



**GOVERNMENT
SEWERAGE
POLICY**

**PERTH
METROPOLITAN
REGION**

GOVERNMENT SEWERAGE POLICY PERTH METROPOLITAN REGION

FOREWORD

In April 1981 the Government announced as part of its Sewerage Policy that, unless special conditions existed, the provision of reticulated sewerage to all new subdivisions in the Perth Metropolitan Region would be mandatory. This decision was arrived at having regard to matters of public health, environment, public and private water supplies and the efficient use of public funds.

Successive Governments have continued with the Policy.

In 1990, the Policy was amended to allow a two-year trial of small-scale unsewered density developments to either R20 or R30 depending on the location and suitability of the land.

Following that trial, the Policy has been rewritten and the new Policy is set out in this document. It requires:

1. All subdivision or density development to be provided with reticulated sewerage, except where certain discretionary provisions may apply;
2. Unsewered subdivision or density development not to exceed R12.5 within the inner metropolitan area. The trial has shown that, in practice, R20 and R30 development is too high a density for unsewered development; and
3. Subdivision or density development exceeding R5 in the outer metropolitan area to be subject to the provision of reticulated sewerage, except in certain circumstances set out in the Policy, e.g. aged persons' accommodation.

There is an expectation that developers will liaise with the Water Authority and the Health Department regarding the provision of sewerage. This should occur when subdivisional planning is proceeding, for example following rezoning.

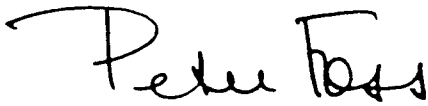
While there have been improvements in the technology associated with on-site wastewater treatment, reticulated sewerage remains the most reliable and environmentally acceptable means of wastewater disposal. It also provides flexibility to support a variety of land uses.

Wastewater treatment works can be designed, controlled and monitored to ensure that the quality of treated wastewater is satisfactory for release back into the environment, with minimal impact and the greatest regard for public health.

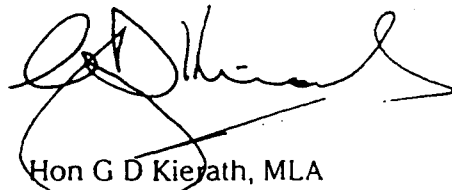
For these reasons reticulated sewerage is used extensively throughout the world to service large cities and towns, and has been adopted as the preferred system in all Australian capital cities. Perth is the only capital city in Australia with a significant proportion of properties not connected to sewerage (greater than 20% of all properties in the metropolitan area as at July 1994).

To overcome this problem, the Government and the Water Authority have undertaken to spend \$800-million on a program to provide reticulated sewerage to about 80,000 residential, commercial and industrial properties in the metropolitan region over the next ten years. The program called the *Infill Sewerage Program* began in the 1994-5 financial year.

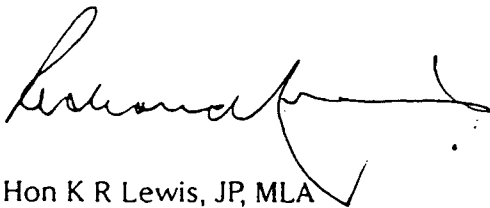
The Cabinet Committee on Waste Management endorses the revised Policy and restates that all new subdivisions or density developments shall be provided with reticulated sewerage except where this Policy provides otherwise.



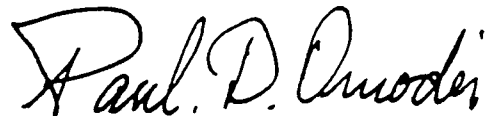
Hon P G Foss, BA, LLB, MLC
MINISTER FOR THE ENVIRONMENT;
WATER RESOURCES; THE ARTS;
FAIR TRADING



Hon G D Kierath, MLA
MINISTER FOR HEALTH;
LABOUR RELATIONS



Hon K R Lewis, JP, MLA
MINISTER FOR PLANNING;
HERITAGE



Hon P D Omodei, MLA
MINISTER FOR LOCAL GOVERNMENT;
MULTICULTURAL AND ETHNIC AFFAIRS

1. POLICY OBJECTIVES

The objectives of this Policy are:

- to protect public-health
- to prevent adverse environmental impact
- to reduce the extent of reticulated infill sewerage required in already developed areas and cost to the community in providing it
- to provide flexibility in the control of subdivision or density development for which reticulated sewerage is unlikely to be available for some time.

