



GOSFORD CITY COUNCIL

ON-SITE SEWAGE MANAGEMENT STRATEGY 2005

Executive Summary

This is a revised Strategy which has been developed due to the changes with the NSW Government introduction of the Local Government (Approvals) Amendment (Sewage Management) Regulation 1998 and accompanying Guidelines. The Amendments to the Regulation were incorporated in the Local Government (Approvals) Regulation 1999 gazetted on 27 August 1999 and more recently remade in the Local Government (General) Regulation 2005.

The Legislation was introduced as a result of surveys throughout NSW which indicated that on-site sewage management systems (septic tanks, aerated treatment systems and other types of sewage treatment systems generally referred to as OSSM systems) were failing to meet acceptable public health and environmental standards.

Under the legislation, the owners of all existing On-site Sewage Management (OSSM) systems and new systems installed after 6 April 1998 are required to obtain Council approval to operate the system. Owners with known existing systems were requested to make application to Council prior to 30 June 1999. Following assessment, Council may issue a conditional Approval to Operate in accordance with the performance standards for the particular system.

This On-site Sewage Management Strategy promotes Council's response to the legislative changes, with the major objective of ensuring the management of the cumulative impacts of OSSM systems and the support of responsible landowner management within the Gosford City Council area. The Strategy establishes the parameters for sustainable on-site sewage management in the Gosford City area and encompasses operational and educational programs to ensure that OSSM systems do not pose a risk to public health or the environment.

The operational program involves the assessment of all OSSM systems and the impact that the systems may have on the environment.

This Strategy and the activities undertaken to implement its requirements will be reported in Council's Annual State of the Environment Report.

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1. INTRODUCTION

1.1 Background

Gosford City Council, in line with the regulatory reforms and guidelines relating to sustainable on-site sewage management of all sewage and wastewater, developed and adopted an On-site Sewage Management Strategy in 1999.

The NSW State Government introduced legislative changes through the Local Government (Approvals) Amendment (Sewage Management) Regulation 1998 which clarified the responsibilities of householders and councils to ensure that new and existing OSSM systems comply with the installation and performance standards and that they are managed and operated in a proper manner and do not pose a risk to public health or the environment. The Amendments were incorporated in the Local Government (Approvals) Regulation 1999 and remade in the Local Government (General) Regulation 2005.

The Regulation in conjunction with the accompanying Environment and Health Protection Guidelines for On-site Sewage Management for Single Households sets performance standards for the installation, operation and maintenance of sewage management systems.

The Regulation requires all owners of OSSM systems to obtain an Approval to Operate and for Council to ensure that such systems are operated in accordance with the performance standards of the Regulation and Guidelines.

The On-site Sewage Management Program has now been operational for over five years. In this time, the number of systems within the City has grown to about 4,500 with 95% of these been assessed and given the Approval to Operate. Through the implementation of actions within the Strategy, on-site sewage management systems (OSSM) on the whole are operating at a much higher performance level than recognised previously, and both the education materials and Approval to Operate distributed to all system owners have ensured that residents living within unsewered areas of the community are more informed about their system maintenance responsibilities.

This revised Strategy will build on the successes of the past five years and aim to sustain the high levels of OSSM systems performances in the City.

1.2 Scope

The Regulation and Guidelines provide a framework for implementation of ecologically and socially sustainable OSSM practices.

It is intended that this further be achieved, as far as possible, by a process of community and user education and by implementation of appropriate operating requirements in a manner which is sensitive to local circumstances.

Strategic management of existing OSSM systems and attention to addressing sewage management issues in newly subdivided areas has been acknowledged as an important task for Council.

Included in the On-site Sewage Management Strategy is a comprehensive review and study of all OSSM systems within the Gosford City Council area.

An OSSM system comprises a sewage management facility and where applicable a related effluent application area (land application area).

The Regulation defines a "sewage management facility" as:

- a human waste storage facility; and
- a waste treatment device intended to process sewage,

and includes a drain connected to such a facility or device.

The Regulation defines a “related effluent application area” as the area of land:

- where it is intended to dispose of the effluent and any by-products of sewage from the facility, or,
- to which the effluent and by-products are intended to be applied.

For the purpose of this Strategy an “on-site sewage management system” includes but is not limited to the following:

- septic tank and absorption trench,
- septic tank and evapo transpiration area,
- aerated wastewater treatment system,
- wet composting toilet with sand filter and/or wetland reed bed with sub-surface application system,
- waterless composting toilet and greywater treatment system,
- greywater treatment systems
- septic tank with sand filter and/or constructed wetland/reed bed with sub-surface application system,
- septic tank and amended soil mound system,
- septic tank and pump-out well,
- cesspit, and
- any other system that stores, treats and/or disposes of sewage and/or wastewater on-site.

Under the Regulation, to “operate a system of sewage management” means to hold or process, or re-use or otherwise dispose of, sewage or by-products of sewage (whether or not the sewage is generated on the premises on which the system of sewage management is operated) and includes the use of artificial wetlands, transpiration mounds, trenches, vegetation and the like in related effluent application areas, and holding or processing sewage that is to be subsequently discharged into a public sewer.

1.3 Performance Objectives

The aim of this On-site Sewage Management Strategy is to provide and maintain a practical mechanism for the effective management and improvement in performance of the OSSM systems installed throughout the Gosford City area. To achieve this aim the following objectives have been identified:

- prevention of public health risk,
- prevention of the spread of diseases by micro-organisms,
- prevention of the spread of foul odours,
- preventing contamination of ground and surface water,
- improved education and awareness of OSM systems’ operation,
- implementation of an effective waterways environmental monitoring program.

1.4 Goals

To achieve the above objectives the following goals have been established;

- To maintain the database of all existing and future on-site sewage management systems.
- To continue an education program for operators of on-site disposal systems.
- To ensure that all OSSM systems and land application areas comply with environmental and health protection standards.
- To minimise system failure as a result of misuse.
- To ensure that all septic tanks are assessed at regular intervals and are desludged and maintained as required.
- To consult with Aerated Wastewater Treatment System service agents regarding uniformity and quality of service and to include in the quarterly maintenance reports certification that the land application areas comply with approval requirements.
- To adopt regional guidelines prepared by Central Coast and Hunter Councils Septic Tank Action Group (STAG) for assessing the suitability, qualifications and experience of AWTS service contractors and thereby achieve uniformity in the servicing of AWTS.
- To encourage a partnership and stakeholder approach between householders, Council and service agents which supports continued improvement of on-site sewage management.
- To review Council development standards and approval criteria for sub-divisions, development and building to ensure that provision is made for sustainable on-site sewage management in unsewered areas.
- To recover the costs of maintaining this Strategy and the activities proposed, by adopting minimum fees and charges for applications and approvals. This will be levied on the annual rates for all the properties in unsewered areas.

1.5 Framework

This On-site Sewage Management Strategy will provide the framework for the implementation of ecologically sustainable on-site sewage management throughout the Gosford City area.

The Strategy includes a Background Component which provides information on the Gosford City area.

An Operational Component is included which encompasses the legislative requirements, Council policies and the environmental and public health standards which must be achieved in the installation of OSSM systems and the operation and maintenance of existing and new systems.

The Operational Component includes the ongoing risk assessment of all OSSM systems and areas with a target of progressive improvement achieved by owner/operator education and cooperation.

2. LEGISLATION

The clear intention of the legislation is to regulate and control the installation and operation of OSSM systems, to identify and rectify any defective systems throughout New South Wales and to remove the potentially serious public health risks and environmental pollution incidents.

2.1 Local Government Act 1993 Local Government (General) Regulation 2005

The Design, installation and operation of onsite sewage management systems serving up to 20 equivalent persons are regulated under the Local Government Act 1993 and its associated Regulations. Under section 68 of the Act, council approval is required prior to the installation, construction or alteration of a human waste treatment device or storage facility and any drain connected to it.

The Local Government (General) Regulation 2005 sets out specific requirements for onsite sewage management approvals including matters for Council consideration, performance standards and circumstance where prior Council approval is not required. Division 4 of the Regulation incorporates the requirements for approval to operate an onsite sewage management system.

Where OSSM systems fail to achieve the prescribed requirements Council may require action or works to be carried out under Section 124 of the Local Government Act 1993 where it may

- 1 Order the premises connect to sewer where available.
- 2 Order the conversion of a system to pumpout where on-site disposal is failing and sewer is not available.
- 3 Order the modification or upgrading of a system incorporating on-site disposal where site conditions are suitable and sewer is not available.
- 4 Order the premises to be maintained in a safe and healthy condition.
- 5 Order the satisfactory treatment, storage and disposal of waste generated on land or premises.

