HGI Plan Review: section 32 report for wastewater

1.0 Executive summary

This report summarises the evaluation undertaken by the council of proposed district plan provisions relating to wastewater on the Hauraki Gulf islands, in terms of section 32 of the Resource Management Act.

The main conclusions are:

- The plan provisions seek to avoid the adverse effects arising from the discharge of wastewater into the environment:
- The design, installation and operation of on-site wastewater treatment and disposal systems are controlled by the provisions of the proposed Auckland Regional Plan: Air, Land and Water, and the requirements of the Building Code and Building Act;
- Through the objective, policies and rule, and council bylaws, council seeks to ensure the ongoing inspection and maintenance of wastewater systems,
- Council bylaws require the pump-out of septic tanks on Waiheke to remove settled solids
 every three years. A review of the bylaws may extend the scope of maintenance and
 inspection of wastewater systems;
- Land must be available on the island to dispose of these settled solids for this to continue. The proposed discretionary activity rule will allow sites on land unit 5 (productive land) to be used for the disposal of settled solids subject to a consent being obtained.

2.0 Introduction

2.1 Purpose of this report

This report is to meet the section 32 requirements of the Resource Management Act.

2.2 Existing plan provisions

The existing plan rules for permitted activities for effluent disposal (rule 6B.1.1.1) state that:

- a. Provision must be made for the satisfactory disposal of all effluent, foul water and stormwater in accordance with the requirements of the relevant City bylaw and the rules and standards included in the provisions of any Regional Plan.
- b. No part of any sewage disposal system shall be located within any hazard area identified in the Hazards Register for the Outer or Inner Islands or on any Outer Islands SMA Foil (Foil 4).

The reason/explanation for these rules state that all existing and future development must be capable of satisfactorily treating and disposing of sewage on-site, or through small-scale community based schemes. The reason/explanation also discusses the general authorisation to discharge domestic wastewater to land via an on-site wastewater disposal system is included as a provision of the Transitional Regional Plan administered by the Auckland Regional Council. It notes that provisions of the Regional Plan set limits on the volume of waste discharged and the method of disposal to ensure that there is minimal risk of pollution to any water. It then notes that the investigation, design, installation and maintenance of the effluent system has to be in accordance with the principles and procedures outlined in the Auckland Regional Water Board Technical Publication No.58 "On-site wastewater disposal for households and institutions".

The standards for effluent disposal as a discretionary activity repeat what is said for permitted activities as outline above.

Rule 6B.1.2.5, which is the permitted activity standard for gross dwelling area states:

"Except as provided for in the particular rules for Land Units 13 and 14, the gross dwelling area of all buildings located on a lot of less than 2000m² shall not exceed 10% of the area of the lot on which it is located."

The reason/explanation for this states that:

"This rule is imposed on lots less than 2000m² in area to ensure that the potential volume of effluent that may be generated can be disposed of on-site. These limits recognise the relationship between wastewater volumes and the site capacity for effluent assimilation. A proportional relationship exists between habitable floor area and wastewater volumes and this relationship has been used to set the maximum gross dwelling area."

Rule 6C.1.2.5 (standards for discretionary activities) states:

- a. Except as provided for in the particular rules for Land Units 13 and 14, where the gross dwelling area of all buildings on a lot less that 2000m² in area does not exceed 25% of the area of the lot on which it is located, a discretionary activity resource consent application will be non-notified.
- b. Where the gross dwelling are of all buildings on a lot less than 2000m² in area does not exceed 25% of the area of the lot on which it is located, a notified discretionary activity resource consent will normally be required.
- c. Where any lot is greater than 2000m2 in area, the gross dwelling area of all buildings shall not exceed the coverage limits in Table 3.

2.3 Proposed plan provisions

The plan provisions seek to address the disposal of wastewater on the Hauraki Gulf Islands.

2.4 Consultation

This section of the report briefly outlines the consultation that the council has undertaken to date and identifies any issues raised of particular relevance to the issue of temporary activities.

2.4.1 Consultation to date

The council undertook consultation in 2005 in preparation for drafting the proposed Plan.

Initial consultation

The main consultation period was from April to July 2005. Consultation during that period consisted of:

- public meetings, workshops, nga hui, and one on one meetings
- a photographic exercise on Waiheke
- inviting written feedback on a consultation document which contained issues and options papers on a wide range of topics.

