# On-site Effluent Treatment Regional Plan Review



Bay of Plenty Regional Council Strategic Policy Publication 2016/01

5 Quay Street PO Box 364 Whakatāne 3158 NEW ZEALAND

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# Acknowledgements

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## **Executive Summary**

The On-site Effluent Treatment Regional Plan (OSETP) was prepared under the Resource Management Act 1991 (RMA) to assist the Bay of Plenty Regional Council (the Regional Council) to manage the discharge of contaminants from on-site effluent treatment systems. It was made operative on 7 August 2006, with two subsequent plan changes made operative on 1 March 2011 (Date Deferral for Small Communities) and 12 August 2014 (Maintenance Zones).

A formal review of the On-site Effluent Treatment Regional Plan (OSETP) has been completed under Section 79 of the Resource Management Act 1991. This review also included an assessment of the efficiency and effectiveness of the policies and methods of the OSETP as required by Section 35 of the RMA.

The review found the OSETP to be generally inefficient. Since it was developed, changes to legislative requirements, planning approaches, management of the Rotorua Lakes, and improved knowledge about the performance of on-site effluent treatment systems has reduced its effectiveness and efficiency.

The key recommendation of the review is to develop a plan change to the Regional Water and Land Plan (RWLP) to include 'consents ready' provisions to manage OSET discharges. The plan change should:

- Remove unnecessary text and duplication of the RMA, RPS (RPS) and RWLP. This
  includes text in the preamble, or material that is more appropriate to include on-line or
  in a user guide.
- Apply a pragmatic and practical approach to managing the effects of OSET systems, particularly in the Rotorua Lakes catchments.
- Include provisions to implement the next generation RPS.
- Align OSET provisions for the Lake Rotorua catchment with Plan Change 10 (Lake Rotorua Nutrient Management).
- Include concise issue statements to focus on effects of OSET discharges.
- Clearly structure policies and rules to make requirements for Maintenance Zones, Rotorua Lakes and other areas easy to find and use.
- Remove material that is better available on-line to assist with interpretation and implementation.
- Use the detailed analysis in the appendices to draft the new provisions (what is retained, amended or removed).
- Reassess the focus and promotion of aerated wastewater treatment systems, including within the Rotorua Lakes catchments.
- Ensure OSET provisions meet the requirements of the National Environmental Standard for Drinking Water Supplies.

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### Part 1: Introduction

The On-site Effluent Treatment Regional Plan (OSETP) was prepared under the Resource Management Act 1991 (RMA), to assist the Bay of Plenty Regional Council (BORPC) with managing discharges from on-site effluent treatment systems in the region. It became operative on 7 August 2006. Two plan changes have been made to OSETP, Plan Change 1 (Date Deferral for Small Communities) become operative on 1 March 2011, and Plan Change 2 (Maintenance Zones) on 12 August 2014.

The On-site Effluent Treatment Regional Plan outlines seven issues and contains provisions that address these issues, by managing discharges from on-site effluent treatment systems (including greywater, pit latrines and septage<sup>1</sup>). The provisions include:

- Ten (10) objectives
- Thirty four (34) policies
- Thirty nine (39) methods
- Twenty six (26) rules including:
  - Ten (10) permitted activities
  - One (1) controlled activity
  - Fourteen (14) discretionary activity rules
  - One (1) prohibited activity

Under Section 35 of the RMA, the Regional Council must assess the effectiveness and efficiency of regional plan provisions at least once every five years and report the findings to the public. The first five-year review (in 2011) resulted in Plan Change 1.

The Regional Council must also formally review any regional plan at least every 10 years under Section 79 of the RMA. Once reviewed, the Regional Council must decide whether the plan is retained or altered. Whichever option is selected, the plan change, new plan, or existing plan must be publicly notified and progressed according to Schedule 1 of the RMA.

### 1.1 Report purpose

This report aims to:

1 Review the OSETP according to Section 79 of the RMA, including recommending whether the existing plan should be retained or changed.

<sup>&</sup>lt;sup>1</sup> The discharge of compost and biosolids from sewage is also addressed by the Regional Water and Land Plan.

- 2 Assess and report on efficiency and effectiveness of policies and methods of the OSETP, as required by Section 35 of the RMA.
- 3 Assess and advise on issues that are relevant to future plan development and implementation (such as giving effect to the second generation RPS).
- 4 Report all review findings and recommendations.

### 1.2 **Evaluation process**

The matters considered in the evaluation to monitor and review the OSETP include:

- Discussions with Council staff responsible for implementing the OSETP.
   These include scientists, resource consent officers, and compliance staff.
- Water quality monitoring results for areas adjacent to unreticulated communities.
- Compliance monitoring results for unreticulated communities.
- Problems documented on the OSETP issues register.
- Implementation issues documented in reports to Council's Regional Direction and Delivery (RDD) Committee, particularly in relation to the Rotorua Lakes.
- Assessment of the alignment of OSETP rules with Proposed Plan Change 10 (Lake Rotorua Nutrient Management).
- Assessment of OSETP provisions in relation to contemporary plan writing good practice (Quality Planning website used as reference).
- Analysis of the requirements of the second generation RPS.
- Developments in on-site effluent management and technologies in New Zealand.
- Issues raised during the OSETP Plan Change 2 process that were unable to be addressed at that time due to being out of scope.
- Assessment of submissions received on the second generation RPS.

#### 1.3 Public consultation and feedback

The review process did not include public consultation. Instead, the on-site effluent treatment issues raised and discussed during the recent consultation phase of OSETP Plan Change 2, have been considered as part of this review. Replication of public consultation for the OSETP review would use resources best spent researching and developing the next plan.

This review report is for the public's information only. No feedback to the Regional Council is required. Subject to Council's approval, a draft plan change to the Regional Water and Land Plan containing provisions for managing on-site effluent treatment systems will be prepared and progressed through the planning process under Schedule 1 of the RMA.

### Part 2: Evaluation

The review assessed the following matters:

Matter assessed	Documentation
Relevant future location of on-site effluent treatment (OSET) provisions	Section 2.1
On-site Effluent Treatment Plan provisions in relation to good plan-writing practice	Section 2.2
Whether the issues in the plan are still appropriate (including issues raised during OSETP Plan Change 2 that were unable to be addressed at the time, and OSET issues from submissions on the second generation RPS)	Section 2.3
Whether the objectives were achieved	Section 2.4 and Appendix 1
The efficiency and effectiveness of plan provisions (including implementation issues with the current OSETP, requirements of the second generation RPS, and alignment with Proposed Plan Change 2 Lake Rotorua Nutrient Management)	Section 2.5 and Appendix 2 and 3
Whether the anticipated environmental outcomes were achieved (including water quality monitoring and compliance monitoring results for unreticulated communities)	Section 2.6 and Appendix 4

### 2.1 Future location of On-site Effluent Treatment provisions

Bay of Plenty Regional Council has three 'core' regional plans (coastal, air, and water and land) and four 'special purpose' regional plans (Tarawera Catchment, Rotorua Geothermal, Gravel Management, and OSETP). The intention is for the provisions of the special purpose regional plans to be included in the Regional Water and Land Plan (RWLP) over time as each of the plans is reviewed. This will be achieved through plan change processes. Accordingly, the review of the OSETP will lead to a plan change to the RWLP, and the withdrawal of the OSETP.

The review of OSETP provisions has been with the view that new provisions will sit in the context of the RWLP, and will not need to repeat generic requirements or existing provisions in the RWLP.

### 2.2 Good plan-writing practice

Good plan-writing practice is detailed on the Quality Planning website<sup>2</sup>. It provides criteria and examples for good objectives, policies, methods, and rules.

Contemporary regional plans are developed as 'consents-ready', meaning the plans focus on clear policies and rules to guide resource consent decisions. This approach recognises the main function of regional plans. Methods are reduced to those that will have a tangible benefit on the implementation of plan provisions. There are no provisions that repeat those in the Regional Statement Policy, rather regional plans cross-reference to the RPS.

<sup>&</sup>lt;sup>2</sup> http://www.qualityplanning.org.nz/

Under Section 67 RMA, regional plans must contain objectives, policies and rules. It is optional to include issues, methods, principal reasons, environmental results and information for resource consent applications. Regional Policy Statements must contain procedures for monitoring the effectiveness and efficiency of plans, and processes for addressing cross-boundary matters.

Many of the provisions in the OSETP do not meet good plan-writing practice or the contemporary regional plan approach. There are also provisions that are no longer required in regional plans. For example:

- Some objectives and policies repeat the requirements of the RMA, and do not provide guidance for resource consent processing.
- Some policies are more appropriate as methods, and vice versa.
- Some policies and methods have been superseded by provisions in the RPS.
- Many of the rules are convoluted and difficult to understand.
- The plan contains information that is not necessary in a regional plan, and would be more appropriate as background information in a separate document (e.g. Section 32 report).

#### 2.3 Plan appropriateness

The plan appropriateness evaluation assesses the plan as to whether:

- Issues addressed in the plan are still relevant.
- Additional issues have arisen which require attention within the Plan. This
  includes an assessment of issues raised during OSETP Plan Change 2 that
  were unable to be addressed at the time, and OSET issues from submissions
  on the second generation RPS.
- Issues need to be included as part of the Plan in the future.

#### Are the issues addressed in the Plan still relevant?

There are seven issue statements in the OSETP. The issues are still relevant to managing OSET discharges, including discharges of greywater and discharges from pit latrines.

#### Are there additional issues which require attention within the Plan?

Additional matters were raised during OSETP Plan Change 2 that were unable to be addressed within scope at the time. These were:

- Composting toilets and related on-site effluent and greywater systems.
- Cost/benefit of nutrient removal from on-site effluent systems in the Rotorua Lakes.
- Equity and fairness matters around requiring upgrade of on-site effluent systems, particularly around the Rotorua Lakes. Also the need to provide for exceptions in certain circumstances.

