BALLINA SHIRE COUNCIL

ON-SITE SEWAGE MANAGEMENT STRATEGY 2022

ballina shire council

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by Ballina Shire Council,
40 Cherry Street, Ballina NSW 2478.

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1. INTRODUCTION

It is a requirement for councils within New South Wales, which have non-sewered areas, to review their On-Site Sewage Management (OSSM) Strategy at appropriate intervals in consultation with the community.

The function of an OSSM system is to collect, contain, treat, assimilate and process wastewater in a sustainable manner so that the key performance objectives are achieved.

Key Performance Objectives:

a) To protect public health
b) To maintain and enhance the quality of the environment
c) To maintain and enhance community amenity
d) To protect resources.

The focus of Ballina Shire Council's (BSC) OSSM Strategy is to sustainably manage the design, construction, installation and ongoing operation and maintenance of all OSSM systems within the BSC Local Government Area (LGA). The OSSM Strategy affirms the community's objectives and outlines Council's monitoring program and support services to assist homeowners install and maintain their OSSM system in a satisfactory operating condition.

Key components of the OSSM Strategy are identified in the ensuing aims, goals and objectives. A risk assessment method provides a mechanism for BSC to allocate resources, determine frequency of OSSM audit site inspections and to identify priority high risk areas.

The OSSM Strategy supports and contributes toward several wider BSC program objectives and initiatives, including the improvement of water quality in the Richmond River, creeks, estuaries, protection of drinking water catchments, priority oyster aquaculture areas, and groundwater and stormwater management.

The OSSM Strategy is to be read in conjunction with Council's OSSM Guidelines, which contain the detailed requirements for the design, construction, installation, replacement, repair, alteration and maintenance of OSSM systems.

Community and homeowner education will be an important component of the OSSM Strategy.

1.1 Aims

The aims of the OSSM Strategy are:

- to provide a management framework to enable BSC to proactively regulate all OSSM systems within the shire
- to enhance the capacity of BSC to fund and resource the OSSM monitoring and management program
- to provide education, support and supervision to help homeowners maintain their OSSM system in a satisfactory condition
- to implement a best practice OSSM management program to ensure the protection of public and environmental health, amenity and to utilise resources efficiently.

1.2 Goals

To achieve the aims the OSSM Strategy goals are to:

- maintain a register of all OSSM systems installed within BSC LGA
- ensure the protection of the environment including groundwater, drinking water catchments, priority oyster aquaculture areas, Richmond River, creeks, estuaries, stormwater, surface water, land and vegetation
- protect public health by minimising the risk of human contact with wastewater and effluent
- restrict vector access into OSSM systems ie mosquitos, flies and rodents
- ensure that specific site constraints and locations are considered to ensure suitable OSSM systems are installed
- maintain and enhance community amenity in regard to installation and operation of OSSM systems, ie visual, noise and odour
- ensure that all applications to install OSSM systems and effluent land application areas comply with appropriate Acts, Regulations, Australian Standards, guidelines and application approval conditions
- promote ecologically sustainable development ie efficient use of resources, water and energy in the design and operation of OSSM systems
- ensure that resources are provided for the development of communication and homeowner education programs
- ensure the efficient and effective use of Council resources
- promote the safe reuse of treated effluent, when and where suitable
- ensure that only suitably qualified and experienced persons design, install and service OSSM systems
- develop key performance indicators that will monitor and measure the success of the OSSM Strategy.

1.3. Objectives

To achieve the Strategy goals, BSC has set the following objectives:

- coordinate and record all OSSM application approvals into the OSSM register, including inspection and monitoring information
- develop OSSM Guidelines for the design, construction, installation, replacement, repair, alteration and maintenance of an OSSM system
- develop and implement a OSSM communication and education plan targeting homeowners, plumbers and drainers, designers, installers, service agents, real estate agents, solicitors, conveyancers, architects, planning consultants, and the general wastewater industry
- educate OSSM owners on the importance of monitoring OSSM systems and to encourage a voluntary compliance attitude
- develop and implement an OSSM monitoring program to ensure that all systems are serviced at required intervals and service reports are submitted to Council within acceptable timeframes
- develop an OSSM audit inspection program that is risk based and considers available resources
- maintain a list of suitably qualified persons for designing, installing and servicing OSSM systems and make the list accessible to the public
- ensure that all OSSM designs and installations are certified by suitably qualified persons for compliance with the Council approved plans and conditions and where applicable the manufacturer's commissioning requirements
- ensure that, where practical, OSSM systems are designed and managed to use materials, water and energy efficiently during construction, installation and operation
- ensure that development approvals in non-sewered areas, ie subdivisions, boundary adjustments, dwelling entitlements and change of land use, comply with the OSSM Strategy.

1.4 Citation

This OSSM Strategy has been adopted by BSC and should be read in conjunction with the Ballina Shire Development Control Plan and BSC OSSM Guidelines.

1.5 Commencement

This OSSM Strategy applies to BSC non-sewered areas from the date of adoption by Council, to all development applications, construction certificate applications, and Local Government Act Section 68 OSSM applications relating to or affected by the matters contained in the OSSM Strategy.

1.6 Corporate Linkages

This OSSM Strategy applies to all land within the BSC LGA and supersedes all previous information issued by BSC with respect to OSSM treatment and disposal. In the event of any inconsistency between this OSSM Strategy and previous Development Control Plans, policies or codes, this OSSM Strategy shall prevail.

Links to Council's Community Strategic Plan (CSP) and Delivery Program and Operational Plan (DPOP):

CONNECTED COMMUNITY

The outcomes we want are:

CC2 We have a sense of belonging within the community

CC2.1 Create events and activities that promote interaction and education, as well as sense of place

HEALTHY ENVIRONMENT

The outcomes we want are:

HE1 We protect, respect, and enhance our natural environment

HE1.2 Undertake and promote initiatives that improve our waterways

HE2 Our operational choices are based on sustainability and limit our impact on the environment

HE2.1 Implement total water cycle management practices

HE3 Our built environment is respectful of the natural environment and the ecosystem

HE3.2 Minimise negative impacts on the natural environment

ENGAGED LEADERSHIP

The outcomes we want are:

EL1 Decision-making is inclusive, transparent and underpinned by sustainability

EL1.2 Involve our community in our planning and decision-making processes

EL1.3 Actively advocate community issues to other levels of government

EL3 Our leaders work effectively with other levels of government and councils

EL3.1 Provide prompt, knowledgeable, friendly and helpful advice

EL3.3 Deliver responsive and efficient services.

