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**WESTERN AUSTRALIAN PLANNING
COMMISSION**

STATEMENT OF PLANNING POLICY No. 6

**JANDAKOT GROUNDWATER PROTECTION
POLICY**

PREPARED UNDER SECTION 5AA OF THE TOWN PLANNING AND
DEVELOPMENT ACT 1928 (AS AMENDED) BY THE WESTERN AUSTRALIAN
PLANNING COMMISSION AND ISSUED WITH APPROVAL OF THE
MINISTER FOR PLANNING AND HIS EXCELLENCY THE GOVERNOR

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PRELIMINARY

1. CITATION

This policy may be cited as the *Statement of Planning Policy No. 6—Jandakot Groundwater Protection Policy*.

2. PURPOSE and STATUTORY BASIS

This Policy has been prepared by the Western Australian Planning Commission (WAPC) in consultation with the Environmental Protection Authority and the Water and Rivers Commission Board of Management. The main purpose of the Policy is to ensure development over the Jandakot public groundwater supply mound is compatible with the long-term use of the groundwater for human consumption. The Policy is to ensure that land use changes within the Policy Area that are likely to cause detrimental effects to the groundwater are brought under planning control and prevented or managed.

The Policy is prepared under Section 5AA of the *Town Planning and Development Act, 1928 (as amended)*. It will be implemented by reference to it in town planning schemes in accordance with the requirements that form part of this Policy, and by its adoption by the Western Australian Planning Commission. The Policy provides guidance regarding planning requirements which need to be considered before development can proceed in the Policy Area.

This Policy has been prepared by the Western Australian Planning Commission to assist local government, proponents and the public. While this policy approach represents the views of the Western Australian Planning Commission, it has been formulated with the concurrence of views of both the Environmental Protection Authority and the Water and Rivers Commission Board of Management. The Policy compliments the administration of environmental protection and groundwater resource protection laws by these other two concurring agencies. Each proposal submitted to any of the three above mentioned agencies for approval or environmental assessment, will be judged on its merits. Proponents who wish to deviate from the contents of this Policy should therefore provide justification for the proposed departure. Recognition of the Policy in this way is not meant to affect the powers and functions of either the Environmental Protection Authority or the Water and Rivers Commission Board of Management.

It should be noted that this Policy has been prepared in consultation with these two bodies. This consultation follows the collaboration of the Department of Environmental Protection, the Water and Rivers Commission and the Ministry for Planning on the content and requirements of this Policy. In this way, a consolidated policy framework is provided to guide town planning scheme amendments and the ongoing protection of the groundwater resource through land use planning.

This Statement of Planning Policy should be read with reference to the background information in Appendix 1. The matters relevant to the background information include the following—

1. Parliamentary Select Committee on Metropolitan Development and Groundwater Supplies;
2. *Statement of Planning Policy No. 2 The Peel-Harvey Coastal Plain Catchment, 1992*;
3. *Jandakot Land Use and Water Management Strategy, 1995*;
4. Metropolitan Region Scheme Amendment No. 981/33 'Rural—Water Protection' Zone (South-West and South-East Corridors);
5. Water and Rivers Commission's 'Jandakot Underground Water Pollution Control Area';
6. Proposed Boundary Amendment to 'Jandakot Underground Water Pollution Control Area';
7. *Environmental Protection (Peel Inlet—Harvey Estuary) Policy, 1992*;
8. *Environmental Protection (Swan Coastal Plain Lakes) Policy, 1992*; and
9. Arrangements for a Common Approach Between Relevant Government Agencies.

In the event of any inconsistency arising between parameters, standards, criteria or provision, as stated in any of the related gazetted documents—

- (a) in the first instance the *Statement of Planning Policy No. 6—Jandakot Groundwater Protection Policy*;
- (b) thence the *Metropolitan Region Scheme Amendment No. 981/33—Rural—Water Protection Zone*;
- (c) thence the *Statement of Planning Policy No. 2—The Peel-Harvey Coastal Plain Catchment, 1992*;
- (d) thence the *Environmental Protection (Peel Inlet—Harvey Estuary) Policy, 1992*; and
- (e) thence the *Environmental Protection (Swan Coastal Plain Lakes) Policy, 1992*;

shall, in that order, prevail to the extent of the inconsistency. However, this does not apply where parameters, standards, criteria or provision, are not addressed in this Policy or where more specific provisions apply in another document.

3. INTERPRETATIONS

In this Policy, unless the contrary intention appears—

Commission means the Western Australian Planning Commission constituted under the *Western Australian Planning Commission Act, 1985*;

contaminant means any substance that is capable of causing a change in the physical, chemical or biological characteristics of groundwater such that the uses of groundwater, as identified in Section 7 of this Policy, are compromised;

contamination means occurrence of substances which in soil or groundwater at concentrations above background levels and which assessment indicates pose, or have the potential to pose, an unacceptable risk to human health or the environment;

constituents means any measurable characteristic that can potentially be found in water and affect its quality. They include physical, chemical, microbiological and radiological properties;

designated substances are substances which have the potential to cause contamination of surface or groundwater when released to the environment. They include, but are not limited to—

- (i) Substances specified in the Schedules of the *Poisons Act, 1964* (as amended).
- (ii) Substances specified in the Orders and Regulations made under the *Explosives and Dangerous Goods Act, 1961* (as amended).

Designated substances do not include quantities of materials less than 23 litres held in watertight containers and used for maintenance of hygiene or other ordinary on-site non-commercial purposes;

development means the development or use of any land, including any demolition, erection, construction, alteration of or addition to any building or structure on the land and the carrying out on the land of any excavation or other works and, in the case of a place to which a Conservation Order under Section 59 of the *Heritage of Western Australia Act, 1990* applies, also includes any act or thing that—

- (a) is likely to change the character of that place or the external appearance of any building;
or
- (b) would constitute an irreversible alteration of the fabric of any building;

groundwater means water located below the surface of the ground and includes surface expressions of groundwater, e.g. lakes and wetlands;

Inter Governmental Agreement on the Environment means the agreement signed on 1 May 1992 by the Commonwealth of Australia, State and Territory Governments and the Australian Local Government Association for the purpose of a cooperative national approach to the environment;

land use means the active or passive use to which the land is put by its owner or lessee or occupier;

margin means a 50 metre buffer distance of upland vegetation, measured from the wetland boundary, and which includes the permanently inundated, seasonally inundated and seasonally waterlogged zones;

Metropolitan Region Scheme means the Metropolitan Region Scheme made pursuant to the *Metropolitan Region Town Planning Scheme Act, 1959* published in the *Government Gazette* of 9 August, 1963 and as amended from time to time;

mining operations has the meaning given to that expression in section 8 (1) of the *Mining Act, 1978*;

native vegetation means any plant species that is indigenous to the Policy Area;

