



Rottnest Island Authority

Operational Audit and Asset Management System Review
Water Licence WL10
(potable and non-potable water, drainage and sewerage)

Report
Economic Regulation Authority
12 December 2017

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Limitations of this Report

This report was prepared for distribution to the Economic Regulation Authority and the Rottnest Island Authority for the purpose of fulfilling Rottnest Island Authority's operational audit and asset management system effectiveness review obligations under its Water Services Operating Licence. We disclaim any assumption of responsibility for any reliance on this report to any persons or users other than the Economic Regulation Authority and Rottnest Island Authority, or for any purpose other than that for which it was prepared.

Because of the inherent limitations of any internal control environment, it is possible that fraud, error or non-compliance may occur and not be detected. An audit is not designed to detect all instances of non-compliance with the procedures and controls over the licence obligations of the Water Services Operating Licence, since we do not examine all evidence and every transaction. The audit and review conclusions expressed in this report have been formed on this basis.

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1. Executive Summary

1.1 Background

The Rottnest Island Authority ('RIA') has a Water Services Operating Licence, issued by the Economic Regulation Authority ('ERA') under the *Water Services Act 2012 ('the Act')*, for the provision of **potable and non-potable water supply services, drainage services and sewerage services** in the Rottnest Island operating area.

The ERA engaged Quantum Management Consulting and Assurance ('Quantum') to undertake an operational audit and asset management system effectiveness review of the RIA's potable and non-potable water supply services, drainage services and sewerage services, to comply with the licensing requirements of the ERA.

Rottnest Island - one of Western Australia's premier recreation and holiday areas, is situated some 15 kilometres to the west of Fremantle. The Island is an A-Class Reserve governed by the Rottnest Island Act 1987 which establishes the RIA as a statutory body to control and manage the Island on behalf of the West Australian Government. The Island receives approximately half a million visitors annually – made up of day trippers and holiday makers, accommodated at three separate settlements and a camping area.

In 2016/17, there were 24 customers being commercial lessees on the Island

Rottnest Island's potable water source is supplied from a mix of bore fresh water extracted from shallow lens aquifers below the Island and saline water treated through a reverse osmosis process. The treated potable water is then reserved in a series of storage and header (pressure) tanks after being sterilised using chlorine gas, and reticulated to the settlements via a network of underground gravity pipeline infrastructure.

A system of reticulation sewers and pumping stations collects and conveys wastewater to the Waste Water Treatment Plant ('WWTP'). The WWTP has been recently upgraded to convert the plant from a Cyclic Activated Sludge System ('CASS') to a Membrane Bio Reactor ('MBR') system at a total cost of \$7.8 million. Sludge from the treatment process is transported to the mainland for disposal in accordance with the Department of Environment Regulation requirements. The high-quality treated wastewater leaving the plant is of a class suitable for re-use in non-potable water applications. The long-term proposition is to irrigate the Rottnest Island Golf Course.

The RIA has overall responsibility for the water services. The services are contracted to Programmed Facility Management ('PFM') who's management and field staff on the Island undertake the management, operation and maintenance of the water services, as set out in the Rottnest Island Facilities Utilities and Support Services Contract 2014 ('FUSS Contract').

The results of daily checks, details of maintenance undertaken, sampling, recording and reporting are recorded in the "Computerised Maintenance Management System" ('Maximo'). The results are signed off by appropriate PFM managers and relevant details provided to the RIA's Manager Major Contracts for information and/or action as appropriate.

The RIA is required to comply with the terms and conditions of their license. There were two versions of the Water Operating License WL10 in operation over the audit period from 1 July 2015 to 30 June 2017, as follows:

Version 7 (22 June 2015 to 30 June 2016); andVersion 8 (1 July 2016 onwards).

Version 8 contains amendments from the 2016 water licence review conducted by the ERA. Besides the re- numbering of licence obligations, the differences between the two versions are relatively minor.

Not less than once in every period of 24 months, the ERA requires an operational audit of compliance with the licence conditions and an effectiveness review of the asset management system to comply with the licensing requirements of the ERA. The previous operational audit and asset management system review covered the period from 1 July 2013 to 30 June 2015.

The audit and review approach is based on the compliance obligations set out in the Licence, applicable legislation, regulatory guidelines (Water Compliance Reporting Manual – 2016) and the Audit and Review Guidelines: Water Licences - 2014.

1.2 Operational Audit

This audit has been conducted to assess the licensee's level of compliance with the conditions of its licence.

Through the execution of the Audit Plan and assessment and testing of the control environment, the information system, control procedures and compliance attitude, the audit team members have gained reasonable assurance that the RIA has:

- a) complied with 134 applicable licence obligations during the audit period from 1 July 2015 to 30 June 2017 with 4 exceptions being:
 - i. 3 recommendations from the previous audit report in October 2015, where action has been taken but has not been fully completed, as follows:
 - upgrading the fire hydrant system on the Island to the minimum performance requirement prescribed in Australian Standard 2419.1 Fire Hydrant Installation Part 1 System Design, Installation and Commissioning, as recommended by the Department of Fire and Emergency Services;
 - further analysis and rationalisation of the scanning data for the below-ground assets needs to be completed, to minimise the risk of supply interruptions due to the possible failure of ageing in-ground water service assets; and
 - taking remedial action to reduce the risk of unplanned interruptions, including installing metering equipment to enable potable water flow and pressure to be measured and recorded to confirm the performance standards in the licence are being consistently achieved; and
- b) 1 new exception relating to the billing information provided to customers not including the RIA's website reference to the Customer Water Services Manual, specified information in respect of requesting meter readings, meter testing, review of a bill and the complaints procedure (as noted in the Customer Water Services Manual) and in some instances, the 24-hour telephone number for faults and emergencies;
- c) established an adequate control environment for ongoing compliance with the exception of the improvements noted above; and
- d) maintained the data integrity of reporting to the ERA.

1.3 Asset Management System Effectiveness Review

This review has been conducted to assess the effectiveness of the licensee's asset management system.

The assets are as described in section 3.1 with no major changes over the review period, apart from the upgrading of the wastewater treatment plant and the upgrading of the fire hydrant system.

Through the execution of the Review Plan and assessment and testing of the control environment, the information system, control procedures and compliance attitude, the audit team members have gained reasonable assurance that the RIA:

- a) has fully implemented 3 of the 5 previous review recommendations and partially implemented 2 recommendations, with the remaining activities being:
 - mapping the below-ground assets and completing condition assessments currently in progress; and
 - based on this information, developing the lifecycle costing model for the water and waste water service assets and updating the capital expenditure plans.
- b) has established an adequate control environment for ongoing compliance in respect of the asset management system. The review identified a number of improvements to the maintenance of the assets as part of the continuous improvement of the asset management system and controls. These opportunities for improvement include:

-) installing scour valves or washout assemblies in the lowest lying sections of the potable water mains;
- j improving the inspection and maintenance regimes of the water tanks;
- linking the new fire booster pumps to the remote communication system;
- clearer physical labelling of the tanks and other assets, including the safety requirements;
- review and risk assessment of the chlorine wash-down facilities;
- review and risk assessment of the physical security of key assets;
- implement the maintenance regimes for the upgraded wastewater treatment plant and the new fire booster pump system; and
- j improving version control of the planning documentation.

For the review period from 1 July 2015 to 30 June 2017, the potable and non-potable water, drainage and services under Water Services Licence WL10 are considered to be run with a professional and effective approach. There have been significant improvements in the asset management system including the planning, operations and maintenance of the facilities.

Overall, the water supply scheme and wastewater treatment system are assessed as being well established, well maintained and in good working order.

We confirm that the ERA's Audit and Review Guidelines: Water Licenses (July 2014) have been complied with in the conduct of this audit/review and the preparation of the report, and that the audit findings reflect our professional opinion.

Quantum Management Consulting & Assurance

Geoff White Director

12 December 2017

2. Operational Audit

2.1 Introduction

The Rottnest Island Authority (RIA) has a Water Services Operating Licence, issued by the Economic Regulation Authority ('ERA') under the *Water Services Act 2012 ('the Act')*, for the provision of **potable and non-potable water supply services, drainage services and sewerage services** in the Rottnest Island operating area.

The ERA engaged Quantum Management Consulting and Assurance ('Quantum') to undertake an operational audit and asset management system effectiveness review of the RIA's potable and non-potable water supply services, drainage services and sewerage services, to comply with the licensing requirements of the ERA.

The RIA is required to comply with the terms and conditions of their license. There were two versions of the Water Operating License WL10 in force over the audit period: Version 7 (22 June 2015 to 30 June 2016), and Version 8 (1 July 2016 onwards).

The audit approach is based on the compliance obligations set out in the Licence, applicable legislation, regulatory guidelines (Water Compliance Reporting Manual – 2016) and the Audit and Review Guidelines: Water Licences - July 2014.

2.2 Objectives and Scope

The objective of the audit was to provide an assessment of the effectiveness of measures taken by the licensee to meet the obligations referred to in the Licence.

The audit has applied a risk-based approach to focus on the systems and effectiveness of processes used to ensure compliance with the standards, outputs and outcomes required by the Licence. The approach is set out in a detailed Audit Plan approved by the ERA that was designed to focus on the higher risk areas with less intensive coverage of medium and low risk areas. *Refer Audit Approach in Appendix A*.

The scope of the audit included the adequacy and effectiveness of performance against the requirements of the licence by considering:

- **process compliance** the effectiveness of systems and procedures in place throughout the audit period, including the adequacy of internal controls;
- outcome compliance the actual performance against standards prescribed in the licence throughout the audit period;
- output compliance the existence of the output from systems and procedures throughout the audit period (that is, proper records exist to provide assurance that procedures are being consistently followed and controls are being maintained);
- integrity of reporting the completeness and accuracy of the compliance and performance reports provided to the ERA; and
- **compliance** with any individual licence conditions the requirements imposed on the specific licensee by the ERA or specific issues that are advised by the ERA.

The highest priority areas (priority 1, 2 or 3) based on inherent risk and previous findings were:

- Provision of water services in accordance with the licence high inherent risk and Type 1 reporting obligation (obligation 1).
- Asset Management System high inherent risk and previous review noted no separate asset management plan for water assets (obligation 6).
- Cut off water supply high inherent risk and Type 1 reporting obligation (obligation 21).
- Install fire hydrants previous review recommended fire hydrant upgrade (obligation 22).

Compliance with the service and performance standards - high inherent risk and previous issues (obligations 161 and 190).

The audit aimed to identify any areas where improvement is required and to recommend corrective action as necessary. The action taken on the previous audit recommendations was also reviewed.

The audit covered the period from 1 July 2015 to 30 June 2017.

2.3 Audit Compliance and Controls Rating Scale

The adequacy of controls and compliance with the legislative obligations was assessed using the following ratings.

А	dequacy of Controls Rating	Compliance Rating				
Rating	Description	Rating	Description			
А	Adequate controls – no improvement needed	1	Compliant			
В	Generally adequate controls – improvement needed	2	Non-compliant – minor impact on customers or third parties			
С	Inadequate controls – significant improvement required	3	Non-compliant – moderate impact on customers or third parties			
D	No controls evident	4	Non-compliant – major impact on customers or third parties			
NP	Not performed – no activity in current period	NR	Not rated – no activity in current period			

2.4 Status of Previous Audit Recommendations

The previous audit covered the period 1 July 2013 to 30 June 2015 and was reported in October 2015.

Table of Pre	Table of Previous Non-Compliances and Audit Recommendations										
Reference (no./year) Legislative Obligation¹/ Compliance Rating/ Details of issue		Auditor's Recommendation or Action Taken	Date Resolved	Further Action Required (if any) & Details (Including current recommendation ref. if applicable)							
A. Resolved be	efore end of previous audit			1							
	Nil										
B. Resolved du	uring current audit period										
01/2015 (6)	Asset Management System Water Services Act 2012 Sections 24(1)(a) and 24(2) Non-compliant – Moderate impact The licensee must have an asset management system that provides for the operation and maintenance of the water service works. This audit and review confirmed the licensee has an asset management system. However as noted in the Compliance Report for 2014/15 to the Authority, the Asset Management System requires updating to include a detailed Asset Management Plan for water assets for the next 5 year period and a detailed Asset Register. This work is expected to be completed in 2015/16.	As planned, the RIA should develop and implement an overall Asset Management Plan for potable water, non-potable water, drainage and sewerage. This should be integrated with the overall Strategic Asset Investment Plan and supporting policies, procedures and the Asset Register system.	September 2016	No further action required. The Strategic Asset Plan, now known as the Strategic Asset Management Plan (SAMP) is complete and has been endorsed by the RIA Executive. A Multi Utility Asset Management Plan (MUAMP) (v1 dated Dec. 2016) has been completed.							

¹ Legislative obligation/licence condition is as per the previous Audit and Review Report.

Table of Prev	Table of Previous Non-Compliances and Audit Recommendations										
Reference (no./year)	Legislative Obligation ¹ / Compliance Rating/ Details of issue	Auditor's Recommendation or Action Taken	Date Resolved	Further Action Required (if any) & Details (Including current recommendation ref. if applicable)							
02/2015	Changes to Asset Management System										
(7, 171)	Water Services Act 2012 Sections 24(1)(b) Licence condition clause 20.2 Not rated The auditor confirmed with RIA's Contracts and Project Officer, Programmed Facilities Management and field observations that no significant changes have been made to the Asset Management System (AMS) during the audit period. The requirement to notify the Authority of any material change to the AMS within 10 days of the change was previously included in the RIA's "Utilities Compliance Schedule". This schedule has been replaced by the "RIA Licence and Compliance Register" but the requirement to notify the Authority of changes to the AMS within 10 business days is not included.	The RIA should include in the RIA Licence and Compliance Register, the requirement to notify the Authority of any material change to the Asset Management System within 10 business days of the change.	October 2015	No further action required. This requirement is now included in the Licence and Compliance Register.							
05/2015	Information for Customers										
(92,119,153)	Water Services Act 2012 – Section 27 Licence conditions – Clause 5.1. and 5.3 Water Services Code of Conduct (Customer Service Standards) 2013 Clauses 7, 21(1), 37(1).	a) The RIA should revise the information in the previous Customer Service Charter to cover the requirements in the Water Services Code of Conduct (Customer Service Standards) 2013 and re-issue as a Customer Information Statement.	May 2016	No further action required. The Rottnest Island Water Customer Services Manual has been developed and was published on the RIA website on 31 May 2016. A hard copy of the Manual is available for							
(93,98,103,	Non-compliant – Minor impact Water Services Code of Conduct (Customer Service Standards) 2013	b) The RIA should provide on the website and in hardcopy upon request, a Customer Information Statement that includes the prescribed		customers and visitors at the Visitor Centre on Rottnest Island. This Manual replaces the previous Customer Service Charter and covers the							

Table of Prev	Table of Previous Non-Compliances and Audit Recommendations										
Reference (no./year)	Legislative Obligation ¹ / Compliance Rating/ Details of issue	Auditor's Recommendation or Action Taken	Date Resolved	Further Action Required (if any) & Details (Including current recommendation ref. if applicable)							
104,105,106, 107,108,109, 110,111,112, 113,121, 122, 123,124,137, 138,139,142, 144)	Clauses 8, 10.5, 13(1), 13(2), 14(1), 15, 16(2), 17(1), 17(2), 18(1), 22, 23(1), 24, 25, 31, 32, 33, 34(4), 34(6). Not rated (no activity in audit period) The licensee must have written information for customers about the specified matters. RIA's Customer Service Charter for Water Services was available on the website until June 2014. The Charter included some of the information required by the Water Services Code of Conduct (Customer Service Standards) 2013 including the licensee functions, how to apply for a connection and the period, etc. In the absence of this Charter, the written information for customers is not being provided and therefore this is a noncompliance. There is also additional information required to be provided to customers under the Code of Conduct as noted in this report. This includes: J Timeliness of connections J If an accurate meter reading is not possible, bill based on estimates Request for meter reading Discount policy if usage high due to leakage Procedures re overcharges and undercharges	information required by the Water Services Code of Conduct (Customer Service Standards) 2013.		requirements in the Water Services Code of Conduct (Customer Service Standards) 2013.							

Table of Prev	ious Non-Compliances and Audit Recomn	nendations		
Reference (no./year)	Legislative Obligation ¹ / Compliance Rating/ Details of issue	Auditor's Recommendation or Action Taken	Date Resolved	Further Action Required (if any) & Details (Including current recommendation ref. if applicable)
	Payment methods to include direct debit. Provisions if unable to pay by due date. Referral of complaints to the Energy and Water Ombudsman, etc.			
06/2015 (115-117, 147,148)	Complaints Procedures Water Services Act 2012 Section 27 Licence conditions – Clause 5.1, 5.3 Water Services Code of Conduct (Customer Service Standards) 2013 Clause 18(3) - (6), 35(3) - (4) Non-compliant – Minor impact The licensee's complaints procedure must provide for the matters specified in relation to lodgement of complaints, responding to complaints, dispute resolution arrangements and resolving complaints. The audit reviewed RIA's Utilities Customer Complaints Procedure and noted that the procedure covers how complaints are to be lodged and recorded, dispute resolution arrangements and time limits and methods for responding. There are some provisions that are not covered.	The RIA should update the Utilities Customer Complaints Procedure to: a) state that a customer may, but does not have to, use the complaints procedure before or instead of the procedures under the Act i.e. applying to the Energy and Water Ombudsman or making an appeal from, or applying for a review of, the decision to the State Administrative Tribunal; b) in addition to an option of applying to the Energy and Water Ombudsman, list the option of making an appeal from, or applying for a review of, the decision that gave rise to the complaint to the State Administrative Tribunal; and	October 2015	No further action required. The Utilities Customer Complaints Procedure and Forms have been updated and are available to customers on the Rottnest Island website.

Table of Prev	Table of Previous Non-Compliances and Audit Recommendations										
Reference (no./year)	Legislative Obligation ¹ / Compliance Rating/ Details of issue	Auditor's Recommendation or Action Taken	Date Resolved	Further Action Required (if any) & Details (Including current recommendation ref. if applicable)							
	The RIA's Utilities Customer Complaints Procedure does not inform the customer that they do not have to use the licensee's complaints procedure, provide details of procedures under the Act, and set out the costs and benefits to the customer if they use the complaint resolution procedure or instead of the procedures under the Act.	c) set out the benefits to the customer, in relation to time and costs, if the customer chooses to use the complaints procedure before or instead of the procedures under the Act i.e. Water Services Ombudsman or State Administrative Tribunal.									
08/2015 (164)	Advise Authority of Major or General Works Water Services Act 2012 Section 27 Licence conditions – Clause 15.1(d) Not rated The licensee must report to the Authority within 10 business days of providing or undertaking water service works that are major works or general works. The auditor confirmed with RIA's Contracts and Project Officer and review of the Asset Management System documentation and drawings that no additional major works or general works have been proposed, provided or undertaken by the licensee during the audit period. However, the requirement to notify the Authority of any material change to the asset management system within 10 business days of providing or undertaking water service	The RIA should include in the RIA Licence and Compliance Register, the requirement to notify the Authority of any major or general water service works within 10 business days of the change.	October 2015	No further action required. This requirement is now included in the Licence and Compliance Register.							

Table of Prev	vious Non-Compliances and Audit Recomn	nendations		
Reference (no./year)	Legislative Obligation ¹ / Compliance Rating/ Details of issue	Auditor's Recommendation or Action Taken	Date Resolved	Further Action Required (if any) & Details (Including current recommendation ref. if applicable)
	works that are major works or general works is not included in the "RIA Licence and Compliance Register".			
C. Unresolved	at end of current audit period			
03/2015 (16)	Interruption of Water Supplies Water Services Act 2012 Section 77(3) Non-compliant – Moderate impact The licensee must take reasonable steps to minimise the extent or duration of any interruption of water services it is responsible for. The 2013/14 Compliance Report to the Authority notes that there were 9 water pipe breaks that affected accommodation units on the Island. These included one break that affected 150 Kingstown visitors in April 2014 with water services being restored after 30 hours. Non-potable water and bottled drinking water was supplied to visitors. The 2014/15 Compliance Report stated there were 7 unplanned interruptions of which 5 affected customers, due to breakages or accidental damage from equipment. The RIA has undertaken localised potable reticulation repairs and improved detection of water leaks via a monitoring system for bulk meters. There is still a risk of unplanned interruptions due to the ageing infrastructure.	As planned, the RIA should continue remedial action to reduce the risk of unplanned interruption of potable water supplies, including localised potable reticulation repairs, investigation of acoustic leak detection systems, improved metering and commencement of a GPS survey of higher risk pipes	N/A	In progress MAXIMO has been implemented by RIA as the Asset Management System for all of the Island's assets. All above ground utility assets have been uploaded into MAXIMO with a preventative maintenance plan. All below ground assets have been mapped as part of a \$180,000 Board approved funding as stage 1 of a stage 2 process. The RIA is a self-funded agency. However, as a State asset subjected to Treasury guidelines, all capital works requests must be applied for in March each year. Urgent capital works can be requested but still subjected to Ministerial / EERC / Cabinet approval. The underground survey has been completed. The RIA has received Stage 1 documentation, incl. detailed underground services drawings and topographic surveys. Stage 1 of the development of a master suite of documents and drawings in relation to all utilities on the Island has been completed.

Table of Prev	Table of Previous Non-Compliances and Audit Recommendations										
Reference (no./year)	Legislative Obligation ¹ / Compliance Rating/ Details of issue	Date Resolved	Further Action Required (if any) & Details (Including current recommendation ref. if applicable)								
				Stage 2 (analysis and rationalisation of scanning data) is planned to be commenced in 2017/18, pending on operational funding approval. There is a rolling multi-year programme of capital works for improvements to potable water reticulation and storage. Recommendation 01/2017 As planned by the RIA, Stage 2 of the analysis and rationalisation of the scanning data for the below-ground assets should be completed.							
04/2015 (22) (23)	Fire Hydrants Water Services Act 2012 Section 96(1) Non-compliant – Moderate impact Water Services Act 2012 Section 96(5) Not rated If the licensee provides water supply reticulation works, or enters into an agreement for the provision of water supply reticulation works, the licensee must install fire hydrants attached to those works in accordance with the requirements of the Department of Fire and Emergency Services (DFES), or the relevant local government as to the location and type of hydrant. The licensee must comply with requests made under sections 96(3) and 96(4) of the Act to the extent practicable and within a reasonable time.	As planned and in conjunction with DFES, the RIA should upgrade the fire hydrant system to DFES standards.	N/A	In progress A new fire main and hydrant system from the View Hill Tank and new fire main along Parker Point Road has been installed, including the installation of 1.6 km of 200 mm hydrant main along Parker Point Road and a pump house. The Department of Fire and Emergency Services ('DFES') Built Environment Branch assessed pressure and flow testing of the new fire service system during April 2017. The findings of the assessment have now been rectified and the system meets the minimum flow and pressure requirements. DFES in their April 2017 report, recommended further extensions of the new fire main and the installation of 11 new fire hydrants.							

