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WESTERN AUSTRALIAN PLANNING COMMISSION

STATEMENT OF PLANNING POLICY No. 4.1

STATE INDUSTRIAL BUFFER POLICY

CONTENTS

BACKGROUND INFORMATION

1. Introduction	1
1.1 Why Have a Buffer Area?	1
1.2 Application	1
1.3 Implementation of a Statement of Planning Policy	2
2. Land Use Restrictions	4
2.1 Direct Payments to Landowners	4
2.2 Indirect Payments to Landowners	4
2.3 Established Industry and Infrastructure	4

STATE INDUSTRIAL BUFFER POLICY

1. Objectives	5
2. Principles	5
3. The Need to Plan for Buffer Areas	5
3.1 On-site Buffer	5
3.2 Off-site Buffer	5
4. The Definition of Off-Site Buffer Areas	6
4.1 Planning Criteria	6
4.2 Environmental Criteria	6
4.3 Environmental Protection Policies	7
4.4 How Industry and Infrastructure Comply with Environmental and Planning Criteria	7
4.5 Variation of Buffer Areas around Established Industry, infrastructure or Special Uses	7
5. Planning for Off-Site Buffer Areas	8
5.1 The Planning Process	8
5.2 The Application of Economic Mechanisms to Secure Buffer Areas	8
5.3 Interim measures to Secure Buffer Areas around Established Industry and Infrastructure	8
6. Who Should Pay for Off-Site Buffer Areas?	9
6.1 Non-conforming Uses	9
6.2 New Industry and Infrastructure	9
6.3 Established Industry, Infrastructure or Special Uses	9
6.4 New Proposals for Industry, Infrastructure or Special Uses	9

APPENDICES

1. Glossary of Terms	9
2. Mechanisms for Securing Buffer Areas	11
3. Persons/Organisations Consulted	12
4. Bibliography	13
5. Project Brief	14

BACKGROUND INFORMATION

1. INTRODUCTION

The purpose of the State Industrial Buffer Policy is to provide a consistent Statewide approach for the protection and long-term security of industrial zones, transport terminals (including ports) other utilities and special uses. It will also provide for the safety and amenity of surrounding land uses while having regard to the rights of landowners who may be affected by residual emissions and risk.

The background information draws a number of conclusions which are pertinent to a State Industrial Buffer Policy. These are based on an assessment of the need for buffer areas, an explanation of current practices in WA and elsewhere and a discussion of equity and compensation issues. The policy establishes objectives and principles and how the principles should be applied to define and secure buffer areas and who should pay for them. It is intended that the Western Australian Planning Commission (WAPC) will, after the policy has been in operation for a period of two full years, undertake a review of its effectiveness, and if necessary amend the Policy.

1.1 Why Have a Buffer Area?

Industry and infrastructure by their very nature may generate a range of emissions of pollutants including noise, dust, gas, odour, fumes, lighting overspill as well as risk levels which may not be compatible with other land uses. As a result, most industries and infrastructure as well as some other uses need to be separated from residential areas and other sensitive uses with a buffer area (refer to definitions in Appendix 1) to ensure that amenity (environmental quality, health and safety standards) is maintained at acceptable levels.

The buffer area may be accommodated on-site within the plant, outside the plant but within the property boundary, or off-site on surrounding properties. The extent of the buffer area will depend on the industry/infrastructure/special use and particular circumstances (e.g. scale of operations).

In the case of industries of a light/service nature and technology parks, the impacts can usually be retained on-site or within the technology park or industrial area boundaries. This is a normal requirement of the performance-based definitions used for these industries/activities (refer to Appendix 1). Building setbacks in effect form the buffer area. The use of setbacks in this instance is most effective, particularly when combined with landscaping, for reducing impacts to acceptable levels (e.g. building bulk, noise and light overspill from storage areas, car parking and servicing areas, etc).

However, other industries such as hazardous, noxious and resource processing as well as infrastructure such as power generation facilities, effluent treatment plants and ports (including associated road/rail/pipeline transport routes into these areas) and some specific uses such as motor racing often require extensive buffer areas which may extend off-site on to surrounding properties. Often these industries and infrastructure are a vital component of the economy of Western Australia and are essential for the quality of life that we enjoy. For example, the resource processing sector in 1992-1993 directly employed 6.3 per cent of the State's workforce and contributed 31.8 per cent of the gross state product—equivalent to \$11 billion. Even with good pollution control technology and practice, these industries often have residual emissions of pollutants which cannot practicably be avoided (i.e. gas, odour, dust, noise). In addition, there may be unavoidable risk of injury or death from accidents associated with industrial activity or the storage of dangerous goods.

Resource processing industries and infrastructure very often need to be at strategic locations, for example, close to infrastructure such as port facilities and key transport connections. These industries will also need to be near their workforce and other industries with which synergies have developed. The present location of many established industries therefore represents a vital land use to the State. Similarly, infrastructure, particularly ports, may have significant locational constraints. This type of infrastructure is restricted to only a few locations which are suitable in WA. It is therefore necessary to recognise the locational constraints of these facilities, the significant investments they represent and to fully consider the costs to the community when determining the highest and best use of surrounding buffer land.

1.2 Application

The policy applies to all industry infrastructure and special use categories where on-site and off-site buffer areas are required. It also has regard to associated road/rail/pipeline transport routes servicing these facilities and airports.

This policy addresses the buffer requirements of the following industrial categories (existing and new industry)—

- resource processing industry;
- general industry;
- hazardous industry;
- noxious industry;
- extractive industry;
- rural industry;
- light industry;
- service industry; and
- technology parks.

The policy also addresses the buffer requirements of major infrastructure (existing and new infrastructure) including—

- ports;
- major freight terminals;
- waste water treatment plants;
- water treatment plants;
- power generation facilities;
- power distribution terminals and substations;
- solid waste disposal sites;
- airports; and
- gas/petroleum pipelines

Also included are those other **special uses** that may require a buffer area, such as major sporting facilities like speedway racing, football and soccer stadia.

1.3 Implementation of a Statement of Planning Policy

Section 5AA of the Town Planning and Development Act outlines the criteria for the preparation of a Statement of Planning Policy, and sets down the role for local government as—

7 Preparation of schemes

(5) Every local authority in preparing or amending a town planning scheme

(a) shall have due regard to any approved statement of planning policy prepared under section 5AA which affects its district;

This means that whenever a local government amends or reviews a scheme or prepares a new district scheme it must pay due regard to this statement of planning policy. Obviously the WA Planning Commission will be aware of the inclusion or otherwise of buffer areas in new schemes, and will assess them accordingly.