NH & MRC limit refers to the health limit or where not established the aesthetic limit of the Australian Drinking Water Guidelines established by the National Health and Medical Research Council in 1996;

non-conforming use means any use of land or building which was lawful immediately prior to the coming into operation of the local government town planning scheme, but is no longer in conformity with the provisions of the scheme;

nutrient means any chemical that provides nourishment for a living organism. Well-known nutrients include the macro-nutrients of nitrogen, phosphorus and potassium;

prescribed use means a use prescribed by regulations made under Section 123 of the *Environmental Protection Act, 1986*;

recharge means the process of water being added to a groundwater system;

reserve means any land reserved for a public purpose;

town planning scheme has the same meaning as described in the *Town Planning and Development Act, 1928*;

Underground Water Pollution Control Area means an area constituted under Section 57A of the *Metropolitan Water Supply, Sewerage and Drainage Act, 1909*, for the protection of drinking water quality; and

wetland means land in the Policy Area that is subject to permanent or seasonal inundation or waterlogging, whether by water that is fresh, brackish or saline, or flowing or static, but does not include estuaries, drains or their tributaries, dams or artificial impoundments.

4. APPLICATION OF THE POLICY

This Policy applies only to the area as defined (shaded) on the attached plan (Figure 1). This Policy applies to all residential, commercial, industrial, rural and recreational land uses, and public purpose undertakings within the Policy Area.

The Policy Area extends into the following local government districts—

City of Armadale
City of Canning
City of Cockburn
City of Gosnells
Town of Kwinana
Shire of Serpentine-Jarrahdale

5. POLICY OBJECTIVES

The objectives of the Policy are—

- to ensure that all changes to land use within the Policy Area are compatible with long-term protection and maintenance of groundwater for public supply and maintenance of associated ecosystems;
- to prevent land uses likely to result in contamination of groundwater through nutrient or contaminant export;
- to balance environmental protection with the economic viability of the existing land uses;
- to maintain or increase natural vegetation cover over the Policy Area; and
- to protect groundwater quality and quantity in the Policy Area in order to maintain the ecological integrity of important wetlands hydraulically connected to that groundwater, including wetlands outside the Policy Area.

BASIS FOR GROUNDWATER PROTECTION

6. PRINCIPLES OF GROUNDWATER PROTECTION

Groundwater protection is based on the following principles—

- (a) groundwater is a highly valued resource of the State;
- (b) groundwater quality and quantity are inexorably linked and should not be managed in isolation of each other or the ecosystems which depend on them;
- (c) groundwater quantity and quality should be protected to meet environmental requirements in order to protect ecological processes, human uses and for the health and sustenance of domestic livestock and crops;
- (d) groundwater protection is dependent on appropriate land use planning and management;
- (e) all Western Australians share the responsibility in protecting our groundwater resources;
- (f) protection of groundwater-dependent ecosystems is linked to consideration of the hydrological cycle, particularly in relation to groundwater recharge and discharge mechanisms; and
- (g) those set out in the Inter Governmental Agreement on the Environment, including—
 - (i) *polluter pays*, those who generate pollution and waste should bear the cost of containment, avoidance or abatement;
 - (ii) *inter-generational equity* (i.e. sustainable use), the present generation should ensure that the health, diversity and productivity of the environment are maintained or enhanced for the benefit of future generations; and
 - (iii) *precautionary principle*, where 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.

7. USES OF GROUNDWATER

The environmental values of groundwater declared to be protected under this Policy for groundwater—

- (a) for maintenance of groundwater-dependent ecosystems;
- (b) as a source of water for domestic human use;
- (c) as a source of water for industry;
- (d) as a source of water for agriculture; and
- (e) for recreation and aesthetics.

8. WATER QUALITY OBJECTIVES AND CRITERIA

8.1 The general environmental objective is to achieve, maintain and protect the declared environmental values and beneficial uses of groundwater.

8.2 Without limiting the generality of subclause (1) the default environmental quality objectives for the protection of groundwater environmental values and beneficial uses are the environmental quality objectives set out as parameters, standards and criteria in the following, and any amendments thereto—

- (a) the *Draft Western Australian Water Quality Guidelines for Fresh Marine Waters* published in 1993 by the Western Australian Environmental Protection Authority;
- (b) the *Australian Drinking Water Guidelines* published in 1996 by the National Health and Medical Research Council (NH & MRC) and the Agricultural and Resource Management Council of Australia and New Zealand;

- (c) the *National Water Quality Management Guidelines* published in 1992 by the National Health and Medical Research Council, the Agricultural and Resource Management Council of Australia and New Zealand and the Australia and New Zealand Environment and Conservation Council; and
- (d) *Australian Guidelines for Recreational Use of Water* published in 1990 by the National Health and Medical Research Council and the Agricultural and Resource Management Council of Australia and New Zealand.

8.3 In the event of any inconsistency arising between the parameters, standards or criteria set out under subclause (2)—

- (a) in the first instance the *Draft Western Australian Water Quality Guidelines for Fresh Marine Waters*;
 - (b) thence the *Australian Drinking Water Guidelines*; and
 - (c) thence the *National Water Quality Management Guidelines*;
- shall, in that order, prevail to the extent of the inconsistency.

The 'Water Catchment' reservation and the 'Rural—Water Protection' zone within the Policy Area, correlate to the boundary changes for the areas currently designated by the Water and Rivers Commission as 'Priority 1' and 'Priority 2', respectively (refer to Figure 2). These Priority areas are two of the three priority-protection levels utilised by the Water and Rivers Commission in constituting the proclaimed 'Jandakot Underground Water Pollution Control Area' (UWPCA). This Area has been established in order to restrict activities that may cause groundwater contamination.

Following are the objectives and detailed water quality performance criteria for the 'Water Catchment' reservation and the 'Rural—Water Protection' zone within the Policy Area.

Water Catchment Reservation

The objective of the 'Water Catchment' reservation is to ensure the availability of a water source suitable for the production of high-quality water. This will be achieved by allowing no further deterioration of the water quality through risk avoidance. The specific objectives for allowable contamination of the recharge water are summarised below. The specific objectives apply only to land uses listed in Section 11.

- *Pesticides*: the NH & MRC limit of determination or 10% of the health limit, whichever is the lesser.
- *Other Constituents*: an increase of 1% of the NH & MRC limit above the average natural concentration in groundwater.

The allowable contamination is estimated or measured at the point of entry to a watercourse or at the watertable and averaged for the property over a calendar year.

No contamination exceeding the NH & MRC guideline at any time is permitted in recharge water for the whole or any part of a lot **except** where the source of contamination is a septic tank system established to serve a caretaker's dwelling.