Focus groups

At the close of consultation, the council analysed the feedback forms received. From these, key issues were identified that subsequently became topics for focus groups on Waiheke. The four topics for the focus groups were:

- landscape
- transport
- sustainability
- future planning (including subdivision, growth, and providing for business activity).

An additional workshop was also held on Great Barrier to give a further opportunity to discuss issues raised through the feedback forms.

Telephone survey

The council commissioned an independent research company to undertake a phone survey in late 2005. The survey was of a randomly selected sample of 1002 on-island residents and off-island ratepayers of Waiheke, Great Barrier and Rakino. The questionnaire used for the survey was designed to get responses on the key issues that had emerged from the consultation process and stakeholder feedback.

The survey provided a means of canvassing the views of a wide range of people who may not have been previously involved in the consultation process.

Consultation with other stakeholders

During the preparation of a proposed plan, the council has also consulted with the following parties:

- the Auckland Regional Council ('ARC')
- the Department of Conservation ('DOC')
- tangata whenua
- network utility authorities
- Ministry for the Environment.

Public notification

Notification of the Plan provides an opportunity for further public participation through the formal submission and appeal process.

2.4.2 Issues raised during consultation

An issues and options papers on wastewater management was released for public comment in 2005. It outlined the controls on wastewater disposal – through the current District Plan, part 29 of the Auckland City Consolidated Bylaw 1998 and by the requirements of the proposed Auckland Regional Plan: Air, Land and Water which refers to the ARC technical publication 58 (TP58) for the design, installation and operation of domestic wastewater systems.

Forty one individuals / groups gave feedback on the wastewater paper. At least 15 of those who gave feedback were opposed to reticulation and wanted the status quo of on-site disposal of wastewater to remain. Only four suggested that reticulation was needed, one of the four suggested the completion of reticulation between Oneroa Beach and the village. Several of those who gave feedback supported the use of composting toilets and grey water recycling. Eleven supported mandatory compliance with council's bylaw, which requires that septic tanks to be pumped once every three years.

3.0 Resource management issues and objectives

3.1 Issues

The main issue is how to provide for the disposal of wastewater on the Hauraki Gulf Islands whilst preventing any pollution of land or water bodies. Disposal methods must recognise issues such as

the types of soil available when on-site disposal is proposed; the size, use and number of buildings likely to generate wastewater, the potential lot sizes of any land subdivision and the presence or absence of a reticulated power supply and water supply. A wastewater disposal system properly designed for these parameters will help to ensure the proper operation of the system and prevention of soil and water pollution. Wastewater treatment and disposal systems should not be placed in areas likely to be flooded or affected by other natural hazards to prevent water pollution in natural hazard events.

Septic tanks are a common part of wastewater treatment and disposal systems. The basic septic tank is a simple solids settling and consolidation and scum retention unit. The removal of settled solids is generally recommended to occur every 3 years to ensure the continued proper operation of the tank. Part 29 of the Auckland City Consolidated Bylaw 1998 – Waiheke Wastewater requires that all property owners on Waiheke Island whose property contains a septic tank to have that tank pumped out to remove all settled solids at least once every 36 months.

Disposal to land is generally the most common and economic means of disposing of the settled solids pumped out of septic tanks, and with proper operational controls land disposal should have no significant effects on the environment. Sufficient land area must be made available to treat and dispose of all the settled solids likely to be pumped out of septic tanks.

The proposed Auckland Regional Plan: Air, Land and Water (ALWP) permits (as a permitted activity) the discharge of domestic wastewater from a single dwelling on a single lot if the treatment and land application disposal system is designed, installed and operated in accordance with the Auckland Regional Council Technical Publication No 58 (TP58) "On-site Wastewater Systems: Design and Management Manual". The proposed plan also sets a maximum daily design flow of 2m³ per day, and also requires a gross lot area to discharge volume equal to or greater than 1.5 m² per litre per day. If a reticulated power supply is available the ALWP also requires a secondary treatment system to improve the quality of the effluent. Domestic wastewater is defined as that originating from toilets, urinals kitchens, bathrooms, showers, baths, basins and laundries such as from a dwelling.

The ALWP provides as a permitted activity the discharge of domestic wastewater to land via treatment and land application disposal systems from up to 3 dwellings within a lot, in circumstances where the dwellings are sufficiently remote from each other that the wastewater systems cannot be feasibly combined. The design flow of each system shall not be greater than $2m^3$ per day and the proportion of gross lot area to discharge volume must be equal to or greater than $3m^2$ per litre per day per dwelling.