2. DEFINITIONS

The following definitions are used in this Policy unless inappropriate to the particular context:

'Aged or dependent person' means a person who is aged 55 years or over or is a person with a recognised form of handicap requiring special accommodation provisions for independent living or special care.

'Density development' means

- a) any residential development greater than a single house; OR
- b) a non-residential development likely to produce wastewater at a rate greater than a single residential equivalent.

'Inner metropolitan area' means all the land within the blue line drawn on Map 1.

'Lot' includes a strata lot.

'Outer metropolitan area' means all land in the Perth Metropolitan Region outside the blue line drawn on Map 1.

'Remote and isolated subdivision or density development' means subdivision or density development of land that is remote from existing or proposed urban land.

NOTE: Urban land means land zoned under the Metropolitan Region Scheme as Urban or Urban Deferred and/or land which may be developed at a density greater than or equal to R5 (2000m²) under a town planning scheme.

'Responsible authorities' means the Health Department of Western Australia, the Water Authority of Western Australia, the Western Australian Planning Commission and the Department of Environmental Protection.

'Reticulated sewerage' means a network of sewers connecting wastewater, from a subdivision or development for disposal off-site.

'Single residential equivalent', when applied to a non-residential development, means a development which is predicted to have an output of less than 540 litres per day (and usually means no more than three major plumbing fixtures).

'Subdivision' includes strata subdivision.

3. SCOPE

This Policy applies throughout the Perth Metropolitan Region to:

- 3.1 all subdivision EXCEPT the subdivision of rural zoned land for rural purposes; AND
- 3.2 all density development (NOTE: This does not include development on an existing vacant lot of a single house, or a non-residential development having a single residential equivalent).

4. MANDATORY PROVISIONS

This Policy requires the provision of reticulated sewerage to all subdivision or density development. Possible exceptions are covered in section 5 but do not include any of the following:

- 4.1 extensive broadacre subdivision, involving the creation of lots or dwellings in areas not currently developed for urban purposes, other than remote or isolated subdivision or density development in the outer metropolitan area (see Section 5.2.3);
- 4.2 subdivision or density development in areas served by reticulated sewerage or which the responsible authorities determine can reasonably be connected to sewer;
- 4.3 subdivision or density development in areas identified as unsuitable areas for onsite wastewater disposal (see Map 1);
- 4.4 subdivision or density development where the absence of sewerage is considered by the responsible authorities to endanger public health, the environment or the quality of underground and surface water supplies; OR

- 4.5 subdivision or density development where the absence of sewerage is considered by the responsible authorities to prejudice, physically or financially, the ability to provide sewerage to adjoining areas.

5. DISCRETIONARY PROVISIONS

The only exceptions to the requirements for provision of reticulated sewerage are as set out below:

5.1 Subdivision or Density Development in the Inner Metropolitan Area

Subdivision or density development without sewer in the inner metropolitan area may be permitted by the responsible authorities where subsections 4.1 to 4.5 do not apply subject to the following conditions:

- 5.1.1 residential developments do not exceed R12.5 and no individual lot on which wastewater is to be disposed is less than 700m² in area; AND
- 5.1.2 the on-site wastewater disposal system is a system approved by the Executive Director, Public Health, and is capable of limiting nutrient (specifically phosphorus) movement from the site, EXCEPT within the areas identified as unconstrained on Map 1, which do not require systems for nutrient removal.

5.2 Subdivision or Density Development in the Outer Metropolitan Area

Subdivision or density development without sewer in the outer metropolitan area may be permitted by the responsible authorities in the following circumstances, where subsections 4.1 to 4.5 do not apply:

5.2.1 *Small Infill*

proposals for small infill subdivision or development do not have potential for the creation of more than four additional lots, dwellings or single residential equivalents respectively, in the immediate vicinity (generally interpreted as within the street block), so that the proposal completes rather than extends an existing pattern of subdivision or development. Lot sizes and land use shall be consistent with the existing pattern of subdivision or development;

5.2.2 *Large Lots*

proposals for large lot subdivision do not involve the creation of lots less than 2000m², or density development exceeding R5, provided the responsible authorities are satisfied that no significant detriment to the environment is likely and there is no further opportunity for subdivision without sewerage;

5.2.3 *Remote and Isolated*

proposals for remote and isolated subdivision or density development do not involve the potential for the creation of more than 25 lots, dwellings or single residential equivalents respectively, and the applicant can demonstrate to the satisfaction of the responsible authorities that:

- i site conditions allow for the effective on-site disposal of wastewater on a long-term basis;
- ii residential developments do not exceed R12.5 and no individual lot on which wastewater is to be disposed is less than 700m² in area;
- iii where in the assessment of the Water Authority of Western Australia it is not economical or practical, within the foreseeable future, to provide sewerage that is connected to its reticulated sewerage system;

5.2.4 *Aged Persons' Accommodation Developments*

proposals for aged or dependent persons' accommodation where:

- i the developments do not exceed an R12.5 residential equivalent;
- ii the proponent has demonstrated to the satisfaction of the local authority a community need for such development in a particular location, and that location is suitable for such accommodation;
- iii the local authority is satisfied that no better alternative site is available in a particular locality for such development which could reasonably be connected to reticulated sewerage;

- iv an appropriate wastewater treatment system approved by the Executive Director, Public Health is used. The system must be capable of satisfying the conditions of Appendix 2 in relation to:
 - final effluent quality criteria;
 - irrigation area requirements;
- v the wastewater treatment and disposal system is owned and operated by a single identifiable person or body (e.g. owner or strata body) and an acceptable maintenance program is in place for the system and disposal area; AND
- vi the internal wastewater reticulation system installed is of a standard acceptable to the Water Authority of Western Australia and includes provision for connection to sewer when it becomes available.

6. ON-SITE WASTEWATER DISPOSAL REQUIREMENTS

Where permission is sought under the provision of section 5, the site requirements for on-site wastewater disposal shall meet the specifications set out in Appendix 1, and the responsible authorities may require compliance with any special conditions of the Department of Environmental Protection.

7. POLICY IMPLEMENTATION

- 7.1 All subdivision and density development continues to be subject to controls and procedures under relevant planning, environmental and health legislation.
- 7.2 In considering proposals involving subdivision or density development of land, local governments within the metropolitan region should apply the relevant provisions of this Policy in order to receive the necessary approval from the responsible authorities.
- 7.3 To ensure uniform application of this Policy, the relevant authorities have agreed to adhere to a coordinated plan of action:

- 7.3.1 the Western Australian Planning Commission will issue a Planning Policy adopting this Policy by reference;
 - 7.3.2 the Executive Director, Public Health, will not approve any on-site disposal installations that do not conform with the provisions of this Policy; AND
 - 7.3.3 the Policy will be taken into account when deciding upon the environmental acceptability of proposals assessed under the Environmental Protection Act and in the setting of environmental conditions on them, and advice on development proposals provided by the Department of Environmental Protection will be consistent with the Policy.
- 7.4 All subdivision or density development approved under this Policy which is:
- 7.4.1 located within the current detailed three-year infill sewerage program shall connect to the sewerage system immediately the Water Authority of Western Australia advises that it has become available; OR
 - 7.4.2 located outside the current detailed three year infill sewerage program is subject to the Water Authority of Western Australia's 'Minimise the Use of Septic Tanks' (MUST) program once sewerage is provided.

Where a subdivision or density development is subject to a sewerage connection requirement under Sections 7.4.1 and 7.4.2, the developer will be expected to advise purchasers of that requirement. The developer shall provide to the responsible authorities written evidence that the purchaser has been so advised.

- 7.5 Where an unsewered development has received formal planning approval at the time the Policy comes into effect, such development may proceed subject to the conditions applicable at the time of approval, including the Government Sewerage Policy at that time, for as long as that approval remains valid.
- 7.6 A strata development approved under this Policy shall make reference on its strata plan to wastewater disposal requirements as follows:

7.6.1 where a common wastewater disposal system is proposed, by showing the area or areas set aside for that system; OR

7.6.2 where wastewater disposal is proposed on each lot, by bearing the endorsement 'Note: Wastewater disposal area required. Location and size must be confirmed at time of development.'

7.7 Where remote and isolated subdivision or density development is approved, the developer will be expected to advise purchasers that the onsite wastewater disposal systems are to be considered permanent and that sewerage facilities will not be provided at a later date.

The developer shall provide to the Health Department of Western Australia written evidence that the purchaser has been so advised.

The developer shall provide all necessary proof that onsite wastewater disposal systems proposed will function effectively on a permanent basis.

7.8 Implementation of this Policy will not affect any right of development outside the scope of the Policy as set out in section 3.