2.1.1 Penalty Notice Powers

New penalty notice powers for on-site sewage management offences were introduced on 1st February 2002.

Under Section 679 of the Local Government Act 1993 councils are able to deal with certain prescribed offences by issuing a penalty notice. The introduction of penalty notice powers for on-site sewage management offences has meant councils can enforce requirements in a more streamline manner. Councils have the option to use penalty notice enforcement in addition to prosecution.

Section 626 prescribes a penalty of 3 penalty units (currently \$330) for operating a system of sewage management without prior council approval. Section 627 prescribes 3 penalty units (currently \$330) for the offence of operating a system of sewage management otherwise than in accordance with the terms of council approval.

2.1.2 Levying and collecting periodic renewal fees

The fee for a renewal of the Council's approval to operate a system of sewage management is a service fee levied under s. 608 (2). In order to assist councils to minimise the cost of levying and collecting this fee periodically, the Local Government Act 1993 provides that an application is deemed to have been made on payment of the due fee (s.107A). Consequently this fee can be collected by listing is as a separate item in the invoice section of the annual rates notice provided that the fee item and the funds when collected (which are service fees, not rates), are separately specified and accounted for.

2.2 Environmental Planning and Assessment Act 1979 Development Control Plan (DCP) Proposed On-Site Sewage Management “Disposal in Unsewered Areas”

Council has developed a Draft Development Control Plan (DCP) No 176 as part of its strategy for on-site sewage management. The purpose of the DCP is to provide uniform criteria for assessing the capability of land in Gosford to accept on-site sewage disposal over the long term. The DCP will provide the regulatory framework for the installation of on-site sewage management systems in the Gosford City Council area to ensure that future development has the provision of adequate land application area on allotments for on-site sewage disposal.

2.3 Protection of the Environment Operations Act 1997

The Protection of the Environment Operations Act replaces several outdated laws, including the Clean Air Act 1961, the Clean Waters Act 1970 and the Noise Control Act 1975 and establishes tougher, streamlined regulatory controls for protecting the environment.

This Act has strengthened the powers of Council to take action where installers and operators of OSSM systems are not complying with the approval conditions issued by Council to install and operate, or not taking adequate steps to reduce the risk to the environment or public health and improve the environmental management of the system.

It is Council's intention to work in cooperation with the community to rectify and upgrade OSSM systems where necessary in order to achieve compliance with the operational requirements of the system.

To ensure the long-term elimination of public health risks and environmental pollution, legal proceedings will be viewed as a last resort and Council will ensure that only the polluter has to pay, rather than those whose systems are working satisfactorily.

2.4 Environment and Health Protection Guidelines

In April 1998 the Department of Local Government in consultation with other relevant State Government agencies released the document 'Environment and Health Protection Guidelines: On-site Sewage Management for Single Households'. These Guidelines address issues including :

- The regulatory framework of Council's operations including the legislation and development planning,
- The development of local OSSM strategies,
- Administration and operational strategies,
- Site evaluation including the site and soil assessment and,
- System options and the operation of OSSM systems.

The Guidelines are specified guidelines for the purposes of Section 23(a) of the Local Government Act 1993 and Clause 31(3) of the Local Government (Approvals) 1999. These relate to Council's responsibilities to consider the Guidelines when approving the installation, alteration, construction and operation of an on-site sewage management system.

2.4.1 Accreditation Guidelines

The following accreditation guidelines have been prepared for most sewage management facilities by NSW Health Department.

Septic Tank and Collection Well Accreditation Guidelines December 2001- (includes septic tanks, collection wells, septic closets, greywater tanks, CED pretreatment tanks and sewage ejection pump stations).

- Aerated Wastewater Treatment Systems (AWTS) Accreditation Guidelines, September 1998
- Interpretation Document to AWTS Guideline, December 1998
- Waterless Composting Toilet Approval (Accreditation) Guideline, August 1997
- Draft Chemical Closet Accreditation Guideline May 1999
- Greywater Reuse in Single Domestic Premises – April 2000
- Domestic Greywater Treatment Systems Accreditation Guidelines – April - 2000

2.5 Australian Standards

2.5.1 AS/NZS 1546.1:1998 – On-site Domestic Wastewater Treatment Units – Part 1: Septic Tanks

This standard identifies performance requirements and performance criteria for septic tanks, specifies technical means of compliance and provides test specifications that enable septic tanks to be manufactured to comply with the Standard.

2.5.2 AS/NZS 1546.2:1998 – On-site Domestic Wastewater Treatment Units – Part 2: Waterless composting toilets

This standard covers the requirements of waterless composting toilets which are intended primarily as stand-alone units for residential use but may be suitable for non-residential applications.

2.5.3 AS/NZS 1546.3 1998 – On-site Domestic Wastewater Treatment Units – Part 3: Aerated wastewater treatment systems

This Standard sets out performance requirements, design requirements, means of compliance, installation requirements, requirements for operations and maintenance and specification for testing aerated wastewater treatment systems and associated fittings.

2.5.4 AS/NZS 1547:2000 – On-site Domestic Wastewater Management

This standard sets out the requirements for the disposal systems for effluent from domestic premises containing not more than ten persons and generating not more than 1400 litres of effluent per day.

3. BACKGROUND INFORMATION

3.1 Information

Gosford is located midway between Sydney and Newcastle with an area of 1028 sq km. The eastern and western boundaries of the City area are defined by the Pacific Ocean and the Old Great Northern Road between Wisemans Ferry and Bucketty.

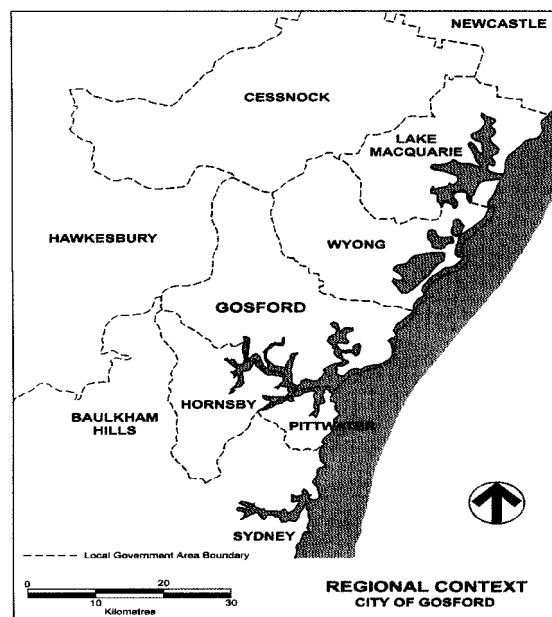
The northern boundary is located near the settlements of Kulnura, Central Mangrove, Somersby, Lisarow and Forresters Beach, while the southern boundary is defined by the Hawkesbury River.

The topography of the area consists of steeply sloping hills and narrow valleys which generally restricts the area available for building. The areas of level land tend to be separated from each other by steep ridges.

The drainage pattern in the area is typified by a number of small estuarine systems which flow into the Hawkesbury River, Brisbane Water and a number of lagoons on the ocean front.

Large areas of the City are declared National Parks, water catchment areas, conservation areas and bush land public reserves and as such a change in land use for these areas is unlikely.

The location of Gosford and its Regional Context.



4. NATURE OF ENVIRONMENTALLY SENSITIVE AREAS

Water quality analysis undertaken in the Gosford City area indicates that effluent discharge along with urban and rural run-off are the potential causes of pollution of the waterways environment.

Location and vulnerability of environmentally sensitive areas must be considered when installing and operating OSSM systems.

Areas requiring major consideration are:

- potable aquifers
- areas with vulnerable ground water
- drinking water catchments
- coastal zones
- vegetation and wildlife areas
- oyster farming areas
- recreational waters

4.1 Potable Aquifers, Vulnerable Groundwater, Streams and Rivers

The Gosford City local government area contains a number of minor streams which drain into the Hawkesbury River, Brisbane Waters and coastal lagoons.

The percentage of rainfall which infiltrates the ground and enters the water table is dependent on factors such as annual rainfall, air temperature, evaporation and soil structure.

As a large percentage of surface water enters streams or rivers, it is essential that potential sources of pollution from OSSM systems be identified and monitored.

Groundwater can contribute to the flow in streams and creeks during extended dry periods and due to this close interaction between groundwater, river water, aquifers and surface waters it is important to maintain the quality of surface water, which if contaminated as a result of land use activities can cause pollutants to enter waterways and aquifers.

Micro-organisms can also be carried great distances in this manner, and with the rural sector experiencing expansion, it is essential that the potential threats to public health and the environment from defective, poorly operated or maintained OSSM systems be identified and monitored and where necessary faults rectified. In the Peats Ridge and Somersby areas, extraction of groundwater for bottling is a growing industry.

