

*AQWEST –  
Bunbury Water  
Board  
Performance  
Audit Report and  
Asset  
Management  
Review Report*

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# 1 Executive Summary

## 1.1 - Introduction

Section 36-37 of the Water Services Licencing Act 1995 requires AQWEST Bunbury Water Board (AQWEST) to provide the Economic Regulation Authority (the Authority) with a performance audit (audit) and asset management review (review) conducted by an independent expert acceptable to the Authority.

The Authority approved PricewaterhouseCoopers to undertake the audit and review in September 2010.

AQWEST is a medium sized water utility providing potable water supply services to approximately 33,000 people within the City of Bunbury. AQWEST operates an integrated treatment and distribution system comprising twelve (12) bores, six (6) treatment plants, four (4) reservoirs, one (1) water tower and approximately 350 km of water reticulation network including a newly commissioned high capacity transfer pumping system.

We have conducted the performance audit in accordance with the Standard on Assurance Engagements (ASAE) 3500 "Performance Engagements". The performance audit is an audit of the effectiveness of the measures taken by AQWEST to meet the obligations of the performance and quality standards referred to in the Water Services Licence. The asset management review was performed in accordance with the Authority's Audit Guidelines: Electricity, Gas and Water, August 2010. This audit and review covered the period 22 September 2007 to 30 September 2010.

An audit plan was developed and approved by the Authority using a risk based approach to focus on key risk areas in accordance with AQWEST's water services risk profile and the industry best practice standard AS/NZS 31000:2009.

A preliminary analysis was performed on the licensing framework and the Authority's Water Compliance Reporting Manual, March 2009 for the water trading licence to ascertain the performance and compliance audit requirements of AQWEST and to determine the nature and extent of audit activity. We have prioritised the audit coverage based on the assigned risk profile with the emphasis on providing greater focus and depth of testing for higher risk areas.

We have assessed the controls and performance against those standards by AQWEST with the relevant licence obligations through a combination of interviews/enquiries, observation, examination of documents and detailed testing.

The report presents the findings from the performance audit and asset management review.

## 1.2 - Audit Objectives, Scope and Approach

### Objectives

The objective of the Operating Licence audit is to evaluate the effectiveness of the measures taken by AQWEST to meet the obligations of the performance and quality standards referred to in the Water Services Licence. The audit focuses on AQWEST's systems and effectiveness of processes used to ensure compliance with the obligations, standards, outputs and outcomes as required by the Licence.

The objective of the Asset Management Review is to assess the measures taken by AQWEST for the proper management of assets used in the provision and operation of services and, where appropriate, the construction or alteration of relevant assets. The review focuses on the asset management system and asset management plans that measure the proper operation and maintenance of assets within AQWEST.

## Audit Scope

For each applicable licencing requirement, the audit effort for the Operating Licence considered the following:

- *process compliance* – the effectiveness of the systems and procedures in place including the adequacy of internal controls
- *outcome compliance* – the actual performance against standards prescribed in the licence
- *output compliance* – the existence of the output from systems prescribed in the licence
- *integrity of performance reporting* – the completeness and accuracy of the performance reporting to the Authority
- *compliance with any individual licence conditions* – the requirements imposed on AQWEST or specific issues to follow up that are advised by the Authority

The scope of the asset management review included an assessment of the following:

- 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 planning
- review of the asset management system.

The period covered by the audit and review was 22 September 2007 to 30 September 2010. We performed our audit and review during the period November and December 2010.

## Audit Approach

Our audit has been conducted in accordance with the Standard on Assurance Engagements (ASAE) 3500 “Performance Engagements” and accordingly included such tests and procedures as we considered necessary in the circumstances. These procedures have been undertaken to form an opinion whether in all material respects, the control procedures in relation to AQWEST’s Water Service Licence operated effectively based on the relevant licencing requirements.

An audit plan was developed and approved by the Authority using a risk based approach to focus on key risk areas in accordance with AS/NZ 31000:2009. Preliminary analysis was performed on the licensing framework for the Water Services Licence to ascertain the performance and compliance audit requirements of AQWEST and to determine the nature and extent of audit activity. The Authority’s Water Compliance Reporting Manual, March 2009 and Audit Guidelines: Electricity, Gas and Water, August 2010 provided a consolidated list of the key obligations relating to water licences and was utilised as part of the risk assessment process to suitably tailor the audit approach for the operating licence audit and asset management review.

In accordance with the Performance Audit Plan approved by the Authority in November 2010, the audit adopted a risk based approach to validate compliance with the licence conditions and perform the asset management review. Under this approach, we have used the audit priority assessment and the alignment of the Water Service Licence requirements to AQWEST’s business processes to determine the nature and extent of testing within the

audit. The nature and extent of testing varied so that as the audit priority of the licence obligations increased, the persuasiveness of the evidence that was obtained was also increased. Where the audit priority of similar requirements was different, the audit priority defaulted to the highest priority to ensure that any interdependencies were considered.

In addition, the audit plan also took into account the Authority's views with respect to audit priority and testing following the Authority's review and feedback of the draft audit plan. As part of our audit approach, we also utilised Halcrow, one of the world's largest engineering consultancy firm's with specialist skills in water management and asset management systems.

## 1.3 – Assessment of the control environment

Our review has noted that AQWEST has a satisfactory control environment. In particular there is:

- a well defined organisational structure with assigned responsibilities for compliance
- policies and procedures for staff to follow
- proactive reviews conducted to improve the asset maintenance processes over specific assets.

## 1.4 – Operating Licence Audit

### 1.4.1 - Performance Summary

The compliance ratings have been applied based on the definitions stipulated in Authority's Audit Guidelines: Electricity, Gas and Water, August 2010. Compliance ratings have been determined based on the following scale.

Operational / Performance Compliance Rating Scale

Compliance Status	Rating	Description of Compliance
Compliant	5	Compliant with no further action required to maintain compliance
Compliant	4	Compliant apart from minor or immaterial recommendations to improve the strength of internal controls to maintain compliance
Compliant	3	Compliant with major or material recommendations to improve the strength of internal controls to maintain compliance
Non-Compliant	2	Does not meet minimum requirements
Significantly Non-Compliant	1	Significant weaknesses and / or serious action required
Not Applicable	N/A	Determined that the compliance obligation does not apply to the licensees business operations
Not Rated	N/R	No relevant activity took place during the audit period, therefore it is not possible to assess compliance

## Operational / Performance Audit Compliance Summary

Compliance Manual Reference	Licence Condition	Consequence	Likelihood	Inherent Risk	Adequacy of Existing Controls (pre-audit)	Compliance Rating N/R	Compliance Rating N/A	Compliance Rating 1	Compliance Rating 2	Compliance Rating 3	Compliance Rating 4	Compliance Rating 5
		Minor Moderate Major	Likely Probable Unlikely	Low Medium High	Strong Moderate Weak							
2	The Licensee must achieve prescribed standards as defined in the regulations.	Major	Probable	High	Strong				✓			
3	The Licensee must have an Asset Management System in respect to the licensed activity.	Major	Unlikely	High	Strong	✓						
4	The Licensee must notify the Authority of any changes to the Asset Management System.	Major	Unlikely	High	Strong	✓						
5	The Licensee must not less than once in every period of 24 months (or such other period determined by the Authority) provide the Authority with an independent expert report, acceptable to the Authority, on the effectiveness of the Asset Management System.	Major	Unlikely	High	Strong							✓
6	The Licensee must not less than once in every period of 24 months (or such other period determined by the Authority) provide the Authority with an operational audit conducted by an independent expert, acceptable to the Authority.	Moderate	Unlikely	Medium	Strong							✓
7	The Licensee must comply with the service and performance standards as set out in Schedule 4.	Major	Probable	High	Strong				✓			
8	The licensee must pay the applicable fees in accordance with the regulations.	Minor	Unlikely	Low	Strong	✓						
9	The licensee must establish a customer complaints process as set out in Schedule 3.	Moderate	Likely	High	Moderate					✓		

## Executive Summary (cont'd)

Compliance Manual Reference	Licence Condition	Consequence	Likelihood	Inherent Risk	Adequacy of Existing Controls (pre-audit)	Compliance Rating N/R	Compliance Rating N/A	Compliance Rating 1	Compliance Rating 2	Compliance Rating 3	Compliance Rating 4	Compliance Rating 5
		Minor Moderate Major	Likely Probable Unlikely	Low Medium High	Strong Moderate Weak							
10	The licensee must resolve customer complaints within 15 business days of the receipt of complaint.	Moderate	Likely	High	Moderate							✓
12	The licensee must provide appropriately trained staff to respond to complaints.	Moderate	Likely	High	Moderate						✓	
1	The licensee must provide an appropriate system to monitor and record the number, nature of and outcomes to complaints.	Moderate	Likely	High	Moderate							✓
15	The licensee must inform the customer of the option to refer a disputed complaint to the Department of Water.	Moderate	Likely	High	Moderate					✓		
17	The licensee must co-operate with the Department of Water's request for information concerning a disputed complaint.	Moderate	Likely	High	Moderate	✓						
18	The licensee must, on request, provide complaints details to the Department of Water.	Moderate	Likely	High	Moderate	✓						
19	The licensee must establish a Customer Service Charter as set out in Schedule 3.	Moderate	Unlikely	Medium	Moderate							✓
20	The licensee must make the Customer Service Charter available to its customers.	Moderate	Unlikely	Medium	Moderate							✓
21	The licensee must review its Customer Service Charter at least once in every three year period.	Moderate	Unlikely	Medium	Moderate							✓
22	The licensee must provide its services consistent with its Customer Service Charter.	Moderate	Unlikely	Medium	Moderate							✓
23	The licensee must establish customer consultation processes as set out in Schedule 3.	Moderate	Unlikely	Medium	Strong							✓

## Executive Summary (cont'd)

Compliance Manual Reference	Licence Condition	Consequence	Likelihood	Inherent Risk	Adequacy of Existing Controls (pre-audit)	Compliance Rating N/R	Compliance Rating N/A	Compliance Rating 1	Compliance Rating 2	Compliance Rating 3	Compliance Rating 4	Compliance Rating 5
		Minor Moderate Major	Likely Probable Unlikely	Low Medium High	Strong Moderate Weak							
24	The licensee may either establish a Customer Council or institute at least 2 of the following: establish a regular meeting; publish a newsletter or run other public forums, concerning the licensed activities.	Moderate	Unlikely	Medium	Strong							✓
25	The licence must consult the Authority on the type and extent of consultation to be adopted by the licensee.	Moderate	Unlikely	Medium	Strong							✓
26	The licensee must, if at the request of the Authority, establish other forums for consultations, to enable community involvement in issues relevant to licence obligations.	Moderate	Unlikely	Medium	Strong							✓
30	The licensee may enter into an agreement with a customer to provide water services that may exclude, modify or restrict the terms of the licence.	Moderate	Unlikely	Medium	Strong		✓					
31	The licensee must publish a report annually that includes the specified information	Moderate	Unlikely	Medium	Strong		✓					
32	The licensee must conduct a customer survey if directed to by the Authority.	Minor	Unlikely	Low	Strong							✓
33	The licensee must enter into a MoU with the Department of Health (DoH).	Major	Probable	High	Strong							✓
34	The licensee and DoH must review and renew the MoU every 3 years.	Major	Probable	High	Strong							✓
35	The licensee must provide the Authority with a complete copy of the MoU within one month of entering into the MoU.	Major	Probable	High	Strong	✓						