8. DATE OF IMPLEMENTATION

This Policy comes into effect on 1 October 1995 and is to be reviewed once the legislation resulting from the Water Restructure Implementation Group has been passed by both Houses of Parliament. There will be a further review after three years.

APPENDIX 1

SITE REQUIREMENTS FOR ON-SITE WASTEWATER DISPOSAL BASED ON HEALTH CRITERIA

- (1) The Executive Director, Public Health, may require the applicant to provide evidence demonstrating that the disposal site is capable of achieving effective long-term on-site wastewater disposal including evidence of depth to groundwater, soil profiles, percolation rates and surface contours.
- (2) The gradient of any land on which wastewater disposal is to occur shall not exceed one in five and shall be engineered to prevent run-off from the site (e.g. bunding, terracing).
- (3) The site should not be subject to inundation or flooding at a probability greater than once in 10 years.
- (4) Irrespective of the type of on-site wastewater disposal system proposed, the land should have a minimum depth to the seasonal or permanent water table from the **natural** ground surface of at least 0.5 metres.
- (5)
 - (a) The depth to highest seasonal or permanent water table from the underside of a wastewater disposal system prescribed under regulation 49 of the *Treatment of Sewage and Disposal of Effluent and Liquid Waste Regulations*, shall be a minimum of 1.2 metres.
 - (b) For existing areas or infill areas where the requirement of 5(a) cannot be met, the depth to the highest seasonal or permanent water table from the underside of the wastewater disposal system shall be not less than that in the surrounding development, but in any case not less than 0.3 metres.
- (6) Where a technology for the on-site disposal of sewage, other than as prescribed under Regulation 49 of the *Treatment of Sewage and Disposal of Effluent and Liquid Waste Regulations*, has been approved by the Executive Director, Public Health, the clearance to highest known water table shall comply with the condition set by the Executive Director, Public Health, for that technology.
- (7) An unencumbered area of at least 150 square metres, or such other area as an approved system may require, must be set aside for the disposal of the wastewater (not including the area for septic tanks, etc) for each dwelling unit.

In the case of non-residential development the unencumbered area to be set aside shall be as approved by the Health Department of Western Australia.

- (8) The area set aside for the disposal of the wastewater shall not be built on or paved in a manner which precludes reasonable access, and shall be kept in a manner which enables servicing and maintenance of the disposal system.
- (9) The surface irrigation disposal area, in addition to the requirements under clause 7 of the *Standards for Installations and Operation of Aerobic Treatment Units (ATUs) Serving Single Households* shall not have the edge of the spray situated closer than 1.8 metres to paths, paved areas, driveways or similar. The disposal area shall not be divided into more than two areas. Where two areas are used, the smaller area shall not be less than one third of the total irrigation area.
- (10) The depth to bedrock or impervious clay soils should be a minimum of 1.2 metres from ground level (i.e. free draining soil is required to a minimum depth of 1.2 metres).
- (11) Where site modification involves 'blasting' or 'fissuring' of rock an imported soil type is required to surround the disposal area, unless the local authority grants an exemption.

Explanatory Note:

These requirements are additional to those set out in the *Treatment of Sewage and Disposal of Effluent and Liquid Waste Regulations*.

APPENDIX 2

AGED PERSONS' ACCOMMODATION

In addition to those conditions in Appendix 1 which are applicable, the following conditions shall specifically apply.

The wastewater treatment plant must be capable of producing a final effluent which satisfies the following criteria:

BOD ₅	- less than 20mg/litre
Suspended Solids	- less than 30mg/litre
Thermotolerant Coliforms	- not more than 10 per 100mL, where disposal is by above ground irrigation.

The wastewater treatment and disposal system must be approved as being capable of limiting nutrient (specifically phosphorus) movement from the site, unless the natural soil has a Phosphorus Retention Index (PRI) greater than 20.

The irrigation area serving a package treatment plant must be a single, dedicated and manageable area conforming with the requirements of clause 7 of the Standard for Installation and Operation of Aerobic Treatment Units (ATUs) Serving Single Households and, in addition:

For above ground spray irrigation, the irrigation area shall not have the edge of any spray plume closer than:

- 10 metres from any building, paved area, path or other human trafficable area
- 5 metres from any boundary.

The area shall be fenced with demarcation fencing, display warning signs, and the fence shall be a minimum of 1.8 metres beyond the edge of any spray plume.

