

Guidelines for the Review and Regular Audit of Strategic Asset Management Plans

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1.0 Introduction

The *Water Act 2000* requires reviews and regular auditing to be carried out on each service provider's Strategic Asset Management Plan (SAMP), unless the service provider is exempted from preparing a SAMP. This guideline provides a review and audit framework for service providers and auditors.

This guideline outlines the regulatory requirements for service providers to carry out audits and summarises the applicable principles of auditing, together with an outline of how both service providers in Queensland and their auditors should approach arranging, conducting and reporting the SAMP audit.

Appendix A lists some of the issues that should be considered by the service provider during the SAMP review.

Appendix B contains a suggested template for the service provider to use as the Terms of Reference when employing an auditor to undertake the SAMP audit work.

Appendix C contains guidance for the SAMP audits. This guidance is provided in the form of examples of prompts and relevant specific issues that would be expected to be addressed by an auditor auditing a SAMP. Additionally, it is intended to act as a guide for service providers, to provide examples of the type of information that they would be expected to be able to provide to enable an auditor to verify annual report data and confirm technical ability to meet the standards identified in the SAMP.

The use of the guidance provided in Appendix C is not mandatory, and the examples used are not an exhaustive list of issues that may need to be addressed by the auditor. The auditor employed by the service provider to undertake their SAMP audit is expected to use professional knowledge and judgement to carry out an appropriate audit. However, if the service provider has assembled the information to respond to the questions listed in Appendix C then the audit process should be relatively straightforward.

The auditor will need to consider both the currently approved SAMP and any previous SAMP document during the audit. The currently approved SAMP will contain details of service provider's strategies, standards, projections and plans but the annual data that is to be audited as part of the audit process could relate to the previous SAMP. There will be a transition period between the submission of a new SAMP document by the service provider and its approval by Natural Resources, Mines and Water (NRMW). If the time taken to approve the new SAMP is likely to impact on the audit timeframe the service provider should contact NRMW to request the date when the SAMP will be approved.

Appendix D contains a suggested audit report template to be used by the auditor when completing the audit report to be submitted.

Appendix E contains the templates for the signed declarations that are required from both the auditor and the service provider, and which need to accompany the audit report when it is submitted to the regulator.

Queensland service provider's range from large metropolitan utilities to small remote service providers. Auditors must adapt the guidance material included in this document to provide audits that are appropriate for the organisation being audited.

1.1 SAMP Audit Process Timeline

Figure 1.1 is a suggested timeline for the SAMP audit process, with suggestions of the number of days that should be allowed for each stage.

	Jun	Jul	Aug	Sept	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	
Key Input Data	Possible timeframe for carrying out activities															
End of Financial Year	◆															
SAMP and CSS Annual Reports (prepared and																
SAMP Annual Report				Final Draft												
CSS Annual Report																
Annual Report adopted by service provider						◆										
Annual Reports submitted to NRMW							◆									
SAMP and CSS Annual Reports (prepared as part of the																
Local Government Annual Report				Final Draft												
Local Government Annual Report adopted by Council						◆										
Local Government Annual Report submitted to NRMW								◆								
Audit Process																
Audit Selection Process										█						
Auditor Appointed											◆					
Programme Audit Dates and Auditor Preparation											█					
SAMP and CSS Audit													█			
SAMP and CSS Audit Report Preparation														█		
SAMP and CSS Audit Report Submitted																◆

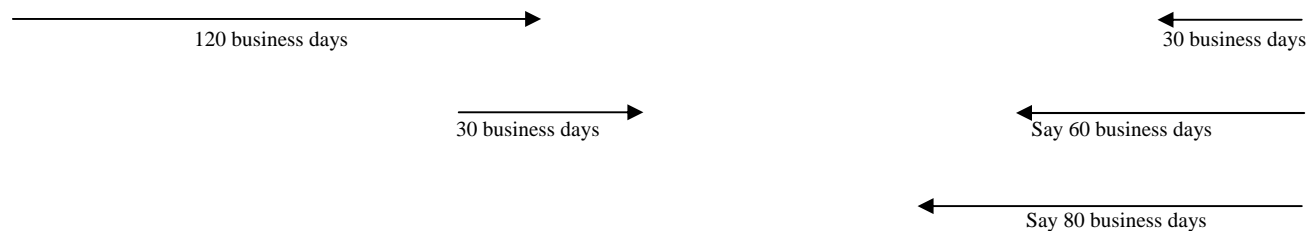


Figure 1.1 - Audit Timeline

This suggested timeline adopts 30 June for completion of the audit work, with the report due 30 business days after this date. The date that the SAMP audit is due to be required by is included in the Notice of Approval letter sent out by the NRMW to service providers at the time that the SAMP was approved. It is suggested that service providers start the auditor selection process about 110 business days before the audit report is due to be submitted to allow sufficient time to complete the audit report.

2.0 Regulatory Requirements

The requirements for reviews and regular audits are in Chapter 3, Part 3 of the *Water Act 2000*, “Service provider obligations”. Details of these regulatory requirements are provided below.

2.1 SAMP Reviews

The relevant provisions for reviewing a SAMP are included in s.415 of the Act.

- A service provider must regularly review their strategic asset management plan, in accordance with the notice given by the regulator under section 411.
- The purpose of the review is to ensure the plan remains relevant having regard to best practice industry standards for the type of services provided by the service provider.
- The service provider must, in its annual report, state –
 - (a) the outcome of the review; and
 - (a) how the service provider has addressed the matters raised in the review.

2.2 SAMP Audits

The Act outlines obligations with regards to the regular audit reporting of SAMPs under Section 417.

Under Section 417(1),

The service provider must, in accordance with the notice given by the regulator under section 411, arrange for regular audit reports to be prepared about the service provider’s strategic asset management plan and compliance with the plan.

Under Section 417(2), the purpose of the regular audit report is to:

- (a) *Verify the accuracy of performance data provided through the annual report; and*
- (a) *Assess the service provider’s technical ability to meet the standards identified in the plan.*

Under Section 417(3), the regular audit report must be:

- (a) *Prepared by a registered professional engineer (the auditor) who is not –*
 - (i) *An employee of the service provider; or*
 - (ii) *The engineer who prepared or certified the plan; or*
 - (iii) *An engineer employed in operating the service provider’s infrastructure.*
- (a) *Given to the regulator within 30 business days after its completion; and*
- (a) *Available for inspection and purchase.*

Further details relating to the SAMP audits are provided in sections 418, 419, 420 and 421 of the Act.

Section 421(1) states:

For conducting an audit under this division, a service provider must give the auditor, and any person employed or authorised by the auditor to participate in conducting the audit, free and uninterrupted access to the service provider's infrastructure and any records relating to the infrastructure.

Other important requirements associated with the regular audit of a SAMP included in Part 3 of Chapter 3 of the Act are:

- The regular audit report must be accompanied by a statutory declaration signed by the Chief Executive Officer of the service provider and a statutory declaration signed by the auditor;
- The audit report must be given to the regulator within 30 business days after its completion; and
- The audit report must be made available for inspection and purchase.

3.0 SAMP Review Process

This section relates to the service providers review of their SAMP as required under s.415 of the Act.

The reviews are to be undertaken at time intervals stipulated by the regulator, typically every three years and the outcome of the review must be stated in the annual report along with how the service provider has addressed the matters raised in the review.

The regular review of the SAMP should be considered as a precursor to the regular audit and is undertaken 12 months prior to the regular audit. It should be considered an opportunity for a service provider to assess its SAMP well before a formal audit is undertaken.