Rural-Water Protection Zone

The objective of the 'Rural-Water Protection' zone is to ensure there is no increased risk of contamination of the water source. Land use in the Rural—Water Protection Zone is managed in accordance with the principle of risk minimisation and only low-risk land development is compatible.

The specific objectives for allowable contamination of the recharge water are summarised below. The specific objectives apply only to land uses listed in Section 11.

- *Pesticides*: the NH & MRC limit of determination.
- *Carcinogens*: 10% of the NH&MRC limit.
- *Other Constituent*: an increase of 25% of the NH & MRC limit above the average natural concentration in groundwater recharge.
- *Nitrogen Loading*: a maximum loading of 25kg Nitrogen/ha/year is accepted. If a higher loading is required, the
- proponent must demonstrate the nitrate concentration in groundwater recharge over the lot will not exceed 25% of the NH & MRC limit.

The allowable contamination is estimated or measured at the point of entry to a watercourse or at the watertable and averaged for the property over a calendar year. No contamination exceeding the NH&MRC guideline at any time is permitted in recharge water for the whole or any part of a lot **except** where the source of contamination is a septic tank system established to serve a single residence.

PROGRAM FOR PROTECTION OF GROUNDWATER

9. NATIVE VEGETATION AND WETLANDS

The retention of native vegetation and wetlands is beneficial in protecting and maintaining the quality of the groundwater resource. They also function as—

- (a) a refuge for rare, endangered, and geographically restricted species of flora and fauna, including birds which migrate between Australasia and the northern hemisphere and which are protected under international treaties;

- (b) a focus of cultural and heritage values for communities living in the area before European settlement, having provided the basis for food gathering and spiritual life in those communities;
- (c) an important aesthetic element in the natural landscape;
- (d) an important resource in studying the natural environment and as a tool for monitoring groundwater levels and quality; and
- (e) a biologically productive and a genetically diverse natural environment.

The retention of native vegetation and protection of wetlands within the Policy Area are fundamental to the objectives of the Policy. Protection and enhancement of native vegetation and wetlands will be a key requirement of any new developments.

10. SUBDIVISION

Subdivision potential for the 'Rural—Water Protection' zone within the Policy Area will continue to be guided by the *Jandakot Land Use and Water Management Strategy*. The Strategy designates much of the area for Rural Living which corresponds with existing 'Special Rural' zones. The Strategy suggests that lot sizes in the 'Special Rural' zones should be determined to suit local conditions, having regard to prevailing lot size (subject to minimum lot size of 2ha), and be based upon a detailed assessment of land capability and suitability.

The Policy reinforces a minimum lot size of 2ha. Where it can be adequately demonstrated that the risk of contamination to the groundwater resource is not increased, then a 2ha average lot size may be acceptable by, for example, using innovative subdivision designs such as cluster form developments. Where an average lot size density is used, an appropriate covenant or caveat should be placed on the title deed to ensure that the residual or larger land area is not further subdivided or fragmented. It should be noted that closer developments, such as cluster subdivisions, may pose a risk to drinking water supplies and therefore may be required to provide an alternative water supply other than using groundwater i.e. rainwater tanks.

The Western Australian Planning Commission may consider, on advice from the Water and Rivers Commission, the Health Department and the Department of Environmental Protection, developments with alternative wastewater treatment and effluent disposal systems. The onus of proof will rest with the subdivider to provide sufficient technical and engineering evidence that alternative systems or site modification will remove any adverse effects on public health, water resources or the environment while not having a detrimental effect on the character of the area.

When advising on subdivision proposals, local government should ensure that a drainage provision is included that maximises the consumption and retention of drainage on site. Conservation reserves are not appropriate as biological wetland filters. Development near conservation reserves may require special constraints to protect and preserve them.

11. LAND USES

The objective in relation to land uses over public groundwater is to control and manage future land uses to achieve acceptable levels of risk for contamination. It needs to be appreciated that landowners can continue to use the land at their existing approved levels of activity. This also means that landowners can sell their properties and the new landowners are able to carry on the existing approved levels of activity.

The following outlines the acceptability of broad land use classifications for the Metropolitan Region Scheme's (MRS) 'Rural—Water Protection' zone and the 'Water Catchments' reservation.

'Water Catchments' Reservation

As the 'Water Catchments' reservation extends over MRS reservations, development control will continue to reside with the Western Australian Planning Commission. Land uses that may be compatible with the reservation include maintenance and enhancement of native vegetation and wetlands, associated scientific research and education, passive recreation, caretaker's dwelling, public utilities and important regional roads and railways.

There is infrastructure for road, rail and air transport in the Policy Area. This transport infrastructure is an integral part of the urban fabric of the Perth Metropolitan Area and in general is an acceptable use within the Policy Area. However, it is acknowledged that there are potential risks to groundwater in both the construction and operation of these various elements of infrastructure and their associated activities. The Policy recognises this and it is expected that Best Practice Management be put in place by the operating authorities to protect the groundwater in consultation with the Water and Rivers Commission.

'Rural—Water Protection' Zone

Local government may propose a number of different local zones within the area covered by the MRS 'Rural—Water Protection' zone, and may choose which of the permitted uses would apply to each of their zones.

The land uses and equivalent annotations listed in Table 1 should be reflected in local government town planning scheme zonings which corresponds to the MRS 'Rural—Water Protection' zone. The symbols shown against these uses mean—

P a use that is permitted.

AA that the local government may, at its discretion, but after having due regard for the advice from the Water and Rivers Commission, permit the use.

Local government, when amending its town planning scheme, may choose to replace the 'AA' annotation with and 'SA' (Special Approval) annotation or equivalent annotation for any of the discretionary uses listed in Table 1, for the purposes of maintaining a consistency within its scheme.

The land uses listed in Table 1 below should be read in conjunction with the interpretations of the listed land uses as they appear in Appendix 2.

All other uses should generally not be permitted, in particular Intensive Agriculture, Turf Farms and Golf Courses, except where a use is not mentioned, but which is similar to a use that is listed in Table 1, then applications must be submitted to the Ministry for Planning and the Water and Rivers Commission for their advice.

The requirements for each of the corresponding land uses by the Water and Rivers Commission are also detailed in Table 2. The 'Rural-Water Protection' zone within the Policy Area correlates to the areas currently designated by the Water and Rivers Commission as 'Priority 2' (P2). These requirements are included for the purposes of the responsible local government's consideration in determination of a development application. Neither the land use annotations nor the development control provisions contained in Section 12 of this Policy are intended to affect the application and operation of the powers of the Water and Rivers Commission.