1.7 Scope

The BSC OSSM Strategy and BSC OSSM Guidelines are designed to be consistent with and complement the NSW Environment & Health Protection Guidelines: On-Site Sewage Management for Single Households and AS/NZS 1547 – Domestic On-Site Wastewater Management, and to highlight certain features of the Ballina Shire locale, such as the exceptionally high seasonal rainfall and volcanic soils. They recognise terrain comprising undulating, or steep escarpments, interspersed with drainage channels and watercourses, the coastal plain, proximity of wetlands and an estuarine environment. These features present challenges that often require specialised solutions for wastewater treatment and management.

The OSSM Strategy and Guidelines provide a framework to implement ecologically sustainable OSSM practices, guidelines for site and soil evaluation (SSE), maintenance and operating requirements for all OSSM systems.

The Protection of the Environment Operations Act (POEO Act) regulates sewage treatment systems when the wastewater processing capacity exceeds 2,500 Equivalent Persons (EP) or 750 kilolitres per day. The OSSM Strategy is not applicable for sewage treatment systems of this capacity that are regulated by the Protection of the Environment Operations Act.

Under the provisions of Local Government Act, Councils are responsible for regulating the installation and operation of OSSM systems, which do not exceed 2,500 Equivalent Persons (EP) or 750 kilolitres per day. This OSSM Strategy applies to sewage treatment systems that do not exceed this capacity.

The NSW Ministry of Health issues certificates of accreditation for OSSM facilities not exceeding 10 EP or 2,000 litres of daily sewage flow. OSSM systems with capacities above 10 EP and less than 2,500 EP have no formal accreditation process.
In these instances, BSC may require an independent third party review of the OSSM design paid for by the proponent before an Approval to install will be issued.

BSC will assess these systems on a case by case situation utilising a risk assessment process and referring to wastewater industry guidelines.

Drinking water catchment areas are subject to specific requirements for both new and existing installations. If a property is located within these catchment areas then the Rous County Council On-Site Wastewater Management Guidelines are applicable and are to be read in conjunction with the BSC OSSM Strategy and Guidelines.

This Strategy is not applicable for OSSM systems on State or Federal Government owned land and institutions, where the State and Federal Government Departments approve the OSSM installation and manage their own monitoring and maintenance program eg NSW state schools.

2.0 COUNCIL APPROVAL REQUIRED FOR OSSM SYSTEMS

The Local Government Act states that prior approval must be obtained from Council before carrying out the following:

- installation, construction or alteration of a waste treatment device or a human waste storage facility or a drain connected to any such device or facility
- operation of a system of sewage management.

The Local Government (General) Regulation sets out:

- Council's responsibilities and powers to regulate the installation and ongoing operation of OSSM systems
- the information that must accompany an OSSM application
- the matters to be taken into consideration by Council in determining an OSSM application
- the performance standards to be satisfied before an OSSM approval can be issued
- the domestic greywater diversion requirements (for maximum of one residential dwelling) and when there is Council prior approval or non-prior approval of an installation.

Note 1: For referenced documents the latest gazetted versions of legislation and Australian Standards are to be used (ie Acts, Regulations, Australian Standards, and Guidelines etc).

2.1 OSSM Compliance with Legislation and Guidelines

When lodging an OSSM application to Council to install/construct/alter an OSSM system or a development application in a non-sewered area, the designer/consultant is to comply with, refer to and reference the following documents (where applicable) as part of the application process.

- Local Government Act
- Local Government (General) Regulation
- Protection of the Environment Operations Act
- Public Health Act
- Ballina Shire Council – On-Site Sewage Management Strategy (amended 2022)
- Ballina Shire Council - On-Site Sewage Management Guidelines (amended 2022)
- AS/NZS 1546.1 – Septic tanks
- AS/NZS 1546.2 – Waterless composting toilets
- AS/NZS 1546.3 – Secondary treatment systems
- AS/NZS 1546.4 – Domestic greywater treatment systems
- AS/NZS 1547 – On-site domestic wastewater management
- Ballina Local Environment Plan 2012 and Ballina Local Environment Plan 1987
- Environment & Health Protection Guidelines: On-Site Sewage Management for Single Households
- Rous County Council – On-Site Wastewater Management Guidelines
- NSW Guidelines for Greywater Reuse in Sewered, Single Household Residential Premises
- NSW Ministry of Health - Sewage Management Facility Vessel Accreditation Guideline (Septic Tanks, Collection Wells, Sewage Ejection Pump Stations, etc.)
- NSW Oyster Industry Sustainable Aquaculture Strategy.

2.2 Applications to Install/ Construct/Alter and Operate an OSSM System

There are two separate applications for OSSM approval, being:

1. An approval to install, construct or alter an on-site sewage management system; and
2. An approval to operate an on-site sewage management system.

The Approval to Install, Construct or Alter an On-Site Sewage Management System relates to the installation of a new OSSM system or the upgrade/alteration of

an existing system. This application is made under Section 68 of the Local Government Act and is to be submitted to Council with payment of appropriate fees prior to any work commencing (refer BSC website for OSSM approval to install application form and BSC OSSM Guidelines).

It is an offence under the Local Government Act to undertake work to install/construct or alter an OSSM system without prior written approval from Council.

The Approval to Operate an On-Site Sewage Management System (other than renewal) will only be issued to the owner of property where:

1. **For a new OSSM system;** a final inspection has been undertaken and when all certification documentation has been received by Council; or

2. **For an upgrade of an existing OSSM system** resulting in a change to the type of system installed eg a new wastewater treatment system and/ or installation of a new effluent land application area (eg trenching or irrigation); a final inspection has been undertaken and when all certification documentation has been received by Council. The new certificate will reflect the modified system; or

3. **For a property that has an existing OSSM system and is sold**, the new property owner may continue to operate the existing system of sewage management for a period of up to three months after completion of the sale, but an application to Council must be lodged (by the new owner) within two months of completion of the sale to enable the OSSM Approval to Operate certificate to be issued in the new owner's name within the legislative timeframes.

For the renewal of an approval to operate certificate it is the homeowners responsibility to arrange an inspection by a suitably qualified person and complete the approval to operate renewal form and inspection checklist and submit back to Council prior to the expiry date.

The assessment of the OSSM system is to be completed using the OSSM inspection templates, which can be found on Council's website. An inspection report and ATO renewal form (Section 68) will need to be submitted to and approved by Council before an ATO is renewed.

Suitably qualified persons that can conduct an OSSM inspection include NSW licensed plumber and drainer and Council registered OSSM designers and AWTS service agents.

For homeowners with an aerated wastewater treatment system (AWTS), a suitably qualified service agent can submit the latest quarterly service report with an ATO Renewal Form (Section 68) to Council for approval. The inspection checklists will not need to be completed if a quarterly service report contains all relevant information and is submitted to Council.