4.2 Drinking Water Catchments

Many of the creeks which traverse the Gosford City area are used for farmland irrigation and general water supply in the rural areas. These creeks drain into the Hawkesbury River or Brisbane Water.

These areas have been identified for monitoring due to the potential for adverse impacts on human health from defective systems.

The City water supply is drawn from Mangrove and Mooney Dams which are located in the upper reaches of the catchment areas. The impact from OSM systems is deemed to be minimal due to the low numbers of households in the catchment areas.

4.3 Coastal Zones

The Gosford coastal zones are typified by numerous small estuarine catchments and varying soil types. Complex ecosystems including a number of creeks, rivers, wetlands, dunes and

beaches are within these coastal zones and the preservation of these existing ecosystems involves the protection of the catchment areas from failing OSM systems.

4.4 Vegetation and Wildlife Habitats

The climatic range and geographic variety of the City region with the mountain range as close as 1 km from the sea, combined with wetlands, waterways, estuaries and creeks, coastal foreshore areas, rainforests, tall open forests, open woodlands, sedgeland and heathlands results in a wide range of wildlife habitats and fauna.

Population growth together with urban and rural expansion inevitably leads to pressure on these vegetation and wildlife habitats and generally takes the form of nutrient pollution from failing OSM systems and excessive water loads. Both of these pressures are detrimental to native flora and encourage the growth of exotic weeds.

4.5 Oyster Growing Areas

Within the Gosford City area major oyster growing areas are located in the Brisbane Waters Estuary, Patonga Creek Estuary and the Hawkesbury River Estuary.

The coordinators of each Estuary Shellfish Quality Assurance Program have been consulted. Maps identifying the location of all oyster growing areas have been provided and are indicated on Annexures 2, 3 and 4.

Also indicated are residential areas adjoining these oyster growing areas which contain OSSM systems. Such areas have been classified as risk areas with regard to the potential system failure and possibility of pollution. It is essential for all OSSM systems within these areas to be identified, assessed and where necessary upgraded to minimise system failure.

In addition local shellfish farmers monitor the water quality adjacent to all oyster leases on a monthly basis and an Emergency Procedures Plan has been developed for implementation by Council following notification of any suspect results.

4.6 Recreational Waters

The Gosford City area includes extensive recreational waters used for a wide range of water activities such as swimming, boating, skiing and fishing.

From October to March each year collection of water samples from these areas including baths and surfing beaches is undertaken by Council's Health Services Section as part of Council's water quality monitoring program. In the event of detection of unsuitable bathing water quality standards, signs are promptly erected to inform the public of the existence of these unsuitable bathing conditions.

Council's Environment Section also conducts a major creek and lagoon water quality monitoring program on a monthly basis and Waterwatch NSW conducts voluntary water quality monitoring of selected creeks.

5. OPERATIONAL STRATEGY

5.1 Introduction

This section of the Strategy sets out the processes for the issuing and re-issuing of Approvals to Operate and the classification and assessment of on-site sewage management systems. The operational strategy outlined is designed to provide an effective and self-funding approvals and assessment program for on-site sewage management in the Gosford LGA. The approach taken is based on the principles of protection and enhancement of public health and the environment through the cooperative management of on-site systems. An essential component of the program is the consultation with owners to establish and improve Council's records of the individual systems, to encourage upgrading where appropriate and to provide information relating to the operation and maintenance of the various OSSM systems.

5.2 Approval to Operate

The *Local Government (Approvals) Regulation 1999* requires that an owner of an on site sewage management system seek Approval to Operate the sewage management system in addition to any approval required for the installation of the system. As such, all system owners are required to be registered for approval with Council.

The approval process establishes an accountability relationship between the property owner and the council. This will enable Council to ensure that householders and property owners are aware of the maintenance and operating requirements of their system.

5.2.1 Existing Systems

Amendments to the Approvals Regulation of the Local Government Act 1993, prescribe the operation of a system of sewage management as an activity requiring an Approval from Council (item 10 of Part F of the table in Section 68 of the Act).

Implement of the approvals process:

- All owners of existing OSSM systems were required to register and lodge an Application for an Approval to Operate with Council by 30 June 1999.
- Application forms for the Approval to Operate were sent to all known owners of OSSM systems.
- Once an application was received by Council, applicants were entitled to continue to operate the system until the application was finally determined.
- Council undertook an assessment of each system to establish the appropriate Approval to Operate term of approval of one, three or five years based on the potential risk of failure and subsequent harm to public health and the environment.
- The Approval to Operate an On-site System was issued with conditions attached. These conditions outline standard operating requirements and procedures for the style of system in use on individual properties and the owners' responsibilities with the operation of that system.

5.2.2 New Systems

Construction or alteration of a waste treatment device or a human waste storage facility currently requires approval in accordance with the Local Government Act 1993 (Item 5 of Part C of the Table to Section 68). As from 6 April 1998 all new systems require an Approval to Operate in accordance with the amendments to this Act. Before granting the initial Approval to Operate for new OSSM systems –

- Applicants must submit with the Application to Install:
 1. Site Report
 2. Site plan indicating; buffer distances from the dwelling, boundaries, swimming pool, paths, groundwater bores and waterways; primary and reserve disposal area; and stormwater diversion drains.
 3. Design plans of the system.
 4. Any maintenance agreement.
 5. Calculations for the disposal area sizing.
 6. Any geotechnical information requested by Council.
 7. Any additional information required by Council to enable assessment in accordance with the Environment and Health Protection Guidelines.
- Each application will be assessed by the determining Council Officer in accordance with AS/NZS 1546.1:1998, 1546.2:1998, 1546.3:1998, 1547:2000, the Environment and Health Protection Guidelines and the performance objectives contained in these Guidelines.
- Preliminary site inspections and the subsequent processing of Applications for Approval to Install On-site Sewage Management Systems will be carried out by a Council officer.

5.2.3 New or Renewal Approval's to Operate

Under the Local Government Act 1993 s.107(A) the payment for the renewal of the Approval to Operate can be collected by listing it as a separate item in the invoice section of the annual rates notice. This will automatically give the owner an Approval to Operate an on site sewage management system with the prescribed conditions.

A renewal Approval to Operate will be automatically issued to residents holding an existing Approval which expires during 2005/2006. This Approval is valid for a period of one year, **expiring on 1 July of each year**. All new Approvals will be issued automatically to residents installing a new onsite sewage management system, or where change of property ownership arises. In the latter circumstance, Approvals will be sent when Council receives information pertaining to the property transfer, and in some cases this process can take up to two (2) months. During this period the operation of an on site sewage management system will be covered by the Approval featuring the name of the previous property owners.

New owners will be sent relevant information about their system and the requirements of the appropriate Regulations.

Owners of properties will be sent a questionnaire every few years so Council will be able to update records for OSSM system.

5.3 Assessment Program

At present there are 4650 OSSM systems registered in the Gosford LGA. To carry out effective and ongoing management of this number of systems, Council officers have classified all systems into risk categories when issuing the initial Approval to Operate. Renewal of the Approval to Operate will be required at 1st July each year. The individual system's risk assessment will be carried out by desktop analysis with reference to individual historical file information and self certification by applicants supported by random on site inspections.

5.3.1 Risk Assessment of Areas

Risk assessment of areas containing OSSM systems will be undertaken and will be categorised as detailed below:

Risk Category	Area Limitations
High	Within 100m of water used for recreational purposes. Within 1/20 year flood level. Within 250m of a domestic groundwater supply. Within 250m of an oyster lease. Within 40m of drainage channels, stormwater lines etc. which discharge within 250m of recreational water or oyster lease.
Low	All other areas

Maps indicating oyster growing estuary catchments and initially identified High Risk areas are indicated on Annexure 2,3 & 4.

5.3.2 Risk Assessment of OSSM Systems

Risk assessment of OSSM systems has been undertaken on an individual site by site basis. The potential for failure of each system has been considered according to the implication of the following criteria. History of failure will also be a contributing factor in determining risk assessment.

- Environmental sensitivity of the allotment.
- Type and capacity of the system.
- Allotment size and available disposal area.
- Soil features including depth of soil and its permeability.
- Number of persons residing on the allotment.
- Slope of irrigation and disposal area.
- Aspect and duration of exposure to sunlight

5.3.3 Categories of OSSM System's Risk Assessments

Three (3) categories of risk associated with the design and operation of OSSM systems will apply.

Low Risk – OSSM system operating in a satisfactory manner.

Medium Risk – some concern regarding the operation and potential failure of the OSSM system.