## Executive Summary (cont'd)

Compliance Manual Reference	Licence Condition	Consequence	Likelihood	Inherent Risk	Adequacy of Existing Controls (pre-audit)	Compliance Rating N/R	Compliance Rating N/A	Compliance Rating 1	Compliance Rating 2	Compliance Rating 3	Compliance Rating 4	Compliance Rating 5
		Minor Moderate Major	Likely Probable Unlikely	Low Medium High	Strong Moderate Weak							
36	The licensee must provide the Authority with any amendments to the MoU within one month of entering into any amendments to the MoU.	Major	Probable	High	Strong	✓						
37	The licensee must comply with the terms of the MoU.	Major	Probable	High	Strong							✓
38	The licensee must publish the MoU and any amendments to the MoU within one month of signing (subject to the confidentiality clause 22.3 in the licence).	Major	Probable	High	Strong	✓						
39	The licensee must publish the audit report on compliance with its obligations under the MoU on the licensee's web site within one month of the completion of the audit.	Major	Probable	High	Strong	✓						
40	The licensee must publish its Potable Water Quality Reports quarterly or at a reporting frequency agreed with the Department of Health	Major	Probable	High	Strong							✓
41	The licensee must maintain accounting records.	Minor	Unlikely	Low	Strong							✓
42	The licensee must comply and require the licensee's auditor to comply with the Authority's Standard Audit Guidelines, minimum requirements regarding appointment of the auditor, scope of audit, conduct of the audit and reporting of the audit.	Moderate	Unlikely	Medium	Strong							✓
43	The licensee must provide for and notify the Authority of its asset management system within 2 business days from the licence commencement date unless notified in writing by the Authority.	Major	Unlikely	High	Strong	✓						

## Executive Summary (cont'd)

Compliance Manual Reference	Licence Condition	Consequence	Likelihood	Inherent Risk	Adequacy of Existing Controls (pre-audit)	Compliance Rating N/R	Compliance Rating N/A	Compliance Rating 1	Compliance Rating 2	Compliance Rating 3	Compliance Rating 4	Compliance Rating 5
		Minor Moderate Major	Likely Probable Unlikely	Low Medium High	Strong Moderate Weak							
44	The licensee must notify the Authority of any changes to its asset management system within 10 business days from the date of change.	Major	Unlikely	High	Strong	✓						
45	The licensee must comply and require the licensee's expert to comply with the Authority's Standard Guidelines dealing with the asset management system review including, minimum requirements, regarding appointment of the expert reviewer, scope of review conduct of the review and reporting of the outcomes of the review.	Major	Unlikely	High	Strong							✓
46	The licensee must report to the Authority if it is under external administration within 2 business days or significant change in its financial or technical circumstances within 10 business days.	Moderate	Unlikely	Medium	Strong							✓
47	The licensee must provide any information the Authority may require in connection with its functions under the Act.	Moderate	Unlikely	Medium	Strong						✓	
48	The licensee must comply with the information reporting requirements as set out in Schedule 5.	Moderate	Unlikely	Medium	Strong						✓	
49	The licensee must publish relevant information directed to do so by the Authority within the specified timeframe.	Moderate	Unlikely	Medium	Strong							✓
LPW 4	Percentage of customers in the Bunbury area that have been supplied at a pressure and flow that meets the standards set out in the licence (monthly data and 12 month data).	Major	Probable	High	Strong							✓

## Executive Summary (cont'd)

Compliance Manual Reference	Licence Condition	Consequence	Likelihood	Inherent Risk	Adequacy of Existing Controls (pre-audit)	Compliance Rating N/R	Compliance Rating N/A	Compliance Rating 1	Compliance Rating 2	Compliance Rating 3	Compliance Rating 4	Compliance Rating 5
		Minor Moderate Major	Likely Probable Unlikely	Low Medium High	Strong Moderate Weak							
TS 3	Percentage of customers who, within one hour of reporting an emergency, were advised of the nature and timing of the action to be undertaken by the licensee.	Major	Probable	High	Strong				✓			
CH 8	Percentage of customer complaints resolved within 15 business days	Major	Probable	High	Strong				✓			
Licence Schedule 2	The Licensee must provide water services only to that area designated by reference to Plan Number OWR-OA-084/4	Moderate	Unlikely	Medium	Strong							✓
Licence Schedule 6 Clause 2	The Licensee must set out in writing its conditions for connection and make that information available to all applicants for connection and to people inquiring about connection.	Moderate	Unlikely	Medium	Strong							✓

### 1.4.2 – Key Findings

The table below provides a summary of findings, recommendations and management's agreed actions. As per the Performance Summary table in Section 1.4.1, the following areas of non-compliance was noted.

Report Reference	Compliance Manual Reference / Licence Condition	Finding	Recommendation for Improvement	Post Audit Action Plan												
Operating Licence 1	Ref. 2, 7, CH8  Clause 19 Clause 20.1 Schedule 4 Clause 1.2	<p>Schedule 4, Clause 1.2 has the performance target for customer complaints resolutions for written complaints to be resolved within 15 days as 90%. We noted through inspection of the complaints register that over the audit period this was not achieved as such:</p> <table><thead><tr><th>Year</th><th># Received</th><th>Standard Achieved</th></tr></thead><tbody><tr><td>07/08</td><td>7</td><td>28.5%</td></tr><tr><td>08/09</td><td>7</td><td>57%</td></tr><tr><td>09/10</td><td>5</td><td>20%</td></tr></tbody></table>	Year	# Received	Standard Achieved	07/08	7	28.5%	08/09	7	57%	09/10	5	20%	Changes to the complaints resolution process are required to ensure the performance standard is met.	<p>The complaints handling manual will be updated incorporating all compliance requirements.</p> <p><i>Responsibility:</i> Brain Granville Manager Finance and Administration</p> <p><i>Implementation Date:</i> 1 April 2011</p>
Year	# Received	Standard Achieved														
07/08	7	28.5%														
08/09	7	57%														
09/10	5	20%														

Report Reference	Compliance Manual Reference / Licence Condition	Finding	Recommendation for Improvement	Post Audit Action Plan
Operating Licence 2	Ref. 2, 7, TS3  Clause 19 Clause 20.1 Schedule 4 Clause 1.1	Schedule 4, clause 1.1 of the License has a performance obligation of the percentage of customers who have been advised within 1 hour of the nature, timing and extent of action to be taken after initial contact of an emergency.  Whilst AQWEST is able to demonstrate compliance during business hours, we were unable to obtain evidence of compliance for after business hours for any period greater than 12 months of our audit.	A register should be maintained to record the time the initial contact was made by the customer and the time they were notified of the action to be taken.	A register will be created to record the time the initial contact was made by the customer and the time they were notified of the action to be taken  <i>Responsibility:</i> Gary Hallsworth Manager Water Services <i>Implementation Date:</i> 1 April 2011

Additionally, the following issues were identified that relate to recommendations for improvements to processes and/or controls relating to compliance requirements.

Report Reference	Compliance Manual Reference / Licence Condition	Finding	Recommendation for Improvement	Post Audit Action Plan
Operating Licence 3	Ref. 9, 12, 15,  Clause 6.1 Schedule 3, Clause 3.2 (b) Clause 3.4	While there is a complaints procedure which outlines the way to log a complaint in TRIM, we were unable to verify that staff that deal with complaints were appropriately trained. During the audit we noted a training presentation was performed in 2009 but we were not able to determine who attended this training. Additionally, there is no set register of who within AQWEST is responsible for dealing with queries as it is left to the knowledge within the organisation to determine the most suitable person to deal with the complaint. There is also no complaints handling training that is performed as part of the induction process.  The complaints manual was updated in 2009 but we noted that it is missing some policy information required by the Operational License. Schedule 3, Clause 3.4 states that if a complaint has not been resolved within 15 working days, the Licensee must inform the customer of their right to engage the Department of Water. Although this is outlined in the Customer Services Charter, there is no process within the manual to inform the customer if the complaint is not resolved after 15 working days of their right to engage the Department of Water. Our testing noted that in the sample of 5 there was one instance where the Department of Water was not offered as a resource to the customer.	Staff that should be dealing with complaints should be clearly identified. Training on AQWEST's complaints handling processes should be given to these employees and evidence maintained.  The complaints handling manual and process should be updated to include the compliance requirements of notifying customers of their right to refer complaints to the Department of Water if they are not resolved within 15 days. Additionally, the processes for AQWEST to deal with the Department of Water should also be documented as part of this manual.	The complaints handling manual will be updated incorporating all compliance requirements.  Staff involved in the complaints process will be trained according to the updated manual.  <i>Responsibility:</i> Brian Granville Manager Finance and Administration <i>Implementation Date:</i> 1 April 2011

Report Reference	Compliance Manual Reference / Licence Condition	Finding	Recommendation for Improvement	Post Audit Action Plan
Operating Licence 4	Ref. 47, 48  Clause 21.1 Clause 21.2	<p>We were not able to obtain evidence that the reportable information required for 2007/08 and 2008/09) was submitted to the Authority in a timely manner. There is no formal logging process for assigning and ensuring that the requests are completed in a timely manner.</p> <p>We did obtain confirmation from the Authority that AQWEST has provided all required information.</p> <p>Without a formal logging process there is a risk that reporting information could be submitted to the Authority past the deadline or completely overlooked.</p>	AQWEST should maintain a compliance log which records, assigns and maintains a record of requests that have been provided to the Authority.	<p>The process for providing reportable information to the Authority will be reviewed with a view to creating a log.</p> <p><i>Responsibility:</i> Gary Hallsworth Manager Water Services</p> <p><i>Implementation Date:</i> 1 April 2011</p>

### 1.4.3 – Previous Audit Findings

Licence Condition	Finding	Recommendation	Action Taken	Status
Clause 3 Schedule 3	The version number on the Customer Charter and Charter Summary needs to be formalised.	A formal version number still needs to be introduced.	There is versioning in the TRIM system which allows all working documents to be given a version number.	Complete
Clause 3 Schedule 6	The number of written complaints successfully resolved within 21 days is reported, however not the number of written complaints resolved in greater than 21 days.	Revise the reporting format provided to the Authority to add statistics on written complaints resolved in greater than 21 days.	No evidence of a change of reporting format was able to be sourced.	Ongoing
Clause 3 Schedule 2	A central process for receiving, recording, managing and resolving both administrative and operational-type complaints has still not been implemented.	In the absence of a central system, all complaints information (both operational and administrative) should be reconciled to both supporting documentation; and monthly Board/ERA Reports. This reconciliation process should be performed by an officer who is independent to the complaint recording, management and resolution process; and should be performed on a monthly basis	There is still no centralised process for administrative and operational complaints. There has been an overhaul of the administrative complaints system during the audit period to the TRIM system, however a manual reconciliation of the two systems is not currently being performed.	Ongoing

Licence Condition	Finding	Recommendation	Action Taken	Status
Clause 4 Schedule 7	The Engineer Water Supply has data integrity and manipulation concerns regarding the use of spreadsheets and considers using the Crystal reporting function to provide reports generated from MAINPAC sourced information.	Assess the potential to use the Crystal reporting mechanism to provide the necessary information seamlessly from MAINPAC.	This Schedule has changed since the previous Operational License. The schedule this applies to is now Schedule 5.  The board and management are currently investigating the feasibility of developing a corporate reporting system which will capture all reportable and non-reportable KPI's.	Ongoing

#### 1.4.4 – Changes to the Licence

No changes to the AQWEST Operating Licence are proposed at this time.

#### 1.4.5 – Conclusion

In summary, we noted that two of the licence obligations reviewed were determined to be non compliant. All other obligations were determined to be compliant or compliant with recommendations to improve and strengthen the internal controls to maintain compliance and as such confirms the reporting performed by AQWEST to the Authority.

## 1.5 -Asset Management Review

### 1.5.1 –Performance Summary

The asset management ratings have been applied based on the definitions stipulated in Authority's Audit Guidelines: Electricity, Gas and Water, August 2010. Ratings have been determined based on the following scale.

#### 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.
B	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).
C	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 fit 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	Serious action required	Process is not performed, or the performance is so poor that the process is considered to be ineffective.

