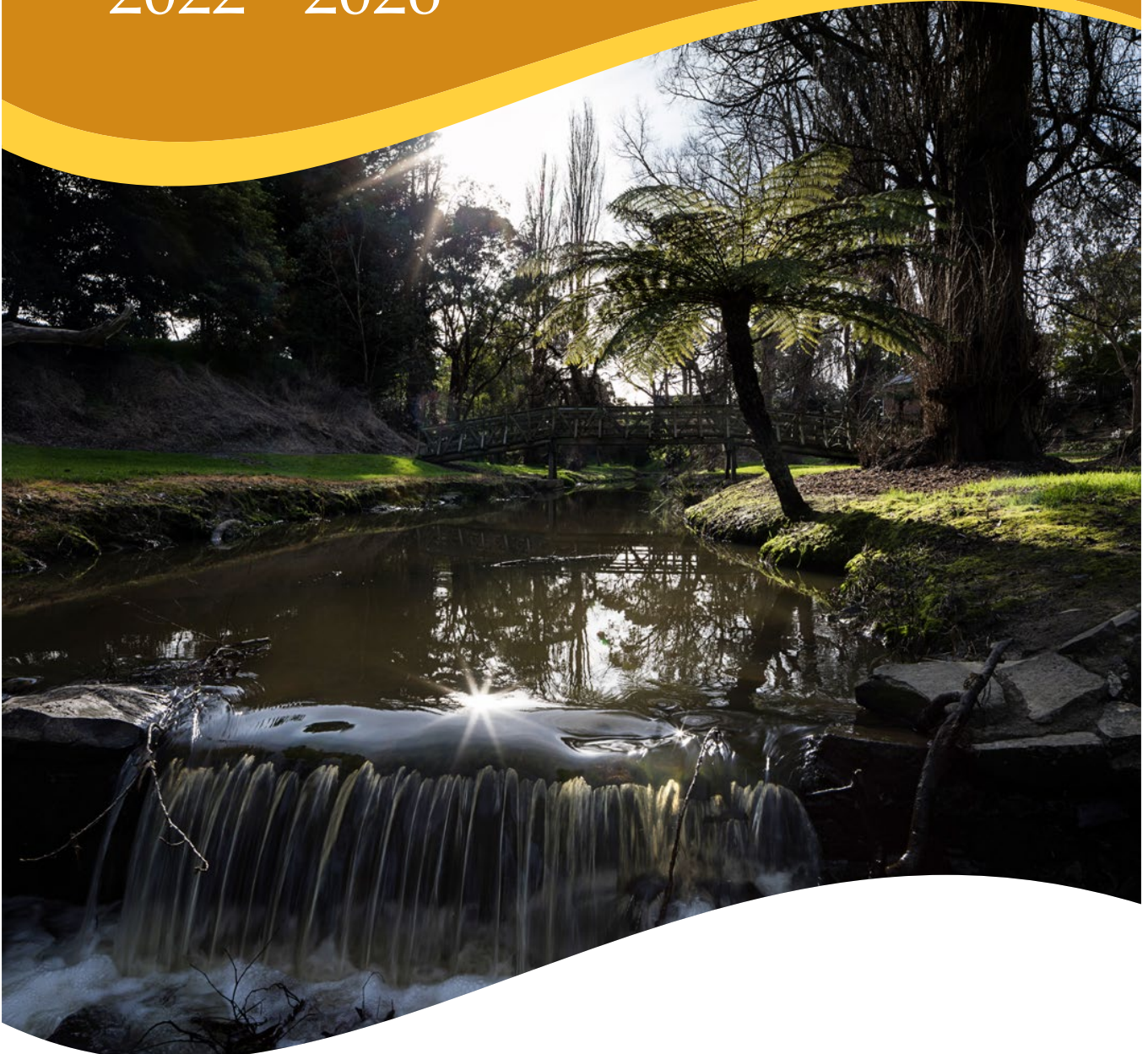


SOUTH GIPPSLAND SHIRE COUNCIL

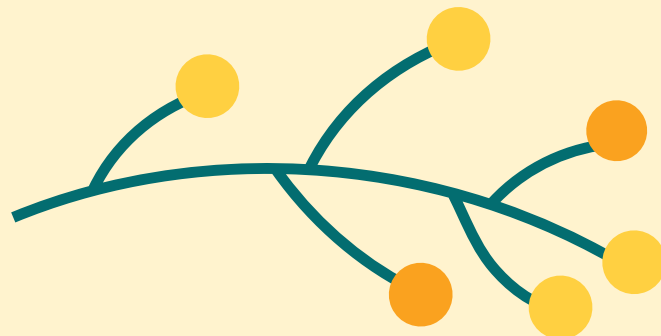
Domestic Wastewater Management Plan 2022 - 2026



South Gippsland
Shire Council

Acknowledgment of Country

We acknowledge the Bunurong and Gunaikurnai people as the Traditional Custodians of South Gippsland and pay respect to their Elders, past, present, and future, for they hold the memories, traditions, culture, and hopes of Aboriginal and Torres Strait Islander people of Australia.



Acacia pycnantha (wattle)

Purpose of this document

The purpose of the South Gippsland Shire Council Domestic Wastewater Management Plan is to:

- Identify current responsibilities, practices, procedures and obligations for domestic and commercial wastewater management within South Gippsland Shire;
- Identify and prioritise the main environmental protection measures to be undertaken by Council to address identified wastewater threats within the Shire;
- With the assistance of the community, township leaders and others, improve and enhance the public health and environmental protection measures undertaken by Council and the community;
- Inform, assist and advocate to responsible agencies on the priority needs for strategic sewer and wastewater treatment infrastructure; and
- Support the economic viability of our townships.



Main Street Korumburra

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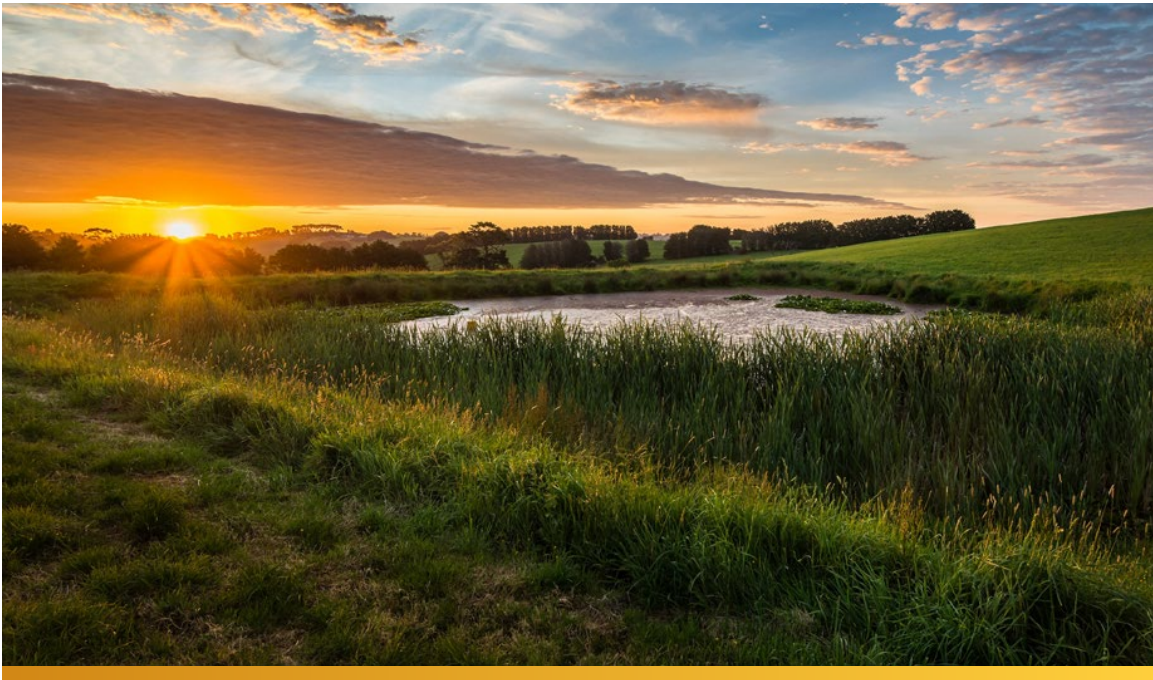
Introduction

South Gippsland is blessed with unique and striking natural beauty in its landscapes, coastlines and ecosystems which are inherently valued by the human and non-human inhabitants of the region; and equally by the many visitors. The retention and enhancement of this natural environment is a priority for South Gippsland Shire Council.