The review is normally an internal process carried out by the service provider, although there is no reason that it could not be carried out by an external consultant. It is essential that key service provider personnel including field staff are involved in this process.

The SAMP review is a means by which the service provider can take a strategic view of:

- Its performance in relation to service levels, operation, maintenance and renewals;
- Future demands/ flows and other factors that will impact on its future service levels and standards; and
- Whether the strategies, actions and financial projections are optimal.

The service provider should not rely on the regulators approval of the SAMP when satisfying itself that the SAMP Guidelines have been complied with. The SAMP guidelines may change from time to time to reflect community expectations and improved standards adopted by government. It is expected that SAMPs will become more effective documents with each review.

The review of the SAMP should address whether the plan accurately reflects the service provider's asset management practices and should ensure that the plan contains all the prerequisite components required by the SAMP guidelines, being:

- Service and system overview
- Standards for appropriate levels of service and performance indicators for the service
- Operation, maintenance and renewals strategy;
- Proposed arrangements for financing implementation of the SAMP

It should also determine whether the SAMP components are currently realistic/appropriate and that the service provider is able to comply with them as required by section 414 of the Act.

Appendix A provides a listing of some of the issues to be considered during the review of the SAMP.

The outcome of the review may be a determination that no changes are required to the currently approved SAMP or that the SAMP should be updated/amended and submitted to the regulator for approval.

4.0 Audit Process

An audit is a systematic, independent and documented process for obtaining evidence and evaluating it objectively to determine the extent to which the audit criteria, the standards and obligations in a service provider's policies, procedures or requirements, have been fulfilled.

Audits are an important part of a regulatory framework as they verify that information collected and reported by service providers is accurate and reliable and provides evidence to customers and other stakeholders about compliance with regulatory obligations. The audits also benefit the service providers themselves, by identifying areas for improvement and providing incentives to achieve compliance.

The process of auditing is characterised by a reliance on a number of key principles, which need to be adhered to in order to ensure that the conclusions reached are relevant and appropriate and to enable auditors working independently from each other to reach similar conclusions in similar circumstances. These principles make the audit an effective and reliable tool in support of management policies and controls, providing information on which an organisation can act to improve its performance.

There are essentially five key processes in establishing any audit framework. These are:

1. Establishing the Audit Scope and Methodology
2. Nominating, Approving and Appointing the Auditor
3. Conducting the Audit
4. Assessing and Reporting on Compliance
5. Responding to the Audits

These processes are discussed in more detail in the following sections.

5.0 Scoping the Audit

5.1 Audit Objectives, Scope and Criteria

The audit scope specifies the nature of the auditor's and service provider's obligations and other matters to be audited, the time frame over which compliance with each relevant obligation or matter is to be audited and the details of the processes and timelines for carrying out the audits and for the provision of the associated reports.

The scope for the SAMP audits is largely governed by the requirements of the Act. These include:

- Auditor assessment of the SAMP.
- Compliance with the SAMP.
- Verification of the accuracy of the performance data provided through the annual report.
- An assessment of the technical ability of the service provider to meet the standards identified in the plan.

The auditor's assessment will include considering whether the SAMP:

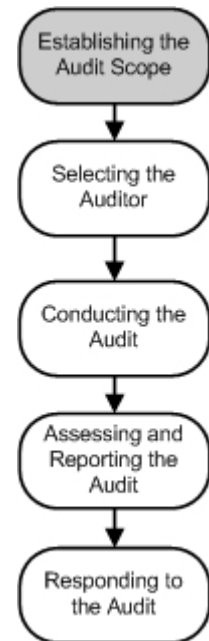
- accurately reflects the water and/or sewerage business.
- contains all of the components required by the SAMP Guidelines, namely:
 - (a) Service and system overview
 - (a) Standards for appropriate levels of service and performance indicators for the service
 - (a) Operation, maintenance and renewals strategy;
 - (a) Proposed arrangements for financing implementation of the SAMP
- components are realistic/appropriate with regard to the water and/or sewerage business.

The auditor will also assess the service provider's compliance with the SAMP of the following SAMP components:

- Service standards and performance indicators
- Operations, maintenance and renewals strategy
- Financial arrangements

The service provider needs to provide the auditor with the most recently approved SAMP. If at the time that the service provider is arranging for its audit there is a more recently prepared SAMP that is awaiting approval from the regulator, the service provider should contact the regulator to inform them that they are arranging their audit and request the date when the SAMP will be approved. The auditor should audit the most recently approved SAMP.

It is recommended that service providers commence the audit process well ahead of the date by which the report is required. If audits are left until the last moment the demand for audit services is likely to exceed available resources. This would mean



that there is the risk of some service providers becoming non-compliant with their obligation to provide for a regular audit report, under section 417 of the Act.

The auditor must verify the performance data provided in the annual report and track data back to the original source data, provide details of the procedures, processes and systems used to record and report the data and use confidence grades to rate the reliability of the procedures used to generate information and the quality of the data.

The “technical ability” of the service provider is to be assessed by considering the following issues:

- Management understanding and commitment;
- Appropriateness of standards;
- Service provider staff qualifications and experience and staffing levels;
- Planning processes related to the achievement of service standards into the future;
- Design criteria in relation to meeting service standards;
- Operation and Maintenance strategies;
- Asset condition and performance monitoring;
- Asset renewal;
- Management of risk; and
- Knowledge management and information systems.

The regulator has determined that service providers shall ensure that their SAMPs are regularly audited. This will be nominally every 3 years.

Each service provider will be notified of the date by which the regular audit report is to be completed and given to the regulator, under s. 411(2)(b) of the Act, in its notice of SAMP approval.

5.2 Assessing Risk

The auditor is expected to adopt a risk-based approach when establishing the extent of the audit in order to focus on the most important and critical issues. This approach is particularly relevant when assessing the “technical ability” of the service provider.

A risk based approach allows the auditor and the service provider to identify the areas and issues where they need to focus their efforts and resources, and where value can be added to the audit process and the provision of the service.

In assessing the likelihood of either non-compliance or of the collected data being defective, the auditor should consider:

- Any previous audit report results or evidence of non-compliance or defective data;
- The likely or known extent of data being defective;
- Any issues identified as part of other regulatory or other consultation processes; and
- Any complaints made by customers or issues raised by other stakeholders.

In assessing the consequences of non-compliance or of the data being defective, the auditor should consider:

- The consequences for achieving the regulator's and service provider's objectives and functions under the *Water Act 2000*;
- The impact on public health, safety or the environment;
- The impact or cost to customers or the general public;
- Damage to property;
- The loss or reduction in the quality, reliability or security of the services provided; and
- The impact on the service provider's ability to make effective service delivery and decisions, for example, basing future decisions on unreliable performance data or invalid comparisons being made between a number of service providers' performance.

In performing the audit, the auditor should have regard to relevant Australian Standards for Assurance Sampling, Compliance and Risk Management.

5.3 Audit Program

Under Section 417(3) of the *Water Act 2000*, the audit report must be submitted to the regulator 30 business days after completion.

The SAMP audit process has not been designed to line up with the Annual Report process timeframe. As a result the auditor will need to use the most recently submitted Annual Report in order to complete the requirement to verify the accuracy and reliability of the information reported. This will relate to information in the previous SAMP if there was one and, therefore, the auditor will need to reference the Annual Report data in relation to that document. The currently approved SAMP will then need to be assessed to allow the auditor to provide comment and assessment of the technical ability of the service provider to meet the standards identified in that plan.