- Mitigation options for nutrient effects from on-site effluent systems in the Rotorua Lakes catchments. At the time this related to the use of financial contributions. This needs to be revisited due to the possibility of financial contributions being removed from the RMA.
- Use of maintenance zone requirements to address water quality issues (rather than focusing on reticulation as the only solution).
- Integration with the Regional Water and Land Plan, and alignment with Plan Change 10 (Lake Rotorua Nutrient Management).

There are also some issues relating to differences in the extent of the Ongare Point Maintenance Zone and the residential zoned areas (i.e. rural properties are captured), and wording of rule conditions that creates loops or uncertainty.

There were no submissions on on-site effluent treatment systems for the Proposed RPS.

Other issues not otherwise listed above that were identified during the review process are:

 Providing for on-site effluent treatment systems associated with Papakāinga housing in the Rotorua and Eastern Bay areas (current provisions are only for Western Bay and Tauranga districts).

# Is it appropriate to include issue statements in the On-site Effluent Treatment Plan?

Section 67 of the RMA does not require that issue statements are included in regional plans (although councils may choose to do so).

Staff involved in developing the RPS recommend keeping regulatory plans as concise as possible. Once text is included in a proposed regional plan, it is available for public submission and appeals. Excessive explanatory text and duplication of provisions that are already included in other regulatory documents is therefore discouraged.

There are no issues specifically about OSET discharges in either the RPS or RWLP. As such, it is recommended that the OSET plan change include concisely written and targeted issue statements to clearly identify the matters the provisions will address. For example, issue statements should be more targeted at unreticulated communities that are proven to be having adverse effects, and clarify nutrient management concerns around the Rotorua Lakes.

#### 2.4 Have the Objectives been achieved?

The purpose of the OSETP is to reduce the impact of domestic sewage discharged from on-site effluent treatment systems in the Bay of Plenty (Section 1.3 Para 1). The OSETP sets out 10 objectives that aim to avoid, remedy or mitigate adverse environmental effects of discharges from on-site effluent treatment systems, including discharges of greywater, and from pit latrines.

Overall, the objectives of the OSETP have largely been achieved. However, a detailed assessment has identified problems with the current objectives that should be corrected. The full assessment of the objectives is in Appendix 1, and recommends that objectives are removed or replaced to:

- Cross-reference to existing provisions in the RWLP.
- Use concise provisions (including objectives, policies and rule conditions where appropriate) that clearly state the environmental standards that OSET systems (including greywater discharges and pit latrines) must meet.
- Comply with contemporary planning practice.

# 2.5 Effectiveness and efficiency of On-site Effluent Treatment Plan provisions

The assessment of the effectiveness and efficiency of OSETP provisions has evaluated the policies, methods and rules in relation to the following matters:

- Do the provisions achieve the objectives?
- Are the provisions efficient? Do they get the right things done well with least waste or effort? This aspect requires having policies and methods that are fit for purpose, and mechanisms that use resources wisely.
- Are there any implementation issues?
- Do the provisions meet the requirements of the second generation RPS?
- Do the provisions align with Proposed Plan Change 10 (Lake Rotorua Nutrient Management) to the RWLP?

Details of this assessment are included in Appendix 2 (policies and methods), and Appendix 3 (rules).

# Do the On-site Effluent Treatment Plan provisions achieve the objectives of the plan?

Overall, the policies and methods have avoided or mitigated the adverse effects of discharges through permitted activity conditions (including Maintenance Zone requirements), and resource consents. However, the reticulation of communities that are having an adverse effect on water quality has been achieved via mechanisms outside the OSETP – being decisions made by territorial authorities as part of their Long Term Plans and Annual Plans. The OSETP policies and methods have not achieved wider goals of improving water quality on their own.

#### Are the On-site Effluent Treatment Plan provisions efficient?

The review has identified the OSETP provisions are not as efficient as possible. A number of plan provisions that could be altered to improve efficiency:

 The rules for septic tanks (Rules 1-9) are convoluted and difficult to understand.

- The rules need to provide for new technology, such as composting toilets and new types of advanced systems as permitted activities where appropriate.
- The rules for on-site effluent treatment systems in the catchments of the Rotorua Lakes need to align requirements with Plan Change 10 (Lake Rotorua Nutrient Management), and identify pragmatic and achievable solutions to on-site effluent treatment management in the lakes catchments.
- Including dates in rules that relate to reticulation decisions made by territorial authorities as part of their Long Term Plans or Annual Plans is not efficient. Community reticulation discussions are extending beyond those dates, meaning the rules are unable to be implemented.
- Policies and methods that are aimed at territorial authorities, where their implementation is out of the Regional Council's control, should be removed. While territorial authorities are required to have regard to regional plans, this is a low level requirement. If the matter is significant, provisions aimed at territorial authorities are better placed in the RPS where territorial authorities are required to give effect to them. Many of these provisions are at an operational level, which are better addressed through an implementation plan outside the OSETP.
- Policy mechanisms or requirements that are too inflexible or too complex to be easily implemented should be removed or replaced with simple alternatives. Regulatory plans are one of the most static planning tools. Once a provision (such as a rule condition or timing requirement) is included in a plan, it is expensive and time consuming to change. If policies and methods are no longer necessary, or timeframes in rules do not align to other processes, they are simply not actioned, rather than going to the expense of changing the plan. The current approach of the rules is not flexible enough to effectively provide the quick changes necessary to deal with changing technology or reticulation timing.
- Streamlining the content of the OSETP and provide more focussed objectives, policies and policy mechanisms. This in turn will provide better guidance to decision makers and resource users.

#### Implementation issues

Problems with the implementation of the OSETP affect its efficiency and effectiveness. The OSETP is implemented within the Regional Council mostly by the Consents and Pollution Prevention Teams. These teams are responsible for implementing regional plans by:

- Giving advice to the public on whether activities are permitted or require consent.
- Processing applications for activities that require resource consents.
- Providing 24 hour, 7 day response to complaints via the Pollution Hotline.
- Monitoring compliance with consent conditions.

The OSETP rules are also implemented by territorial authorities through building consent processes. Implementation needs to effectively link Regional Council's

control of discharges, and territorial authority building controls relating to sanitary requirements.

Council's Regional Direction and Delivery Committee received an update on OSETP implementation in December 2015. Issues noted in the report were:

- Rules specifying dates when upgrades were required that do not align with the timing of community reticulation discussions, or ability of the affected landowners to comply with the requirements. This is particularly evident for properties within 200 m of the lake shore in Rotorua Lake catchments.
- Potential implications of Plan Change 10 (Lake Rotorua Nutrient Management) for the management of on-site effluent treatment systems within the Lake Rotorua catchment.

Other implementation issues have been identified:

- Rules 1-9 for septic tank rules are difficult to understand. There are also repetitive conditions between the rules and related Schedules.
- Financial contributions are not being implemented in the Rotorua Lakes catchments as anticipated due to Council's decision on Section 36 RMA Charges. This creates uncertainty for consent processing. Central Government is currently proposing removing financial contributions provisions from the RMA.
- Some reticulation zone maps are incorrect.
- Uncertainty for people buying or selling properties affected by on-site effluent treatment upgrade requirements (i.e. when should upgrades be made?).
- Low awareness levels of on-site effluent treatment issues or requirements in some parts of the industry.

# Do the On-site Effluent Treatment Plan provisions meet the requirements of the second generation Regional Policy Statement?

Policies from the RPS particularly relevant to managing discharges from on-site effluent treatment systems are identified below:

RPS Policy	Relevance to OSETP
IW 1B: Enabling development of multiple-owned Māori land UG 22B: Providing for Papakāinga	The On-site Effluent Treatment Plan currently only provides for on-site effluent treatment systems for Papakäinga housing in the Western Bay/Tauranga area.  Appropriate provisions need to be included for the Rotorua and Eastern Bay areas.

IW 4B: Taking into account iwi and hapū resource management plans	An assessment of iwi and hapū management plans (IMPs) in relation to OSETP matters was carried out in February 2016. Some IMPs did not mention OSETP matters, and others focused on municipal wastewater discharges. Where septic tanks were specifically mentioned, the concerns were:
	<ul> <li>No (direct) discharge of effluent to water due to effects on mauri and cultural uses of water.</li> </ul>
	Use land discharge for effluent disposal.
	<ul> <li>Encouraging households to update systems and respect the environment.</li> </ul>
	These principles are applied in the OSETP and are to be continued in the next generation of OSETP provisions.
WL 8B: Providing for regular reviews of regional council consent conditions	The OSETP Policy 34 identifies a consent term for consents. This should be continued in the next generation of OSETP provisions.

Other policies that manage urban development and the provision of infrastructure (including sewerage infrastructure) are:

UG 9B: Co-ordinating new urban development with infrastructure.

UG 10B: Rezoning and development of urban land – investment and infrastructure considerations.

UG 17B: Urban growth management outside of the western Bay of Plenty sub-region.

# Do the On-site Effluent Treatment Plan provisions align with Proposed Plan Change 10 (Lake Rotorua Nutrient Management) of the Regional Water and Land Plan?

The OSETP provisions do not align with new rules in Proposed Plan Change 10 of the RWLP for Lake Rotorua Catchment. Any new provisions for the catchment need to be carefully developed to achieve alignment in a pragmatic, practical, fair and equitable manner.

#### Improving effectiveness and efficiency

It is important to note that the style of the OSTEP is consistent with other regulatory plans of its era and the provisions were appropriate for the legislative landscape that existed at the time.

In order to make the plan more effective and efficient as part of the overall review, it needs to be reduced to the basics. These are:

- allow for low-risk activities (permitted activities),
- control activities that have a higher risk of adverse effects (controlled, discretionary, non-complying activities),
- prohibit activities with known serious adverse effects (prohibited activities),
- provide policy support for plan users, particularly resource consent applicants and Council officers (i.e. a 'consents ready' plan).

Operational methods may still be included in the plan, but these should be kept to a minimum, and at a low level of detail. The contents of the plan should be able to stand the test of time and not become outdated quickly.

### 2.6 Have the anticipated environmental results been achieved?

The plan includes a list of 11 Anticipated Environmental Results (AERs). These AERs focus on water quality, performance of on-site effluent treatment systems, and community awareness of environmental issues associated with poor management of on-site effluent treatment systems. Details of this assessment are in Appendix 4.