To ensure the health of our environment and that of our residents, visitors and those working in the municipality, South Gippsland Shire Council has a number of significant roles and legislative responsibility. One area of that control is in the effective management and disposal of wastewater.

Wastewater, if not managed effectively, can pose a significant public health, environmental, legal and economic risk. Poor wastewater management threatens Council values and undermines the municipality's ability to attract more residents, businesses and tourists to the area.

State legislation requires that Council develops a *Domestic Wastewater Management Plan (DWMP)* to effectively manage the disposal and treatment of waste water, where properties do not have access to reticulated sewerage systems. There are many townships in South Gippsland Shire that are reliant on septic tank systems and the subsequent disposal of treated effluent.



Sunset in Bena

Where Are We Now

Population

The municipality is subject to significant seasonal population change, mainly in coastal townships. While the annual amount of wastewater generated in coastal (holiday) properties is likely to be lower than for permanent occupancy, coastal wastewater management systems are more likely to receive higher flows over shorter periods of time. This can significantly reduce the effectiveness of the on-site wastewater management (septic tank) system to treat and dispose of wastewater safely.

These areas are often adjacent to shallow groundwater fields and use groundwater from bores for household purposes. Bore licences specify that bore water should not be used for drinking water purposes without adequate treatment. Contamination of groundwater or bores may, however, place visitors at risk as, whilst officially discouraged, it is likely bore water continues to be used for domestic purposes, such as showering and refilling water tanks in times of low rainfall, putting people's health at risk.

Household Size and Types

All households create wastewater in their everyday activities. The amount of wastewater created can often vary between people and days.

Dramatic increases to wastewater flow rates, for example many loads of washing completed within a short time frame or two or more persons showering consecutively, can severely reduce the effectiveness of an on-site wastewater management system.

In South Gippsland (Local Government area):

- 69 per cent are family households, 29 per cent are single-person households and 2 per cent are group households;
- Within occupied private dwellings, the average number of bedrooms was 3.1. The average household size is 2.4 people;
- Family and share households are more likely to create large 'shock' loads to systems, causing existing systems to fail more regularly. For example, a family of four can potentially create 360 litres of wastewater within an hour from morning showering alone (based on a nine litres per minute shower head).
- Single occupant households are more likely to be able to manage their wastewater with existing systems due to the lower flow rates they generate.

South Gippsland Water (SGW)

South Gippsland Water is the main local water authority for supplying and maintaining reticulated water and sewerage services to most of South Gippsland, and across their catchment areas. South Gippsland Water install and maintain a network of pipes up to the water meter or the property boundary if no water meter is available.

South Gippsland Water is also responsible for declaring geographical areas as sewer districts, in which serviced properties must connect to sewer unless they gain special permission to install an on-site wastewater system.

South Gippsland Water works in partnership with Council in planning and implementing appropriate infrastructure developments, determining which properties are unable to contain wastewater within their boundaries and to recommend priorities for the provision of sewerage services. They are the key primary authority in setting the scope and direction of the extension of mains sewerage infrastructure across the Shire.

Figure One – South Gippsland Shire Council wastewater areas.



The relationships between South Gippsland Water and South Gippsland Shire is ongoing, collaborative and has resulted in benefits for both parties.

Under the current *Ministerial Guidelines: Planning permits in open, potable water supply catchment areas*, the density of dwellings in the catchment should be no greater than one dwelling per 40 hectares (1:40 ha) or eight dwellings per one kilometre radius.

Endorsement of Council's *Domestic Wastewater Management Plan* document by South Gippsland Water has allowed for the relaxing of this density requirement. Importantly, it also supports the development of existing lots in accordance with Council's *Rural Land Use Strategy*.

Any new on-site wastewater systems located within their water supply catchment areas are installed to the best available standard at the time of installation and existing systems are monitored for maintenance requirements and compliance.

Wastewater Management Policy

Council's *Wastewater Management Policy* (C78) was endorsed by Council in 2019. The policy sets out how Council will manage the approval of prospective septic tank systems and the ongoing monitoring and management of existing systems.

The policy applies to all wastewater generated within South Gippsland Shire, other than wastewater disposed to:

- The sewer network; and
- Wastewater systems designed to discharge more than 5,000 litres of sewerage per day.

Council's *Wastewater Management Policy* will be reviewed in the next 12 months to ensure consistency and compliance with the recently updated *Environment Protection Act 2017*.

Risks Associated with On-site Wastewater

Wastewater poses a public health, environmental, legal and economic risk. South Gippsland is an area that prides itself on its natural assets as well as living amenity. Poor wastewater management threatens these values and undermines the municipality's ability to attract more residents, businesses and tourists to the area.

It is generally agreed that while all wastewater generation inherently poses a risk to public health, not all risks are equal in likelihood. The assessment of comparative wastewater threats is generally dependent upon three particular variables:

- The proportion of effectively operating septic systems;
- The proportion of the types of systems installed; and
- Concentration of effluent within the sub-catchment area.

Council assesses risk across the municipality to provide sufficient information to prioritise areas for targeted management strategies and action plan.

Values, Challenges and Issues

Each geographical location of the municipality has values and environmental assets that may be impacted by poor wastewater management. South Gippsland contains natural environments an surface waters, recognised both nationally and internationally. These assets provide residents with an enjoyable place to live and work, generating local income through our growing tourism industry.

Wastewater (containing human waste) contains many infectious pathogens which, if not appropriately managed, present a risk to public and environmental health. Human wastewater also contains nutrients, including nitrogen and phosphorus, chemicals and suspended solids that can cause degradation of the environment and toxic algal blooms under certain conditions.

Identified values in the areas of public health, environmental sustainability and economic viability are important to wastewater management in South Gippsland and include:

- Disease prevention (public health);
- Visual / odour amenity;
- Stormwater management (flood protection);
- Surface water quality;

- Development potential;
- Public access (to public spaces);
- Property value;
- Groundwater quality; and
- Vegetation.

Determining the risk to local values requires clearly identifying the threats posed by different wastewater systems and existing conditions. Council prioritises the following wastewater management threats:

- Failed primary systems;
- Lack of user knowledge;
- Ineffective / inadequate regulation;
- Town / groundwater supply availability;
- Untreated off-site sullage discharge;
- Density of wastewater systems;
- Historical data availability;
- Failed tertiary system;
- Grey water diversion to garden;
- Adequate primary system;
- Failed secondary system;
- Off-site discharge secondary system; and
- Adequate secondary system.

Township Issues

A wide variety of risks above exist in each township, requiring intervention to remove or reduce them. The magnitude of risk posed by threats is dependent on the individual characteristics of each township. These include the:

- Size of the township;
- Significance of the local environment;
- Quality of the stormwater infrastructure;
- Exposure of threats to the public; and
- Availability of threat-reduction measures, for example setback distances.

The level of information gathered, analysed and understood at any particular time affects the level of risk posed by wastewater management in each township. Since 2007, significant changes in the information available to Council and legislative interpretation have occurred. A current risk assessment and updated priority listing are an important step in the development of this plan.