In addition, the Environmental Protection Authority (EPA) will also be assessing schemes under the most recent planning legislation amendments. This Policy will fit in with the new legislation which has the following key features—

- statutory plans are now subject to formal environmental assessment by the EPA. Acceptable buffer areas in accordance with this Policy will be part of that assessment.
- agencies responsible for preparing and amending statutory plans now have equivalent status to proponents under the environmental assessment system. A local government will have to notify the EPA about its intention to prepare or amend a scheme, so that the EPA can determine if a formal assessment is needed.
- preparation of an environmental review of a scheme may be required by the EPA prior to formal advertising.
- submissions received during formal advertising which contain environmental issues must be referred to the EPA.
- the EPA may recommend conditions which shall be incorporated in statutory plans before consideration for final approval by the WAPC.

The Department of Environmental Protection is in the course of preparing a Generic Industrial Buffer Distance Review, which will form the primary guide to the need for buffers, along with appendices to this Policy.

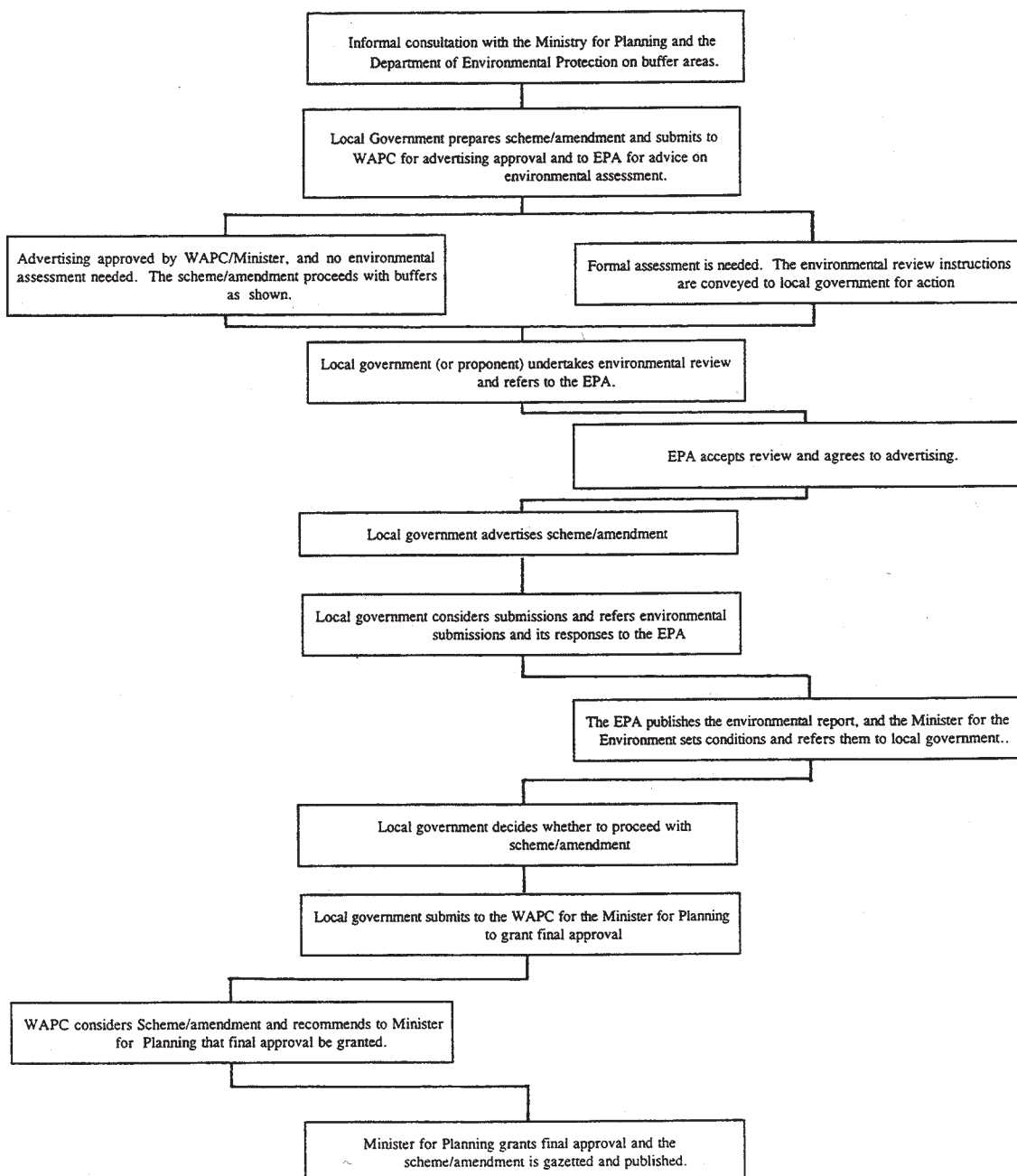
Generally the following procedure as shown diagrammatically on page 9 should be followed by local government when preparing a scheme or scheme amendment. In this context it should be noted that it will often be the Proponent behind the initiation of a scheme or scheme amendment who will be responsible for some of the following—

- Informal consultation with the Ministry for Planning and the Department of Environmental Protection when the preparation of a scheme or the amendment of a scheme is being considered to determine the need for, and the scope of buffer areas.
- The EPA would then be formally notified when the local government resolves to amend or prepare a scheme. This would be at the same time local government sought approval to advertise from the WAPC.
- Under the provisions in the Environment Protection Act the EPA must notify local government within 28 days whether a scheme or amendment needs to be assessed. It would be at this stage that the EPA would give informal advice on buffer areas if there was to be no formal assessment.
- If formal assessment is required the EPA has 60 days to send instructions concerning the scope and content of an environmental review. These formal instructions would cover the general requirements for the implementation of buffer areas.

- Local government would then prepare, or have prepared by a proponent, an environmental review and receive clearance from the EPA before the scheme is advertised for public comment.
- Once this clearance is received, approval from the WAPC to advertise is sought, and the scheme is advertised and treated as any other scheme.
- Any submissions that relate to environmental matters, (the submissions commenting on buffer areas could be considered of this nature,) would be referred to the EPA. The EPA will report to the Minister for the Environment on any environmental factors which should be incorporated into the scheme.
- The scheme with resolutions on the submissions and the advice from the Minister for the Environment is then referred to the WAPC for final approval.