For below ground irrigation the edge of the irrigation area shall not be closer than:

- 5 metres from any building, paved area, path or other human trafficable area
- 5 metres from any boundary.

If a sub-strata system, then the area shall be fenced with demarcation fencing, display warning signs, and the fence shall be 0.5 metres beyond any dripper.

In the case of an amended soils system (e.g. Ecomax) the edge of the treatment system (taken to be the bund) shall be not closer than:

- 5 metres from any building, paved area, path or other human trafficable area
- 5 metres from any boundary.

Where appropriate a maintenance program acceptable to the Executive Director, Public Health, is required for the wastewater treatment system and disposal area. Such a maintenance program shall require that the system and disposal area be monitored at not greater than monthly intervals.

GOVERNMENT SEWERAGE POLICY - PERTH METROPOLITAN REGION

AMENDMENTS - 1 JULY 1996

The new Government Sewerage Policy - Perth Metropolitan Region as announced to be introduced on 1 October 1995 but deferred until 1 July 1996 has been amended as follows:

1. Wherever reference is made in the Policy to the 'Water Authority' or 'Water Authority of Western Australia' replace with 'Water Corporation'.

2. **Section 2 - Definitions**

- 2.1 The definition of 'Responsible Authorities' is replaced by:

Responsible Authorities: means the Health Department of Western Australia, the Western Australian Planning Commission, the Department of Environmental Protection, the Water and Rivers Commission, Office of Water Regulation and the relevant sewerage provider.

- 2.2 Include a new definition:

Relevant Sewerage Provider: means the body holding a licence from the Office of Water Regulation for the provision of sewerage services, which would be affected by the application of a sewerage requirement to a proposed subdivision or density development.

3. **Section 5.2.** - paragraph vi, is replaced by:

- vi the internal wastewater reticulation system installed is of a standard acceptable to the Water Corporation. Developers should contact the relevant sewerage provider to determine the best location of the packaged plant system to facilitate future sewerage connection to the sewerage scheme.

4. **Section 7.6** - to be replaced with:

- 7.6 A strata or strata survey subdivision/development approved under this Policy, shall provide for wastewater disposal requirements as follows:

-for proposals where it is intended to have a common wastewater system and/or common effluent disposal area, require that such proposals have a restrictive use placed on the strata plan for those areas.

-for proposals where wastewater disposal is intended on individual strata lots the developer and subsequent owners are expected to advise prospective purchasers, as part of the required disclosure statement, that a wastewater disposal area is required, the location and size of which must be confirmed at the development stage.

Address

Dear Sir/Madam

GOVERNMENT SEWERAGE POLICY - PERTH METROPOLITAN REGION

The Government Sewerage Policy - Perth Metropolitan Region which was to commence on 1 October 1995 was deferred and will take effect from 1 July 1996. The following are interpretation and administration procedures.

1. IMPLEMENTATION OF POLICY

To assist with implementation of specific sections of the Policy, the following will apply:

1.1 Section 7.5.

Applications for unsewered subdivision, vacant strata subdivision or density development which have been formally lodged with either the local government or the Ministry for Planning prior to 1 July 1996 may proceed under either the new or previous policy provisions. However, whichever Policy is chosen it must be fully complied with, including minimum lot size.

Prior to changes to the Strata Titles legislation in April 1996 applicants were required to obtain a vacant strata title approval from both the Ministry for Planning and local government, whereas the new provisions require only the Ministry of Planning approval. This will mean some applicants may have obtained a local government strata/development approval without having lodged an application with the Ministry for Planning prior to 1 July 1996.

To ensure those applicants are not disadvantaged, I understand the Ministry for Planning will honour those local government strata/development approvals by receiving applications for those vacant strata subdivisions after 1 July 1996 subject to the old Policy provisions and issue preliminary approvals valid for the term of the local government approval. (For example: if the local government approval was valid until July 1997 then the Ministry for Planning approval would also only be valid until July 1997).

Applications lodged on or after 1 July 1996 other than those specified above will be required to comply with the new Policy provisions.

1.2 Granny Flats

The concept of the 'granny flat' to house a dependant relative has previously been considered as exempt from the Policy and will continue to be exempt, subject to such development having a total floor area of not more than 60m² and any other restrictions the local government may wish to apply.

All other similar developments in excess of this maximum size will be deemed a density development for which all the Policy provisions will apply.