Each township is likely to have an area posing a high risk to public health or the environment. Generally, high-risk areas will have one or more of the following characteristics:

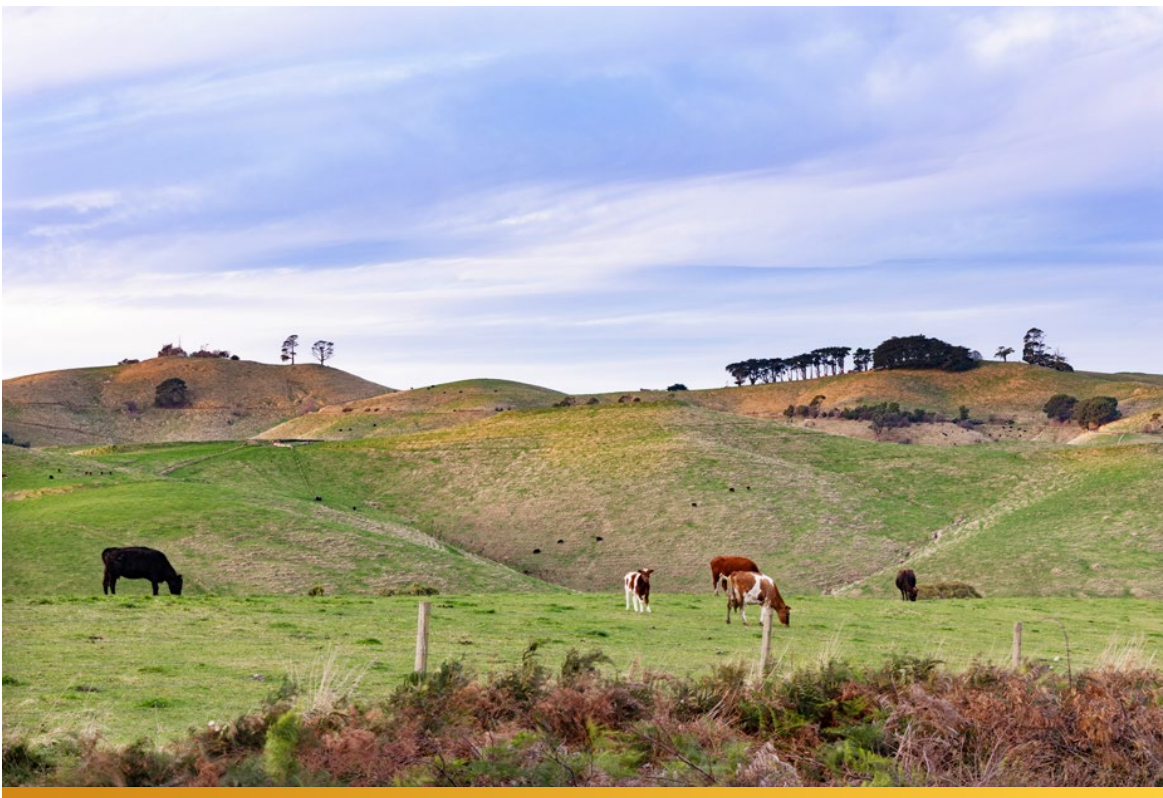
- Properties less than 1,000 square metres (particularly in towns with very low or high soil percolation rates);
- High levels of faecal bacteria and/or nutrients identified in nearby stormwater drains or groundwater;

- High likelihood of human contact with contaminated stormwater, groundwater or waterways e.g. open drains and groundwater bore use;
- Environmentally significant vegetation in the area;
- Undersized stormwater infrastructure unable to cope with anticipated increases in flow rates and regular contamination by domestic wastewater;
- Steep grades prone to instability exacerbated by high rainfall, moving groundwater springs and high wastewater loading; or
- Inadequate and failing wastewater infrastructure.

In addition to townships, rural land also presents wastewater management related concerns, albeit to a lesser degree. In particular areas where there are groupings of smaller lots, in declared water supply catchments, environmentally significant areas and where house lots are excised from farms. These areas are to be given priority consideration within the rural context and special conditions may be applied to control identified risks.

In identified high-risk areas, investigative sampling of stormwater and/or ground waters may be used to monitor impacts of wastewater disposal in the area.

Township Land Capability Assessments are used to provide detailed investigation in areas of excessive risk to determine the limiting risk factors and appropriate design standards for on-site wastewater treatment systems.



Paddocks between Korumburra and Leongatha

Wastewater Compliance Program

During the implementation of the *2016 - 2020 Domestic Wastewater Management Plan*, the South Gippsland Shire Council – Wastewater Compliance Program (WWCP) was established, in consultation with South Gippsland Water.

The objectives of the Wastewater Compliance Program include:

- Evaluate the performance of existing wastewater systems in the Shire;
- Reduce public health risk from failed wastewater systems;
- Reduction in offensive odours and improved township amenity;
- Improve health of waterways, wetlands and coastal environments;
- Protection of drinking water supplies;
- Improve the lifespan of on-site wastewater systems with reduced demand for development of sewerage infrastructure; and
- Allow increased development in the Tarwin Catchment in agreement with South Gippsland Water in accordance with Guideline One of the *Ministerial Guidelines: Planning permit applications in open potable water supply catchments* (Ministerial Guidelines).

In 2017, an initial letter introducing the Wastewater Compliance Program was sent to over 8,000 individual property owners. Land owners were reminded of their responsibility to properly maintain their on-site wastewater systems in accordance with their permit conditions and relevant legislation. The letter also explained why Council was implementing the program and outlined the risks to public and environmental health the program aimed to reduce.

The program also requires property owners/ occupiers to provide Council with evidence their wastewater system has been maintained in accordance with their permit, either by providing a copy of their most recent on-site wastewater treatment system's service report, or by having a qualified plumber complete an inspection of their system and provide Council with information on the operation and adequacy of the system.

Property owners have always been required to maintain their on-site wastewater systems in accordance with legislation, however this was the first time Council had asked for evidence that this was occurring.

To date (October 2021), 3,199 properties throughout the Shire are now on the Wastewater Compliance Program. This means these property owners have provided evidence to Council that their on-site wastewater system has been serviced or maintained as required. These properties are required to continue to comply with their wastewater servicing and maintenance requirements.

The program has also identified 139 properties with failing wastewater systems or systems which posed a direct risk to public and environmental health. These matters have been identified and repaired as a direct result of the implementation of the program.

The program was prioritised for townships located within the Declared Tarwin Drinking Water Catchment in the first instance, and will now be rolled out to all properties with an on-site wastewater treatment system within in the municipality.

There have been significant delays to the implementation of the program due to COVID-19 implications. It is expected the Wastewater Compliance Program will be implemented throughout the entire Shire during the *2022 - 2026 Domestic Wastewater Management Plan* implementation.