Section 430(4)(iv) of the *Water Act 2000* requires that the findings and any recommendations of any audit must be summarised by the service provider in the next Annual Report that is submitted to the regulator. Ideally the service provider should also state whether or not any recommendations made by the auditor have been adopted.

6.0 Selecting the Auditor

6.1 Nomination

Auditors should be independent of the activity being audited, free from bias and conflicts of interest and able to maintain an objective view to ensure that the findings will be based only on the audit evidence.

Under Section 417(1) of the *Water Act 2000*,

The service provider must, in accordance with the notice given by the regulator under section 411, arrange for regular audit reports to be prepared about the service provider's strategic asset management plan and compliance with the plan.

Therefore, the responsibility for appointing an auditor lies solely with the service provider. However, the *Water Act 2000* does specify some criteria that the auditor has to meet. Under Section 417(3) of the Act, it is specified that the audit report must be,

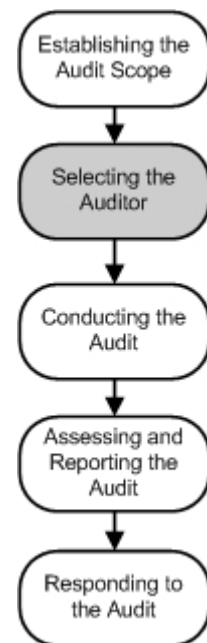
- (a) *Prepared by a registered professional engineer (the auditor) who is not:*
 - (i) *An employee of the service provider; or*
 - (ii) *The engineer who prepared or certified the plan; or*
 - (iii) *An engineer employed in operating the service provider's infrastructure.*

The requirement that the auditor be a registered professional engineer means a further set of criteria will have to be taken into consideration when selecting an auditor.

The Code of Practice for Registered Professional Engineers issued by the Board of Professional Engineers of Queensland details obligations that a professional engineer must adhere to, including obligations to society, obligations to the client and general professional obligations. Of particular importance are:

- Section 1.2: Act with honesty, integrity, fairness and without discrimination.
- Section 2.1: Act truthfully, objectively, and not mislead people, nor engage in misrepresentation.
- Section 2.3: Disclose actual and potential conflicts of interest.
- Section 3.2: Not engage in professional misconduct, fraudulent or dishonest behaviour.
- Section 3.5: Work within an area of competence and not misrepresent competence.

It would be desirable for the service provider to select an auditor with audit accreditation or previous audit experience. This may include ISO, HAZOP, environmental or regulatory auditing. Suggested criteria for an auditor are listed in Appendix B.



6.2 Managing Conflicts of Interest

There are potentially conflicts of interests when an auditor is appointed to carry out a SAMP audit. It is possible for some of these conflicts to be managed and in some circumstances the auditor should not accept appointment.

Potential conflicts of interests could be:

- An employee of the same company auditing the SAMP as had prepared the SAMP. Section 417(3) of the *Water Act 2000* specifies that the auditor can not be the engineer who prepared or certified the plan;
- An auditor who is employed by a company which has contracts with the service provider and, therefore, would be auditing and commenting on projects, particularly under the “technical ability” requirement, that the auditor’s employer company had been responsible for;
- An auditor who is a member of regional working groups with employees of the service provider to be audited;
- An auditor who is a former employee of the service provider (Section 417(3) only states that the auditor cannot be a current employee of the service provider); or
- An auditor who is currently engaged on unrelated projects for the service provider (Section 417(3) only states that the auditor cannot be an engineer employed in operating the service provider’s infrastructure).

The Act requires the auditor to be a registered professional engineer. Under section 2.3 of the Code of Practice for Registered Professional Engineers there is a requirement to disclose actual and potential conflicts of interest and these should be disclosed in the auditor selection process.

The Code of Practice for Registered Professional Engineers has specific obligations which may make it possible for these conflicts of interest to be managed in order for a satisfactory audit to be produced.

6.3 Briefing the Auditors

Service providers will need to provide a written brief to the auditor. These guidelines may be used as a basis for the written briefs. A template for “Terms of Reference” is included in Appendix B.

7.0 Conducting the Audit

This section provides information about conducting the audit and an overview of the generic issues that the auditor would need to address.

The types of information and issues that the auditor would be expected to verify and assess during an audit are provided in Appendix C. These lists are not exhaustive, and their use would depend on the methods used to populate the annual report and derive the information to allow the auditor to assess and comment on the service provider's "technical ability". Use of the prompts is not mandatory and they have been included to provide guidance to the service provider as to the type of questions they are likely to be asked and to assist the auditor with conducting the audit.

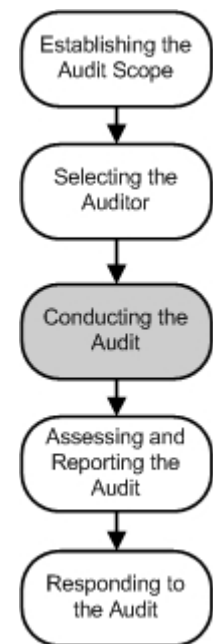
7.1 Audit Methodology

In order to prepare for conducting the audit, it is expected, at a minimum, that the auditor would have regard to relevant information in the following documents:

- These guidelines;
- The *Water Act 2000*;
- Annual Reporting of SAMP and CSS – Guidelines for Service Providers - Department of Natural Resources, Mines and Water;
- The service provider's SAMP, both the currently approved SAMP and the previous SAMP;
- The service provider's CSS, both the current CSS and any previous version;
- The service provider's SAMP annual report;
- The service provider's CSS annual report;
- Guidelines for Preparing Strategic Asset Management Plans - Department of Natural Resources, Mines and Water;
- Total Management Planning Guidelines 2001 (Department of Natural Resources, Mines and Water), and, if relevant, the service provider's TMP;
- Guidelines for Preparing Customer Service Standards - Department of Natural Resources, Mines and Water; and
- Australian Standards for Assurance Sampling, Compliance and Risk Management (AUS 514).

By being able to provide all the necessary documents to the auditor in advance of the audit and by being prepared for the audit, the service provider should be able to minimise the time taken to complete the audit and the costs.

The service provider should be given sufficient notice of the commencement of the audit by the auditor. A schedule of interviews should be agreed between the auditor and the service provider. This will ensure that key service provider staff are available and prepared for the audit. A start-up meeting between senior service provider staff and auditor may be useful. This would allow the service provider to provide an overview of its operating environment and issues it faces in delivering water and



sewerage services. It also provides an opportunity for the auditor to outline the audit process and its expectations of the service provider.

During the audit, the auditor is expected to:

- Subject the SAMP to effective and focused scrutiny;
- Expose and challenge the information provided;
- Assess information quality;
- Assess the adequacy of reporting processes;
- Assess procedures to identify whether or not they are fit for purpose; and
- Provide an opinion on the accuracy and reliability of the data recorded and submitted.

An attitude of professional scepticism is required by the auditor. This involves making a critical assessment, with a questioning mind of the validity of evidence provided, and being alert to evidence that contradicts or brings into question the reliability of documents or representations by the auditee.

During the audits, the auditor would be expected to have access to, or receive copies of supporting information and any calculations used to derive to the reported figures. This will include access to customer service and asset management systems, billing systems, telemetry data and any other data management applications that are used to support the data. At the start of each audit, if not before, the auditor would expect to have access to:

- A copy of the completed annual report along with any appropriate service provider commentary (if required);
- Copies of annual reports from previous years.
- Calculations, copies of spreadsheets etc;
- Copies of individual work orders where it is necessary to track information back to its source; and
- Evidence that indicates that service provider policies and procedures are in place and are being adhered to.