Table of Pre	Table of Previous Non-Compliances and Audit Recommendations										
Reference (no./year)	Legislative Obligation ¹ / Compliance Rating/ Details of issue	Auditor's Recommendation or Action Taken	Date Resolved	Further Action Required (if any) & Details (Including current recommendation ref. if applicable)							
	RIA's Contracts and Project Officer confirmed that fire hydrants are installed but do not meet DFES requirements as identified in a survey in 2012. The survey advised that the system's pressure is insufficient for a major fire event and also several hydrants have been shut off. There has also been no pressure testing for at least 5 years as this may damage the water mains. The RIA has advised there is an alternative response to fire events by use of bulk fire water tankers. It is outside the scope of this audit to assess the effectiveness of alternative responses. The RIA's Fire and Emergency Manager advised that no formal requests have been received from DFES or the City of Cockburn under the Act. The RIA's approved capital expenditure plan for 2015/16 includes new hydrants and a separate fire main pipeline using non-potable water, to address the issues with mains pressure for firefighting and to deliver a compliant system.			Recommendation 02/2017 As recommended by DFES, the fire hydrant system on the Island should be extended and 11 new fire hydrants installed to complete the upgrade of the fire hydrant system to the minimum performance requirement prescribed in Australian Standard 2419.1 Fire Hydrant Installation Part 1 System Design, Installation and Commissioning.							

Table of Previous Non-Compliances and Audit Recommendations										
Reference (no./year)	Legislative Obligation ¹ / Compliance Rating/ Details of issue	Auditor's Recommendation or Action Taken	Date Resolved	Further Action Required (if any) & Details (Including current recommendation ref. if applicable)						
07/2015 (161)	Assessment of Performance Standards – Pressure and Flow Testing Water Services Act 2012 – Section 27 Licence conditions – Clause 13.1 and Schedule 3 Not rated Individual performance standards regarding potable water system are set out in Schedule 3 of RIA's licence WL10 Version 7 dated 22 June 2015 and WL10 Version 6, dated 18 November 2013. The performance standards relate to the pressure and flow standards for potable water and conducting an annual desktop audit of the drainage scheme. As noted in the previous audit and in the Compliance Reports for 2013/14 and 2014/14 to the Authority, the RIA is unable to confirm that the potable water pressure and flow levels meet the minimum standards in the licence, as there are no pressure and flow measuring facilities. Installation of the equipment is to be considered in the 2015/16 capital works program. The RIA has advised that there	As planned, the RIA should consider installing pressure and flow testing measuring facilities to periodically test that the minimum standards per the Water Licence performance standards are being achieved.	N/A	In progress The RIA plans to install metering equipment to enable potable water flow and pressure to be recorded. Potable water flow meters are planned to be installed for the Bathurst, Caroline Thomson and Campground distribution network. Due to delays to the potable and fire hydrant main projects, the installation of potable water meters has been deferred to an October 2017 completion. Recommendation 03/2017 As planned, the RIA should install metering equipment to enable potable water flow and pressure to be recorded. Potable water flow meters are planned to be installed for the Bathurst, Caroline Thomson and Campground distribution network.						

2.5 **Summary of Audit Ratings of Controls and Compliance**

The audit assessment of the ratings for the adequacy of controls and compliance with the legislative obligations is shown below.

No.²		Legislative Reference	Audit Priority applied (rated 1 = High to 5 = Low)	Adequacy of Controls Rating³ (A=Adequate, B=Generally adequate, C=Inadequate, D=No controls, NP=Not performed)			Compliance Rating (1=Compliant 2=Non-compliant (minor impact), 3=Non-compliant – moderate impact, 4=Non-compliant - major impact, NR=Not rated)						
				А	В	С	D	NP	1	2	3	4	NR
	vices Act 2012		_	ı			T						
1	Nature of services	Sec. 21(1)(a)	2					N/A					N/A
2	Terms of service	Sec. 21(1)(b)	4					✓					✓
3	Provision of services	Sec. 21(1) (c)	4	✓					✓				
4	Operating area	Sec. 22	4					✓					✓
5	Outsourcing of services	Sec. 23	4	✓					✓				
6	Asset management system	Sec. 24(1)(a) & 24(2)	2	✓					✓				
7	Changes to asset management system	Sec. 24(1)(b)	4	✓									✓
8	Asset management system review	Sec. 24(1)(c)	4	✓					✓				
9	Operational audit	Sec. 25	4	✓					✓				
10	Code of Practice	Sec. 26(3)	4					✓					✓
11	Code of Conduct	Sec. 27	4	✓					✓				
12	Compliance generally	Sec. 29	4	✓						✓			
13	Termination of service	Sec. 36	4					✓					✓
14	Supplier of last resort	Sec. 24(1)(b)	4					N/A					N/A
15	Ombudsman scheme	Sec. 66	4	✓					✓				
16	Interruption of water supplies	Sec. 77(3)	4		✓					√			
17	Notification of building works	Sec. 84(4) & (5)	4					N/A					N/A
18	Ensuring water service works are done	Sec. 84(2)	4	✓									✓
19	Review of decisions	Sec. 87(2)	4	✓									✓
20	Construction near water service works	Sec. 90(7)	4					N/A					N/A
21	Termination of water supply	Sec. 95(3)	2	✓									✓
22	Fire hydrants	Sec. 96(1)	3		✓						✓		
23	Fire hydrant requests	Sec. 96(5)	4		✓								✓
24	Sewer connections	Sec. 98(3)	4					✓					✓
25	Compliance notice issued by licensee re not maintaining pipes	Sec. 106(2)	4					✓					✓
26-27	Drainage connections	Sec 110(3), 112(5)	4					N/A					N/A

 $^{^2}$ The number refers to the Obligation reference in the Water Compliance Reporting Manual, ERA 2016. 3 Refer Controls and Compliance Rating Scales in Section 2.3.

No.²		Legislative Reference	Audit Priority applied (rated 1 = High to 5 = Low)	ty Rating³ ed (A=Adequate, B=Gener adequate, C=Inadequate D=No controls, NP=Nw) performed)				enerally equate,	Compliance Rating (1=Compliant 2=Non-compliant (minor impact), 3=Non-compliant – moderate impact, 4=Non-compliant - major impact, NR=Not rated)			ninor iant – Non-	
				А	В	С	D	NP	1	2	3	4	NR
28	Compliance notice issued by licensee re building works	Sec. 119(2)	4					N/A					N/A
29	Review of decisions	Sec. 122(2)	4					N/A					N/A
30	Apportionment of fees between properties	Sec. 125(2)	4					✓					<
31	Lodging memorial to secure fees owing	Sec. 128(4)	4					N/A					N/A
32	Notice to property owner - entry	Sec. 129(5)	4	✓									✓
33	Notice to property owner – removal of fence	Sec. 139(3)	4					N/A					N/A
34	Notice to roads authority	Sec. 141(1)	4	✓									✓
35-39	Proposal for major works	Sec. 142, 143(2) &(3), 144(3), 45(2),	4	✓									✓
40-41	Proposal for general works – Minister notices	Sec. 147(3) & (4)	4					N/A					N/A
42-45	Proposal for general works	Sec. 151(1) - (3), 153(3),	4					N/A					N/A
46-48	Interest in land	Sec. 166(5) - (6), 170	4					N/A					N/A
49-57	Notice of entry to property and authority to enter	Sec. 173 (4) 174 (1) & (4), 175(2) & (5), 176(1), (3) & (4) 181	4					N/A					N/A
58-61	Warrant to enter property	Sec. 186, 187(1) - (3), 190(4) - (5), 210(5), 218(2) - (3).	4					N/A					N/A
62	Compliance Officer	Sec. 210(5)	4	✓									✓
63	Minimum disruption	Sec. 218(2)	4	✓									✓
64	Physical damage	Sec. 218(3)	4	✓									✓
Water Ser	vices Regulations 2013										,		
65 - 68	Meter testing and compliance	Reg. 23(2), 24(4), 26(3), 26(5)	4	✓									✓
69	Lot development	Reg. 29(2)	4					N/A					N/A
70 - 72	Backflow prevention devices	Reg. 42(2), 43(3), 43(6).	4	✓									√
73	Drainage services (to 13 December 2016 only)	Reg. 53(3)	4	✓									√
74 - 75	Work affecting roads	Reg. 60(2), 63	4					N/A					N/A
76 - 77	Water service charges – land records (only to 13 Dec. 2016)	Reg. 65(1), 65(2)	4	✓					✓				
78 - 87	Water service charges (only to 13 Dec. 2016)	Reg. 65(4), 67 to 74 (2)	4	✓									✓

No.²		Legislative Reference	Audit Priority applied (rated 1 = High to 5 = Low)	Adequacy of Controls Rating³ (A=Adequate, B=Generally adequate, C=Inadequate, D=No controls, NP=Not performed) A B C D NP				enerally equate, P=Not	Compliance Rating (1=Compliant 2=Non-compliant (minor impact), 3=Non-compliant – moderate impact, 4=Non-compliant - major impact, NR=Not rated) 1 2 3 4 NR				
88	Water service charges - liability (only to 13 Dec. 2016)	Reg. 75(1)	4	✓				141	✓		3	7	TWI C
89	Compliance notice issued by licensee to include consequences and rights	Reg. 85	4					N/A					N/A
90-91	Applicable only to "water corporations"		4					N/A					N/A
Water Serv	vices Code of Conduct (Custo	mer Service Standa	ards) 2013			•						<u> </u>	
92	Information for customers	CI. 7	4	✓					✓				
93	Timeliness of connections	CI. 8	4	✓									✓
94	Annual service charges	Cl. 9	4	✓					✓				
95-96	Usage bills at least 6 monthly	Cl.10(2) - (5)	4	✓					✓				
97	Estimated Bill of Usage - Regulation	Cl. 10(4)	4					N/A					N/A
98	Estimated Bill of Usage	Cl. 10(5)	4	✓									✓
99	Address for billing	Cl. 11	4	✓					✓				
100	Billing information	Cl. 12(1)	4		✓					✓			
101	Billing information - usage	Cl. 12(2)	4	✓					✓				
102	Billing information -further information	Cl. 12(3)	4	✓						√			
103-104	Basic of billing estimate	Cl. 13(1) & (2)	4	✓									✓
105	Request for meter reading	Cl. 14(1)	4	✓									✓
106	Higher than normal charge	Cl. 15	4	✓					✓				
107-112	Under and over charges	Cl. 16(2) - (5), 17(1)-(2)	4	✓									✓
113	Review of bill upon request	Cl. 18(1)	4	✓					✓				
114	Review of bill procedure – written procedure	Cl. 18(2)	4	✓					✓				
115-117	Review of bill procedure – options and timeframe	Cl. 18(3) - (6)	4	✓					✓				
118	At least 14 days for payment	CI 20	4	✓					✓				
119	Payment methods - options	Cl. 21(1)	4	✓					✓				
120	Payment methods - fees	Cl. 21(2)	4	✓									✓
121	Payment methods- direct debit authority	Cl. 22	4	✓					✓				
122	Payment in advance	Cl. 23(1)	4	✓					✓				
123	Redirection of bills	Cl. 24	4	✓					✓				
124	Payment plan	Cl. 25	4	✓									✓
125-128	Financial hardship policy	Cl. 26(1) - (5)	4					N/A					N/A
129	Financial hardship policy - review	Cl. 26(6)	4					N/A					N/A
130-131	Financial hardship – payment variations	Cl. 27(2) - (3)	4					N/A					N/A
132	Payment plan – in writing	Cl. 28(1)	4	✓									✓

No.²		Legislative Reference	Audit Priority applied (rated 1 = High to 5 = Low)	(A=Adequate, B=General adequate, C=Inadequate D=No controls, NP=Not performed)			enerally equate, P=Not	Compliance Rating (1=Compliant 2=Non-compliant (minor impact), 3=Non-compliant – moderate impact, 4=Non-compliant - major impact, NR=Not rated)				ninor liant – Non-	
133	Payment arrangements –	Cl. 28 (4) & (5)	4	A	В	С	D	NP	1	2	3	4	NR ✓
134	written information Debt recovery	Cl. 29	4	√									√
135-136	Restoration of drinking water supply	Cl. 30(1) & (2)	4	✓									✓
137-139	Reducing flow rates	Cl. 31, 32, 33,	4	√									✓
140-141 143	Applicable only to "water corporations"		4					N/A					N/A
142	Timeframe to restore service	Cl. 34(4)	4	✓									√
144	Timeframe to restore service – compliance rate	Cl. 34(6)	4	✓					✓				
145-146	Complaints procedure - written	Cl. 35(1) - (2)	4	✓					✓				
147-148	Complaints procedure - details	Cl. 35(3), (4)	4	✓					✓				
149	Complaints procedure publicly available	Cl. 35(6)	4	✓					✓				
150,151	No charge for information	Cl. 36(1)	4	✓									✓
152	Access to customer information	Cl. 36(2)	4	✓									✓
153	All Code of Conduct information to be publicly available in hardcopy and website	Cl. 37(1)	4	✓					✓				
154	Bill information	Notes Cl. 12 (Cl 37(2))	4	✓					✓				
Licence C	onditions - Specific Clauses						ı						
155	Fees to regulator	Cl. 4	5	✓					✓				
156	Compliance with legislation	Cl. 5.1	4	✓						✓			
157	Compliance with Code of Practice	Cl. 5.2	4					N/A					N/A
158	Compliance with Code of Conduct	Cl. 5.3	4	✓						✓			
159	Compliance re any breaches	Cl. 5.4	4					✓					✓
160	Compliance with Accounting Standards	Cl. 12	4	✓					✓				
161	Compliance with performance standards	Cl. 13.1	2			✓				✓			
162	Operational audit	Cl. 14.4	4	✓					✓				
163	External administration	Cl. 15.1(a)-(c)	4					✓					✓
164	Advise Authority of major or general works	Cl. 15.1(d)	4	✓									✓
165	Provision of information to the ERA	Cl. 16.1	4	✓					✓				
166	Compliance reporting to Authority	Cl. 16.1	4	✓					✓				
167	Performance reporting to Authority	Cl. 16.3	4	✓					✓				

No.²		Legislative Reference	Audit Priority applied (rated 1 = High to 5 = Low)	(A=Adequate, B=Genera adequate, C=Inadequat D=No controls, NP=No performed)			enerally equate,	Compliance Rating (1=Compliant 2=Non-compliant (minor impact), 3=Non-compliant – moderate impact, 4=Non-compliant - major impact, NR=Not rated)				ninor iant – Non-	
				Α	В	С	D	NP	1	2	3	4	NR
168	Publishing information	Cl. 17.2	4					✓					✓
169	Notices in writing	Cl. 18.1	4	✓					✓				
170	Notify Authority of asset management system (AMS)	Cl. 20.1 (applies to 30/6/2016)	4	✓					✓				
171	Notify Authority of material change to AMS	Cl. 20.2	4	✓									✓
172	AMS review	Cl. 20.6	4	✓					✓				
173	Ombudsman scheme	Cl. 21.1	4	✓					✓				
174	Customer contract – standard terms	Cl. 22.1	4					✓					✓
175-180	Customer contract approval and amendment	Cl. 23.1-23.3, 23.6, 24.1-2 24.4.	4					✓					✓
181	Obligations of supplier of last resort	Cl. 25.1	4					N/A					N/A
182	No services outside operating area	Cl. 28.1(b)	4					N/A					N/A
183	Financial hardship policy guidelines	Cl. 30.3	4					N/A					N/A
184	MOU with Department of Health	Cl. 31.1	4	✓					✓				
185	MOU – legal and audits	Cl. 31.2	4	✓					✓				
186	MOU – compliance	Cl. 31.3	4	✓					✓				
187	MOU – publishing	Cl. 31.4	4	✓					✓				
188	MOU – publish audit report	Cl. 31.5	4	✓								İ	✓
189	MOU – publish other reports	Cl. 31.6	4	✓					✓				
190	Service and performance standards (if applicable)	Schedule 3	2			✓				✓			

2.6 **Detailed Audit Observations**

No⁴	Operating Area	Legislative Reference	Description	Audit Priority	Systems, Processes, Controls in Place to Comply with Licence (including any recommendations)	Adequacy of Controls Rating ⁵	Compliance Rating ⁶
Wate	r Services Act 2	012					
1.	Nature of services	Section 21(1)(a)	The licensee must provide a water service authorised by the licence to persons entitled to the service under the Act, except to the extent otherwise provided for by the Act.	_	Section 21(1)(a) only applies to "persons entitled to the service under the <i>Water Services Act 2012</i> . Section 73 of the Act sets out which persons are entitled to water services (also see the note under section 21, which refers to section 73). Section 73 provides "the owner of land in respect of which statutory water service charges apply for the provision of a water service by a licensee is entitled to the provision of the water service". "Statutory water service charge" is defined in section 71 as "a water service charge payable under the regulations". There are currently no regulations made under the <i>Water Services Act 2012</i> which prescribe charges which must be paid by land owners to the RIA. As neither the RIA or customers are "owners" of the land, this obligation does not apply to this licence.	N/A	N/A
2.		Section 21(1)(b)	The licensee must offer to provide a water service on reasonable terms, unless provision of the service is not financially viable or is otherwise not practicable, to persons within the operating area who are not entitled to the service under the Act.	·	The auditor confirmed with RIA's Contracts and Project Officer that services are available for connection on any land in the Operating Area subject to compliance with RIA's conditions. There were no requests for connection in the audit period.	NP	NR

⁴ Number refers to the Obligation reference in the Water Compliance Reporting Manual, Authority 2016.

⁵ Controls Rating Scale: A=Adequate, B=Generally adequate, C=Inadequate, D=No controls, NP=Not performed.

⁶ Compliance Rating Scale: 1=Compliant, 2=Non-compliant (minor impact), 3=Non-compliant – moderate impact, 4=Non-compliant - major impact, NR=Not rated.

No ⁴	Operating Area	Legislative Reference	Description	Audit Priority	Systems, Processes, Controls in Place to Comply with Licence (including any recommendations)	Adequacy of Controls Rating ⁵	Compliance Rating ⁶
3.		Section 21(1)(c)	The licensee must provide, operate and maintain the water service works specified by the ERA in the licence.	4	Confirmed by this audit and review.	А	1
4.	Operating area	Section 22	The licensee must notify the ERA as soon as practicable before commencing to provide the water service outside of the operating area of the license.	4	The auditor confirmed with the Island Engineer and field observation that the licensee does not provide a water service outside of the operating areas set out in Plan Number: OWR-OA-189.	NP	NR
5.	Outsourcing of services	Section 23	All water service works used by the licensee in the provision of a water service must be held by the licensee, or must be covered by an agreement whereby the licensee can operate the works so as to comply with its obligations, or must fit in to other prescribed categories under the Act.		The auditor confirmed that the water service assets are held and managed by the RIA. The operation and maintenance of the water facilities is outsourced to Programmed Facilities Management Pty Ltd (PFM) via the Facilities and Support Services (FUSS) Contract. Sighted contract and confirmed they cover the water service works.	A	1
6.	Asset management system	Sections 24(1)(a) & 24(2)	The licensee must have an asset management system that provides for the operation and maintenance of the water service works.	2	This audit and review confirmed the licensee has an asset management system (AMS).	A	1
7.	Changes to asset management system	Section 24(1)(b)	The licensee must give details of the asset management system and any changes to it to the ERA.	4	The auditor confirmed with the RIA's Contracts & Project Officer and field observations that no significant changes have been made to the Asset Management System (AMS) during the audit period. The requirement to notify the ERA of any material change to the AMS within 10 days of the change is included in the RIA's Licence and Compliance	A	NR
8.	Asset management system review	Section 24(1)(c)	A licensee must provide the ERA with a report by an independent expert as to the effectiveness of its asset management system every 24 months, or such longer period as determined by the ERA.	4	Register which has a detailed list of all compliance obligations under the Licence. This review is being undertaken as required by the ERA.	A	1

No ⁴	Operating Area	Legislative Reference	Description	Audit Priority	Systems, Processes, Controls in Place to Comply with Licence (including any recommendations)	Adequacy of Controls Rating ⁵	Compliance Rating ⁶
9.	Operational audit	Section 25	A licensee must, not less than once every 24 months, or such longer period as determined by the ERA, provide the ERA with an operational audit conducted by an independent expert acceptable to the ERA.		This audit is being undertaken as required by the ERA.	A	1
10.	Code of Practice	Section 26(3)	The licensee must comply with each code of practice made by the Minister to the extent to which it applies to the licensee.		No Codes of Practice have been issued by the Minister.	NP	NR
11.	Code of Conduct	Section 27	The licensee must comply with the code of conduct that may be made by the ERA to the extent to which it applies to the licensee and is not inconsistent with the licence.	•	The auditor reviewed compliance with the Water Services Code of Conduct (Customer Service Standards) 2013 as per obligations listed in this audit report, and concluded that the RIA complies with the Code of Conduct.	A	1
12.	Compliance	Section 29	The licensee must comply with the duties imposed on it by the Act in relation to its licence and must carry out its operations in respect of the licence in accordance with the Act.	•	The auditor reviewed compliance with the Water Services Act 2012, Water Services Regulations 2013 and the Water Services Code of Conduct (Customer Service Standards) 2013 as per obligations listed in this audit report and concluded that the RIA complies with the obligations with the exception of 3 obligations where action is still in progress from the previous audit and one new minor non-compliance.	A	2

No ⁴	Operating Area	Legislative Reference	Description	Audit Priority	Systems, Processes, Controls in Place to Comply with Licence (including any recommendations)	Adequacy of Controls Rating ⁵	Compliance Rating ⁶
					The Compliance Reports provided to the ERA for 2015/16 and 2016/17 note the non-compliances as reported in the 2015 Audit & Review Report (refer action taken as noted in Section 2.3 above). Three recommendations have not been fully implemented at the date of this audit. One new issue was noted re billing information not including all of the "prescribed information (obligation 100 and 102).		
13.	Termination of service	Section 36	If the licensee ceases to provide a water service in an area, the licensee must ensure that the water service works are left in a safe condition, and must not remove any part of the works except with the approval of the Minister.		The auditor confirmed with the RIA's Contracts & Project Officer and field observation that the licensee didn't cease to provide a water service in the area.	NP	NR
14.	Supplier of last resort	Section 60	If the licensee is the supplier of last resort for a designated area, the licensee must perform the functions of the supplier of last resort and must comply with the relevant duties and carry out the relevant operations prescribed.		Confirmed with the RIA's Contracts & Project Officer that the licensee is not a supplier of last resort.	N/A	N/A
15.	Ombudsman scheme	Section 66	Licensees who are required to be a member of the water services ombudsman scheme agree to be bound by, and compliant with, any decision of direction of the water services ombudsman under the scheme.	4	Confirmed by review of correspondence between the licensee and the Energy and Water Ombudsman (WA) Limited that the licensee is a member of the Water Services Ombudsman scheme.	A	1
16.	Interruption of water supplies	Section 77(3)	The licensee must take reasonable steps to minimise the extent or duration of any interruption of water services it is responsible for.		The Performance Report provided to the ERA for 2015/16 reports that there were 7 unplanned interruptions to potable water supply with an average duration of 111 minutes. The 2016/17 report states there were no interruptions to the water supply. The audit concluded that	В	2

No ⁴	Operating Area	Legislative Reference	Description	Audit Priority	Systems, Processes, Controls in Place to Comply with Licence (including any recommendations)	Adequacy of Controls Rating ⁵	Compliance Rating ⁶
					"reasonable steps" are being taken and further works are planned to minimise the risk of interruption of water services. Recommendation 01/2017 As planned by the RIA, Stage 2 of the analysis and rationalisation of the scanning data for the belowground assets should be completed.		
17.	Notification of building works	Sections 82(4) & (5)	If a person must give the licensee notice of any building work to be carried out on land in the operating area of a license, the licensee must return a copy of the plans and specifications contained in the notice with any written directions about the proposed building work that the licensee considers necessary to ensure the safety and efficacy of the provision of water services provided, or to be provided. The licensee must do this within 7 days of receiving the fee for dealing with the notification.	·	PFM advised that any building work on the Island requires approval from the RIA which is the owner of all properties. The auditor sighted the procedure for "Requests to Undertake Ground Disturbance" from a contractor which requires various approvals from RIA officers (environment, heritage, etc.) and the Major Contracts Manager. This is an internal procedure of RIA. There is no legislative requirement for a person to give the RIA notice of any building work as all work is contracted by the RIA as the licensee, therefore this requirement is not applicable.	N/A	N/A
18.	Additional Water Services - Ensuring water service works are done	Section 84(2)	If the licensee has given a notice under section 83(3)(a) of the Act, and the licensee is satisfied that the person given the notice is not going to comply with the notice within a reasonable time, the licensee must give the person 21 days' notice of its intention to commence the works.	4	The auditor confirmed with the RIA's Contracts & Project Officer that no notices were given in the audit period for any additional water service works.	A	NR