Domestic Wastewater Management Strategies

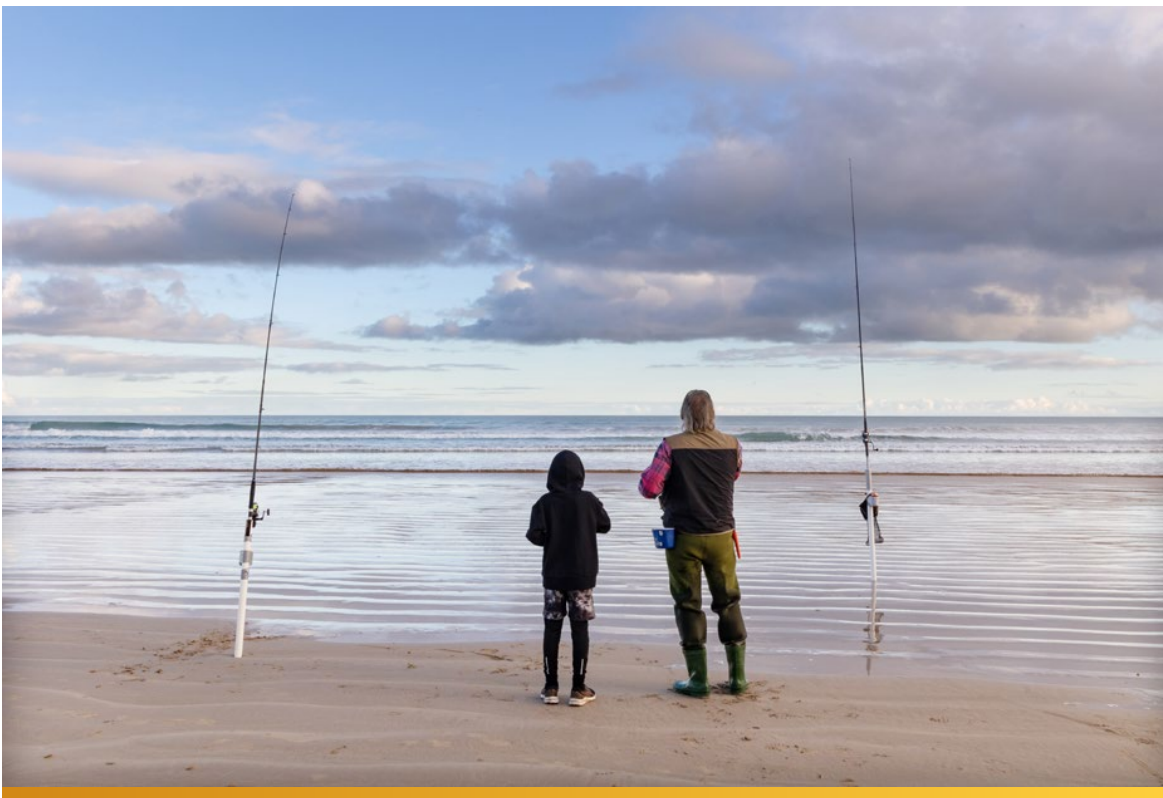
The Domestic Wastewater Management Plan identifies there are in excess of 10,000 septic tank systems in use across the Shire. Many of these systems are aged beyond their design life and with limited or inaccessible records as to their location, maintenance or current condition. More recent systems are better designed; however, many new systems require regular maintenance to ensure correct performance and protect the sensitive environments in which these types of systems are usually installed.

Township Wastewater Management and Improvement Plans provide further information.

Given the diversity of wastewater management performance in our townships, the Plan identifies the current challenges being experienced, the wastewater management designs or requirements, and any recommended system improvement options.

This plan identifies eight key strategies for the management of wastewater systems within South Gippsland Shire Council.

Council commits to implementing these strategies to improve the management of wastewater across the municipality. The success of this Plan relies upon the active involvement of all stakeholders and Council. Actions identified will contribute to the implementation of these strategies and will be monitored annually and reviewed every five years.



Fishing at Sandy Point

Strategy One: Further develop information management systems

Aim: To capture appropriate septic tank system data that is easily accessible for reporting purposes and to improve processes, efficiently target resources and assist strategic wastewater planning.

Strategy Two: Education and community consultation

Aim: Provide fair, accurate and accessible information on good wastewater management principles, practices and improvement options.

Strategy Three: Strategic planning and infrastructure development

Aim: Plan for the long-term sustainability of townships through appropriate development controls of land and infrastructure.

Strategy Four: Environmental monitoring

Aim: To develop an environmental monitoring program including stormwater and groundwater sources, and to actively engage with other agencies and community groups to allow for the collection, storage, analysis and sharing of environmental data that monitors the impacts of on-site wastewater systems.

Strategy Five: Management of commercial properties

Aim: Commercial properties discharging less than 5,000 litres of wastewater per day, particularly restaurants and cafes and business which generate a high hydraulic load, to be addressed by integrating the assessment and monitoring of these systems into other Shire regulatory activities.

Strategy Six: Continue to develop and implement compliance management

Aim: To implement an efficient and comprehensive program of education, facilitation and enforcement to ensure property owners fulfil their responsibilities for the maintenance of their on-site wastewater systems in accordance with Council's *Wastewater Management Policy* so as to prevent risks to public health or the environment.

Strategy Seven: Regulatory management

Aim: To influence the regulatory framework in which Council must operate to manage wastewater and develop Council policy and procedures utilising available tools.

Strategy Eight: Reporting, audits and review

Aim: To prepare annual reporting against the actions in the *Domestic Wastewater Management Plan* (this plan), and regular review and auditing of the plan. An audit of the plan is to be conducted every five years.

Implementation and Action Plan



Strategy One – Information Management

Capture appropriate septic tank system data that is easily accessible for reporting purposes and to improve processes, efficiently target resources and assist strategic wastewater planning.

Number	Strategy	Actions	When
IM1	Improve the quality and quantity of wastewater related information captured.	<ul style="list-style-type: none"> Identify and collect the appropriate information required for all installed septic tank systems. Data capture processes to be reviewed to ensure efficiency of data entry and appropriate use of data fields for reporting and document processing purposes. Develop and maintain partnerships and reporting agreements with service agents to improve reporting accuracy and efficiency. 	Ongoing
IM2	Better utilise information and Communication Technologies tools to efficiently collect and store wastewater data.	<ul style="list-style-type: none"> Maintain a relevant and accurate webpage, with links to/ from relevant external pages. Cross reference wastewater licence information with other relevant permit controls, e.g. building or planning permits. Utilise 'in the field' data management and communication tools. Investigate suitable data sources for groundwater levels, soil types, effective transportation rates and treatment ability to identify high-risk areas. Investigate costs and potential benefits of GIS-based wastewater mapping system including retrospective data entry. 	Initial Update – 2021 to 2022. Ongoing
IM3	Investigate and implement an online portal for wastewater contractors to use when submitting information to Council.	<ul style="list-style-type: none"> Develop and implement an incentive strategy to promote the uptake of a Council approved online information management system i.e. a published list of 'Approved Service Agents'. Strategy to be implemented through Council's <i>Wastewater Management Policy</i>. Encourage, through education and incentives, wastewater contractors to adopt approved systems. 	2023 / 2024
IM4	Risk Prioritisation	<ul style="list-style-type: none"> Investigate ways to use Council's corporate information management systems (Pathway/ TRIM/ IntraMaps) to record on-site wastewater treatment systems that are known to be failing and causing risks to public and environmental health (low, medium, low-risk rating). Develop a procedure to record when risks have been addressed and removed. 	2024 / 2025

Strategy Two – Education and Community Consultation

Provide fair, accurate and accessible information on good wastewater management principles, practices and improvement options.

Number	Strategy	Actions	When
EC1	Raise profile of wastewater system operation and maintenance requirements within the municipality and region.	<ul style="list-style-type: none"> Attend the South Gippsland Shire Council Sustainability Festival and other relevant community events to promote wastewater management best practice. Implement targeted education campaigns to property owners, occupiers and agents in high-risk areas at appropriate times. Provide readily accessible wastewater management information in hard copy and web-based format. 	2022 to 2023
EC2	Provide regular opportunities to improve community and stakeholder understanding and support of improved wastewater management projects and programs.	<ul style="list-style-type: none"> Develop and implement an ongoing community education program. Provide information on septic tank system best practice to property owners via community outlets and Council publications. Liaise with communities and local water authorities to progress community sewerage, where appropriate. Work with the EPA, Water Authorities, Catchment Management Authorities (CMAs) and other interested stakeholders to achieve shared goals. 	Ongoing
EC3	Develop and implement a process that will ensure all new property owners are informed about what type of on-site wastewater treatment system is on or available to their property.	<ul style="list-style-type: none"> Section 32 notices to include basic information on property's on-site wastewater treatment system including: <ul style="list-style-type: none"> → Property on on-site wastewater treatment system indefinitely. → Property in a declared water catchment area. → Any outstanding notices issued on property with respect to on-site wastewater treatment system. Develop a process with Rates to be able to add or remove the available details on Section 32 notices as required. 	Ongoing
EC4	Disseminate information on landowner/ occupier responsibilities and maintenance requirements for residents with on-site wastewater treatment systems when properties change hands.	<ul style="list-style-type: none"> Develop a 'new residents kit' for all new residents who are moving into a property serviced by an on-site wastewater system. Upon notification of property transfer, provide new residents with details about their on-site wastewater management system including the type of system, maintenance and service conditions, a copy of the property's wastewater permit and plan (if available). 	2022 to 2023
EC5	Develop education materials for property owners and users of holiday accommodation, particularly those in sandy soils.	<ul style="list-style-type: none"> Develop education materials for property owners who use their property for holiday type purposes (absentee land owners) to educate on matters such as restarting on-site wastewater systems after a period of absence and what to do when you leave the property. Develop resources for property owners to provide to guests staying at holiday houses and accommodation serviced by on-site wastewater systems. 	2022 / 2023
EC6	Develop targeted resources for industry.	<ul style="list-style-type: none"> Develop dedicated education of property agents and owners of short-term rentals regarding management of on-site wastewater treatment systems in holiday rentals in a Communications Plan. 	2023 / 2024

Strategy Three – Strategic Planning and Infrastructure Development

Plan for the long-term sustainability of townships through appropriate development controls of land and infrastructure.