## Asset Management Effectiveness Summary

Asset Management System	Asset management process and policy definition adequacy rating	Asset management performance rating
Asset planning	B	1
Asset creation and acquisition	B	1
Asset disposal	A	1
Environmental analysis	A	1
Asset operations	A	1
Asset maintenance	B	2
Asset Management Information System	B	2
Risk management	A	1
Contingency planning	A	1
Financial planning	A	1
Capital expenditure planning	A	1
Review of AMS	B	1

## 1.5.2 – Key Findings

Report Reference	Process	Finding	Recommendation for Improvement	Post Audit Action Plan
Asset 1	Asset Planning	<p>There does not currently appear to be a clearly defined link between the corporate wide risk management process and the asset management framework. There is currently no document in place which links the two.</p> <p>Ideally, there should be a direct link between the corporate wide risk management process and the asset management framework.</p> <p>Asset strategies should be driven by risk assessments with links to the corporate risk framework.</p>	AQWEST should seek to integrate its asset management framework with its corporate risk framework. This would include development of asset maintenance strategies covering the full portfolio of assets, based on risk assessment and informed by up to date criticality and condition assessments.	Creating a link between the risk management manual and the asset management manual will be investigated.



Report Reference	Process	Finding	Recommendation for Improvement	Post Audit Action Plan
Asset 2	Asset Creation	<p>A best practice asset management framework would include a staged release of funds, and documentation to evidence the approval process at each stage of the project lifecycle. This would typically involve:</p> <ul style="list-style-type: none"> <li>The need for investment is identified, and an outline of the project is developed. Drivers are identified, including strategic fit of the project.</li> <li>Options are identified (including non capital options), a preliminary assessment of options (including a risk assessment, cost-benefit analysis, financial analysis etc) is undertaken and documented, and authorisation to release funds for more detailed planning and development of a business case is secured. Authorised to proceed with the project is obtained, and documented.</li> <li>A business case is prepared with a more detailed assessment of costs and benefits, and a preferred option selected. Authorisation to proceed with the project is obtained, and documented within the Capital Project Form</li> <li>Detailed planning. Authorisation to proceed to construction.</li> <li>Construction.</li> </ul> <p>It is noted that AQWEST may well undertake these steps already. However, there appears to be an absence of documentation surrounding the authorisation and release of funds.</p>	<p>The capital project approval process should be modified to include the staged release of funds, and the Capital Project Form be split in accordance with these stages. In addition, the form should be updated to include the requirement to obtain authorisation to proceed to the next phase.</p> <p>This may be applicable for projects which may be above the \$500k threshold as well as projects deemed as "high risk".</p>	<p>A project management methodology has been implemented since the review period. This methodology is currently in a trial period and it is intended to incorporate a project phase signoff check point for relevant projects.</p>

Report Reference	Process	Finding	Recommendation for Improvement	Post Audit Action Plan
Asset 3	Asset Maintenance 1	<p>AQWEST currently has in place asset strategies for its reticulation assets (water mains and valves). However, it does not appear that any documented strategies currently in place for treatment assets, or booster pumps. As a consequence, it is not possible to easily determine what is driving the maintenance activities for these assets, or how the maintenance strategies have been determined / assessed.</p> <p>Additionally in a sample of 25 assets tested, the following was noted:</p> <ul style="list-style-type: none"> <li>15 of the assets had a maintenance strategy such as run to fail in place, however there is no supporting documentation which outlines this approach.</li> <li>2 of the assets did not appear to have any maintenance strategy in place.</li> <li>1 of the assets had maintenance based on the manufacturing service documents however these could not be located.</li> </ul> <p>The 2009-10 Asset Management Plan states that AQWEST “continually reviews and optimises specific maintenance practices” and “Identifies the true cost of maintenance and evaluates preventative maintenance versus corrective maintenance”. Based on discussions with the Manager Water Services, there is currently no structured process in place whereby AQWEST seeks to optimise the split of preventative and corrective maintenance.</p> <p>We also noted that the AQWEST preventative valve maintenance program has fallen behind schedule, and is currently on hold. There is a risk that delays in delivering the preventative maintenance program for valves will result in a greater number of valve failures, and a subsequent decline in serviceability performance.</p>	<p>AQWEST should seek to develop and document asset strategies to cover the full portfolio of its assets.</p> <p>The asset strategy should seek to identify the optimal maintenance regime, taking into the age and condition of the assets.</p> <p>The strategies should be risk based and consistent with AQWEST's risk management framework.</p> <p>An assessment should be undertaken for key assets, and it should be reviewed at regular intervals (every two to three years).</p> <p>Asset strategies should be formalised and recommendations from the GHD Asset Maintenance Review implemented.</p>	<p>Documentation will be developed detailing the asset maintenance strategies for all asset types.</p> <p>An investigation will be conducted to consider documenting the optimal split between preventative and corrective maintenance.</p>

Report Reference	Process	Finding	Recommendation for Improvement	Post Audit Action Plan
Asset 4	Asset Maintenance 2	<p>An asset audit is undertaken every 5 years, which involves condition based assessments of all assets. The audit involves inspection of the assets and comparing this against the data in the asset register. It allows for the removal of retired assets and the amendment of inaccurate information. An asset audit is currently underway and a copy of the Capital Project Form for the 'Asset Data Audit – All Sites' was provided (dated 12/4/10).</p> <p>It provides limited information on the validation checks to be undertaken, the type of information to be gathered, and how this is used / update back into Mainpac.</p>	The Asset Audit should have a formalised procedure in place documenting the audit approach. This will assist in addressing the GHD Asset Maintenance Review finding in relation to the missing data within Mainpac for AQWEST assets.	The procedure for conducting the Asset Audit will be formalised.
Asset 5	Asset Management Information System 1	Periodic access reviews for Mainpac are performed on an ad hoc basis and currently not formalised. During our review we noted that two staff which had access to Mainpac were not appropriate and subsequently removed. AQWEST is currently in the process of formalising this process. One of these was a GHD Consultant and one was an AQWEST employee with 2 user IDs.	<p>Periodic access reviews should be performed on a six monthly basis. Evidence of the periodic access review should be maintained for a period of three years for audit purposes and any follow-up actions should be documented.</p> <p>The reviews of access to the network / applications should include a review of:</p> <ul style="list-style-type: none"> <li>• Access remains commensurate with staff's position requirements</li> <li>• Only valid staff are active</li> </ul>	The Information Communication & Technology Committee has recently instigated the development of a procedure to periodically review user access to all systems.
Asset 6	Asset Management Information System 2	Daily and weekly back-up tapes are currently stored at a member of the Finance Team's private house. There is a risk that a week's worth of key financial data and asset management data may be lost in the event of disaster resulting in costs inherent in the re-creation of this data.	Back-up tapes should be stored in a secure, fire-proof off-site storage facility in the immediate future.	Consideration will be given to alternative sites for storage of back-up tapes.
Asset 7	Review of AMS	A GHD Asset Maintenance Review was conducted in July 2010. The outcome included specific recommendations. Since July 2010 an action plan has not been formulated to address these recommendations.	An action plan to address the GHD Asset Maintenance Review recommendations should to be formulated with quarterly review of the status of the action plan.	An action plan will be prepared to address the GHD recommendations.

### 1.5.3 – Previous Audit Findings

Process	Finding	Recommendation	Action Taken	Status
Asset Planning	Limited amount of detail on proposed capital works projects. Documentation to be commensurate with cost of project.	For proposed capital works projects with a value greater than \$500K that a more comprehensive project justification report be produced.	Project justification reports are commissioned. Consultants are engaged to assist in the development of business cases for projects and include the costs and benefits to be considered in the decision.	Closed.
Risk Management	Risk assessments undertaken by others not consistent with AQWEST format. Unable to directly transfer into the AQWEST Risk Register.  Residual risk (risk remaining after treatment) has not been considered. This will confirm whether the treatment is effective in terms of both risk reduction and cost.	Future planning and investigation reports by consultants use the AQWEST risk format to enable transfer of any identified risks directly into the Risk Register.  Ensure standardisation of the risk management process in terms of overall approach and documentation  Extend the risk register to include evaluation of the residual risk (risk remaining after application of the proposed treatment).	The Risk Register and supporting Risk Management Process has been standardised through the implementation of RiskBase, a risk management software in May 2008.  Additionally risks within the risk register are constantly evaluated and the risk assessment determined is the evaluation of the residual risk.	Closed
Contingency Planning	Unable to identify full suite of contingency and action plans, whether they are current and when they are due for revision.	Develop a register of all contingency and action plans, including date of issue and time for revision.	The Business Continuity Plan identifies a full suite of contingency and action plans which section clearly stating when it was last reviewed and when it is next due for review.	Closed
Capital Expenditure	Capital and Financial Plans only extend for a period of 5 years. Extend to identify major expenditure that could impact in years 6 to 10, which can identify possible future shortfalls in funding or other financial implications.	Extend the capital plan to include projections on major projects for up to 10 years.	The Capital and Financial Plans have been extended to a 10 year period for the whole audit period.	Closed

### 1.5.4 – Conclusion

The Asset Management System for AQWEST is deemed to be adequate for the extent and complexity of the scheme under which it is operating. This review did not identify any non-conformances in respect to the asset management aspects that were reviewed. We have identified a number of areas that would improve the asset management processes within AQWEST.

## 1.6 - AQWEST Representatives that were involved within this review

### Operating Licence

- Gary Halsworth, Manager Water Services
- Brian McCarroll, Project Management Officer
- Iris Johns, Finance & Administration Officer
- Jeremy Morrison, Customer Service Officer
- Richard Coutts, Coordinator of Water Distribution
- Karl Woods, Water Quality Officer
- Caleb Maguire, Design Officer.

### Asset Management Review

- Gary Halsworth, Manager Water Services
- Brian McCarroll, Project Management Officer
- Caleb Maguire, Design Officer
- Lisa Dichiera, Management Accountant
- Joe Smith, Project Accountant

## 1.7 - Audit Team and Time

Shane Devitt, Executive Director	12.0
Ryan Menezes, Senior Manager	45.0
Ana Dijanosic, Senior Business Consultant - Water Engineer	23.0
Iara Steingiesser, Consultant	90.0
Marshall Broadbent, Consultant	77.0
Stephen Sherring, Consultant	40.0

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## 2 Audit Opinion

### **Report on the Performance Audit of the Water Services Operating Licence.**

We have audited the compliance of Aqwest – Bunbury Water Board with the procedures and controls over the performance and quality standards of the Water Services Operating Licence as measured by the Authority's Water Compliance Reporting Manual, March 2009 for the period from 22 September 2007 to 30 September 2010.

### **Respective Responsibilities**

Aqwest – Bunbury Water Board is responsible for compliance with the procedures and controls over the performance and quality standards of the Water Services Operating Licence as measured by the Authority's Water Compliance Reporting Manual, March 2009. Our responsibility is to provide reasonable assurance and express a conclusion on compliance with the procedures and controls of the Water Services Operating Licence as measured by the Authority's Water Compliance Reporting Manual, March 2009, in all material respects.

Our audit has been conducted in accordance with applicable Standards on Assurance Engagements (ASAE) 3000 "Assurance Engagements Other than Audits or Reviews of Historical Financial Information" and 3100 "Compliance Engagements". Our procedures have been included in Section 3 of this report and have been undertaken to form a conclusion as to whether Aqwest – Bunbury Water Board has complied in all material aspects, with the procedures and controls over the performance and quality standards of the Water Services Operating Licence as measured by the Authority's Water Compliance Reporting Manual, March 2009 for the period from 22 September 2007 to 30 September 2010.

### **Use of Report**

This compliance audit report was prepared for distribution to the directors of Aqwest – Bunbury Water Board for the purpose of fulfilling the directors' reporting obligations under the Water Services Operating Licence and considers only the circumstances of Aqwest – Bunbury Water Board. We disclaim any assumption of responsibility for any reliance on this report to any persons or users other than Aqwest – Bunbury Water Board, or for any purpose other than that for which it was prepared.

### **Inherent Limitations**

Because of the inherent limitations of any internal control structure, 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 performance and quality standards of the Water Services Operating Licence as measured by the Authority's Water Compliance Reporting Manual, March 2009, as an audit is not performed continuously throughout the period and the audit procedures are undertaken on a test basis. The audit conclusion expressed in this report has been formed on the above basis.