The ALWP also requires an additional reserve disposal area of 33% - 100% of the gross site area to be provided on site in the event of a failure of the system or an underestimation of daily wastewater production.

The discharge of domestic wastewater or domestic type wastewater from commercial or other premises such as cafes, restaurants and schools is a controlled activity under the ALWP provided that the design flow does not exceed 6m³ per day and the design and installation is in accordance with the principles and procedures of TP 58. The amount of wastewater discharged from commercial/industrial sites is generally less than that from residential areas because they usually do not use showers, baths or clothes washing machines. As a consequence, the wastewater treatment of disposal systems in commercial/industrial buildings should require less land than comparably occupied residential buildings.

Subject to meeting the controls within the ALWP, the Council may then approve the treatment and land application disposal system under the Building Act.

3.2 Objectives

The objective for wastewater disposal is: "to ensure that the adverse effects associated with wastewater disposal are adequately avoided or remedied."

4.0 Statutory requirements under part II, sections, 9, 15, 31, 32, 72 and 74 of the Resource Management Act

Section 9 (3) states:

No person may use any land in a manner that contravenes a rule in a regional plan or a proposed regional plan unless that activity is –

- (a) expressly allowed by a resource consent granted by the regional council responsible for the plan; or:
- (b) allowed by section [20A] (certain existing lawful uses allowed).

Section 15 controls the discharge of contaminants into the environment:

- (1) No person may discharge any -
 - (b) contaminant onto or into land in circumstances which may result in the contaminant (or any other contaminant emanating as a result of natural processes from that contaminant) entering water:

unless the discharge is expressly allowed by a rule in a regional plan and in relevant proposed regional plan, a resource consent or regulations.

Section 31 sets out the council's functions for the purpose of giving effect to the Act. The council's functions include:

(a) The establishment, implementation, and review of objectives, policies and methods to achieve integrated management of the effects of the use, development, or protection of land and associated natural and physical resources of the district:

Section 72 states as follows:

The purpose of the preparation, implementation, and administration of district plans is to assist territorial authorities to carry out their functions in order to achieve the purpose of this Act.

Section 74(1) of the RMA states as follows:

- (1) A territorial authority shall prepare and change its district plan in accordance with its functions under section 31, the provisions of Part II, its duty under section 32, and any regulations.
- (2) In addition to the requirements of section 75(3) and (4) when preparing or changing a district plan, a territorial authority shall have regard to(a) any
 - (i) proposed regional policy statement
 - (ii) proposed regional plan of its region in regard to any matter of regional significance or for which the regional council has primary responsibility under Part 4.

In achieving the purpose of the Act, the council must carry out an evaluation under section 32 of the RMA before publicly notifying a district plan or a plan change. Section 32(3) and (4) state as follows:

- (3) An evaluation must examine -
 - (a) the extent to which each objective is the most appropriate way to achieve the purpose of the Act; and
 - (b) whether, having regard to their efficiency and effectiveness, the policies, rules, or other methods are the most appropriate for achieving the objectives
- (4) For the purposes of this examination, an evaluation must take into account
 - (a) the benefits and costs of policies, rules, or other methods; and
 - (b) the risk of acting or not acting if there is uncertain or insufficient information about the subject matter of the policies, rules, or other methods.

The statutory requirements, including section 32 matters, are assessed below under the following headings:

- The extent to which each objective is the most appropriate way to achieve the purpose of the Act
- Whether the policies, rules, or other methods are the most appropriate for achieving the objectives
 - having regard to their efficiency and effectiveness
 - taking into account the benefits and costs of policies, rules, or other methods
 - taking into account the risk of acting or not acting if there is uncertain or insufficient information about the subject matter of the policies, rules, or other methods.

4.1 The extent to which each objective is the most appropriate way to achieve the purpose of the Act

4.1.1 The purpose of the Act

Section 5 states that the purpose of the Act is 'to promote the sustainable management of natural and physical resources'. Section 5(2) states:

- (2) In this Act, "sustainable management" means managing the use, development, and protection of natural and physical resources in a way, or at a rate, which enables people and communities to provide for their social, economic, and cultural wellbeing and for their health and safety while-
 - (a) Sustaining the potential of natural and physical resources (excluding minerals) to meet the reasonably foreseeable needs of future generations; and
 - (b) Safeguarding the life-supporting capacity of air, water, soil, and ecosystems; and
 - (c) Avoiding, remedying, or mitigating any adverse effects of activities on the environment.