High Risk – major concern regarding the operation and potential failure of the OSSM system.

To assist in the assessment process the following matrix has been formulated. The matrix is based on the assessment criteria with selection in the three (3) risk categories of each criterion representing the points value as listed.

	High	Medium	Low
Environmental sensitivity of the allotment	15	5	0
Type and capacity of the system	15	5	0
Allotment size and available disposal area	15	5	0
Soil features including depth and permeability	15	5	0
Number of persons residing on the allotment	15	5	0
Slope of irrigation and disposal area	15	5	0
Aspect and duration of exposure to sunlight	15	5	0
Subtotal			
Total			

The overall score obtained determines the OSM system risk category in accordance with the following scale:

< 25	=	Low Risk
> 25 < 50	=	Medium Risk
>50	=	High Risk

5.3.4 Review of and Changes to Categories of Risk

Review of Categorisation

When an OSSM system has been assessed and allocated to a category of risk, any owner who believes that such allocation is not appropriate may apply to Council to have the risk assessment reviewed.

Re-categorising of Systems

In order to encourage appropriate management and maintenance of OSSM systems, Council intends to provide for the re-categorisation of systems from the high and medium risk categories. This will involve re-categorisation of installations from high risk to medium risk where the continuing operation of a particular installation has been shown, to Council's satisfaction, over a period of three years continuous operation, to be in accordance with the performance standards set out in the "Guidelines" and this strategy. Similarly medium risk installations, whose continuing operation has been shown, over a period of six years continuous approved operation, to be in accordance with the performance standards set out in the "Guidelines" and this strategy, will be re-categorised to low risk.

Council officers may increase the risk rating of any installation after inspection if that inspection reveals that more frequent monitoring of that system is required.

Council will advise the owners concerned in writing.

5.3.5 Assessment/Inspection Process

Council has previously inspected all systems that were issued with an Approval to Operate. This determined the risk category of the system.

It must be acknowledged that even a system that is achieving optimal performance may pose a potential risk to public health and the environment if it is located in an extremely sensitive environment. For this reason, this Strategy makes a distinction between **high risk areas** and **high risk systems**. Although high risk areas for onsite sewage disposal are common, the high risk systems are not desirable and should be upgraded. High risk areas have been determined from a desktop study but high risk systems can only be identified through the inspection of individual on-site sewage management systems.

This strategy outlines the performance based Inspection Program currently operated within the City. A compliance approach for the inspection of onsite sewage management systems is consistent with Council's approach to its other environmental protection duties, and is considered the most equitable and effective strategy for ensuring that onsite sewage management systems do not pose a risk to the environment or to public health. Through the Inspection Program, Council can ensure that individual property owners and occupiers are acting responsibly and managing their sewage systems correctly. Inspections will be carried out on a random basis with priority given to high risk systems and high risk areas.

Notification of Inspection

Property owners will be given notification by mail of Council's intention to inspect their sewage management systems specifying the time period during which the inspections are to be carried out and requesting that access be provided and where necessary arranged with Council. Property owners wishing to be present at the time of the inspection will be given the opportunity to arrange a mutually convenient time for the inspection to take place.

Monitoring of Pumpout Systems

There are currently ninety-four (94) pumpout systems in Gosford LGA which are all classified as low risk. Figures for individual systems will be monitored regularly to ensure that a satisfactory service is being maintained.

Monitoring of Aerated Wastewater Treatment Systems

There are currently 1268 Aerated Wastewater Treatment Systems (AWTS) in the Gosford LGA. As a condition of certification by NSW Health Department and Council's installation approval these systems are required to be serviced quarterly by recognised service contractors.

Council receives inspection reports from these service contractors and will conduct desktop analyses of these OSSM systems together with random inspections to ensure that the service contractor is supplying Council with the correct information.

The Hunter and Central Coast Septic Tank Action Group (STAG) have developed Draft Regional Guidelines for Local Council Accepted AWTS Service Contractors. This will enable the Councils within the Region to adopt standard assessment criteria for the suitability, qualifications and experience of service contractors. The Guidelines are currently under consideration by the Councils within the Region.

Outline of the AWTS Assessment/Inspection Program

- Owners of systems where a serious risk to health or the environment is identified will be required to carry out work to remedy that problem, as a matter of urgency.

- Where a system does not pose a serious risk to health or the environment, but does not satisfy the **long term** performance objectives outlined in this Strategy, Council will –
 - 1 Inform the owners that the system will remain on Council's assessment program until the system satisfies these performance objectives.
 - 2 Provide details of what level of upgrading would satisfy these performance objectives for their individual site.
 - 3 Negotiate an appropriate time frame for any upgrade.
- Council officers will continue to visit the site until individual systems meet the required standards.
- Once individual systems reach the required standard Council will no longer carry out regular assessments but will monitor the existing service documentation. This service documentation will be extended to include an inspection of the irrigation area by the service agent and any other areas of the system thought necessary by Council to ensure a high standard of operation and maintenance. Where problems are identified by service agents Council will contact the owner and advise for the problem to be rectified and may carry out an inspection.
- Council will carry out random monitoring of these systems to ensure that the service agent inspections are maintaining the required standard of system operation.

The inspection of aerated systems should include the size, condition, management and location of the disposal area, the potential for effluent migration off site and into watercourses and the operation efficiency of the tank and treatment system. Council staff will monitor the documentation currently provided by service agents.

The effluent irrigation and spray areas may include grass (lawn areas), landscaped areas, trees other than fruit trees, or other land as specified in the Approval to Operate.

Indelible signs visible from six (6) metres must define the effluent disposal area. The sign shall include;

WARNING

Reclaimed effluent in this area
Do not drink Avoid contact

If the owner moves the irrigation sprays, the signs must be relocated.

Through the inspection and monitoring process Council will collect data on the performance of the various makes and models of AWTs's. If trends of poor performance in various models or service providers are found, Council will forward this information to the NSW Health Department, which is responsible for the ongoing accreditation of these systems, or contact the service provider.

Monitoring of Transpiration Areas and Absorption Trenches

This is the most historic and widespread method of effluent disposal in the Gosford LGA with approximately 3,200 systems. These systems involve the subsurface disposal of primary treated effluent in:

- 1 absorption trenches through percolation into the soil, and
- 2 transpiration beds by evaporation and transpiration of moisture into the atmosphere and into the soil by partial percolation.

Effluent from these systems undergoes only primary treatment and the assessment will specifically check that effluent has not risen to the surface and that there is little potential for contamination of ground and surface water. The diversion of stormwater, desludging of primary tanks, water economy and disposal field maintenance are matters that also must be assessed at the time.

Monitoring of Other Systems

Other OSSM systems may include cesspits, chemical closets, composting systems and combinations of any of the systems previously mentioned. These systems will be inspected and monitored to ensure that they conform with installation specifications, Approval to Operate conditions and performance standards as set out in the Guidelines and this Strategy.

Monitoring of Major Commercial Systems

There are currently twelve (12) large commercial OSSM systems installed at various locations throughout Gosford including caravan parks, childcare centres, schools, golf courses and licensed clubs. The systems treat in excess of 2000 litres of effluent per day and have been therefore classified as major commercial systems requiring comprehensive annual inspection to ensure compliance with approval and operating requirements. The systems were initially inspected in 2004 and are due for reinspection in 2005. The remaining minor commercial systems will be included with the domestic systems random inspection process.

5.3.6 Upgrading Failing Systems

System inspections are required to ensure that all OSSM systems are installed and operated in accordance with the conditions specified in any Council approvals. Beyond system design and installation, those approval conditions relate primarily to the performance standards specified in the Guidelines and this Strategy.

System failure is deemed to have occurred when a system fails to achieve these prescribed performance standards resulting in adverse impacts on public health or the environment.

Where a system failure is identified, Council may take one or more of the following actions:

- Provide advice and educational material to the system owner and/or operator as to the best practice in operating and maintaining the sewage management system. This may include advice on the use of water saving devices, stormwater diversion, desludging etc (this will be Council's preferred course of action).

- Council may require action or works to be carried out under Section 124 of the Local Government Act 1993 where it may –
 - 1 Order the premises connected to sewer where available
 - 2 Order the conversion of a system to pumpout where on-site disposal is failing and sewer is not available.
 - 3 Order the modification or upgrading of a system incorporating on-site disposal where site conditions are suitable and sewer is not available.
 - 4 Order the premises to be maintained in a safe and healthy condition
 - 5 Order the satisfactory treatment, storage and disposal of waste generated on land or premises.
- Council may issue a Prevention Notice under the Protection of the Environment Operations Act 1997, specifying action that must be taken to ensure that the operation of the OSSM system is carried out in an environmentally satisfactory manner.
- Under Section 679 of the Local Government Act 1993 councils are able to deal with certain prescribed offences by issuing a penalty notice.