FLOW DIAGRAM

STATE INDUSTRIAL BUFFER POLICY



2. LAND USE RESTRICTIONS

While buffer areas are an effective tool for dealing with residual emissions and risk, they often affect land not owned by the proponent (which is often held in private ownership) and can result in limitations being imposed on the use and development of this land. This raises issues of equity and possible compensation, in particular, who should “pay” for off-site buffer areas around proposed or established industry and infrastructure.

The legal position in Western Australia in relation to compensation should be made clear first. Claims for compensation under Section 12 of the Town Planning and Development Act, 1928, can arise only where a property is injuriously affected by the making of a town planning scheme subject to the following limitations—

12(2a)(b) Subject to the provision of paragraph (c), land shall not be deemed to be injuriously effected by reason of any provision of a town planning scheme which comes into force on or after the appointed day, and which deals with any of the matters specified in clause 10 of the First Schedule, unless the scheme

(i) permits development on that land for no purpose other than a public purpose;

or

(ii) prohibits wholly or partially the continuance of any non-conforming use of that land or the erection, alteration or extension on the land of any building in connection with or in furtherance of, any non-conforming use of the land, which, but for that prohibition, would not have been an unlawful erection, alteration or extension under the laws of the State or the by-laws of the local authority within whose district the land is situated.

It is essential that once buffer areas are defined, the impacts of industry/infrastructure are confined within the buffer on the one hand and, on the other hand, the buffer area is not encroached upon by sensitive uses. It is important that any variations to a defined buffer area must have regard to the rights of landowners, existing industries and the future development intentions of the industry or infrastructure.

The interests of landowners affected by buffer areas can be addressed either directly or indirectly.

2.1 Direct Payments to Landowners

This approach involves payment to the owner of land within the buffer area that is incorporated in the town planning scheme by the developer through acquisition of the land or the acquisition of the rights or interests in the land that restrict its development or use (or other economic mechanisms referred to in Appendix 2), and would be negotiated depending on the particular circumstances. This approach is most applicable in the case of new industrial estates and infrastructure which is surrounded by low intensity broad hectare rural uses (examples include Kemerton and the Collie Power Station). It is also applicable in some instances to single site industries such as Alcoa's Wagerup and Pinjarra Refineries which are surrounded by broad hectare rural land which has been acquired and is farmed by Alcoa.

This approach would be supported by restrictions under planning controls over the uses permitted in the buffer area.

2.2 Indirect Payments to Landowners

An alternative to the above involves the re-planning of buffer areas to allow the development of compatible higher-value land uses, referred to as compatible land uses. These compatible land uses would neither generate significant emissions and/or risk, nor warrant protection from them.

This approach allows the buffer area to be retained in private ownership. However, its application depends on local/regional opportunities for the development of compatible higher-value land uses, the availability of servicing infrastructure and compatibility with the planning framework for the area. It is most applicable where it is possible to match the buffer area with the outer boundaries of the compatible land uses.

This approach has been applied to the buffer areas around special industrial zones in the Shires of Albany and Plantagenet. However, the remote location of these zones has raised concerns about the suitability of this land for compatible use zones and the degree to which landowners accept this solution.

2.3 Established Industry and Infrastructure

Within some areas surrounding established industrial estates, single-site industries infrastructure (e.g. ports) and other special uses, sensitive uses have been allowed to encroach over time due to poorly defined buffer areas and/or the absence of adequate planning and development controls to secure them. In these circumstances the nature of land uses within what should be the buffer areas, and regional/local conditions may make it neither practical nor reasonable for the established industry or infrastructure to be responsible for removing those sensitive uses. Where this occurs subdivision and land use controls may be the most appropriate to prevent further encroachment.

In extreme cases, where the encroachment of sensitive uses is extensive and environmental criteria are exceeded by significant levels, on advice from the Environmental Protection Authority, the government may restrict further industrial development or provide the resources to either relocate the industry or infrastructure or to enable it to meet established emission standards at the boundary of the encroaching sensitive use.

Where there is potential for land use conflicts to occur, and the alternatives mentioned above are not realistic options, planning authorities may need to prepare specific policies or strategies to provide strategic land use and development control guidance for town planning schemes. For example, the prohibitive cost to the State of purchasing the buffer around the Kwinana Industrial Area (when considered by the Kwinana Industrial Coordinating Committee (KICC) in 1991) resulted in the KICC requesting the then State Planning Commission to prepare a policy to provide subdivision and development guidance to secure the long term protection of the Kwinana Industrial Area and its buffer.

Proposals for new development and expansion/upgrading of existing facilities in established industrial estates, single-site industries and infrastructure (including new activities associated with the growth of trade at ports) should have regard to the interests of affected landowners in surrounding areas, where unacceptable impacts extend beyond any existing buffer areas. (The WAPC in conjunction with the EPA would determine those impacts that are unacceptable). In recognition of these interests, the developer may need to upgrade processing systems to mitigate impacts and negotiate with affected landowners, in the same way as with proposals for new facilities and industrial estates in greenfield sites, where indirect solutions in the form of compatible land uses cannot be applied.

STATE INDUSTRIAL BUFFER POLICY

1. OBJECTIVES

(1) To provide a consistent Statewide approach for the definition and securing of buffer areas around industry, infrastructure and some special uses.

(2) To protect industry, infrastructure and special uses from the encroachment of incompatible land uses.

(3) To provide for the safety and amenity of land uses surrounding industry, infrastructure and special uses.

(4) To recognise the interests of existing landowners within buffer areas who may be affected by residual emissions and risks, as well as the interests, needs and economic benefits of existing industry and infrastructure which may be affected by encroaching incompatible land uses.

2. PRINCIPLES

(1) Industries, infrastructure and special uses requiring off-site buffer areas are an important component of economic growth in Western Australia and are essential for the maintenance of our quality of life. These facilities and associated buffer areas must be planned for.

(2) Off-site buffer areas shall be defined for new industry, infrastructure and special uses where necessary to comply with accepted environmental criteria. Off-site buffer areas shall also be defined for established industry and infrastructure to comply with accepted environmental criteria where there are existing land use conflicts or where there is the potential for land use conflicts to occur.