Number	Strategy	Actions	When
SP1	Reduce impact of off-site discharges through available mitigation remedies.	<ul style="list-style-type: none"> Investigate health protection measures to address high-risk and accessible contaminated stormwater drains or groundwaters. Seek improved maintenance and development of stormwater drainage in priority townships in partnership with Maintenance and Engineering departments. Identify funding opportunities to implement improvement options in priority townships. 	Ongoing
SP2	Investigate alternative, community-scale treatment systems for priority townships and availability of funding.	<ul style="list-style-type: none"> Investigate innovative and sustainable community-scale or on-site wastewater treatment and water cycle management solutions in partnership with key stakeholders. 	Ongoing
SP3	Liaise with appropriate departments to ensure that planning and infrastructure proposals adequately address wastewater management needs for townships.	<ul style="list-style-type: none"> Assess existing block density in unsewered townships and investigate options to reduce density to sustainable levels. Develop clear policy guidelines for future developments with unsewered townships and for unsewered allotments within sewerer townships. Review Planning Scheme and other relevant Council policies to identify opportunities for improvements to existing wastewater management clauses and/or policies. Continue to investigate and update appropriate design standards for high-risk townships so as to inform any future improvement plans. 	Ongoing

Strategy Four – Environmental Monitoring

To develop an environmental monitoring program including stormwater and groundwater sources, and to actively engage with other agencies and community groups to allow for the collection, storage and analysis and sharing of environmental data that monitors the impacts of on-site wastewater systems.

Number	Strategy	Actions	When
EM1	Develop an environmental monitoring program in cohabitation with other agencies.	<ul style="list-style-type: none"> Identify and collate relevant existing environmental data for the South Gippsland Shire to quantify wastewater impacts on waterways, groundwater, public health and water catchments. Design and implement an environmental monitoring strategy in collaboration with EPA, South Gippsland Water and Gippsland Water including industrial areas, high-risk locations and groundwater, for environmental and health contaminants (e.g. nutrients and pathogens). Identify source locations for environmental monitoring and produce a publicly available map which shows these locations. 	2022 / 2023
EM2	Implement an environmental monitoring program.	<ul style="list-style-type: none"> Implement a comprehensive environmental monitoring program including the collection of water samples from selected locations, and arranging their analysis at a NATA-approved laboratory. Prepare an annual report outlining the results of the environmental monitoring program and any improvements that have been made. 	2021 to 2022
EM3	Secure funding for ongoing environmental monitoring program.	<ul style="list-style-type: none"> Seek and source an ongoing funding stream for environmental monitoring sampling and analysis. 	Ongoing 2025 / 2026

Strategy Five – Management of Commercial Properties

Commercial properties discharging less than 5,000 litres of wastewater per day, particularly restaurants and cafes and businesses which generate a high hydraulic load, to be addressed by integrating the assessment and monitoring of these systems into other Shire regulatory activities.

Number	Strategy	Actions	When
CP1	Develop wastewater standard conditions for wastewater permits issued for commercial businesses.	<ul style="list-style-type: none"> Develop and include standard wastewater conditions for commercial properties to have pre-treatment (i.e. grease trap), similar to those implemented by South Gippsland Water trade waste arrangements. Update South Gippsland Shire Council <i>Wastewater Management Policy</i> to allow Council to request on-site wastewater treatment system upgrades (i.e. pre-treatment), including where a new commercial premise is established either in a new or existing construction, where a change of use occurs for the land or building, or where a business significantly changes which impacts on the existing wastewater system. 	2022 / 2023
CP2	Develop specific education for food businesses and on-site wastewater treatment system.	<ul style="list-style-type: none"> Develop education for commercial food businesses in unsewered areas i.e. use of chemicals and impact on on-site wastewater treatment systems. Link education to other programs already conducted by South Gippsland Shire Council including Food Safety Management activities. 	2022 / 2023
CP3	Improve the relationship between South Gippsland Shire Council and EPA works approvals.	<ul style="list-style-type: none"> Establish a process for the exchange of information between the Shire and EPA on commercial properties that exceed 5,000 litres per day. Develop a better relationship between Council and the EPA to allow better sharing of information, particularly with regards to wastewater systems with EPA works approvals. 	Ongoing
CP4	Audit commercial businesses in identified high-risk areas.	<ul style="list-style-type: none"> Conduct an audit for all commercial businesses located in the 'high-risk' locations identified in this plan to assess adequacy and to identify any immediate public or environmental health risks – every three years. 	2022 / 2023

Strategy Six – Compliance Management

To implement an efficient and comprehensive program of education, facilitation and enforcement to ensure property owners fulfil their responsibilities for the maintenance of their on-site wastewater system in accordance with Council's *Wastewater Management Policy* so as to prevent risk to public health or the environment.

Number	Strategy	Actions	When
CM1	Implement an education program to assist property owners to understand and comply with their legal responsibilities for monitoring and maintaining their wastewater systems.	<ul style="list-style-type: none"> Utilise web-based and hard copy information to promote correct maintenance of wastewater systems. Public contact lists of appropriate servicing agents. Send reminders to all owners requiring annual service contracts or three-yearly de-sludging of primary systems. 	Ongoing
CM2	Improve electronic data capture and storage to maximise administrative efficiencies and assist in appropriate targeting of resources.	<ul style="list-style-type: none"> Update existing hard copy records onto Council's electronic database. Establish efficient reporting mechanisms for service agents and home owners. 	Ongoing
CM3	Develop South Gippsland Shire Council wastewater installation guidelines.	<ul style="list-style-type: none"> Implement a system to follow-up on owners who fail to maintain service contracts. Review service reports and follow-up any outstanding failures. Implement an audit program to confirm accuracy of service reports and wastewater treatment system performance. 	2023
CM4	Establish an audit and enforcement program to ensure that property owners and service technicians or agents adequately fulfil their respective responsibilities.	<ul style="list-style-type: none"> Develop a 'new residents kit' for all new residents who are moving into a property serviced by an on-site wastewater treatment system. Upon notification of property transfer, provide new residents with details about their on-site wastewater treatment system including the type of system, maintenance and service conditions, a copy of the property's wastewater permit and plan (if available). 	Ongoing
CM5	Review South Gippsland Shire Council <i>Wastewater Management Policy</i> .	<ul style="list-style-type: none"> Review South Gippsland Shire Council's <i>Wastewater Management Policy</i> in line with recent legislative changes (<i>Environment Protection Act 2020</i>). Policy update to also include: <ul style="list-style-type: none"> → Major/ minor alterations and a clear definition of each; → Pump-out systems and the conditions in which they will be approved; → Council's domestic bore position and investigation process; and → Any other matter identified in the review. 	2022 / 2023
CM6	Develop a wastewater compliance and enforcement policy and associated procedures.	<ul style="list-style-type: none"> Develop robust wastewater compliance processes including procedures for managing non-compliance. 	2022 to 2023

Strategy Seven – Regulatory Management

To influence the regulatory framework in which Council must operate to manage wastewater and develop Council policy and procedures utilising available tools.