Of the seven water quality AERs, only one can be directly related to the OSETP provisions and the effects of unreticulated communities. The other six are a duplication of those included within the RWLP and are dependent on managing a range of discharge and land use activities within catchments, and cannot be solely attributed to OSET.

There is a lack of monitoring information, or information is of limited use to assess the AERs relating to the performance of on-site effluent treatment systems.

The measurement of the AER on community awareness of environmental issues is not possible as Council has not carried out a community perceptions survey since 2010. There is only limited information on the number of OSET upgrades and these can generally be carried out as permitted activities.

The AERs suffer from a lack of detail and an inability to objectively assess performance of the OSETP provisions. If AERs are included in the plan change to include OSETP provisions in the RWLP, any additional AERs must be specific to the effects of unreticulated communities on water quality, and nutrient management relating to on-site effluent treatment in the catchments of the Rotorua Lakes and those communities identified as Maintenance Zones.

### Part 3: Conclusions and recommendations

The OSETP has avoided or mitigated adverse environmental effects of discharges from onsite effluent treatment systems, including discharges of greywater, and from pit latrines. However, it has not been directly effective in achieving most of the anticipated environmental effects (AERs) stated in the OSETP.

The review has highlighted the following key issues:

- Many of the current provisions do not meet good planning practice, and do not provide sufficient guidance for consent processing.
- The policies, rules and mechanisms used are not as efficient as could be expected.
- There is an excess of written material (including detailed operational methods) that is either not necessary or not appropriate to include in a regional plan.
- Many of the matters covered within the OSETP are already covered by water quality and discharge provisions in the RWLP.

The key recommendation to resolve the above issues is to develop a plan change to the RWLP to include 'consents ready' provisions to manage OSET discharges. A plan change to include new OSET provisions in the RWLP is a more appropriate option than changing the current OSETP. The plan change should:

- Remove unnecessary text and duplication of the RMA, RPS and RWLP. This includes text in the preamble, or material that is more appropriate to include on-line or in a user guide.
- Apply a pragmatic and practical approach to managing the effects of OSET systems, particularly in the Rotorua Lakes Catchments.
- Include provisions to implement the operative RPS.
- Align OSET provisions for the Lake Rotorua catchment with Plan Change 10 (Lake Rotorua Nutrient Management).
- Include concise issue statements to focus on effects of OSET discharges.
- Clearly structure policies and rules to make requirements for Maintenance Zones,
   Rotorua Lakes and other areas easy to find and use.
- Remove material that is better available on-line to assist with interpretation and implementation.
- Use the detailed analysis in the appendices to draft the new provisions for the plan (what is retained, amended or removed).
- Reassess the focus and promotion of aerated wastewater treatment systems, including within the Rotorua Lakes Catchments.
- Ensure OSET provisions meet the requirements of the National Environmental Standard for Drinking Water Supplies.

# **Appendices**

## Appendix 1 – Assessment of objectives

This table shows whether and how each objective has been achieved and whether they have been efficient and effective.

Provision For full version of Objective, refer to the operative On-site Effluent Treatment Regional Plan	Achieved/Met	Analysis	Recommendation
Objective 1	Largely met if in relation to effects of nutrients and bacteria on water quality. However, there are many individual systems that are failing and having adverse effects in localised areas.	Effectiveness and efficiency assessment Largely repeats the requirements of the RMA. Not useful for decision-making and is not consistent with quality planning advice on writing good objectives. Does not specify what the 'environmental contamination' relates to. Difficult to determine effects of concern from the Objective. Generic discharge requirements are already covered by Objectives 26, 28 RWLP.	Remove Replace with a new concise Objective similar to Objective 7 in the Proposed Regional Coastal Environment Plan that states the environmental standards that OSET systems must meet.
Objective 2	Partly achieved in areas where rules require nutrient reduction (i.e. Rotorua Lakes).	Effectiveness and efficiency assessment  Not consistent with quality planning advice on writing good objectives as it states how the outcome is to be achieved. That is the role of policies. Describes a process, not an end result.	Remove Replace with clear, directive policies. Cross-reference to Objective 11 RWLP in relation to lake Trophic Level Indices (TLIs).
Objective 3	Generally achieved throughout the region in relation to system design.	Effectiveness and efficiency assessment  Not consistent with quality planning advice on writing good objectives as it states how the outcome is to be achieved. That is the role of policies.  Training to a specific unit national standard is available for OSET designers. A list of approved designers is on BOPRC's website. Anyone who installs a new OSET system must use an approved designer to perform a site assessment and design.	Remove Replace with clear, directive policies and rule conditions. Use new Objective that states the environmental standards that on-site effluent treatment systems must meet. Also include references that the OSET system designer must be an approved designer (or define as 'suitably qualified person').

Provision For full version of Objective, refer to the operative On-site Effluent Treatment Regional Plan	Achieved/Met	Analysis	Recommendation
Objective 4	Generally achieved in Maintenance Zones due to requirements of rules for those areas. However, many people in these zones only carry out maintenance when reminded through implementation and compliance action.  The assumption for the rest of the region is that property owners 'flush and forget' until there is a problem or they are selling their property and a buyer requires OSET compliance.	Effectiveness and efficiency assessment  Not consistent with quality planning advice on writing good objectives as it states how an environmental outcome is to be achieved. That is the role of policies.	Remove Replace with clear, directive policies and rule conditions around regular cleaning and maintenance of OSET systems. Apply a practical and pragmatic approach to OSET management in relation to maintenance and how people act in reality. Consider provisions to require OSET compliance when a property is sold or ownership is transferred. Use new Objective that specifies the environmental standards that on-site effluent treatment systems must meet.
Objective 5	Assume partly achieved due to requirements of greywater rules. There is no compliance monitoring information to provide an accurate assessment of this objective.	Effectiveness and efficiency assessment Repeats the requirements of the RMA. Not useful for decision- making and is not consistent with quality planning advice on writing good objectives.	Remove Replace with a new concise Objective similar to Objective 7 in the Proposed Regional Coastal Environment Plan, that states the environmental standards that discharges from greywater systems must meet. Also include clear, directive policies and rule conditions for greywater discharges to address adverse effects on the environment and risks to human health.

Provision For full version of Objective, refer to the operative On-site Effluent Treatment Regional Plan	Achieved/Met	Analysis	Recommendation
Objective 6	Assume achieved due to requirements of pit latrine rules. There is no compliance monitoring information to provide an accurate assessment of this objective.	Effectiveness and efficiency assessment  Not consistent with quality planning advice on writing good objectives as it states how an environmental outcome is to be achieved. That is the role of policies.  There is a lack of clarity around where pit latrines can be used, as the current requirements are ambiguous. This also needs to consider whether the use of pit latrines in sensitive catchments is appropriate (such as the Rotorua Lakes).	Remove Replace with clear, directive policies and rule conditions for pit latrines (including where these can be used). Replace with a new concise Objective similar to Objective 7 in the Proposed Regional Coastal Environment Plan that states the environmental standards that discharges from pit latrines must meet.
Objective 7	Assume partly achieved. No compliance monitoring information to provide accurate assessment of objective.	Effectiveness and efficiency assessment  Not consistent with quality planning advice on writing good objectives as it states how an environmental outcome is to be achieved. That is the role of policies.  The objective identifies the outcome that is sought so that OSET systems are at the appropriate capacity. However, the requirements are not clear within the rule structure and wording.  Currently, adding one bedroom to an existing house triggers the requirement for full design re-evaluation. This may be too onerous in many situations, as often only another 20-40 m of drainage trench is necessary.  Bay of Plenty Regional Council has the opportunity to comment on some district council resource consent applications that trigger regional council RMA interests. A portion of this will relate to OSET issues, including dwelling expansion. However, the vast majority of dwelling alterations will be through Building Consent processes (not RMA), which BOPRC has no involvement with. Hence, BOPRC has little knowledge of compliance with this Objective.	Remove Replace with clear, directive policies and rule conditions relating to upgrading of systems to comply with potential dwelling occupancy rates when dwellings are expanded. Consider providing for assessments to be made by a plumber or drainlayer, rather than an approved designer.  Replace with a new Objective that states the environmental standards that on-site effluent treatment systems must meet.

Provision For full version of Objective, refer to the operative On-site Effluent Treatment Regional Plan	Achieved/Met	Analysis	Recommendation
Objective 8	Not achieved – there are no rules to require AWTS and prohibit use of alternatives to AWTS in inspection and maintenance areas. As such, alternatives can be used subject to consent.	Effectiveness and efficiency assessment  Not consistent with quality planning advice on writing good objectives as it states how the outcome is to be achieved. That is the role of policies. Too prescriptive for an Objective as AWTS may not be the only appropriate options for use in inspection and maintenance areas locations. The Objective is 'heavy handed' and does not provide for practical alternatives, and equity and fairness issues.  It is more appropriate to focus on appropriate design, verification of installation, and maintenance requirements for appropriate wastewater solutions rather than promote specific systems.	Remove Replace with clear, directive and appropriate policies and rule conditions around appropriate wastewater solutions. Include a new Objective that states the environmental standards that on-site effluent treatment systems must meet in maintenance zones or in sensitive catchment (e.g. Rotorua Lakes).
Objective 9	Achieved – individual property owners select the OSET system (including AWTS) appropriate to their circumstances.	Effectiveness and efficiency assessment  Does not add value to the OSETP – is more of a loose statement than an objective. Not consistent with quality planning advice on writing good objectives as it states a vague outcome or option rather than direction where required.	Remove
Objective 10	Refer to Appendix 4 and commentary on Anticipated Environmental Results 8.1 – 1, 2, 3, 4, and 5.	Effectiveness and efficiency assessment  Largely repeats Objective 1 in relation to surface water. Too vague to be useful for decision making. Already covered by Objectives 26, 28 RWLP.	Remove Use recommended change for Objective 1, and cross-reference to other relevant Objectives in the RWLP relating to effects of discharges on groundwater.