No ⁴	Operating Area	Legislative Reference	Description	Audit Priority	Systems, Processes, Controls in Place to Comply with Licence (including any recommendations)	Adequacy of Controls Rating ⁵	Compliance Rating ⁶
19.	Review of decisions (Additional Water Services - Ensuring water service works are done)	Section 87(2)	If a person makes an application with the State Administrative Tribunal for a review of a decision in respect of the licensee providing additional water services when a person has not responded to the licensee's notice, the licensee cannot provide the works until the application has been finally dealt with, except in limited circumstances.	4	As per Obligation 18 above.	A	NR
20.	Construction near water service works	Section 90(7)	If the licensee gives a compliance notice to a person who is undertaking construction or carrying out similar works in the vicinity of water service works, the licensee must, to the extent practicable, consult with the owner of the land on which the obstruction is located or the activity is taking place if the person to be given the notice is not the owner of the land.	4	There is no legislative requirement for a person to give the RIA notice of any building work as all work is contracted by the RIA as the licensee, therefore this requirement is not applicable.	N/A	N/A
21.	Termination of water supply	Section 95(3)	The licensee cannot cut off the supply of water to an occupied dwelling unless the occupier agrees to that.	2	The auditor confirmed with the RIA's Contracts & Project Officer and the Property Manager that, during the audit period, the licensee did not cut off the supply of water to any occupied dwelling. The policy is to not cut off the water supply. The town's residents are not billed for any water services.	A	NR
22.	Fire hydrants	Section 96(1)	If the licensee provides water supply reticulation works, or enters into an agreement for the provision of water supply reticulation works, the licensee must install fire hydrants attached to those works in accordance with the requirements of the Department of Fire and Emergency Services (DFES), or the relevant local government as to the location and type of hydrant.	2	A new fire main and hydrant system from the View Hill Tank and new fire main along Parker Point Road has been installed, including the installation of 1.6 km of 200 mm hydrant main along Parker Point Road and a pump house. The Department of Fire and Emergency Services (Built Environment Branch) assessed pressure and flow testing of the new fire service system during April 2017. The Manager Major Projects advised that the findings of the assessment have now been	В	3

No⁴	Operating Area	Legislative Reference	Description	Audit Priority	Systems, Processes, Controls in Place to Comply with Licence (including any recommendations)	Adequacy of Controls Rating ⁵	Compliance Rating ⁶
					rectified and the system meets the minimum flow and pressure requirements. DFES in their April 2017 report, also recommended further extensions of the new fire main and the installation of 11 new fire hydrants. The report stated: "This will assist firefighters by providing better hydrant coverage to existing major Island infrastructure: — Marina — Café, restaurants, Shopping centre — Accommodation — Historical Building". Recommendation 02/2017 As recommended by DFES, the fire hydrant system on the Island should be extended and 11 new fire hydrants installed to complete the upgrade of the fire hydrant system to the minimum performance requirement prescribed in Australian Standard 2419.1 Fire Hydrant Installation Part 1 System Design, Installation and Commissioning.		
					The RIA's Manager Major Projects advised that no formal requests have been received from DFES or the local government authority.		
23.		Section 96(5)	The licensee must comply with requests made under sections 96(3) and 96(4) of the Act to the extent practicable and within a reasonable time.	2	The RIA's Manager Major Projects advised that no formal requests have been received from DFES or the local government authority. However, as noted in Obligation 22 above, DFES has recommended further upgrades of the fire hydrant system. Refer recommendation 02/2017	В	NR

No ⁴	Operating Area	Legislative Reference	Description	Audit Priority	Systems, Processes, Controls in Place to Comply with Licence (including any recommendations)	Adequacy of Controls Rating ⁵	Compliance Rating ⁶
24.	Minister may require connection to sewer works	Section 98(3)	If required to by the Minister, the licensee must connect a wastewater inlet on land to the sewerage works of the licensee.	4	The auditor confirmed with the RIA's Contracts & Project Officer that, during the audit period, no written notice requiring connection to the Island's sewerage works has been received from the Minister.	NP	NR
25.	Discharge of Trade Waste - Compliance notice issued by Licensee	Section 106(2)	The licensee must include the information specified in a compliance notice given in relation to failure to maintain fittings, fixtures and pipes.	4	The auditor confirmed with the RIA's Contracts & Project Officer and the Major Contracts Manager, there is no trade waste discharged to the scheme i.e. wastewater other than wastewater of the kind and volume ordinarily discharged from an ordinary dwelling used solely or primarily as the dwelling of the occupants.	NP	NR
26	Drainage connections	Section 110(3)	If required by the Minister, the licensee must connect a drainage asset on land to the drainage works of the licensee.	4	The auditor confirmed with the RIA's Contracts & Project Officer and the Major Contracts Manager that there have been no requests from the Minister and this would not apply as the Island is an A-Class Reserve.	N/A	N/A
27		Section 112(5)	If required by the Minister, the licensee must modify the property drainage connection.	4	As per Obligation 26.	N/A	N/A
28.	Compliance notice issued by Licensee	Section 119(2)	The licensee must include the information specified in a compliance notice given in relation to the matters set out in section 119(1).	4	The auditor confirmed with the RIA's Contracts & Project Officer and the Major Contracts Manager that all construction is managed by the RIA or contracted to PFM, so no compliance notices would be issued.	N/A	N/A
29.	Review of decisions relating to giving compliance notices	Section 122(2)	If a person makes an application to the State Administrative Tribunal under section 122(1), the licensee cannot take, or continue to take, action against the person except in the circumstances specified.	4	As per Obligation 28.	N/A	N/A

No ⁴	Operating Area	Legislative Reference	Description	Audit Priority	Systems, Processes, Controls in Place to Comply with Licence (including any recommendations)	Adequacy of Controls Rating ⁵	Compliance Rating ⁶
30.	Apportionment of fees between properties	Section 125(2)	If the licensee provides a water supply, sewerage or drainage service to 2 or more dwellings on land by a single property connection, the licensee may apportion fees. The licensee cannot apportion fees to the extent inconsistent with any agreement related to such a provision of services, or section 66 of the <i>Strata Titles Act 1985</i> .		The auditor confirmed with the RIA's Contracts & Project Officer and the Property Manager that no fees are apportioned between any lessees. If fees were to be apportioned, it would only be in accordance with the lease agreement.	NP	NR
31.	Lodging memorial to secure fees owing	Section 128(4)	If the licensee has previously lodged a memorial with the Registrar, the licensee must lodge a withdrawal of memorial with Registrar along with the prescribed fee (if any) if the charge or contribution has been paid.		The RIA's Contracts & Project Officer advised that as the customers are all commercial lessees, no memorials would be lodged.	N/A	N/A
32.	Notice to property owner	Section 129(5)	If a routine inspection or maintenance is likely to cause disruption to the occupants of a place at least 48 hours' notice of a proposed entry must be given to the occupier of the place unless the occupier agrees otherwise.	4	The auditor confirmed with RIA's Contracts and Project Officer that, during the audit period, no routine maintenance of the water service works was undertaken that would require entry to occupied premises or likely to cause disruption to the occupants of a place.	A	NR
33.		Section 139(3)	If the licensee removes or erects a fence or gate when exercising a works power conferred by the Act, the licensee must take all reasonable steps to notify the owner before doing so.	4	As the RIA is the owner of all properties on the Island, this section is not applicable.	N/A	N/A
34.	Notice to roads authority	Section 141(1)	In certain instances, if a person authorised by the licensee carries out road work that involves breaking the surface of the road or that would cause major obstruction to road traffic, the licensee must give at least 48 hours' notice to the public authority managing the road.	·	As the roads on the Island are managed by the RIA and there are only authorised vehicles on the Island (contractors or commercial lessees), this section is not rated for this audit period.	A	NR

No ⁴	Operating Area	Legislative Reference	Description	Audit Priority	Systems, Processes, Controls in Place to Comply with Licence (including any recommendations)	Adequacy of Controls Rating ⁵	Compliance Rating ⁶
35.	Proposals for major works (includes water treatment plant over 10ML, WWTP with capacity over 2ML per day, dams, irrigation schemes, etc.)	Sections 142	The licensee must comply with sections 143 and 144 of the Act in relation to the proposed major works, and has given any notice required under section 148.	4	The auditor confirmed by interview with PFM and review of the Asset Management System documentation that no "major works" have been proposed or completed during the audit period. The main asset changes of upgrading the wastewater treatment plant with new membrane technology and upgrading the fire hydrant system do not constitute "major works" as defined in Section 133 of the Water Services Act 2012. The auditor confirmed that any major water works would include obtaining regulatory approvals and giving notice to the community and stakeholders as part of the Rottnest Island Management Plan and the RIA's Development Policy and Guidelines.	A	NR
36.		Sections 143 (2)	Before the licensee submits a proposal for the provision of major works to the Minister, the licensee must prepare, publish and make available plans and details of those major works as specified.	4	As per Obligation 35.	А	NR
37.		Sections 143 (3)	The licensee must, within 5 days of publishing the plans and details on the licensee's website, give notice setting out the matters prescribed in section 143(4) to the persons and agencies specified.	4	As per Obligation 35.	А	NR
38.		Sections 144(3)	The licensee must have regard to an objection or submission lodged within the relevant period.	4	As per Obligation 35.	А	NR
39.		Section 145(2)	If the licensee makes alterations to the plans or details referred to in section 143(2), the licensee must give written notice of the alterations to any person who is likely to be adversely affected by those alterations.	4	As per Obligation 35.	A	NR

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40.		Section 147(3)	The licensee must comply with a direction given by a Minister in respect of a proposal to provide water service works that are major works under section 143(3).	4	Under the Water Services Act 2012, section 135, "the making of alterations, extensions or additions to general works on — i. land owned by the licensee; or ii. a reserve under the Land Administration Act 1997, the care, control and management of which is placed with the licensee under that Act" are "exempt works". Therefore, as the Island is an A-Class Reserve, this section is not applicable.	N/A	N/A
41.		Section 147(4)	If the Minister gives a direction that further notices in relation to the proposed major works be given under section 143(3), the licensee must resubmit the proposal.	4	As per Obligation 40.	N/A	N/A
42.	Proposals for general works (includes new water treatment plants up to 10 ML per day, WWTP with capacity up to 2ML per day, reticulation mains and trunk lines, pumping stations, etc.)	Section 151(1)	A licensee proposing to provide water service works that are general works must prepare plans and details of the proposed works and publish and make them available for inspection.	4	Under the Water Services Act 2012, section 135, "the making of alterations, extensions or additions to general works on — iii. land owned by the licensee; or iv. a reserve under the Land Administration Act 1997, the care, control and management of which is placed with the licensee under that Act" are "exempt works". Therefore, as the Island is an A-Class Reserve, this section is not applicable.	N/A	N/A
43.		Section 151(2)	The licensee must give a notice setting out the matters referred to in section 151(3) to the persons and agencies specified.	4	As per Obligation 42.	N/A	N/A

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44.		Section 152(3)	The licensee must have regard to an objection or submission lodged by the date specified in the notice given under section 151(2).	4	As per Obligation 42.	N/A	N/A
45.		Section 153(3)	If the licensee makes alteration to those plans or details referred to in section 151, the licensee must give written notice of the alterations to any person who is likely to be adversely affected by those alterations.	4	As per Obligation 42.	N/A	N/A
46.	Interest in land	Section 166(5)	On being advised by the Minister that an interest in land is appropriate to the licensee's needs, the licensee is required to acquire the interest.	4	Part 7 – Powers in relation to interest in land under the Act does not apply to the licensee as all land is under the management of the RIA.	N/A	N/A
47.		Section 166(6)	Any costs incurred in taking an interest in land are to be paid by the licensee.	4	As per Obligation 46.	N/A	N/A
48.		Section 170	The licensee must not sell an interest in land if the purchaser would hold a parcel of land that did not comply with the minimum lot size and zoning requirements under the <i>Planning and Development Act 2005</i> , unless the Minister permits the licensee to do so.	4	As per Obligation 46.	N/A	N/A
49.	Notice of entry to property and authority to enter	Section 173(4)	In relation to entry to a place for the purposes of doing works, in the circumstances specified the licensee is required to give 48 hours' notice of proposed entry to a place to the occupier or owner, as applicable, unless the occupier or owner agrees otherwise.	4	The Water Services Act 2012, section 173 (4) states that: "In relation to entry to a place for the purposes of doing works the following apply — (a) if the proposed works are likely to cause disruption to the occupants of the place — 48 hours' notice of the proposed entry is required to be given to the occupier of the place, unless the occupier agrees otherwise".	N/A	N/A

No ⁴	Operating Area	Legislative Reference	Description	Audit Priority	Systems, Processes, Controls in Place to Comply with Licence (including any recommendations)	Adequacy of Controls Rating ⁵	Compliance Rating ⁶
					As the occupiers have entered into a commercial lease with the RIA, entry to premises is considered to be covered by this agreement. The standard commercial lease provides that "the lessee will permit the lessor, agents or contractors to have access to the leased premises at all reasonable times." Therefore, this obligation is not applicable. The Water Customer Services Manual (May 2016) does provide that any such entry will normally occur during business hours, and for planned work, at least 24 hours' notice of any interruption to water services, will be given.		
50.	Notice of entry to property and authority to enter (Cont'd)	Section 174(1)	Notice of a proposed entry by the licensee must be in writing and must set out the purpose of the entry, including (if applicable) any work proposed to be carried out.	4	As per Obligation 49.	N/A	N/A
51.		Section 174(3)	Even if in a particular instance the licensee may enter a place under the Act without having to give notice of proposed entry, the licensee must when practicable, and when it will not compromise the reason for entry, give notice of entry to the occupier.		As per Obligation 49.	N/A	N/A
52.		Section 175(2)	If an occupier is present when the licensee proposes to enter a dwelling, the licensee must perform the prescribed actions before entering the premises.		As per Obligation 49.	N/A	N/A

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53.		Section 175(5)	If the licensee enters a dwelling that is unoccupied, the licensee must leave a notice or a copy of the warrant (as applicable) in a prominent position in the dwelling before leaving the dwelling.	4	As per Obligation 49.	N/A	N/A
54.		Section 176(1)	If the licensee has entered a place with or without consent, the licensee must leave the premises as soon as practicable after being notified that the owner or occupier has refused or withdrawn their consent.	4	As per Obligation 49.	N/A	N/A
55.		Section 176(3)	The licensee must produce their certificate of authority if asked to do so, and must not perform, or continue to perform, a function under the Act until they are not able to do so.	4	As per Obligation 49.	N/A	N/A
56.		Section 176(4)	If the licensee enters or proposes to enter a place, and the owner or occupier requests the licensee produce evidence of authority for that entry, then the licensee must leave the place if they are unable to do so unless the owner or occupier agrees otherwise.	4	As per Obligation 49.	N/A	N/A
57.		Section 181	The licensee, or a person assisting the licensee, must, as far as is practicable comply with any reasonable request from the owner or occupier intended to limit interference with the lawful activities of the owner or occupier.	4	As per Obligation 49.	N/A	N/A
58.	Warrant to enter property	Section 186	If the licensee applies for a warrant, the application must contain the prescribed information.	4	As per Obligation 49. No warrants were applied for in the audit period.	N/A	N/A
59.		Section 187(1) – (3)	If the licensee applies for a warrant to enter, the application must be made in accordance with the procedures specified depending on the location of the applicant and the justice.	4	As per Obligation 49.	N/A	N/A

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60.		Section 190(4)	Unless required to give a copy of the warrant, the licensee executing the warrant must produce the warrant for inspection by the occupier of the place concerned on entry (if practicable), and if requested to do so.	4	As per Obligation 49.	N/A	N/A
61.		Section 190(5)	On completing the execution of a warrant, the licensee must record the prescribed information on that warrant.	4	As per Obligation 49.	N/A	N/A
62.	Compliance Officer	Section 210(5)	If the licensee designates a person as an inspector or compliance officer, the licensee must give that person a certificate of authority that includes certain prescribed information.	4	The auditor confirmed with RIA's Contracts and Project Officer that no person is currently designated as an inspector or compliance officer.	A	NR
63.	Minimum disruption	Section 218(2)	In the exercise or purported exercise of a power under the Act, the licensee must ensure that, to the extent practicable, the free use of any place is not obstructed, and that as little damage, harm or inconvenience is caused as is. possible	4	The auditor confirmed by sighting a sample of commercial leases that the leases provide for the "quiet enjoyment" of the property by the lessee/tenant, and if entry is required to the property, the RIA will minimise any disruption to the tenant. The leases also state that the lessor will minimise any damage and if any damage to the tenant's property does occur, the lessor will make good the damage. The auditor confirmed with RIA's Contracts and Project Officer that, during the audit period, there was no entry to occupied premises likely to cause disruption to the occupants of a place.	A	NR
64.	Physical damage	Section 218(3)	If the licensee does any physical damage in the exercise of a works power or a power of entry, the licensee must ensure that the damage is made good, and pay compensation to the extent that it is not practicable to make good the damage.	4	As per Obligation 63.	A	NR

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Wate	r Services Regul	ations 2013					
65.	Meter testing and compliance	Regulation 23(2)	If the licensee provides a water supply service in respect of a multi-unit development, the licensee, on the owner's request, is to assess whether a meter is satisfactory for measuring the quantity or flow of water through a pipe supplying water to the unit.	4	The audit confirmed with the RIA's Property Manager that there are no multi-unit developments occupied by the customers (i.e. commercial lessees).	A	NR
66.		Regulation 24(4)	If the licensee gives a compliance notice to a person in respect of access to meters, the notice must specify the specified information.	4	The auditor confirmed with RIA's Contracts and Project Officer and Property Manager that no compliance notices are issued.	А	NR
67.		Regulation 26(3)	If the owner or occupier requests the licensee to test a meter, subject to the payment of the charge (if any) for testing that type of meter, the licensee must test the meter in accordance with the approved procedure.	4	The RIA's Water Customer Services Manual provides that a customer may request a water meter be tested (for a fee which is refundable if the test results are outside an acceptable tolerance). The auditor confirmed with the Property Manager that there were no requests for meter readings in the audit period.	A	NR
68.		Regulation 26(5)	If a meter test finds that the meter is outside the prescribed tolerance applicable, the licensee must take the specified actions, bear the costs of testing and refund or credit any charges paid under regulation 26(3).	4	As per Obligation 67.	Α	NR
69.	Lot development	Regulation 29(2)	If the developer of a lot makes a request to the licensee to defer payment of an infrastructure contribution, the licensee must, subject to regulations 29(3) and 29(4), allow the payment to be deferred.	4	All lots are part of an A-Class Reserve governed by the Rottnest Island Act 1987 which establishes the RIA as a statutory body to control and manage the Island. Not applicable.	N/A	N/A

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70.	Backflow prevention devices	Regulation 42(2)	The written order requiring the owner or occupier of land to install a backflow prevention device must set out the date which the device must be installed and tested (which must be at least 7 days after the order is given).	4	The auditor confirmed with the Property Manager that there were no orders issued to customers for any backflow prevention devices to be installed.	A	NR
71.		Regulation 43(3)	The compliance notice requiring the owner or occupier of land to have their backflow prevention device tested or maintained in accordance with the standard by a specified date (which must be at least 7 days after the notice is given).	4	As per Obligation 70.	A	NR
72.		Regulation 43(6)	The compliance notice requiring the owner or occupier of land to have their backflow prevention device made good as specified in the notice must include the work that is required to be done, the manner in which the work is to be done and the date by which the work is to be done (which must be at least 7 days after the notice is given).	4	As per Obligation 70.	A	NR
73.	Drainage services (to 13 December 2016 only	Regulation 53(3)	The licensee must provide a person with a plan of the existing drainage plumbing for a building on request and on receipt of payment from the person.	4	The auditor confirmed with the Property Manager that in the audit period, there were no requests from customers for any drainage plumbing plan. If a plan was requested, this would be provided by the RIA.	A	NR
74.	Works affecting roads	Regulation 60(2)	If the licensee proposes to exercise a works power in a road and considers that it is necessary to alter the position of infrastructure, the licensee must notify the person who is responsible for the infrastructure and may request that the person make the alterations within the time specified in the notice.	4	As the RIA has the responsibility for all roads on the Island, no work would be undertaken without the authority of the RIA. Road works are carried out by Main Roads under advice from the RIA. Therefore, this obligation is not applicable.	N/A	N/A

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75.		Regulation 63	If the licensee opens or breaks up the surface of a road, the licensee must complete the relevant work and reinstate and make good the road, and must take all reasonable measures to prevent that part of the road from being hazardous.	4	As per Obligation 74.	N/A	N/A
76	Water service charges (76 to 88 only apply to RIA to 13 December 2016)	Regulation 65(1)	The licensee must maintain records for all land in respect of which water service charges apply.	4	The auditor confirmed with the Property Manager that records of the commercial lessors occupying the land on the Island are maintained with the prescribed details for the billing of water service charges.	A	1
77	,	Regulation 65(2)	The records for all land in respect of which water service charges apply must contain prescribed information.		As per Obligation 76.	А	1
78		Regulation 65(4)	The licensee must make the records for all land in respect of which water service charges apply available for inspection by any person without charge, and give a copy of particular records to a person with a material interest in them, on payment of the prescribed charge.	4	A record of the land in respect of which the water charges are billed is contained in the commercial lease document signed by each lessor and a copy is provided to them. The Property Agent advised there have been no specific requests for any further information, in the audit period.	A	NR
79		Regulation 67	Except as otherwise provided under the Act, the records maintained by the licensee for a period in relation to land are the basis upon which the licensee must determine the water service charges applicable for the period.	4	As per Obligation 78.	A	NR
80		Regulation 68(5)	The licensee must consider an objection to the records maintained by a licensee under regulation 65 as soon as practicable.	4	The auditor confirmed with the Property Manager that records of the commercial lessors occupying the land on the Island are maintained with the prescribed details for the billing of water service charges. The Property Agent advised there have been no such requests/objections in the audit period.	A	NR

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81		Regulation 68(6)	The licensee must give the person by whom the objection was made written notice of the licensee's decision on the objection together with a brief statement of the licensee's reasons for the decision.	4	As per Obligation 80.	A	NR
82		Regulation 68(7)	If the licensee disallows an objection, wholly or in part, to entries in the records maintained by a licensee under regulation 65, the licensee must advise the person who objected of any consequent amendment of the records.	4	As per Obligation 80.	A	NR
83		Regulation 68(8)	If the licensee allows an objection, wholly or in part, to entries in the records maintained by a licensee under regulation 65, the licensee must advise the person of the time within which and the manner in which a review of the decision may be sought.	4	As per Obligation 80.	A	NR
84		Regulation 69(3)	Upon receipt of a notice from a person dissatisfied with a decision of the licensee on an objection, the licensee must promptly refer the relevant records to the State Administrative Tribunal for a review.	4	As per Obligation 80	A	NR
85		Regulation 70(2)	Upon receipt of a notice from a person dissatisfied with a decision of the licensee to refuse to extend the time for giving an objection to the licensee or a notice under regulation 69(2), the licensee must promptly refer the decision to the State Administrative Tribunal for a review.	4	As per Obligation 80	A	NR
86		Regulation 74(1)	The licensee must make any amendment of the records necessary as a consequence of an allowance, wholly or in part, of an objection under the Act or the <i>Valuation of Land Act 1978</i> or as a consequence of a review by the State Administrative Tribunal.	4	As per Obligation 80	A	NR