2. ADMINISTRATION OF POLICY

To enable the Health Department to ensure developments to which the Policy apply are correctly assessed, the assistance of local government environmental health officers is sought. Local government environmental health officers are requested to complete the questionnaire (attached) whenever an 'Application for Permission to Construct or Install an Apparatus for the Treatment of Sewage and the Disposal of Effluent and Liquid Wastes' is being endorsed. The completed form should be attached to the application when forwarded to the Health Department of WA for approval.

3. CHANGES TO POLICY

Since the Policy was approved for release on 1 October 1995 there have been some changes required. The intended changes are indicated below, but require approval from the Cabinet Committee on Waste Management before formal amendment to the Policy can occur. When such approval has been obtained a reprinted Policy will be made available. It is intended these changes will be put to the Cabinet Committee as soon as possible.

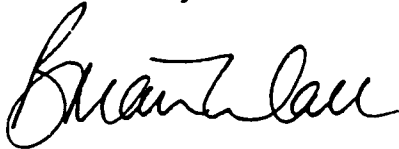
- 3.1 Reference to the Water Authority of Western Australia throughout the Policy will require alteration to the new name **Water Corporation**.
- 3.2 The definition of responsible authorities will require inclusion of the newly formed **Water and Rivers Commission and Office of Water Regulation**, and need to include the **relevant sewerage provider** who could now be a private organisation.
- 3.3 There is a need to define the **relevant sewerage provider** as one licensed by the Office of Water Regulation to operate a sewerage scheme.
- 3.4 Section 5.2.4 vi requires that internal sewer works be of a standard acceptable to the Water Corporation and that a future sewer connection be provided for when reticulated sewer in the area is available. Unless there is a sewer plan for the area, this location would not be known. Consequently, it is intended that this section be changed so developers are directed to simply consult with the Water Corporation to ascertain the best location of a wastewater system to facilitate future sewer connection.

3.5 Section 7.6 requires that strata plans be duly marked in relation to wastewater disposal requirements. It has been determined that application of this section in the proposed way would be difficult. Consequently, it is intended that to overcome these difficulties this Section needs to be changed so it can be implemented as follows:

- for proposals where it is intended to have a common wastewater system and/or common effluent disposal area, require that such proposals have a restrictive use placed on the strata plan for those areas.
- for proposals where wastewater disposal is intended on individual strata lots the developer and subsequent owners are expected to advise prospective purchasers, as part of the required disclosure statement, that a wastewater disposal area is required, the location and size of which must be confirmed at the development stage.

Should you wish to discuss these matters or require further clarification on any of these points please contact Mr Barry Bowden on 388 4930 or Mr Jim Bertram on 388 4939.

Yours faithfully



Brian P Wall
A/GENERAL MANAGER
PUBLIC HEALTH

12 June 1996
(6607BJ1A.lc)

Att:

**GOVERNMENT SEWERAGE POLICY - PERTH
METROPOLITAN REGION**

LOCAL GOVERNMENT INFORMATION

To be completed by the local government Environmental Health Officer and attached to all 'Applications for Permission to Construct or Install an Apparatus for the Treatment of Sewage and Disposal of Effluent and Liquid Waste' where it is considered the above Policy has implications for this development.

Question 1. Address of Property

.....

Question 2. Is this proposed development additional to an already existing development on the lot. (ie additional dwelling or additional non-residential developments etc)

(Please tick appropriate box)

 YES NO

If yes please give details.....

.....

.....

Question 3. Was an application for this development lodged at Council before 1 July 1996. (ie for planning approval or building approval)

(Please tick appropriate box)

 YES NO

If yes please provide documentation to verify the date of receipt (ie copy of Council date stamped documentation etc.)

Question 4. Was this property created as a consequence of subdivision, or vacant strata subdivision or vacant strata survey approved under the new Policy provisions which came into effect after 1 July 1996. This advice is obtainable from your Planning Department.

YES - after 1 July 1996

(Please tick appropriate box)

NO - before 1 July 1996

Question 5. Is this property included in the Water Corporation's current three year infill sewerage programme.

(Please tick appropriate box)

 YES NO

Question 6. Is this development a granny flat that has a total floor area of 60m² or less.