(3) Once an off-site buffer area is defined, the boundary should not be varied unless justified in a scientifically based study (e.g. the impacts of industry/infrastructure should be maintained within the buffer and it should not be encroached upon by sensitive uses).

(4) It is essential that once an off-site buffer area is defined, it must be recognised in a town planning scheme.

(5) Where a buffer area is included as part of a town planning scheme, all issues relating to restrictions on land use and development, and the effect on landowners and existing industry, shall be addressed by the scheme.

3. THE NEED TO PLAN FOR BUFFER AREAS

All industries, infrastructure and special uses incorporate a buffer area within the boundaries of the site. However, for many industries infrastructure and special uses it is just not practical (usually not economically viable) to retain the entire buffer area on-site.

3.1 On-Site Buffer Areas

Light and service industry and technology parks should retain all emissions and hazards on-site or at least within the zone or park area.

On-site buffer areas should be sufficient to address local amenity. Local governments should ensure that sufficient setback distances (including the treatment of setbacks, e.g. landscaping) are included in their town planning schemes to retain residual emissions and risks within site boundaries. Easements to provide protection for infrastructure such as drainage lines, transmission lines and gas and petroleum pipes should also be shown as these are one form of on-site buffer. Provisions should also be included to ensure acceptable levels of visual amenity.

3.2 Off-Site Buffer Areas

Off-site buffer areas may be required for the following categories of industry, major infrastructure and special uses—

- hazardous industry;
- noxious industry;
- resource processing industry;
- extractive industry;
- rural industry;
- medium and general industry;
- major sporting venues; and
- noisy sports such as speedway or drag racing.

Off-site buffer areas should be defined and secured as early as possible in the planning stages for new facilities and the expansion/upgrading of existing facilities to ensure the protection and long-term security of the industry/infrastructure, including associated road/rail/pipeline transport routes. Off-site buffer

areas should also be determined and secured for established industry and infrastructure where there are existing or potential land use conflicts with the facility.

The definition and securing of off-site buffer areas is important to —

- provide certainty for industry, encouraging continuing investment in the State;
- provide a greater level of certainty for infrastructure which often represents major investment by the State and is not easily replaced, particularly for resource processing industries and its major infrastructure such as ports which have significant locational constraints; and
- ensure that the buffer provides adequate protection for the interests of surrounding landowners.

The remainder of the policy focuses on defining and securing off-site buffer areas, in view of the importance of this matter to the State.

4. THE DEFINITION OF OFF-SITE BUFFER AREAS

The identification of an off-site buffer area requires the application of both environmental criteria and planning criteria to determine the actual size and boundaries of the buffer area. This will require the boundaries of buffer areas to meet the requirements of the Environmental Protection Authority, the Western Australian Planning Commission and the Department of Minerals and Energy.

The Environmental Protection Authority and Department of Environmental Protection (DEP) through the administration of the Environmental Protection Act, will advise on the environmental standards and management of industry/infrastructure/special uses including environmental criteria for both new and established industry, infrastructure and special uses. The DEP Generic Industrial Buffer Distance Review will be a guide to these buffer distances and environmental standards.

Environmental criteria may be developed for specific types of emissions and risk and may be applied to a defined area in the form of an Environmental Protection Policy. These criteria shall be applied by the industry or responsible authority (developer) to determine the buffer area required around an existing or proposed industry or infrastructure or to ensure compliance with an Environmental Protection Policy. Guidelines may be developed to assist with defining buffer areas for generic industry and infrastructure types (e.g. ports). It is important that responsible authorities have regard to these environmental guidelines and criteria when investigating and defining land use zones in site specific locations.

Where an industry or authority responsible (developer) for the operation of an established facility and the Western Australian Planning Commission consider that either existing or potential land use in the vicinity has the potential to compromise the operation of that facility, the developer shall undertake a buffer definition study to define the extent of the buffer area required to secure the facility. Such a study will identify the likely emissions, hazard and risk, noise or lighting and model the development to show the extent of these outside the development site. The study should also show how amelioration could occur, and if this is not possible, the buffer distances required to enable the use to be developed. The incompatible uses that need to be avoided in the buffer area would also be identified.

The Western Australian Planning Commission shall evaluate the buffer definition study recommendations when considering land use decisions that may need to be made in the relevant area.

Extractive industry is a special case, as it can be a temporary use or a long term use. In the case of basic raw materials, or materials used in the development of urban areas for buildings, roads and infrastructure, its cost effectiveness often requires proximity to the urban areas. Each case will need to be considered separately, with hard rock quarries being of a long term nature perhaps needing different treatment to the limestone and sand extraction areas.

4.1 Planning Criteria

The definition of an off-site buffer area will require the application of planning criteria as stated in WAPC policies and in local government planning schemes for land use and development control. These criteria may be expressed through the following planning instruments where they affect the subject land—

- town planning schemes;
- region plans and strategies;
- structure plans; and
- policies.

The application of planning criteria will require consultation between the Environmental Protection Authority and Western Australian Planning Commission prior to the finalisation of the boundaries of an off-site buffer area. Existing land use will be recognised as an important factor in defining the buffer area.

4.2 Environmental Criteria

The following types of environmental criteria shall be applied on a site or area-specific basis by the developer for the purpose of determining the size of buffer areas and for protecting buffer areas from inappropriate uses. These include—

- risk (individual and societal);
- air quality (e.g. dust, sulphur dioxide);
- noise; and
- odour.

It is recognised that the following types of environmental criteria need to be developed further by the Environmental Protection Authority, industry and planning authorities to provide a more scientific approach for the definition and protection of buffer areas.

- societal risk;
- odour; and
- dust.

Some criteria for odour have been produced by the Department of Environmental Protection. The Environmental Protection Policy for Kwinana specifies dust levels for industry within the policy area. Dust levels for new industries are set on a case-by-case basis using the Kwinana criteria where appropriate. While there are criteria for individual risk assessment, there are presently no criteria in Western Australia or Australia for societal risk. However, the Environmental Protection Authority requires that where residential areas abut hazardous industry, societal risk assessment should be carried out. In the interim, the Environmental Protection Authority uses criteria developed by the Health and Safety Executive in the United Kingdom as a guide in determining its advice on specific proposals.

Societal risk criteria for industry, infrastructure and special uses will be established by the EPA in consultation with the Department of Minerals and Energy.