Environment is defined in Section 2 of the RMA as including:

- (a) Ecosystems and their constituent parts, including people and communities; and
- (b) All natural and physical resources; and
- (c) Amenity values; and
- (d) The social, economic, aesthetic, and cultural conditions which affect the matters stated in paragraphs (a) to (c) of this definition or which are affected by those matters:

Section 6 of the RMA identifies matters of national importance, which need to be recognised and provided for in achieving the purpose of the Act. The are no matters of particular relevance to the proposed controls on wastewater.

Section 7 deals with 'other matters' which, in achieving the purpose of this Act, persons exercising functions and powers under the Act shall have particular regard to. The matters of are of particular relevance to wastewater are identified below:

Clause		
(a)	Kaitiakitanga	
(aa)	The ethic of stewardship	
(b)	The efficient use and development of natural and physical resources	✓
(ba)	The efficiency of the end use of energy	
(c)	The maintenance and enhancement of amenity values	✓
(d)	Intrinsic value of ecosystems	
(f)	Maintenance and enhancement of the quality of the environment	✓
(g)	Any finite characteristics of natural and physical resources	
(h)	The protection of the habitat of trout and salmon	
(i)	The effects of climate change	
(j)	The benefits to be derived from the use and development of renewable energy	

Section 8 provides that in achieving the purpose of the Act, all persons exercising functions and powers under it, in relation to managing the use, development and protection of natural and physical resources, shall take into account the principles of the Treaty of Waitangi (Te Tiriti O Waitangi).

Section 9 outlines the restrictions on the use of land stating among other things that land cannot be used in a manner that contravenes a rule in a district plan or a proposed district plan unless the activity is expressly allowed by a resource consent, or is an existing use.

4.1.2 Appropriateness in achieving the purpose of the Act

The objective for wastewater is to provide for wastewater disposal and the disposal of settled solids in a manner which ensures that adverse effects are adequately avoided or remedied.

This objective is consistent with 5(2) because the proper on-site disposal of wastewater, the regular pump out of settled solids from septic tanks and other wastewater disposal systems and the proper disposal of those settled solids will safeguard the life supporting capacity of water, soil and ecosystems and will avoid any adverse effects of the activity on the environment.

4.2 Whether the policies, rules, or other methods are the most appropriate for achieving the objectives

Policies for the objective are:

- 1. By recognising that the adverse effects associated with wastewater disposal are controlled by Auckland Regional Council requirements and the Building Act.
- 2. By ensuring the proper maintenance of wastewater treatment and disposal systems through bylaws made under the Local Government Act.
- 3. By providing for the disposal of settled solids from septic tanks and wastewater treatment and disposal systems in an appropriate manner on suitable sites in landform 5 land unit.
- 4. By protecting through designation, council operations relating to wastewater treatment (such as Owhanake wastewater treatment plant) and settled solids disposal (such as Claris landfill).

The proposed policies are the most appropriate means of achieving the objectives because they highlight that the on-site disposal of wastewater is a matter controlled by the ALWP and if

compliance with this is met and other requirements of the Building Code, the Council can issue a building consent under the Building Act. To improve the operation of septic tanks systems, a council bylaw requires that once every three years septic tanks on Waiheke to be pumped out, to remove settled solids. The Local Government Act 2002 requires council to review this bylaw (and all bylaws) and it is likely this bylaw will be retained and could be applied to other areas of the islands. Because of this bylaw requirement, suitable land areas need to be available for the proper disposal of these settled solids and this matter is addressed in the third policy. The fourth policy seeks to protect by designation the operation of council owned facilities – Owhanake which treats the effluent from the Oneroa area, and Claris where settled solids from septic tanks on Great Barrier can be treated and disposed.

The following options are the main alternatives which the council has considered as a means of achieving the objectives

4.2.1 Option 1

Do nothing – rely only on the provisions of the proposed Auckland Regional Plan: Air,
 Land and Water (ALWP) and the requirements of the Building Code and Building Act

Benefits	Costs
Would be the least cost option for both council and land owners	Proper operation of septic tanks and other treatment and disposal systems relies on regular maintenance and the removal of settled solids from many systems. For existing systems this is not a mandatory requirement of the ALWP or Building Code/Act.
	Provision of land for the proper disposal of settled solids not a requirement of the ALWP or Building Code/Act.
	Designation of wastewater treatment plants and sludge disposal sites not a function of the ALWP or Building Code/Act.