TABLE 1 – LAND USE SUITABILITY for the RURAL - WATER PROTECTION ZONE		TABLE 2 - REQUIREMENTS OF THE WATER AND RIVERS COMMISSION FOR PRIORITY 2 WATER SOURCE PROTECTION AREAS
Land Use	Annotation	Requirements
Animal Husbandry	AA	Nutrient loadings in groundwater recharge must comply with water quality objectives for the Rural - Water Protection 'zone. Livestock numbers must conform to stocking densities recommended by Agriculture WA. Each proposal should be referred to WRC* for assessment.
Aquaculture	AA	This is a restricted land use activity within P2*. Any development requires a permit from the WRC. Proposals should be operated in accordance with the WRC's <i>Guidelines for the Acceptability of Aquaculture Projects</i> .
Caretaker's Dwelling	AA	This is a restricted land use activity within P2. Density of wastewater disposal and lot size require assessment. The proponent should refer details of wastewater disposal system to WRC for approval.
Cattery*	P	na

TABLE 1 - LAND USE SUITABILITY for the RURAL - WATER PROTECTION ZONE		TABLE 2 - REQUIREMENTS OF THE WATER AND RIVERS COMMISSION FOR PRIORITY 2 WATER SOURCE PROTECTION AREAS
Land Use	Annotation	Requirements
Dwelling	P	Does not need to be referred to WRC for advice. A licence for groundwater abstraction is required from the WRC.
Dog Kennels*	A	This is a restricted land use activity within P2. Proposals should conform with WRC guidelines on appropriate waste and wastewater management.
Equestrian Activity*	AA	This is a restricted land use activity within P2. Nutrient loadings in groundwater recharge must comply with water quality objectives for the Rural - Water Protection Zone. Proposals should be referred to WRC.
Floriculture	AA	This is a restricted land use activity within P2. Contaminant loadings in groundwater recharge must comply with water quality objectives for the Rural - Water Protection Zone. A permit is required from WRC for storage of fuels or chemicals. Restrictions may apply to fertiliser application rates and the application of pesticides. A groundwater licence for water abstraction is also required from WRC.
Fodder and Pasture	P	Does not need to be referred to WRC for advice. A Broadacre Cropping licence for groundwater abstraction is required (non-irrigated) from the WRC.
Hobby Farm	P	Does not need to be referred to WRC for advice. A licence for groundwater abstraction is required from the WRC.
Home - Business	AA	Proposals should be referred to WRC for advice on acceptability of proposed occupation.
Home Occupation	AA	Proposals should be referred to WRC for advice on acceptability of proposed occupation.

TABLE 1 - LAND USE SUITABILITY for the RURAL - WATER PROTECTION ZONE		TABLE 2 - REQUIREMENTS OF THE WATER AND RIVERS COMMISSION FOR PRIORITY 2 WATER SOURCE PROTECTION AREAS
Land Use	Annotation	Requirements
Industry-Extractive	AA	This is a restricted land use activity within P2. Proposals should be referred to WRC. Restrictions apply on depth of mining to watertable and storage of designated substances. A permit is required from WRC for storage of fuels and/or chemicals. A groundwater licence for water abstraction is also required from WRC. Proposals should comply with conditions set by the DOME* and/or the LG*.
Orcharding	AA	This is a restricted land use within P2. Contaminant loadings in groundwater recharge must comply with water quality objectives for the Rural - Water Protection zone. A permit is required from WRC for storage of fuels or chemicals. Restrictions may apply to fertiliser application rates and the application of pesticides. A groundwater licence for water abstraction is also required from WRC.
Plant Nursery* (wholesale and retail)	AA	This is a restricted land use activity within P2. Nutrient loadings in groundwater recharge must comply with water quality objectives for the Rural - Water Protection zone. A permit is required from WRC for storage of fuels or chemicals. Restrictions apply to fertiliser application rates and the application of pesticides. A groundwater licence for water abstraction is also required from WRC.
Poultry Farm (housed)	AA	This is a restricted land use activity within P2. Developments should satisfy the WRC guidelines for poultry farming. A permit is required from WRC subject to the assessment of the site's vulnerability to groundwater contamination and consideration of location of the site in respect to the production wells.
Private Tree Plantation	AA	This is a restricted land use activity within P2. Contaminant loadings in groundwater recharge must comply with water quality objectives for the Rural-Water Protection zone. A permit is required from WRC for storage of fuels or chemicals. Restrictions may apply to fertiliser application rates and the application of pesticides. A groundwater licence for water abstraction is also required from WRC.

TABLE 1 - LAND USE SUITABILITY for the RURAL - WATER PROTECTION ZONE		TABLE 2 - REQUIREMENTS OF THE WATER AND RIVERS COMMISSION FOR PRIORITY 2 WATER SOURCE PROTECTION AREAS
Land Use	Annotation	Requirements
Radio, TV & Communication Installation	AA	This is a restricted land use activity within P2. The proponent should obtain a permit from WRC for storage and use of potential groundwater contaminants.
Public Utility	AA	These developments can potentially cause contamination of public drinking water sources from nutrients or other organic chemicals. Any proposal associated with storage of use of potential groundwater contaminants may require a permit from WRC. A permit for designated substances is required even for temporary storage during construction.
Recreation-Public	P	Proposals should comply with requirements from Health Department and WRC for wastewater disposal.
Stable	AA	This is restricted land use activity within P2. Nutrient loadings in groundwater recharge must comply with water quality objectives for the Rural - Water Protection zone. Proposals should be referred to WRC.
Stall-Wayside	AA	Any development should comply with LG requirements.
Viticulture	AA	This is a restricted land use activity within P2. Contaminant loadings in groundwater recharge must comply with water quality objectives for the Rural - Water Protection zone. A permit is required from WRC for storage of fuels or chemicals. Restrictions may apply to fertiliser application rates and the application of pesticides. A groundwater licence for water abstraction is also required from WRC.

- P2* refers to Priority 2 Source Protection Area and correlates with the 'Rural—Water Protection' zone.
- WRC* refers to the Water and Rivers Commission.
- DOME* refers to the Department of Minerals and Energy.
- LG* refers to local government.
- Cattery*; Dog Kennels*; Equestrian Activity*; and Plant Nursery*—are land uses where extensions to existing operations and new developments are to be restricted to the special areas designated in the relevant town planning schemes, at the time of publication of this Statement of Planning Policy.

12. DEVELOPMENT CONTROL PROVISIONS

The following development control provisions will apply. Generally, the responsibility for determination will rest with the relevant local government based on relevant land zoned in the local government town planning scheme. Proposals will, in any event, be subjected to by-laws controlling the Jandakot Underground Water Pollution Control Area. An applicant is to refer to the Water and Rivers Commission in this respect.

Development, including both material changes in land use and the construction of works in the Policy Area, should relate to land capability and suitability and specific management practices to ensure that the risk of pollution to the groundwater resource is not increased.