4.3 Environmental Protection Policies

Environmental Protection Policies may also be used to define off-site buffer areas where it is necessary to establish environmental quality objectives and standards for industry or infrastructure.

In the determination of boundaries and any environmental quality standards for buffer areas in Environmental Protection Policies, it is essential that the Environmental Protection Authority and Western Australian Planning Commission liaise closely to ensure that both environmental and planning criteria are adequately addressed.

4.4 How Should Industry and Infrastructure Comply with Environmental and Planning Criteria?

Industry and infrastructure normally comply with adopted environmental and planning criteria through a combination of—

- appropriate management practices which should not unreasonably inhibit industry capacity or infrastructure usage; and
- off-site buffer areas.

The size of the buffer area is dependent on the management practices used. The balance is normally based on a weighing up of the economic viability of incorporating management practices versus the availability and cost of securing a buffer area. Best practicable environmental management practices (BPEMPs) may be acceptable where an adequate off-site buffer area can be provided. If only a smaller buffer area is available then best environmental management practices (BEMPs) may be required. Although it is accepted that best environmental management practices are preferred, in reality best practicable environmental management practices will usually be negotiated.

The final combination of management practices and off-site buffer areas to comply with the environmental and planning criteria will often involve negotiation between the developer, the Department of Environmental Protection, other adjacent landowners, industry or infrastructure operators (existing and potential) and planning authorities (Western Australian Planning Commission and local governments).

The Western Australian Planning Commission may require the preparation of a structure plan to indicate how the environmental and planning criteria can be satisfied where there are “trade-offs” between the management practices used and the size of the off-site buffer area (e.g adjacent to gas pipelines).

Risk management should ensure that the individual risk criteria are not exceeded and that societal risk levels are reduced as low as possible. The Health and Safety Executive in the United Kingdom recognises three criteria: tolerable, scrutiny and intolerable. Where the societal risk is below the tolerable criteria, no action should be taken. Where the risk is above the intolerable criteria, the proposal is unacceptable. Where the risk is between the tolerable and scrutiny criteria, as low as reasonably practicable (ALARP) principles should apply. Where the risk is between the scrutiny and intolerable criteria the proposal should be re-examined and benefits identified. An assessment is then made regarding these benefits as to whether it should proceed at these elevated risk levels. ALARP should still apply.

In cases where it is not possible to determine whether the environmental criteria have been met, generic buffer distances, as recommended by the Department of Environmental Protection, may be applied. These distances were defined based on work from overseas and interstate, using information from the Department’s complaints register and the judgment of officers who deal with these industries. Depending on the management practices of the industry and site-specific studies of the extent of any off-site impacts, these buffer distances may be varied.

The monitoring of existing facilities will continue by the Department of Environmental Protection to ensure compliance with licence conditions, industry standards and regulations. As new technology is developed and management practices improved, industry and infrastructure will be expected to progressively improve management practices, where practicable, irrespective of licensing conditions or current industry standards and regulations (as well as standards in environmental protection policies).

4.5 Variation of Buffer Areas around Established Industry Infrastructure or Special Uses

Where an industry, infrastructure or encroaching sensitive use seeks to vary the boundary of a buffer area once defined, the variation shall not be allowed unless justified by the proponent seeking the variation in a scientifically based study. The study should comply with adopted environmental and planning criteria to the satisfaction of the Environmental Protection Authority and the Western Australian Planning Commission.

A final decision on the variation of the buffer area would need to take into account the results of that study, the needs of industry and infrastructure (including any arrangements between the proponent seeking the variation, and the industry or infrastructure, to upgrade a facility to reduce the off-site buffer requirement) environmental needs and the rights of adjacent landowners.

5. PLANNING FOR OFF-SITE BUFFER AREAS

Once a buffer area is defined, steps should be taken to ensure that it is effective. A range of mechanisms can be used to manage these buffer areas. These are included in Appendix 2. One or more of these mechanisms should be applied to specific buffer areas by the developer, planning authorities or the State government, depending on the particular circumstances. They can be used either independently or in conjunction with each other. These are—

- (i) the application of planning mechanisms to prevent incompatible land uses being developed within the buffer area.
- (ii) the use of mechanisms involving the purchase of land by the developer, whether this is a Government agency or private industry. This could also involve a negotiated purchase of development rights from the land owner. These tools would be applicable where existing zones permitted incompatible uses.
- (iii) the buffer area can be reserved for a public purpose, and compensation paid to the landowners to secure it or purchase it. In such cases there may be arrangements made between local government, the industry and State government agencies in relation to financial liability.

5.1 The Planning Process

The planning process has an important role to play in ensuring the development of compatible land uses in buffer areas.

Once a buffer area is defined and accepted by the Western Australian Planning Commission, the local government or the Western Australian Planning Commission will incorporate the buffer within any statutory plans, strategic plans or policies affecting the subject land.

Buffer areas should be incorporated into strategic plans and regional and/or local government town planning schemes through appropriate land use designations, zoning and development controls. Where there is potential for land use conflicts to occur, planning authorities may also prepare area-specific policies or strategies to provide strategic land use, subdivision and development control guidance for town planning schemes. Thus, in a rural zone a scheme text could specifically deal with further subdivision or residential development within the buffer area.

The Western Australian Planning Commission may prepare guidelines for buffer areas where—

- the potential for land use conflict is significant and the particular industry/infrastructure has strategic importance to the State;
- land use conflicts cannot be resolved by local governments; and
- there is a need to improve co-ordination between local governments.

Ideally, compatible land uses (e.g. light/service industry) should be used to create tiered or graduated zones which coincide with off-site buffer areas around industry and infrastructure. However, this is limited to locations where there are regional/local opportunities for this type of complementary development, servicing infrastructure is available and where it is compatible with the planning framework for the area (e.g. would not unduly compromise other planning objectives for the locality).

Where compatible land uses are permitted, the designation of these uses should be guided by a structure plan of the area.

5.2 The Application of Economic Mechanisms to Secure Buffer Areas

The application of economic mechanisms may be appropriate in the following circumstances—

- Where the developer prefers to acquire the agreed buffer area (and it is economically viable to do so, such as at the Alcoa Wagerup Refinery) to control existing unacceptable uses.
- Where the proposed buffer area allows, through existing zoning provisions, uses that are not compatible with the use to be buffered. (In such cases the proponent, particularly if a Government agency, may need to undertake a cost benefit analysis to determine whether to proceed with the development and acquire the buffer area or the rights or interests in the land to restrict its development or use.)