Section 626 prescribes a penalty of 3 penalty units (currently \$330) for operating a system of sewage management without prior council approval. Section 627 prescribes 3 penalty units (currently \$330) for the offence of operating a system of sewage management otherwise than in accordance with the terms of council approval.

5.3.7 Complaints About Failing Systems

A member of the community who has a problem with the operation of an OSSM system is entitled to approach Council about the problem. Council must regulate the operation of OSSM facilities so that risks to health and the environment do not arise. Council will investigate complaints relating to system failures irrespective of the priority area. Changes may also be made to the risk categorisation of systems as a result of any complaint investigation.

It is the responsibility of the owner or occupier of the premises to ensure that on-site systems are designed, installed and managed so that environmental nuisance/damage does not occur and there is no risk to public health from the operation of the system.

Owners should ensure that other occupiers of the premises are also aware of the systems' operation and maintenance requirements. If a system is defective and cannot be corrected by the proper operation and maintenance, householders should report this to Council so that immediate action can be taken to address the problem.

6. RECORDS, REPORTING, REVIEW AND EDUCATION

6.1 Council Records

A register of all septic systems has been recorded into an electronic database (Authority and Councils GIS). The following details are included: details of the applicant, the property concerned, the type of installation, the date of application, the determination of the application, the date of issue of any approval or refusal, site inspections and any other relevant details.

All service documentation related to AWTS quarterly maintenance is currently forwarded to Council and assessed. If any further action is required Council will advise the owner to ensure that the system is working in accordance with the conditions to operate.

Council will also maintain a record of effluent pumpout figures to allow periodic desktop analysis of volumes from individual properties.

6.1.1 Notification through the 149 Certificate

Intending purchasers of unsewered allotments within the Gosford LGA are advised of the On-Site Sewage Management Regulations and requirements by the inclusion of the following message in the Section 149 Certificate:

Any property which is not connected to the Council's sewer system may be subject to requirements of State Legislation concerning "On-Site" Sewage Management". When purchasing or selling property in an unsewered area information concerning on-site sewage mngmt should be obtained from Council's Waste Services section by phoning (02) 43 25 8142. NOTE: It is a requirement under the provisions of the Local Govn't (Approval(s) Reg. 1999, that a person who purchases (or otherwise acquires) land on which any sewage mngmt facility is installed or constructed, is required to apply to Council for an Approval to Operate an on-site sewage mngmt system.

6.2 Environmental Audit

The use of a large number of on-site sewage systems in a catchment area may have long term negative impacts on that area and on downstream waterbodies. To monitor these impact levels, testing of surface water for faecal and nutrient contamination is being monitored by the following organizations: Council's Education and Compliance Unit, Waterwatch NSW and local shellfish farmers in areas adjoining oyster leases.

This information can be used to indicate the effectiveness of management practices for on-site sewage systems and also as an indicator of problem areas and management priorities.

6.3 Reporting

Council's Annual State of the Environment Report will include details of:

- the results of the on-site sewage management program;
- the effectiveness of this strategy and its implementation measured against the objectives and goals set out in this strategy;
- a review of water quality data from the environmental auditing process.
- the inspection and assessment of all registered OSSM systems, the number of systems, the type of system, the risk of the system and the risk area.
- enforcement of compliance for the conditions of Approval to Operate.

6.4 Review and Evaluation of this Strategy

This strategy will be the subject of ongoing review. Any substantial changes proposed as a result of these reviews will be considered by Council. Ultimately it is expected that the review process will stabilise and that major reviews will occur every five years.

To support the major review an annual review will take into account the information provided in Council's State of the Environment Reports, progress made on the achievements of goals, aims and objectives outlined in the Strategy and the results of any consultations with relevant Government departments, the community generally and any local interest groups.

6.5 Education and Provision of Information

An important part of this strategy is to ensure that all parties involved in the installation, operation and maintenance of OSSM systems are aware of their responsibilities. The level of knowledge required depends on the type of sewage management system and what the stakeholder needs to do.

The operation of a centralised sewage system requires limited input from the individual householder, but householders need to take an active roll in the operation of OSSM systems. They should have a broad knowledge of OSSM principles and be able to apply that knowledge responsibly.

Householders need to have a full understanding of:

- 1 system operation and maintenance requirements,
- 2 their responsibilities under the regulation,
- 3 system selection and design of effluent application areas,
- 4 the health risks involved if systems fail,
- 5 emergency numbers if the system fails,
- 6 waste and water use minimisation principles and techniques,
- 7 managing the environmental impacts of wastewater,
- 8 where to get further information.

Council has taken an active role in the provision of educational material, information booklets and maintenance fact sheets to the householders and, through the approvals/renewal and inspection process, continues to assist the householders in the correct management of the individual systems.

7. ACCREDITATION

There are two distinct aspects to Accreditation:

1 Systems

2 Personnel

- (i) NSW Health issues certificates of accreditation to manufacturers of sewage management systems. Accreditation is mandatory and validates quality assurance and compliance with provisions of AS/NZS 1546.1.

The Local Government (General) Regulation 2000, Division 4, Subdivision 5 specifies the type of sewage management facilities requiring a Certificate of Accreditation. Such accreditation may include specific requirements for the installation, operation and maintenance and these requirements become part of the Council Approval.

- (ii) The Central Coast and Hunter Councils Septic Tank Action Group (STAG) has prepared draft Regional Guidelines for assessing the suitability, qualifications and experience of Aerated Wastewater Treatment Systems (AWTS) Service Contractors. The aim is to ensure that AWTS are serviced correctly by competent contractors with no risk to public health or the environment. Minimum requirements for accreditation include:

- Relevant servicing experience whilst employed by an AWTS service contractor
- Attendance at a recognised AWTS training course
Current recognised courses are "Aerated Wastewater Treatment System Maintenance Procedures" conducted by Australian Water Technologies Training Services, "AWTS Servicing and Maintenance Training Course" and "On-site Wastewater Management Training Course" conducted by Centre for Environmental Training
- Ability to provide 24 hour emergency breakdown service
- Access to spare parts, pumps, blowers and chlorine supplies
- Access to manufacturers service manuals for relevant AWTS
- Certificate of currency showing insurance for minimum \$10million Public and Product Liability for AWTS service activities

These draft minimum requirements will be used as the basis for accreditation and acceptance of local service contractors operating in the Gosford area.

8. EVALUATION OF IMPLEMENTATION OF THIS STRATEGY

8.1 Monitoring of Individual OSSM Systems

The ongoing efficiency of this Strategy will be evaluated by a monitoring program which will involve;

- a The random inspection of OSSM systems throughout the Council area,
- b An assessment of the integration of this Strategy with other Council strategic planning processes which may include but are not limited to Council's Management Plan, Business Plan, Development Planning, Stormwater Management Planning, Catchment Management Planning and Water and Sewerage infrastructure and,
- c An assessment of the effectiveness of this Strategy in relation to the objectives and goals with regard to the resources required to implement the strategy.

On an annual basis it is intended that all high and medium risk systems and 5% of low risk systems will be inspected to determine whether they meet the performance standards set out in the Regulation and are being operated with no risk to public health or the environment.

8.2 Monitoring Program

In order to fulfil its obligations under the legislation, Council has developed a monitoring program to ensure sewage management systems meet the environment and health performance objectives set out in the Strategy. This program will involve the monitoring of service documentation and on-site inspections.

8.3 Reporting

Council's Annual State of the Environment Report will include details of:

- the results of the on-site sewage management program;
- the effectiveness of this strategy and its implementation measured against the objectives and goals set out in this strategy;
- a review of water quality data from the environmental auditing process.
- the inspection and assessment of all registered OSSM systems, the number of systems, the type of system, the risk of the system and the risk area.
- enforcement of compliance for the conditions of Approval to Operate.

9. EDUCATION AND AWARENESS

It is important that owners of OSSM systems are aware of their responsibilities and have access to the appropriate information and other resources to carry them out.

Owners need to take an active role in the operation of on-site sewage management systems and have a broad knowledge of the management principles and apply that knowledge responsibly.

Owner education and awareness will be promoted by the following:

- Information brochures made available to persons with approval to operate an OSSM system regarding general information on types of on-site sewage management systems, their suitability for sites, installation, operation and maintenance.
- Meetings with plumbers/drainers, installers of systems and AWTS service providers.
- Information relating to OSSM system made available on the Gosford City Council website. www.gosford.nsw.gov.au

10. REVENUE AND FUNDING

Charges associated with on-site sewage management activities will be considered in the preparation of Council's Management Plan to enable implementation of the programs in this Strategy. These fees are reviewed annually.