### **Unqualified Auditor's Opinion**

In our opinion, Aqwest – Bunbury Water Board has complied, in all material respects, with the procedures and controls over the performance and quality standards of the Water Services Operating Licence as measured by the Authority's Water Compliance Reporting Manual, March 2009 for the period from 22 September 2007 to 30 September 2010.

PricewaterhouseCoopers

Shane Devitt  
Principal

Perth  
2 February 2011

## 3 Observations – Operating Licence

### 3.1: Service and Performance Standards

#### Audit Test Reference:

1

#### Audit Priority:

2

#### 3.1.1: References

Reporting Manual Reference: 2, 7, LPW4, TS3, CH8

Trading Licence Clause: 19, 20.1, Schedule 4 Clause 1.1, 1.2 and 2.1

- A Licensee must achieve prescribed standards as defined in the regulations.
- The Licensee must comply with the service and performance standards as set out in Schedule 4.
- Percentage of customers in the Bunbury area that have been supplied at pressure and flow that meets the standards set out in the licence (monthly data and 12 month data).
- Percentage of customers who, within one hour of reporting an emergency, were advised of the nature and timing of the action to be undertaken by the licensee.
- Percentage of customer complaints resolved within 15 business days.

#### 3.1.2: Observations

##### **TS3 (Schedule 4 Clause 1.1)**

An emergency telephone number has been implemented and diverted to one of the on call supervisors after hours. The number is clearly displayed on the front door of the AQWEST offices, the website and at each of the treatment plants. We noted that during business hours, procedures have been implemented to notify the customer of the action to be taken at the time of the call. However, for after business hours, records for notification to customers were not able to be obtained as the paging system only maintains a history of 12 months.

##### **CH8 (Schedule 4 Clause 1.2)**

Testing was performed over a sample of complaints which noted that AQWEST is performing below the target of 90% as per the table below.

Year	# Received	Standard Achieved
07/08	7	28.5%
08/09	7	57%
09/10	5	20%

##### **LPW4 Schedule 4 Clause 2.1**

For each of the periods under review, the calculations performed by AQWEST were re-performed. For the 3 periods the indicator matched the reported numbers which were greater than the performance standard (99.8%).

##### **Schedule 4 Clause 2.2**

Mainpac is utilised to report with performance standard. We re-performed the calculation and noted it was well above the target of 75%.

##### **Schedule 4 Clause 2.3**

There have been no drought response declarations made by the Minister during the audit period.

#### Documents Reviewed:

- Jobs by Fault report (Mainpac)
- Water Services Staff Roster
- Example of a Completed Work Order
- Report from Mainpac- Work Orders with 1 hour completion time.
- SQL for OPI spreadsheet (Jobs By Fault Report)
- Complaints Handling Procedure (2009)
- Complaints Register (2007/8, 2008/9 & 2009/10)
- Network Hydraulic Report (2010)
- Proven Poor Pressure Report (Mainpac)
- Continuity of Service SQL
- Number of Telephone Calls Logged SQL
- Newspaper Spread (AQWEST Public Information)

### 3.1: Service and Performance Standards

- Business Continuity Plan.
- OPI Spreadsheet 2009/10
- Sprinkler Ban Correspondence.

#### 3.1.3: Findings (Refer to Executive Summary)

**Operating Licence 1:** Schedule 4, Clause 1.2 has the performance target for customer complaints resolutions for written complaints to be resolved within 15 days as 90%. We noted through inspection of the complaints register that over the audit period this was not achieved as such:

Year	# Received	Standard Achieved
07/08	7	28.5%
08/09	7	57%
09/10	5	20%

**Operating Licence 2:** Schedule 4, clause 1.1 of the License has a performance obligation of the percentage of customers who have been advised within 1 hour of the nature, timing and extent of action to be taken after initial contact of an emergency.

Whilst AQWEST is able to demonstrate compliance during business hours, we were unable to obtain evidence of compliance for after business hours for any period greater than 12 months of our audit



3.2: Asset Management System		
<b>Audit Test Reference:</b>	<b>Audit Priority:</b>	
2	2	
<b>3.2.1: References</b> Reporting Manual Reference: 3, 4, 5, 43, 44, 45 Trading Licence Clause: 17.1, 17.2, 17.3, 17.4		
<ul style="list-style-type: none"> <li>– The Licensee must have an Asset Management System in respect to the licensed activity.</li> <li>– The Licensee must notify the Authority of any changes to the Asset Management System.</li> <li>– The Licensee must not less than once in every period of 24 months (or such other period determined by the Authority) provide the Authority with an independent expert report, acceptable to the Authority, on the effectiveness of the Asset Management System.</li> <li>– The licensee must provide for and notify the Authority of its asset management system within 2 business days from the license commencement date unless notified in writing by the Authority.</li> <li>– The licensee must notify the Authority of any changes to its asset management system within 10 business days from the date of change.</li> <li>– The licensee must comply and require the licensee's expert to comply with the Authority's Standard Guidelines dealing with the asset management system review including, minimum requirements, regarding appointment of the expert reviewer, scope of review conduct of the review and reporting of the outcomes of the review.</li> </ul>		
<b>3.2.2: Observations</b>		
The following clauses were deemed not rated: <ul style="list-style-type: none"> <li>• Clause 17.1 – AQWEST did not commence operating under the license in the audit period.</li> <li>• Clause 17.2 – AQWEST has not had any material changes to the Asset Management System within the audit period.</li> </ul>		
<b>Clause 17.3</b> PricewaterhouseCoopers has been engaged by AQWEST to perform the asset management review. This has been approved by the Authority. We confirmed that the Authority provided notification to AQWEST for the period of review has been extended to 36 months.		
<b>Clause 17.4</b> The scope of the asset management review was approved by the Authority and is in accordance with the Authority's Audit Guidelines: Electricity, Gas and Water, August 2010.		
<b>Documents Reviewed:</b> <ul style="list-style-type: none"> <li>– Email from ERA to PwC (25/11/10)</li> <li>– Letter of approval from ERA for extended audit period.</li> <li>– Letter from ERA to approve PwC as auditors.</li> </ul>		
<b>3.2.3: Findings (Refer to Executive Summary)</b>		
None.		

3.3: License Requirements		
<b>Audit Test Reference:</b> 3	<b>Audit Priority:</b> 4	
<b>3.3.1: References</b> Reporting Manual Reference: 6, 8, 42 Trading Licence Clause: 4.1, 16.1, 16.2		
<ul style="list-style-type: none"> <li>– The Licensee must not less than once in every period of 24 months (or such other period determined by the Authority) provide the Authority with an operational audit conducted by an independent expert, acceptable to the Authority.</li> <li>– The licensee must pay the applicable fees in accordance with the regulations.</li> <li>– The licensee must comply and require the licensee's auditor to comply with the Authority's Standard Audit Guidelines, minimum requirements regarding appointment of the auditor, scope of audit, conduct of the audit and reporting of the audit.</li> </ul>		
<b>3.3.2: Observations</b>  The following clauses were deemed not rated: <ul style="list-style-type: none"> <li>• Clause 4.1 – AQWEST is not required to pay fees for the license.</li> </ul> <b>Clause 16.1</b> PricewaterhouseCoopers has been engaged by AQWEST to perform the operating licence audit. This has been approved by the Authority. We confirmed that the Authority provided notification to AQWEST for the period of review has been extended to 36 months.		
<b>Clause 16.2</b> The scope of the operating licence audit was approved by the Authority and is in accordance with the Authority's Audit Guidelines: Electricity, Gas and Water, August 2010.		
<b>Documents Reviewed:</b> <ul style="list-style-type: none"> <li>– Email from ERA to PwC (25/11/10)</li> <li>– Letter of approval from ERA for extended audit period.</li> <li>– Letter from ERA to approve PwC as auditors.</li> </ul>		
<b>3.3.3: Findings (Refer to Executive Summary)</b>		
None.		

3.4: Customer Complaints Process		
<b>Audit Test Reference:</b>	<b>Audit Priority:</b>	
4	2	
<b>3.4.1: References</b> Reporting Manual Reference: 9, 10, 12, 14, 15, 17, 18 Trading Licence Clause: 6.1, Schedule 3 Clause 3.1, 3.2b, 3.2d, 3.4, 3.6, 3.7		
<ul style="list-style-type: none"> <li>– The licensee must establish a customer complaints process as set out in Schedule 3.</li> <li>– The licensee must resolve customer complaints within 15 business days of the receipt of complaint.</li> <li>– The licensee must provide appropriately trained staff to respond to complaints.</li> <li>– The licensee must provide an appropriate system to monitor and record the number, nature of and outcomes to complaints.</li> <li>– The licensee must inform the customer of the option to refer a disputed complaint to the Department of Water.</li> <li>– The licensee must co-operate with the Department of Water's request for information concerning a disputed complaint.</li> <li>– The licensee must, on request, provide complaints details to the Department of Water.</li> </ul>		
<b>3.4.2: Observations</b>		
<b>Schedule 3 Clause 3.1</b> AQWEST uses two systems to log customer complaints. TRIM is used for administrative complaints (including all written complaints and personal complaints) and the MAINPAC system is used to capture operational complaints when work orders are generated. We noted that there is no reconciliation between operational and administrative complaints systems. The complaints procedure manual details the process of recording complaints. After 9 days if there has been no resolution on the complaint, the person who was designated the complaint is sent a reminder message and if there is no response then the complaint is escalated to their supervisor.		
<b>Schedule 3 Clause 3.2</b> The system will allocate an individual number to each customer complaint. While there is a complaints procedural document which outlines the way to log a complaint in TRIM, there is insufficient evidence to show that there is appropriately trained staff to deal appropriately with complaints. A training presentation was performed in 2009 but we were not able to determine who attended this training. Additionally, there is no set register of who within AQWEST is responsible for dealing with queries as it is left to the knowledge within the organisation to determine the most suitable person to deal with the complaint. There is also no complaints handling training that is performed as part of the induction process. Both TRIM and MAINPAC have the capabilities to produce reports to monitor complaints.		
<b>Schedule 3 Clause 3.3</b> Outlined in the Customer Services Charter is for the customer right to engage the Department of Water.		
<b>Schedule 3 Clause 3.4</b> There is no mention of the customer's right to refer their complaint to the Department of Water in the Customer Service Manual. It is stated in the customer charter that a dispute may be referred to the Department of Water if it is in writing and it remains unresolved after 15 business days. Testing of the complaints process noted an instance where the claim was not resolved within 15 days and the customer was not informed of their rights against this clause.		
<b>Schedule 3 Clause 3.6, 3.7</b> Sample testing of the complaints procedure noted no instances where the Department of Water was involved. There is no section in the complaints manual which outlines the need for co-operation with the Department of Water.		
<b>Documents Reviewed:</b> <ul style="list-style-type: none"> <li>– Customer Complaints Policy</li> <li>– Complaints Handling Manual (March 2005 and September 2009)</li> <li>– Staff Presentation Customer Complaints 2009</li> <li>– Complaint Register (2007-2009)</li> <li>– Customer Charter (2010 – 2013 Edn.)</li> </ul>		

### 3.4: Customer Complaints Process

#### 3.4.3: Findings (Refer to Executive Summary)

**Operating Licence 3:** While there is a complaints procedure which outlines the way to log a complaint in TRIM, we were unable to verify that staff that deal with complaints were appropriately trained. During the audit we noted a training presentation was performed in 2009 but we were not able to determine who attended this training. Additionally, there is no set register of who within AQWEST is responsible for dealing with queries as it is left to the knowledge within the organisation to determine the most suitable person to deal with the complaint. There is also no complaints handling training that is performed as part of the induction process.

The complaints manual was updated in 2009 but we noted that it is missing some policy information required by the Operational License. Schedule 3, Clause 3.4 states that if a complaint has not been resolved within 15 working days, the Licensee must inform the customer of their right to engage the Department of Water. Although this is outlined in the Customer Services Charter, there is no process within the manual to inform the customer if the complaint is not resolved after 15 working days of their right to engage the Department of Water. Our testing noted that in the sample of 5 there was one instance where the Department of Water was not offered as a resource to the customer.