## **Appendix 2 – Assessment of Policies and Methods**

This table shows whether each policy and method has been efficient and effective.

Provision  For full version of the provision, refer to the operative On-site Effluent Treatment Regional Plan	Assessment of effectiveness and efficiency	Recommendation
Policy 1	Useful to indicate process for addressing adverse effects of OSET discharges, but is currently too generic to provide certainty.  State of the environment and compliance monitoring are already required by Section 35 RMA.	Rewrite  Cross-reference to Policy IR 5B(c) RPS – Assessing cumulative effects.  Clarify monitoring expectations relating to effects of unsewered communities on water quality, particularly high risk communities (e.g. sensitive catchments, population density, high use/holiday use).  Clarify process for addressing adverse effects of unreticulated communities, including reticulation and application of Maintenance Zones).
Policy 2	This policy has not been effective.  While ensuring lot sizes are of a size to provide for sufficient treatment area for sustainable OSET systems is necessary, achieving this has been difficult. Inadequate lot sizes cause problems on occasion. Bay of Plenty Regional Council submissions on lot sizes to territorial authorities are not necessary adopted in final planning documents or subdivision plans.  District and city councils are required to give effect to provisions in the RPS, and not be inconsistent with a regional plan.	Rewrite  Clarify and strengthen policy to specify minimum lot sizes to ensure suitable and sustainable systems can be installed. Clarify how the policy is to be implemented.  Consider amending permitted rule conditions for OSET systems to refer to discharge density (i.e. related to one discharge per a specified area (m²)), rather than by dwelling.
Policy 3	The policy and related rule conditions has been effective in relation to not allowing soak holes after 1997.  However, there are existing soak holes installed prior to 1997 that	Rewrite  Strengthen policy to phase out all soak holes (including those prior to 1997) particularly in sensitive catchments

Provision	Assessment of effectiveness and efficiency	Recommendation
For full version of the provision, refer to the operative On-site Effluent Treatment Regional Plan		
	are having an adverse effect on the environment that should be	such as Rotorua Lakes.
	addressed.	Link to appropriate rule conditions, including prohibited rules with phase out times for soak holes. Phase out times should prioritise sensitive catchments, and then the rest of the region.
		Consider providing for continued use of soak holes only in specific circumstances – isolated properties, distant from surface waterbodies, sufficient height above groundwater, and on appropriate soil types.
Policy 4	Regular maintenance is necessary for the sustainable operation of OSET systems. It is required through permitted activity rule conditions and conditions on resource consents.  Currently BOPRC only requires maintenance reporting for Maintenance Zones and within 200 m of lakeshore in the Rotorua Lakes Catchment, and for AWTS systems.	Retain.
·		Consider including in a single policy the clearly lists how OSET systems are to be managed. Also include in rule conditions.
		Consider extending maintenance reporting to other areas, particularly for septic tanks.
Policy 5	This policy uses 'To promote' rather than 'require'. Therefore is not	Rewrite
	as effective as necessary.	Clarify how the requirement for inspection and upgrading is actually implemented.
		Consider including a policy detailing process for addressing non-compliance.
Policy 6	A pragmatic approach in areas where reticulation is confirmed or	Rewrite
	planned. Providing for short-term solutions in such areas is cost- effective for residents. However, the policy needs to be clarified with criteria for when suspension or deferment may be applied.	Clarify the specific basis on which deferral would be applied, and how this would be implemented (e.g. through consents?).
		Consider including in a policy detailing a process for areas where reticulation is planned or confirmed.

Provision  For full version of the provision, refer to the operative On-site Effluent Treatment Regional Plan	Assessment of effectiveness and efficiency	Recommendation
Policy 7	This policy uses 'To promote' rather than 'require'. Therefore is not as effective as necessary.	Rewrite Clarify where outlet solids filters will be required (e.g. Maintenance Zones including existing OSET systems). Consider a mandatory requirement for filters of a specified standard to be installed on all new systems. Consider including in a single policy the clearly lists how OSET systems are to be managed.
Policy 8	This policy has not been effective. Consent applications for septic tanks in the Rotorua Lakes Catchments have been received due to relative costs of installing an AWTS system.  The approach to OSET management in the Rotorua Lakes needs to be reconsidered. A well-designed septic tank system may be appropriate in some lake catchments.	Remove Replace with a new policy that clearly states the environmental outcomes sought from OSET management in each of the Rotorua Lakes catchments. Consider lake-specific rules, especially in relation to Lake Rotorua and Plan Change 10.
Policy 9	As written, the policy doesn't provide clear guidance on the type of technology and specific areas of the region that are of concern.  Also refer above for comments on Policy 8 in relation to Policy 9(a).	Remove  Replace with new policy that clearly states the environmental outcomes or performance standards required for OSET systems, including higher standards in specified areas if appropriate.  Refer to above for comments on a replacement for Policy 8.
Policy 10	The policy doesn't provide clear guidance on how discharges of greywater are to be managed. Not consistent with quality planning advice on how to write good policies.  The discharge of greywater is not a water conservation measure; it is a wastewater management option. However, it is an appropriate way to dispose of a portion of household wastewater in some situations.	Rewrite  Replace with a clear policy on how discharges of greywater are to be managed to avoid or mitigate adverse effects on the environment and human health.

Provision	Assessment of effectiveness and efficiency	Recommendation
For full version of the provision, refer to the operative On-site Effluent Treatment Regional Plan		
Policy 11	Correctly sized OSET systems for dwelling occupancy rates are necessary for the sustainable operation of OSET systems. But the policy needs to link to clear rule conditions to be effective. The wording needs to focus on dwelling changes that increase potential occupancy.  Also refer to comments on Objective 7.	Rewrite.  Delete 'alteration', and focus on changes that increase potential occupancy of a dwelling.  Consider including in a single policy, that clearly lists how OSET systems are to be managed. Ensure appropriate rule conditions are included to implement the policy.
Policy 12	Appropriately sized reserve areas are necessary for the sustainable operation of some OSET systems.  As currently written, the policy is not clear about the situations where a reserve area should be required and there are no associated rule conditions to implement the policy. The policy needs to link to clear rule conditions to be effective.  In some cases having a reserve area is not possible. Advanced systems shouldn't require a reserve area. A 100% reserve area for a well-designed septic tank system may be excessive.	Rewrite.  Clarify the strengthen the policy in relation to where reserve areas are required. Link to a rewritten version of Policy 2 on lot size (refer above for comments).  Consider including in a single policy, that clearly lists how OSET systems are to be managed. Ensure appropriate rule conditions are included to implement the policy.
Policy 13	As written, the intent of this policy is not particularly clear, and therefore not effective or efficient. The use of community schemes in situations where on-site effluent treatment is not viable is the responsibility of either the developer of the sub-division or the relevant territorial authority. Resource consent for community scheme discharge is required under Rule 37 RWLP.  The intent of the policy should be to encourage the use of community systems where on-site treatment is not possible or effective.	Rewrite Clarify the intent of the policy.
Policy 14 and Policy 15	These policies deal with a function that is not BOPRC's responsibility, and is therefore not effective or efficient. The matter is partly addressed by Policies UG 9B, UG 10B, UG 11B RPS. Bay	Remove.  Rely on implementation of the Policies in the RPS (as noted in the column to the left). Bay of Plenty

Provision	Assessment of effectiveness and efficiency	Recommendation
For full version of the provision, refer to the operative On-site Effluent Treatment Regional Plan		
	of Plenty Regional Council may only have some input to subdivision applications if the activity is discretionary under a district or city plan.	Regional Council retains input to consented subdivision applications via these RPS policies.
	As written, it is unclear who implements these policies.	
Policy 16	This policy has not been implemented by BOPRC.	Remove
	It is a requirement of the Health Act 1956 for a territorial authority to provide sanitary works, which includes septage disposal.	Rely on the Health Act.
Policy 17	Appropriate management of septage is necessary to manage adverse effects, but the policy does not provide sufficient guidance to be effective. As written, it is unclear how this Policy is implemented and who is responsible. Bay of Plenty Regional Council's role is to regulate discharges rather than 'ensure septage is adequately treated'.	Remove Use either rule conditions or consent conditions to control effects of the discharge of septage to the environment. Clarify link to existing rules in the RWLP (e.g. Rule 19 – discharge of Grade Aa biosolids).
	There is some overlap with existing provisions in the RWLP relating to biosolids, which need to be clarified.	
	Also refer above for territorial authority requirements under the Health Act 1956.	
Policy 18	It is not necessary to state that resource consents will be required due to the restrictive presumption of Section 15 RMA. Does not add value to the OSETP.	Remove
Policy 19	These matters are factored into plan reviews and development of OSET provisions, but it is not necessary to have a policy around this.	Remove
Policy 20	Co-ordinating processes and systems for OSET across regional and district council operations is effective and efficient. However, this is a method rather than a policy.	Remove policy and include in Methods section.

Provision  For full version of the provision, refer to the operative On-site Effluent Treatment Regional Plan	Assessment of effectiveness and efficiency	Recommendation
Policy 21	It is not necessary to repeat the requirements of Section 35 RMA. Also repeats Method 66 RWLP. The policy is not sufficiently focused to be effective or efficient. Science monitoring is better focused around unreticulated communities rather than OSET systems in general. 'State of the Environment monitoring' is too broad a term to use. Specific monitoring programmes in identified areas are more efficient and efficient. An amended version of Policy 22 would be more useful.	Remove
Policy 22	As written, the policy is not sufficiently focused on OSET issues to be effective or efficient. The key OSET issues to monitor are the effects of unreticulated communities (rather than 'key sites'), and the effectiveness of specific systems to perform to required environmental standards.	Remove  Clarify monitoring expectations in a rewritten version of Policy 1 (refer above for comments), focus on key OSET issues (as noted in the column to the left), and link to policies or methods around what the information will be used for.
		Also include monitoring after reticulation for a specified time to confirm the extent to which water quality improves.
Policy 23	Not necessary to state this as a policy as will be apparent in the rule structure to use permitted activity status for appropriate situations. Not consistent with good planning practice. Is also unclear about what types of effects are 'minor'. As such, this is not effective or efficient.	Remove
Policy 24	The current policy is not effective.	Rewrite
	The use of garbage grinders increases pressure on an OSET system. Education material and BOPRC's wastewater booklet discourage the use of grinders, but property owners can install a garbage grinder at any stage as there are no regulations on the use of these in relation to OSET systems.	Strengthen the policy and implementation mechanisms to avoid the use of garbage grinders in relation to OSET systems.  Consider using rule conditions to prevent the use of grinders, particularly in sensitive areas.