Whilst there has been a demonstrated expectation from the residents involved for Council to fund this program from Council's general fund, it is anticipated that unless additional revenue is secured the status will remain unchanged with the program totally funded by appropriate application and assessment fees based on cost recovery.

It is acknowledged that the introduction of any new charges is extremely unpopular in the community. One of the aims of this Strategy is to introduce an approach that imposes the least financial burden on owners of non-sewered land.

The revenue program has been developed using an approach that is intended to be

- Administratively efficient.
- Cost efficient.
- Fair, equitable and minimises financial hardship
- Guarantees implementation.

The fees for applications, renewals and assessments have been determined in accordance with the community consultation process and based on recommendations from the Department of Local Government as well as fees adopted by Central Coast and Hunter Regional Councils.

10.1 Application for Approval to Operate

A fee of \$23.00 allocated on the annual rates will allow Council to partially recover the costs incurred in issuing and renewing Approvals to Operate and any inspections. This fee will apply to all new and existing installations.

Council previously resolved that a one third discount for pensioners and charitable organisations would apply to application and, in particular, inspection fees. With the introduction of an annual fee for approval to operate and the deletion of inspection fees discounting is not considered appropriate and should be discontinued.

10.2 Grant Applications

Council will apply for appropriate Grants as programs become available.

10.3 Extraordinary Costs

Council retains the right of recovery of costs associated with a Clean-Up Notice issued under the Protection of the Environment Operations Act, 1997 and the costs of additional water sampling where pollution or contamination from a failed OSSM is suspected.

11. SOCIAL ISSUES

There are a number of social considerations which may be relevant in the on-site sewage management issue, including:

- The financial implication for property owners who may be required to carry out substantial system upgrading works or complete system replacement. The introduction of “pumpout” arrangements as an alternative to on-site disposal also has substantial financial implications for property owners.
- The financial impact of requiring improved sewage management outcomes would be significant for some property owners.
- The significant ramifications that may arise to property owners if their allotment is considered to be of insufficient size to achieve sustainable on-site effluent disposal.

The above issues require consideration when decisions are made, particularly for existing sewage management facilities.

In some circumstances, it may be necessary to receive and consider applications for financial assistance from property owners unable to obtain finance from regular sources.

12. EVALUATION

Evaluation of the On-site Sewage Management Strategy in the Gosford City Council region will be an ongoing process and includes performance indicators for key goals and programs.

Performance Indicators include:

GOAL	INDICATOR/TARGET
Accurate storage of information relating to the operation of OSSM systems.	Maintain a database of approvals and approval conditions for all OSSM systems. Individual system records on the database accurately reflect the approval status of the system. Ongoing.
Improvement of the OSSM Strategy.	Review effectiveness of Strategy through the assessment of information obtained through the monitoring, approval, inspection and education programs. Ongoing
Assessment of pollution incidents of OSSM systems.	Review and implement pollution incident procedure. Undertake analysis of inspection program resulting using GIS.
Provide information of OSSM program in the State of the Environment Report.	Review and update data about of Council's On-site Sewage Management Strategy. Ongoing.
Complete OSSM systems that have not been granted an Approval to Operate.	Inspect all outstanding systems and grant Approval to Operate when all systems meet current health and performance standards. By July 2006.
To increase general education and awareness of on-site disposal systems.	Undertake pilot surveys of general awareness within region. Provide regular media releases and articles filling awareness gaps highlighted in pilot survey. Provide information program for all users of on-site sewage management systems.
Implementation of an inspection program for all OSSM systems	Inspect all high and medium risk systems to ensure that any upgrade works are completed and meet current health and performance standards. By December 2006. Undertake random inspections of low risk systems to ensure that OSSM systems are operated and maintained in accordance with approval conditions. Ongoing.
Implement the Renewal of Approval to Operate Program.	Include annual charge of \$23.00 on the rates notice of all properties containing an on-site sewage management system as the fee for renewal of the approval to operate the OSSM system as provided by Section 107A of the Local Government Act 1993. Commencement by January 2006. Ongoing.

Identify Council's Environment Section, Health Services Section, Waterwatch NSW and local Shellfish Farmers water quality monitoring locations on Council's GIS.	Locate on Council's GIS all monitoring points relating to water quality and obtain water quality information monitoring data. Assess the effectiveness of management practices for on-site sewage systems in relation to recreational waters and oyster growing estuaries. By December 2006.
To ensure all aerated wastewater treatment systems are inspected by accredited persons at quarterly intervals, and are maintained and operated as required for efficient performance.	Implement a Maintenance Policy for AWTS service contractors including disposal area assessment for all systems by 1 July 2006. Provide instruction to all authorised service contractors for the implementation of the maintenance policy by 1 January 2007.

13. CONCLUSION

Gosford City Council is committed to continuing improvement in the installation, operation and maintenance of on-site sewage management systems. Council is aware of the immensity of the task that this commitment involves to achieve the basic environment and health protection objectives of this Strategy.

The results of the evaluation and monitoring programs outlined in this Strategy will indicate where deficiencies and strengths are and what changes need to be made to overcome any deficiencies.

New technology, guidelines, regulations or performance standards which may be introduced to enhance the performance of on-site sewage management systems will be included in any review of this Strategy.

14. DEFINITIONS

Aerated Wastewater Treatment System (AWTS)

An aerated waste water treatment system treats all household waste water and involves the settling of solids, oxidation and consumption of organic matter, clarification of solids and disinfection using chlorination prior to irrigation.

Blackwater

Human excreta and water grossly contaminated with human excreta from toilet waste water.

Buffer Distance

A distance measured in metres that represents the length of flow line between a waste water re-use or disposal area and the high water mark of a water body or watercourse.

Compost

The material produced by aerobic biological decomposition of organic material.

Composting Toilet (Waterless)

A waterless system including (humus closet, biological toilet) that uses the principle of composting to break down human excreta to a humus type material. Any liquid is evaporated or directed to an appropriate management system.

Composting Toilet (Wet)

Treats all household waste water and putrescible household organic solid wastes such as food waste. Uses the principle of aerobic composting to break down the solid waste, the liquid component is directed to a land application system after passing through the pile of solids.

Constructed Wetland

An area where the water surface is near ground level to maintain saturated soil conditions and promote related vegetation.

Desludging

Withdrawing sludge, scum and liquid from the tank.

Disinfection

A process that destroys, inactivates or removes pathogenic micro-organisms.

Domestic Waste Water

Waste water arising from household activities, including waste water from bathrooms, kitchens and laundries.

Effluent

Liquid discharge from a septic tank or aerated waste water treatment system.

Evapotranspiration

Removing water from soil by evaporation and from plants by transpiration.

Grey water

Domestic waste water (sullage) excluding toilet waste.

Ground Water

All underground water.

Guidelines

Environment and Health Protection Guidelines – On-site Sewage Management for Single Households.

Land Application Area

The area over which treated waste water is applied.

LGA

Local Government Area

On-site Sewage Management System

Any facility that stores, treats and/or disposes of sewage and/or waste water on-site.

OSSM System

An on-site sewage management system.

Permeability

The general term used to describe the rate of water movement through the soil.

Potable Water

Water of a quality suitable for drinking or domestic use.

Regulation

The Local Government (Approvals) Amendment (Sewage Management) Regulation 1998.

Septic Tank

Waste water treatment device that preliminarily treats all household waste water by settling the solids, flotation of oils and fats and anaerobic digestion of sludge.

Sewage Management

Any activity carried out for the purpose of holding or processing, or re-using or otherwise disposing of, sewage or by-products of sewage.

Sludge

Mainly organic semi-solid product produced by waste water treatment processes.

Soil Absorption System

Includes leach drains, drain fields, absorption trenches, seepage beds and seepage pits, sub-surface land application systems that rely on the capacity of the soil to accept and transmit the applied hydraulic load.

15. REFERENCES

Australian/New Zealand Standards 1546.1, 1546.2, 1546.3 & 1547

NSW Department of Local Government:

- 1993 - Local Government Act 1993
- 1997 - Local Government (Ecological Sustainable Development) Amendment Act.
- 1998 - Circulars to Councils (Refs. 98/28, 98/60, 99/07)
- 1998 - On-site Sewage Management Reforms Information. (Ref. FF98/0228/01)
- 1998 - Local Government (Approvals) Amendment (Sewage Management) Regulation 1998
- 1999 - Local Government (Approvals) Regulation
- 2005 - Local Government (General) Regulation

Department of Urban Affairs and Planning, (1979) - Environmental Planning and Assessment Act 1979, NSW Department of Urban Affairs and Planning, Sydney.