Number	Strategy	Actions	When
RM1	Advocate to government agencies and other stakeholders to improve the regulatory framework within which Council operates.	<ul style="list-style-type: none"> Seek the development and implementation of improved wastewater management legislation and guidelines. Influence government agencies to better coordinate wastewater and water supply policy and legislation. Work with EPA Victoria to facilitate improved designs for high-risk areas, such as coarse sand and heavy clay. 	Ongoing
RM2	Alternative or innovative uses of existing legislation provisions to enhance wastewater management processes.	<ul style="list-style-type: none"> Investigate options for applying controls to bore installation and use in sandy soil townships. Review wastewater management controls for temporary or seasonal use facilities (building sites, festivals, camping on private land). 	2022 to 2023
RM3	Update the existing South Gippsland Shire Council Wastewater Management Policy.	<ul style="list-style-type: none"> Review and update Council's <i>Wastewater Management Policy</i> in line with the new <i>Environment Protection Act 2020</i> and the <i>Environment Protection Regulations 2021</i>. 	2022
RM4	Develop Council's <i>Wastewater Management Policy</i> through evidence-based investigation.	<ul style="list-style-type: none"> Identify funding opportunities to undertake Land Capability Assessments of priority townships and implement findings into Council's strategic policy and statutory programs. Where appropriate, standardise guidelines and processes with neighbouring Councils and water authorities. Conduct targeted monitoring of stormwater systems, surface waters and groundwaters in high-risk areas. 	2022 to 2025

Strategy Eight – Reporting, Audits and Review

Prepare annual reporting against the actions in the *Domestic Wastewater Management Plan* (this plan), and regular review and auditing of the plan. An audit of the plan to be conducted every five years.

Number	Strategy	Actions	When
R1	Annual internal review (with amendments as required).	<ul style="list-style-type: none"> Conduct an annual review and assessment of the progress achieved in the previous year of the <i>Domestic Wastewater Management Plan</i> implementation and action plan. Prepare a report for Council and make publicly available: <ul style="list-style-type: none"> → Annual review to identify and allow for any major changes in wastewater legislation and industry – particularly as the implementation of the <i>Environment Protection Act 2020</i> is implemented. 	2022 / 2023 2023 / 2024 2024 / 2025 2025 / 2026
R2	Three-yearly audit and report on actions from this plan.	<ul style="list-style-type: none"> Conduct an audit to assess and report on the progress of the <i>Domestic Wastewater Management Plan</i> implementation and action plan every three years and publish the report on Council's website. 	2024 / 2025
R3	Five-yearly review and report of this plan.	<ul style="list-style-type: none"> Review and update the <i>Domestic Wastewater Management Plan</i> every five years as required by the <i>State Environment Protection Policy: Waters</i>. 	2026
R4	Develop and strengthen external stakeholder relationships and collaboration.	<ul style="list-style-type: none"> Identify shared water/ wastewater objectives and strategies with external water authorities and stakeholders. Work with Southern Rural Water to develop a domestic bore installation process, including developing accurate mapping of bores within the Shire and providing property owners/ occupiers with information about the risks of using bore water and how to safely use that water around the home. Promote and facilitate ongoing coordination of internal resources into wastewater management strategies and projects. 	Ongoing
R5	Community engagement.	<ul style="list-style-type: none"> Conduct community engagement every five years in line with the <i>Domestic Wastewater Management Plan</i> five-yearly review process. 	2021 / 2022 2025 / 2026
R6	Advocate for and contribute to reform of the wastewater legislative framework.	<ul style="list-style-type: none"> Advocate for improvements to legislative framework. Provide input into proposed legislation and standards pertaining to domestic wastewater. 	Ongoing

Glossary



AOWTS – Aerated Wastewater Treatment System. A type of secondary treatment system.

CMAs – Catchment Management Authorities.

COC – Certificate of Conformance (provided by Standards Australia).

De-sludging – The removal of sludge and sediment from the tanks of a wastewater treatment system.

DELWP – Department of Environment, Land, Water and Planning.

Domestic Wastewater – Wastewater arising from a domestic dwelling. Domestic wastewater can comprise of blackwater (toilet waste) or greywater (sullage waste from bathrooms, laundry and kitchen appliances), or a combination of both.

DWMP – Domestic Wastewater Management Plan.

Effluent – Combined wastewater coming from (leaving) a domestic residence and/ or coming from (leaving) a wastewater treatment system. It is a direction-based term used for wastewater exiting a household or treatment system.

EHO – Environmental Health Officer.

EPA – Environment Protection Authority.

GIS – Geographic Information System.

GW – Gippsland Water.

Greywater – Domestic wastewater that does not contain toilet waste. Also known as sullage.

Influent – Combined wastewater entering a wastewater treatment system or land disposal system. It is a direction-based term used for the wastewater entering a wastewater treatment or land disposal system.

Joint Accreditation System of Australia and New Zealand (JAS-ANZ) – Is an accreditation authority and framework with the purpose to enhance national, trans-Tasman and international trade via accreditation to achieve international recognition for the excellence of Australian and New Zealand goods and services. JAS-ANZ provides a certification mark for use on goods and services that meet their accreditation requirements.

Land Capability Assessment (LCA) – A method used to assess the capability of land to manage on-site wastewater disposal, which recommends whether effluent can be adequately treated and retained on-site.

MAV – Municipal Association of Victoria.

OWTS – Wastewater Treatment System. This is the generic term used to refer to all available types of on-site wastewater treatment and disposal systems (across both primary and secondary treatment systems).

Percolation – The filtration of liquid through soil.

Permeability – The rate at which water moves through a soil profile. Fast permeability rates will not allow for adequate remediation, slow rates may give rise to soil water logging.

Primary Treatment System – A wastewater treatment system that treats the effluent to a primary standard.

Secondary Treatment System – A wastewater treatment system that treats the effluent to a secondary standard.

SEPP – State Environment Protection Policy (Waters).

Septic tank system – A primary wastewater treatment system for the bacterial, biological, chemical and physical treatment of sewage including all tanks, beds, drains, pipes, fittings, appliances and land used in connection with the system. Septic tank systems treat the influent sewage primarily through anaerobic processes.

Sewage – Any wastewater contain human excreta or domestic wastewater.

Sewerage – The infrastructure system (drains etc.) used to carry, treat and dispose of sewage.

SGSC – South Gippsland Shire Council.