Provision	Assessment of effectiveness and efficiency	Recommendation	
For full version of the provision, refer to the operative On-site Effluent Treatment Regional Plan			
Policy 25	Not necessary to state this as a policy as will be apparent in the rule structure to use permitted activity status for appropriate situations. Not consistent with good planning practice. Is also unclear about what types of effects are of concern. As such, this is not effective or efficient.	Replace Replace with clear, directive policies and rule conditions for pit latrines that states the environmental standards that discharges from pit latrines must meet (including where these can be used).	
Policy 26	An effective and efficient policy that describes the application and use of Maintenance Zones. These zones have proven effective to address adverse effects on water quality in areas where reticulation may not be possible.	Retain  Recommend minor amendments to formatting to clarify intent.	
Policy 27	Is no longer effective or efficient for Lake Rotorua due to the implications of Plan Change 10 (nutrient management rules). Also possibly inconsistent with Policy 8 OSETP. A policy to clarify the overlap between the OSETP and RWLP is necessary, but a practical and pragmatic approach needs to be discussed.	Remove Replace with updated approach for managing OSET in Rotorua Lakes catchments, especially in Lake Rotorua in relation to Plan Change 10.	
Policy 28	Has not been effective due to lack of implementation of financial contributions, and lack of certainty about appropriate mitigation measures. A policy to clearly identify how OSET systems in the Rotorua Lakes is needed, but a new approach needs to be identified.  Financial contributions may be removed from the RMA by Central Government. If this progresses, BOPRC needs to	Replace with updated workable and agreed approach for managing OSET in Rotorua Lakes catchments.	
	reconsider appropriate mitigation measures.  This is a critical issue to resolve in the OSETP review.		
Policy 29	An effective and efficient mechanism to clearly identify appropriate consent conditions in the specified areas, and achieve good water quality outcomes. However, needs to be carefully linked to replacement provisions for Policies 27 and 28.	Retain, but update with amendments to link to updated policies, and appropriate requirements for consented On-Site Effluent Treatment systems based on risk.	

Provision	Assessment of effectiveness and efficiency	Recommendation	
For full version of the provision, refer to the operative On-site Effluent Treatment Regional Plan			
	Consented OSET systems have an inspection regime in BOPRC's compliance monitoring programme. Low-risk OSET systems are inspected every eight years. High-risk OSET systems are inspected every one year.		
Policy 30	This policy has not been effective.  Financial contributions are not being implemented in the Rotorua Lakes catchments as anticipated due to Council's decision on Section 36 RMA Charges. This creates uncertainty for consent processing. Central government is currently proposing removing financial contributions provisions from the RMA.	Replace with updated workable and agreed approach for managing OSET in Rotorua Lakes Catchments.	
Policy 31	While the intent of the policy is valid, the implementation lacks efficiency. Problems evident with the implementation are maps of reticulation areas are incorrect, and changes to reticulation timing made in territorial authorities' Long Term Plans are not accurately reflected OSETP rules. There is overlap with processes the requirement to connect to available sewage reticulation under other legislation. There are more efficient ways to achieve the intent of this policy.	Replace with simple and effective mechanism to achieve the same outcome.  Consider including reticulation area maps on BOPRC's OSET web page, for easy access by the community and so the maps can be updated when necessary. The on-line maps can clarify the types of reticulation areas (e.g. operating, confirmed, future) and the associated requirements. The maps would need to be carefully coordinated with the territorial authorities.	
Policy 32	While this policy is effective, it is not necessarily efficient. Schedule 5 is essential 'information required for a consent application'. Including this type of provision in a regional plan is optional under the RMA. The form in Schedule 5 could be provided on-line and not included in the OSETP.  In addition, it was previously intended to develop a checklist to cover the requirements of NZS 1547:2012 Appendices C and D. BOPRC has also received feedback that it may be unnecessary to complete Schedule 5 for each lot in a subdivision.	Replace Consider options, including:  Specific checklists relating to the requirements of different parts of NZS 1547:2012.  Requiring OSET systems to be designed by a 'Suitably Qualified and Experience Person', as already stated in the operative OSETP, but not including Schedule 5 in the Plan. This would be for upgraded dwellings in non-critical areas.	

Provision	Assessment of effectiveness and efficiency	Recommendation	
For full version of the provision, refer to the operative On-site Effluent Treatment Regional Plan			
		<ul> <li>Require OSET systems to be designed, constructed and installed to follow specified guidelines (refer to Gisborne District Council provisions).</li> <li>Placing greater responsibility on OSET system designers, such as providing producer statement, clear as built plans, declaration that the design meets requirements. The information should be provided to Council and the home owner within three months of installation.</li> </ul>	
Policy 33	An effective provision for specifying resource consent conditions for OSET, and ensuring OSET systems are installed in accordance with designs submitted in resource consents. However, it is not as efficient as it could be. The forms in Schedule 5, 7 and 8 could be provided on-line and not included in the OSETP.	Remove policy, and include rule conditions to require the supply of specified information.  Provide standard form on-line.  Also refer to comments above in relation to Schedule 5.	
Policy 34	An effective provision for specifying the maximum term for OSET resource consents. This provides certainty for consent applicants. It is efficient for the reasons stated in the policy: to recognise the life expectancy of an OSET system, and to re-evaluate system performance.	Retain	
Method 1	This is a policy rather than method. It is also not efficient to encourage reticulation of <u>all</u> un-sewered communities as implied by the method. Such an approach would lead to excessive costs to the regional community and TAs. It is more appropriate to identify appropriate solutions on a case-by-case basis where degraded water quality or public health issues are proven. Solutions may include the application of a Maintenance Zone, or alternative management options.	Remove  Replace with a policy to work with territorial authorities and communities to identify solutions (including Maintenance Zones and reticulation) for unreticulated communities where degraded water quality or public health is proven to be a problem.	
Method 2	This method has been superseded by policies in the RPS:	Remove, and cross-reference the RPS provisions.	

Provision	Assessment of effectiveness and efficiency	Recommendation
For full version of the provision, refer to the operative On-site Effluent Treatment Regional Plan		
	IW 2B: Recognising matters of significance to Māori	
	IW 4B: Taking into account iwi and hapū resource management plans	
	IW 5B: Adverse effects on matters of significance to Māori	
	IW 6B: Encouraging tangata whenua to identify measures to avoid, remedy or mitigate adverse cultural effects	
	It is not efficient to include matters in the OSETP that have superseded by the RPS.	
Method 3	This method is not effective or efficient by itself as the community also needs to understand the cause of water quality problems in an area. It is not necessary to include this method in the plan as water quality information is available on the internet, e.g.:	Remove
	http://www.boprc.govt.nz/	
	http://www.lawa.org.nz/	
	Provision of water quality information to the community is addressed by Method 28 RWLP.	
Method 4	It is effective and efficient to provide information on OSET systems	Retain
	to the community to assist compliance with the OSETP requirements. A list of approved on-site effluent treatment systems is included on Councils website. These systems have been successfully tested through the appropriate standards and meet the minimum OSET requirements.	Add other information, such as greywater systems and compliance requirements.
Method 5	Provision of financial assistance for reticulation is carried out through decisions made under the Local Government Act (e.g. Long Term Plan, Annual Plan). It is not appropriate to include this method in an RMA plan.	Remove

Provision  For full version of the provision, refer to the operative On-site Effluent Treatment Regional Plan	Assessment of effectiveness and efficiency	Recommendation
Method 6	It is more effective and efficient to target community education and engagement about OSET systems in areas where degraded water quality is evident. This is an operational method that is not appropriate to include in the OSETP. Implementation strategies and community engagement are better left outside the plan to allow flexibility, and reduce unnecessary provisions.	Remove
	There are a number of methods already in the RWLP that are to education and support community awareness and projects.	
Method 7	This method does not add any value to OSETP. Using information provided by consent applicants to assess environmental effects is standard practice.	Remove
Method 8	It is more effective and efficient to target community education and engagement about OSET systems where reticulation of communities in the Rotorua Lakes has been identified as necessary in lake action plans. It is more efficient to have clear regulatory rule requirements in these situations.  An implementation plan can sit outside the OSETP, which would	Remove
Mail a 10	include education and communication strategies.	Powers.
Method 9	It is more effective and efficient to target community education and engagement about use of AWTS in areas where such systems are necessary (if this is proven to be the case). It is more efficient to have clear regulatory rule requirements in these situations.	Remove
Method 10	It is more efficient to provide information on OSET systems that have nutrient reducing capabilities that comply with rule requirements. This information is provided on Council's website rather than through education programmes.	Remove Include provision of information on nutrient reducing systems in relation to Method 4 (refer above).