Department of Local Government, Environment Protection Authority, Department of Urban Affairs and Planning, Department of Land and Water Conservation, NSW Health (1998).

Environment and Health Protection Guidelines: On-site Sewage Management for Single Households, NSW Department of Local Government, Sydney.

Gosford City Council - State of Environment Reports 1998 to 2004.

NSW Fisheries - Maps

ANNEXURE 1

**APPLICATION FOR APPROVAL
TO OPERATE A SEWAGE MANAGEMENT SYSTEM**LOCAL GOVERNMENT ACT 1993, SECTION 68
LOCAL GOVERNMENT (GENERAL) REGULATION 2005

Assessment No.

OSSM:

PROPERTY WHERE THE SEWAGE MANAGEMENT SYSTEM IS INSTALLEDHouse No Lot No D P No
Street Suburb**OWNER (S) DETAILS**Full Name (s)
Mailing Address
Contact Telephone Number**OCCUPIER (S) DETAILS**Full Name (s)
Mailing Address
Contact Telephone**TYPE OF SEWAGE MANAGEMENT SYSTEM**

- ☐ Primary Septic Tank with Secondary Aerated Treatment and Spray Irrigation
☐ Primary Septic Tank with Aerated Treatment and Sub-Surface Irrigation
☐ Septic Tank with Onsite Effluent Disposal by Absorption Trench
☐ Septic Tank with Effluent Pump-Out
☐ Composting Toilet with Separate Greywater Management System
☐ Other (please describe)

OWNER (S) SIGNATURE (S)

.....

NOMINATED OPERATOR DETAILS

The nominated operator must reside at the property serviced by the sewage management system and is responsible for ensuring that the system does not pose a risk to public health or the environment. Where the owner does not reside at the property the nominated operator is the occupier.

.....
Please print name SignatureCOMPLETED APPLICATION FORM AND APPLICATION FEE OF \$23.00 TO BE FORWARDED TO:
GOSFORD CITY COUNCIL, PO BOX 21 GOSFORD, OR 49 MANN STREET GOSFORD 2250

Office Use Only

Cashier Code 449

Receipt No: Date:.....



APPROVAL TO OPERATE AN ON-SITE SEWAGE MANAGEMENT SYSTEM

Issued under The Local Government Act 1993, Section 68 and The Local Government (General) Regulation 2005

Approval No	<i>[document number]/[document year]</i>
Property Where Sewage Management System is Installed	<i>[Property title]</i> <i>[property address]</i>
Type of System Installed	<i>[document number1 desc] SYSTEM</i>
Owners Name and Address	<i>[Owner name]</i> <i>[Owner address1]</i> <i>[owner address2] [owner address3]</i>
Date of Issue	
Valid Until	

This Approval to Operate is issued subject to compliance with the attached conditions.

Peter Wilson
General Manager

Per:

**CONDITIONS OF APPROVAL TO OPERATE
AN ON-SITE SEWAGE MANAGEMENT SYSTEM**

Local Government Act 1993, Section 68 and Local Government (General) Regulation 2005

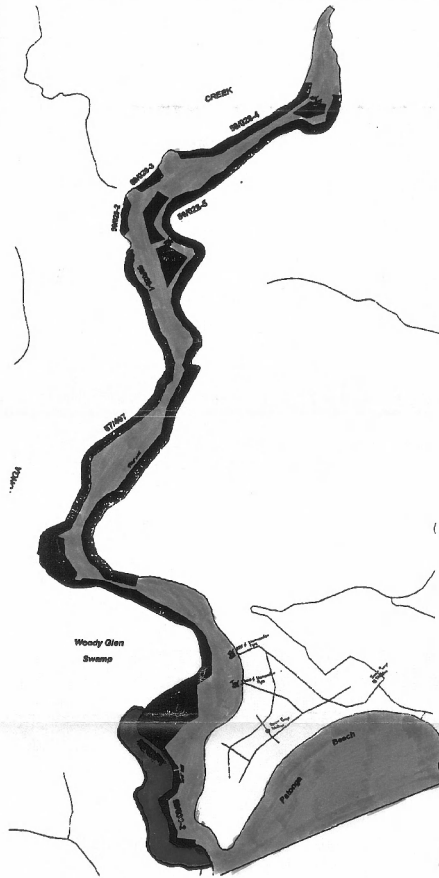
1. A system of sewage management shall be operated in a manner that achieves the following performance standards:
 - a the prevention of the spread of disease by micro-organisms,
 - b the prevention of the spread of foul odours,
 - c the prevention of the contamination of water,
 - d the prevention of degradation of soil and vegetation,
 - e the discouragement of insects and vermin,
 - f ensuring that persons do not come into contact with untreated sewage or effluent (whether treated or not) in their ordinary activities on the premises concerned,
 - g the minimisation of any adverse impacts on the amenity of the premises and surrounding lands,
 - h if appropriate, provision for the re-use of resources (including nutrients, organic matter and water)
2. The system of sewage management shall be operated:
 - a in accordance with the relevant operating specifications and procedures (if any) for the sewage management facilities used for the purpose, and
 - b so as to allow the removal of any treated sewage (and any by-product of any sewage) in a safe and sanitary manner.
3. The sewage management facilities used in the operation of the system shall be maintained in a sanitary condition and must be operated in accordance with the approved plans and conditions.
4. Sewage and effluent from the sewage management facility used in the operation of the system shall not be discharged into any watercourse or onto any land other than its related effluent application area.
5. The person operating the system of sewage management shall provide details of the way in which it is operated, and evidence of compliance with the conditions of this approval, whenever the Council reasonably requires the person to do so.
6. A person who purchases (or otherwise acquires) land on which any sewage management facilities are installed or constructed may operate a system of sewage management for the period of three (3) months after the date on which the land is transferred or otherwise conveyed to the person, and if the person applies within the period of two (2) months after the date on which the land is transferred or otherwise conveyed to the person for approval to operate the system of sewage management concerned, the person may continue to operate that system of sewage management without approval until the application is finally determined.
7. Where the owner does not occupy the premises, the occupier shall be informed of the operating arrangements for the system.
8. The owner or occupier shall advise Council immediately of any defect or failure of the system.
9. Council shall be advised of any proposal to extend the premises which will increase the occupancy.
10. The owner shall advise any lessee of these premises the terms and conditions of this approval.
11. Grease traps shall be regularly cleaned to prevent the entry of grease into the septic tank and absorption trenches.
12. Treated effluent from aerated wastewater treatment systems shall be managed wholly within the premises where the system is installed. Where the effluent is used for irrigation, a warning sign shall be displayed.
13. Aerated wastewater treatment systems shall be maintained on a quarterly basis by an authorised service agent.
14. Spray heads shall be low pressure, low volume sprays which are not capable of producing aerosols. The spray plume shall have a height of less than 500mm and diameter of less than 5 metres. The spray irrigation system shall be fully operational.
15. The contents of collection wells shall be emptied by Council's authorised contractor.
16. Composted humus material from composting toilets shall be removed only following a minimum composting period of 12 months. The composed material shall be buried within the site, in a level area not used for the cultivation of crops for human consumption, with a minimum soil cover of 75mm.