The risk of acting or not acting

The risk of acting on this option would be a potential lack of maintenance of wastewater treatment and disposal systems especially for systems installed before the ALWP was notified in October 2001. The proposed ALWP requires that there is a programmed maintenance contract in accordance with the supplier's specifications or the requirements of TP58 whichever is the more stringent, and records of each maintenance action are to be retained and made available on the site for inspection by Council officers or their agents. Without the regular removal of settled solids, the solids from wastewater entering a septic tank or other wastewater treatment equipment may not settle out in the tank or equipment and be carried over into the effluent disposal fields causing their blockage and failure. This may in turn lead to a short circuiting and leakage in the disposal system, potentially causing pollution and health nuisances. Regular removal of settled solids that build up in septic tanks and other wastewater treatment systems ensures the better operation of these tanks and systems and a better quality of effluent going to the disposal system. This will contribute to avoiding remedying or mitigating the adverse effects wastewater may have on the environment.

The risk of not acting on this option would be a failure to ensure the ongoing maintenance of old wastewater treatment and disposal systems and their possible pollution of land and water.

4.2.2 Option 2

Option 2: continue to use the existing rules

Benefits	Costs
Community is familiar with existing rules	Effluent disposal rules fail to achieve any outcome because they simply refer to regional plan requirements that control the on-site disposal of effluent/foul water. Permitted activity gross dwelling rules are in many cases too conservative and have been
	effectively replaced by the specific requirements of the ALWP and TP58.
	Gross dwelling areas do not address effluent disposal on commercial or industrial properties.
	The prohibition on the location of sewage disposal areas within any hazard area are hindered by the lack of a hazard register and the inaccurate identification of hazard areas on foil 4 for the outer islands.
	No differentiation between the standards for permitted activities and discretionary activities for effluent disposal.
	Fails to provide for land to be used for the disposal of settled solids from wastewater treatment and disposal systems.

The risk of acting or not acting

The risk of acting on this option is that the rules for permitted and discretionary activity effluent disposal have no influence, because the discharge of wastewater is controlled by the ALWP and the requirements of the Building Act. Similarly the rules for effluent disposal (especially those for discretionary activities) are potentially in conflict with the requirements of the ALWP and the requirements of technical publication 58 (TP58). Council bylaws only affect the maintenance of wastewater systems. This option also fails to identify land where consents can be applied for, for the disposal of settled solids from wastewater treatment and disposal systems.

The risk of not acting on this option are potential confusion and conflict with the requirements of the ALWP and TP58 and a potential lack of suitable land to be able to dispose of settled solids removed from wastewater treatment and disposal systems.

4.2.3 **Option 3**

Option 3: Use of the proposed policies and rule

Benefits	Costs
Recognise the role that the ALWP and TP58 in regulating the on-site disposal of wastewater	
Proposed controls for total area of impervious surfaces also ensure that sufficient land is made available for on-site wastewater disposal.	
Avoids unnecessary consents and a duplication of the requirements of the ALWP which must be complied with. No time or cost thus required for assessing consents.	
Will allow suitable land to be used for the disposal of settled solids removed from septic tanks and other wastewater treatment and disposal systems	Consent will be required from the Auckland Regional Council for disposal to land and from the Medical Officer of Health as an offensive trade.
Designations will protect and will make it easy to manage the Owhanake wastewater treatment plant and the Claris landfill, which will treat and dispose of settled solids.	

The risk of acting or not acting

The risk of not acting on this option is a duplication of the requirements of the ALWP and TP58 with associated unnecessary cost in times and resources. Controls on the total permitted area of impervious surfaces will also ensure that there is sufficient land available on a site for wastewater disposal. A failure to have a bylaw requiring maintenance would result in the lack of maintenance of wastewater treatment and disposal systems, and their possible failure with subsequent potential for ground and water pollution. There would also be difficulties in finding new sites to dispose of the settled solids removed from wastewater treatment and disposal systems, and possible difficulties in obtaining consents to expand the operation of the Owhanake treatment plant and the Claris landfill if they did not have a designation.

The risk of acting on this option are negligible.