It is important to provide Council and the homeowner with accurate information on the operation of the OSSM system. It is considered an offence to provide Council with false or misleading information relating to the renewal of an Approval to Operate Certificate and may attract a penalty infringement notice (PIN) and/or a court attendance notice. Homeowners and Suitably qualified persons that do not report failing systems may be held liable and compliance action may be taken to rectify the situation.

For commercial properties with an OSSM system the requirements for renewing an approval to operate may differ depending on the conditions set out in the approval to install certificate. Council may request additional documentation to ensure the system is operating satisfactorily before a new approval to operate certificate is issued.

An administration fee is to be paid to Council for the processing and issuing of the OSSM approval to operate certificate (refer to BSC OSSM Approval to Operate application form).

It is an offence under the Local Government Act to operate an OSSM system without a current Approval to Operate issued by Council.

3.0 RENEWAL AND ANNUAL OSSM MANAGEMENT FEE

An OSSM Approval to Operate certificate issued by BSC to a property owner is not unlimited and has an expiry date. Depending on the risk rating of a property the homeowner will be required to organize a re-inspection of their system by a suitably qualified person at the intervals set out in Table 1 below. The suitably qualified person will be required to complete and submit Council's Approval to operate renewal form which includes an inspection checklist. If the OSSM system is operating satisfactorily as detailed in the inspection checklist Council will then issue a new approval to operate certificate for a certain timeframe depending on the risk rating of a property and also the condition and age of the OSSM system.

For a non-sewered property that has an OSSM system installed, Council charges the property owner an annual fee to assist with the funding of the OSSM Management Program. The fee is charged as a separate item on the annual rates notice. The fee contributes to the development and dissemination of education material, OSSM random audit inspections and the acquisition of resources to implement the OSSM Program objectives.

There have been limited Council resources to perform a re-inspection of the OSSM system (prior to OSSM Approval to Operate expiry date) and issue the certificate.

4.0 RISK ASSESSMENT AND INSPECTION FREQUENCY

In order for BSC to achieve its strategy goals and objectives and to manage resources effectively and efficiently, the OSSM audit inspection program will utilise a risk assessment process.

All properties with existing OSSM systems within the BSC LGA will have a desktop risk assessment evaluation performed to identify site features and constraints. Each of those properties will then be allocated a corresponding risk level (ie high, medium or low). The OSSM risk level will determine the OSSM Approval to Operate expiration, reinspection and renewal date.

The risk method process will identify all applicable site and soil characteristics on a property and evaluate the level of constraint for each. The horizontal and/or vertical setback distance from a sensitive receptor to the OSSM system (including the effluent land application area) will be the key element in determining the level of risk. The level of constraint presented by site and soil characteristics on the property and/or the proximity of sensitive receptor to the OSSM system will correspondingly increase the level of constraint and risk for that property. The higher the risk, the greater the audit inspection frequency for that property and the less time between OSSM Approval to Operate expiration, reinspection and renewal dates.

BSC will prioritise the completion of the desktop risk assessment process. This will ensure that the risk level for each property with an OSSM system has been determined and the OSSM register is brought up to date with correct data. At the time of writing this revised OSSM Strategy there are approximately 2,000 properties in the OSSM register that require a risk assessment evaluation.

In the future, BSC will perform more of an auditing role within the OSSM monitoring program. For example, a cluster of OSSM high risk properties will be selected for operational compliance (eg ten to twenty properties in the same locality). This method of limiting the maximum number of properties to inspect in any given time and concentrating the inspections in specific areas on a risk basis is an efficient and effective way to use resources and to manage any necessary compliance actions. The properties that are within the priority oyster aquaculture and drinking water catchment areas are examples of where audit inspections will be performed.

BSC will also be randomly auditing recently completed renewal applications to ensure all information provided to Council by the suitably qualified person is accurate.

Typical site features/constraints which will be taken into consideration are:

- priority oyster aquaculture areas
- drinking water catchment areas
- groundwater bores on-site or nearby
- soil landscapes and soil properties
- slope of ground
- flooding potential
- permanent and intermittent surface waterways and stormwater drainage channels
- level of wastewater treatment and quantity of wastewater generated
- effluent land application method
- size of parcel of land
- commercial and public businesses.

Table 1: OSSM Reinspection Requirements for Renewal of Approval to Operate Certificate

OSSM TYPE	OSSM EVALUATED RISK LEVEL AND INSPECTION FREQUENCY			SER VICE PERSON TO PERFORM INSPECTION (INSPECTION REPORTS LODGED TO BSC)
	HIGH	MEDIUM	LOW	
Wastewater Collection Well – Pump Out System	Once/5yrs	Once/7yrs	Once/10yrs	Suitably Qualified Person – NSW Licenced Plumber & Drainer & OSSM Designer
Septic Tank & Trench/ Beds	Once/5yrs	Once/7yrs	Once/10yrs	Suitably Qualified Person – NSW Licenced Plumber & Drainer and OSSM Designer
Septic Tank & Wisconsin Sand Mound	Once/5yrs	Once/7yrs	Once/10yrs	Suitably Qualified Person – NSW Licenced Plumber & Drainer and OSSM Designer
Septic Tank and Sand Filter	Once/5yrs	Once/7yrs	Once/10yrs	Suitably Qualified Person – NSW Licenced Plumber & Drainer and OSSM Designer
Composting Toilet	Once/5yrs	Once/7yrs	Once/10yrs	Suitably Qualified Person – NSW Licenced Plumber & Drainer and OSSM Designer
Constructed Wetland – Reed Bed	Once/5yrs	Once/7yrs	Once/10yrs	Suitably Qualified Person – NSW Licenced Plumber & Drainer and OSSM Designer
Greywater Diversion Devices	Once/5yrs	Once/7yrs	Once/10yrs	Suitably Qualified Person – NSW Licenced Plumber & Drainer and OSSM Designer
Greywater Treatment Systems (GTS)	Not Applicable already serviced at regular intervals as required within NSW Ministry of Health Certificate of Accreditation			Suitably Qualified Person – Authorised Service Agent
Aerated Wastewater Treatment Systems (AWTS)	Not Applicable already serviced at regular intervals as required within NSW Ministry of Health Certificate of Accreditation			Suitably Qualified Person – Authorised Service Agent
All OSSMs (other than AWTS or GTS) Installed within Drinking Water Catchment Areas	Once/3yr	Once/5yrs	Once/7yrs	Suitably Qualified Person - NSW Licenced Plumber & Drainer and OSSM Designer
All OSSMs (other than AWTS or GTS) Installed within Priority Oyster Aquaculture Areas	Once/yr	Once/5yrs	Once/7yrs	Suitably Qualified Person - NSW Licenced Plumber & Drainer and OSSM Designer
Commercial OSSM Systems (other than AWTS or GTS)	Once/yr	Once/5yrs	Once/7yrs	Suitably Qualified Person - NSW Licenced Plumber & Drainer and OSSM Designer
All OSSMs (other than AWTS or GTS) prior to selling property in non-sewered area	Vendor to arrange inspection of OSSM system prior to selling property. Inspection report to be provided to purchasers of property and to BSC via the new owner when they lodge their OSSM Approval to Operate application.			Suitably Qualified Person – NSW Licenced Plumber & Drainer and OSSM Designer

Note 3: BSC will develop standard OSSM inspection templates to be used by suitably qualified people when re-inspecting OSSM systems to renew the OSSM Approval to Operate certificate or prior to selling a property.