Additionally, the degree of co-operation required with the Department of Water during the complaints process has not been documented within the manual.

3.5: Customer Service Charter		
<b>Audit Test Reference:</b> 5	<b>Audit Priority:</b> 4	
<b>3.5.1: References</b> Reporting Manual Reference: 19, 20, 21, 22 Trading Licence Clause: 7.1, Schedule 3 Clause 2.5, 2.6, 2.7.		
<ul style="list-style-type: none"> <li>– The licensee must establish a Customer Service Charter as set out in Schedule 3.</li> <li>– The licensee must make the Customer Service Charter available to its customers.</li> <li>– The licensee must review its Customer Service Charter at least once in every three year period.</li> <li>– The licensee must provide its services consistent with its Customer Service Charter.</li> </ul>		
<b>3.5.2: Observations</b>		
<b>Schedule 3 Clause 2.1, 2.2, 2.3, 2.4</b> The AQWEST customer services charter has been approved by the Authority. The Charter is written in plain English and addresses the service issues that are likely to be of concern to its customers.		
<b>Schedule 3 Clause 2.5</b> The customer service charter was displayed in pamphlet form on the AQWEST head office which was in a prominent and visible position for customers to see. The charter is also available on the AQWEST website. Prior to 2010 the customer service charter was sent out with new accounts set up. In late September 2010, AQWEST engaged Australia Post to deliver a copy to every customer who had a current account. We also noted the charter is available free of charge when requested by customers.		
<b>Schedule 3 Clause 2.6</b> AQWEST's Customer Services Charter was approved by the ERA on the 9th of July 2010.		
<b>Schedule 3: Clause 2.7</b> AQWEST has provided its services consistent with its Customer Service Charter based on the lack of complaints in the complaints registers and work done performed in the following aspects of the charter: <ul style="list-style-type: none"> <li>• Compliance with the Memorandum of Understanding with the Health Department through testing in audit test 9.</li> <li>• Water Pressure through testing in audit test 1.</li> <li>• Uninterrupted water supply through testing in audit test 1.</li> <li>• Customer consultation connections procedure (including applications) through testing in audit test 6 and 13.</li> <li>• Reporting faults through audit test 1.</li> </ul>		
<b>Documents Reviewed:</b> <ul style="list-style-type: none"> <li>– Customer Services Charter</li> <li>– Board Resolution of Content of Customer Charter</li> <li>– Approval from the ERA on Customer Services Charter</li> <li>– Australia Post Delivery Report</li> </ul>		
<b>3.5.3: Findings (Refer to Executive Summary)</b>		
None		

3.6: Customer Consultation Process		
<b>Audit Test Reference:</b> 6	<b>Audit Priority:</b> 4	
<b>3.6.1: References</b> Reporting Manual Reference: 23, 24, 25, 26 Trading Licence Clause: 8, Schedule 3 Clause 4.1, 4.2, 4.3		
<ul style="list-style-type: none"> <li>– The licensee must establish customer consultation processes as set out in Schedule 3.</li> <li>– The licensee may either establish a Customer Council or institute at least 2 of the following: establish a regular meeting; publish a newsletter or run other public forums, concerning the licensed activities.</li> <li>– The license must consult the Authority on the type and extent of consultation to be adopted by the licensee.</li> <li>– The licensee must, if at the request of the Authority, establish other forums for consultations, to enable community involvement in issues relevant to license obligations.</li> </ul>		
<b>3.6.2: Observations</b>		
<b>Schedule 3 Clause 4.1</b> AQWEST has established a Customer Council through the annual public meeting held in December each year. AQWEST also publishes a newspaper advertisement fortnightly in the local paper informing customers of upcoming events, publications and water wise initiatives.		
<b>Schedule 3 Clause 4.2</b> AQWEST consulted the Authority on the type and extent of consultation including changes of the format and frequency for the Newspaper spread.		
<b>Schedule 3 Clause 4.3</b> No additional forums have been requested by the Authority.		
<b>Documents Reviewed:</b> <ul style="list-style-type: none"> <li>– Minutes of Annual Public Meetings (2007-2009)</li> <li>– Newspaper articles from the Local paper</li> <li>– Letter to the ERA informing them of a change of timing with regards to the customer consultation</li> <li>– Email from ERA to PwC (25/11/10)</li> </ul>		
<b>3.6.3: Findings (Refer to Executive Summary)</b>		
None.		

3.7: Customer Contracts		
<b>Audit Test Reference:</b> 7	<b>Audit Priority:</b> 4	
<b>3.7.1: References</b> Reporting Manual Reference: 30, 31 Trading Licence Clause: Schedule 3 Clause 5.1 and 5.4		
<ul style="list-style-type: none"> <li>– The licensee may enter into an agreement with a customer to provide water services that may exclude, modify or restrict the terms of the license.</li> <li>– The licensee must publish a report annually that includes the specified information.</li> </ul>		
<b>3.7.2: Observations</b>		
The following clauses were deemed not applicable: <ul style="list-style-type: none"> <li>• Schedule 3 Clause 5.1, 5.4 – AQWEST does not have any contracts with customers. All customers are supplied water on a per usage basis as set out in the operational license and are charged at the same rate per consumption. To confirm there were no customer contracts, the top 5 customers by volume were selected and compared to the standard tariffs charged. On each of the occasions there were no discrepancies noted</li> </ul>		
<b>Documents Reviewed:</b> <ul style="list-style-type: none"> <li>– Billed Customer Listing</li> <li>– Supply and Water Consumption Notice</li> </ul>		
<b>3.7.3: Findings (Refer to Executive Summary)</b>		
None		

3.8: Customer Survey		
<b>Audit Test Reference:</b> 8	<b>Audit Priority:</b> 5	
<b>3.8.1: References</b> Reporting Manual Reference: 32 Trading Licence Clause: Schedule 3 Clause 6		
– The licensee must conduct a customer survey if directed to by the Authority.		
<b>3.8.2: Observations</b>		
<b>Schedule 3 Clause 6</b> AWEST has completed customer surveys on an annual basis. The surveys addressed the areas of the license which are subject to this review, with particular emphasis on water quality, water services and water conservation.		
<b>Documents Reviewed:</b> – Annual Customer Service Surveys from Strahan Research (2008-2010)		
<b>3.8.3: Findings (Refer to Executive Summary)</b>		
None.		



3.9: Water Quality		
<b>Audit Test Reference:</b>	<b>Audit Priority:</b>	
9	2	
<b>3.9.1: References</b> Reporting Manual Reference: 33, 34, 35, 36, 37, 38, 39, 40 Trading Licence Clause: 9.1, 9.2c, 9.2d, 9.2e, 9.4, 9.5, 9.6, 9.7		
<ul style="list-style-type: none"> <li>– The licensee must enter into a MoU with the Department of Health (DoH).</li> <li>– The licensee and DoH must review and renew the MoU every 3 years.</li> <li>– The licensee must provide the Authority with a complete copy of the MoU within one month of entering into the MoU.</li> <li>– The licensee must provide the Authority with any amendments to the MoU within one month of entering into any amendments to the MoU.</li> <li>– The licensee must comply with the terms of the MoU.</li> <li>– The licensee must publish the MoU and any amendments to the MoU within one month of signing (subject to the confidentiality clause 22.3 in the license).</li> <li>– The licensee must publish the audit report on compliance with its obligations under the MoU on the licensee's web site within one month of the completion of the audit.</li> <li>– The licensee must publish its Potable Water Quality Reports quarterly or at a reporting frequency agreed with the Department of Health.</li> </ul>		
<b>3.9.2: Observations</b> The following clauses were deemed not rated: <ul style="list-style-type: none"> <li>• Clause 9.2d, 9.2e – There has been no renewed MoU within the audit period.</li> <li>• Clause 9.5, 9.6 – There has been no renewed MoU within the audit period. Clause 9 of the Operating Licence is a new addition to the licence and as there is no approved current MoU, it cannot be published.</li> </ul>		
<b>Clause 9.1, 9.2c</b> There is a MoU in place with the Health department; however the most recent version is January 2004. This MoU has expired and a draft MoU that has been with the DoH for approval since September 2009 awaiting approval. AQWEST. The extended length of time for approval is due to the change in regulation which means that every water licence requires a MoU with the Health Department. Due to the constrained resources at the Health Department, this has resulted in an extended delay in processing the MoU. The previous operating licence required a MoU to be updated every 5 years. AQWEST has kept the Authority informed of the progress of the MoU.		
<b>Clause 9.4</b> The purpose of the MoU is primarily to ensure the drinking water quality is of an acceptable standard and water quality systems are accurately capturing information on water quality. Reported samples of microbiological and chemical readings were selected for testing to verify that AQWEST was (a) correctly recording the samples and (b) compliant with the levels stated by the Health Department in the MoU. No exceptions were noted in our testing.		
<b>Clause 9.7</b> Drinking water quality reports are issued every quarter and displayed on the AQWEST website for a period of 12 months. After the 12 month period, the water quality reports are taken off the website, but are still available by request from AQWEST.		
<b>Documents Reviewed:</b> <ul style="list-style-type: none"> <li>– WQMS Database report on specific samples</li> <li>– Pathwest Independent Water Quality Reports</li> <li>– SGS Independent Water Quality Reports</li> <li>– MoU with the Department of Health (2004)</li> <li>– MoU with the DoH (Draft Version, 2010)</li> <li>– Aqwest's quarterly water report 01/07/10 - 30/09/10, 01/04/10 - 30/06/10, 01/01/10 - 31/03/10 &amp; 01/10/09 - 31/12/09.</li> <li>– Email from Brian Labza (DoH) re: MoU</li> <li>– Board Minutes, May 12, 2010</li> <li>– Letter from Lyndon Rowe (Chairman ERA) to Richard Theobold (Senior Environmental Health Officer, Department of Health) 29/7/09.</li> <li>– Email from Gary Hallsworth (Manager of Water Services, Aqwest) to Richard Theobold, 14/4/2010 re: making the Aqwest MoU a priority.</li> </ul>		

3.9: Water Quality
3.9.3: Findings (Refer to Executive Summary)
None

3.10: Accounting Records		
<b>Audit Test Reference:</b> 10	<b>Audit Priority:</b> 5	
<b>3.10.1: References</b> Reporting Manual Reference: 41 Trading Licence Clause: 15.1		
– The licensee must maintain accounting records.		
<b>3.10.2: Observations</b>		
<b>Clause 15.1</b> – AQWEST is audited every financial year by the auditor general. The audit opinion issued verifies that the financial statements are based on proper accounts and present fairly the financial position of AQWEST. Accounting records are maintained on the Authority Financial system.		
<b>Documents Reviewed:</b> – Annual Financial Reports FYE 2008, 2009, and 2010 – Annual Audit Opinions FYE 2008, 2009, and 2010		
<b>3.10.3: Findings (Refer to Executive Summary)</b>		
None		

3.11: Reporting to the Authority		
<b>Audit Test Reference:</b>	<b>Audit Priority:</b>	
11	4	
<b>3.11.1: References</b> Reporting Manual Reference: 46, 47, 48, 49 Trading Licence Clause: 18.1, 21.1, 21.2, 22.2 and 22.4		
<ul style="list-style-type: none"> <li>– The licensee must report to the Authority if it is under external administration within 2 business days or significant change in its financial or technical circumstances within 10 business days.</li> <li>– The licensee must provide any information the Authority may require in connection with its functions under the Act.</li> <li>– The licensee must comply with the information reporting requirements as set out in Schedule 5.</li> <li>– The licensee must publish relevant information directed to do so by the Authority within the specified timeframe.</li> </ul>		
<b>3.11.2: Observations</b>		
<b>Clause 18.1</b> AQWEST are aware that there is a responsibility to communicate in writing to the Authority if AQWEST is under external administration or experiences a significant change in its corporate, financial or technical circumstances.		
<b>Clause 21.1, 21.2</b> The Project Management Officer is AQWEST's the key contact who responds to all queries and correspondence with the Authority. AQWEST has provided all key documents required during the audit period. We did noted that there was no documented process for registering key documents received and sent to the Authority. We were also not able to obtain evidence to show that the data that was supplied to the Authority was done so in a timely manner. An audit of the national performance benchmark data was performed in October 2010.		
<b>Clause 22.2, 22.4</b> KPI's were made publically available for the previous financial years and were submitted to the National Water Commission and the Water Services Association of Australia. The 2009/10 report will be available from the NWI website from April, 2011. The Authority has requested that the quarterly drinking water reports are made available to the public. We confirmed that the four most recent reports are available from the AQWEST website.		
<b>Documents Reviewed:</b> <ul style="list-style-type: none"> <li>– Results from the NWI Benchmarking Review</li> <li>– PwC Audit report of NWI Reportable Figures</li> <li>– Letter from ERA Confirming Receipt of Latest NWI Figures</li> <li>– Email from ERA to PwC (25/11/10)</li> <li>– Copies of the NWI Benchmarking report for 2008 &amp; 2009.</li> <li>– Operational Performance Indicators Spreadsheet.</li> </ul>		
<b>3.11.3: Findings (Refer to Executive Summary)</b>		
<b>Operating Licence 4:</b> We were not able to obtain evidence that the reportable information required for 2007/08 and 2008/09) was submitted to the Authority in a timely manner. Whilst the Project Management Officer is responsible for dealing with requests from the Authority, there is no formal logging process for assigning and ensuring that the requests are completed in a timely manner. We did obtain confirmation from the Authority that AQWEST has provided all required information. Without a formal logging process there is a risk that reporting information could be submitted to the Authority past the deadline or completely overlooked.		