Development within the Policy Area of the 'Jandakot Underground Water Pollution Control Area' will apply utilising on-site effluent disposal will require approval from the Water and Rivers Commission.

Disposal systems require Health Department approval.

Approval will be required from the Water and Rivers Commission with regard to water supplies from bores and wells.

The retention and rehabilitation of existing vegetation is to be encouraged. Remnant vegetation should be retained on the margins of sumplands, damplands and wetlands, to maintain the ecological integrity of the environmental resource.

Development proposed within 200 metres of the boundary of a Conservation or Resource Management category wetland (as defined in *Wetlands of the Swan Coastal Plain—Volume 2*) should be referred to the Water and Rivers Commission for advice.

The development of kennels and equestrian activities should be restricted to the special areas designated in the relevant town planning schemes, at the time of publication of this Statement of Planning Policy.

Within the Policy Area, development of new plant nurseries (wholesale and retail) will not be allowed outside the special areas designated in the relevant town planning schemes at the time of publication of this Policy. The expansion of existing plant nurseries should be strictly controlled with regard to the storage of blended soils, fertilisers, chemicals and fuels etc. which pose a threat to the groundwater resource.

13. DISCRETIONARY USES

Where an application is made for approval of a discretionary land use which is specified in Table 1, as representing a potential source of groundwater contamination, the following procedure should apply. It should be noted, that the procedure outlined below is notional and is meant to demonstrate the intent and process involved in the application of an intended delegation instrument. It should also be noted, that a delegation instrument is a separate action to be taken by the Commission under either the *Metropolitan Region Scheme Act* or the *Western Australian Planning Commission Act*.

The local government will be required to refer development applications within the Policy Area to the Water and Rivers Commission for comment, before making a determination. The local government will be required to incorporate the Water and Rivers Commission's recommendation into its decision on the application. If the local government is not prepared to accept the recommendation of the Water and Rivers Commission then, within a specified period of time of the receipt of the recommendation, the development application will be forwarded to the Western Australian Planning Commission for determination, together with the Water and Rivers Commission recommendation.

14. NON-CONFORMING USES

The requirements of the local government town planning schemes in relation to non-conforming use specifications should comply with the requirement of this Policy to accord with the MRS Amendment No. 981/33.

Prevention of continuance of a legally permitted use by a current town planning scheme incurs a liability for compensation. Where there is a risk of a non-conforming use contaminating the groundwater, and a restriction is placed on that use, the compensation and injurious affection provisions of the *Town Planning and Development Act, 1928* (as amended), may apply.

In formulating local government town planning scheme amendments to accord with this Policy, provisions will be made for the continuing lawful use of the land, or the extension of such uses at the time the scheme amendments come into effect, as would have been permitted if such scheme amendments had not come into effect.

A local government may, in particular circumstances, make provision in the scheme amendment affecting any non-conforming use where such use puts the groundwater resource at risk of contamination.

Land or property should not be deemed to be injuriously affected by reason of the making of any provisions inserted in a town planning scheme for the purpose of minimising the risk of contaminating the groundwater resource.

Notwithstanding the above, where existing uses are likely to have a detrimental effect on the quality of the groundwater through the discharge of nutrients or other waste matter, the *Environmental Protection Act, 1986* may apply.

15. EFFLUENT DISPOSAL

Local governments are responsible for the supervision and management of alternative effluent disposal systems, including alternative or Aerated Treatment Units.

Within the Policy Area, on-site effluent disposal for new developments should only be used if—

- factors such as soil type, permeability, vegetation cover and system design have been addressed;
- environmental acceptability can be demonstrated to the EPA;
- at least a 1.2m vertical separation exists between the underside of the wastewater disposal system base and the highest known watertable, as per regulation 49 of the *Treatment of Sewage and Disposal of Effluent and Liquid Waste Regulations*; and
- there is at least 100m horizontal separation between the disposal system and the nearest water body or public water supply well.

16. LAND USE ZONING

In relation to the preparation of town planning scheme amendments within the Policy Area, no residential, special

residential, industrial or commercial zoning should be considered. 'Special Rural' or 'Rural Residential' zones will be considered, provided they conform with the *Jandakot Land Use and Water Management Strategy*. When considering scheme amendments, local government should ensure that account is taken of land capability/suitability criteria, particularly in relation to the net effects that the proposed land use changes are likely to have on the risk of polluting the groundwater.

17. IMPLEMENTATION THROUGH PLANNING SCHEMES

Local governments affected by MRS Amendment No. 981/33 are required to review their town planning schemes within a three-month period from final government gazettal date of the MRS Amendment. For amendments to existing planning schemes operating in the Policy Area, those schemes should be amended to accord with the land use provisions of this Policy. The zoning table in new schemes, or in amendments to existing schemes, should reflect the land use suitability as listed in Table 1, Section 11 of this Policy. Uses not mentioned in the land use table should not be introduced into the list of permissible or discretionary uses nor permitted within the 'Rural—Water Protection' zone, except with the express approval of the Western Australian Planning Commission in consultation with the Water and Rivers Commission.

For the purposes of this Policy the interpretations for land uses, as appear in Appendix 2, are to be used.

Local government may propose a number of different local zones within the area covered by the MRS 'Rural-Water Protection' zone, and may choose which of the permitted or discretionary uses would apply to each of their zones.

The MRS reserves in the Policy Area are automatically included within local government schemes.

APPENDIX 1

BACKGROUND INFORMATION

1. PARLIAMENTARY SELECT COMMITTEE ON METROPOLITAN DEVELOPMENT AND GROUNDWATER SUPPLIES

In November 1993 the Legislative Assembly of the Parliament of Western Australia resolved—

- (1) *That a Select Committee be appointed to inquire into and report on to what extent and in what manner development should be permitted on or around groundwater reservoirs in the Perth Metropolitan Region, with particular regard to protecting underground water supplies while maximising the potential to zone and develop land for its optimum and best use inclusive of urban development;*
- (2) *That the committee have power to send for persons and papers, to sit on days over which the House stands adjourned, to move from place to place and to report from time to time; and*
- (3) *That the committee finally report by no later than 30 November 1994.*

The Select Committee concluded that Perth's groundwater systems constitute a significant regional resource of fresh water which meets approximately 60 percent of combined domestic, irrigation and industrial supply demands. The Jandakot mound has the potential to supply 13 million kilolitres a year of shallow groundwater.