5.3 Interim Measures to Secure Buffer Areas around Established Industry and Infrastructure

Interim consultation measures may need to be applied to secure a buffer area where a buffer definition study has been initiated around an established industry or infrastructure.

The Western Australian Planning Commission will consult with the Department of Environmental Protection or the authority responsible for the operation of a facility (e.g. port authority, Water Corporation) when considering any proposals for sensitive uses (including associated subdivision and rezoning proposals) within the vicinity of a facility where a buffer definition study has been commenced.

Where the Western Australian Planning Commission receives advice that a proposal for a sensitive use may have an effect upon the operation of an existing facility or be affected by off-site impacts from that facility, it may require the proponent to carry out the necessary studies to determine the extent of the impacts.

6. WHO SHOULD PAY FOR OFF-SITE BUFFER AREAS

The application of this statement of planning policy does not affect the legal position in Western Australia where compensation is generally not liable for zoning (and development control) restrictions imposed through town planning schemes.

6.1 Non-conforming Uses

The policy recognises that the imposition of a buffer area could adversely affect existing use rights under town planning schemes and rights to certain permitted development, such as a single residence to support a farming use. Matters such as these need to be adequately dealt with using either planning or economic mechanisms prior to the scheme or scheme amendment being referred to the Western Australian Planning Commission.

Prevention of continuance of a legally permitted use by a new town planning scheme incurs a liability to compensation. This Policy seeks to ensure that such instances do not occur without specific equitable attention to such issues.

Where a new industry or infrastructure or an expansion is being considered, any environmental conditions set by the Minister for the Environment would be likely to involve the securing of an appropriate buffer area.

6.2 New Industry and Infrastructure

Where a Government agency, local government or a private developer as the proponent of new industrial estates, single-site industries and infrastructure or special uses, incorporates an off-site buffer area over privately owned land to satisfy environmental criteria, and it is not possible to apply compatible use zones, then appropriate economic mechanisms shall be considered by the proponent to satisfy the Western Australian Planning Commission requirements for the buffer area.

6.3 Established Industry Infrastructure or Special Uses

Where land use conflicts (or potential conflicts) arise in defined off-site buffer areas around established industrial estates, single site industry and infrastructure or special uses, as a result of the approval of encroaching sensitive uses (or a proposal for a sensitive use) the industry or infrastructure or special use should not be required to pay compensation. Rather, the State government may investigate the extent or likely extent of the conflicts and if it decides, after careful consideration of the costs/benefits to the community that it is in the interests of the State for that incursion to occur, to either—

- provide a mechanism and the resources to relocate that industry or infrastructure; or
- provide that industry or infrastructure with the resources to meet established emission standards at the boundary of the encroaching sensitive use.

Alternatively, where the State government decides that the industry or infrastructure or special use should be able to continue to operate without modifying its emission standards planning authorities may apply planning mechanisms to prevent more intensive development of sensitive uses, perhaps for example, by limiting further subdivision. Unless such mechanisms require the removal of non-conforming land uses then the existing uses will be permitted. It should be noted that such action will inevitably restrict the operations of the industry or infrastructure or special use while those sensitive uses remain.

Alternatively the planning authority may consider proposals to redevelop the buffer area land to a more acceptable standard.

6.4 New Proposals for Industry Infrastructure or Special Uses

Where a developer of new proposals for industry infrastructure or special uses (including expansion/upgrading of existing facilities and new activities associated with the growth of trade at ports) incorporates a new or expanded off-site buffer area over privately owned land to satisfy environmental criteria, and it is not possible to apply compatible use zones, then appropriate economic mechanisms should be applied to secure the buffer area. The application of these mechanisms should be applied by the proponent to secure the buffer area, to satisfy the environmental conditions on the environmental approval for the industry or infrastructure.

APPENDICES

APPENDIX 1

Glossary of Terms

For the purposes of this discussion paper the following terms have been used—

- **Best Environmental Management Practices**—Technologies (production) and management processes (including computer based systems and staff management) which achieve the maximum environmental performance possible.
- **Best Practicable Environmental Management Practices**—Technologies (production) and management processes (including computer based systems and staff management) which take into account practical financial and operating considerations whilst still achieving the required environmental performances.
- **Buffer Area**—is the area within which sensitive uses are either restricted or prohibited.
- **Developer**—reference to the developer may include the developer or proponent of a specific industry or it may include a government or local government agency in the case of the development of an industrial estate (LandCorp) or government infrastructure (Water Corporation, Western Power, port authorities, etc), or special use but does not include the authorities which initiate or approve proposals for the zoning of land.

- **Extractive Industry**—means an industry which involves—
 - the extraction of sand, gravel, clay, turf, soil, rock, stone, minerals, or similar substance from the land, and also includes the management of products from any of those materials when the manufacture is carried out on the land from which any of the materials so used is extracted or on land adjacent thereto, and the storage of such materials or products; and
 - the production of salt by the evaporation of salt water.
- **General Industry**—means an industry other than a cottage, extractive, hazardous, light, noxious, rural or service industry.
- **Hazardous Industry**—means an industry which, when in operation and when all measures proposed to minimise its impact on the locality have been employed (including measures to isolate the industry from existing or likely future development on other land in the locality) would pose a significant risk in relation to the locality, to human health, life or property, or to the biophysical environment. Examples of such industry include oil refineries and chemical plants but would generally exclude light, rural or service industries.
- **Infrastructure** includes public installations that provide a service such as—
 - Ports
 - Major freight terminals
 - Waste water treatment plants
 - Water treatment plants
 - Power generation facilities
 - Power distribution terminals and substations
 - Solid waste disposal sites
 - Airports, and
 - Gas/petroleum pipelines
- **Light Industry**—means an industry;
 - in which the processes carried on, the machinery used, and the goods and commodities carried to and from the premises, will not cause any injury to, or will not adversely affect the amenity of the locality by reason of the emission of light, noise, electrical interference, vibration, smell, fumes, smoke, vapour, steam, soot, ash, dust, waste water or other waste products; and
 - the establishment of which will not, or the conduct of which does not, impose an undue load on any existing or proposed service for the supply or provision of water, gas, electricity, sewerage facilities, or any other like services.
- **Noxious Industry**—means an industry in which the processes involved constitute an offensive trade within the meaning of the Health Act 1911 (as amended).
- **On-site buffer areas.** On-site buffer areas are those contained wholly on the site of the particular use.
- **Off-site buffer areas.** For some uses it is not possible to contain all potential emissions or risk of acceptable criteria within the site boundaries. In these cases an off site buffer area is needed.
- **Proponent**—The meaning of the term Proponent is the same as for Developer.
- **Resource Processing Industry**—includes major industries which normally involve—
 - the processing of natural resources (including chemical industries);
 - substantial capital investment;
 - significant employment; and
 - a need for substantial separation or buffer distances to sensitive areas.
- **Sensitive Use**—includes residential dwellings, major recreational areas, hospitals, schools and other institutional uses involving accommodation.
- **Service Industry**—means a light industry carried out on land or in buildings which may have a retail shop front and from which goods manufactured on the premises may be sold; or land and buildings having a retail shop front and used as a depot for receiving goods to be serviced.
- **Special Uses**—means those uses other than industrial uses that require a buffer area to enable them to operate in harmony with surrounding areas. Uses such as sporting stadia, airports, and motor sports sites are specifically targeted in this grouping.
- **Technology Park**—means a specialised location for scientific and technological research and development activities, and may include production, manufacturing and assembly of products providing these activities relate to and are ancillary to the technological research and development of activities on each site. Development should consist of high quality buildings set in a spacious, park-like setting, and the nature of uses and site layout and design should not adversely affect the amenity of the locality.