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87		Regulation 74(2)	The licensee must, if necessary as a consequence of the amendment to the records under regulation 74(1) re-determine and if necessary provide a rebate or refund.	4	As per Obligation 80	A	NR
88		Regulation 75(1)	If a person is liable, under an agreement with the owner of land, for payment of the water service charges in respect of certain land, the person is entitled to receive from the licensee all information necessary for the person to assess his or her liability under the agreement.	4	The auditor confirmed by review of a sample of annual and quarterly invoices for water charges sent to commercial lessees that the invoices include adequate information for the lessee to assess his/her liability as per the commercial lease terms.	A	1
89.	Compliance notice issued by licensee to include consequences and rights	Regulation 85	Compliance notices issued by the licensee must include a brief description of the possible consequences under the Act of not complying with the notice, and the rights of review under the Act in relation to the notice and who may apply for review.	4	The RIA's Contracts & Project Officer confirmed that no compliance notices would be issued as the RIA is responsible for all works on the Island.	N/A	N/A
90 - 91			Applicable only to "water corporations"			N/A	N/A
Wate	r Services Code	of Conduct (Co	ustomer Service Standards) 2013				
92.	Information for customers	Clause 7	The licensee must have written information for customers about the specified matters.	4	The Rottnest Island Water Customer Services Manual has been developed and was published on the RIA website on 31 May 2016. A hard copy of the Manual is available for customers and visitors at the Visitor Centre on Rottnest Island. This Manual covers the requirements in the Water Services Code of Conduct (Customer Service Standards) 2013.	A	1
93.	Timeliness of connections	Clause 8	The licensee must ensure that, in any 12-month period, 90% of connections are completed before the end of 10 business	4	There were no new connections during the audit period as confirmed by the RIA's Contracts & Project Officer and the Water Licence Performance	Α	NR

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			days, starting on the day on which the customer has paid the relevant fees and complied with the relevant requirements.		Reports for 2015/16 and 2016/17 submitted to the ERA.		
94.	Annual service charges	Clause 9	The licensee must issue a bill for non- quantity charges to each customer at least once in every 12-month period.	4	The audit sighted a sample of invoices for water charges to customers and confirmed that the invoices for non-quantity charges are issued annually.	А	1
95.	Usage bills at least 6 monthly	Clause 10(2)	The licensee must issue a bill for usage to each customer at least once in every 6 month period.	4	The audit sighted a sample of invoices for water charges to customers and confirmed that the invoices for water usage are issued monthly on Utility Statements that are based on meter readings.	A	1
96.		Clause 10(3)	The licensee must ensure a bill for usage is based on a meter reading to ascertain the quantity supplied or discharged.	4	The audit confirmed on a sample basis that invoices for usage are based on meter readings to ascertain the quantity of potable water supplied.	A	1
97.		Clause10(4)	If an accurate meter reading is not possible, a bill for usage must be based on an estimation (in accordance with the prescribed regulations) of the quantity of water supplied or waste water discharged.	4	No applicable regulation is in place.	N/A	N/A
98.		Clause 10(5)	If an accurate meter reading is not possible and there are no applicable regulations, a bill for usage must be based on a reasonable estimate of supply or discharge using one of the prescribed methods.	4	As stated in Section 2.3 Estimations, of the Water Customer Services Manual, if a water meter is faulty, consumption charges will be estimated and based on an average of past consumption, comparable customers if no billing history or a test of the water meter. The Property Manager confirmed that, during the audit period, no such circumstances eventuated and no customer was issued with an estimated bill of usage.	A	NR

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99.	Address for billing	Clause 11	The licensee must send a bill to the address of the place where the water service is provided or, if the customer nominates another address, to the nominated address.	4	The auditor confirmed on a sample basis compliance with this requirement over the audit period.	A	1
100	Billing information	Clause 12(1)	Each bill must contain the prescribed information.	4	The prescribed information is provided to customers via the monthly Utility Statements and the monthly invoices with the exception of: The Utility Statement includes a 24-hour telephone number for faults and emergencies but this is not stated on the invoice; and Invoices should include the RIA website reference for the Customer Water Services Manual and a statement that "the website contains information about estimates, meter reading and testing, complaints and review. Recommendation 04/2017 The RIA should arrange for the Property Agent to: Include the 24-hour telephone number for faults and emergencies on the invoices for water charges; Invoices should include the RIA website reference for the Customer Water Services Manual and a statement that "the website contains information about estimates, meter reading and testing, complaints and review.	В	2
101		Clause 12(2)	Each bill for usage for a metered water service must, in addition to the requirements of clause 12(1), contain the specified information.	4	The auditor confirmed by review of a sample of monthly invoices and Utility Statements that the specified information on usage is included in each bill.	A	1

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102		Clause 12(3)	Each bill must inform the customer of the specified information and where further details can be obtained.	4	The additional information as per the Code of Conduct is stated in the Customer Water Services Manual. However, from review of the annual and monthly water bills to customers, it was noted that the information specified in Clause 12(3) of the Code is not stated on the invoices as follows: Clause 12 (3) states: b) that the customer may request a meter reading and bill to determine outstanding charges for a period that is not the same as the usual billing cycle; c) that the customer may request a meter reading and revised bill if the customer disputes an estimate on which a bill is based and that if the customer so requests, information about the fees that apply; d) that the customer may request, in accordance with the regulations mentioned in section 79(3)(b), the testing of a meter and that if the customer so requests, information about the fees that apply and when the fees may be reimbursed in accordance with the regulations mentioned in section 79(3)(c);	A	2

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					 e) that the bill can be reviewed in accordance with the licensee's review procedure mentioned in clause 18; f) that complaints about the provision of a water service by the licensee or a failure by the licensee to provide a water service can be made in accordance with the licensee's complaints procedure mentioned in clause 35. Also, as noted in Obligation 100, invoices should include the RIA website reference for the Customer Water Services Manual and a statement that "the website contains information about estimates, meter reading and testing, complaints and review. Refer recommendation 04/2017 		
103	Basis of billing estimate	Clause 13(1)	If a bill is based on an estimate, the licensee must tell the customer on request the basis of the estimate and the reason for the estimate.	4	The methods of estimation are stated in Section 2.4 Review of Bill, of the Customer Water Services Manual. A customer may request review of a bill. The Property Manager confirmed that, during the audit period, no such circumstances eventuated and no customer was issued with an estimated bill of usage or requested a review of a bill.	A	NR
104.		Clause 13(2)	The licensee must make any adjustments to the next bill to take into account the extent to which the estimate was not reasonable having regard to a subsequent and accurate meter reading.	4	As per Obligation 103.	A	NR

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105.	Request for meter reading	Clause 14(1)	The licensee must provide to the customer on request a meter reading and a bill in the prescribed circumstances.	4	As per Obligation 103.	А	NR
106.	Higher than normal usage	Clause 15	The licensee must have a publicly available written policy, standard or set of guidelines in relation to granting a discount to a customer whose meter reading indicates a water usage that is higher than normal for the customer but is likely to have been wasted because of a leak.	4	The policy for any discounts for over-charges is stated in Section 2.4 Review of Bill, of the Customer Water Services Manual and complies with the Code.	A	1
107.	Under and over charges	Clause 16(2)	The licensee cannot recover an undercharged amount from a customer unless it is for water services provided in the 12-month period ending on the day on which the licensee informed the customer of the undercharging.	4	The policy for recovery of any under-charges is stated in Section 2.4 Review of Bill, of the Customer Water Services Manual and complies with the Code. The Property Manager confirmed that, during the audit period, no such circumstances eventuated and no customer requested review of a bill.	A	NR
108.		Clause 16(3)	An undercharged amount must be the subject of, and explained in, a special bill or a separate Obligation in the next bill. The licensee cannot charge interest or late payment fees on an undercharged amount. The licensee must allow a customer to pay an undercharged amount by way of a repayment plan as specified in the Code of Conduct.	4	As per Obligation 107. The policy states that no fees or interest will be charged and a repayment plan can be provided.	A	NR
109.		Clause 16(4)	The licensee must not charge interest or late payment fees on an undercharged amount.	4	As per Obligation 107. The policy states that no interest will be charged.	A	NR

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110.		Clause 16(5)	The licensee must allow a customer to pay an undercharged amount by way of a repayment plan that has effect for the duration of shorter of the prescribed periods starting on the day that the bill in clause 16(3) is issued.	4	As per Obligation 107. The policy states the duration of the repayment period, as per the Code.	A	NR
111.		Clause 17(1)	If the licensee overcharges a customer, the licensee must credit the customer's account and must immediately afterwards notify the customer, or inform the customer of the overcharging and recommended options for refunding or crediting the overcharged amount.	4	As per Obligation 107. The policy states that where a customer has been overcharged, the customer must be informed by the RIA and the options for credit or refund of the amount.	A	NR
112.		Clause 17(2)	The licensee must, in accordance with the customer's instructions, refund or credit the customer's account within 15 business days from starting on the day the licensee receives the instructions.	4	As per Obligation 107. The policy states the refund will be processed within 15 business days, as per the Code.	А	NR
113.	Review of bill	Clause 18(1)	The licensee must review a bill on the customer's request.	4	The policy for review of a bill is stated in Section 2.4 Review of Bill, of the Customer Water Services Manual and complies with the Code. The Property Manager confirmed that, during the audit period, no such circumstances eventuated and no customer requested review of a bill.	A	1
114.		Clause 18(2)	The license must have a written procedure for the review of a bill on the customer's request.	4	As per Obligation 113.	А	1
115.		Clause 18(3) & (6)	The review procedure in clause 18(2) must include the specified information and be publicly available.	4	As per Obligation 113. The policy is publicly available on the RIA website and at the RIA office on the Island.	А	1
116.		Clause 18(4)	The review procedure must state that the customer may, but does not have to, use the licensee's complaints procedure mentioned in clause 35 before or instead of applying to the water services ombudsman or, if	4	As per Obligation 113. The policy states the alternate complaints procedures as per the Code.	A	1

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			available, making an appeal from, or applying for a review or, the decision under regulations mentioned in section 222(2)(k) of the Act.		The RIA's Contracts and Project Officer (and the Complaints Register) confirmed that no complaints had been received in the audit period.		
117.		Clause 18(5)	The licensee must inform the customer of the outcome of a review of the customer's bill as soon as practicable or otherwise less than 15 business days from the day the customer's request for review was received.	4	As per Obligation 113.	А	NR
118.	At least 14 days for payment	Clause 20	The time set by the licensee for the payment of a bill must be after 14 days from when the bill is issued.	4	The audit sighted a sample of invoices for water charges to customers and confirmed that the invoices are due for payment 21 days from issue.	А	1
119.	Payment methods	Clause 21(1)	The licensee must allow a customer to pay a bill using any of the prescribed methods selected by the customer.	4	The audit sighted a sample of invoices for water charges to customers and confirmed that the invoices/utility statements include the prescribed methods as per the Code. The payment methods are also stated in the Customer Water Services Manual.	A	1
120.		Clause 21(2)	The licensee must, when offering bill payment method options, inform the customer of the fees and charges (if any) associated with each bill payment method offered.	4	The audit sighted a sample of invoices for water charges to customers and confirmed that the invoices/utility statements do not include any additional fees for payment methods.	A	NR
121.		Clause 22	Before receiving a bill payment by direct debit the licensee must obtain the express consent, either orally or in writing, of the holder of the account to be debited and of the customer or an adult person nominated by the customer, to do so.	4	Customer authorisation of direct debits is a standard part of RIA and Property Agent procedures.	A	1
122.	Payment in advance	Clause 23(1)	The licensee must accept payment in advance from a customer on a customer's request.	4	Payments in advance are accepted as stated in the Customer Water Services Manual.	А	1
123.	Redirection of bills	Clause 24	The licensee must on request and at no charge redirect a customer's bills because of the customer's absence or illness.	4	Re-direction is available as stated in the Customer Water Services Manual.	Α	1

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124.	Payment plan	Clause 25	The licensee must allow a customer to pay a bill under a payment plan or other arrangement under which the customer is given more time to pay the bill or to pay arrears if the customer is assessed by the licensee as experiencing payment difficulties.	4	Additional time to pay is available if a customer is experiencing financial difficulty as stated in the Customer Water Services Manual. The Property Manager confirmed there were no requests in the audit period.	А	NR
125.	Financial hardship policy	Clauses 26(1) & (2)	The licensee must have a written policy in relation to financial hardship that is approved by the ERA.	4	As the RIA has only commercial businesses as customers and does not have any residential customers (ie customers who receive water supply to their primary dwelling), this clause does not apply.	N/A	N/A
126.		Clause 26(3)	If the licensee's licence was in place before the commencement of the Act, the licensee must have a financial hardship policy before the end of the 6 month period starting on the day on which section 27 of the Act comes into effect.	4	Refer Obligation 125.	N/A	N/A
127.		Clause 26(4)	If the licensee's licence was granted after the day on which the Act came into effect, the licensee must have a financial hardship policy within 6 months of the day of the grant of the license.	4	Refer Obligation 125	N/A	N/A
128.		Clause 26(5)	The licensee's financial hardship policy must be publicly available.	4	Refer Obligation 125.	N/A	N/A
129.		Clause 26(6)	The licensee must review its financial hardship policy at least once in every 5 year period and, as part of the review process, consult with relevant consumer organisations.	4	Refer Obligation 125.	N/A	N/A
130.		Clause 27(2)	The licensee must allow a customer experiencing financial hardship to pay a bill	4	Refer Obligation 125.	N/A	N/A

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			under an interest-free or fee-free payment plan other arrangement under which the customer is given more time to pay the bill or to pay arrears.				
131.		Clause 27(3)	The licensee must also consider reducing the amount owed, review and revise, if appropriate, how a customer is paying a bill under clause 27(2) and provide the specified written information to a customer.	4	Refer Obligation 125.	N/A	N/A
132.		Clause 28(1)	Before the licensee enters into a payment plan or other similar arrangement with a customer who is not the owner of the land in respect of which the water service is provided, the licensee must ensure that the owner is aware of the proposed plan or arrangement.	4	The auditor confirmed with the RIA's Contracts and Projects Officer and the Property Manager that any payment arrangements would be put in writing. There were no payment plans or arrangements entered into in the audit period.	A	NR
133.		Clause 28(4) & (5)	The licensee must have publicly available written information regarding the payment plans, arrangements and other assistance that is available to customers.	4	The Water Customer Services Manual available on the RIA's website states the procedures for payment difficulties and other assistance available to customers.	А	1
134.	Debt recovery	Clause 29	The licensee must not commence or continue proceedings to recover a debt from a customer who is complying with a payment plan or other arrangement, or who is being assessed for payment difficulties or who is being assessed for financial hardship.	4	The auditor confirmed with the RIA's Contracts and Projects Officer and the Property Manager that any debt recovery action would not be commenced where payment arrangements are being complied with or payment difficulties are being assessed. There were such debt recovery actions in the audit period.	A	1
135	Restoration of drinking water supply	Clause 30(1)	If the licensee has reduced the rate of flow of drinking water to land under section 95(1)(b) of the Act, the licensee must restore the supply of water if the amount owing is paid, or if the customer enters into a payment arrangement for the amount owing that is satisfactory to the licensee.		The auditor confirmed with the RIA's Contracts and Projects Officer and the Property Manager that there are no circumstances where the water flow to a customer would be reduced. There were such actions in the audit period. Section 4.6 Disconnection of the Water Customer Services Manual provides that potable water may be disconnected only in an emergency and	A	NR

No ⁴	Operating Area	Legislative Reference	Description	Audit Priority	Systems, Processes, Controls in Place to Comply with Licence (including any recommendations)	Adequacy of Controls Rating ⁵	Compliance Rating ⁶
					restricted only for operational reasons, not for non-payment.		
136		Clause 30(2)	If the licensee has, under section 95(1)(a), (c), (d) or (e) of the Act, cut off or reduced the flow of drinking water, the licensee must restore the supply of water if the licensee is satisfied that the reason for the disconnection or reduction no longer applies.	4	Section 4.6 Disconnection of the Water Customer Services Manual provides that potable water may be disconnected only in an emergency and restricted only for operational reasons, not for non-payment. Section 4.1 states that "the RIA will make every effort to minimise the interruption to your water supply, but on occasion planned maintenance on the water services needs to be carried out." The auditor confirmed with the RIA's Contracts and Projects Officer and the Property Manager that there are no circumstances where the water flow to a customer would be reduced. There were also no such actions in the audit period.	A	NR
137	Reducing the rate of flow of water - Preliminary Action	Clause 31	The licensee must not, under section 95(1)(b) of the Act, reduce the rate of flow of drinking water to a customer without having first used its best endeavours to inform the customer in person of its intention to do so if the amount owing is not paid.	4	If for operational reasons (such as maintenance or water pipe leaks), the flow of drinking water is reduced, the RIA has procedures to inform the customer. Section 4.1 of the Water Customer Services Manual states that: "The Rottnest Island Authority will make every effort to minimise the interruption to your water supply, but on occasion planned maintenance on the water services needs to be carried out. The Rottnest Island Authority aims to provide the customer with notice 24 hours in advance if the water supply needs to be interrupted for planned work. In cases of emergency, notice of entry to attend to the emergency is not required and may not be given. Should this be necessary, the RIA and/or its	A	NR

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					Facility Management Contractor will respect your property and will be present for the minimum time required. The customer, if present, will be informed of the repairs to be undertaken and the anticipated length of time for the work to be completed. As soon as practicable after the event, notice in writing of the entry, the works carried out and any further relevant intention of the RIA will be given to the customer." The auditor confirmed with the RIA's Contracts and Projects Officer and the Property Manager that there are no circumstances where the water flow to a customer would be reduced due to non-payment. There were also no such actions in the audit period.		
138	No reduction of flow of water in certain cases	Clause 32	The licensee must not reduce the rate of flow of drinking water under the Act if the specified circumstances apply.	4	Refer Obligation 135.	А	NR
139.	Reducing flow rate	Clause 33	The licensee must not reduce the rate of flow of water to a customer to below 2.3 litres each minute.	4	Refer Obligation 135.	А	NR
140, 141, 143	"water corporations"		Only applicable to "water corporations".	4		N/A	N/A
142.	Timeframe to restore service	Clause 34(4)	The licensee (other than the Water Corporation) must restore a water supply to land within the specified timeframe, unless the licensee and customer expressly agree otherwise.	4	Clause 34(4) of the Code requires that: "A licensee other than the Water Corporation must restore a water supply — (a) if the restoration event occurs before 3 p.m. on a business day, by the next business day; and (b) if the restoration event occurs at any other time, within the next 2 business days, unless the licensee and customer expressly agree otherwise."	A	NR

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					The auditor confirmed with the RIA's Contracts and Projects Officer and the Property Manager that there are no circumstances where the water flow to a customer would be reduced due to non-payment. There were also no such actions in the audit period that required any restoration of water supply. Section 4.6 Disconnection of the Water Customer Services Manual provides that potable water may be disconnected only in an emergency and restricted only for operational reasons, not for non-payment. Section 4.1 states that "the RIA will make every effort to minimise the interruption to your water supply, but on occasion planned maintenance on the water services needs to be carried out." The auditor confirmed with the RIA's Contracts and Projects Officer and the Property Manager that there are no circumstances where the water flow to a customer would be reduced. There were also no such actions in the audit period. The Performance Report provided to the ERA for 2015/16 reports that there were 7 unplanned interruptions to potable water supply with an average duration of 111 minutes. The 2016/17 report states there were no interruptions to the water supply. The audit concluded that "reasonable steps" are being taken and further works are planned to minimise the risk of interruption of water services and to restore the water supply as soon as possible.		
144.		Clause 34(6)	The licensee (other than the Water Corporation) must ensure that there is a	4	The Performance Report provided to the ERA for 2015/16 reports that there were 7 unplanned interruptions to potable water supply with an	A	1

No ⁴	Operating Area	Legislative Reference	Description	Audit Priority	Systems, Processes, Controls in Place to Comply with Licence (including any recommendations)	Adequacy of Controls Rating ⁵	Compliance Rating ⁶
			90% compliance rate with clause 34(4) in any 12 month period ending on 30 June.		average duration of 111 minutes. The 2016/17 report states there were no interruptions to the water supply.		
					The audit review of the PFM – Operational Outage Register for the years 2015/16 and 2016/17 confirmed that for both years there was greater than 90% compliance with the restoration requirements as stated in Obligation 142 above.		
145.	Complaints procedure	Clause 35(1)	The licensee must have a written complaints procedure in relation to investigating and dealing with complaints of customers about the provision of water services by the licensee or a failure by the licensee to provide a water service.	4	The Water Customer Services Manual – Section 3.4.2 – Complaints Procedure and the Utilities Customer Complaints Procedure and form on the RIA's website were sighted. The procedures include the information required.	A	1
146.		Clause 35(2)	The licensee's complaints procedure must be developed using as minimum standards the relevant provisions of the AS ISO 10002-2006 and the ERA's guidelines.	•	The procedures are compliant with the relevant provisions of AS ISO 10002-2006 and the ERA's Customer Complaints Guidelines dated December 2016.	А	1
147.		Clause 35(3)	The licensee's complaints procedure must provide for the matters specified in relation to lodgement of complaints, responding to complaints, dispute resolution arrangements and resolving complaints.	4	The Water Customer Services Manual – Section 3.4.2 – Complaints Procedure and the Utilities Customer Complaints Procedure include the required information.	A	1
148.		Clause 35(4)	The licensee's complaints procedure must inform the customer that they do not have to use the licensee's complaints procedure, provide details of procedures under the Act, and set out the costs and benefits to the customer if the use the complaint resolution procedure or instead of the procedures under the Act.	4	The Water Customer Services Manual – Section 3.4.2 – Complaints Procedure and the Utilities Customer Complaints Procedure include the required information.	A	1
149.		Clause 35(6)	The licensee's complaints procedure must be publicly available.	4	The definition of "publicly available" per Clause 3 of the Water Services Code of Conduct is website and hardcopy.	Α	1

No⁴	Operating Area	Legislative Reference	Description	Audit Priority	Systems, Processes, Controls in Place to Comply with Licence (including any recommendations)	Adequacy of Controls Rating ⁵	Compliance Rating ⁶
					The RIA's Water Customer Services Manual and the Utilities Customer Complaints Procedure is available on RIA's website and in hardcopy upon request.		
150, 151	No charge for information	Clause 36(1)	The licensee must provide a customer with the specified services on request and at no charge.	4	Under this Section of Code, the licensee must provide a customer with the following on request and at no charge: a) services for account, payment and general enquiries for use by customers with hearing or speech impaired; b) interpreter services for account, payment and general enquiries; c) a large-print version of any of the licensee's publicly available documents. The auditor confirmed with the RIA's' Contracts and Project Officer and the Property Manager that the information is available in the above formats and that during the audit period, no such request has been received.	A	NR
152.	Access to customer information	Clause 36(2)	The licensee must make available to each customer the customer's personal account information.	4	The auditor confirmed with the RIA's' Contracts and Project Officer and the Property Manager that the information is available and that during the audit period, no such request has been received.	А	NR
153.	All Code of Conduct information to be publicly available in hardcopy and website	Clause 37(1)	The licensee must make the prescribed information publicly available.	4	The licensee must make the "prescribed information" publicly available. The definition of "publicly available" per Clause 3 of the Water Services Code of Conduct is website and hardcopy. The auditor confirmed that the "prescribed information" set out in Clause 37 of the Code is available to customers in the Policies published on the RIA's website and in hardcopy upon request.	A	1