3.12: Operating Area		
<b>Audit Test Reference:</b> 12	<b>Audit Priority:</b> 4	
<b>3.12.1: References</b> Reporting Manual Reference: Additional 1 Trading License: Schedule 2		
– The licensee must provide water services only to that area designated by reference to Plan Number OWR-OA-084/4		
<b>3.12.2: Observations</b> The only AQWEST infrastructure that is outside the license area is the mains line in the Dalyellup area. While the pipe is outside the Operating Licence Boundary it does not service any customers and has been built to cater for potential water transfers to Water Corporation and some point in the future. We obtained an engineering blueprint to verify the infrastructure in the sections of the license area which are close to the border in Dalyellup and the North of Picton.		
<b>Documents Reviewed:</b> <ul style="list-style-type: none"> <li>– Bunbury Water Board License Area Map (sourced from ERA)</li> <li>– Bunbury Water Board License Area Map (sourced from Aqwest)</li> <li>– Aerial Plans for Infrastructure</li> <li>– Correspondence with Water Corporation regarding Bulk Water Agreement</li> </ul>		
<b>3.12.3: Findings (Refer to Executive Summary)</b>		
None.		

3.13: Customer Obligations		
<b>Audit Test Reference:</b> 13	<b>Audit Priority:</b> 4	
<b>3.13.1: References</b> Reporting Manual Reference: Additional 2 Trading License: License Schedule 6 Clause 2		
<ul style="list-style-type: none"> <li>The licensee must set out in writing its conditions for connection and make that information available to all applicants for connection and to people inquiring about connection.</li> </ul>		
<b>3.13.2: Observations</b>		
<b>Schedule 6 Clause 2.1:</b> Copies of the "Application for water services" form for; (a) Residential, (b) Non-residential and (c) Fire Fighting applications were obtained. It was confirmed that the conditions for connection have been clearly outlined on the reverse of the application forms. The information is also available on the AQWEST website, under the customer service charter. We obtained the policy for water supply connections and confirmed it appears to be compliant with Schedule 6.		
<b>Schedule 6, Clause 2.2:</b> Services are available for connection to anyone in the license area with no history of rejection for connection in the audit period. There have also been no complaints recorded relating to AQWEST's for refusal to connect services to a potential customer recorded on the complaints register.		
<b>Schedule 6, Clause 2.3:</b> There have been no customers who have had their services to their property discontinued during the audit period due to reason of the service not being commercially viable.		
<b>Documents Reviewed:</b> <ul style="list-style-type: none"> <li>Application for connection forms (current)</li> <li>Application for connection forms (superseded)</li> <li>Customer Service Charter</li> <li>Exert of AQWEST's policy on new connections.</li> <li>Complaints log.</li> </ul>		
<b>3.13.3: Findings (Refer to Executive Summary)</b>		
None.		

## 4 Observations - Asset Management Review

### 4.1: Asset Planning

Audit Test Reference:	Audit Priority:	Asset Management Process and Policy Definition Adequacy Rating:	Asset Management Performance Rating:
1	2	B	1

#### 4.1.1: Description

Asset planning strategies are focused on meeting customer needs in the most effective and efficient manner (delivering the right service at the right place).

#### 4.1.2: Observations

Through review of the Strategic Development Plan 2010 - 2020, the 2009-2010 Asset Management Plan as well as the Operations & Maintenance Manual M38 for Asset Management, strategic objectives for assets have been identified. The Strategic Development Plan and Capital Works Plan are linked through the Statement of Corporate Intent. Within this statement, all capital works plans are aligned to one of the Strategic Development Goals.

Life cycle costs have been considered for all AQWEST assets within the Operations and Maintenance Manual.

Performance Indicators and KPI's have been included in the 2009 - 2010 Asset Management Plan as well as the 2010 - 2020 Strategic Development Plan. Performance indicators are also referred to in the Annual Report. This includes details on KPI targets as well as results since 2007.

The need for new assets has been captured in the 2010/2011 budget and ten year finance plan. Within Mainpac, the asset management system, AQWEST captures the theoretical life of its assets which assists in determining when new assets are needed. Additionally, AQWEST have a Forward Planning Meeting on an annual basis where external consultants are invited. In the audit period we noted GHD (strategic alliance partner) attend these meetings. The Asset Management Plan and Maintenance Manual were reviewed as part of this meeting. The purpose of the asset planning process is to ensure that all stakeholders (including staff and customers) have a constant supply of high quality water.

Asset details are recorded in Mainpac, the asset management system. The system captures details such as asset type, condition, location, installation date and replacement cost.

The responsibility for each individual capital works plan is captured in the Capital Project Form.

Through inspection of a sample of capital works projects, we verified that the evaluation process for assets had been followed, including comparative assessment of non-asset solutions.

#### Documents Reviewed:

- Strategic Development Plan 2007 – 2012, 2010 – 2010
- Asset Management Plan 2007-08, 2008-09, 2009-10
- Operations & Maintenance Manual M38 for Asset Management 2010
- Asset Management Manual 2007
- Aqwest Annual Report 2010
- 2010/2011 Budget and Ten Year Finance Plan 2010/2011 to 2019/2020
- Aqwest Forward Planning Workshop Minutes 2008, 2010
- Statement of Corporate Intent 2007 -2008, 2008-2009, 2009-2010
- Parade Rd Asset Options Assessment
- Capital Project Form
- Mainpac Screenshots
- Glen Iris Bore Capital Project Form, Options Assessment, Completion Report

#### 4.1.3: Findings (Refer to Executive Summary)

**Asset 1** - There does not currently appear to be a clearly defined link between the corporate wide risk management process and the asset management framework. There is currently no document in place which links the two.

4.2: Asset Creation and Acquisition			
Audit Test Reference:	Audit Priority:	Asset Management Process and Policy Definition Adequacy Rating:	Asset Management Performance Rating:
2	4	B	1
<b>4.2.1: Description</b> Asset creation/acquisition means the provision or improvement of an asset where the outlay can be expected to provide benefits beyond the year of outlay.			
<b>4.2.2: Observations</b> <p>Acquired assets are based on a tender which stipulates that they are designed in accordance with appropriate industry standards. AQWEST have a specific tender procedure in place outlining the requirements on the tender process. For all major assets, all requested tenders must comply with the National Plumbing and Drainage Standard AS3500.2003 as well as the Occupational Health, Safety and Welfare Act.</p> <p>Project management processes are in place for asset creation and refurbishment and detailed under the Operations &amp; Maintenance Manual M38 for Asset Management and the Asset Management Plan. A Capital Project Form is used for each project. The form captures the environmental / sustainability considerations, the risk analysis, implementation plan as well as project status updates.</p> <p>The requirement for minor and major assets is documented within the budget which is approved by the Board annually and reviewed quarterly. Actual costs against budgeted costs are reviewed during the budget review by the Board on a quarterly basis. If a project goes over budget the Chief Finance Officer is authorised to approve minor budget amendments (less than \$30,000) with all other budget amendments being referred to the Board for ratification.</p> <p>Commissioning of assets is outlined in the Operations &amp; Maintenance Manual and details in relation to commissioning new assets are detailed under 'Asset Acceptance'.</p> <p>We performed testing and noted no departures from the above procedures.</p>			
<b>Documents Reviewed:</b> <ul style="list-style-type: none"> <li>– Tender: Installation of Water Main Parade Road</li> <li>– Operations &amp; Maintenance Manual M38 for Asset Management</li> <li>– Asset Management Plan 2007-08, 2008-09, 2009-10</li> <li>– Board Policy #4.2 - Tender Procedure</li> <li>– Capital Project Form - Implement Reticulation System Augmentation Project Proposals</li> <li>– Board Meeting Minutes August 2010 Quarterly Review</li> <li>– Board Meeting Attachment June 2009 Quarterly Review</li> <li>– Water Distribution Jan-March Quarterly Budget Review</li> <li>– Parade Rd Variation Register</li> <li>– Parade Rd Commissioning tests documentation</li> <li>– Budget Amendment Policy</li> </ul>			
<b>4.2.3: Findings (Refer to Executive Summary)</b> <p><b>Asset 2:</b> A best practice asset management framework would include a staged release of funds, and documentation to evidence the approval process at each stage of the project lifecycle. This would typically involve:</p> <ul style="list-style-type: none"> <li>• The need for investment is identified, and an outline of the project is developed. Drivers are identified, including strategic fit of the project.</li> <li>• Options are identified (including non capital options), a preliminary assessment of options (including a risk assessment, cost-benefit analysis, financial analysis etc) is undertaken and documented, and authorisation to release funds for more detailed planning and development of a business case is secured. Authorised to proceed with the project is obtained, and documented.</li> <li>• A business case is prepared with a more detailed assessment of costs and benefits, and a preferred option selected. Authorisation to proceed with the project is obtained, and documented within the Capital Project Form</li> <li>• Detailed planning. Authorisation to proceed to construction.</li> <li>• Construction.</li> </ul> <p>It is noted that AQWEST may well undertake these steps already. However, there appears to be an absence of documentation surrounding the authorisation and release of funds.</p>			



4.3: Asset Disposal			
Audit Test Reference:	Audit Priority:	Asset Management Process and Policy Definition Adequacy Rating:	Asset Management Performance Rating:
3	5	A	1
<b>4.3.1: Description</b> Effective asset disposal frameworks incorporate consideration of alternatives for the disposal of surplus, obsolete, under-performing or unserviceable assets. Alternatives are evaluated in cost-benefit terms.			
<b>4.3.2: Observations</b> <p>The Asset Disposal process is outlined under the Operations &amp; Maintenance Manual M38 for Asset Management and the Asset Management Plan.</p> <p>Disposal alternatives are considered as part of the AQWEST Asset Disposal process.</p> <p>The Operations &amp; Maintenance Manual outlines the ongoing requirement to review the Asset Maintenance Strategy to ensure asset lives are prolonged and to ensure an asset meets is performance criteria in terms of customer service, life and cost. Through maintenance, under-utilised or poor performing assets are identified and corrective action taken to improve or dispose of the assets. This process tracks the conditions of assets using methods such as a leak detection specialist to locate leaking water mains that may have been undetected in the past and repairing the issue.</p> <p>An 'Asset Information Capture Form' is used for the disposal or replacement of an asset. The details of the asset to be retired are completed on the form by the AQWEST employee and are then signed off by the designated authorities as part of the checklist. The information then gets inputted into the Mainpac system and marked off as 'retired'. If the asset is to be replaced, the same process is followed, with a Work Order completed identifying both the retired asset and the replacing asset.</p> <p>AQWEST's disposal of assets must comply with the Treasurer's Instruction, which has a specific section for 'write-off's'. The level of authority for write-offs is covered with mention of the agency required for approval with different asset limits:</p> <ul style="list-style-type: none"> <li>• Up to \$100,000 – Accountable Authority</li> <li>• Up to \$250,000 – Responsible Minister</li> <li>• Over \$250,000 – Responsible Minister with approval of the Governor</li> </ul> <p>We performed testing and noted no departures from the above procedures.</p> <p><b>Documents Reviewed:</b></p> <ul style="list-style-type: none"> <li>– Operations &amp; Maintenance Manual M38 for Asset Management 2010</li> <li>– 2009-2010 Asset Management Plan Poster</li> <li>– Asset Information Capture Form</li> <li>– Asset Disposal - Mainpac Screenshots</li> <li>– Treasurer's Instructions</li> </ul>			
<b>4.3.3: Findings (Refer to Executive Summary)</b>			
None.			