5.0 SUITABLY QUALIFIED PERSON

Design, installation and/or servicing of OSSM systems in the BSC LGA must be undertaken by suitably qualified and experienced people with adequate qualifications, training, knowledge, experience and skill. In addition, professional indemnity insurance must be held and the insurance certificate of currency must cover the work being performed.

BSC has adopted AS/NZS 1547: – On-site wastewater management recommendations in determining suitable qualifications for each element of the OSSM installation process and for the ongoing servicing of the system as follows.

Source AS/NZS 1547:

5.1 Site evaluators and soil assessors

Site evaluators and soil assessors may include professional engineers, soil scientists, drainage contractors or plumbers with appropriate training, competence, and experience in design and installation practice. Site evaluators and soil assessors should ensure that they:

1. Have attended an appropriate accredited training program
2. Are familiar with any regulatory requirements for site evaluation
3. Are responsible for all work to evaluate the capacity of a site and its soil for accepting treated wastewater
4. Certify that the evaluation procedures have been undertaken in accordance with this Standard and any requirements of the relevant regulatory authority, and
5. Identify cultural concerns or constraints.

5.2 OSSM Designers

Designers may include professional engineers, soil scientists, drainage contractors or plumbers with appropriate training, competence, and experience in design and installation practice. Designers should ensure they:

a) Have attended an appropriate accredited training program
b) Complete and certify a design report (including a wastewater loading certificate) to accompany any application for installing or operating on-site systems, as set out in 7.4.2
c) Are familiar with information on current installation trade practices, the range of materials and methods employed, the types of machinery available to the installer and the level of operator competence required for their use
d) Are familiar with any community and environmental constraints
e) Certify on completion of the installation, that the on-site system has been constructed, installed, and commissioned in accordance with its design including any additional requirements of the relevant regulatory authority
f) Lodge a set of 'as-built' plans and details, as set out in 6.2.5.4, with the owner or occupier of the facility being serviced by the on-site system and with the relevant regulatory authority if required.

The above sections (e) and (f) are not applicable for OSSM Designers. Refer to Table 3 for requirements and responsibilities for OSSM certification within the BSC LGA.

g) Prepare a set of operation and maintenance guidelines (see 6.3) specific to the on-site system as designed and installed or constructed. The guidelines should be lodged with the property owner or occupier and if required, with the regulatory authority or their agent.

Certification could be required by regulatory authorities as prepared by independent technical experts such as professional engineers with appropriate experience and competence in the relevant discipline. The operation and maintenance guidelines should include the designer's loading certificate setting out specific detail on the capacity of the system, the wastewater producing fixtures for which it has been designed, and the risks of overloading if additional fixtures are added beyond the capacity of the system.

5.3 OSSM Installation contractors

Installation contractors may include licensed drainlayers and plumbers, technical or professional engineering people or any other persons with appropriate competence and experience in construction and installation. Contractors should ensure that they:

a) Have attended an appropriate accredited training programme which should include training in the theory of current and contemporary design approaches and in installing on-site systems;
b) Consult with the designer on the intention of the design, and the installation/construction methods and procedures essential to achieving design integrity;
c) Liaise with the designer during installation/ construction so that a certificate of compliance with design can be completed, particularly when unusual or innovative design approaches are being used that are beyond their current experience; and
c) Certify with the designer that all equipment incorporated as part of the on-site system has been installed in accordance with the manufacturer's or supplier's instructions and in accordance with any other conditions established by the regulatory authority.

Regulatory authority requirements could at times override the designer's or manufacturer's instructions.

5.4 OSSM Aerated Wastewater Treatment System (AWTS)

To become a Council authorised AWTS service agent the following is required:

a) Completion of an AWTS servicing training course conducted by a registered training organisation ie Training Australia course CPCPDR2023 maintain effluent disinfection systems or equivalent course;
b) Minimum six months experience in the servicing of AWTS systems – proof of servicing experience and the type of systems serviced is required. Service agents just starting out would need to gain experience working with authorised AWTS service agent (mentor). Contact BSC if assistance is required in obtaining experience or mentorship;
c) Accreditation in writing from each AWTS manufacturer confirming completion of any specific training needed to service that manufacturer's particular system;
d) Public liability insurance (certificate of currency) is to be lodged with Council in advance of commencing servicing. BSC will maintain a register of currency of insurance and it is the responsibility of Service Agents to lodge renewal details with Council.

All OSSM electrical work is to be performed by a qualified, experienced licenced electrical contractor and in accordance with all appropriate electrical regulations and standards.