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154		Notes - Clause 12 (clause 37(2))	The licensee must ensure that the specified information about a bill may be obtained from its website.	4	The auditor noted that the "prescribed information" set out in Section 37 of the Code is available to customers in the Water Customer Services Manual and the Utilities Customer Complaints Procedure published on the RIA's website.	A	1
Licen	ice Conditions -	- Specific Claus	es				
155.	Fees to regulator	Clause 4	The licensee must pay the applicable fees in accordance with the Regulations.	4	The auditor confirmed the annual fees to the ERA have been paid.	А	1
156.	Compliance generally	Clause 5.1	Subject to any modifications or exemptions granted pursuant to the Act, the licensee must comply with any applicable legislation.	4	The auditor reviewed compliance with the Water Services Act 2012, Water Services Regulations 2013 and the Water Services Code of Conduct (Customer Service Standards) 2013 as per obligations listed in this audit report and concluded that the RIA complies with the obligations apart from two minor non-compliances related to specified billing information to be provided to customers as follows: The prescribed information is provided to customers via the monthly Utility Statements and the monthly invoices with the exception of: The Utility Statement includes a 24-hour telephone number for faults and emergencies but this is not stated on the invoice; and Invoices should include the RIA website reference for the Customer Water Services Manual and a statement that "the website contains information about estimates, meter reading and testing, complaints and review. Refer recommendation 04/2017	A	2

No ⁴	Operating Area	Legislative Reference	Description	Audit Priority	Systems, Processes, Controls in Place to Comply with Licence (including any recommendations)	Adequacy of Controls Rating ⁵	Compliance Rating ⁶
157.		Clause 5.2	The licensee must comply with any code of practice made by the Minister to the extent it applies to the licensee.	4	No Codes of Practice have been issued by the Minister.	N/A	N/A
158.		Clause 5.3	The licensee must comply with any code of conduct made by the ERA to the extent it applies to the licensee and is not inconsistent with the terms and conditions of the licence.	4	The auditor reviewed compliance with the Code of Conduct as per obligations listed in this audit report, and concluded that the licensee complies with the Code of Conduct as per obligations 92 to 154 above with the exception of the "prescribed information" on bills as noted in Obligation 156. Refer recommendation 04/2017	A	2
159.		Clause 5.4	The licensee must comply with a direction from the ERA in relation to a breach of applicable legislation.	4	The auditor confirmed by reference to the ERA's website that no Rectification Notice has been issued to the RIA by the ERA.	NP	NR
160.	Compliance with Accounting Standards	Clause 12	The licensee and any related body corporate must maintain accounting records that comply with the Australian Accounting Standards Board Standards or equivalent International Accounting Standards.	4	The auditor reviewed the RIA's Financial Reports for the years ended 30 June 2015 and 30 June 2016 and confirmed compliance.	Α	1
161.	Compliance with performance standards	Clause 13.1	The licensee must comply with any individual performance standards prescribed by the ERA.	2	Individual performance standards regarding potable water system are set out in Schedule 3 of RIA's licence WL10 Version 7 dated 22 June 2015 and WL10 Version 8, dated 1 July 2016. The performance standards relate to the pressure and flow standards for potable water and conducting an annual desktop audit of the drainage scheme. As noted in the previous audit and in the Compliance Reports for 2015/16 and 2016/17 to the ERA, the RIA is unable to confirm that the potable water pressure and flow levels meet the	С	2
					minimum standards in the licence, as there are no pressure and flow measuring facilities. Installation of the equipment is to be considered in the 2017/18 capital works program. The RIA has advised that		

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					there have been no complaints from customers. This is a control issue rather than non-compliance. Recommendation 03/2017 As planned, the RIA should consider installing pressure and flow testing measuring facilities to periodically test that the minimum standards per the Water Licence performance standards are being achieved. The auditor sighted documentation of the annual drainage desktop audit and confirmed it had been completed.		
162.	Operational audit	Clause 14.4	The licensee must cooperate with the independent expert and comply with the ERA's standard audit guidelines dealing with the operational audit.	4	This audit/review is designed in accordance with the Audit Guidelines. The licensee has fully cooperated.	А	1
163.	External administration	Clause 15.1(a), (b), (c)	The licensee must report to the ERA, in the manner prescribed, if a licensee is under external administration or there is a material change in the circumstances upon which the license was granted which may affect a licensee's ability to meet its obligations.	4	The auditor confirmed by interview and review of the RIA's Financial Reports for the audit period that there is no external administration.	NP	NR
164.	Advise ERA of major or general works	Clause 15.1(d)	The licensee must report to the ERA within 10 business days of providing or undertaking water service works that are major works or general works.	4	The auditor confirmed with RIA's Contracts and Project Officer, Manager Major Projects and review of the Asset Management System documentation and drawings that no additional major works or general works have been proposed, provided or undertaken by the licensee during the audit period. The requirement to notify the Authority of any material change to the asset management system within 10 business days of providing or undertaking water service works that are major works is included in the "RIA Licence and Compliance Register". "General works" are exempt from this requirement.	A	NR

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165.	Provision of information to Authority	Clause 16.1	The licensee must provide the ERA any information that the ERA may require in connection with its functions under the Act in the time, manner and form specified by the ERA.	•	In accordance with the Water Compliance Reporting Manual 2016, the RIA is required to submit to the ERA: Annual performance reports no later than 31 July for the reporting year ending 30 June; and Annual compliance reports by 31 August for the year ending 30 June. The auditor reviewed the RIA's correspondence with the ERA and the Compliance and Performance Reports for 2015/16 and 2016/17 and confirmed the reports had been submitted by the due dates.	A	1
166.	Compliance reporting to ERA	Clause 16.2	The licensee must comply with any information reporting requirements prescribed by the ERA, including but not limited to the provisions of the Water Compliance Reporting Manual that apply to the licensee.		As per Obligation 165, the auditor reviewed the licensee's correspondence with the ERA and licensee's Compliance and Performance Reports for 2015/16 and 2016/17 and confirmed the required information had been provided. Section 9.3.2.3 of the Audit and Review Guidelines: Water Licenses July 2014 states that the ERA expects licensees to maintain a compliance (or breach) register in respect of their licence conditions. The auditor sighted a copy of the Licence and Compliance Register for the audit period.	A	1
167.	Performance reporting to ERA	Clause 16.3	The licensee must provide the ERA with the data required for performance reporting purposes that is specified in <i>Water Compliance Reporting Manual</i> , and the National Performance Framework that apply to the licensee.		The auditor reviewed the RIA's correspondence with the ERA and the Performance Reports for 2015/16 and 2016/17, and confirmed the RIA provided the ERA with the data required for performance reporting purposes in the time and format required.	А	1

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168.	Publishing information	Clause 17.2	Subject to clause 17.3, the licensee must publish within the specified timeframe any information that the ERA has directed the licensee to publish under clause 17.1.	4	The auditor reviewed the RIA's correspondence with the ERA in the audit period and confirmed that in the audit period, the RIA was not directed by the ERA to publish any information.	NP	NR
169.	Notices in writing	Clause 18.1	Unless otherwise specified, all notices must be in writing.	4	The auditor reviewed the RIA's correspondence with the ERA in the audit period and confirmed compliance. All correspondence observed was in hardcopy letter or email.	Α	1
170.	Notify Authority of asset management system (AMS)	Clause 20.1	The licensee must provide for, and notify the ERA of, an asset management system within the specified time unless otherwise notified by the ERA.	4	The ERA has been notified of and has approved the asset management system as part of the licence approval.	A	1
171.	Notify Authority of material change to AMS	Clause 20.2	The licensee must notify the ERA of any material change to the asset management system within 10 business days of the change.	4	The auditor confirmed with the RIA's Contracts & Project Officer and in the field visit that no significant changes have been made to the Asset Management System (AMS) during the audit period. The requirement to notify the ERA of any material change to the AMS within 10 days of the change is included in the Water Compliance Reporting Manual - list of all compliance obligations	A	NR
172.	Asset Management System Review	Clause 20.6	The licensee must cooperate with the independent expert and comply with the ERA's standard guidelines dealing with the asset management system review.	4	This review is being undertaken in accordance with the Audit and Review Guidelines. The licensee has fully cooperated with the review.	А	1
173.	Ombudsman scheme	Clause 21.1	The licensee must not supply water services to customers unless the licensee is a member of and bound by the Water Services Ombudsman scheme.	4	The auditor confirmed by interview with the RIA's Contracts & Project Officer and review of the correspondence between the licensee and the Energy and Water Ombudsman (WA) Limited, that the licensee is a member of the Water Services Ombudsman Scheme.	A	1
174	Customer contract	Clause 22.1	Subject to the Act and the terms of a customer contract that apply to the water service, the licensee must supply water services in accordance with the terms and conditions set out in Schedule 4 (if any).	4	There are no specific terms and conditions in Schedule 4 (Version 7) or Schedule 3 (Version 8) of the licence so this clause was not applicable in the audit period.	NP	NR

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175.		Clause 23.1	If directed by the ERA, the licensee must submit a draft customer contract for approval.	4	the RIA's Contracts & Project Officer confirmed there has been no directive from the ERA.	NP	NR
176.		Clause 23.2	The licensee must comply with any Customer Contract Guidelines that apply to the licensee.	4	As per Obligation 174.	NP	NR
177.		Clause 23.3	The licensee may only amend the customer contract with the ERA's approval.	4	As per Obligation 174.	NP	NR
178.		Clause 23.6	The licensee must comply with any direction by the ERA to amend the customer contract.	4	As per Obligation 174.	NP	NR
179.		Clauses 24.1 and 24.2	Unless clause 24.3 applies, the licensee cannot enter into an agreement with a customer to provide water services that exclude, modify or restrict the terms and conditions of the licence or the requirements of the <i>Customer Services Code</i> without the prior approval of the ERA.	4	The Property Manager provided a copy of the standard leasing contract. The auditor confirmed that there are no provisions to restrict the terms and conditions of the licence or the Code of Conduct. There are no other contracts or agreements in use.	NP	NR
180.		Clause 24.4	If the licensee enters into an agreement that excludes, modifies or restricts the terms and conditions of the licence or the requirements of the <i>Customer Services Code</i> , the licensee must publish an annual report containing the information specified.	4	As per Obligation 179.	NP	NR
181.	Obligations of supplier of last resort	Clause 25.1	If the licensee is appointed as the supplier of last resort for a designated area, the licensee must perform the functions of a supplier of last resort, comply with the duties imposed by the Act and carry out its operations under or for the purpose of the last resort plan in accordance with the Act.	4	The auditor confirmed with the RIA's Contracts & Project Officer that the RIA was not appointed as a supplier of last resort.	N/A	N/A

No⁴	Operating Area	Legislative Reference	Description	Audit Priority	Systems, Processes, Controls in Place to Comply with Licence (including any recommendations)	Adequacy of Controls Rating ⁵	Compliance Rating ⁶
182.	No services outside operating area	Clause 28.1(b)	If the licensee provides a water service outside of the operating area the licensee must apply to amend the licence unless otherwise notified by the ERA.	4	The auditor confirmed by interview with the RIA's Contracts & Project Officer, review of Asset Management System documentation and observation that the RIA does not provide a water service outside of the operating area set out in Plan Number: OWR-OA-189.	N/A	N/A
183.	Financial hardship Policy guidelines	Clause 30.3	The licensee must comply with the ERA's Financial Hardship Policy Guidelines as they apply to the licensee.	4	As the customers are commercial businesses, the RIA is not required to have a Financial Hardship Policy.	N/A	N/A
184	MOU with the Department of Health	Clause 31.1	The licensee must enter into a Memorandum of Understanding ('MOU') with the Department of Health as soon as practicable after the commencement date.	4	The auditor sighted the Memorandum of Understanding – Binding Protocols with the Department of Health (MOU). The current MoU between the Department of Health and the RIA, due to expire in April 2015, was extended to the end of 2015 at the request of the Department of Health, and has since been extended to 30 June 2017.	A	1
185		Clause 31.2	The Memorandum of Understanding must comply with the specified requirements in relation to legal standing of the document and compliance audits by the Department of Health.	4	The MOU is a legal document signed by both parties.	А	1
186		Clause 31.3	The licensee must comply with the terms of the Memorandum of Understanding.	4	From this audit and review of reports to the Department of Health, the audit concluded that the RIA is complying with the MOU. Annual drinking water quality incident tests are performed with the Department of Health. The tests did not identify any significant non-compliances.	A	1
187		Clause 31.4	The licensee must publish the Memorandum of Understanding and any amendments to the Memorandum of	4	The auditor confirmed the MOU is published on the RIA's website.	Α	1

No ⁴	Operating Area	Legislative Reference	Description	Audit Priority	Systems, Processes, Controls in Place to Comply with Licence (including any recommendations)	Adequacy of Controls Rating ⁵	Compliance Rating ⁶
			Understanding within one month of signing or making the amendment.				
188		Clause 31.5	The licensee must publish the audit report on compliance with its obligations under the Memorandum of Understanding on its website within one month of the completion of the audit.	4	There has not been any audit by the Department of Health during this licence audit period apart from the annual desktop audit of water quality incidents which is reported in the annual drinking water quality reports.	Α	NR
189		Clause 31.6	The licensee must publish any reports required by the Department of Health or set out in the Memorandum of Understanding on the licensee's website quarterly or at a reporting frequency specified by the Department of Health.	4	The auditor confirmed that the quarterly and annual drinking water quality reports have been published on the RIA's website for the audit period from 1 July 2015 to 30 June 2017.	А	1
190.	Service and performance standards (if applicable)	Clause 31.1	The licensee must comply with the service and performance standards as set out in Schedule 3.	2	As noted in the previous audit and in the Compliance Reports for 2015/16 and 2016/17 to the ERA, the RIA is unable to confirm that the potable water pressure and flow levels meet the minimum standards in the licence, as there are no pressure and flow measuring facilities. Installation of the equipment is to be considered in the 2017/18 capital works program. The RIA has advised that there have been no complaints from customers. This is a control issue rather than non-compliance. *Refer recommendation 03/2017.	С	2

2.7 Audit Recommendations

Table of Current Audit Non- Compliances and Recommendations

A. Resolved during c	A. Resolved during current audit period						
Item (no.) & Obligation (no.)	Non-Compliance/Controls Improvement (Legislative Obligation/Compliance Rating/Details)	Date Resolved (& management action taken)	Auditor's Comments				
	N/A						

B. Unresolved at end	B. Unresolved at end of current audit period					
Recommendation (no./year) & Obligation (no.)	Non-Compliance/Controls Improvement (Legislative Obligation/Compliance Rating//Details)	Auditor's Recommendation	Management Action taken by end of audit period			
01/2017	Interruption of Water Supplies Water Services Act 2012 Section 77(3)					
Obligation 16	Non-compliant – Minor impact The licensee must take reasonable steps to minimise the extent or	As planned by the RIA, Stage 2 of the analysis and	Continuing			
	duration of any interruption of water services it is responsible for.	rationalisation of the scanning data for the below-	Continuing			
	The previous audit report (October 2015) stated the RIA has undertaken localised potable reticulation repairs and improved detection of water leaks via a monitoring system for bulk meters. There is still a risk of unplanned interruptions due to the ageing infrastructure.	ground assets should be completed, including updating the Asset Register with the asset details, location and condition.				
	It recommended that the RIA should continue remedial action to reduce the risk of unplanned interruption of potable water supplies, including localised potable reticulation repairs, investigation of acoustic leak detection systems, improved metering and commencement of a GPS survey of higher risk pipes.					
	Subsequently, MAXIMO has been implemented by RIA as the Asset Management System for all of the Island's assets. All above ground utility assets have been uploaded into MAXIMO with a preventative					

Recommendation			Management
(no./year) & Obligation (no.)	Non-Compliance/Controls Improvement (Legislative Obligation/Compliance Rating//Details)	Auditor's Recommendation	Action taken by end of audit perio
	maintenance plan. All below ground assets have been mapped as part of a \$180,000 Board approved funding as stage 1 of a stage 2 process.		
	The underground survey has been completed. The RIA has received Stage 1 documentation, including detailed underground services drawings and topographic surveys. Stage 1 of the development of a master suite of documents and drawings in relation to all utilities on the Island has been completed.		
	Stage 2 (analysis and rationalisation of scanning data) is planned to be commenced in 2017/18, pending operational funding approval.		
	There is a rolling multi-year programme of capital works for improvements to potable water reticulation and storage.		
	The Performance Report provided to the ERA for 2015/16 reports that there were 7 unplanned interruptions to potable water supply with an average duration of 111 minutes. The 2016/17 report states there were no interruptions to the water supply. The audit concluded that "reasonable steps" are being taken and further works is planned to minimise the risk of interruption of water services.		
02/2017	Fire Hydrants		
	Water Services Act 2012 Section 96(1) & (5)		
Obligations 22,23)	Non-compliant – Moderate impact		
	If the licensee provides water supply reticulation works, or enters into an agreement for the provision of water supply reticulation works, the licensee must install fire hydrants attached to those works in accordance with the requirements of the Department of Fire and Emergency Services (DFES), or the relevant local government as to the location and type of hydrant.	As recommended by DFES, the fire hydrant system on the Island should be extended and 11 new fire hydrants installed to complete the upgrade of the fire hydrant system to the minimum performance requirement prescribed in Australian Standard 2419.1 Fire Hydrant Installation Part 1	Continuing
	The licensee must comply with requests made under sections 96(3) and 96(4) of the Act to the extent practicable and within a reasonable time.	System Design, Installation and Commissioning.	
	The previous audit report (October 201%0 stated that fire hydrants are installed but do not meet DFES requirements as identified in a survey in		

B. Unresolved at en	d of current audit period		
Recommendation (no./year) & Obligation (no.)	Non-Compliance/Controls Improvement (Legislative Obligation/Compliance Rating//Details)	Auditor's Recommendation	Management Action taken by end of audit period
	2012. The survey advised that the system's pressure is insufficient for a major fire event and also several hydrants have been shut off. There has also been no pressure testing for at least 5 years as this may damage the water mains. The RIA has advised there is an alternative response to fire events by use of bulk fire water tankers. It is outside the scope of this audit to assess the effectiveness of alternative responses.		
	The RIA's approved capital expenditure plan for 2015/16 includes new hydrants and a separate fire main pipeline using non-potable water, to address the issues with mains pressure for firefighting and to deliver a compliant system.		
	Subsequently, a new fire main and hydrant system from the View Hill Tank and new fire main along Parker Point Road has been installed, including the installation of 1.6 km of 200 mm hydrant main along Parker Point Road and a pump house.		
	The DFES Built Environment Branch assessed pressure and flow testing of the new fire service system during April 2017. The findings of the assessment have now been rectified and the system meets the minimum flow and pressure requirements.		
	DFES in their April 2017 report, recommended further extensions of the new fire main and the installation of 11 new fire hydrants.		
03/2017	Assessment of Performance Standards – Pressure and Flow Testing		
(Obligation 161)	Water Services Act 2012 – Section 27		
(conganess sos)	Licence conditions – Clause 13.1		
	Non-compliant – Minor impact		
	Individual performance standards regarding potable water system are set out in Schedule 3 of RIA's licence WL10 Version 7 dated 22 June 2015 and WL10 Version 8, dated 1 July 2016. The performance standards relate to the pressure and flow standards for potable water and conducting an annual desktop audit of the drainage scheme.	As planned, the RIA should install metering equipment to enable potable water flow and pressure to be recorded. Potable water flow meters are planned to be installed for the Bathurst, Caroline Thomson and Campground distribution network.	Nil
	As noted in the previous audit and in the Compliance Reports for 2015/16 and 2016/17 to the ERA, the RIA is unable to confirm that the		

ecommendation	Non-Compliance/Controls Improvement			Management
(no./year) & Obligation (no.)	(Legislative Obligation/Compliance Rating//Details)		Auditor's Recommendation	Action taken by end of audit perion
	potable water pressure and flow levels meet the minimum standards in the licence, as there are no pressure and flow measuring facilities. Installation of the equipment is to be considered in the 2017/18 capital works program. The RIA has advised that there have been no complaints from customers. This is a control issue rather than non-compliance.			
	The RIA plans to install metering equipment to enable potable water flow and pressure to be recorded. Potable water flow meters are planned to be installed for the Bathurst, Caroline Thomson and Campground distribution network.			
	Due to delays to the potable and fire hydrant main projects, the installation of potable water meters has been deferred to an October 2017 completion.			
04/2017	Billing Information			
	Water Services Act 2012 – Section 27			
(Obligations 100, 102)	Licence conditions – Clause 5.1. and 5.3 Water Services Code of Conduct (Customer Service Standards) 2013			
	Clauses 12(1) and 12(3)			
	Non-compliant – Minor impact			
	The "prescribed information" required by the Code of Conduct (Customer Service) 2103 is provided to customers via the monthly Utility Statements and the monthly invoices with the exception of:	The J	e RIA should arrange for the Property Agent to: Include the 24-hour telephone number for faults and emergencies on the invoices for	Nil
	The Utility Statement includes a 24-hour telephone number for faults and emergencies but this is not stated on the invoice; and		water charges; Include on annual and water usage invoices, the RIA website reference for the Customer	
	J Invoices do not include the RIA website reference for the Customer Water Services Manual and a statement that "the website contains information about estimates, meter reading and testing, complaints and review.		Water Services Manual and a statement that "the website contains information about estimates, meter reading and testing, complaints and review.	
	The additional information as per the Code of Conduct is stated in the Customer Water Services Manual. However, from review of	J	Include in annual and water usage invoices, the specified information in Clause 12(3) of the Code of Conduct (as noted in the	

ecommendation (no./year) & Obligation (no.)	Non-Compliance/Controls Improvement (Legislative Obligation/Compliance Rating//Details)	Auditor's Recommendation	Management Action taken by end of audit perio
	the annual and monthly water bills to customers, it was noted that the information specified in Clause 12(3) of the Code is not stated on the invoices as follows:	Customer Water Services Manual), as this is a requirement of the Code.	
	Clause 12 (3) states:		
) that the customer may request a meter reading and bill to determine outstanding charges for a period that is not the same as the usual billing cycle;		
) that the customer may request a meter reading and revised bill if the customer disputes an estimate on which a bill is based and that if the customer so requests, information about the fees that apply;		
) that the customer may request, in accordance with the regulations mentioned in section 79(3)(b), the testing of a meter and that if the customer so requests, information about the fees that apply and when the fees may be reimbursed in accordance with the regulations mentioned in section 79(3)(c);		
) that the bill can be reviewed in accordance with the licensee's review procedure mentioned in clause 18;		
) that complaints about the provision of a water service by the licensee or a failure by the licensee to provide a water service can be made in accordance with the licensee's complaints procedure mentioned in clause 35.		

2.8 Conclusion

This audit has been conducted to assess the licensee's level of compliance with the conditions of its licence.