4.4: Environmental Analysis			
Audit Test Reference:	Audit Priority:	Asset Management Process and Policy Definition Adequacy Rating:	Asset Management Performance Rating:
4	2	A	1
<b>4.4.1: Description</b> Environmental analysis examines the asset system environment and assesses all external factors affecting the asset system.			
<b>4.4.2: Observations</b> <p>The performance requirements for assets are documented in the Strategic Development Plan 2010 -2010 as well as the Customer Service Charter. Emergency Response is detailed under 'Interrupting Water Supply' in the Customer Service Charter.</p> <p>The regulatory / statutory obligations for AQWEST are documented as part of the Strategic Development Plan 2010 - 2020 under the 'Regulatory Performance' key result area.</p> <p>The targets and achievement of performance and service standards have been reported for the last four years in the 2009-10 Annual Report. Actual results achieved on performance standards are also reported on a monthly basis to the Board. These are based on both Mainpac and manually calculated reports. Through inspection of a sample of 5 Key Performance Indicator Monthly Reports, we verified that where any breaches occurred appropriate corrective action was taken to remedy the breach.</p> <p>Mainpac, SCADA, GIS systems and key spreadsheets are used for reporting and monitoring.</p>			
<b>Documents Reviewed:</b> <ul style="list-style-type: none"> <li>– Customer Service Charter</li> <li>– Strategic Development Plan 2010 - 2020</li> <li>– Aqwest Annual Report 2010</li> <li>– Key Performance Indicator Monthly Report</li> <li>– Operational Performance Indicators 2007 -2008, 2008-2009, 2009-2010</li> </ul>			
<b>4.4.3: Findings (Refer to Executive Summary)</b>			
None.			

4.5: Asset Operations			
Audit Test Reference:	Audit Priority:	Asset Management Process and Policy Definition Adequacy Rating:	Asset Management Performance Rating:
5	4	A	1
<b>4.5.1: Description</b> Operations functions relate to the day-to-day running of assets and directly affect service levels and costs.			
<b>4.5.2: Observations</b> <p>Asset system components are documented in the asset management system, Mainpac. The system captures details such as asset type, condition, location, installation date and replacement cost. There is also a unique identifier for each asset.</p> <p>Asset performance and condition is continually monitored in accordance with the Operations &amp; Maintenance Manual M38, under the 'Asset Condition Monitoring Process'. An Asset Register can be generated as report from Mainpac. Additionally AQWEST maintains an Asset Register in Authority, the Accounting system. Mainpac has the functionality of a comprehensive register of the assets to component level, maintenance management, work order scheduling, maintenance history and reporting.</p> <p>Asset conditions are recorded within Mainpac. The SCADA system is additionally utilised by the Treatment Plant Operators to monitor the efficiency and condition of the treatment plants.</p> <p>There are a number of ways to ensure that resources within AQWEST are appropriate to meet the performance requirements:</p> <ul style="list-style-type: none"> <li>• Recruitment and induction processes for all employees</li> <li>• Annual performance evaluations for all employees</li> <li>• Annual staff attitudinal survey to understand staff perspectives on AQWEST as an employer</li> <li>• Reviewing the Geographical Information System (GIS) on a periodic basis for complaints relating to poor pressure, water leaks etc</li> <li>• Key staff receive SMS alerts from SCADA if any assets are performing below a certain threshold</li> <li>• Quarterly reports from the Water Treatment Coordinator and Water Distribution Coordinator on performance.</li> </ul> <p>Maintenance policies and procedures are kept within the AQWEST Intranet with specific links under each Water Treatment Plant. Mainpac captures all costs to date for each individual asset. Risk management practises are utilised to prioritise maintenance activities.</p> <p>Training requirements are assessed annually during the individual staff members Annual Performance Review. Operations staff have been provided with Certificate II and III in Water Operations NPW20107 &amp; NPW30107 from the Challenger Institute of Technology. The National Water Training Package (NPW20107 and NPW30107) is the formal basis for the training activities for Aqwest operations staff. This package consists of three "endorsed" features - National Competency Standards, Assessment Guidelines and Australian Qualification Framework. The content and assessment of this package are based on the competent performance of work related skills together with the knowledge required to underpin these skills.</p>			
<b>Documents Reviewed:</b> <ul style="list-style-type: none"> <li>– Mainpac screenshots of the asset profile and condition details</li> <li>– Operations &amp; Maintenance Manual M38 for Asset Management 2010</li> <li>– Financial Asset Register</li> <li>– Mainpac Asset Register</li> <li>– Aqwest Annual Report 2010</li> <li>– Aqwest Recruitment and Performance Evaluation process</li> <li>– Aqwest Workplace Attitudinal Survey</li> <li>– GIS Screenshots</li> <li>– Operations Manual Screenshots</li> <li>– Mainpac Asset Replacement Report</li> <li>– Training Schedule</li> </ul>			
<b>4.5.3: Findings (Refer to Executive Summary)</b>			
None.			

4.6: Asset Maintenance			
Audit Test Reference:	Audit Priority:	Asset Management Process and Policy Definition Adequacy Rating:	Asset Management Performance Rating:
6	2	B	2
<b>4.6.1: Description</b> Maintenance functions relate to the upkeep of assets and directly affect service levels and costs.			
<b>4.6.2: Observations</b>  Within the Operations & Maintenance Manual M38, there is an Asset Maintenance Strategy which ensures an asset meets its performance criteria in terms of customer service, life, and cost. Asset conditions are monitored and documented on an annual basis for some classes of assets. Specific strategies are in place for different categories of assets. Through testing of a sample of 25 assets and their maintenance plans, we noted the following: <ul style="list-style-type: none"> <li>• 15 had a run to fail maintenance strategy but did not have any supporting documentation</li> <li>• 2 did not appear to have any maintenance strategy in place</li> <li>• 1 had strategy based on the manufacturing service documents but these could not be located</li> <li>• 4 had a specific maintenance plan but did not have any AQWEST documentation to support this.</li> </ul> Maintenance procedures are documented on the AQWEST Intranet. Each specific maintenance procedure has a reference number, version number, date and approval per position. The Manager Water Services is responsible for ensuring that the targets for the AQWEST performance indicators are met. Each asset's individual costs as well as replacement cost is captured in Mainpac. Within the Operations & Maintenance Manual there is a "Failure Mode Effects and Criticality Analysis" step which includes selecting the appropriate strategy depending on the failure characteristic of the asset. An asset audit is undertaken every 5 years, which involves condition based assessments of all assets. The audit involves inspection of the assets and comparing this against the data in the asset register. It allows for the removal of retired assets and the amendment of inaccurate information. An asset audit is currently underway. As per the Operations & Maintenance Manual, all new assets go through a range of processes once they are commissioned including having an Operating Manual and instructions documented as well as the maintenance schedule.			
<b>Documents Reviewed:</b> <ul style="list-style-type: none"> <li>– General Renewal Strategy for Water Pipe Network</li> <li>– General Valve Maintenance Strategy Report</li> <li>– Operations &amp; Maintenance Manual M38 for Asset Management 2010</li> <li>– Mainpac Screenshots - Valve Maintenance</li> <li>– Valve Maintenance Report</li> <li>– Maintenance and Operations Procedures</li> <li>– GHD Asset Maintenance Review</li> <li>– Electrical Contract</li> <li>– GHD Contract</li> <li>– Capital Project Form - Asset Audit</li> <li>– Mainpac Asset Replacement Report</li> <li>– Asset Information Capture Form</li> <li>– Electrical Maintenance Check Screenshots and Checklist.</li> </ul>			

#### 4.6: Asset Maintenance

##### 4.6.3: Findings (Refer to Executive Summary)

**Asset 3:** AQWEST currently has in place asset strategies for its reticulation assets (water mains and valves). However, it does not appear that any documented strategies currently in place for treatment assets, or booster pumps. As a consequence, it is not possible to easily determine what is driving the maintenance activities for these assets, or how the maintenance strategies have been determined / assessed.

Additionally in a sample of 25 assets tested, the following was noted:

- 15 of the assets had a maintenance strategy such as run to fail in place, however there is no supporting documentation which outlines this approach.
- 2 of the assets did not appear to have any maintenance strategy in place.
- 1 of the assets had maintenance based on the manufacturing service documents however these could not be located.

The 2009-10 Asset Management Plan states that AQWEST “continually reviews and optimises specific maintenance practices” and “Identifies the true cost of maintenance and evaluates preventative maintenance versus corrective maintenance”. Based on discussions with the Manager Water Services, there is currently no structured process in place whereby AQWEST seeks to optimise the split of preventative and corrective maintenance.

We also noted that the AQWEST preventative valve maintenance program has fallen behind schedule, and is currently on hold. There is a risk that delays in delivering the preventative maintenance program for valves will result in a greater number of valve failures, and a subsequent decline in serviceability performance.

**Asset 4:** An asset audit is undertaken every 5 years, which involves condition based assessments of all assets. The audit involves inspection of the assets and comparing this against the data in the asset register. It allows for the removal of retired assets and the amendment of inaccurate information. An asset audit is currently underway and a copy of the Capital Project Form for the 'Asset Data Audit – All Sites' was provided (dated 12/4/10).

It provides limited information on the validation checks to be undertaken, the type of information to be gathered, and how this is used / update back into Mainpac.