To ensure continuity and consistency of its approach it is suggested that the service provider has or puts in place procedures that document the source of the data, any data manipulation required and the key assumptions used to calculate the reported data.

In order to ensure that the audits of SAMPs throughout Queensland are comparable, as a minimum, the auditor should:

- Analyse documented procedures to assess consistency with regulatory definitions in the SAMP and CSS guidelines;
- Interview the staff responsible to assess understanding and compliance with the documented procedures;
- Analyse information systems to assess the extent to which they produce information that complies with the SAMP guidelines;

- Analyse quality controls to assess whether non-compliance and information defects are systematically identified and corrected;
- Identify changes in systems and documented procedures that may indicate that data accuracy or reliability has varied over the audit time frame;
- Analyse relevant data to ensure that it matches data previously reported to the regulator and/or identifies missing data or unusual figures or trends that might suggest errors in the data entry or manipulation; and
- Analyse a sample of data to establish the extent to which there has been compliance with SAMP guidelines or the extent to which any relevant data or information is accurate and reliable

When auditing the quality, reliability or conformity of information, the auditor will need to be able to address the following generic issues:

- Is the information generated in accordance with documented policies, practices and procedures?
- Are the policies, practices and procedures fully understood by relevant staff?
- How accurately do those procedures and the information derived from them reflect the regulator's information specifications?
- Is the information based on sound information and records?

When auditing compliance with SAMP obligations, the auditor will need to be able to address the following generic issues:

- Is the matter reflected in the documented policies, procedures and practices?
- Has the matter been fully understood by staff?
- Has the matter been delivered as specified, insofar as it is a matter to be supplied or performed?
- Is the matter the subject of effective compliance monitoring and quality control?
- Does the culture appear to support compliant behaviour?
- Does the organisational structure support compliant behaviour and outcomes?

On completion of the audit, a debriefing session between the auditor and service provider is desirable. This would allow the auditor to outline:

- General opinions on the audit;
- Likely content of the audit report including any specific areas of non-compliance;
- Any outstanding information or audit issues that need to be addressed before conclusion of the audit and preparation of the audit report.

8.0 Assessing and Reporting Audit Findings

8.1 Reporting Procedures

Under Section 417(3) (b) of the Act, the SAMP Audit report must be given to the regulator within 30 business days of its completion. Under clause (c) of the same section, the audit report must be available for inspection and purchase.

Auditors should keep all draft reports, audit notes and all records used in arriving at their audit findings, as the regulator may request copies of these documents. Also the audit findings could be challenged by the service provider. The auditor must be able to support its findings.

8.2 Reports

The auditor is expected to prepare a report that addresses all of the issues identified in the audit scope, included in Section 5.0 of these guidelines.

The report should be succinct and focussed so that the issues can be readily identified by the service provider and the regulator. As a minimum, it would be expected that the audit report would include:

- A description of the audit scope and methodology;
- A description of the service provider's systems and procedures;
- A discussion of compliance, including any non-compliance; and
- Compliance grades for each obligation included in the audit scope.

It would be desirable for a draft copy of the audit report to be forwarded to the service provider. This would provide an opportunity for the service provider to clarify any misunderstandings or other issues. However, the auditor, if satisfied as to the validity and objectivity of its report, must be prepared to stand by it, regardless of any negative response from the service provider.

An audit reporting template is provided in Appendix D.

8.3 Signed Statement

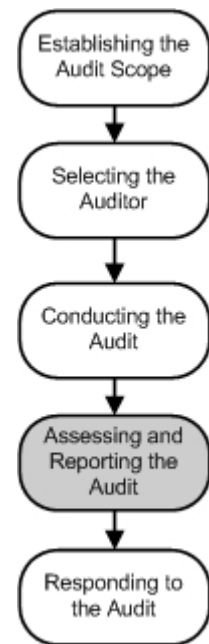
The *Water Act 2000* requires the audit report to be accompanied by statutory declarations by the auditor and the service provider's Chief Executive Officer. The legal requirements are included in section 418 of the Act.

Under Section 418(3), the service providers statutory declaration must state that the service provider –

- (a) has not knowingly given any false or misleading information to the auditor: and
- (a) has given all relevant information to the auditor.

Under Section 418(4), the auditor's statutory declaration must,

- (a) state the auditor's qualifications and experience relevant to the audit;
- (a) state that the auditor has not knowingly included any false, misleading or incomplete information in the report;



- (a) state that the auditor has not knowingly failed to reveal any relevant information or document to the regulator, and
- (a) certify that
 - (i) the report addresses the relevant matters for evaluation and is factually correct; and
 - (ii) the opinions expressed in it are honestly and reasonably held.

A signed statutory declaration template has been included in Appendix E of these guidelines.

8.4 System of Grading Audit Data and Compliance

The audit process relating to the verification of the performance data in the annual report should follow an evidence-based approach, based on samples of verifiable information.

Although the service provider will have assigned confidence gradings to the data in the annual report, auditors must make their own determination as to the data quality that service provider has included in the annual report.

The grading system to be used by the auditor is the same as used by the service provider, using a two part alpha-numeric system to identify the reliability and the accuracy for each item of data. The auditor's report commentary should be used to provide more detailed information relating to the data and information audited and the systems used to produce it.

The first part of the grading system to be used to describe the reliability of the data, is as follows:

A	Highly reliable	Data is based on sound records, procedures, investigations or analyses that are properly documented and recognised as the best available assessment methods.
B	Reliable	Generally as in "A", but with minor shortcomings e.g. some of the documentation is missing, the assessment is old, or some reliance on unconfirmed reports; or there is some extrapolation made (e.g. extrapolations from records that cover more than 50% of the service provider's system).
C	Unreliable	Generally as in "A" or "B", but data is based on extrapolations from records that cover more than 30% (but less than 50%) of the service provider's system.
D	Highly unreliable	Data is based on unconfirmed verbal reports and/or cursory inspections or analysis, including extrapolations from such reports/inspections/analysis.

The second part of the grading system to be used to describe the accuracy of the data, is as follows:

1	+/- 1%
2	+/- 5%
3	+/- 10%
4	+/- 25%
5	+/- 50%
6	+/- 100%

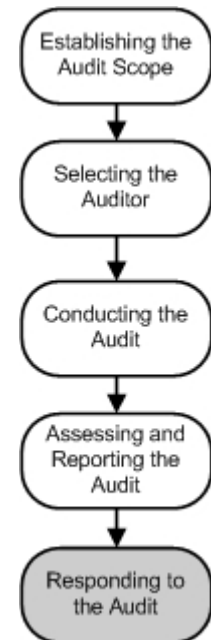
The appropriate use of sampling is closely related to the confidence that can be placed in the audit conclusions reached. Auditors should have regard to the Australian Standard for Assurance Sampling in determining the size of statistical samples that the confidence grades for each item of data are to be based on.

9.0 Responding to the Audit

Timeframes

Under Section 417(3) of the *Water Act 2000*, the audit report must be submitted to the regulator 30 days after completion. The due date by which the SAMP audit report must be conducted is included in the notice that the regulator sends to the service provider when the SAMP has been approved. The audit report must be given to the regulator within 30 business days of this date.

Under section 430(4)(iv) the findings and any recommendations of any audit must be summarised by the service provider in the next annual report that is submitted to the regulator. Ideally the service provider should also state whether or not any recommendations made by the auditor have been adopted.