4.2.4 Conclusion

Option 2 is considered the most appropriate to achieve the requirements section 5, 7, and 31 of the Act. The proposed objective, policies and rule will ensure the wastewater can, in most circumstances be disposed of on site, without any adverse effects on the environment. Bylaw requirements for maintenance should lessen the risk of failure of wastewater systems. Provisions which allow land to be used for the disposal of settled solids (as a discretionary activity and subject to ARC approval and the approval of the Medical Officer of Health) will allow the on-going maintenance of wastewater treatment systems.

4.3 Whether the proposed rules assist the council to carry out its function of control of actual or potential effects of the use, development or protection of land

The proposed rule, will allow as a discretionary activity, land within land unit 5 (productive land) to be used for the disposal of settled solids from septic tanks and wastewater disposal systems. This will assist the council in avoiding the adverse effects of on-site wastewater treatment and disposal.

5.0 National planning documents

5.1 National and NZ coastal policy statements

Section 75(3) of the RMA states:

- (3) A district plan must give effect to -
 - (a) any national policy statement; and
 - (b) and any New Zealand coastal policy statement; and

...

Policy 3.2.7 of the New Zealand Coastal Policy Statement states:

Policy statements and plans should identify any practicable ways whereby the quality of water in the coastal environment can be improved, by altering land management practices and should encourage the adoption of those practices.

The proposed objective, policies and rules should contribute to an improvement in the quality of water discharged into the coastal environment.

5.2 Hauraki Gulf Marine Park Act 2000

Section 9(3) of the Hauraki Gulf Marine Park Act 2000, requires the council to ensure that:

... any part of a district plan that applies to the Hauraki Gulf, its islands, and catchments, does not conflict with sections 7 and 8 of this Act.

Section 7 recognises the national significance of the Hauraki Gulf and Section 8 provides management direction for the Gulf. Section 10 of the Act requires that sections 7 and 8 be treated as a New Zealand coastal policy statement under the RMA. Sections 7 and 8 are attached as appendix A.

The proposed objective, policies and rule for wastewater give effect to sections 7 and 8 of the Hauraki Gulf Marine Park Act 2000 by supporting the protection of the life-supporting capacity of the environment of the Hauraki Gulf, its islands and catchments.

6.0 Regional planning documents

6.1 Regional policy statement

Section 75(3) and (4) of the RMA state:

(3) A district plan must give effect to -

• • •

- (c) any regional policy statement.
- (4) A district plan must not be inconsistent with -

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(c) a regional plan for any matter specified in section 30(1).

Auckland Regional Policy Statement

Chapter 8 of the Auckland Regional Policy Statement deals with water quality. One of the overall visions for water quality in the region is:

o Water quality at beaches rivers and lakes will be suitable for swimming

For this to occur the proper operation of on-site wastewater disposal systems will have to be maintained.

It is noted in issue 8.2.1

"Provided that septic tank based systems are properly designed, installed and maintained, they are considered to be an environmentally sound method of effluent disposal. Localised problems do however occur at various times in rural and coastal communities as a result of cumulative impact. These are commonly due to a combination of poor soil types, higher densities of septic tank use, insufficient land for ground disposal and poor maintenance practices. There is a need for proactive management of septic tanks by TAs.

Policy 8.4.1 states:

 Adverse effects on water quality caused by the discharge of contaminants (including non-point source discharges) shall be avoided, particularly the discharge of potentially toxic, persistent or bioaccumulative contaminants. Where it is not practicable to avoid discharges, they shall be adequately remedied or mitigated.

Auckland Regional Plan: Coastal.

Chapter 20 of the Auckland Regional Plan: Coastal deals with the discharge of contaminants to the coastal marine area. Issue 20.2.1 notes:

 Water and sediment quality is probably the major environmental issue for the Auckland coastal marine area.

Issue 20.2.2 notes also:

 There are a number of inputs into the coastal marine area which are known to cause degradation of the water and sediment quality. The interaction of these inputs and their effects on the water and sediment quality on the marine environment is complex and not well understood. Research to date has demonstrated that water and sediment quality and marine ecology are being adversely affected by human activities.

The proposed objective, policies and rules will help improve the quality of effluent from wastewater treatment and disposal systems and lessen the degradation of water discharging to the coastal marine environment.

Proposed Auckland Regional Plan: Air Land and Water (ALWP)

Chapter 5 of the ALWP deals with discharges to land and water, and land management. It deals with issues, objectives, policies and rules for sewage treatment and disposal. A copy of the rules are attached as Appendix B

7.0 Other documents

Essentially Waiheke

Essentially Waiheke – A Village and Rural Communities Strategy is a non-statutory strategic document, which sets out a community approved framework for Waiheke's development. It was adopted by Council in 2000, after extensive consultation with the Waiheke community.