Through the execution of the Audit Plan and assessment and testing of the control environment, the information system, control procedures and compliance attitude, the audit team members have gained reasonable assurance that the RIA has:

- a) complied with 134 applicable licence obligations during the audit period from 1 July 2015 to 30 June 2017 with 4 exceptions being:
 - i. 3 recommendations from the previous audit report in October 2015, where action has been taken but has not been fully completed, as follows:
 - upgrading the fire hydrant system on the Island to the minimum performance requirement prescribed in Australian Standard 2419.1 Fire Hydrant Installation Part 1 System Design, Installation and Commissioning, as recommended by the Department of Fire and Emergency Services:
 - further analysis and rationalisation of the scanning data for the below-ground assets needs to be completed, to minimise the risk of supply interruptions due to the possible failure of ageing in-ground water service assets; and
 - taking remedial action to reduce the risk of unplanned interruptions, including installing metering equipment to enable potable water flow and pressure to be measured and recorded to confirm the performance standards in the licence are being consistently achieved; and
 - ii. 1 new exception relating to the billing information provided to customers not including the RIA's website reference to the Customer Water Services Manual, specified information in respect of requesting meter readings, meter testing, review of a bill and the complaints procedure (as noted in the Customer Water Services Manual) and in some instances, the 24-hour telephone number for faults and emergencies;
- b) established an adequate control environment for ongoing compliance with the exception of the improvements noted above; and
- c) maintained the data integrity of reporting to the ERA.

3. Asset Management System Effectiveness Review

3.1 Description of Infrastructure

Rottnest Island's potable water source is supplied from a mix of bore fresh water extracted from shallow lens aquifers below the Island and saline water treated through a reverse osmosis process. The treated potable water is then reserved in a series of storage and header (pressure) tanks after being sterilised using chlorine gas, and reticulated to the settlements via a network of underground gravity pipeline infrastructure.

Wastewater generated on the Island is collected and conveyed via a piped underground gravity sewer system to a series of sewer pump stations and ultimately transferred to the newly upgraded Waste Water Treatment Plant ('WWTP') located on the Island. The incoming wastewater is directed into a high-level screw fed grit removal system and odour extraction/scrubbing process. A large holding tank then provides a degree of control to regulate flows and nutrient loads through the treatment plant.

The mix is subject to a finer grit screening process, down to 2mm before commencing further treatment. Effluent is processed through the membrane bioreactor plant, where it is fed via pump to mixing, aeration and scouring tanks before passing through a long length of membrane filter. The above ground concrete tanks, salvaged from the previous WWTP, have been refurbished with new mechanical/electrical plant. The final stage combines biological treatment (an activated sludge process to oxidise matter and remove nutrients) with membrane filtration to provide an advanced level of total suspended solids removal.

Solid sludge is collected at the plant and then transported to the mainland for disposed in accordance with the Environmental Protection Agency (EPA) requirements.

The high quality treated wastewater leaving the plant is of a class suitable for re-use in non-potable applications. A large steel 1000kL tank provides storage capacity while a series of new pumps (not yet in service) will provide head and flow to distribute the non-potable water. Non-potable water from Tanks 6 & 3 in the water distribution system, previously used to irrigate the golf course, have also been linked to the 1000kL recycled water tank.

A lagoon with a flexible impervious liner allows for excess holding capacity in case of plant failure or in the remote case, extreme incoming flows.

The long-term proposition is to irrigate the Rottnest Island Golf Course. This will avoid high potable water usage during warmer times of the year, with recycled water from the wastewater treatment plant irrigating the golf course.

3.2 Objectives and Scope

The objective of the review was to assess the adequacy and effectiveness of the asset management system in place for the undertaking, maintenance and monitoring of the licensee's assets.

The scope of the review included an assessment of the adequacy and effectiveness of the asset management system by evaluating the key processes of:

Asset planning
Asset creation/acquisition
Asset disposal
Environmental analysis
Asset operations
Asset maintenance
Asset management information system
Risk management

Contingency planning

Financial planning

Capital expenditure planningReview of the asset management system.

The highest priority asset components based on inherent risk were:

- Asset Planning high inherent risk.
- **Environmental Analysis** high inherent risk.
- Risk Management high inherent risk.
- Contingency Planning high inherent risk.
- **Financial Planning** previous review noted no detailed financial plan for water services.
- Capital Expenditure Planning previous review noted no separate capital expenditure plan for water services apart from the overall RIA Strategic Asset Investment Plan.

This review covered the period from 1 July 2015 to 30 June 2017.

The previous review was from 1 July 2013 to 30 June 2015.

3.3 Asset Management Process and Performance Rating Scales

The adequacy of process policy and definition and the performance of the key processes were assessed using the scales described in the tables below. The overall effectiveness rating for each asset management process is based on a combination of the process and policy adequacy rating and the performance rating.

Asset Management Process and Policy Definition - Adequacy ratings

RATING	DESCRIPTION	Criteria
A	Adequately defined	Processes and policies are documented. Processes and policies adequately document the required performance of the assets. Processes and policies are subject to regular reviews, and updated where necessary. The asset management information system(s) are adequate in relation to the assets that are being managed.
В	Requires some improvement	Process and policy documentation requires improvement. Processes and policies do not adequately document the required performance of the assets. Reviews of processes and policies are not conducted regularly enough. The asset management information system(s) require minor improvements (taking into consideration the assets that are being managed).
С	Requires significant improvement	Process and policy documentation is incomplete or requires significant improvement. Processes and policies do not document the required performance of the assets. Processes and policies are significantly out of date. The asset management information system(s) require significant improvements (taking into consideration the assets that are being managed).
D	Inadequate	Processes and policies are not documented. The asset management information system(s) is not for purpose (taking into consideration the assets that are being managed).

Asset Management Performance ratings

RATING	DESCRIPTION	CRITERIA						
1	Performing effectively	The performance of the process meets or exceeds the required levels of performance. Process effectiveness is regularly assessed, and corrective action taken where necessary.						
2	Opportunity for improvement	 The performance of the process requires some improvement to meet the required level. Process effectiveness reviews are not performed regularly enough. Process improvement opportunities are not actioned. 						
3	Corrective action required	The performance of the process requires significant improvement to meet the required level. Process effectiveness reviews are performed irregularly, or not at all. Process improvement opportunities are not actioned.						
4	Some action required	Process is not performed, or the performance is so poor that the process is considered to be ineffective.						

3.4 Status of Previous Review Recommendations

The previous review covered the period from 1 July 2013 to 30 June 2015 and was reported in October 2015.

Reference (no./year) Compliance rating	Asset System Deficiency (AMS Component/Effectiveness Criteria/Details)	Auditor's Recommendation	Date Resolved	Further Action Required (if any) & Details (Including current recommendation ref. if applicable)
A. Resolved be	efore end of previous review			
	Nil			
B. Resolved di	uring current review period			
09/2015	Asset Planning – Asset Management Plan			
B3	Asset management plan covers key requirements. Lifecycle costs of owning and operating assets are assessed. Funding options are evaluated. Plans are regularly reviewed and updated. The RIA has developed the Rottnest Island Management Plan 2014-19 and the Strategic Asset Investment Plan 2014-15 to 2023-24 that include the key requirements for the potable water supply and the wastewater services. The RIA intends to develop a specific Asset Management Plan for the water assets but this has not yet occurred. The lifecycle costs of the water assets have not yet been assessed and budgeted for. The Strategic Asset Investment Plan 2014-15 to 2023-24 includes a project to establish the asset baseline (condition) of water assets (and other Island assets) as an interim step in preparing a 10-year asset maintenance plan. It is recognised in the Plan that "the RIA lacks a long-term strategy for the ongoing maintenance and renewal of its built infrastructure, or a methodical capital evaluation process to assess need and whole of life cost of its assets".	As noted in recommendation 01/2015, and as planned, the RIA should develop and implement a detailed Asset Management Plan for potable water, non-potable water and drainage. This should be integrated with the overall Strategic Asset Investment Plan and supporting policies, procedures and the Asset Register system. a) The detailed Asset Management Plan for potable water and wastewater treatment assets (AMP) should include the lifecycle costs of owning and operating the assets over the lifecycle of the assets. b) The AMP should consider the funding options for the maintenance and renewal of the assets. c) The AMP should be reviewed and updated if major changes occur or at least every 5 years.	Sept. 2016	No further action required A Strategic Asset Plan 2016- 17 to 2026-27, Strategic Asset Management Plan 2016-17 and a Multi Utility Asset Management Plan 2016 – 2020 have been completed.

Reference (no./year) Compliance rating	Asset System Deficiency (AMS Component/Effectiveness Criteria/Details)	Auditor's Recommendation	Date Resolved	Further Action Required (if any) & Details (Including current recommendation ref. if applicable)
	The Strategic Asset Investment Plan 2014-15 to 2023-24 recognises that funding options need to be further considered. This is planned to continue and to be developed further when the asset baseline project has been completed in 2016.			
	The Strategic Asset Investment Plan 2014-15 to 2023-24 was reviewed and updated in October 2014. The asset investment required is reviewed annually as part of developing the capital expenditure programme each year. Review of the detailed Asset Management Plan, when developed, should be included in the Plan.			
12/2015	Financial Planning			
C4	The financial plan states the financial objectives and strategies and actions to achieve the objectives.	The RIA, as part of developing an Asset	Sept. 2016	No further action required A Multi Utility Asset
	The financial plan identifies the source of funds for capital expenditure and recurrent costs.	Management Plan for the water services, should develop a 5-year financial plan that includes the forecast income and expenses, an allowance for		Management Plan 2016 – 2020 have been completed
	The financial plan provides projections of operating statements (profit and loss) and statement of financial position (balance sheets).	capital expenditure to upgrade or replace assets (based on the Asset Condition Baseline project results) and the source of funding or shortfall.		including water services. This includes planning for the upgrade or replacement
	The financial plan provides firm predictions on income for the next five years and reasonable indicative predictions beyond this period.			of assets. A 10-year capital expenditure profile is included in the Strategic Asset Plan 2016-17 to 2026-
	The financial plan provides for the operations and maintenance, administration and capital expenditure requirements of the services.			27.
	As there is no separate Asset Management Plan for the water licence services, the financial plan is part of the overall Strategic Asset Investment Plan 2014-15 to 2023-24. The Strategic Asset Investment Plan 2014-15 to 2023-24 includes a project to establish the asset baseline (condition) of water assets (and other Island assets) as an interim step in preparing a 10 year asset maintenance			

Reference (no./year) Compliance rating	Asset System Deficiency (AMS Component/Effectiveness Criteria/Details)	Auditor's Recommendation	Date Resolved	Further Action Required (if any) & Details (Including current recommendation ref. if applicable)
	plan. It is recognised in the Plan that "the RIA lacks a long term strategy for the ongoing maintenance and renewal of its built infrastructure, or a methodical capital evaluation process to assess need and whole of life cost of its assets".			
	The only major capital expenditure currently planned over the next 5 years is the upgrade of the wastewater treatment plant. The project funding is across three financial years commencing in 2014/15 with the detailed design. The capital funds are to come from RIA's available funds. The operating expenditure of the new plant is expected to be consistent with the current operating costs and will be funded from the RIA's income and recurrent funding from government.			
	The RIA has developed a four year projection of income and expenses for the potable water and wastewater services on the Island. The RIA estimates there is an annual subsidy of \$236,077 per annum for potable water and \$645,071 per annum for wastewater services.			
	The financial plan for the next four years show that the current level of income is insufficient to fund the operating costs of the services apart from any allowance for the capital expenditure in replacing or upgrading assets. The RIA is considering adjusting the charges for these services but this will only cover part of the shortfall.			
	The financial plan does not provide adequate funding for the operating expenses and the capital expenditure requirements of the services.			
13/2015	Capital Expenditure Plan			
D4	There is a capital expenditure plan that covers issues to be addressed, actions proposed, responsibilities and dates.	The RIA, as part of developing an Asset Management Plan for the water services, should develop a 5-year capital expenditure plan that is based on the Asset Condition Baseline project	Sept. 2016	No further action required A Multi Utility Asset Management Plan 2016 – 2020 have been completed

Reference (no./year) Compliance rating	Asset System Deficiency (AMS Component/Effectiveness Criteria/Details)	Auditor's Recommendation	Date Resolved	Further Action Required (if any) & Details (Including current recommendation ref. if applicable)
	The plan provides reasons for capital expenditure and timing of expenditure. The capital expenditure plan is consistent with the asset life and condition identified in the asset management plan. There is an adequate process to ensure that the capital expenditure plan is regularly updated and actioned. The Strategic Asset Investment Plan 2014-15 to 2023-24 includes a project to establish the asset baseline (condition) of water assets (and other Island assets) as an interim step in preparing a 10-year asset maintenance plan. There is no separate capital expenditure plan for the water supply services apart from an assessment of the highest priority capital expenditure currently planned is the upgrade of the wastewater treatment plant. The project funding is across three financial years commencing in 2014/15 with the detailed design. The capital funds are to come from RIA's available funds. There is no separate capital expenditure plan for the water supply services apart from an assessment of the highest priority capital expenditure items over the next year. For example, the capital expenditure budget for 2014/15 includes \$210,000 for potable water storage and distribution improvements, and \$150,000 for fire hydrant improvements. Funding is from the RIA's available funds.	results and provides for the replacement of the assets over their estimated useful life.		including water services. This includes planning for the upgrade or replacement of assets. A 10-year capital expenditure profile is included in the Strategic Asset Plan 2016-17 to 2026-27.
C. Unresolved	before end of current review			
10/2015 A2	Asset Operations – Asset Register		-	In progress

Reference (no./year) Compliance rating	Asset System Deficiency (AMS Component/Effectiveness Criteria/Details)		Auditor's Recommendation	Date Resolved	Further Action Required (if any) & Details (Including current recommendation ref. if applicable)
	Assets are documented in an Asset Register including asset type, location, material, plans of components, and an assessment of assets' physical/structural condition and accounting data.	a)	As planned, the RIA in conjunction with PFM should complete the asset condition assessment project and update the individual asset register in the Maximo system.		The RIA advised that the asset register is contingent upon asset discovery and continues to be updated.
	Assets are documented in the Maximo system maintained by PFM on the Island. The asset register includes: Asset Class Asset location Asset Sub-location Asset number Description. The register does not include a condition assessment although this is currently being assessed and input into an Excel database by the Asset Condition Baseline project which is due for completion in 2015. No formal 'As Constructed' records of infrastructure exist. For instance, pipe infrastructure is comprised of a wide mix of different components and materials in varying states of age and repair. There is certain reliance upon the memory of key long-term staff to recall historic details about existing infrastructure. A Geographical Information System (GIS) would assist in asset operations to manage and schedule maintenance for underground pipes, structures and appurtenances. The historical cost information for the assets has not been transferred to the Asset Register but is in the financial system of the RIA.	b)			This asset project is split into two parts. 1. The first part was completed on 30/06/2016 as part of a larger project. 2. The second half of the project is currently in progress, which is subject to the underground survey. The RIA received final documentation, including detailed underground services drawings and topographic surveys. The asset register completion will form the next part of this process. The physical asset register and the accounting asset register will have common financial codes and therefore this link will be manual only. However, MAXIMO has the capability to cross-reference the accounting asset register

Reference (no./year) Compliance rating	Asset System Deficiency (AMS Component/Effectiveness Criteria/Details)	Auditor's Recommendation	Date Resolved	Further Action Required (if any) & Details (Including current recommendation ref. if applicable)
				identifiers. The requirements to link unique asset identifiers in MAXIMO and the accounting asset register are being scoped. The drawings are dated and are being systematically updated as RIA improves the processes and capture the data. A significant amount of drawings will be updated during the underground utilities project and uploaded onto MAXIMO The RIA uses a GIS and is implementing a programme of surveys of key locations, associated with capital works projects, this has yet to be scoped and incorporated in the MAXIMO Asset Management System. Refer recommendation 01/2017 in section 2.7.

Reference (no./year) Compliance rating	Asset System Deficiency (AMS Component/Effectiveness Criteria/Details)		Auditor's Recommendation	Date Resolved	Further Action Required (if any) & Details (Including current recommendation ref. if applicable)
11/2015 A2	Asset Maintenance – Condition Assessment Regular inspections are undertaken of asset performance and condition. Asset performance is monitored via the planned monthly, quarterly and annual maintenance checks by senior staff and others, who have the skill and knowledge to do so. There is also a SCADA (Supervisory Control and Data Acquisition) based computerised system providing real time operational performance, alarms and control over remote equipment (which also forms part of the risk assessment used to prioritise maintenance tasks). As noted in 5.3 above, the asset register does not include a condition assessment although this is currently being assessed and input into an Excel database by the Asset Condition Baseline project. There were several opportunities for improvement noted as follows: J From our field observations, the water supply holding and pressurisation tanks do not appear to have a formal system for inspecting the tank roofs and tank wall structural integrity. There has historically been some water quality issues associated with dead end sections of water mains and the lack of scour valves and washout assemblies. There were some concerns raised by PFM surrounding the reliability of osmosis plant pumps.	a) b)	It is recommended that PFM complete an initial inspection and condition report in the short term to ascertain the water supply holding and pressurisation tank integrity, and develop a maintenance schedule based upon the condition of the assets. It is recommended that RIA/PFM consider the provision of funds in the capital works expenditure budget to install (cut in) scour valves in the lowest lying section of mains or to install wash out assemblies at the end of mains without existing flushing points, to improve the potable water quality. It is recommended that RIA/PFM consider the establishment of a pump management program for the osmosis plant pumps, including monitoring the operation, flows, and pump efficiency. Hence, the projected remaining life of the asset and provision of critical spares, may address these concerns.	- January 2017	In progress a) The condition report is complete for all above ground assets. All above ground assets have been loaded into MAXIMO and have a preventative maintenance plan, which includes all statutory maintenance. Condition assessments for all assets (below-ground) have commenced but are not yet completed. Refer recommendation 01/2017 in section 2.7. b) No change Refer recommendation 07/2017 (a). c) Completed.

3.5 Summary of Asset Management System Effectiveness Ratings

The audit assessment of the asset management system process and policy definitions and their effectiveness, based on the ratings scale in Section 3.3, is shown in the table below.

Section 3.6 provides further details of the rating results for each process in the asset management system.

ASSET MAN/AGEMENT SYSTEM COMPONENT & EFFECTIVENESS CRITERIA	Process and policy definition Performance rating						ing		
	Adequately defined	Requires some improvement	Requires significant improvement	Inadequate	Performing effectively	Opportunity for improvement	Corrective action required	Serious action required	Not Rated
	Α	В	С	D	1	2	3	4	NR
1. Asset planning	Α					2			
1.1 Asset management plan covers key requirements.	Α				1				
1.2 Planning process and objectives reflect the needs of all stakeholders and is integrated with business planning.	Α				1				
1.3 Service levels are defined.	Α				1				
Non-asset options (e.g. demand management) are considered.	Α				1				
1.5 Lifecycle costs of owning and operating assets are assessed.	Α					2			
1.6 Funding options are evaluated.	Α					2			
1.7 Costs are justified and cost drivers identified.	Α				1				
Likelihood and consequences of asset failure are predicted.	А				1				
1.9 Plans are regularly reviewed and updated.	Α					2			
2. Asset creation/ acquisition	Α				1				
Full project evaluations are undertaken for new assets, including comparative assessment of non-asset solutions.	Α				1				
2.2 Evaluations include all life-cycle costs.	Α				1				
Projects reflect sound engineering and business decisions.	А				1				
Commissioning tests are documented and completed.	Α				1				

ASSET MAN/AGEMENT SYSTEM COMPONENT & EFFECTIVENESS CRITERIA		icy d	ss an efinit ing						ing
	Adequately defined	Requires some improvement	Requires significant improvement	Inadequate	Performing effectively	Opportunity for improvement	Corrective action required	Serious action required	Not Rated
	Α	В	С	D	1	2	3	4	NR
2.5 Ongoing legal/environmental/safety obligations of the asset owner are assigned and understood.	Α				1				
3. Asset disposal	Α				1				
3.1 Under-utilised and under-performing assets are identified as part of a regular systematic review process.	Α				1				
3.2 The reasons for under-utilisation or poor performance are critically examined and corrective action or disposal undertaken.	Α				1				
3.3 Disposal alternatives are evaluated.	Α				1				
3.4 There is a replacement strategy for assets.	Α				1				
4. Environmental analysis	Α					2			
4.1 Opportunities and threats in the system environment are assessed.	Α				1				
4.2 Performance standards (availability of service, capacity, continuity, emergency response, etc) are measured and achieved.	Α					2			
4.3 Compliance with statutory and regulatory requirements.	Α				1				
4.4 Achievement of customer service levels.	Α				1				
5. Asset operations	Α					2			
5.1 Operational policies and procedures are documented and linked to service levels required.	Α				1				
5.2 Risk management is applied to prioritise operations tasks.	Α				1				
5.3 Assets are documented in an Asset Register including asset type, location, material, plans of components, and an assessment of assets' physical/structural condition and accounting data.	Α					2			
5.4 Operational costs are measured and monitored.	Α				1				
5.5 Staff resources are adequate and staff receive training commensurate with their responsibilities.	Α				1				

ASSET MAN/AGEMENT SYS COMPONENT & EFFECTIVENESS				ss an efiniti ing		Performance rating				ing
		Adequately defined	Requires some improvement	Requires significant improvement	Inadequate	Performing effectively	Opportunity for improvement	Corrective action required	Serious action required	Not Rated
		Α	В	С	D	1	2	3	4	NR
Asset maintenance Maintenance policies and proc documented and linked to ser required.		A				1	2			
6.2 Regular inspections are und asset performance and condition		Α					2			
6.3 Maintenance plans (emergency and preventative) are docum completed on schedule.		Α				1				
6.4 Failures are analysed operational/maintenance plans where necessary.		Α				1				
6.5 Risk management is applied t maintenance tasks.	o prioritise	Α				1				
6.6 Maintenance costs are measmonitored.	sured and	Α				1				
7. Asset Management Information (MIS)	n System	Α				1				
7.1 Adequate system documentatio and IT operators.	n for users	Α				1				
7.2 Input controls include a verification and validation of da into the system.	appropriate ata entered	Α				1				
7.3 Logical security access contro adequate, such as passwords.	ols appear	Α				1				
7.4 Physical security access contradequate.	ols appear	Α				1				
7.5 Data backup procedures appea and backups are tested.	r adequate	Α				1				
7.6 Key computations related to performance reporting are accurate.	licensee materially	Α				1				
7.7 Management reports appear active licensee to monitor licence of		Α				1				

ASSET MAN/AGEMENT SYSTEM COMPONENT & EFFECTIVENESS CRITERIA	Process and policy definition Perform rating				manc	e rat	ing		
	Adequately defined	Requires some improvement	Requires significant improvement	Inadequate	Performing effectively	Opportunity for improvement	Corrective action required	Serious action required	Not Rated
	Α	В	С	D	1	2	3	4	NR
8. Risk management	Α				1				
8.1 Risk management policies and procedures exist and are being applied to minimise internal and external risks associated with the asset management system.	A				1				
8.2 Risks are documented in a risk register and treatment plans are actioned and monitored.	^				1				
8.3 The probability and consequences of asset failure are regularly assessed.	А	_			1				
9. Contingency planning	Α				1				
9.1 Contingency plans are documented, understood and tested to confirm their operability and to cover higher risks.	Α				1				
10. Financial planning	Α					2			
10.1 The financial plan states the financial objectives and strategies and actions to achieve the objectives.	А				1				
10.2 The financial plan identifies the source of funds for capital expenditure and recurrent costs.	Α					2			
10.3 The financial plan provides projections of operating statements (profit and loss) and statement of financial position (balance sheets).	Α				1				
10.4 The financial plan provides firm predictions on income for the next five years and reasonable indicative predictions beyond this period.	Α				1				
10.5 The financial plan provides for the operations and maintenance, administration and capital expenditure requirements of the services.	Α				1				
10.6 The financial plan states the financial objectives and strategies and actions to achieve the objectives.	A				1				

ASSET MAN/AGEMENT SYSTEM COMPONENT & EFFECTIVENESS CRITERIA	Process and policy definition rating				Р	erfor	mance rating		
	Adequately defined	Requires some improvement	Requires significant improvement	Inadequate	Performing effectively	Opportunity for improvement	Corrective action required	Serious action required	Not Rated
	A	В	С	D	1	2	3	4	NR
11. Capital expenditure planning						2			
11.1 There is a capital expenditure plan that covers issues to be addressed, actions proposed, responsibilities and dates.	Α				1				
11.2 The plan provides reasons for capital expenditure and timing of expenditure.	Α				1				
11.3 The capital expenditure plan is consistent with the asset life and condition identified in the asset management plan.	Α					2			
11.4 There is an adequate process to ensure that the capital expenditure plan is regularly updated and actioned.	Α				1				
12. Review of asset management system	Α				1				
12.1 A review process is in place to ensure that the asset management plan and the asset management system described therein are kept current.	Α				1				
12.2 Independent reviews (e.g. internal audit) are performed of the asset management system.	Α				1				

3.6 Detailed Review Observations

Item no.	Component and Effectiveness Criteria (refer criteria in Audit Guidelines)	Observations and results (including any potential improvements)				
1	ASSET PLANNING	Process Rating ⁷	Α	Performance Rating ⁸	2	
1.1	Asset management plan covers key requirements.	The RIA has previously developed the Rottnest Island Management Plan 2014-19 that provides high-level strategies and plans. Since the previous review, the RIA and PFM have significantly improved the asset management planning and documentation, including the development of RIA Asset Management Policy (July 2016) Strategic Asset Investment Plan 2016-17 to 2026-27 that provides the objectives, status and needs of utility assets including water, with the priorities for expenditure in the next 12 months and a 10-year capital expenditure profile that is subject to funding. The Plan is to be reviewed annually. Strategic Asset Management Plan 2016-17 that sets out the systems and strategies to manage the Island's assets for the benefit of stakeholders. Multi-Utility Asset Management Plan 2016 - 2020 that provides a description of the overall system components and summarises key asset and planning information at a single point of time with the purpose to identify the financial consequences of delivering services through physical assets.				
		The Plans cover the key requirements of	the water serv	rices over 1 year, 5 year and 10 year planning	horizons.	
1.2	Planning process and objectives reflect the needs of all stakeholders and is integrated with business planning.	The business planning process in developing the above plans has included input from stakeholders and is integrated with the RIA's planning and budgeting processes. The planning process is also aligned with the WA Government Treasury planning cycle.				
1.3	Service levels are defined.	(including drainage) are defined in the Mand the Rottnest Island Facilities, Utilities Facility Management (PFM). Monthly date	Multi-Utility Ass s and Support shboard report	stewater and sewerage service and grounds et Management Plan 2016 – 2020 (sections 1 Services (FUSS) contract between the RIA and s are provided to the RIA on key performance in the annual performance reports provided to	11.3 and 11.4) d Programmed indicators.	