APPENDIX 2

Mechanisms For Securing Buffer Areas

A range of mechanisms may be applied to secure buffer areas depending on the circumstances. These mechanisms include economic instruments, special Acts of Parliament and statutory planning controls. The mechanisms are discussed below and may be implemented individually or in conjunction with each other.

1. Economic Mechanisms

There are a number of economic mechanisms that can be applied by the developer to secure and consolidate buffer areas. These measures vary from outright purchase, land swaps, acquiring interests or rights to restrict the development or use of land, and in extreme cases the relocation of industry or infrastructure.

(i) Direct Acquisition of Buffer Areas

This mechanism may be applied where land costs are not excessive and existing and potential land uses are clearly incompatible with the industry or infrastructure developed to best practicable management standards.

Where the developer is the Government, acquisition can be accomplished under existing legislation enabling the Government agency concerned or otherwise by special act of Parliament.

(ii) Land Exchanges

This mechanism has limited application. However, where opportunities can be identified, land within the buffer area may be swapped for land of similar value and type outside the buffer area.

(iii) Acquiring Rights or Interests in Land to Restrict Development or Use

This mechanism involves entering into agreements with the owners of vacant land to acquire the rights or interests in land to restrict its development or use. The mechanism in such agreements can be registered as a restrictive covenant on the title. Under this option the owner could continue to own and use the land in a way that is compatible with the adjoining industrial and/or infrastructure uses.

(iv) Payments to Industry or Infrastructure

In extreme cases, where environmental constraints are large, the government may consider direct payments to industry or infrastructure to enable it to upgrade to meet acceptable emission standards.

(v) Relocation of Industry

The government may consider providing the necessary resources to facilitate the relocation of existing industry or infrastructure in extreme cases where environmental constraints are large and the industry/infrastructure is unable to meet reasonable environmental quality standards in the vicinity.

2. Special Acts of Parliament

Where buffer areas are not acquired by the developer, Agreement Acts can ensure that decisions on development within buffer areas take into account the views of the Minister responsible for the agreement. Such an approach was taken in the Dardanup Pine Log Sawmill Agreement Act 1992. This Agreement Act requires the Minister for Planning to consult with the Minister responsible for this Agreement before exercising any discretionary powers on any application under the planning system to increase residential development in the buffer area.

This mechanism is most suited to controlling development within a buffer area around a single resource processing industry site.

A special Act of Parliament may also be used to facilitate the acquisition of land and lesser interests in land in buffer areas around resource processing precincts. This would enable the Government to place restrictive covenants on property titles purchased and sell the land to private owners to develop in a compatible manner.

3. Planning Controls

A range of planning controls can be applied to maintain the integrity of buffer areas and include both statutory and non-statutory mechanisms.

(i) Subdivision Control

Restriction of the subdivision of land is one way in which the intensity of occupation (population density) within privately owned buffer areas can be limited. Controls on subdivision may impose appropriate restrictions as this is within the discretion of the Western Australian Planning Commission. Subdivision decisions of the Western Australian Planning Commission are subject to the appeal process.

(ii) Improvement Plans

These plans can facilitate the development of an area for compatible uses. For example, an Improvement Plan (IP 14) has been prepared for the East Rockingham Industrial Area to facilitate the orderly development of land in the area (approximately 1336 ha) for a range of industrial uses and parkland buffer areas. Improvement plans can be prepared only within the area covered by the Metropolitan Region Scheme.

(iii) Town Planning Schemes/Development Control

Town planning schemes may be prepared at the regional level through regional planning schemes by the Western Australian Planning Commission and local level by local governments. At the

regional level regional planning schemes can establish broad zones and reservations to secure the general purpose of buffer areas (e.g. industrial or rural). Regional planning schemes may also call-in development that may affect the integrity of the buffer area for determination by the Western Australian Planning Commission.

At the local level scheme controls can be used to restrict sensitive uses such as residential dwellings.

(iv) **Region Plans**

Region plans can allocate land for particular uses so that there is adequate separation between industries and residential areas prior to development proceeding. These are non-statutory plans that promote a framework for future land use and development. They are the initial guidelines for the future regional development of an area.

(v) **Structure Plans**

Structure plans provide a framework for co-ordinated planning and provision of services, and are the precursor to the statutory region scheme. They ensure that planning for new growth areas is consistent with region plans. They may also identify appropriate sites for infrastructure where off-site buffers are required, and guide subdivision design to minimise the impact of polluting industries and infrastructure and the encroachment of surrounding sensitive land uses.

(vi) **Local Rural Strategies**

Local rural strategies can guide the subdivision and development of rural land. They primarily provide a mechanism for protecting good quality farmland.