10.0 Bibliography

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- Auditing and Assurance Standards Board of the Australian Accounting Research Foundation – Auditing Standard AUS106, Explanatory Framework for Standards on Audit and Audit Related Services, November 2001, 20p.
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APPENDIX A

Prompts for Service Provider SAMP Review

These prompts are not exhaustive. They are provided to stimulate ‘brainstorming’ of ideas and strategic thinking that will lead to further refinement and effectiveness of the SAMP by the service provider.

Category	Suggested Prompts
What has changed since the development of the existing SAMP which will impact on the SAMP	<ul style="list-style-type: none"> • Regulatory impacts? • Change in service provider strategic direction? • New schemes recently installed or proposed to be installed? • New assets which would impact on operational staff (e.g. BNR wastewater treatment plant)? • Demands significantly different from anticipated? • Significant variation of service levels from standards? • Unsatisfactory customer survey responses? (eg. customer complaints) • Metric and process benchmarking undertaken? • Significant variation of revenues and costs from projections? • Improved knowledge of asset condition and performance? • Improved predictive modelling of asset failures?
Annual Report	<ul style="list-style-type: none"> • Do the annual report outputs suggest that changes need to be made to the SAMP?
Nature of services	<ul style="list-style-type: none"> • Has the nature and extent of our services changed?
Infrastructure details	<ul style="list-style-type: none"> • Are the infrastructure details up to date?
Service standards	<ul style="list-style-type: none"> • How do the service levels compare to the standards? • Are there any standards that require review? • Do we know what the service standard targets should be? • How does our performance compare to similar service providers? • Are our customers satisfied with our service levels? • Can we sustain these service levels?

O&M Strategy

- Do our systems operate as described in our SAMP?
- Is the information in the SAMP consistent with our actual O&M strategies?
- Are our O&M strategies consistent with appropriate best practice?
- Do the maintenance activities and frequency listed in our SAMP reflect reality?
- Is our listing of documented O&M procedures up to date?
- Have we reviewed our documented procedures and what was the result of these reviews?
- To what extent are these documented procedures being followed?
- What is the status of our staff resources and skills?
- Are these still appropriate to maintain our service standards?
- Will our performance monitoring processes and outputs stand up to a rigorous audit process?
- Have we identified our O&M risks and determined mitigation strategies?
- Is this O&M strategy optimal?

Renewals Strategy

- What really is the condition and performance of our assets?
- How much confidence do we have in our knowledge of asset condition and performance?
- What do we need to do to improve this knowledge?
- Does the process for developing and updating our renewals strategy consistent with what is documented in the SAMP?
- What can we do to improve our asset renewals predictions?
- Is this renewals strategy optimal?

Operations, Maintenance and Renewals Program

- What did we propose to do and did we achieve it?
- What do we need to do to improve our processes and performance or to minimise our service risks?

- Do we have management and staff commitment to implement our proposed program?
 - How well have we been able to project our expenditure in the past?
 - How confident are we of our expenditure projections and that funding will be available?
- Financial Arrangements
- Have we any action plans and, if so, what is our progress in achieving these action plan targets
 - To what extent are these actions relevant?
 - What is our budget for action plans and our progress on the budget?
- Action Plans
- Should the SAMP be a "stand-alone" document or incorporated into a TMP?
- Documentation

APPENDIX B

Sample Audit Terms of Reference

Audit of Strategic Asset Management Plan (SAMP)

Introduction

Under Section 417 of the *Water Act 2000*, [name of service provider] is required to arrange for regular audits of its SAMP. These Terms of Reference outline [name of service provider]'s requirements for the audit.

Required Deliverables

An audit report (hardcopy and PDF version) of the findings of an audit of the SAMP which complies with the requirements of the *Water Act 2000* and the NRMW Guidelines for the Review and Regular Audit of Strategic Asset Management Plans.

Background

[name of service provider] is a registered service provider which owns and manages the following schemes.

Scheme	Service

Methodology

The audit methodology shall be consistent with the “Guidelines for Review and Regular Audit of Strategic Asset Management Plans”, issued by the Department of Natural Resources, Mines and Water.

Note: The service provider needs to provide the auditor with the most recently approved SAMP. If at the time that the service provider is arranging for its audit there is a more recently prepared SAMP awaiting approval by the regulator, the service provider should contact the regulator to advise it is arranging an audit and request the date when the SAMP will be approved.

Conflicts of Interest

The auditor shall advise [name of service provider] of any potential conflicts of interest.

The auditor's attention is drawn to:

- The Code of Practice for Registered Professional Engineers, issued by the Board of Professional Engineers of Queensland, which details obligations that a professional engineer must adhere to, including obligations to society, obligations to the client and general professional obligations.
- The requirements of section 417(3)(a) of the *Water Act 2000* ie:-

- (a) *Prepared by a registered professional engineer (the auditor) who is not:*
- (i) *An employee of the service provider; or*
 - (ii) *The engineer who prepared or certified the plan; or*
 - (iii) *An engineer employed in operating the service provider's infrastructure.*

Timeframe

The final audit report is to be submitted to [name of service provider] by [insert due date].

Other

Service provider to include:

- Conditions of contractor/consultancy agreement;
- Information to be submitted with proposal; and
- Selection criteria.

The following are suggested auditor selection criteria:

- Compliance with Section 417(3) of the *Water Act 2000* (requirements to be a Registered Professional Engineer);
- Previous audit experience;
- Experience in water supply and sewerage asset management;
- Ability to complete all the audit work and audit report with the timeframe required; and
- Provision of value for money.

APPENDIX C

Suggested Audit Prompts

The prompts in the table below have been developed to give auditors assistance in conducting SAMP audits, and to give service providers assistance in preparing for an audit.

The applicability of these prompts would depend on the methods used by the service provider to populate the data in the annual report and the service standard targets that they have set. This list is not exhaustive, and auditors are expected to use their knowledge and judgement to carry out an appropriate audit.

Documentation for Audit Preparation

In order to prepare for conducting the audit, it is expected, at a minimum, that the auditor would have regard to the following relevant information:

- These guidelines;
- The *Water Act 2000*;
- Annual Reporting of SAMP and CSS - Guidelines for Service Providers - Department of Natural Resources, Mines and Water;
- The service provider SAMP (auditor to check whether this document is current and approved);
- The service provider CSS (auditor to check whether this document is current and approved);
- The service provider SAMP annual report;
- The service provider CSS annual report;
- Guidelines for Preparing Strategic Asset Management Plans - Department of Natural Resources, Mines and Water;
- Total Management Planning Guidelines 2001 (Department of Natural Resources, Mines and Water), and, if relevant, the service provider's TMP;
- Guidelines for Preparing Customer Service Standards - Department of Natural Resources, Mines and Water; and
- Australian Standards for Assurance Sampling, Compliance and Risk Management (AUS 514).

The auditor will need to be provided with both the currently approved SAMP and any previously approved version of the SAMP. The auditor will need to refer to both of these SAMP documents during the course of the audit because the annual report data being audited may relate to the previous SAMP.

Generic Auditor Guidance

During the audits, the auditor is expected to:

- Subject the SAMP to effective and focused scrutiny;
- Expose and challenge the information provided;
- Assess information quality;
- Assess the adequacy of reporting processes;
- Assess procedures to identify whether or not they are fit for purpose; and

- Provide an opinion on the accuracy and reliability of the data submitted.

An attitude of professional scepticism is required by the auditor. This involves making a critical assessment, with a questioning mind, of the validity of the evidence provided, and is alert to evidence that contradicts or brings into question the reliability of documents or representations by the auditee.