Gosford City Council

On-site Sewage Management Strategy

ANNEXURE 2

Patonga Creek Estuary



Source: Lismore
1:50,000 scale
February 1997

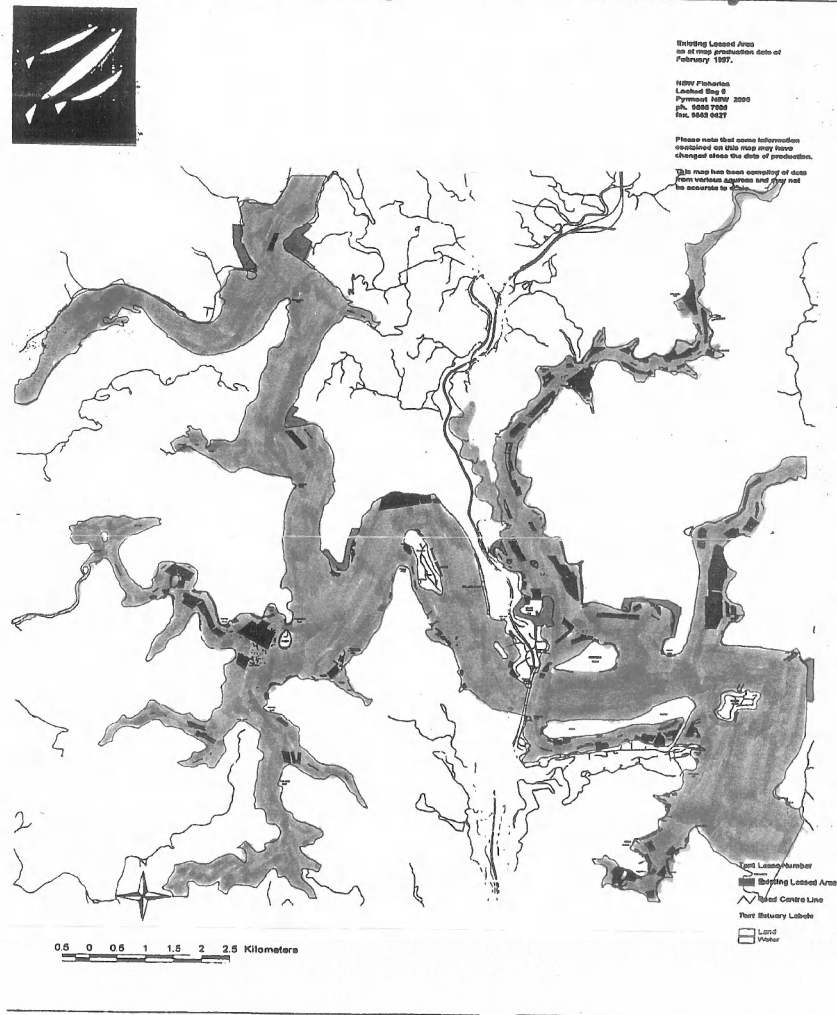
Map prepared
Lismore City Council
10/01/97
10/01/97
10/01/97

Patonga Creek
This map has been
prepared on a
1:50,000 scale

Test Lismore
10/01/97

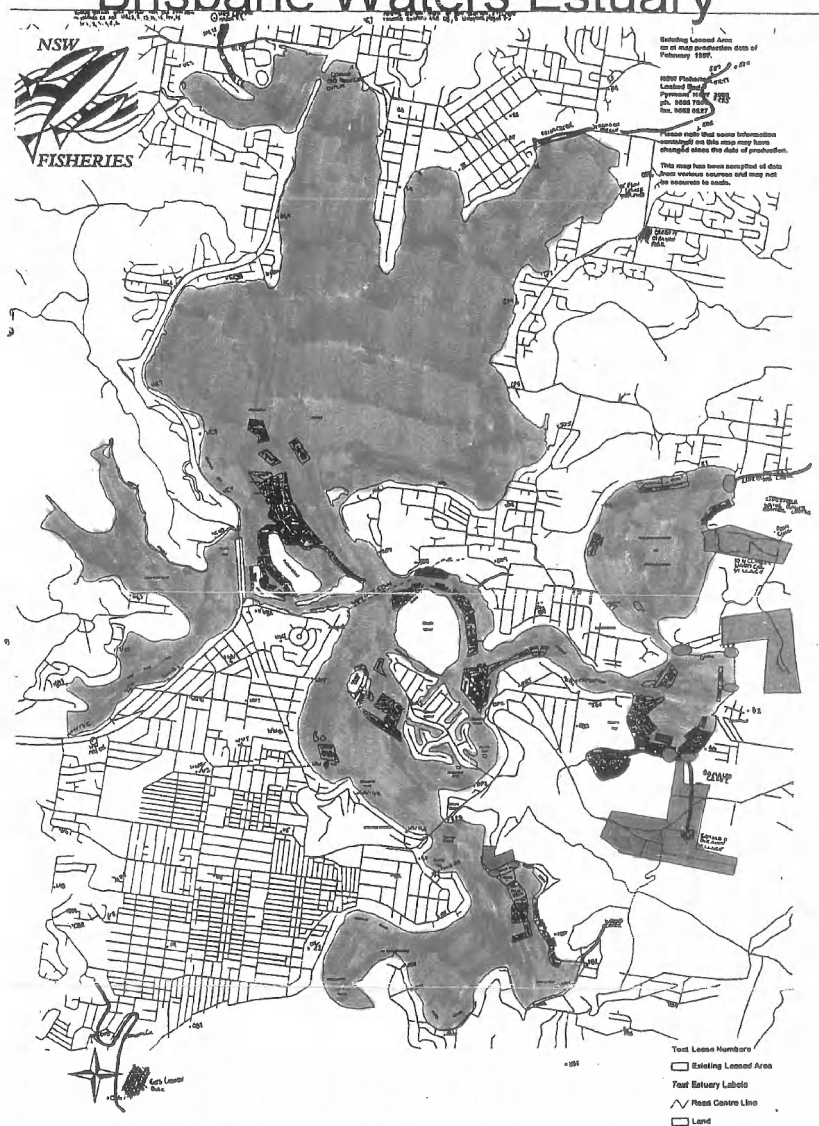
ANNEXURE 3

Hawkesbury River Estuary



ANNEXURE 4

Brisbane Waters Estuary



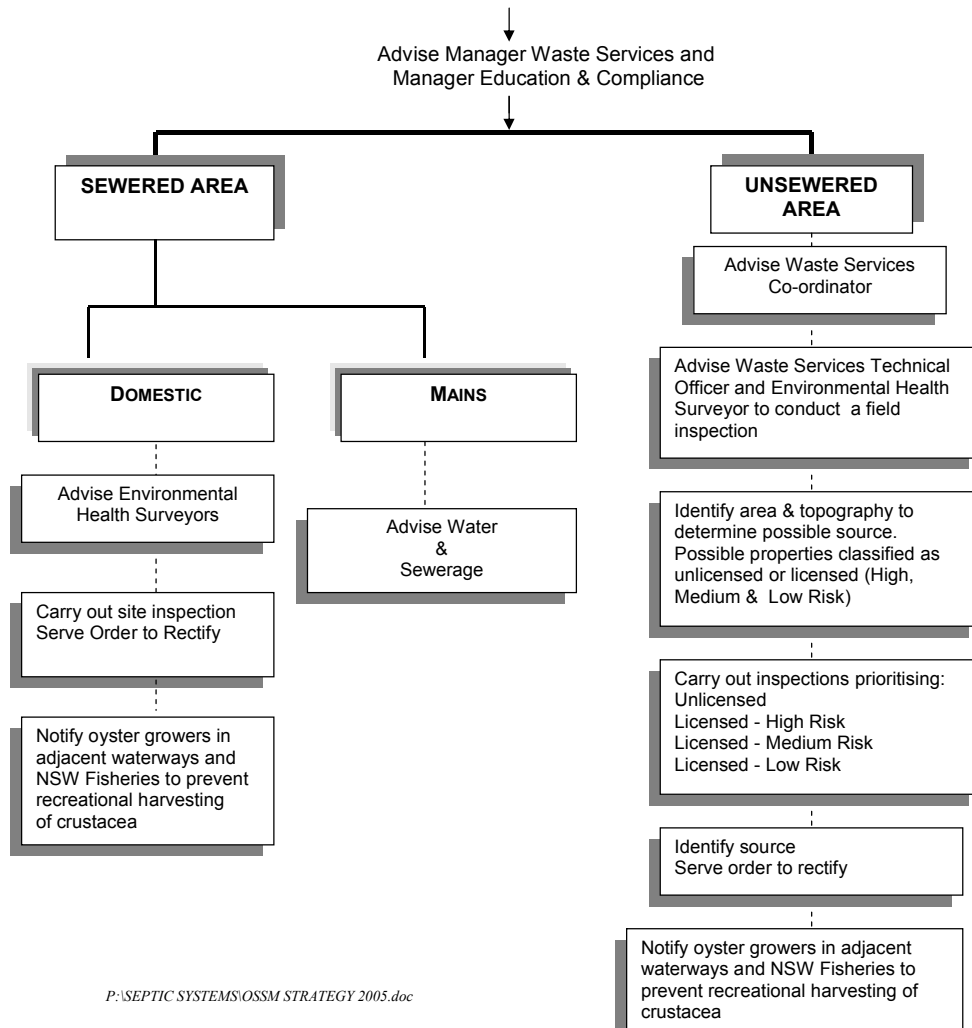
ANNEXURE 5**EMERGENCY PROCEDURES PLAN**

This plan is designed to provide a clear course of action by Council's staff in the event of a water sample from recreational waters or oyster growing areas returning a high bacterial level.

The flow chart identifies the action and responsible officer. All staff should note that it is essential for implementation to occur in an efficient manner with minimal delays to allow the field officers the opportunity to identify the source and take immediate action in an effort to minimise the potential pollution.

FLOW CHART

Advice received of high bacterial levels in sample of waterways or advice by a resident of a suspected problem



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