APPENDIX 3

Persons/Organisations Consulted

Western Australia

John Murphy—Department of Transport
Jim Riddle—Western Power
Adrian Chegwiddden—Western Power
Bob Jackson—Water Authority of Western Australia (now the Water Corporation)
Garry Middle—Department of Environmental Protection
Neville Duckett—LandCorp
Tom Grigson—Department of Resources Development
Ian Williams—Dover Consultants
Joe Bosworth—Dover Consultants
Wilma Coote—Technology Park Management

Victoria

Robin Dunstone—Department of Planning and Development
Peter Anderson—Department of Planning and Development
Joanne Caminiti—Department of Business and Employment

New South Wales

Derek Mullins—Department of Urban Affairs and Planning
Ron Baker—Department of Urban Affairs and Planning
Elizabeth Loseby—Department of Urban Affairs and Planning
Jan Murell—Department of Urban Affairs and Planning
City Planner—Botany Council

Submissions on the Draft Policy were received from—

The City of Fremantle
Shire of Manjimup
Department of Minerals and Energy
Shire of Capel
Chamber of Commerce and Industry
Shire of Busselton
Shire of Katanning
Shire of Moora
Shire of Beverley
Shire of Brookton
Shire of Pingelly
Shire of Cuballing
Shire of Wickpin
Shire of Corrigin
Fremantle Port Authority
Homeswest
City of Belmont
Urban Development Institute of Australia
Town of Kwinana
Shire of Harvey
Town of Bassendean
Shire of Augusta Margaret River

Shire of Ashburton
 Western Australian Municipal Association
 Department of Resources Development
 Shire of Broome
 Esperance Shire Council
 Water Corporation
 City of Armadale
 Australian Institute of Valuers and Land Economists
 Department of Transport
 Chittering Ratepayers Association
 Town of Vincent
 Western Power
 Shire of Swan
 Town of Kwinana
 City of Cockburn
 City of Wanneroo
 Shire of Denmark
 Town of Albany
 Waters and Rivers Commission
 Shire of Northam
 Shire of Dardanup
 Main Roads Western Australia
 Stuart Devenish (WAMA)

APPENDIX 4

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APPENDIX 5
Project Brief

State Industrial Buffer Policy

1. Background

The Infrastructure Coordinating Committee of the WAPC at its meeting of 17 May 1995 resolved to prepare this policy in recognition of the need to provide a consistent Statewide approach to the protection of the integrity of industrial land.

2. The Problem

There has been concerns that buffer areas around industrial land are being developed for uses that are incompatible with existing and potential development of industrial areas in the State (e.g. Kwinana and Narngulu at Geraldton). An industry background report commissioned by DRD outlines the need to protect the integrity of buffer areas around heavy industry.

Some work has been undertaken in an attempt to address this problem by DRD (*Draft State Heavy Industry Land Policy* and related policy paper *Protecting the Integrity of Heavy Industry Buffer Areas*) and LandCorp (for specific proposals in the Shires of Greenough, Plantagenet and Albany). The Commission's Policy *D.C. 4.2 Planning for Hazards and Safety* addresses buffer areas in part. At present the WAPC does not have a basic industrial buffer policy that covers safety and amenity issues and the long term security related to industrial zones.

The Infrastructure Coordinating Committee of the WAPC has indicated that the problem also extends to transport terminals (including ports) and other utilities.

3. Purpose

The purpose of this policy is to provide a consistent Statewide approach for the protection and long term security of industrial zones, transport terminals (including ports) and other utilities. Also, to provide for the safety and amenity of surrounding land uses while having regard to the rights of landowners who may be affected by residual emissions and/or risk.

4. Scope of the Policy

There will be two phases to the project. The **first phase** will involve some research in the form of a discussion/issues paper. It should be focused into the following areas—

- * need for buffers;
- * definitions of terms such as buffer, sensitive use and industry types that require buffer areas (both on-site and off-site);
- * identification of existing processes and responsibilities;
- * literature review;
- * equity and compensation issues and
- * alternative approaches for maintaining buffer areas.

The **second phase** will involve policy development. The policy should address the following matters (this phase will include some overlap with the first phase) —

- * definitions of terms such as buffer, sensitive use and industry types that require buffer areas (both on-site and off-site);
- * identification of existing processes and responsibilities;
- * the protection of new buffer areas (by industry type); and
- * the protection of existing buffer areas.

The scope is primarily concerned with the various mechanisms for protecting industrial areas. It does not include an assessment of the existing processes/responsibilities for defining industrial buffer requirements for risk, air quality, odour and noise as these are already well established by existing legislation/policy.

Reference to transport terminals and other major utilities is restricted to the following—

- * ports (shipping);
- * major freight terminals;
- * waste water treatment plants;
- * water treatment plants;
- * power generation facilities; and
- * power transmission terminals and distribution substations.

5. Steering Committee

The project will be overseen by an interdepartmental/industry steering committee consisting of representatives from—

Ministry for Planning (chair)
LandCorp
Chamber of Commerce and Industry
Department of Commerce and Trade
Department of Resources Development
Department of Minerals and Energy
Department of Environmental Protection
Department of Transport
Water Corporation

It is anticipated that up to four Steering Committee meetings will be required.

6. Consultation

Consultation will occur through the Steering Committee. The draft policy will also be released to relevant State and local government agencies and industry. This will give an opinion of the proposal from the many stakeholders. Specifically this process will involve—

- * consulting with the Steering Committee members on—
 - the study brief (including contents of the discussion paper);
 - the draft discussion paper;
 - the draft policy (prior to formal consideration/release by the WAPC); and
 - the final policy and report on submissions (prior to formal consideration/release by the WAPC).
- * consulting with key interest groups on the final discussion paper.
- * the WAPC formally releasing the draft policy for comment to—
 - relevant State government agencies;
 - relevant industry bodies; and
 - relevant local authorities.

7. Desired Outcomes

The desired outcomes of the project are—

Phase 1 Discussion/Issues paper

- * A discussion/issues paper which identifies relevant approaches and principles for maintaining buffer areas; the discussion/issues paper to be used as the basis for developing the policy.

Phase 2 Policy Preparation

- * A draft policy to be released by the WAPC for formal consultation.
- * A final policy for consideration and adoption by the WAPC for use by government agencies (State and local) and industry for the planning and maintenance of buffer areas.

8. Project Administration

The project will be undertaken in-house by the Strategies and Policies Branch. Some assistance will be sought from the Steering Committee in the preparation of the discussion/issues paper, particularly the literature review.

The project will be undertaken within the current work program of the branch.

The time-frame for the preparation of the issues/discussion paper and draft policy is four months with completion in the second quarter of 1996.



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