The five central principles of Essentially Waiheke are:

- principles of environmental protection
- principles of economic development and employment

- principles for strong communities
- principles to protect and enhance Waiheke's character
- principles of location.

The objective, policies and rule are consistent with Essentially Waiheke which notes that:

"independent on-site systems will continue to be the primary method for effluent and wastewater disposal on Waiheke Island for the short to medium term future, with the gradual introduction of alternative water conserving devices and effluent disposal methods as the traditional, older infrastructure needs replacing."

8.0 Procedures for monitoring

The council will monitor the effectiveness of the proposed provisions as a means of achieving the objectives and policies by:

- Requiring through bylaw provisions, the on-going inspection and maintenance of wastewater treatment and disposal systems;
- Undertaking inspections of wastewater treatment and disposal system when complaints about there performance or leakage are received;
- Monitoring streams and bathing beaches to check water quality and to identify possible sources if bacterial levels are above recognised standards;
- Monitoring resource consents conditions for land used for the disposal of the settled solids from wastewater treatment and disposal systems.

Conclusions

The plan provisions seek to avoid the adverse effects arising from the discharge of wastewater into the environment. The design, installation and operation of on-site wastewater treatment and disposal systems are controlled by the provisions of the proposed Auckland Regional Plan: Air, Land and Water, (ALWP) and the requirements of the Building Code and Building Act. Through the objective, policies and rule, and council bylaws, council seeks to ensure the ongoing inspection and maintenance of wastewater systems, especially those installed prior to the ALWP being notified when the requirement for maintenance where not specifically addressed. Council bylaws require the pump-out of septic tanks on Waiheke every three years and land must be available on the island to dispose of these settled solids for this to continue. The proposed discretionary activity rule will allow sites on land unit 5 (productive land) to be used for the disposal of settled solids subject to a consent being obtained.

A review of the bylaw may include areas on Great Barrier Island and the on-going inspection and maintenance of other wastewater treatment and disposal systems.

Appendix A

Hauraki Gulf Marine Park Act 2000

Section 7 states as follows:

Recognition of national significance of Hauraki Gulf

- (1) The interrelationship between the Hauraki Gulf, its islands, and catchments and the ability of that interrelationship to sustain the life-supporting capacity of the environment of the Hauraki Gulf and its islands are matters of national significance.
- (2) The life-supporting capacity of the environment of the Gulf and its islands includes the capacity—
 - (a) to provide for-
 - (i) the historic, traditional, cultural, and spiritual relationship of the tangata whenua of the Gulf with the Gulf and its islands: and
 - the social, economic, recreational, and cultural well-being of people and communities:
 - (b) to use the resources of the Gulf by the people and communities of the Gulf and New Zealand for economic activities and recreation:
 - (c) to maintain the soil, air, water, and ecosystems of the Gulf

Section 8 states as follows:

Management of Hauraki Gulf

To recognise the national significance of the Hauraki Gulf, its islands, and catchments, the objectives of the management of the Hauraki Gulf, its islands, and catchments are—

- (a) the protection and, where appropriate, the enhancement of the life-supporting capacity of the environment of the Hauraki Gulf. its islands, and catchments:
- (b) the protection and, where appropriate, the enhancement of the natural, historic, and physical resources of the Hauraki Gulf, its islands, and catchments:
- (c) the protection and, where appropriate, the enhancement of those natural, historic, and physical resources (including kaimoana) of the Hauraki Gulf, its islands, and catchments with which tangata whenua have an historic, traditional, cultural, and spiritual relationship:
- (d) the protection of the cultural and historic associations of people and communities in and around the Hauraki Gulf with its natural, historic, and physical resources:
- (e) the maintenance and, where appropriate, the enhancement of the contribution of the natural, historic, and physical resources of the Hauraki Gulf, its islands, and catchments to the social and economic well-being of the people and communities of the Hauraki Gulf and New Zealand:
- (f) the maintenance and, where appropriate, the enhancement of the natural, historic, and physical resources of the Hauraki Gulf, its islands, and catchments, which contribute to the recreation and enjoyment of the Hauraki Gulf for the people and communities of the Hauraki Gulf and New Zealand.

Appendix B

Proposed Auckland Regional Plan: Air, Land and Water (amended to incorporate decisions on submissions)