5.5 Existing OSSM re-inspection

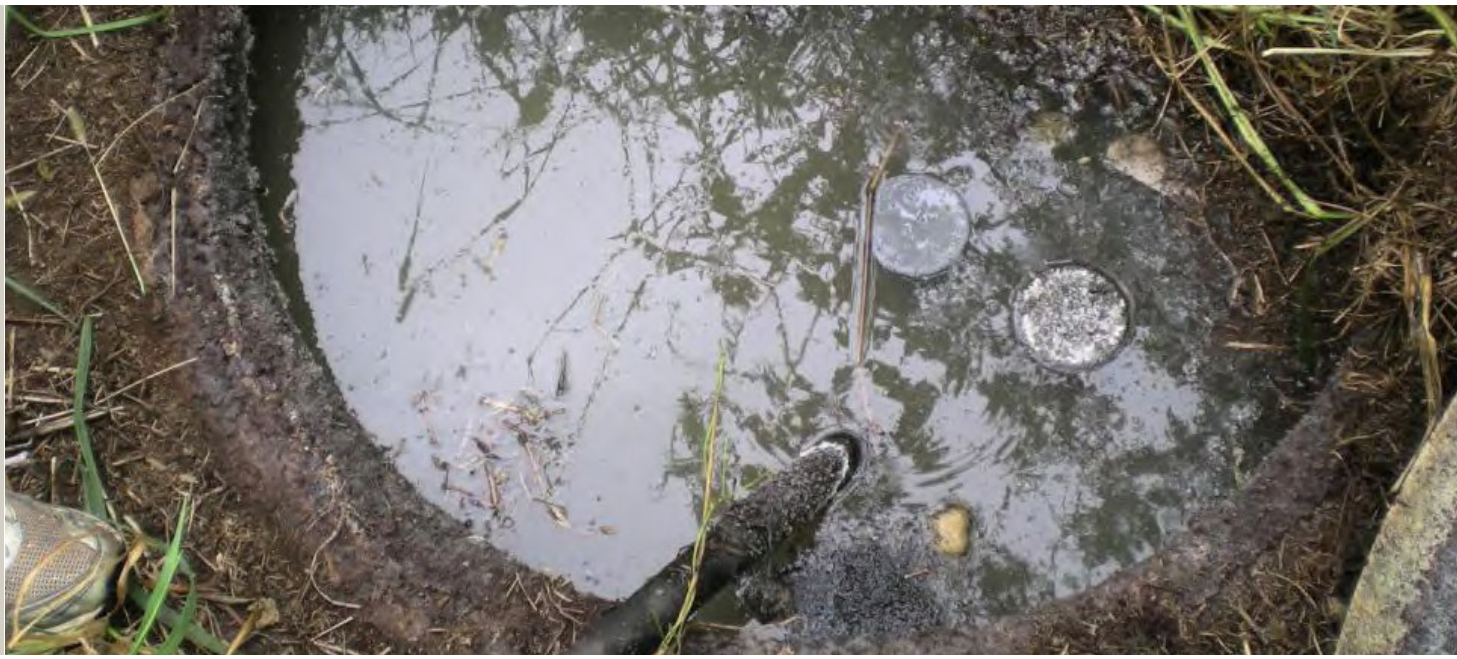
For the purposes of renewing an approval to operate certificate Re-inspection of existing OSSM systems (other than an AWTS), can be performed by OSSM designers and NSW licensed plumbers and drainers using Council's inspection form within the approval to operate renewal form.

When an approval to operate certificate for an AWTS is due for renewal, the latest quarterly service report completed by an authorisized AWTS service agent will need to be provided to Council with the approval to operate renewal form. *Please note the inspection form will not need to be completed in this instance.*

Note 4: There are a sufficient number of suitably qualified persons to install OSSM systems within the BSC LGA ie NSW licenced Plumber and Drainers. However, there are a limited number of OSSM designers and service agents and it is understood it can be difficult for the public to access and contact these professionals.

For these reasons BSC will make available to the public a list of suitably qualified persons that meet the required criteria to design or service OSSM systems within the BSC LGA. To submit OSSM design reports to BSC, businesses will be required to be on the list before doing so. To be included on the list each business will need to complete and submit to BSC the *OSSM Suitably Qualified Person Application Form* and provide supporting documentation. The suitably qualified person is to uphold their continual professional development and insurance requirements to remain on the list

6.0 COMPLIANCE AND ENFORCEMENT OVERVIEW



When BSC conducts a OSSM site inspection and confirms that the OSSM system is operating un-satisfactorily (ie defective, failed system or effluent run-off) then the following enforcement steps are undertaken to ensure that the OSSM system is rectified promptly and returns to satisfactory operation.

1. BSC sends the property owner a Local Government Act – "Notice of Proposed Order" advising that BSC is intending to issue the owner an "Order" to rectify the defective OSSM system on the property. The "Notice of Proposed Order" details the defects and the actions required to resolve the matter. The owner has an opportunity to make representations to Council within 14 days of the date on the "Notice of Proposed Order" if they believe the "Order" should not be given, modified or the timeframes to rectify are not achievable.

2. After the 14 day representation period expires, BSC will review any representations and decide whether to issue the property owner the "Order" and if so, whether with or without modifications. Depending on the extent of OSSM defects, the "Order" may require a Local Government Act – Section 68 Application to be lodged with Council, the payment of fees and lodgment of NSW Department of Fair Trading plumbing and drainage forms (where applicable).

3. If the property owner does not comply with the "Order", BSC engages a solicitor to start proceedings to have the matter heard in either the Land and Environment Court or the Ballina Local Court.

4. Depending on the results of the site inspection, ie extent of non-compliance and risk to public and environmental health, Council may issue the person responsible for the breech a Penalty Infringement Notice (PIN) "On The Spot Fine" in addition to the standard legal enforcement process. The OSSM risk rating and inspection frequency will be reviewed and adjusted if needed, which may incur additional costs to the homeowner due to potential increase in frequency of inspections. Under certain circumstances and conditions, council has the power to enter the property and carry out the required works and place a debt on the landowner for these works.

Table 2: OSSM Program - Key Performance Indicators

KEY PERFORMANCE INDICATORS	MEASUREMENT (TASK ACTIONED/ COMPLETED)
Determination of OSSM system Approval to Install Applications (except applications within priority oyster aquaculture areas, which may take longer)	14 days
Determination of OSSM Approval to Operate Applications when property sold – include with the certificate to the new owner, the suite of OSSM homeowner education fact sheets and any system specific information	7 days
Response to customer request for BSC management action eg effluent run-off complaints where there is public and environmental health risk	Within 24 hours
Response to customer request for BSC management action eg OSSM complaints where there are no apparent public and environmental health risk	Within 48 hours
Timeframe for service agents to send their Aerated Wastewater Treatment System (AWTS) completed service reports to BSC. (In future all types of OSSMs service reports will need to be lodged to BSC within this timeframe)	Within 14 days
BSC perform audit of AWTS service reports overdue (>30 days) – letter to owner if overdue in first instance, enforcement process to follow if needed	2 audit reports run/year
Lodgement by service agents of current public liability and professional indemnity insurance cover. Review by BSC and inclusion on BSC list of authorised service agents	1 per year
Educational information provided to homeowner, community and wastewater industry – eg OSSM articles in the BSC community connect newsletter and workshops	2 per year
Customer service survey	1 per year
Statistics of OSSM inspections performed on existing systems and provide breakdown of inspection results - compliances, non-compliances and failures	Quarterly 4 audit reports run/year

The OSSM Program provides quarterly statistics to Council as part of the Development Environmental and Health Group quarterly reporting process. The statistical reports are a gauge confirming if compliance with the Key Performance Indicators ~~are~~ is being achieved. A summary of OSSM statistical information is also included in the BSC State of the Environment Annual Report.