Service Provider Documentation

During the audits, the auditor would be expected to have access to, or receive copies of supporting information and any calculations used to derive the reported figures. This will include access to customer service and asset management systems, billing systems, telemetry data and any other data management applications that are used to support the data. At the start of each audit, if not before, the auditor would expect to receive:

- A copy of the completed annual report along with any appropriate company commentary (if required);
- Calculations, copies of spreadsheets etc;
- Calculations, copies of spreadsheets etc;
- Copies of individual work orders where it is necessary to track information back to its source; and
- Complaints records; and
- Maintenance records.

To ensure continuity and consistency of its approach it is suggested that the service provider has or puts in place procedures that document the source of the data, any data manipulation required and the key assumptions used to calculate the reported data.

The performance data reported by the service provider in the Annual Report should be able to be confirmed by assessing the service provider's review of the SAMP, compliance with the SAMP, and a sampling of data from the information included in the Annual Report.

The auditor's assessment of the service provider's review of the SAMP would be expected to address the following issues with respect to SAMP content:

- Is the SAMP document that the auditor is reviewing the currently approved SAMP?
- Does the SAMP review accurately reflect the schemes and infrastructure owned by the service provider?
- Does it contain all the pre-requisite components of a SAMP:
 - Service standards
 - O&M Strategy
 - Renewals Strategy
 - Action Plans
 - Financial projections
- Are the following realistic/appropriate for the service provider:

- Service standards
- O&M Strategy
- Renewals Strategy
- Action Plans
- Financial projections

The auditor's assessment of service provider compliance with the SAMP would be expected to address the following issues for each component of compliance:

Component	Issues
Nature of Services	<ul style="list-style-type: none"> • Are the services listed in the SAMP provided? • Are other water or sewerage services provided? • Are the number of connections consistent with the SAMP? • Is the current demand consistent with the SAMP?
Infrastructure	<ul style="list-style-type: none"> • Is the infrastructure for delivering the service consistent with that described in the SAMP?
Service Standards	<ul style="list-style-type: none"> • How do the service levels comply with documented service standards? • Is the process for monitoring performance against service levels consistent with that listed in the SAMP?
O&M Strategy	<ul style="list-style-type: none"> • Do the systems operate as described in the SAMP? Is the information in the SAMP consistent with actual O&M strategies? • Do the maintenance activities and frequency listed in the SAMP reflect reality? • Is the listing of documented O&M procedures up to date? • To what extent are these documented procedures being followed? • Is the procedure review process documented in the SAMP being followed? • What is the status of staff resources and skills and is this compliant with the SAMP? • Is the strategy to ensure availability of suitably qualified operational and maintenance staff, as documented within the SAMP, being followed? • Is the actual asset condition and performance consistent with that documented in the SAMP?
Renewals Strategy	<ul style="list-style-type: none"> • Is the process for developing and updating the

Component	Issues
	renewals strategy consistent with what is documented in the SAMP?
Operations, Maintenance and Renewals Program	<ul style="list-style-type: none"> • Is the level of progress on the action plans consistent with the target dates outlined in the SAMP?
Financial Arrangements	<ul style="list-style-type: none"> • How does the service provider budget and financial projections compare to the figures in the SAMP?

In addition to verifying samples of data for each reported component back to the source documents/information/data in order to assess the reliability and accuracy of the performance data submitted to the regulator in the Annual Report, the auditor would also be expected to address specific issues and questions for each section of the Annual Report. These are documented in the following sections, together with details of the performance indicators that are included in the Annual Report.

The above are examples of the information that the auditor would expect to see details of and confirm are provided for guidance only as examples of the specific issues that the auditor would be expected to address. Their use is not mandatory and they are not an exhaustive list of examples. Auditors are expected to use their knowledge and judgement to carry out an appropriate audit.

Day to Day Continuity of Service

Performance Indicators included in Annual Report

The performance indicators for day to day continuity of service, and in particular, interruptions, included in the SAMP and to be included in the annual report for the purpose of assessing service against the standards in the approved SAMP are as follows:

- Unplanned interruptions per 1,000 connections/year
- Restoration of services due to unplanned interruptions (% restored within a time specified by the service provider)
- Ratio of unplanned to planned interruption incidents
- Response time to all events (hours)

Additional performance indicators to be mandatory after 1 October 2007 are:

- Extent of unplanned interruptions (connections affected by an interruption)
- Customer interruption frequency
- Average interruption duration – planned
- Average interruption duration – unplanned

Auditor and Service Provider Guidance for Auditing Day to Day Continuity

Performance Indicator	Suggested Prompt
Planned and Unplanned Interruptions	<ul style="list-style-type: none"> • How are all interruptions recorded? • Is there a clear trail to GIS, customer service system or another system? • Is there a register of interruptions? • How are the start and end times of an interruption determined and recorded? • How are intermittent interruptions at the same location during the same day reported? For example, intermittent interruptions may be generated by further bursts. Alternatively the service provider may have a policy to restore supply to customers for say 30 minutes to avoid customers being without water for a protracted length of time. • Is there a policy or practice to supply the customer with water at a much lower pressure than normal as a result of an interruption? Are these included in the reported figures?
Planned Interruptions	<ul style="list-style-type: none"> • What are the procedures for issuing customers with advance warnings? • Can the actual start and finished times be confirmed as being within the times in the advance warning letter? • Can the interruptions be tied back to data in a work management system?
Planned and Unplanned Interruptions indicator to be introduced from 1 October 2007	<ul style="list-style-type: none"> • How are the properties affected by an interruption identified? Can the service provider demonstrate this?

Adequacy and Quality of Normal Water Supply

Performance Indicators included in Annual Report

The performance indicators for the adequacy and quality of normal water supply included in the SAMP and to be reported on in the annual report are as follows.

- Minimum water pressure or minimum flow
- Compliance with NHMRC Drinking Water Guidelines
- Specific standards for physical/chemical quality
- Drinking water quality complaints
- Drinking water quality incidents

An additional performance indicator mandatory after 1 October 2007 is

- Connections with deficient pressure and/or flow

Auditor and Service Provider Guidance for Auditing Adequacy and Quality of Normal Water Supply

Performance Indicator	Suggested Prompt
Minimum Pressure/Flow	<ul style="list-style-type: none"> • What is the methodology for measuring the pressure and/or flow? • What assumptions have been used in the methodology and calculations, and are they appropriate/realistic? • What is the extent of pressure/flow studies in the service provider's area? • Are any low pressure/flow events excluded from the reported numbers, for example in cases on abnormal demand, planned maintenance, one-off incidents, fire fighting requirements, incidents of very short durations? • Are poor pressure/flow complaints recorded? If so, do they correspond with the recorded events?
Low pressure/flow indicator to be introduced from 1 October 2007	<ul style="list-style-type: none"> • Is there a clear trail to the GIS, customer service system or another system that counts connections with deficient pressure and/or flow?
NHMRC Drinking Water Guidelines and specific standards for physical/chemical quality	<ul style="list-style-type: none"> • How are samples taken and tested to determine water quality and compliance with ADWG 2004? • What calculations are used, and do they adhere to the methodology and assumptions used? • Are the results realistic and justifiable? • Are any works that did not produce water throughout the year appropriately included? • Have any samples been excluded, and if so, what are the reasons and is their exclusion appropriate? • Do any excluded samples have a material affect on the results included in the Annual Report?
Drinking Water Quality Complaints	<ul style="list-style-type: none"> • Are there procedures for handling complaints received face to face, and by email, fax, mail, email and telephone? • Is there a formal definition as to what constitutes a