⁷ Process ratings: A=adequately defined, B=requires some improvement, C=requires significant improvement, D=inadequate.

⁸ Performance ratings: 1=performing effectively, 2=opportunity for improvement, 3=corrective action required, 4=serious action required

Item no.	Component and Effectiveness Criteria (refer criteria in Audit Guidelines)	Observations and results (including any potential improvements)
1.4	Non-asset options (e.g. demand management) are considered.	Non-asset options have been considered in the Strategic Asset Investment Plan 2016-17 to 2026-27, such as the use of renewable energy to power the wastewater treatment plant and the greater use of recycled water for irrigation to conserve potable water supplies. These initiatives are currently in progress.
1.5	Lifecycle costs of owning and operating assets are assessed.	The lifecycle costs of the water assets have not yet been assessed and budgeted for by the RIA. The Multi-Utility Asset Management Plan 2016 – 2020 includes a project to establish the asset baseline (condition) of water assets (and other Island assets) and develop a lifecycle costing model. The models for the potable water supply and the wastewater treatment plant and infrastructure, are progressively being developed based upon mapping, condition assessments, updating the asset register in the Computerised Maintenance Management System "Maximo". Recommendation 05/2017 As planned, the RIA should develop lifecycle costing models for the potable water services and the waste water treatment services, including completing the condition assessments and populating the asset register in the Maximo
1.6	Funding options are evaluated.	system (above-ground assets have been completed). The lifecycle costs should be considered in the long-term planning and budgeting for provision of the services. The Strategic Asset Investment Plan 2016-17 to 2026-27 recognises that funding options need to be further considered. This is planned to continue and to be developed further when the asset baseline project has been completed. Also, the lifecycle costing project will contribute to a better understanding of the funding requirements. Refer item 1.5 above.
1.7	Costs are justified and cost drivers identified.	The operating and maintenance costs and capital expenditure for potable/non-potable water supply and wastewater supply are justified in the financial management processes of the RIA. The cost drivers are identified through the business planning process that prioritises projects as detailed in the Multi Utility Asset Management Plan 2016-2020. The drivers include demand management, maintenance costs, safety risks, etc.
1.8	Likelihood and consequences of asset failure are predicted.	PFM has an Enterprise Risk Management Plan for 2017/18 that includes detailed risk assessments for the potable water supply and wastewater treatment services, including the likelihood and consequences of asset failure.
1.9	Plans are regularly reviewed and updated.	The Asset Management Plans referred to in item 1.1 have been developed or updated in the past 2 years. The capital expenditure funding required is reviewed annually as part of developing the capital expenditure programme each year. It was noted that not all documents have version control including approval date and next review date. An example is the Strategic Asset Plan 2016-17 to 2026-27 (no version control) and the Multi Utility Asset Management Plan 2016-2020 (has revision history but no approval date and next review date).

Item no.	Component and Effectiveness Criteria (refer criteria in Audit Guidelines)	Observations and results (including any potential improvements) Recommendation 06/2017					
		The RIA should ensure that a consistent version control including revision history, approver and date and next review date are recorded on the asset management planning documents, and a reminder is included in a register such as the Licence and Compliance Register.					
2	ASSET CREATION/ ACQUISITION	Process Rating A Performance Rating 1					
2.1	Full project evaluations are undertaken for new assets, including comparative assessment of non-asset solutions.	The only major asset creation/acquisitions were the upgrading of the wastewater treatment plant and the upgrading of the fire hydrants. The evaluations and procurement were performed in accordance with the RIA's procurement framework and included adequate evaluation of the need for the new assets and alternatives. Detailed business cases were developed.					
2.2	Evaluations include all life-cycle costs.	The evaluation for the wastewater treatment plant and the fire hydrants included evaluating the lifecycle costs and considering these as part of the final decision.					
2.3	Projects reflect sound engineering and business decisions.	Major water and wastewater capital projects are subject to preparation, scoping and development of an individual business case, in line with the RIA Strategic Asset Investment Plan 2016-17 to 2026-27 objectives. Approval for projects to proceed requires RIA management and board approval.					
		Capital works are undertaken under contract and subject to RIA's procurement policies and procedures. Both the wastewater treatment plant upgrade and fire service main projects were capital works undertaken during the audit period.					
		The RIA engaged specialist consultants and contractors to complete the investigation, design and construction works on their behalf. Strategically, the opportunity to review shortcomings with existing infrastructure was undertaken and additional improvements have been made to the system holistically (where budget allows).					
2.4	Commissioning tests are documented and completed.	There is a PFM procedure for the commissioning and handover of new assets. Commissioning tests for the wastewater treatment plant were performed by the contractor and evidenced in a handover report. A Project Closure Report on the wastewater treatment plant was also produced with "lessons learned".					
		The Department of Fire and Emergency Services (DFES) assessed pressure and flow testing of the recently constructed fire service system – Built Environment Branch – during April 2017. The remedial actions recommended in the assessment have now been rectified and the system meets the minimum flow and pressure requirements.					
2.5	Ongoing legal/environmental/safety obligations of the asset owner are assigned and understood.	The ongoing obligations of the asset owner, RIA, have been assigned to the contractor, PFM, under the Rottnest Island Facilities, Utilities and Support Services (FUSS) contract between the RIA and PFM. The reviewer sighted various documentation of environment and safety procedures for the ongoing operation of the water assets on the					

Item no.	Component and Effectiveness Criteria (refer criteria in Audit Guidelines)	Observations and results (including any potential improvements)						
			sland including Asset Management Process Manual, Asset Register Management procedure, Asset Change Form and Asset Commissioning and Handover procedure.					
		The control of the asset creation and	e control of the asset creation and acquisition process is considered to be satisfactory.					
3	ASSET DISPOSAL	Process Rating	Α	Performance Rating	1			
3.1	Under-utilised and under-performing assets are identified as part of a regular systematic review process.	Under-utilised and under-performing assets are identified from observations of key performance indicators as set out in the FUSS contract. Under-performing assets are also being identified as part of the Asset Condition Baseline project that is nearing completion and will result in a detailed register of assets and their condition. The wastewater treatment plant upgrade was a significant capital project; this involved disposal of assets which had no significant salvage value. The primary grit removal machinery and large (above ground) concrete tank associated with the former wastewater treatment plant (most valuable parts), were both retained and integrated with the new plant.						
3.2	The reasons for under-utilisation or poor performance are critically examined and corrective action or disposal undertaken.	reviewed by PFM and work orde	Any under-utilised or under-performing assets identified from regular inspections and performance monitoring are reviewed by PFM and work orders created on the Maximo system for any corrective action required (e.g. maintenance). Commercial disposal of assets from the Island is generally unrealistic due to the cost of relocating the asset to the mainland.					
3.3	Disposal alternatives are evaluated.			nd would be undertaken by PFM under e analysis of options in the Business Cas				
3.4	There is a replacement strategy for assets.	The Strategic Asset Investment Plar strategy and this will be further refine		7 includes an overall short-term and lon dition Baseline project.	g-term replacement			
		The controls over asset disposals ar	e considered to be	satisfactory.				
4	ENVIRONMENTAL ANALYSIS	Process Rating	Α	Performance Rating	2			
4.1	Opportunities and threats in the system environment are assessed.	The Strategic Asset Management Prisk management framework to prior		Multi-Utility Asset Management Plan 20 ects.)16 – 2020 include a			
		Opportunities and threats for the potable water system, non-potable water system and wastewater system are assessed in the Enterprise Risk Management Plan prepared by PFM for 2016/17. The Plan includes 17 risk statements covering external risks such as bushfire and water quality issues to internal risks such as performance management. The coverage is considered to comprehensively cover potential risks to the water services. PFM also have comprehensive Occupational Health and Safety management systems and the Drinking Water Quality Risk Management Plan and quarterly monitoring and reporting on drinking water quality.						
4.2	Performance standards (availability of service, capacity, continuity,			erly reports are provided to the Departre e aesthetic water quality tests not mee				

lton no	Component and Effectiveness Criteria	Observations and results				
Item no.	(refer criteria in Audit Guidelines)	(including any potential improvements)				
	emergency response, etc.) are measured and achieved.	These did not pose any health risks. Non-potable recycled water is also regularly tested and an annual report is provided to the Department of Health per the licence.				
		The Annual Performance Reports to the Authority for 2015/16 and 2016/17 were sighted. Performance standards have been met apart from the lack of water pressure and flow monitoring which has not resulted in any customer complaints. <i>Refer recommendation 03/2017 (section 2.7 of this report).</i>				
		One continuing issue is the number of interruptions to supply due to the ageing reticulation system for potable water. The number of interruptions to the potable water supply reduced over the past few years. The Performance Report provided to the ERA for 2015/16 reports that there were 7 unplanned interruptions to potable water supply with an average duration of 111 minutes. The 2016/17 report states there were no interruptions to the water supply.				
		The audit concluded that "reasonable steps" are being taken and further works is planned to minimise the risk of interruption of water services. The RIA has undertaken localised potable reticulation repairs and improved detection of water leaks via a monitoring system for bulk meters. However, there is still a risk of unplanned interruptions due to the ageing infrastructure.				
		Refer recommendation 01/2017 (section 2.7 of this report).				
4.3	Compliance with statutory and regulatory requirements.	The RIA Licence and Compliance Register lists the statutory and regulatory licences and other compliance requirements including reporting to the regulatory authorities. The RIA's Contracts and Project Officer monitors compliance.				
		Any breaches or non-compliance issues are logged in the Breaches and Non-Compliances Register. There were some minor issues logged and actioned in the audit period.				
4.4	Achievement of customer service levels.	The Compliance Reports to the ERA for 2015/16 and 2017/18 and the Complaints Register showed that there were no complaints about the water services during the audit period.				
		It is considered that on this basis and from review of the operation of the system, that customer service levels are being achieved.				
5	ASSET OPERATIONS	Process Rating A Performance Rating 2				
5.1	Operational policies and procedures are documented and linked to service	Water and wastewater infrastructure services on the Island are well established with systems procedures, protocols and performance fully documented and in place.				
	levels required.	PFM has an Asset Management Process Manual (February 2015) that is supported by detailed operating procedures and instructions for the potable water, wastewater and non-potable water systems. The reviewer confirmed by review of the procedures that they are based on the operating responsibilities and standards (service levels) set out in the FUSS contract. There are detailed operating manuals for the desalination plant and the wastewater treatment plant. The operating procedures are also incorporated into the PFM Maximo system of work orders.				

Item no.	Component and Effectiveness Criteria (refer criteria in Audit Guidelines)	Observations and results (including any potential improvements)
5.2	Risk management is applied to prioritise operations tasks.	Detailed operations tasks, such as water quality sampling, are loaded into the Maximo system and assigned to staff and tracked to completion. Some of the operational tasks are based on the Enterprise Risk Management Plan developed by PFM for the contract. The tasks are allocated a priority in the Maximo system based on the risk assessment. There is also a SCADA (Supervisory Control and Data Acquisition) based computerised system providing real time operational performance, alarms and control over remote equipment (which also forms part of the risk assessment used to prioritise operations tasks).
5.3	Assets are documented in an Asset Register including asset type, location, material, plans of components, and an assessment of assets' physical/structural condition and accounting data.	Assets are documented in the Maximo system maintained by PFM on the Island. The asset register includes: Asset Class Asset location Asset sub-location Asset number Description. The register does not include a condition assessment although this is currently being assessed and input into an Excel database by the Asset Condition Baseline project which is continuing. No formal 'As Constructed' records of infrastructure exist. For instance, pipe infrastructure is comprised of a wide mix of different components and materials in varying states of age and repair. There is certain reliance upon the memory of key long-term staff to recall historic details about existing infrastructure. A Geographical Information System (GIS) would assist in asset operations to manage and schedule maintenance for underground pipes, structures and appurtenances. Since the last review in 2015, progress has been made in this area with WKC Spatial appointed by the RIA to undertake lidar survey and at ground asset mapping services. The next steps involve completion of mapping, populating data associated with the mapping and formalising the system for use – this will enable better analysis, planning and decision making for asset maintenance with respect to water and wastewater systems.
5.4	Operational costs are measured and monitored.	Refer recommendation 01/2017 (section 2.7 of this report). All asset expenditure including operational costs are recorded in the RIA's Financial Management Information System (FMIS). The historical cost information for the assets has not been transferred to the Asset Register but is in the FMIS. Operational costs are recorded and monitored via RIA's preparation and review of monthly Financial

Item no.	Component and Effectiveness Criteria (refer criteria in Audit Guidelines)	Observations and results (including any potential improvements)				
5.5	Staff resources are adequate and staff receive training commensurate with their responsibilities.	The reviewer sighted a listing of the key personnel from PFM that operate and maintain the supply of water services and wastewater treatment facilities. PFM maintains a matrix of staff qualifications and training completed and planned. The matrix is updated as training is completed.				
		PFM also has comprehensive Occupational Health and Safety (OHS) management systems. Specific work permits are in place for high risk activities such as confined space entry permit.				
		The responsibilities and competencies of key PFM staff have also been assessed as noted in the matrix in the Drinking Water Quality Risk Management Plan				
		The RIA has a Contracts and Projects Officer and Manager Major Contracts with responsibility for the management of the contract with PFM and other obligations under the licence.				
		Overall, the staff resources are considered to be adequate and receive training commensurate with the responsibilities.				
6	ASSET MAINTENANCE	Process Rating A Performance Rating 2				
6.1	Maintenance policies and procedures are documented and linked to service levels required.	Asset maintenance appears to be well managed with a systematic approach given to asset maintenance, scheduling and document control. PFM uses the Maximo computer database system to action and record all maintenance related activities and Work Orders. The system is able to action Work Orders according to a set maintenance schedule; make relevant staff aware of the actions required, and to escalate activities not actioned or closed out to ensure compliance. Key to this process is the Asset Register management procedure which details all relative steps for documenting activities and actions. The system also generates monthly Planned Preventative Maintenance (PPM) orders which are assigned to staff and signed-off on the system when completed – PPM for the potable water and wastewater systems were sighted. Some of the maintenance tasks are based on the Enterprise Risk Management Plan developed by PFM for the contract. The tasks are allocated a priority in the Maximo system based on the risk assessment. There is also a Drinking Water Quality Risk Management Plan based on the service levels in the FUSS contract and the Department of Health guidelines that also drives the maintenance activities being undertaken. Quarterly reports are provided to the Department of Health on the water quality testing.				
6.2	Regular inspections are undertaken of asset performance and condition.	Asset performance is monitored via the planned monthly, quarterly and annual maintenance checks by senior staff and others, who have the skill and knowledge to do so. There is also a SCADA (Supervisory Control and Data Acquisition) based computerised system providing real time operational performance, alarms and control over remote equipment (which also forms part of the risk assessment used to prioritise maintenance tasks).				

Component and Effe	ectiveness	Observations and results
Item no. (refer criteria in Audit (Cuidolinos)	(including any potential improvements)
(Telef Chiena in Addit o	,	d in 5.2 above, the egget register does not include a condition acceptant although this is currently being
		Id in 5.3 above, the asset register does not include a condition assessment although this is currently being and input into an Excel database by the Asset Condition Baseline project which is in progress.
		ecommendation 1/2017 (section 2.7 of this report).
	Deman	d management as well as usage (including energy) is monitored. For example, the potable water supply
	system	has SCADA communications providing continual feedback about tank levels, flows and residual chlorine
		Recent upgrades and capital expenditure in the range of \$200k have been made to upgrade the wastewater ump station system SCADA modem communications from the 2G to the 3G telecommunication network. The
		b has an iPhone and Android 'app' which indicates the source of energy usage and production on the island.
	From of follows:	ur inspection of the water infrastructure on the Island, there were 7 opportunities for improvement noted as
	a)	As noted in the previous review report, there have historically been some water quality issues associated
	,	with <u>dead end sections of water mains</u> and the lack of scour valves and washout assemblies.
	b)	From our field observations, the water supply holding and pressurisation tanks do not appear to have a <u>formal system for inspecting the tank roofs and/or tank wall structural integrity</u> . Since the last audit, there has been some progress. However, there appears to be a certain impasse reached with regard to safe
		access by divers into the concrete tanks to inspect the interior condition.
	c)	<u>Linking booster pump alarms with the SCADA/WINCC network</u> . While only a recent addition, it would be beneficial for the fire booster system pumps to be linked to the remote communications system to ascertain issues and/or intervene in the case of operational failure. Understandably, previous budgets may not have allowed for the additional communications upgrade.
	d)	<u>Labelling of assets</u> . Examples noticed during the audit were the water supply tanks, fire booster pump systems. Labelling should also be extended to identify confined space entry points (e.g. Tank 4 with its door down into the concrete lined basin).
	e)	<u>Chlorine dosing rooms</u> . Some of these buildings are at the end of their usable life and are considered to be in need of upgrade. In addition, some of the buildings have wash-down areas set away from the dosing room entry and would be difficult to find in the case of an emergency.
	f)	General security. Some of the key assets, while remote are still accessible by the general public visiting the island. It is suggested that a review and risk assessment be undertaken on the security of key assets. Consideration may be given to providing an alarmed door to high risk areas such as the chlorine dosing rooms.

Item no.	Component and Effectiveness Criteria (refer criteria in Audit Guidelines)	Observations and results (including any potential improvements)
		It is noted that (maintenance) regimes for some of the recently created assets (the wastewater treatment plant and fire booster pump system) are yet to be formalised. Maintenance is being undertaken by PFM whilst negotiations (between the RIA and PFM) are progressed with the aim of resolving contractual variations. Recommendation 07/2017
		a) As previously recommended, the RIA should consider funding in the RIA capital works expenditure budget to install (cut in) scour valves in the lowest lying section of mains or to install wash out assemblies at the end of mains without existing flushing points, which would improve the potable water quality.
		b) PFM should complete an initial inspection and condition report in the short term to ascertain the water tank integrity and develop a maintenance schedule based upon the condition of the assets. A process and/or engineering controls also need to be developed to meet the operational needs of regular and safe tank assessment (i.e. safe access by divers).
		c) The RIA should consider linking the new fire booster system pumps to the remote communications system (SCADA/WINCC network) to ascertain issues and/or intervene in the case of operational failure.
		d) The RIA/PFM should more clearly physically label the water supply and wastewater assets, including tank numbers, fire booster pump systems, and safety requirements such as entry to confined space restrictions at Tank 4.
		 PFM should complete a review and risk assessment for all of the wash-down facilities at the chlorine dosing rooms to ensure they are of an adequate standard and as close to the chlorine dosing room exit points as possible.
		f) The RIA/PFM should complete a review and risk assessment of the security of key assets for the water services. Consideration should be given to providing an alarmed door to high risk areas such as the chlorine dosing rooms.
		g) The RIA/PFM should arrange the maintenance regimes for the recently created assets – wastewater treatment plant and the fire booster pump system.
6.3	Maintenance plans (emergency, corrective and preventative) are documented and completed on schedule.	PFM has individual maintenance procedures including work risk assessments and safety procedures. Work Orders are systematically raised according to a set maintenance schedule maintained on the Maximo system. Any unplanned maintenance activities have work orders raised on Maximo and all orders are tracked to completion on the system. The work orders include both corrective and emergency maintenance. Whilst the entire scope of schedules themselves were not reviewed, a sample of weekly maintenance checklists were viewed as examples of completed actions. The audit also viewed the planned maintenance work orders for
		were viewed as examples of completed actions. The audit also viewed the planned maintenance work orders for one month and confirmed that planned maintenance is being completed by the scheduled dates.