7.0 HOW TO APPLY TREATED EFFLUENT TO THE LAND

All OSSM systems within the BSC LGA must apply treated effluent to the land via sub-surface methods to reduce the risk of the effluent coming into contact with humans, or animals and minimising the risk of effluent surface run-off incidents.

For existing OSSM systems which have previously been approved by BSC for surface spray irrigation, they may continue to operate in this method as long as the system complies with the Approval to Operate conditions. If the existing system fails or is not being serviced and maintained in accordance with the Approval to Operate conditions then BSC will issue an Order to the owner to lodge a Local Government Act Section 68 application to install/alter the effluent land application system to a sub-surface method.

8.0 GREYWATER REUSE REQUIREMENTS

The Local Government Act and Local Government (General) Regulation provide approval requirements for domestic greywater treatment systems and greywater diversion devices.

Greywater means wastewater from washing machine, laundry tub, shower, hand basin, bath and kitchen (however it is preferred to keep kitchen waste out of greywater systems), but does not include wastewater from a toilet, urinal or bidet.

In general there are three ways of re-using greywater:

1. Manual bucketing – small quantities of greywater are captured in a bucket for re-use outside on gardens or lawns for which no Council approval is required

2. Greywater diversion devices - divert greywater (excluding kitchen wastewater) without storage or treatment to a sub-surface irrigation area for which no Council approval is required under certain conditions. A NSW licenced plumber and drainer is to install the device/s

3. Domestic greywater treatment systems - collect, store, treat greywater and disinfect the greywater for re-use inside the home for toilet and urinal flushing and cold water washing machine use, as well as for use outside the home on gardens or lawns in dedicated non-trafficable areas or other land application systems and for which Council approval is required. A NSW licenced plumber and drainer is to install the system/s.

Domestic greywater treatment systems must be accredited by the NSW Ministry of Health. All greywater diversion devices (gravity and pumped devices) are to be evaluated in accordance with the Australian Technical Specification ATS 5200.460-2004 issued by SAI Global Assurance Services.

WaterMark

Certification to the technical specification for plumbing and drainage products is obtained by way of a Watermark licence.

Extract from NSW Health - Greywater reuse policy:
"It is well recognised that householders, unless dedicated to wastewater reuse practices, do not necessarily maintain their wastewater management systems unless there is a system of audit. It is essential that councils institute an on-site wastewater management strategy which initially considers the impacts of greywater reuse in their areas before allowing greywater reuse and secondly, rigidly enforces an operating licence by a system of regular audit."

8.1 Greywater Reuse in Non Sewered Areas

Installation of a greywater treatment system or greywater diversion device in a non-sewered area must be of an accredited system and must have prior approval from BSC. This approval is sought by the lodgement of a Local Government Act Section 68 Application (including payment of the application fee). Refer to BSC OSSM Guidelines for details on information to be submitted with an application.

Greywater reuse systems are not encouraged in non-sewered areas, as unlike in a sewered area where the greywater can be instantly diverted into Council's reticulated sewerage system during a power outage, maintenance works, persistent wet weather periods, or when high volumes of wastewater are being generated, this immediate safety diversion option is not available in a non-sewered area.

This means in a non-sewered area there is more risk and there also needs to be a backup system installed ie a treatment tank and effluent land application area must be installed based on total volume of greywater generated to manage the greywater when there is a power outage, maintenance works, persistent wet weather periods, or when high volumes of greywater are being generated. The added financial costs and additional resources required for inspection and management (BSC and homeowner) of a greywater re-use system in a non-sewered area do not fall within the OSSM Strategy objectives.

8.2 Greywater Reuse in Sewered Areas

Installation of a greywater treatment system or greywater diversion device in a sewered area must be of an accredited system and must have prior approval from BSC. This approval is sought by the lodgement of a Local Government Act Section 68 Application (including payment of the application fee). Refer to BSC OSSM Guidelines for details on information to be submitted with application.

Domestic greywater diversion may be carried out without the prior approval of the Council if:

a) it is carried out in accordance with the Plumbing Code of Australia
b) an on-site sewage management facility is not installed on the premises, and
c) the following performance standards are achieved:
   (i) the prevention of the spread of disease by micro-organisms
   (ii) the prevention of the spread of foul odours
   (iii) the prevention of contamination of water
   (iv) the prevention of degradation of soil and vegetation
   (v) the discouragement of insects and vermin
   (vi) ensuring that persons do not come into contact with sewage or effluent (whether treated or not) in their ordinary activities on the premises concerned
   (vii) the minimisation of any adverse impacts on the amenity of the premises concerned and surrounding lands.

Note 5: An OSSM Approval to Operate Certificate must be issued to a property owner prior to the operation of either a greywater treatment system or greywater diversion device. The NSW Department of Primary Industries–Water website provides information on greywater and a link to the document titled "NSW Guidelines for Greywater Reuse in Sewered, Single Household Residential Premises", which explains all the approval requirements for greywater reuse.

9.0 OSSM CERTIFICATION

BSC requires that all stages of the OSSM system design and installation process are certified by suitably qualified persons.

Table 3: OSSM Certification Requirements

CERTIFICATION TYPE	CERTIFICATION PERSON	CERTIFICATION DOCUMENT
OSSM Design Certification	Suitably Qualified Person – ie Designer - NSW Licenced Plumber and Drainer or Wastewater Consultant	BSC – Design Producer Statement
OSSM Installation and Commissioning Certification - new and upgraded On-Site Sewage Management Systems	NSW Licenced Plumber and Drainer	BSC – Compliance and Commissioning Certification Form
OSSM Installation & Minor Alterations Certification	Suitably Qualified Person – ie Designer, NSW Licenced Plumber and Drainer or Wastewater Consultant	BSC - Installation and Minor Alterations Certification Form
OSSM Commercial Systems - >10 Equivalent Persons (EP) - Design and Installation Certification	Appropriately qualified and experienced Wastewater Consultant or NSW Registered Professional Engineer	BSC – Design Producer Statement BSC – Compliance and Commissioning Certification Form

10.0 DEVELOPMENT APPLICATIONS NON-SEWERED AREAS

For developments applications in non-sewered areas the following is generally required. However, Council may use discretion to require OSSM design details/reports on a risk-based basis i.e. small blocks, Older OSSMs, water catchment zones or in close proximity to waterways.

10.1 Subdivision/Boundary Adjustments/Rezoning Applications

a) The development application is to include an OSSM Report prepared by a suitably qualified person, who has conducted an OSSM desktop study of the property, a site inspection and who has assessed any existing OSSM system/s. The OSSM Report must include details of the location of all existing OSSM systems on the property (including effluent land application areas), confirm; whether the existing systems are performing satisfactorily or unsatisfactorily; their location; their condition; and if they will affect the proposed development application

b) For development applications involving the subdivision of land into multiple parcels, the OSSM design report will need to include a desktop study, site and soil assessment details and justify that an OSSM system can be installed on the new parcel/s of land in accordance with BSC's OSSM Strategy and Rous County Council On-Site Wastewater Management Guidelines if applicable.