Performance Indicator	Suggested Prompt
	<p>complaint? Is the definition appropriate and unambiguous?</p> <ul style="list-style-type: none"> • How are complaints monitored and reported? • Do the service provider staff comply with the procedures? The work processes of at least one member of staff should be audited to ensure compliance. • How are periods of correspondence on the same subject with the same customer monitored and recorded? Is each letter from the customer counted as a separate complaint and recorded as such? • Are internal Quality Assurance checks carried out on customer correspondence? If so, is there any evidence of this? • Are any assumptions made by the service provider exposed in their methodology? • Is sampling used to derive the total reported figure? Is so, are the sampling techniques used likely to be statistically representative of the total number of complaints received? • Are complaints about contractors working on behalf of the service provider reported? • Are complaints made against the service provider but handled by contractors reported? • What are the criteria for determining how telephone calls fall within the definition of a complaint? • How have the telephone complaint statistics been collated?
Drinking Water Quality Incidents	<ul style="list-style-type: none"> • Is there a formal definition as to what constitutes a water quality incident? • How are water quality incidents recorded? • Is a register of water quality incidents maintained? • Can incidents be tied back to information in the service provider's work management system or customer service system? • Can water quality incidents be cross-referenced to customer complaints about water quality?

Continuity in the Long Term (a) Water

Performance Indicators Reported against in the Annual Report

The performance indicators for the continuity in the long term for water included in the SAMP and to be included in the annual report are as follows.

- Water main breaks and leaks
- System water loss

Auditor and Service Provider Guidance for Auditing Continuity in the Long Term (a) Water

Performance Indicator	Suggested Prompt
Water Main Breaks and Leaks	<ul style="list-style-type: none"> • How are these incidents recorded and reported? • Is there a definition for a burst? • How are bursts on mains and fittings differentiated between? • How does the definition for a burst differ from the definition of a leak? • How do bursts and leaks differ from unplanned events? • How are the start times for bursts and leaks defined? • Are there processes for calling in work start and stop times and valve open and close times? • Can the incidents be trailed back to a customer services database (i.e. customers calling in reporting bursts/leaks) or a works management system? • Are bursts/leaks in the service connection to internal plumbing excluded from the reported data? • Are mains faults that can be fixed without shutting down the main included in the reported data?
System Water Loss	<ul style="list-style-type: none"> • Are the calculations for non-revenue water realistic/appropriate? • What are the assumptions underpinning the calculations, and are they appropriate/realistic? • How are unavoidable annual real losses calculated? Is the interpretation and assessment realistic/appropriate? • What assumptions/adjustments are used to account for non-metered consumption by customers and are

	<p>they realistic and justifiable?</p> <ul style="list-style-type: none"> • What assumptions/adjustments are used to account for estimated other non-metered consumption and are they realistic and justifiable? Other non-metered consumption will include estimates for fire fighting, mains flushing, water taken by contractors or service provider's and other consumption due to operations. • What assumptions/adjustments are used to allow for loss of volume due to errors in customer metering, and are they realistic and justifiable? • Does the adjustment to the quantity of water delivered to customers exclude losses from major dams and reservoirs or evaporation losses? • Has the leakage been calculated in accordance with IWA methodology? What are the key assumptions? Are they realistic/appropriate? How sensitive is the calculation to the assumptions made?
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Effective transport of waste effluent

Performance Indicators included in Annual Report

The performance indicators for the continuity in the long term for water included in the SAMP and to be included in the annual report are as follows.

- Total sewage overflows
- Sewage overflows to customer property
- Odour complaints
- Response/reaction time to incidents

Auditor and Service Provider Guidance for Auditing Effective Transport of Waste Effluent

Performance Indicator	Suggested Prompt
Sewage Overflows and Overflows to Customer Property	<ul style="list-style-type: none"> • What methodologies and processes are used to record and report overflows? • What assumptions have been used? Have they been disclosed? Are they realistic/appropriate? What is their materiality on the reported figures? • Do the reported numbers exclude overflows caused by infrastructure owned by the customer? • Do the reported numbers include overflows from points designed to overflow? • Do the reported numbers include both wet and dry weather overflows? • Do the reported numbers include all overflows, regardless of where they have occurred? These would be expected to include overflows to highways, including footpaths and overflows to other areas, for example, flooding to non-residential buildings, e.g. schools, offices, commercial premises and public buildings; public open space; agricultural land; car parks. • Do the reported numbers for overflows to customer property include both internal and external flooding? • Do the incidents of overflows successfully cross-check with the customer complaints received?
Odour Complaints	<ul style="list-style-type: none"> • Are there procedures for handling complaints received face to face, and by email, fax, mail, email and telephone? • Is there a formal definition as to what constitutes a complaint? Is the definition appropriate and unambiguous? • How are complaints monitored and reported? • Do the service provider staff comply with the procedures? The work processes of at least one member of staff should be audited to ensure compliance. • How are periods of correspondence on the same subject with the same customer monitored and recorded? Is each letter from the customer counted as

Performance Indicator	Suggested Prompt
	<p>a separate complaint and recorded as such?</p> <ul style="list-style-type: none"> • Are internal Quality Assurance checks carried out on customer correspondence? If so, is there any evidence of this? • Are any assumptions made by the service provider exposed in their methodology? • Is any sampling used to derive the total reported figure? If so, are the sampling techniques used likely to be statistically representative of the total number of complaints received? • Are complaints about contractors working on behalf of the service provider reported? • Are complaints made against the service provider but handled by contractors reported? • What are the criteria for determining how telephone calls fall within the definition of a complaint? • How have the telephone complaint statistics been collated?
<p>Response/Reaction Times to Sewerage Incidents</p>	<ul style="list-style-type: none"> • How are these incidents recorded and reported? • Are the reported figures realistic/justifiable? • Is there a clear trail on incidents back to the GIS, customer service or another system? • Is a register of sewerage incidents maintained? • How is the start time of an incident reported and recorded? • What are the methods for confirming the time of arrival at site? • Can the incidents be trailed back to a customer services database (i.e. customers calling in reporting bursts/leaks) or a works management system? • How are incidents at the same or a nearby location reported? For example, a blockage in the system resulting in a sewerage overflow may cause another connecting sewer main to surcharge and overflow, but is this classed as one incident or two.

Continuity in the Long Term (b) Sewerage

Performance Indicators included in Annual Report

The performance indicators for the continuity in the long term for sewerage included in the SAMP and to be included in the annual report are as follows:

- Sewer main breaks and chokes
- Sewer inflow and infiltration

Auditor and Service Provider Guidance for Auditing Continuity in the Long Term (b) Sewerage

Performance Indicator	Suggested Prompt
Sewer Main Breaks and Chokes	<ul style="list-style-type: none"> • How are these incidents recorded and reported? • What are the definitions of a break and a choke and do they correspond with the definition included in the SAMP guidelines. • Is a register of sewer breaks and chokes maintained? • Can the incidents be traced back to information in the customer service system (i.e. customers calling in breaks or chokes)? • Can the incidents be traced back to information recorded in the works management system? • Do the incidents successfully cross-check with the customer complaints received?
Sewer Inflow and Infiltration	<ul style="list-style-type: none"> • How are these incidents recorded and reported? • Do the reported figures include stormwater, illegal stormwater connections and groundwater infiltration? • What assumptions and adjustments have been made to the methodology and calculations? Are they appropriate/justifiable? • Are the results realistic/justifiable?

Assessing the Service Provider's technical ability to meet the standards identified in the plan

The auditor should be able to start to assess the Service Provider's technical ability to meet the standards identified in the SAMP through the findings of the assessment of the SAMP and the compliance with the SAMP.