Item no.	Component and Effectiveness Criteria (refer criteria in Audit Guidelines)	Observations and results (including any potential improvements)				
6.4	Failures are analysed and operational/maintenance plans adjusted where necessary.	There is a SCADA (Supervisory Control and Data Acquisition) based computerised system providing real time operational performance, alarms and control over remote equipment. All failures/alarms are analysed and. operational/maintenance plans adjusted where necessary. Failures are recorded in the annual "Operational Outage Register". Incident reports are completed for each failure. There was evidence to show that maintenance is adjusted to respond to the failures. Review of the PFM FUSS Contract - Service Report (June 2017) showed that there were no Utility failures in the past 3 months and no significant failures over the past 12 months.				
6.5	Risk management is applied to prioritise maintenance tasks.	Detailed maintenance tasks, such as regular inspections, are loaded into the Maximo system and assigned to staff and tracked to completion. Some of the maintenance tasks are based on the Enterprise Risk Management Plan developed by PFM for the contract. The tasks are allocated a priority in the Maximo system based on the risk assessment.				
6.6	Maintenance costs are measured and monitored.	The reviewer confirmed by interview with RIA's Contracts and Project Officer and review of RIA's financial statement for the utilities expenses that maintenance costs are tracked through the FMIS and monitored.				
7	ASSET MANAGEMENT INFORMATION SYSTEM	Process Rating A Performance Rating 1				
7.1	Adequate system documentation for users and IT operators.	PFM has adequate system documentation for the asset management system including the Asset Management Process Manual, Asset Register Management procedure and Maximo system documentation.	ent			
7.2	Input controls include appropriate verification and validation of data entered into the system.	Data accuracy is controlled by edit checks of data fields in the Maximo system and checks by the Administrator when entering manually completed work order requests and updates – considered adequate.				
7.3	Logical security access controls appear adequate, such as passwords.	The Maximo system has global password rules that require complex passwords, password change every 60 days and restricted reuse of passwords. Only authorised staff are provided with access to the system. Also sighted the PFM Information Security Policy including Acceptable Usage.				
7.4	Physical security access controls appear adequate.	he PFM site office on the Island is locked and alarmed outside of office hours. The servers are at PFM's central ffice and not on the Island.				
7.5	Data backup procedures appear adequate and backups are tested.	The system is backed up at least daily and a copy stored offsite as part of the standard IT data backup procedure. The backups are regularly tested by recovery of data files.	€.			

Item no.	Component and Effectiveness Criteria (refer criteria in Audit Guidelines)	Observations and results (including any potential improvements)			
7.6	Key computations related to licensee performance reporting are materially accurate.	From review of source data for the performance reporting, the calculations are considered to be accurate.			
7.7	Management reports appear adequate for the licensee to monitor licence obligations.	Maximo reporting is largely online to responsible officers. PFM provide a monthly report to RIA on performance of the FUSS contract and a dashboard report of key performance indicators, which is reviewed by RIA to confirm that the licence obligations are being met. Considered adequate.			
8	RISK MANAGEMENT	Process Rating A Performance Rating 1			
8.1	Risk management policies and procedures exist and are being applied to minimise internal and external risks associated with the asset management system.	PFM has a risk management policy and procedure that has been applied to develop an Enterprise Risk Management Plan covering their FUSS services on the Island including the potable water supply, wastewater service and non-potable water supply. The Plan has been applied to the operations and maintenance activities as described above. The Plan includes 17 risk statements covering external risks such as bushfire and water quality issues to internal risks such as performance management. The coverage is considered to comprehensively cover potential risks to the water services. There is also a Drinking Water Quality Risk Management Plan and a Summer Water Risk Management Plan that have assessed the risk for these services in more detail and been applied in the operations and maintenance activities. PFM also have comprehensive Occupational Health and Safety management systems.			
8.2	Risks are documented in a risk register and treatment plans are actioned and monitored.	The risks are documented in a risk register as part of the Enterprise Risk Management Plan and as Critical Control Points in the Drinking Water Quality Risk Management Plan. Treatment plans are included in these Plans and actioned via the operating and maintenance procedures. There was a Drinking Water Hazard and Critical Control Points (HACCP) Risk Workshop conducted by RIA and PFM that updated the RIA - Rottnest Island - Drinking Water Quality HACCP Risk Register - Ecosafe Int 20160728 and identified continuous improvements that are being actioned.			
8.3	The probability and consequences of asset failure are regularly assessed.	The probability and consequences of asset failure are included in the Enterprise Risk Management Plan. The Plan is reviewed and updated every 6 months.			

Item no.	Component and Effectiveness Criteria (refer criteria in Audit Guidelines)	Observations and results (including any potential improvements)				
9	CONTINGENCY PLANNING	Process Rating	Α	Performance Rating	1	
9.1	Contingency plans are documented, understood and tested to confirm their operability and to cover higher risks.	The RIA and PFM have documented the contingency plans in the Water Services Recovery and Contingency Plan (October 2016). The Plan includes key contacts for RIA and PFM including emergency contacts. The Plan includes various scenarios to cover higher risks including desalination plant failure and other scenarios for potable water; and wastewater treatment plant failure and other scenarios for wastewater services. The scenarios include detailed action plans. The Plan includes the scenarios expected from our review of the water supply services. The plan was tested in a desktop scenario exercise each quarter with the latest test being in June 2017. The Water Services Recovery and Contingency Plan is reviewed and updated at least annually with the latest version dated October 2016.				
		The Drinking Water Quality Risk Management Plan also includes incident reporting and emergency response procedures. The Plan has been tested at least annually since 2013.				
		There is also Rottnest Island Drinking Water Quality Management Incident Response Protocols (August 2017) that document the immediate response procedures.				
10	FINANCIAL PLANNING	Process Rating	Α	Performance Rating	2	
10.1	The financial plan states the financial objectives and strategies and actions to achieve the objectives.	The Strategic Asset Investment Plato achieve the objectives.	an 2016-17 to 2026-2	27 states the financial objectives and stra	ategies and actions	
10.2	The financial plan identifies the source of funds for capital expenditure and recurrent costs.	The Plan identifies the funding for the next year but beyond that is subject to further government or internal funding being available. Refer recommendation 08/2017.				
10.3	The financial plan provides projections of operating statements (profit and loss) and statement of financial position (balance sheets).	The Plan includes projections of operating costs. The RIA prepares annual budgets, and produces monthly and annual financial statements of actual to budget income and expenses. Also, a Statement of Financial Position is produced.				
10.4	The financial plan provides firm predictions on income for the next five years and reasonable indicative predictions beyond this period.	The financial plan states financial predictions until 2026-2027 although not fully funded.				

Item no.	Component and Effectiveness Criteria (refer criteria in Audit Guidelines)	Observations and results (including any potential improvements)			
10.5	The financial plan provides for the operations and maintenance, administration and capital expenditure requirements of the services.	The financial plan provides adequate funding for the operating expenses and the capital expenditure requirements for a year but beyond that is subject to further funding approval from Government.			
10.6	Significant variances in actual/budget income and expenses are identified and corrective action taken where necessary.	Variances in actual to budget income and expenses are analysed and reported in the monthly financial statements to the RIA			
11	CAPITAL EXPENDITURE PLANNING	Process Rating A Performance Rating 2			
11.1	There is a capital expenditure plan that covers issues to be addressed, actions proposed, responsibilities and dates.	Since the previous review, the RIA and PFM have significantly improved the capital expenditure planning and documentation, including the development of Strategic Asset Investment Plan 2016-17 to 2026-27 that provides the objectives, status and needs of utility assets including water, with the priorities for expenditure in the next 12 months and a 10-year capital expenditure profile that is subject to funding. Strategic Asset Management Plan 2016-17 that sets out the systems and strategies to manage the Island's assets for the benefit of stakeholders. Multi-Utility Asset Management Plan 2016 – 2020 that provides a description of the overall system components and summarises key asset and planning information at a single point of time with the purpose to identify the financial consequences of delivering services through physical assets. The Plans includes priorities for capital expenditure in the next year and a 10-year unfunded capital expenditure plan.			
11.2	The plan provides reasons for capital expenditure and timing of expenditure.	The rationale and priorities for capital expenditure, including estimated timing over 10 years, are stated in the above Plans.			
11.3	The capital expenditure plan is consistent with the asset life and condition identified in the asset management plan.				

Item no.	Component and Effectiveness Criteria (refer criteria in Audit Guidelines)	Observations and results (including any potential improvements)			
		Recommendation 08/2017			
		 a) As planned, the RIA should revise their capital expenditure plans for the assessment of asset condition and useful life that is currently being completed. 			asset condition and
		b) The RIA should endeavour to secure appropriate funding to meet the capital requirements of the Asse Management Plan.			nents of the Asset
11.4	There is an adequate process to ensure that the capital expenditure plan is regularly updated and actioned.	The RIA has a regular process to review and update their annual capital expenditure plan and to monitor actual against planned expenditure. This process is documented in the RIA's Financial Management procedures.			
12	REVIEW OF ASSET MANAGEMENT SYSTEM	Process Rating	Α	Performance Rating	1
12.1	A review process is in place to ensure that the asset management plan and the asset management system described therein are kept current.	status and needs of utility assets and a 10-year capital expenditure Strategic Asset Management Plar manage the Island's assets for the Multi-Utility Asset Management P overall system components and with the purpose to identify the fire. The Plans cover the key requirements of the There is a process for the RIA and PFM to procedures. The RIA Asset Management A minor improvement to version control/re06/2017. There is also a process at PFM for review as documented in the PFM Asset Management.	eviewed July 2 2016-17 to 2 including was e profile that is n 2016-17 (re e benefit of st Plan 2016 – 20 summarises hancial consent he water service review these Policy also do eview procede and update of	2016) 026-27 (reviewed 18/11/2016) that provider, with the priorities for expenditure in the subject to funding. The Plan is to be reviewed 8/9/2016) that sets out the system takeholders. 020 (reviewed 20/12/2016) that provides key asset and planning information at a squences of delivering services through places over 1 year, 5 year and 10 year plane documents as documented in the RIA's bounded the objectives and roles and resures was noted in item 1.9 above. Refer the supporting plans and procedures for the supporting plans and p	des the objectives, the next 12 months viewed annually. In and strategies to a description of the single point of time mysical assets. In annual budgeting sponsibilities. It is recommendation or the water services
12.2	Independent reviews (e.g. internal audit) are performed of the asset management system.	An independent review is performed every Department of Health via annual desktop to			reviews by the

3.7 Review Recommendations

Table of Current Review Asset System Deficiencies and Recommendations						
A. Resolved du	A. Resolved during current review period					
Ref.	Asset System Deficiency (Rating/AMS Component/Effectiveness Criteria/Details)	Auditor's Comments				
	Nil					

B. Unresolved at end of current review period					
Reference (no./year) Compliance rating	Asset System Deficiency (AMS Component/Effectiveness Criteria/Details)	Auditor's Recommendation	Management Action taken by end of audit period		
05/2017	Asset Planning – Lifecycle Costs				
4.0	Lifecycle costs of owning and operating assets are assessed.				
A2	The lifecycle costs of the water assets have not yet been assessed and budgeted for by the RIA. The Multi-Utility Asset Management Plan 2016 – 2020 includes a project to establish the asset baseline (condition) of water assets (and other Island assets) and develop a lifecycle costing model. The models for the potable water supply and the wastewater treatment plant and infrastructure, are progressively being developed based upon mapping, condition assessments, updating the asset register in the Computerised Maintenance Management System "Maximo".	As planned, the RIA should develop lifecycle costing models for the potable water services and the waste water treatment services, including completing the condition assessments and populating the asset register in the Maximo system (above-ground assets have been completed). The lifecycle costs should be considered in the long-term planning and budgeting for provision of the services.	Nil		
06/2017	Asset Planning – Document Version Control				
	Plans are regularly reviewed and updated.				
A2	The Asset Management Plans have been developed or updated in the past 2 years. The asset investment required is	The RIA should ensure that a consistent version control including revision history, approver and date and next review date are	Nil		

. Unresolved a	t end of current review period		
Reference (no./year) Compliance rating	Asset System Deficiency (AMS Component/Effectiveness Criteria/Details)	Auditor's Recommendation	Management Action taken by end o audit period
	reviewed annually as part of developing the capital expenditure programme each year. It was noted that not all documents have version control including approval date and next review date. For example, the Strategic Asset Plan 2016-17 to 2026-27 (no version control) and the Multi Utility Asset Management Plan 2016-2020 (has revision history but no approval date and next review date).	recorded on the asset management planning documents, and a reminder is included in a register such as the Licence and Compliance Register.	
07/17	Asset Maintenance – Inspections		
A2	Regular inspections are undertaken of asset performance and condition. From our inspection of the water infrastructure on the Island, there were 7 opportunities for improvement noted as follows: a) As noted in the previous review report, there have historically been some water quality issues associated with dead end sections of water mains and the lack of scour valves and washout assemblies. b) From our field observations, the water supply holding and pressurisation tanks do not appear to have a formal system for inspecting the tank roofs and/or tank wall structural integrity. Since the last audit, there has been some progress. However, there appears to be a certain impasse reached with regard to safe access by divers into the concrete tanks to inspect the interior condition. c) Linking booster pump alarms with the SCADA/WINCC network. While only a recent addition, it would be	 a) As previously recommended, the RIA should consider funding in the RIA capital works expenditure budget to install (cut in) scour valves in the lowest lying section of mains or to install wash out assemblies at the end of mains without existing flushing points, which would improve the potable water quality. b) PFM should complete an initial inspection and condition report in the short term to ascertain the water tank integrity and develop a maintenance schedule based upon the condition of the assets. A process and/or engineering controls also need to be developed to meet the operational needs of regular and safe tank assessment (i.e. safe access by 	Nil
		needs of regular and safe tank	

deference no./year) ompliance rating	Asset System Deficiency (AMS Component/Effectiveness Criteria/Details)	Auditor's Recommendation	Management Action taken by end of audit period
rating displaying the state of	were the water supply tanks, fire booster pump systems. Labelling should also be extended to identify confined space entry points (e.g. Tank 4 with its door down into the concrete lined basin). Chlorine dosing rooms. Some of these buildings are at the end of their usable life and are considered to be in need of upgrade. In addition, some of the buildings have wash-down areas set away from the dosing room entry and would be difficult to find in the case of an emergency. General security. Some of the key assets, while remote are still accessible by the general public visiting the island. It is suggested that a review and risk assessment be undertaken on the security of key assets. Consideration may be given to providing an alarmed door to high risk areas such as the chlorine dosing rooms.	remote communications system (SCADA/WINCC network) to ascertain issues and/or intervene in the case of operational failure. d) The RIA/PFM should more clearly physically label the water supply and wastewater assets, including tank numbers, fire booster pump systems, and safety requirements such as entry to confined space restrictions at Tank 4. e) PFM should complete a review and risk assessment for all of the wash-down facilities at the chlorine dosing rooms to ensure they are of an adequate standard and as close to the chlorine dosing room exit points as possible. f) The RIA/PFM should complete a review and risk assessment of the security of key assets for the water services. Consideration should be given to providing an alarmed door to high risk areas such as the chlorine dosing rooms. g) The RIA/PFM should arrange the maintenance regimes for the recently created assets – wastewater treatment plant and the fire booster pump system.	

Reference (no./year) Compliance rating	Asset System Deficiency (AMS Component/Effectiveness Criteria/Details)		Auditor's Recommendation	Management Action taken by end of audit period
08/2017	Capital Expenditure Planning – Asset Life and Condition			
A2	The capital expenditure plan is consistent with the asset life and condition identified in the asset management plan. The capital expenditure plans will be updated annually for the condition assessment of assets that is currently in progress. The assets are ageing which may not be adequately reflected in the capital expenditure plan. PFM is developing an Excel spreadsheet that provides information on asset condition and expected operation al life with overall risk and consequence of loss. This has not been completed, especially for below-ground assets. The Plans also have not determined the funding source for the capital expenditure over the next 10 years.	a) b)	As planned, the RIA should revise their capital expenditure plans for the assessment of asset condition and useful life that is currently being completed. The RIA should endeavour to secure appropriate funding to meet the capital requirements of the Asset Management Plan.	Nil

3.8 Conclusion

This review has been conducted to assess the effectiveness of the licensee's asset management system.

The assets are as described in section 3.1 with no major changes over the review period, apart from the upgrading of the wastewater treatment plant and the upgrading of the fire hydrant system.

Through the execution of the Review Plan and assessment and testing of the control environment, the information system, control procedures and compliance attitude, the audit team members have gained reasonable assurance that the RIA:

- c) has fully implemented 3 of the 5 previous review recommendations and partially implemented 2 recommendations, with the remaining activities being:
 - mapping the below-ground assets and completing condition assessments currently in progress; and
 - based on this information, developing the lifecycle costing model for the water and waste water service assets and updating the capital expenditure plans.
- d) has established an adequate control environment for ongoing compliance in respect of the asset management system. The review identified a number of improvements to the maintenance of the assets as part of the continuous improvement of the asset management system and controls. These opportunities for improvement include:
 - installing scour valves or washout assemblies in the lowest lying sections of the potable water mains;
 - improving the inspection and maintenance regimes of the water tanks;
 - linking the new fire booster pumps to the remote communication system;
 - clearer physical labelling of the tanks and other assets, including the safety requirements;
 - review and risk assessment of the chlorine wash-down facilities;
 - review and risk assessment of the physical security of key assets;
 - implement the maintenance regimes for the upgraded wastewater treatment plant and the new fire booster pump system; and
 - improving version control of the planning documentation.

For the review period from 1 July 2015 to 30 June 2017, the potable and non-potable water, drainage and services under Water Services Licence WL10 are considered to be run with a professional and effective approach. There have been significant improvements in the asset management system including the planning, operations and maintenance of the facilities.

Overall, the water supply scheme and wastewater treatment system are assessed as being well established, well maintained and in good working order.

Appendix A - Methodology

A1. Audit and Review Approach

Our approach to meeting the requirements for the operational audit and asset management system effectiveness review is set out below.

Audit and Review Planning

- Conduct an initial meeting with the ERA to confirm the audit/review approach and timing for the audit and review (if required).
- Contact the licensee to gain an understanding of the business, relevant management plans and systems that may affect the risk assessment for planning purposes.
- Prepare a risk assessment including any specific factors or changes relevant to the licensee (in tabular form against each license condition and asset management system component).
- Submit a draft **Audit and Review Plan**, including the risk assessment and proposed approach, to the ERA for review and approval.
- Send a **Pre-Visit Checklist** of information and documentation to the licensee to enable staff to prepare for the visit (and where possible, send us information prior to the site visit).

Fieldwork

- Undertake a visit to the licensee and conduct various meetings with stakeholders, including corporate services and works/facilities management personnel, to determine the effectiveness of systems and procedures in place and to compare actual performance against the licence standards. The onsite visit will include our Senior Engineer.
- Obtain copies of the latest asset management plans (including the new WWTP), performance reporting statistics and relevant correspondence between the licensee and the ERA for the audit period.
- The audit steps for the **Operational Audit** will include:
 - analysis of documented procedures to assess whether they are consistent with regulatory requirements or arrangements under the licence;
 - review of systems and procedures to assess whether they reflect compliance obligations and performance standards, including assessing and testing the following:
 - control environment management's philosophy and operating style, organisational structure, assignment of authority and responsibilities, the use of internal audit, the use of information technology and the skills and experience of the key staff members;
 - information system the appropriateness of the information systems to record the information needed to comply with the licence, accuracy of data, security of data and documentation describing the information system;
 - control procedures the presence of systems and procedures to monitor compliance with the licence or the effectiveness of the asset management system and to detect and correct non-compliance or under-performance;
 - compliance attitude the action taken by the licensee in response to the previous audit/review recommendations, and

- an assessment of management's attitude towards compliance; and
- outcome compliance the actual performance against standards prescribed in the licence throughout the audit period.
- Update the risk assessment with any new information obtained in the course of the audit testing and, in instances of significant non-compliance, assess the licensee's plan to ensure compliance and recommend any further improvements to achieve compliance.
- The activities in the Asset Management System Effectiveness Review will include:
 - analyse the documented procedures and processes for the planning, construction, operation and maintenance of assets to assess whether they are consistent with regulatory requirements under the licence;
 - interview key personnel to assess whether they understand and comply with the documented processes and procedures;
 - o physically inspect the key assets and infrastructure; and
 - assess the effectiveness of the processes and system in place.

Audit and Review Reporting

- Prior to the conclusion of the visit, the lead auditor will discuss any observations and recommendations with the licensee's management to confirm our understanding of the issues and to discuss the action to be taken.
- Provide a draft report to the ERA for review no later than two weeks before the final report is due and make any revisions necessary.
- Provide the updated draft report to the ERA for review and feedback prior to finalising the report.
- Issue the final report to the ERA.
- The ERA will arrange for the RIA to provide their Post Audit and Post Review Implementation Plans to the ERA.

The audit report will comply with the format prescribed in section 11 of the Audit and Review Guidelines: Water Licences – July 2014.

A2. Key Documents and Information Sources

Regulatory Documents and Reports

- Audit and Review Guidelines: Water Licences July 2014
- Water Compliance Reporting Manual 2016
- Rottnest Island Authority Water Services Operating Licence WL10 version 7 (22 June 2015 30 June 2016) and Version 8 (1 July 2016 onwards).
- Map of Licence Operating Area Rottnest Island (OWR-OA-189(B))
- Audit Report Rottnest Island Authority Operational Audit and Asset Management System Review 18 October 2015
- Post Audit and Review Action Plans status reports to February 2017
- Compliance reports to the ERA –2015/16 and 2016/17
- Performance reports to the ERA 2015/16 and 2016/17
- Memorandum of Understanding between the Department of Health and RIA for Drinking Water (Latest version)
- Department of Health Binding Protocols

Department of Fire and Emergency Services (Built Environment Branch) - Report on Fire Hydrant Upgrade (April 2017) Scheme Information and Procedures RIA Water Customer Service Manual 2016 RIA Utilities Customer Complaints Procedure and Form RIA Customer Complaints Reporting Register and complaint records RIA Licence and Compliance Register RIA Standard Customer Contract and commercial lease examples Examples of McGee Property invoices Asset Management System Rottnest Island Facilities Utilities and Support Services contract between RIA and Programmed Facility Management Pty Ltd (PFM) - 2014 ('FUSS contract') Rottnest Island Management Plan 2014-19 RIA Asset Management Policy (July 2016) Strategic Asset Investment Plan 2016-17 to 2026-27 Strategic Asset Management Plan 2016-17 Multi-Utility Asset Management Plan 2016 – 2020 PFM Enterprise Risk Management Plan 2016/17 RIA - Rottnest Island - Drinking Water Quality HACCP Risk Register - Ecosafe Int. - 20160728 PFM FUSS Contract Service Report – June 2017 Drinking Water Risk Management Plan (Latest version) Annual Drinking Water Report 2015-2016 Quarterly Drinking Water Reports – July 2015 to June 2017 Asset Inspection Reports Asset Database system (Maximo) RIA Business Case – Upgrade to Wastewater Treatment Plant (approved 07 October 2013) PFM Asset Management Process Manual (February 2015) PFM Asset change form to (March 2015) PFM Change request form to (March 2015) PFM Asset register management procedure PFM Asset commissioning and handover procedure RIA Procurement procedure RIA WWTP Close Out Report (16 June 2017) PFM – Water and Wastewater Services Operations Manuals

- PFM Computerised Procedure for Maximo Computerised Maintenance System (CMMS)
-) PFM Operational Outage Register
-) PFM Safety Management Plan
- PFM Water Services Recovery and Contingency Plan
- PFM Annual Drinking Water Incident/Response Plan Desktop Exercise
- PFM Weekly logs of bore water levels, pH, temperature, storage levels etc.
- PFM Pro-forma sheets for recording daily, monthly etc. maintenance operation checks and output results
- PFM Staff Training Matrix and training records.

A3. Licensee's Representatives

The main contacts were:

Rottnest Island Authority

- Tracey Hornsey Manager Major Contracts
- Janett Enke Contracts and Project Officer

Programmed Facilities Management

- Jodie Mott Operations Manager
-) Orrin Neale Island Engineer
- Anesh Boodhram Asset Manager

Other

Tiarne Wyatt – Property Manager (Property Agent Property)

A4. Audit and Review Team and Hours

NAME AND POSITION	Hours
Geoff White – Director	45
David Wills - Principal Consulting Engineer	5
Susan Smith –Manager	10
Paul Ivkovic – Senior Consulting Engineer	20
TOTAL	80

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END OF REPORT