The Select Committee report, which was tabled into the Legislative Assembly on 1 December 1994 contained, inter alia, the following recommendations policy—

- 1.2 *DPUD's (now the Ministry for Planning) Water Resources Policy D.C No. 6.3 should be amended to strengthen groundwater protection mechanisms, be compatible with the Crown land EPP and give greater responsibility to DPUD to ensure that protection of Perth's water supply is given primacy in the important recharge areas of Gnangara and Jandakot.*
- 4.9 *Consideration should be given to the gazetting of a Priority 1 zone on the main recharge area of the Jandakot mound to cover land held by Government.*
- 13.1 *The town planning schemes developed by local government should be reviewed to ensure they reflect the water protection policies and By-laws developed by the Water Authority (now the Water Corporation and the Water and Rivers Commission), the State Planning Commission (now the Western Australian Planning Commission) and the Environmental Protection Authority.*

2. STATEMENT OF PLANNING POLICY NO. 2 THE PEEL-HARVEY COASTAL PLAIN CATCHMENT

On 21 February 1992 the then State Planning Commission published *Statement of Planning Policy No. 2—The Peel-Harvey Coastal Plain Catchment*. This policy was initiated by the Government which resolved that—

"Measures be taken to ensure that there is no significant increase of nutrients into the estuary from urban sources by requiring that all developments within 2 km are to include appropriate sewage disposal systems."

The resultant Statement of Planning Policy covers the catchment areas of those water systems that discharge into the Peel Harvey Estuary. It extends into the local government districts of Cockburn, Armadale, Kwinana, Rockingham and Serpentine-Jarrahdale within the Metropolitan Region Scheme. Statement of Planning Policy No. 2 will overlap the Jandakot Groundwater Protection Policy, and it is important that the two policies are recognised and incorporated into town planning schemes. The two planning instruments, this draft Policy and SPP No. 2, are similar in that they have a general resource protection objective. Obviously, the circumstances and associated policy provisions differ to achieve discrete objectives. Therefore, inconsistencies do exist with regard to policy provision. As a general practice, where there is an inconsistency from one policy to the next, the latter prevails. In this instance, the SPP No. 6 is the latter.

3. ENVIRONMENTAL PROTECTION (PEEL INLET-HARVEY ESTUARY) POLICY, 1992

The *Environmental Protection (Peel Inlet-Harvey Estuary) Policy, 1992* sets out environmental quality objectives for the Estuary for the purpose of rehabilitation and protection of the Estuary from further degradation. The Policy also outlines the means by which the environmental quality objectives are to be achieved and maintained. This Policy underpins the *SPP No. 2—the Peel-Harvey Coastal Plain Catchment*.

4. ENVIRONMENTAL PROTECTION (COASTAL PLAIN LAKES POLICY) POLICY, 1992

The *Environmental Protection (Coastal Plain Lakes Policy) Policy, 1992* ensures that any nominated lake, regardless of its wetland evaluation management category, is automatically protected from unauthorised filling, mining, changes to drainage or direct effluent discharge.

5. JANDAKOT LAND USE AND WATER MANAGEMENT STRATEGY, 1995

The Strategy established the physical and policy framework for the long-term planning, management and development of the area covered by this Statement of Planning Policy. The overall aims of the strategy are to—

- promote development which is consistent with the protection and management of the groundwater system and key environmental values;
- provide opportunities for consolidated urban growth close to existing services in the Perth Metropolitan Region; and
- preserve significant wetlands and remnant vegetation while providing for compatible economic and recreational activities.

The Strategy includes land use and management controls designed to protect both the groundwater and environmental resources in the Policy Area. These controls involve both local and State government agencies responsible for environmental protection and water resource management.

6. METROPOLITAN REGION SCHEME AMENDMENT NO. 981/33 RURAL-WATER PROTECTION (SOUTH-WEST AND SOUTH-EAST CORRIDORS)

The Western Australian Planning Commission examined options for protecting the groundwater for privately owned land zoned Rural in the Metropolitan Region Scheme (MRS). As there were no suitable zones in the MRS, the preferred option was to create a new zone.

At its meeting on 11 August 1996 the Western Australian Planning Commission resolved to proceed with an amendment to the Metropolitan Region Scheme to create a new zone for the purpose of protecting the groundwater for public water supply purposes on the Jandakot mound and to rezone the affected area of land accordingly. The amendment will be made under the provisions of Section 33 of the *Metropolitan Region Town Planning Scheme Act, 1959*.

The Amendment proposal is to apply the 'Rural—Water Protection' zone to the land currently zoned Rural over the capture areas of the existing Jandakot Public Water Supply wellfield and its proposed extension. The affected areas are currently designated by the Water and Rivers Commission as 'Priority 2' groundwater source protection areas. The area affected is 4818ha. The Amendment originally proposed the name of the new zone to be 'Rural Groundwater Catchment Protection' zone. However, after consideration of submissions and hearings, the Hearings Committee recommended to the Hon Minister for Planning to simplify the terminology to 'Rural-Water Protection' zone.

It is also proposed to apply the current MRS 'Water Catchments' reservation to Crown land located over the capture areas of the existing Jandakot Public Water Supply wellfield and its proposed extension. The 1650 ha of land to be affected are presently reserved under the MRS as Parks and Recreation and Public Purposes. The 'Water Catchments' reserve is extended to include 'Important Regional Road' and 'Railway' reserves in the Policy Area.

7. WATER AND RIVERS COMMISSION'S 'JANDAKOT UNDERGROUND WATER POLLUTION CONTROL AREA'

Clause 57A of the *Metropolitan Water Supply, Sewerage and Drainage Act, 1909* gives the Governor the power on the recommendation of the Water and Rivers Commission to proclaim, constitute and declare any part or parts of an area to be an Underground Water Pollution Control Area (UWPCA). Within the UWPCAs the Water and Rivers Commission has defined three priority-protection levels. These are—

Priority 1 (P1). This is the highest level of protection and normally will apply to land owned by the State, with low-intensity and low-risk land use such as forestry. Use of this land for protection of the public water supply outweighs virtually all other considerations and the object is to ensure that there is no degradation of water resources in these areas.

Priority 2 (P2). Normally includes private rural with few buildings, with low-risk, low-intensity land use. These areas have a high priority for public water supply use. The management objective is to ensure there is no increased risk of pollution to the water source. Restricted development may take place under specific guidelines.

Priority 3 (P3). Generally includes areas where water-supply needs co-exist with other land uses such as housing, commercial sites and light industry. Management controls, rather than land use restrictions dominate the water management and protection policy for these areas. The areas are defined to minimise the risk of pollution to the water source.

The Jandakot Underground Water Pollution Control Area is generally defined on the attached plan (Figure 2). The existing JUWPCA boundaries are to be amended to coincide with the recommendations of the Water and Rivers Commission's report—*Review of Groundwater Protection Priority Area Boundaries Jandakot Mound* (Dames and Moore, 1996). This proposed boundary has been reflected in the Metropolitan Region Scheme Amendment No. 981/33.