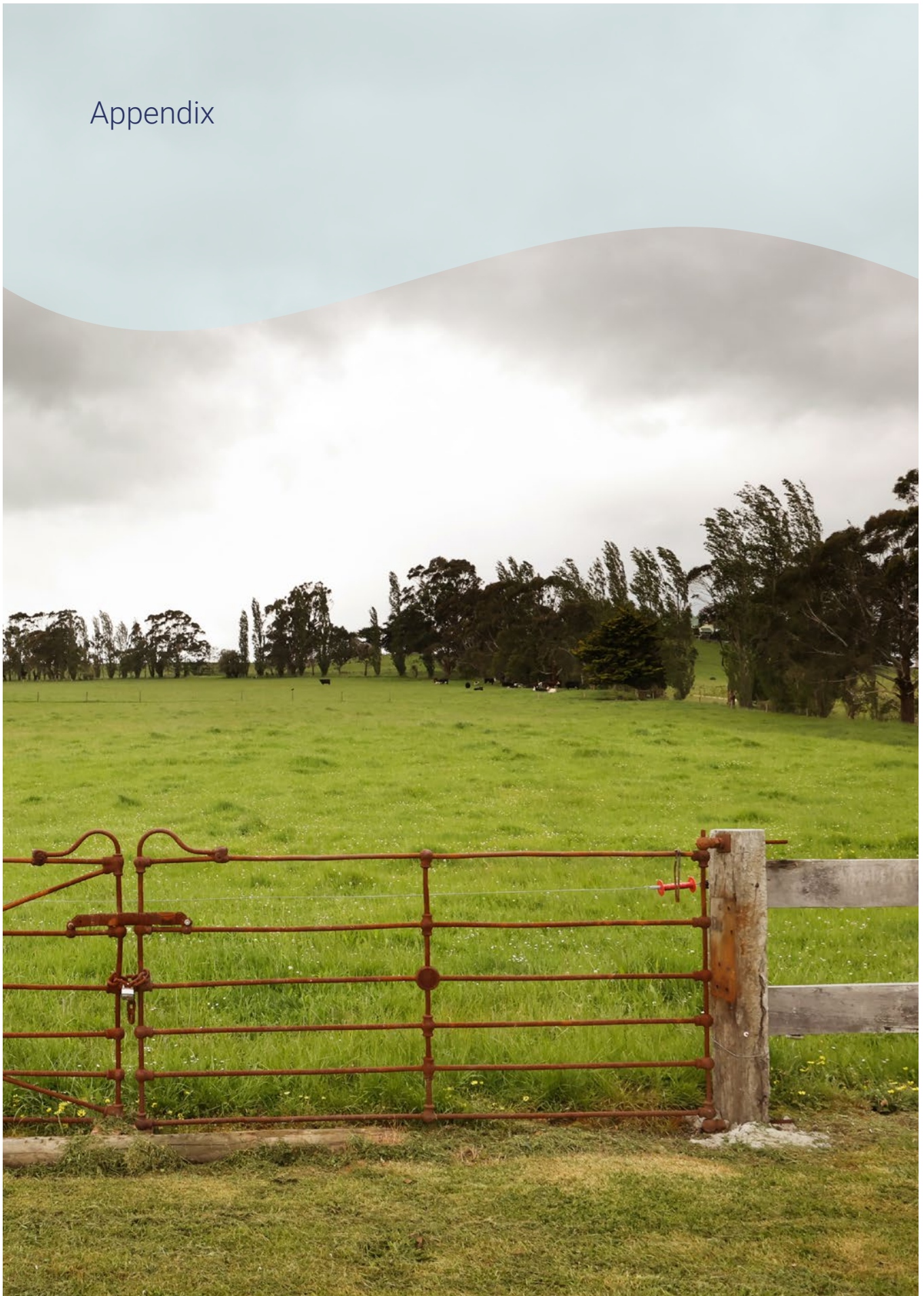
SGW – South Gippsland Water.

SRW – Southern Rural Water.

Sullage – See greywater. Household greywater that does not contain toilet waste, but may still contain many of the harmful pathogens, nutrients and other chemicals contained in blackwater waste, presenting a similar hazard.

WWCP – Wastewater Compliance Program.

Appendix



Legislative Framework

There is an extensive and complex policy and legislative framework surrounding domestic on-site wastewater management which includes several State Acts and subordinate legislation, along with Codes, Guidelines and Australian Standards. On-site wastewater management systems (septic tank systems) are governed or impacted by the following Acts and subordinate instruments.

Victorian State Legislation

- *Environment Protection Act 2017.*
- *Public Health and Wellbeing Act 2008.*
 - *Public Health and Wellbeing Regulations 2019.*
- *Building Act 1993.*
 - *Building Regulations 2018.*
- *Planning and Environment Act 1987.*
- *Local Government Act 2020.*
- *Water Act 1989.*
- *Catchment and Land Protection Act 1994.*

Subordinate Legislation, Policy, Codes and Strategies

- SEPP Waters of Victoria, SEPP Groundwaters Victoria.
- EPA Guidelines for Environmental Management: Code of Practice – On-site Wastewater Management, Pub: 891.4.
- Ministerial Guidelines: Planning permit applications in open potable water supply catchments (DSE November 2012).
- Victorian Land Capability Assessment Framework (January 2014).

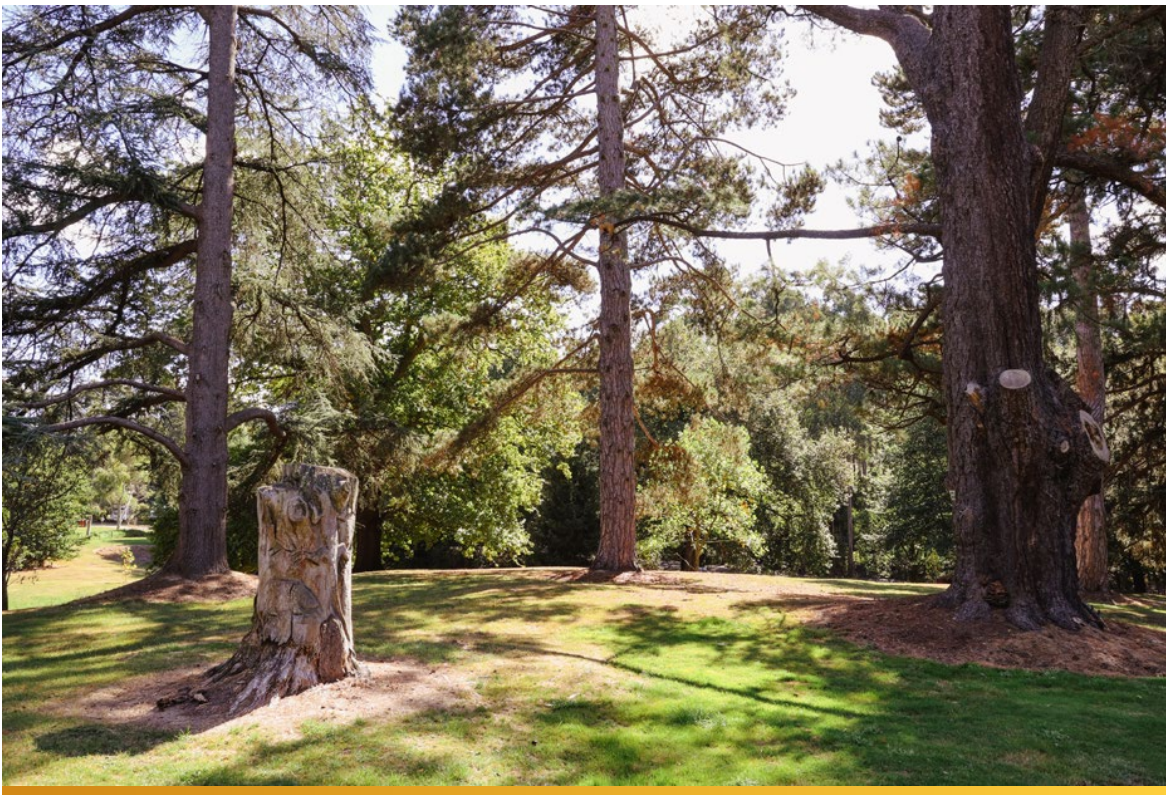
National Standards

- Australian/ New Zealand Standards and JAS-ANZ Certification.

Auditor General Victoria

In June 2006, the Auditor General Victoria delivered a performance audit report, *Protecting our environment and community from failing septic tanks*. The report identified a number of actions relevant to Local Government authorities to improve wastewater management performance in regional areas. These included:

- Use all available data sets to plan and make decisions;
- Ensure owners and/or tenants understand that they have a septic system and the responsibilities they have that are associated in relation to ongoing maintenance; and
- Reassess the resourcing levels needed to fulfil the legislative responsibility of local government.



Korumburra Botanic Park

Regional and State Strategies

Domestic wastewater management also has implications for areas with regional, state and in some cases of national and international significance. Some of these significant areas include Westernport Bay, Corner Inlet, Anderson Inlet and the Strzelecki Ranges.

A number of regional authorities identify wastewater management as an important area for consideration. These include:

- Melbourne Water;
- South Gippsland Water;
- Gippsland Water;
- West Gippsland Catchment Management Authority; and
- Southern Rural Water.

The main relevant documents are:

- South Gippsland Water – Water Plan 3 2021 - 2026.
- Gippsland Water – Water Plan 3 2013 - 2018.
- West Gippsland Catchment Management Authority – West Gippsland Regional Catchment Strategy 2013 - 2019.
- West Gippsland Catchment Management Authority – West Gippsland Waterway Strategy 2014 - 2022.