The size and location of the subdivision will also determine the extent of content to be included in the OSSM Design Report. For large subdivisions (ie subdividing into greater than five parcels of land) and where the soil assessment characteristics are confirmed the OSSM designer may only need to justify that an OSSM system can be installed on the most limiting parcels within the subdivision.

This would mean a site and soil assessment and effluent land application area calculation, based on a standard four bedroom dwelling, is only carried out on the most limiting parcel/s, and not on every parcel of land. The most limiting size of effluent land application area would be indicatively placed onto a site plan for all parcels of land within the subdivision justifying that an OSSM system can be installed in accordance with BSC's OSSM Strategy and Rous County Council On-Site Wastewater Management Guidelines if applicable;

c) If the OSSM Report finds that any existing OSSM system is unsatisfactory, the Report must set out in detail why this should not affect any consent given for the proposed development.

Example:

- Confirm that a Local Government Act Section 68 application to alter/install an OSSM system has been lodged with Council to rectify the unsatisfactory performance of the system, or
- Advise it is the intention of the owner to lodge a Local Government Act Section 68 application to alter/install an OSSM system at a later date, justify the delay in rectifying the OSSM system and certify it will not cause an environmental or health risk in the meantime.

BSC will consider this information and may issue the development consent with appropriate conditions to ensure that any OSSM system upgrade works are completed (eg prior to issue of an occupation or subdivision certificate) and/or issue an "Order" to the property owner to rectify the OSSM system within a set timeframe;

d) If the OSSM Report finds that the existing OSSM system is satisfactory, it must also confirm that if the system does require any future upgrades, and it will not affect any consent given for the proposed development

e) If an applicant is unsure of BSC requirements when lodging a development application, a request

Note 6: The OSSM Designer is to consider and reference any applicable building envelop and environmental zones, in the OSSM Report and on the site plan, when determining the location of OSSM systems and effluent land application areas.

10.2 New Dwellings

For proposed new dwellings in non-sewered areas, on parcels of land 2000m^2 or less, and/or within a drinking water catchment area and/or within a POAA the following is required:

a) The development application is to include an OSSM Report prepared by a suitably qualified person. The OSSM design report will need to include a desktop study, site and soil assessment details and justify that an OSSM system can be installed on the land in accordance with BSC's OSSM Strategy and Rous County Council On-Site Wastewater Management Guidelines if applicable;
b) The OSSM design is to be approved by Council prior to the development application being determined to ensure it is capable of servicing the proposed development
c) An OSSM Approval to Operate certificate must be issued by BSC prior to the issuing of an interim or final occupational certificate;

For proposed new dwellings in non-sewered areas, on parcels of land greater than 2000m^2, and not within a drinking water catchment area and not within a POAA the following is required:

d) Any approval will be conditioned to lodge a Local Government Act OSSM Section 68 Application (including payment of the application fee) prior to issue of a Construction Certificate;
e) An OSSM Approval to Operate certificate must be issued by BSC prior to the issuing of an interim or final occupational certificate.

10.3 Alterations and Additions to Existing Dwellings including Dual Occupancies

All development applications with alterations and additions to existing dwellings in non-sewered areas are to include an OSSM Report prepared by a suitably qualified person when there is no existing approval to operate certificate or the certificate has expired. The OSSM report will need to demonstrate that the existing system is operating satisfactorily and Council officers may at their discretion require additional information.

Development applications which propose rumpus rooms, offices and/or art studios (as well as any other type of room which can be converted to a bedroom) will be required to specify these rooms as bedrooms and account for the additional wastewater load in the OSSM report.

For alterations and additions to existing dwellings in non-sewered areas where there is a proposal to increase the wastewater load (eg additional bedrooms) or an intention to carry out plumbing and drainage works (eg ensuite) the following is required:

Note 7: If the Change of Building Use development application involves building works then the OSSM Report and Local Government Act OSSM Section 68 Application (if applicable) is to be lodged to BSC prior to issue of the Construction Certificate.

Prior to Issue of a Construction Certificate

a) A suitably qualified person is to provide a report to BSC justifying that the existing OSSM system is operating satisfactorily, can treat the additional wastewater load and apply the effluent to the land, or confirm that the existing OSSM system will need to be upgraded, or that a new OSSM system will need to be installed;
b) If the OSSM system needs to be upgraded or a new system installed then a Local Government Act OSSM Section 68 Application is to be lodged to BSC prior to issue of the Construction Certificate, including an OSSM Report prepared by a

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suitably qualified person in accordance with BSC's OSSM Strategy and Rous County Council On-Site Wastewater Management Guidelines if applicable. An OSSM Approval to Operate certificate must be issued by BSC prior to the issuing of an interim or final occupational certificate.

For alterations and additions to existing dwellings in non-sewered areas where there is not a proposal to increase the wastewater load (eg no additional bedrooms) or no intention to carry out plumbing and drainage works the following is required:

c) It is the homeowner's and designer's responsibility to verify that the proposed development works (eg decking, building extension, swimming pool) will not be built over or impact on any existing OSSM system or effluent land application area or any reserve areas for future wastewater disposal. For small lots (ie <2000m^2) all development applications shall be referred to the OSSM team to ensure there are adequate reserve areas for future disposal of wastewater. There is generally no requirement to submit an OSSM Report or lodge a Local Government Act OSSM Section 68 Application to BSC for these types of alterations and additions.

d) For lots under 2000m^2 all development applications are to include an OSSM Report prepared by a suitably qualified person. The OSSM report will need to demonstrate that the existing system is operating satisfactorily and the proposed development will not impact the operation of the OSSM system and hinder future reserve areas. Consideration must be given to future scenarios of OSSM system failure and utilization of a defined reserve area

10.4 Change of Building Use

For change of building use development applications in non-sewered areas the following is required:

Development Application Stage

a) A suitably qualified person is to provide a OSSM Report to BSC justifying that the existing OSSM system is operating satisfactorily, can treat any additional wastewater load and apply the effluent to the land, or confirm that the existing OSSM system will need to be upgraded, or that a new OSSM system will need to be installed;

b) If the OSSM system needs to be upgraded or a new system installed then a Local Government Act OSSM Section 68 Application is to be lodged to BSC including an OSSM Report prepared by a suitably qualified person in accordance with BSC's OSSM Strategy and Rous County Council On-Site Wastewater Management Guidelines if applicable. An OSSM Approval to Operate certificate must be issued by BSC prior to the issuing of an interim or final occupational certificate.