4.7: Asset Management Information System (MIS)			
Audit Test Reference:	Audit Priority:	Asset Management Process and Policy Definition Adequacy Rating:	Asset Management Performance Rating:
7	4	B	2
<b>4.7.1: Description</b> <p>An asset management information system is a combination of processes, data and software that support the asset management functions.</p>			
<b>4.7.2: Observations</b> <p>AQWEST use the Mainpac asset maintenance and management system. Mainpac has the functionality of a comprehensive register of the assets to component level, maintenance management, work order scheduling, maintenance history and reporting. Currently Mainpac Version 3.3 is being utilised. Mainpac changed from a client server based system to a browser based system on August 2009.</p> <p>Within the Operations &amp; Maintenance Manual M38, there are operation manuals for Mainpac. All staff working on Mainpac must undergo training in how to use the system.</p> <p>All users need to have a User ID and password to access Mainpac. Periodic review of staff access is performed on an ad-hoc basis. Through inquiry with the Project Management Officer and Design Officer two staff who currently have access are not required access and were removed during this review.</p> <p>Mainpac is maintained on a server in the Server Room on the AQWEST premises. Physical access controls exist to the building and visitors must sign in and receive passes. The servers are kept in a locked cabinet. Daily and weekly back-up processes occur and back-up tapes are taken home by one of the Finance personnel and kept in their house.</p> <p>Within Mainpac each individual asset has a profile. Mainpac captures details such as asset type, condition, location, installation date and replacement cost. There is also a unique identifier for each asset. Additionally the history of the asset and its operations is included in all the work orders which have been actioned for that asset. Data validation checks have been implemented through manual verification checks on asset input and periodic asset verifications for data accuracy within the system.</p> <p>Mainpac produces various reports used by AQWEST across different divisions.</p>			
<b>Documents Reviewed:</b> <ul style="list-style-type: none"> <li>– Mainpac Screenshots</li> <li>– Mainpac Upgrade Test Plan, Deliverable Sign-off, Budget, Timeline</li> <li>– Finance and Administration Procedure Manual Screenshot</li> <li>– Mainpac User Listing</li> <li>– IT Room Access Listing</li> <li>– Backup Procedure</li> <li>– Mainpac Asset Replacement Report</li> <li>– Back up verification email</li> </ul>			
<b>4.7.3: Findings (Refer to Executive Summary)</b> <p><b>Asset 5:</b> Periodic access reviews for Mainpac are performed on an ad hoc basis and currently not formalised. During our review we noted that two staff which had access to Mainpac were not appropriate and subsequently removed. AWEST is currently in the process of formalising this process. One of these was a GHD Consultant and one was an AQWEST employee with 2 user IDs.</p> <p><b>Asset 6:</b> Daily and weekly back-up tapes are currently stored at a member of the Finance Team's private house. There is a risk that a week's worth of key financial data and asset management data may be lost in the event of disaster resulting in costs inherent in the re-creation of this data.</p>			

4.8: Risk Management			
Audit Test Reference:	Audit Priority:	Asset Management Process and Policy Definition Adequacy Rating:	Asset Management Performance Rating:
8	4	A	1
<b>4.8.1: Description</b> Risk management involves the identification of risks and their management within an acceptable level of risk.			
<b>4.8.2: Observations</b> <p>The Risk Management Committee meets on a quarterly basis. During this meeting the Risk Management Manual and any updates are discussed. Additionally since May 2010, AQWEST have had an annual reviews of their Risk Management Manual by RiskCover.</p> <p>A risk register is maintained utilising the Riskbase software. All risks in this risk register use a consequence matrix which rates the risk. It additionally looks at the existing controls as well as the assessed level of risk to determine the overall risk assessment rating. Prior to Riskbase, the risk register was maintained as part of the Risk Management Manual.</p> <p>The Risk Management Policy is encompassed within Section 5 of the Risk Management Manual.</p> <p>Staff are trained in risk awareness through various means including:</p> <ul style="list-style-type: none"> <li>• Attending the Government Risk Management Conference Training (attended by the CEO, Manager Water Services, Project Management Officer and Board Chairman).</li> <li>• Attending RiskCover Project/Contract Risk Training (attended by the Project Management Officer and the Project Accountant).</li> </ul> <p>Each risk that has a high risk assessment rating has a Treatment Action Plan (TAP) created for that risk. The TAP outlines the proposed action, the resources required as well as the implementation date.</p>			
<b>Documents Reviewed:</b> <ul style="list-style-type: none"> <li>– Risk Management Committee Minutes September 2010</li> <li>– Risk Management Committee Agenda September 2010</li> <li>– Risk Management Manual 2007, 2008, 2009, 2010</li> <li>– Aqwest Risk Management Status Review 12 May 2010</li> <li>– RiskBase Risk Register Report</li> <li>– Senior Management Training Evidence</li> <li>– Screenshots of RiskBase</li> </ul>			
<b>4.8.3: Findings (Refer to Executive Summary)</b>			
None.			

4.9: Contingency Planning			
Audit Test Reference:	Audit Priority:	Asset Management Process and Policy Definition Adequacy Rating:	Asset Management Performance Rating:
9	2	A	1
<b>4.9.1: Description</b> Contingency plans document the steps to deal with the unexpected failure of an asset.			
<b>4.9.2: Observations</b> A Business Continuity Plan is currently in place at AQWEST. The plan was developed based on the following: <ul style="list-style-type: none"> <li>• RiskCover Business Continuity Management Guidelines (2007)</li> <li>• AS/NZS 4360:2004 Risk Management Guidelines.</li> </ul> Bi-annual testing of the BCP occurs and RiskCover facilitate the process annually. On alternate years a walkthrough of the plan is conducted internally with the Crisis Management Team and Recovery Team Leaders. In July 2008 the plan was walked through with the entire team with areas for improvement noted and incorporated. The plan was tested with a full BCP event simulation conducted by RiskCover in September 2008 and October 2009. Through inspection of a sample of BCP event simulations conducted by RiskCover, we verified that the contingency plans in place have been assessed and tested to determine their operability. Sections of the Business Continuity Plan are reviewed on an ongoing basis through the Risk Management Meetings. Emergency Contingency Plans have been developed for the following internal and external events: <ul style="list-style-type: none"> <li>• Water Quality Incident Response Plan</li> <li>• Chlorine Incident</li> <li>• Water Services Centre</li> <li>• Information Systems Disaster Recovery Plan</li> <li>• Pandemic Influenza Plan</li> <li>• Records Management Disaster Plan</li> </ul>			
<b>Documents Reviewed:</b> <ul style="list-style-type: none"> <li>– Business Continuity Plan 2007</li> <li>– Business Continuity Plan 2008 onwards</li> <li>– RiskCover Report BCP Scenario Exercise October 2009</li> <li>– RiskCover Report BCP Scenario Exercise September 2008</li> <li>– Risk Management Committee Minutes September 2010</li> <li>– Risk Management Committee Agenda September 2010</li> </ul>			
<b>4.9.3: Findings (Refer to Executive Summary)</b>			
None.			



4.10: Financial Planning			
Audit Test Reference:	Audit Priority:	Asset Management Process and Policy Definition Adequacy Rating:	Asset Management Performance Rating:
10	4	A	1
<b>4.10.1: Description</b> The financial planning component of the asset management plan brings together the financial elements of the service delivery to ensure its financial viability over the long term.			
<b>4.10.2: Observations</b> <p>The 2010-11 Financial Plan includes projected financial statements of the income statement including estimates of revenue, other income, cost of services, administration and other expenses as well as retained profits. This was the same for the previous Financial Plans within the audit period. The financial plan covers a period of 10 years, allowing sufficient cash flow forecasting. The latest 2010 - 2011 plan covers up until 2019 - 2020. Within the financial plans there are projected Cash Flow Statements included.</p> <p>The financial plan includes details of the Ten Year Capital Works Plan. The projected financial statements are utilised to support the Board's Strategic Development Plan in order to achieve AQWEST's objectives. The financial plan also outlines the Cash Reserve Fund Balances. Expenditure allocations from reserves are examined periodically during Board meetings and captured in the Board Reports.</p> <p>The sources of funds for operation, maintenance and administration are incorporated in the Projected Cash Flow Statement. There is also a breakdown of the Capital Projects funded from Revenue outlined under Capital Funding. The capital projects funding are broken down into Furniture and Equipment, Plant and Vehicle Purchases, IT Equipment (Cyclical Replacement), Build New Laboratory, and Rear Courtyard Patio.</p> <p>An Operations and Maintenance Plan is maintained as part of the 2009-2010 Asset Management Plan. A detailed breakdown is included for all operations and maintenance expenditure from 2008-2009 through to 2018-2019.</p> <p><b>Documents Reviewed:</b></p> <ul style="list-style-type: none"> <li>– Asset Management Plan 2007-08, 2008-09, 2009-10</li> <li>– 2010/2011 Budget and Ten Year Finance Plan 2010/2011 to 2019/2020</li> <li>– 2009/2010 Budget and Ten Year Finance Plan 2009/2010 to 2018/2019</li> <li>– 2008/2009 Budget and Ten Year Finance Plan 2008/2009 to 2017/2018</li> <li>– 2007/2008 Budget and Ten Year Finance Plan 2007/2008 to 2011/2012</li> <li>– Board Meeting Minutes May 2010</li> </ul>			
<b>4.10.3: Findings (Refer to Executive Summary)</b>			
None.			

4.11: Capital Expenditure Planning			
Audit Test Reference:	Audit Priority:	Asset Management Process and Policy Definition Adequacy Rating:	Asset Management Performance Rating:
11	4	A	1
<b>4.11.1: Description</b> <p>The capital expenditure plan provides a schedule of new works, rehabilitation and replacement works, together with estimated annual expenditure on each over the next five or more years.</p> <p>Since capital investments tend to be large and lumpy, projections would normally be expected to cover at least 10 years, preferably longer. Projections over the next five years would usually be based on firm estimates.</p>			
<b>4.11.2: Observations</b> <p>Capital expenditure planning forms part of the budgeting process. This is reviewed on an annual basis, with quarterly reviews also conducted. The budgeting process is completed by the Management Accountant and the responsible Executives on an annual basis. The finalised draft budget is then distributed to the Board, who reviews and endorses the proposed budget at the Board Meeting. The finalised budget is then sent to the Minister for Water for final approval. The quarterly reviews of the budget follow the same process.</p> <p>The Financial Plan covers a period of 10 years, allowing for sufficient cash flow forecasting. The latest 2010 - 2011 plan covers up until 2019 - 2020. The Projected Cash Flow Statements are included in the Financial Plan forming part of the cash flow forecasting.</p> <p>The Capital Projects form is used to address the risks, benefits, project responsibility, and timing for major capital project expenditure. The form is completed by the Project Manager. The person of responsibility for each capital project is also outlined in the Gantt chart, which also shows timeframes for each capital project.</p>			
<b>Documents Reviewed:</b> <ul style="list-style-type: none"> <li>– Board Meeting Minutes August 2010</li> <li>– Aqwest Capital Project Form</li> <li>– Gantt Chart - Capital Project Allocation Spreadsheet</li> <li>– Asset Management Plan 2007-08, 2008-09, 2009-10</li> <li>– 2010/2011 Budget and Ten Year Finance Plan 2010/2011 to 2019/2020</li> <li>– 2009/2010 Budget and Ten Year Finance Plan</li> <li>– 2008/2009 Budget and Ten Year Finance Plan 2008/2009 to 2017/2018</li> <li>– 2007/2008 Budget and Ten Year Finance Plan 2007/2008 to 2011/2012</li> </ul>			
<b>4.11.3: Findings (Refer to Executive Summary)</b>			
None.			

4.12: Review of Asset Management System			
Audit Test Reference:	Audit Priority:	Asset Management Process and Policy Definition Adequacy Rating:	Asset Management Performance Rating:
12	5	B	1
<b>4.12.1: Description</b> The asset management system is regularly reviewed and updated.			
<b>4.12.2: Observations</b> <p>The Asset Management Plan is reviewed on an Annual basis. This incorporates a review of the overall asset management systems in use including the use of the Mainpac, SCADA, GIS systems and key spreadsheets that are used for reporting and monitoring assets. There have been no significant changes to the asset management system in the audit period.</p> <p>A forward planning meeting occurs on an annual basis with the strategic alliance partner. During this meeting the Asset Management Plan and Maintenance Manual are reviewed. There have also been various reviews conducted by external consultants which have impacted on the Asset Management Plan.</p> <p>Additionally an Asset Management Review is performed by an external consultant every three years and recommendations from this review are addressed in the Asset Management Plan. An Asset Maintenance Review was conducted by GHD in July 2010 with specific actions recommended. These recommendations have not yet been actioned.</p>			
<b>Documents Reviewed:</b> <ul style="list-style-type: none"> <li>– 2009-2010 Asset Management Plan Poster</li> <li>– 2008-2009 Asset Management Plan Poster</li> <li>– 2007-2008 Asset Management Plan Poster</li> <li>– 2010/2011 Budget and Ten Year Finance Plan 2010/2011 to 2019/2020</li> <li>– Aqwest Forward Planning Workshop Minutes 2009/2010</li> <li>– Aqwest Forward Planning Workshop Minutes 2008/2009</li> <li>– GHD Asset Maintenance Review</li> </ul>			
<b>4.12.3: Findings (Refer to Executive Summary)</b> <p><b>Asset 7:</b> A GHD Asset Maintenance Review was conducted in July 2010. The outcome included specific recommendations. Since July 2010 an action plan has not been formulated to address these recommendations.</p>			