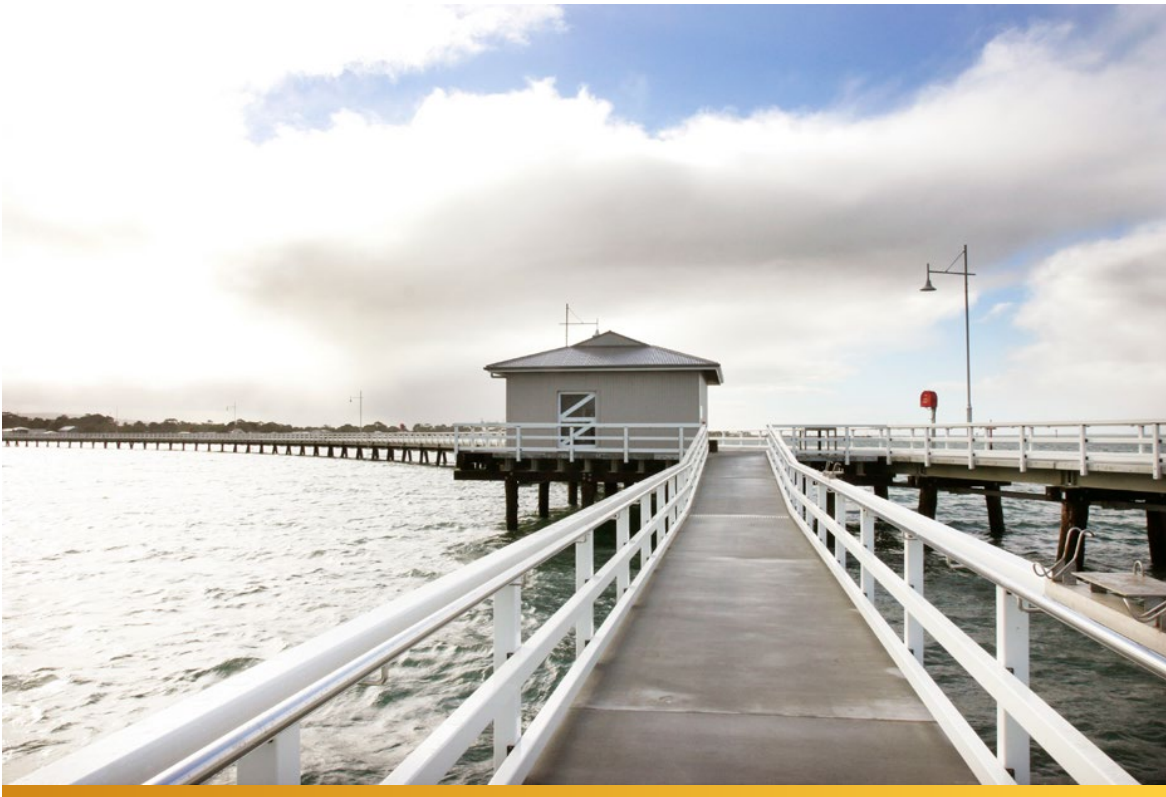
Environmental Protection Authority Victoria

Environment Protection Authority (EPA) Victoria is responsible for the protection of the Victorian environment by developing policies and guidelines, encouraging best practice environmental management and maintaining a complaint register.

The Environment Protection Authority also performs a regulatory and enforcement role to protect the quality of the environment.

The Environment Protection Authority's responsibilities in relation to the management of domestic wastewater disposal are as follows:

- Developing policies and legislation in relation to domestic wastewater disposal.
- Developing and reviewing the *Code of Practice – On-site Wastewater Management* and other relevant publications.
- Approving the type of domestic wastewater treatment systems that can be installed in Victoria via the JAS-ANZ Certificate of Conformance process.
- Providing advice to local Councils where required.
- Approval of systems discharging more than 5,000 litres per day (Works Approvals).



Port Welshpool Long Jetty

Landowners and Occupiers

A landowner's wastewater responsibilities consist of the following:

- Connecting to the mains sewerage system where it is available (in a declared sewer area) and the existing on-site wastewater treatment system does not meet EPA standards at the time the sewer (connection point) became available;
- In unsewered areas, obtaining a permit to install or alter an on-site wastewater treatment system before a building permit is issued and any on-site wastewater treatment system installation or alteration works commence; and
- Obtaining a certificate to use the system once installation has been completed and approved.

With regard to the ongoing maintenance of an on-site wastewater treatment system, it is the land occupier's responsibility to ensure that:

- The maintenance requirements of the on-site wastewater treatment system are implemented, including de-sludging (every three to eight years, depending on the system loading), and any specified monitoring conditions under the permit (including annual sampling);
- If the system type is a secondary treatment plant – it undergoes maintenance checks every three months by an accredited maintenance provider;
- The effluent disposal area remains clear from development, impermeable surfaces and unsuitable vegetation; and
- Copies of all maintenance, based on the type of system in use, is provided to Council in accordance with permit conditions.

OWTS Installers (Plumbers) and Maintenance Providers

On-site wastewater treatment system installers are responsible for:

- Ensuring that any plumbing work is either undertaken by a licenced plumber, or under the direct supervision of a licenced plumber;
- Only installing on-site wastewater treatment systems that are approved for installation in Victoria (with a current JAS-ANZ Certificate of Conformance); and
- Ensuring that all of the plumbing work complies with the Plumbing Regulations 2018, the Plumbing Code of Australia (Volume 3 of the National Construction Code) and any referenced Australian Standards relevant to the plumbing work undertaken, and issuing a compliance certificate for any plumbing work valued at \$750 or more.

Compliance certificates must be issued by licenced plumbers for specific plumbing work carried out in Victoria. A compliance certificate signed by a licenced plumber is a certification that their work complies with the prescribe plumbing standards. A licenced plumber is not able to issue a certificate for plumbing work that has been carried out by someone else, except in limited circumstances.

On-site wastewater treatment system maintenance providers are also responsible for:

- Ensuring that they are an accredited maintenance service provider;
- Ensuring that any maintenance plumbing work requiring a compliance certificate is either undertaken by a licenced plumber, or under the direct supervision of a licenced plumber; and
- Ensuring that any wastewater pumped out of an on-site wastewater treatment system as part of a maintenance service is transported and disposed of at a licenced facility.



Mossvale Park

Standards Australia and JAS-ANZ

Standards Australia is the peak non-government standards development body in Australia, recognised through a Memorandum of Understanding with the Australian Government.

Standards Australia develops internationally aligned Australian Standards (AS) and participates in standards-related activities that deliver benefit nationally. Standards Australia and Standards New Zealand also work together to develop joint standards (AS/ NZS).

Although Standards Australia develops and publishes different national standards, they are not responsible for enforcing, regulating or certifying compliance with those standards. The responsibility for system assessment and the evaluation of minimum performance requirements for on-site wastewater treatment systems sits exclusively with the accreditation authority JAS-ANZ (Joint Accreditation System of Australia and New Zealand) and is carried out by the accredited certification body; Global Certification Pty Ltd (GC) under the GC Domestic Wastewater Treatment Units (Septic tanks) certification scheme.

On-site wastewater treatment systems that pass the certification scheme are provided with a Certificate of Conformance. Only systems with a valid Certificate of Conformance can be installed in Victoria.

JAS-ANZ utilise the published joint Australian and New Zealand Standards for on-site domestic wastewater as the basis for the majority of the performance criteria applied to their certification scheme (for on-site wastewater treatment systems). For example, the current certification scheme for secondary treatment systems requires the different manufactured systems to have completed and passed a comprehensive testing program by 2020 based upon the requirements of *AS/NZS 1546.3:2017 On-site domestic wastewater treatment units: Part 3: Aerated wastewater treatment systems to receive a Certificate of Conformance post 2020*.

Domestic wastewater management has a pervasive impact upon community asset and health management, demonstrated through its strong links to Council, Regional and State policies. It must be considered in the management of assets (e.g. buildings in unsewered areas, stormwater drains and roads), flood management and the planning of sustainable and healthy township development.

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South Gippsland
Shire Council