Provision  For full version of the provision, refer to the operative On-site Effluent Treatment Regional Plan	Assessment of effectiveness and efficiency	Recommendation	
Method 11	It is effective and efficient to provide information on AWTS systems to the community to assist compliance with the OSETP requirements. Information is provided on Council's website.	Remove Include provision of information AWTS in amended Method 4.	
Method 12	This method does not add value to OSETP as information on greywater is freely available on the internet, and can be added to BOPRC's website. It is more efficient and effective to have clear regulatory rule requirements for greywater discharges.	Remove	
Method 13	This method does not add value to OSETP as information on pit latrines is freely available on the internet, and can be added to BOPRC's website. It is more efficient and effective to have clear regulatory rule requirements for pit latrines discharges.	Remove	
Method 14	Repeats Method 5 OSTEP. Refer above for assessment of Method 5.	Remove	
Method 15	This method is effective for implementing the OSETP. However, it is more efficient to target work with territorial authorities, in areas where OSET systems are proven to be having adverse effects on water quality and/or public health.	Remove	
	This can be covered by a new policy to work with territorial authorities and communities where unreticulated areas are causing water quality problems.		
	An implementation plan can sit outside the OSETP, which would include education and communication strategies.		
Method 16	It is effective and efficient to ensure uniform and accessible data and information systems, are developed and used to manage OSET systems through RMA and Building Act processes. However, this method is at an operational level that is not necessary to	Remove Include a new method that clarifies the roles and responsibilities of different agencies in OSET management, and states that an implementation plan will	

Provision	Assessment of effectiveness and efficiency	Recommendation	
For full version of the provision, refer to the operative On-site Effluent Treatment Regional Plan			
	include in the OSETP. Operational arrangements can be made outside of the plan.	be developed outside the Plan to ensure efficient processes.	
Method 17	Advocacy in a regional plan for matters around territorial authority	Remove	
	functions is not effective or efficient. If the matter is significant for resource management in the region, it should be required by the RPS. Addressed by Methods 9 and 47 of the RPS.	matter is significant for bulb be required by the Include a new method that clarifies the roles and responsibilities of different agencies in OSET.	
Method 18 Advocacy in a regional plan for matters around territorial authority		Remove	
	functions is not effective or efficient. If the matter is significant for resource management in the region, it should be required by the RPS. Addressed by Methods 9 and 47 of the RPS. This method is at an operational level that is not necessary to include in the OSETP. Operational arrangements can be made outside of the plan.	Include a new method that clarifies the roles and responsibilities of different agencies in OSET management, and states that an implementation plan will be developed outside the Plan to ensure efficient processes.	
Method 19	Advocacy in a regional plan for matters around territorial authority	Remove Include a new method that clarifies the roles and responsibilities of different agencies in OSET management, and states that an implementation plan will be developed outside the Plan to ensure efficient processes.	
	functions is not effective or efficient. If the matter is significant for resource management in the region, it should be required by the RPS. Addressed by Methods 9 and 47 of the RPS. This method is at an operational level that is not necessary to include in the OSETP. Operational arrangements can be made outside of the plan.		
Method 20	This method has been implemented. However, advocacy in a	Remove	
	regional plan for matters around Building Industry Authority functions is not effective or efficient. This method is at an operational level that is not necessary to include in the OSETP. Operational arrangements can be made outside of the plan.	Include a new method that clarifies the roles and responsibilities of different agencies in OSET management, and states that an implementation plan will be developed outside the Plan to ensure efficient processes.	

Provision	Assessment of effectiveness and efficiency	Recommendation	
For full version of the provision, refer to the operative On-site Effluent Treatment Regional Plan			
Method 21	Charging regimes for OSET inspection and pump-outs are more appropriately decided outside the OSETP. Such decisions would be made through Long Term Plan or Annual Plan decisions. This method is not efficient as it refers to decisions made by territorial authorities that are separate from RMA processes.	Remove	
Method 22	Advocacy in a regional plan for matters around territorial authority	Remove	
	functions is not effective or efficient. If the matter is significant for resource management in the region, it should be required by the RPS. Addressed by Methods 9 and 47 of the RPS.	Include a new method that clarifies the roles and responsibilities of different agencies in OSET management, and states that an implementation plan will be developed outside the Plan to ensure efficient processes.	
Method 23	Advocacy in a regional plan for matters around territorial authority	Remove	
	functions is not effective or efficient. If the matter is significant for resource management in the region, it should be required by the RPS. Addressed by Methods 9 and 47 of the RPS.	Include a new method that clarifies the roles and responsibilities of different agencies in OSET management, and states that an implementation plan will be developed outside the Plan to ensure efficient processes.	
Method 24	Is this method has not been implemented?	Remove	
		Include a new method that clarifies the roles and responsibilities of different agencies in OSET management, and states that an implementation plan will be developed outside the Plan to ensure efficient processes.	
Method 25	The discharge of septage is managed by rules in the RWLP.	Remove	
Method 26	The discharge of septage is managed by rules in the RWLP. Grade AA biosolids can be discharges as a permitted activity under	Remove	

Provision	Assessment of effectiveness and efficiency	Recommendation
For full version of the provision, refer to the operative On-site Effluent Treatment Regional Plan		
	Rule 19 RWLP (or discretionary under Rule 37 if the conditions can't be met). This method is therefore unnecessary.	
Method 26a	It is effective and efficient to support Papakāinga housing developments, and link to toolkits developed as part of SmartGrowth. This method is consistent with Policy IW 1B: Enabling development of multiple-owned Māori land in the RPS. However, there are no equivalent provisions for Papakāinga housing outside the Tauranga and Western Bay districts. It is important to extend these provisions for the Eastern Bay and Rotorua due to the higher percentage of Māori population in these areas, and associated areas of multiple-owned Māori land. The method is also more appropriate as a policy.	Retain as a policy, and include appropriate provisions for Papakāinga housing in other parts of the region.
Method 27	Advocacy in a regional plan for matters around territorial authority functions is not effective or efficient. If the matter is significant for resource management in the region, it should be required by the RPS. Provision of financial assistance for reticulation is carried out through decisions made under the Local Government Act (e.g. Long Term Plan, Annual Plan). It is not appropriate to include this method in an RMA plan.	Remove
Method 28	It is effective and efficient to clearly identify what will be expected for OSET systems that don't meet the operating requirements of the Plan. This method would therefore be more appropriate reworded as a policy.	<b>Retain</b> as a policy, but rewrite to clarify requirements (e.g. link to rules) and processes.
Method 29	If is effective and efficient to clearly identify what will be expected for soak holes that don't meet the operating requirements of the Plan. However, this is more appropriate as a policy.	<b>Retain</b> as a policy, but rewrite to clarify requirements (e.g. link to rules) and processes.
Method 30	This method does not make sense as written. It is a statement rather than a method, and implies that Bay of Plenty Regional	Remove

Provision	Assessment of effectiveness and efficiency	Recommendation	
For full version of the provision, refer to the operative On-site Effluent Treatment Regional Plan			
	Council will provide community secondary (and tertiary) treatment schemes. This is not the case.		
Method 31	It is not necessary to repeat the requirements of Section 35 RMA. It also repeats Method 66 RWLP.	Remove	
Method 32	Under Section 67 RMA, it is not necessary to include procedures for monitoring the effectiveness and efficiency of regional plans. This is addressed by the RPS.	Remove	
Method 33	This method is at an operational level that is not necessary to include in the OSETP. Operational arrangements can be made outside of the plan.	Remove	
Method 34	To date, this method has not implemented. New buildings require associated OSET systems to be designed by an approved designer. However, the quality of installation is a concern in some cases. A mechanism to check installation is needed.	Replace Include a new method that clarifies the roles and responsibilities of different agencies in OSET management, and include a mechanism to ensure installation of OSET systems meets requirements.	
Method 35	This repeats Method 52 RWLP.	Remove	
Method 36	It is effective and efficient to have accredited persons for septic tank inspections and maintenance programmes to ensure the requirements of the Plan and environmental outcomes are met. A specific NZQA training programme has been established to ensure that designers and installers have the adequate training. A list of these approved persons is also provided for on Regional Council's website, and in order to be included on the list you must have completed the training.	Retain, but amend wording to current situation with NZQA training, and inspections (delete 'programmes' in last line).	
Method 37	Under Section 67 RMA, it is not necessary to include procedures for monitoring the effectiveness and efficiency of regional plans. This is	Remove	

Provision	Assessment of effectiveness and efficiency	Recommendation	
For full version of the provision, refer to the operative On-site Effluent Treatment Regional Plan			
	addressed by the RPS. This method links back to Method 31 which is also recommended for removal.		
Method 38	Regional plans cannot require city and district councils to implement	Remove	
	a policy or method. If the matter is significant for resource management in the region, it should be required by the RPS. This method is at an operational level that is not necessary to include in the OSETP. Operational arrangements can be made outside of the plan.	Include a new policy that clarifies the roles and responsibilities of different agencies in OSET management, and states that an implementation plan will be developed outside the Plan to ensure efficient processes.	
Method 39	Regional plans cannot require city and district councils to implement	Remove	
	a policy or method. If the matter is significant for resource management in the region, it should be required by the RPS. This method is at an operational level that is not necessary to include in	Replace with clear permitted activity rule conditions relating to discharge density (e.g. 1 discharge per x m²).	
	the OSETP. Operational arrangements can be made outside of the plan.	Also include minimum lot sizes in a new policy that clarifies the roles and responsibilities of different agencies in OSET management.	

## Appendix 3 – Assessment of rules

This table shows whether the rules have been efficient and effective.

Summary of Rule  For full version of rule, refer to the operative On-site Effluent Treatment Regional Plan	Assessment of effectiveness and efficiency	Recommendation
Rules 1-9 (inclusive) septic tanks	Overall, the rules for septic tanks are largely effective at managing adverse effects on water quality and human health. However, the rules are convoluted, not easy to use, and contain errors, so are not efficient. The rules contains matters that should be policies, an excessive number of Advisory Notes, repeat aspects of related Schedules, and are not written in accordance with Quality Planning guidelines.  An example of a current problem is that under the present rules, many existing activities are considered to be "permitted" activities despite being high risk. A single dwelling on a lot of around 1500 m² is low risk. High risk activities such as rural industries, shops, packhouses, camp grounds and multiple houses on a property. The 2000 litres per day discharge limit is not an effective tool in identifying high risk activities. The application of the limit needs to be clarified in relation to lot, dwelling, individual system, etc.  The approach for septic tanks in the Rotorua Lakes Catchments needs to be reconsidered in relation to individual lake action plans, Plan Change 10 (Lake Rotorua), and achieving a pragmatic and achievable solution.	Rewrite for clarity and ease of use, and to correct errors. Amend to comply with contemporary rule writing practice.  Use area-specific rules where appropriate (e.g. Maintenance Zones, Rotorua Lakes), and a more generic permitted activity rules for low risk situations.
Rules 10-15 (inclusive) Aerated Wastewater Treatment Systems	Overall, the rules for Aerated Wastewater Treatment Systems are largely effective at managing adverse effects on water quality and human health. AWTS may be contributing to reducing some nutrients in the Rotorua Lakes.  However, there are aspects of the rules that need to be corrected. For example, the rules need to provide for dripper systems, and BOD and TSS limits amended for consistency with NZS 1546 and 1547.	Rewrite for clarity and ease of use, and to correct errors.  Amend to comply with contemporary rule writing practice.  Use area-specific rules where appropriate (e.g. Maintenance Zones, Rotorua Lakes).