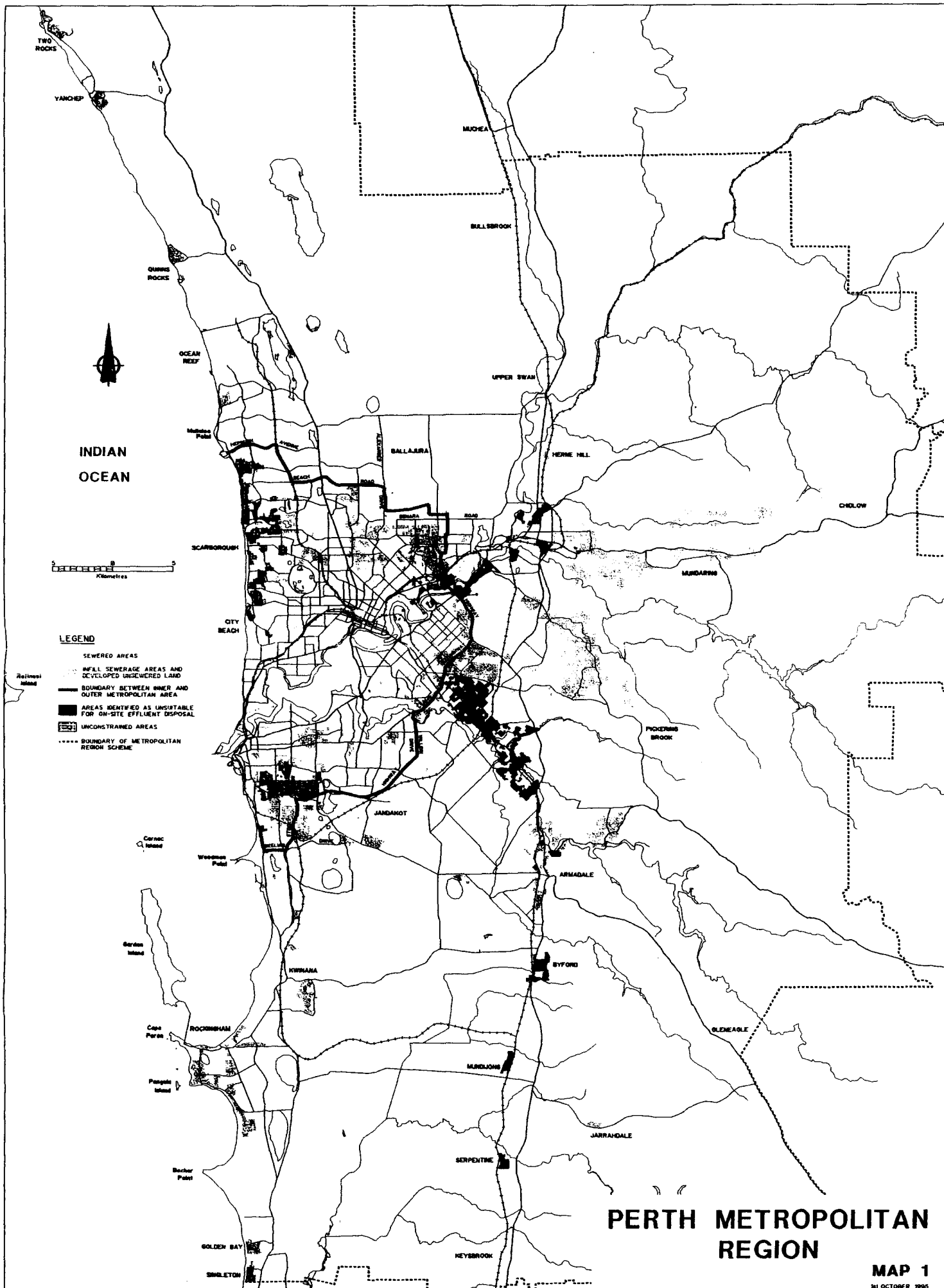
(Please tick appropriate box)

 YES NO

Local Government
Environmental Health Officer

Signature -----

Date -----



INDIAN OCEAN



LEGEND

- SEWERED AREAS
- INFILL SEWERAGE AREAS AND DEVELOPED UNSWERED LAND
- BOUNDARY BETWEEN INNER AND OUTER METROPOLITAN AREA
- AREAS IDENTIFIED AS UNSUITABLE FOR ON-SITE EFFLUENT DISPOSAL
- UNCONSTRAINED AREAS
- BOUNDARY OF METROPOLITAN REGION SCHEME

PERTH METROPOLITAN REGION

MAP 1
31 OCTOBER 1995