In the event that the applicant wishes to certify an unauthorized dwelling it will be a requirement to ensure that management of on-site wastewater is in accordance with Council's OSSM Strategy and Guidelines. If the existing OSSM system is operating unsatisfactorily and/or cannot meet the minimum criteria set out in Council's Strategy and Guidelines the unauthorized dwelling will not be given an occupation certificate.

11.0 ECOLOGICALLY SUSTAINABLE DEVELOPMENT

All buildings connected to OSSM systems are to install water and energy efficient plumbing products (where applicable) to conserve the water and energy supply, minimise wastewater generation, assist in the satisfactory operation of the OSSM system and reduce the risk of the system failing. Refer to the Australian Government Water Efficiency Labelling Standards (WELS) Scheme and Energy Rating websites to compare the water and energy efficiency of different products.

As a minimum the following water efficient products are to be installed:

a) Water conserving clothes washing and dishwashing machines (if applicable);
b) Dual flush cisterns to all toilets;
c) Flow control aerators to taps; and
d) Water conserving shower roses.

The WELS water rating label provides water efficiency information for water-using products. It allows consumers to compare products and rewards manufacturers and retailers who make and stock water efficient models.

Label identification rating:

- A zero to six star rating that allows a quick comparative assessment of the product's water or energy efficiency. The more stars on the label the more water or energy efficient the product
- A figure showing the water consumption flow of the product based on laboratory tests.

OSSM Design - elements to consider:

- use of electricity
- use of consumables (such as chlorine)
- frequency of servicing
- number of parts and maintenance costs
- generation of greenhouse gases
- ability to reduce -
  a) organic matter (compost food scraps),
  b) nutrients (low phosphorus washing and cleaning products),
  c) salts (low sodium washing and cleaning products), and
  d) sludge.

Note 8: Approval to install (section 68) applications may be refused if an AWTS is proposed when it is not required (i.e. in low risk areas). This is to reinforce sustainable development with the Ballina Shire. Further, if an AWTS is not maintained on a quarterly basis to manufacturers specifications, then it is likely to perform less satisfactorily compared to a septic tank. Ballina Shire Council will always promote sustainable systems in our Shire and the use of reed beds instead of AWTS is encouraged where it is possible to do so.

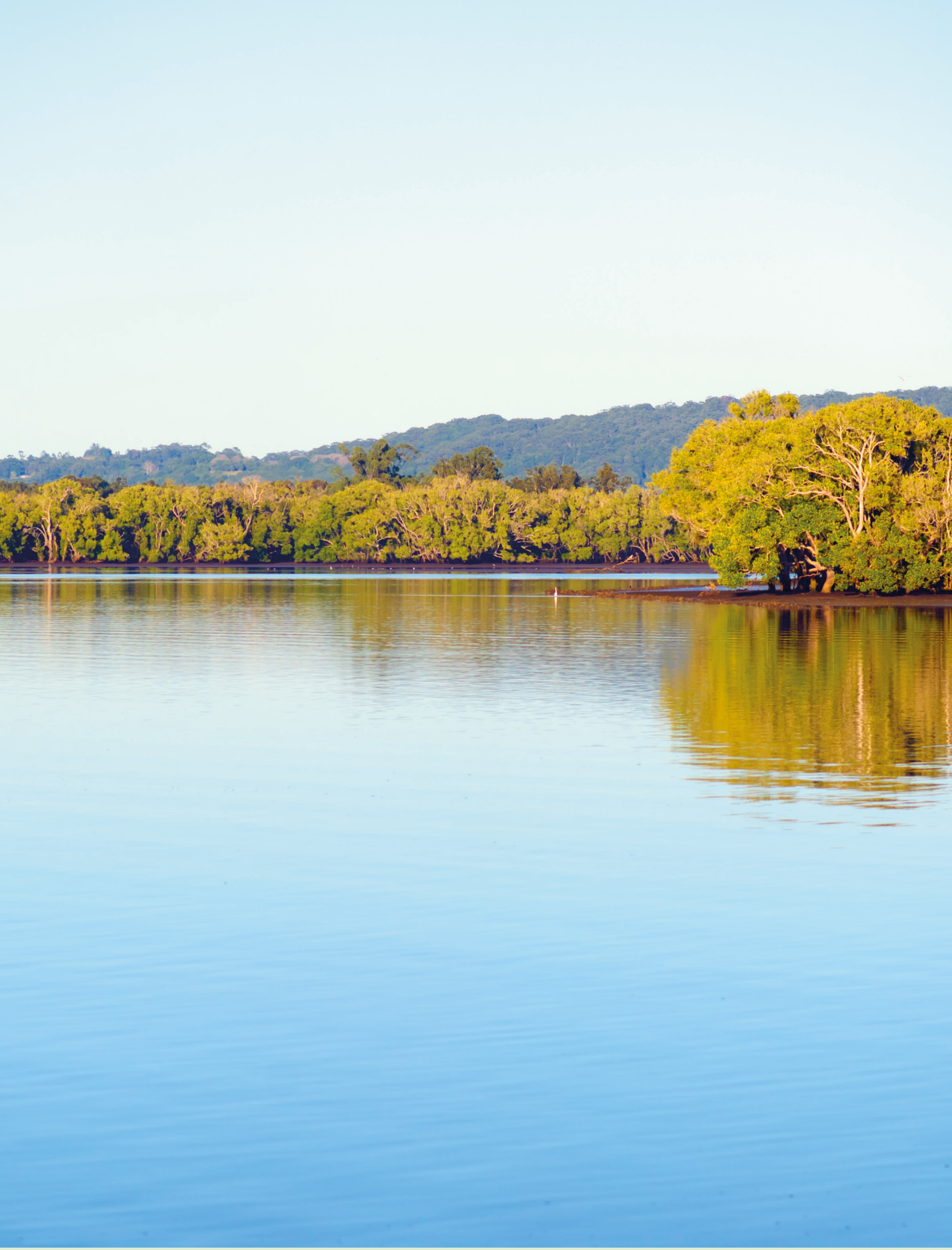
Note 9: Above ground irrigation covered in mulch may be encouraged at properties with a large number of native trees or where tree removal is not possible.

12.0 STAKEHOLDERS

The following stakeholders have been consulted during the OSSM Strategy review process.

Table 4: OSSM Strategy Review - Stakeholders

BSC INTERNAL	EXTERNAL	GOVERNMENT
Public and Environmental Health		
Building Services		



BALLINA SHIRE COUNCIL

ON-SITE SEWAGE MANAGEMENT STRATEGY 2022

ballina shire council

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