Summary of Rule  For full version of rule, refer to the operative On-site Effluent Treatment Regional Plan	Assessment of effectiveness and efficiency	Recommendation
	The approach for AWTS + NR in the Rotorua Lakes Catchments also needs to be reconsidered in relation to individual lake action plans, Plan Change 10 (Lake Rotorua), and achieving a pragmatic and achievable solution.	Refer to comments above on reconsidering the emphasis on AWTS in the Rotorua Lakes Catchment.
	The preference for AWTS in some situations needs to be revisited, in relation to the lifetime operating cost, ability to function in highly variable situations, and actual contribution to nutrient management. This includes the extent to which nutrients may be reduced within the receiving environment – for both septic tanks and AWTS.	
Rules 16 and 17 Greywater	It is efficient to have a permitted activity rule for greywater discharges to provide for appropriate water conservation and reuse practices. The conditions need to be effective to avoid or mitigate adverse effects on water quality and human health. Concerns about greywater discharges were raised by Toi te Ora during the PC2 process relating to human contact with greywater discharges with laundry wastewater (faecal material).  There are two types of greywater. The difference is the presence of food scraps from the kitchen sink - food preparation and dishwashing entrains putrescible material into the wastewater. The treatment and disposal options are different for each type as follows;  1 No food scraps. The greywater should be irrigated as soon as possible after collection. This is to avoid the fats and oils going rancid within the collection tank creating the characteristic odour.  2 With food scraps. This greywater needs to be treated by retention in a septic tank. The principles from NZS 1547:2012 would require 24 hour storage plus an allowance for an eight hours hydraulic buffering plus an allowance for sludge and scum.	Rewrite to ensure adverse effects on water quality and human health are fully addressed.  Amend to comply with contemporary rule writing practice.  Carefully consider greywater conditions and correct errors in the current rule.  Consider separate rules or conditions for different types of greywater.
Rule 18 and 19 Pit latrines	The rules have largely been an effective and efficient means of	Rewrite to comply with contemporary

Summary of Rule For full version of rule, refer to the operative On-site Effluent Treatment Regional Plan	Assessment of effectiveness and efficiency	Recommendation
	addressing the adverse effects of pit latrines on water quality.	rule writing practice.  Consider making pit latrines more permitted in specific situations and in appropriate locations. Retain infrequent use and in remote areas (clarify 'remote').
Rule 20 OSET systems associated with expansion, altered or reconstructed dwelling	The rule is an efficient means of clearly identifying that OSET systems need to be upgraded if the design occupancy of the associated dwelling is expanded or altered.  However, the rule contains matters that should be policies, and is not written in accordance with Quality Planning guidelines.	Remove rule, but include specific requirements in permitted rules to require systems to be upgraded if design occupancy is increased.  Consider consolidating discretionary rules where appropriate.
Rule 21 Upgraded or replace OSET systems	The rule is an efficient means of clearly identifying that the upgrading or replacement of an OSET system needs to comply with the requirements of the Plan.  However, the rule contains matters that should be policies, and is not written in accordance with Quality Planning guidelines.	Remove rule, but include specific requirements in permitted rules to require upgraded systems to comply.  Consider consolidating discretionary rules where appropriate.
Rule 22 Septage to land	The rule overlaps with Rule 19 (permitted discharge of Grade AA biosolids to land) and Rule 37 (discretionary discharges) in the RWLP.	Remove, cross reference to relevant rules in the RWLP (Rule 19 – permitted, Rule 37 – discretionary)
Rule 23 Spray irrigation of wastewater effluent	The rule is an efficient means of clearly identifying that spray irrigation of wastewater is a high risk activity that is best to assess through a consent process.	Retain. Amend to comply with contemporary rule writing practice.
Rules 24 – 26 (inclusive) Papakāinga housing	The set of rules for OSET systems associated with Papakāinga housing is an effective and efficient means of providing for development on multiple-owned Māori land.  The rules are consistent with Policy IW 1B: Enabling development of multiple-owned Māori land in the RPS. However, there are no	Retain.  Extend rules to Eastern Bay and Rotorua areas, with appropriate consideration of the use of a Māori Housing Toolkit in these areas.

Summary of Rule	Assessment of effectiveness and efficiency	Recommendation
For full version of rule, refer to the operative On-site Effluent Treatment Regional Plan		
	equivalent provisions for Papakāinga housing outside the Tauranga and Western Bay districts. It is important to extend these provisions for the Eastern Bay and Rotorua due to the higher percentage of Māori population in these areas, and associated areas of multipleowned Māori land.	Amend for consistency with changes made to associated rules, and to comply with contemporary rule writing practice.

## **Appendix 4 – Assessment of anticipated environmental results**

Anticipated environmental result	Comment on progress	Summary of issues with AER	Achieved?
8.1 Water Quality 1	The majority of monitored river and lake bathing sites meet the Bathing Standard guidelines. As at 7 March 2016, there were five sites with Amber (potentially contaminated/potentially unsuitable) ratings:  Ngongotaha Stream at railway bridge Kaituna River at Trout Pool Lake Rotoehu (two sites) at Kennedy Bay and Otautu Arm Wairoa River at Bethlehem  Information source: <a href="http://www.boprc.govt.nz/environment/water/swimming-water-quality/">http://www.boprc.govt.nz/environment/water/swimming-water-quality/</a>	The AER is too generic for use for the management of on-site effluent treatment systems. Bathing suitability in the region is largely related to all activities in a catchment. It can only be linked directly to OSET systems where there are unreticulated communities. Of the 'Amber' sites, only Lake Rotoehu sites would have significant input from OSET systems.  This AER is duplicated within the RWLP and therefore achievement (or part achievements) can't be linked solely to the OSETP and therefore needs to be considered in the wider context.	Partly
8.1 Water Quality 2	Many of the streams in the catchment of Tauranga Harbour, do not meet their water quality classification standard in the RWLP. This is largely due to the effects of land use on water quality.  Water quality in streams with natural geothermal influences in the Rotorua area can be poor. Water quality in rivers and streams in the Eastern Bay is generally good, except for specific 'hot spots' such as Nukuhou and Tarawera.  Source:  Bay of Plenty Regional Council, 2011. Water Quality Classification Assessment – Rivers and Streams in the	The AER is too generic for use for the management of on-site effluent treatment systems. Water quality in streams and rivers in the region is largely related to all activities in a catchment. It can only be linked directly to OSET systems where there are unreticulated communities. Two of the Environmental Performance Indicators (temperature, suspended sediment) have no relation to OSET systems.  This AER is duplicated within the RWLP and therefore achievement (or part achievements) can't be linked solely to the OSETP, and needs to be considered in the wider context.	Partly

Anticipated environmental result	Comment on progress	Summary of issues with AER	Achieved?
	Bay of Plenty. Bay of Plenty Regional Council Environmental Publication 2011/07.	The AER will be superseded by Council's work to implement the National Policy Statement (NPS) Freshwater Management (2013), including the National Framework Objectives for water quality.	
8.1 Water Quality 3	The 2014/15 TLI shows two lakes are meeting or below their respective TLIs - lakes Ökaro and Rerewhaakitu. The remaining 10 Rotorua lakes are exceeding their TLIs.  Source: <a href="http://www.rotorualakes.co.nz/">http://www.rotorualakes.co.nz/</a>	The AER is too generic for use for the management of on-site effluent treatment systems. Water quality in lakes is largely related to all activities in a catchment. It can only be linked directly to OSET systems where there are unreticulated lake settlement communities that contribute a significant percentage of the total nutrients within a lake catchment. Achievement (or part achievements) can't be linked solely to the OSETP.  This AER is also duplicated within the RWLP and therefore needs to be considered wider than the OSET Plan.	Partly
8.1 Water Quality 4	Some estuarine sites in the Bay of Plenty show declining water quality trends while other sites show improvements linked to reduced impact from point source discharges. The complexity of estuaries and their sensitivity to stressors means that it is often difficult to assess their state and few appropriate guidelines are available.  Source:  Bay of Plenty Regional Council, 2015. NERMN Estuary Water Quality Report 2014. Bay of Plenty Regional Council Environmental Publication 2015/01	The AER is too generic for use for the management of on-site effluent treatment systems. Water quality in harbours, estuaries and the open coast is largely related to all activities in a catchment. It can only be linked directly to OSET systems where there are unreticulated communities.  This AER is duplicated within the RWLP and therefore achievement (or part achievements) can't be linked solely to the OSETP, and needs to be considered in the wider context.	Partly
8.1 Water Quality	Groundwater quality in the region generally does not	The AER is too generic for use for the	Unknown