8. PROPOSED BOUNDARY AMENDMENT TO 'JANDAKOT UNDERGROUND WATER POLLUTION CONTROL AREA'

The Select Committee on Metropolitan Development and Groundwater Supplies also recommended that: "a study be undertaken by the Water Authority, in liaison with the EPA (Environmental Protection Authority) and DPUD (Department of Planning and Urban Development, now the Ministry for Planning) to review the priority area boundaries to ensure that they are based on rigorous scientific evidence...."

In September 1995, the consultant firm Dames and Moore was selected to conduct the groundwater modelling scientific study recommended in the Select Committee's report. The study assessed the requirements to protect the current and future public water supply wellfield at Jandakot. The outcomes of this study will result in adjustments being made to the UWPCA boundaries (as defined generally on the attached plan—Figure 1) and have been the basis for identifying zone and reservation changes in MRS Amendment 981/33.

The Select Committee recommended that land which is already committed for urban and commercial development be recognised in the review of priority boundaries.

9. ARRANGEMENTS FOR A COMMON APPROACH BETWEEN RELEVANT GOVERNMENT AGENCIES

The Environmental Protection Authority (EPA) and the Water and Rivers Commission (WRC) Board of Management have been consulted on this draft Statement of Planning Policy. This consultation follows collaboration with the Department of Environmental Protection, the Water and Rivers Commission and the Ministry for Planning on the content and requirements of this Policy. In this way, a policy framework is provided to guide town planning scheme amendments and the ongoing protection of the groundwater resource through land use planning. The performance of statutory functions and discretions by either the EPA or WRC under their respective legislation will be independently exercised notwithstanding the terms of the EPP.

Town planning schemes and their amendments are required to be referred to the EPA under Section 48 of the *Environmental Protection Act, 1986*. Elements of this Policy and consistency of any Scheme or amendment to a Scheme with this Policy will be used, in part, to determine whether or not a formal assessment is required.

APPENDIX 2

LAND USE INTERPRETATIONS

Where a land use interpretation in this Policy is inconsistent with the Western Australian Planning Commission's Model Scheme Text, the interpretation of the Model Scheme Text shall prevail.

For the purposes of this Policy the following interpretations for land uses have been used—

animal husbandry means any land used for the development of land for the keeping, rearing or fattening of livestock, rabbits (for either meat, or fur production), but does not include pigs, poultry (for either egg or meat production which is not housed) and other livestock in feedlots and which are in excess of the recommended stocking rates by Agriculture WA;

aquaculture shall have the same meaning as given to the term in and for the purposes of the *Fish Resources Management Act, 1994*;

apiary means the keeping of bees;

caretaker's dwelling means a building used as a dwelling by a person having the care of the building, plant, equipment or grounds associated with an industry, business, office or recreation area carried on or existing on the same site;

cattery means the of an approved outbuilding constructed in accordance with the *Health Act Model By-Laws Series 'A' Part One—General Sanitary Provisions, 1927* for the purpose of keeping more than three (3) cats over the age of three (3) months;

dog kennels means any land or buildings used for the boarding and breeding of dogs where such premises are registered or required to be registered by the Council, and may include the sale of dogs;

equestrian activity means any land or buildings used for the showing, competition or training of horses and includes a riding school;

floriculture (extensive) means the production of vegetables, flowers, exotic and native plants;

fodder and pasture means the development of land for non-irrigated fodder production and non-irrigated pasture but does not include turf farms;

hobby farm means any land or building used for the keeping of farm animals or the growing of vegetables, fruit and flowers for non-commercial purposes or sale;

home—business means a business, service, trade or similar activity carried on in a dwelling or on land around a dwelling which may employ, in addition to the resident of the dwelling, no more than two persons but which—

- (a) does not entail the retail sale, display or hire of goods of any nature;
- (b) does not cause injury to or prejudicially affect the amenity of the neighborhood;
- (c) does not detract from the residential appearance of the dwelling house or domestic outbuilding;
- (d) does not entail employment of any person not a member of the occupier's household;
- (e) does not occupy an area greater than 50m⁵;
- (f) will not result in traffic difficulties as a result of the inadequacy of on-site and off-site parking;
- (g) will not result in a substantial increase in the amount of vehicular traffic in the vicinity; and
- (h) does not entail the presence, parking and garaging of a vehicle of more than 3.5 tonne tare weight.

home occupation means an occupation carried on in a dwelling or on land around a dwelling by a resident of the dwelling which—

- (a) does not entail the retail sale, display or hire of goods of any nature;
- (b) does not cause injury to or prejudicially affect the amenity of the neighborhood;
- (c) does not detract from the residential appearance of the dwelling house or domestic outbuilding;
- (d) does not entail employment of any person not a member of the occupier's household;
- (e) does not occupy an area greater than 20m²;
- (f) does not display a sign exceeding 0.2m² in area
- (g) will not result in the requirement of a greater number of parking facilities than normally reserved for a single dwelling, and will not result in a substantial increase in the amount of vehicular traffic in the vicinity; and
- (h) does not entail the presence, parking and garaging of a vehicle of more than 1 tonne tare weight.

hydroponics means the production of vegetables, flowers, exotic and native plants, fruit and nuts using hydroponic systems for the delivery of water and nutrients to the plants;

industry—extractive means an industry which involves—

- (a) the extraction of sand, gravel, clay, 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
- (b) the production of salt by the evaporation of salt water.

nursery—see plant nursery;

orcharding means the production and operation of a fruit nurseries;

plant nursery means any land or buildings used for the propagation, rearing and sale of plants and the storage and sale of products associated with horticultural and garden activities;

poultry farm (housed) means any land or buildings used for hatching, rearing or keeping of poultry for either egg or meat production which does not constitute an offensive trade within the meaning of the *Health Act, 1911*;

private tree plantation means any land used for growing timber for commercial purposes;

public utility means any work or undertaking constructed or maintained by a public authority or the Council as may be required to provide water, sewerage, electricity, gas, drainage, communications or other similar services;