Anticipated environmental result	Comment on progress	Summary of issues with AER	Achieved?
5	appear to be changing over time. Trend analysis found relatively few variables having statistically significant changes over time. However, this can be due to the limited frequency of sampling, total number of samples and data gaps which can inhibit the ability to identify trends.  Source:	management of on-site effluent treatment systems. Groundwater quality in the region is largely related to all activities in the catchment of an aquifer. It can only be linked directly to OSET systems where there are unreticulated communities. One of the Environmental Performance Indicators (saltwater or geothermal intrusion) has no relation to OSET systems.	
	Bay of Plenty Regional Council, 2013. NERMN Groundwater Monitoring Report. Bay of Plenty Regional Council Environmental Publication 2013/02	This AER is duplicated within the RWLP and therefore achievement (or part achievements) can't be linked solely to the OSETP, and needs to be considered in the wider context.	
8.1 Water Quality 6	<ul> <li>The water quality results for the Maintenance Zones listed in the AER are as follows:</li> <li>Information sources:</li> <li>Monitoring the impacts of on-site wastewater treatment systems, Bay of Plenty. May 2011.         Bay of Plenty Regional Council Environmental Publication 2011/05.</li> <li>Ongare Point Environmental Monitoring Update April 2014. Bay of Plenty Regional Council.</li> <li>Tanners Point Environmental Monitoring Update February 2012. Bay of Plenty Regional Council.</li> <li>Te Puna Environmental Monitoring Update January 2015. Bay of Plenty Regional Council.</li> <li>Ongare Point – information from monitoring update 2014:</li> <li>Monitoring of the Ongare Point discharges adjacent to the foreshore show contamination from septic tank effluent. These drains regularly exceed the Microbiological Water Quality Guidelines red action</li> </ul>	This AER specifically relates to those unreticulated communities that have originally had poor water quality results and have subsequently become Maintenance Zones. It is therefore recommended that this AER be retained within the new OSET Plan to ensure that adequate monitoring of specific communities continues. However, the AER needs to be updated in relation to any changes to Maintenance Zones in new OSET provisions (e.g. remove newly reticulated areas).	Unknown – more recent data is needed

Anticipated environmental result	Comment on progress	Summary of issues with AER	Achieved?
	mode, with most exceedances occurring at site 4, Potu drain. Swimming water quality is at times compromised at Ongare Point, usually as a result of rainfall runoff. While local drains will be adding to compromised swimming water quality, they are only a minor contributor, with most of the local contribution from the local rurally impacted stream and other nearby rivers.		
	Te Puna West <sup>3</sup> - information from monitoring update 2015:		
	Several drains show high bacterial contamination typical of poorly treated septic tank effluent. The highest bacterial contamination occurs on the western side of Te Puna where a number of dwellings are located on flat low lying land. Median <i>E.coli</i> levels above the microbiological water quality guideline (red action mode) occur in two of the drains on the east side and one on the west side. This is similar to results reported in 2006.		
	Several of these west side drains as well as two of the drains on the north side of the Waitui Reserve have elevated ammonium-nitrogen (NH4-N) concentrations. Drains on the eastern side have lower ammonium-nitrogen concentrations. Conversely, drains on the eastern side have higher nitrate-nitrite-nitrogen (NNN) concentrations than their western counterparts. Elevated phosphorus levels on the eastern side also indicate some potential effluent influence.		
	One of the main stormwater drains, the Waitui drain, has not only high indicator bacterial levels but also elevated nutrient levels, indicating contamination from on-site effluent treatment systems. Faecal		

<sup>&</sup>lt;sup>3</sup> As at May 2016, the Te Puna West Maintenance Zone is confirmed for reticulation by Western Bay of Plenty District Council.

Anticipated environmental result	Comment on progress	Summary of issues with AER	Achieved?
	contamination was high in 2002, 2003. This has returned to a more moderate contamination level in recent times, possibly due to septic system servicing, with the most recent samples being low, probably due to lower flows at time of sampling.		
	Tanners Point - information from monitoring update 2012:		
	The permanently flowing drain adjacent to the boat ramp at Tanners Point has been the most often sampled flow on the peninsula. The drain has faecal coliform and enterococci concentrations have on average been improving since 2007. <i>Median E.coli</i> levels have also been monitored and are for the same 2007-2011 period, well under the contact recreational limit of 550 cfu/100 ml (red alert mode, orange alert mode is E.coli > 280 cfu/100 ml).		
	NNN results are also high, indicating that septic tank contamination is likely to be occurring, but that much of the ammonium is being converted to NNN. High NNN results have also been found in the waters emanating from the sub-surface drains Ammonium-nitrogen and dissolved reactive phosphorous concentrations also have at times been at levels that suggest a contamination source.		
	Bathing surveillance monitoring undertaken at the boat ramp for this summer has only recorded one value over the microbiological water quality guidelines (2003) in eight seasons. This exceedance may have been the result of an illegal boat discharge, flow from the Tuapiro River or water fowl rather than a land based discharge from Tanner Point.		

Anticipated environmental result	Comment on progress	Summary of issues with AER	Achieved?
	Tarawera – information from 2011 report:		
	There continues to be localised evidence suggesting that septic tanks are causing some groundwater contamination. High nitrate, elevated faecal bacteria and conductivity around Tarapatiki Point and Rangiuru Bay have been intermittently found, however, bathing water quality remains good. Freshwater shellfish do indicate that faecal contamination is present adjacent to the lakeside community, although it is unclear if this contamination comes from septic tanks or other sources such as waterfowl. It is likely that the health risk to the community from septic tanks is low, but nutrient inputs will continue to be a potential issue for the lake.		
	Gisborne Point – information from 2011 report:		
	Monitoring at Gisborne Point indicates some contamination is occurring from septic tanks, but it is only detected at low levels in shallow groundwater and the near-lake environment.		
	Faecal bacteria levels in shellfish show some contamination is occurring but this may be sourced from waterfowl as well on-site wastewater systems.		
	Rotomā – information from 2011 report:		
	The water quality of Lake Rotomā adjacent to lakefront communities remains excellent, however, the lake has been showing signs of increasing nutrient loading. Reticulating septic tanks has been identified as one of the options to reduce nutrient input to the lake.		

Anticipated environmental result	Comment on progress	Summary of issues with AER	Achieved?
	Hinehopu – information from 2011 report:		
	Any faecal contamination arising from septic tank effluent from the Hinehopu community appears to have little effect on the bathing quality of the adjacent waters, but may affect shellfish. Two surface water inflows show low level contamination which is likely to emanate from on-site wastewater systems. Nutrient concentrations from surface inflows are at low levels compared to other Lake Rotoiti inflows.		
	Bryans Beach - information from 2011 report:		
	Small flows from the Bryans Beach community to the beach are occasionally contaminated with septic tank leachate at levels that may present a health risk. Flows are generally short lived disappearing into the porous sand dunes except during stormy periods when the stream discharges directly to the sea. Elevated contaminant levels often occur after moderate to high rainfall events and these periods pose the highest risk to human health.		
	Matatā is not currently a Maintenance Zone, as implied by the AER.		
8.1 Water Quality 7	Refer to 1 and 3 above.	Refer to 1 and 3 above.	
8.2 Performance of On-site effluent treatment systems 1	The percentage of approved OSET systems in each Maintenance Zones is not collected and reported.  Refer to comments in the column to the right.	Some information on the compliance of on-site effluent treatment systems in Maintenance Zones is collected in the septic tank database. However, this data is limited and not reported. Septic tank cleaners and inspectors assign the demerit points. Due to a lack of resources, there has been no quality control to check the assignment of demerit	Unknown

Anticipated environmental result	Comment on progress	Summary of issues with AER	Achieved?
		points.  A more accurate assessment of environmental performance is water quality monitoring results in the areas around unreticulated communities and Maintenance Zones, as per AER 8.1.6 above.	
8.2 Performance of On-site effluent treatment systems 2	It is assumed all resource consents for on-site effluent treatment systems have conditions that achieve compliance with the OSETP provisions.	<ul> <li>There are problems with this measure:</li> <li>There are no resources to audit all resource consents for on-site effluent treatment systems for compliance.</li> <li>Short term consents have been granted for OSET systems that do not comply with permitted activity requirements, in areas where reticulation is either planned or confirmed. This is to avoid undue expense to property owners in the short term.</li> <li>Performance of systems should comply with the requirements of the particular system, it is therefore unrealistic to anticipate a system would have an improved performance.</li> <li>Council's District Application process has identified situations where OSET upgrade is needed due to subdivision of land. Comments are made to this effect through the process. However, this process does not consider all subdivision applications. If resource consent is sought and granted for a particular system, provided it meets the requirements of that system, this should mean an improvement.</li> </ul>	Assume met
		A more accurate assessment of environmental performance is water quality monitoring results in the areas around unreticulated communities and Maintenance Zones as per AER 8.1.6.	

Anticipated environmental result	Comment on progress	Summary of issues with AER	Achieved?
8.2 Performance of On-site effluent treatment systems 3	Refer to 8.1 1, 2, 3, 4, 5 above	Refer to 8.1 1, 2, 3, 4, 5 above  Problems with this measure relate to the use of alternative means to improve water quality than solely compliance with the Plan. For example, water quality has improved for Tanners Point and Te Puna West. At Tanners Point, upgrades and improvements have been made to OSET systems, but the public toilets have also moved from a soak hole to better treatment and soakage. At Te Puna West, the public toilets have been upgraded to a holding tank (with no discharge to the environment).  It is rare to receive OSET-related complaints through the Pollution Hotline as generally only the property owner or occupier will be affected by a failing system. There is no data on the percentage of upgrades made across the region.  It is difficult to measure an improvement of the wastewater discharge of a permitted activity. Ensuring a system meets the requirements of a	Partly
8.3 Community Awareness of Environmental Issues	Bay of Plenty Regional Council has not carried out an attitudes and perceptions survey since 2010. Surveys were carried out in 2006 and 2010. Results from these	consent would mean it have no more than minor effect on the environment.  Bay of Plenty Regional Council no longer carries out perceptions surveys, so there is no recent data to measure the AER. "Increased community	Unknown
1	years show that in 2006, 4 % of respondents felt the cause of deterioration in the region's waterways was sewage/septic tanks, and in 2010 it was 3% of respondents.  A general assumption would be that only people in Maintenance Zones or other areas where reticulation is being investigated, would have an awareness of the	awareness" is a very low threshold to meet, therefore achieving the result does not necessarily indicate that the community is significantly more aware of environmental issues associated with management of on-site effluent treatment systems.	

Anticipated environmental result	Comment on progress	Summary of issues with AER	Achieved?
	environmental issues associated with OSET systems.  Council only has data on the number of upgrades to OSET systems in Maintenance Zones. Refer to 8.2 – 1 above for comment.		