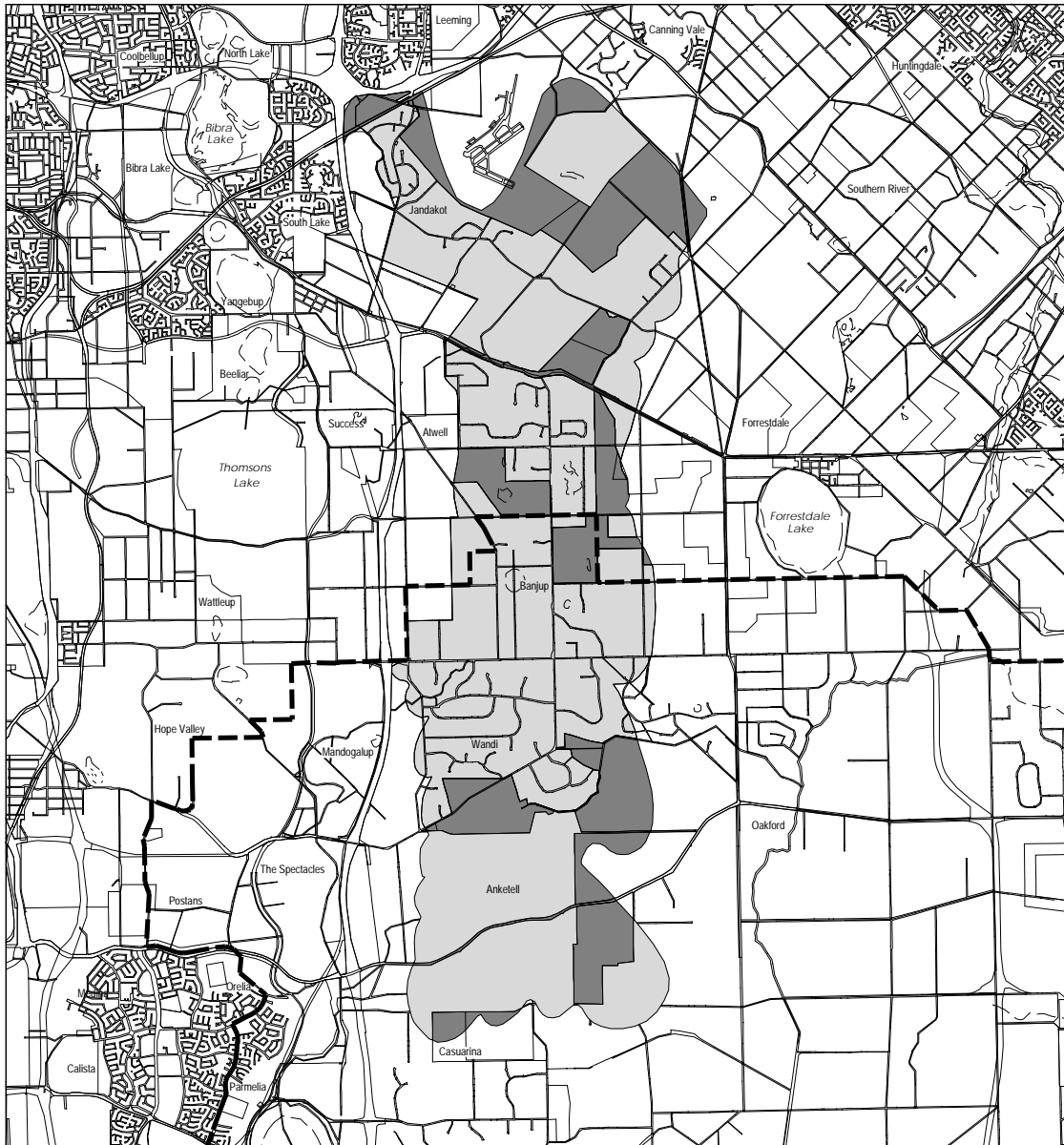
radio, TV and communication installation means any land or buildings used for the transmission, relay or reception of signals or pictures, both commercial and domestic, but does not include a communications antennae domestic;

recreation public means land used for a public park, public gardens, foreshore reserve, playground or other grounds for recreation which are usually open to the public without charge;

stable means any land, building or structure used for the housing, keeping and feeding of horses, asses and mules and associated incidental activities;

stall-wayside means a place, stand, vehicle or other thing which offers for sale to the general public, produce or any commodity which is grown or manufactured on the land/site, upon which the place, stand, or vehicle is located; and

viticulture means the production of grapes.






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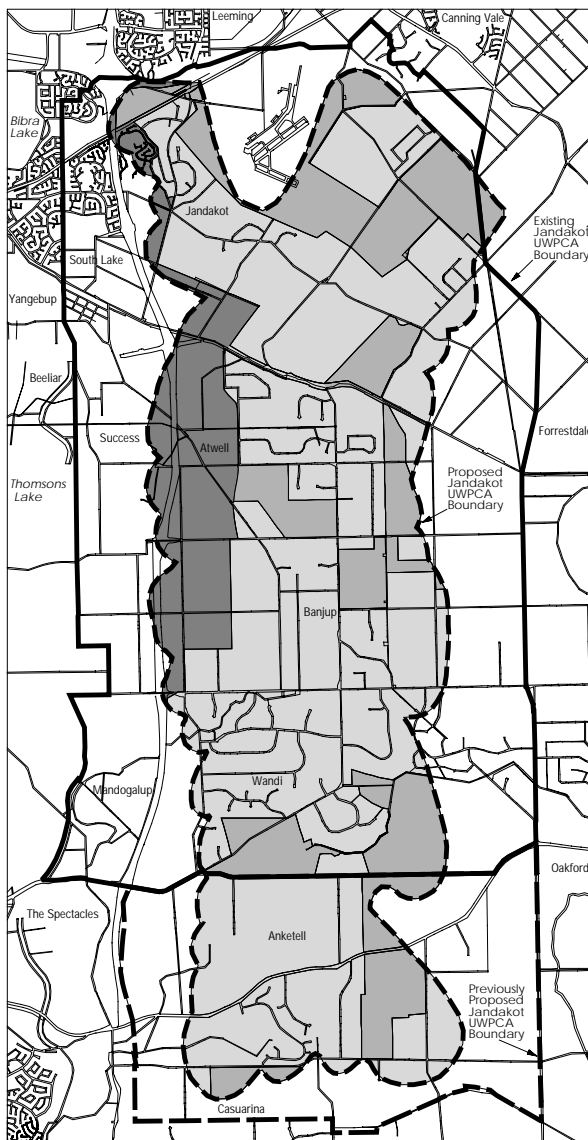
**POLICY AREA FOR SPP No. 6 -
JANDAKOT GROUNDWATER PROTECTION POLICY**

LEGEND

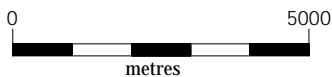
-  RURAL - WATER PROTECTION ZONE
-  WATER CATCHMENTS RESERVATION
-  SPP No. 2 THE PEEL - HARVEY COASTAL PLAIN CATCHMENT

PRODUCED BY LAND INFORMATION BRANCH, STATUTORY MAPPING SECTION, MINISTRY FOR PLANNING

FIGURE 1






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PLAN SHOWING EXISTING AND PROPOSED JANDAKOT UWPCA BOUNDARIES

SOURCE OF DATA: WATER AND RIVERS COMMISSION 

LEGEND

-  Priority 1 Source Protection Area (Proposed)
-  Priority 2 Source Protection Area (Proposed)
-  Priority 3 Source Protection Area (Proposed)

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FIGURE 2