In addition, the specific information that has been audited for the verification of the data included in the annual report will also contribute towards addressing the

“technical ability” of the service provider, and whether they are able to meet the standards identified in the SAMP.

Additionally, the auditor would be expected to address and comment the following issues:

- Management understanding and commitment to the SAMP;
- Appropriateness of standards;
- Service provider staff and staffing levels;
- Planning processes relating to the achievement of service standards into the future;
- Design criteria in relation to meeting service standards;
- Operation and Maintenance strategies;
- Asset condition and performance monitoring;
- Asset renewal strategies;
- Management of risk;
- Financial Arrangements; and
- Knowledge management and information systems.

There are a number of generic issues that the auditor would be expected to address for each of the above areas of focus in assessing the technical ability. These are:

- What is the management commitment to the each of these subjects, having regard to how this is reflected in:
 - (a) Corporate policy
 - (a) Goals
 - (a) Objectives
 - (a) Responsibilities
 - (a) Business drivers (community, environmental, economic, regulatory)?
- What is the level of corporate understanding and knowledge of what is involved in each of these subjects, having regard to:
 - (a) Documentation
 - (a) Training
 - (a) Practitioner skill
 - (a) Communication
 - (a) Systems and processes?
- What is the level of practice of each of these subjects, having regard to:
 - (a) Good practice
 - (a) Government policies, objectives and priorities?

In addition to these generic issues, there are specific issues for each of the subjects that would expect to be addressed by the auditor when assessing the “technical

ability” of the service provider. Examples of these issues that the auditor would be expected to address during the audit are provided below.

Technical Ability Area	Suggested Prompt
Management Understanding and Commitment	<ul style="list-style-type: none"> • Is there a corporate policy on asset management? • Which executive manager has responsibility for the SAMP? • How involved is this person in the development and monitoring of the SAMP? • Does the executive manager responsible for customer service understand the customer service standards? • Has the Finance Director reviewed the financial projections?
Appropriateness of Standards	<ul style="list-style-type: none"> • Does the service provider know what the service standard targets should be? • How have the service standards been set? • How are they monitored? Are there any standards that require review? • Has the service provider met the standards set according to their annual report and from the auditor verification of the data? • If they have not met their own service standards, what are the reasons, and do they imply that the standards have been set too high to be appropriate or are there issues relating to how the service provider is being managed and operated? • How does performance compare to similar service providers? • Are customers satisfied with current service levels?
Staff and Staffing Levels	<ul style="list-style-type: none"> • Are numbers/ skills adequate to sustain the service? • Are the skills/ training consistent with what is in the SAMP? • How is knowledge shared by the staff? • Are staff aware of their roles and responsibilities? • How are staff involved in the development of the operation, maintenance and renewal strategies documented in the SAMP?
Planning Processes	<ul style="list-style-type: none"> • How are demand trends monitored and input in the

Technical Ability Area	Suggested Prompt
	<p>planning process?</p> <ul style="list-style-type: none"> • How is information on asset capacity, performance and condition input into the planning process? • How are infrastructure planning studies instigated? • To what extent are "non-infrastructure" options considered in the planning process? • To what extent is the capacity of existing infrastructure maximised? • Is the level of predictive modelling appropriate? • What tools and processes are in place to determine the appropriate basis of the assets being replaced, renewed, repaired or maintained? • What is the level of adequacy of these tools and processes to meet the obligation? • Has the service provider used appropriate and realistic asset lives? • How are the trade-offs made between the management of assets for the longer term and minimising whole-of-life asset costs? • What is the service provider's capability to determine future investment programs and identify realistic timeframes to deliver such programs? • Does the service provider have documentation or a system that allows prioritisation of works? • What processes or plans are in place to manage any environmental impacts as a result of the service provider's activities?
Design Criteria	<ul style="list-style-type: none"> • Do documented design criteria exist for new assets? • Are these consistent with accepted industry standards (e.g. WSAA Codes)? • Are the standards appropriate to the service provider?
Operation and Maintenance Strategies	<ul style="list-style-type: none"> • Are the O&M strategies consistent with appropriate best practices? • What was the result of any O&M strategy reviews? • Are the O&M strategies still appropriate to maintain service standards? • Have O&M risks been determined and mitigation

Technical Ability Area	Suggested Prompt
	<p>strategies developed?</p> <ul style="list-style-type: none"> • Are the O&M strategies optimal?
Asset Condition and Performance Monitoring	<ul style="list-style-type: none"> • What is the adequacy of the information and assessments available to make key decisions on the service provider's infrastructure? • Are there regular reviews to discuss changes to asset conditions and the results from performance monitoring? • What management system, processes and plans are in place to support decision-making to cover maintenance, repair or upgrade?
Asset Renewals	<ul style="list-style-type: none"> • What is the level of knowledge of asset condition and performance? • Is the Asset Renewals strategy optimal?
Management of Risk	<ul style="list-style-type: none"> • What tools and processes are in place to identify, assess and treat risks? • What processes are in place to determine priority for risk reduction investments across the business? Are these integrated with the Capex program? • Are the risk management processes transparent and well documented? • What processes are in place to initiate an appropriate response should risks eventuate? • Are the critical enterprise-wide risks reported to the Council/Board? • What is the level of adequacy of these tools and processes with regard to AS/NZS 4360 – Risk Management? • Are there processes in place to incorporate water industry good practice?
Financial Arrangements	<ul style="list-style-type: none"> • What is the basis for future projections? • Has the funding been adequate to achieve each of the appropriate strategies?
Knowledge Management and Information Systems	<ul style="list-style-type: none"> • Is the asset register realistic, and does it correlate with other asset information audited during the SAMP audit. • What is the level of adequacy of the service provider's asset related databases?

Technical Ability Area	Suggested Prompt
Other	<ul style="list-style-type: none"> • Can any further conclusions be drawn from the audit of the SAMP, including compliance, Annual Report review, or the service provider's technical ability to meet the standards identified in the plan?

Appendix D
SAMP Audit Report Template

1. Audit Details

Auditor	
Auditor	
Date of Audit	
Service Provider Personnel (and Position) Interviewed	

2. Scope of Audit

A description of the scope of the audit, what the auditor did, for example we sampled X out of Y records, we reviewed procedures relating to XYZ, we audited XYZ figure, the processes and procedures that the auditor used in carrying out the audit. Information can be copied over from Section 5.0 of these guidelines and inserted into this section for further comment.

3. Documents and Data Reviewed

List documents and data tabled by the service provider and which have been reviewed by the auditor. The auditor should be given copies of the main documents, spreadsheets etc to help with their review and writing the audit report.

4. Methodology

An overview of the policies, practices, procedures, processes and systems the service provider has in place to monitor, record and report the information submitted to the regulator in the Annual Report and that are in place in order for the service provider to maintain a service to the customer to the standard described in the SAMP.

5. SAMP Content

The auditor should provide comment relating to the content of the SAMP. Comments to be included in this section should focus on whether the SAMP accurately reflects the water and/or sewerage business, whether it contains all the prerequisite components required by the SAMP Guidelines, and whether these components are realistic/appropriate with regard to the water and/or sewerage business. Suggested issues that should be addressed in the review of the SAMP content have been included in Appendix C of these guidelines.

6. Compliance with SAMP

The auditor should provide comment relating to service provider's compliance with the SAMP, paying particular regard to the financial expenditure arrangements, action plans, service standards, renewals strategy and the O&M strategy.

7. Performance Data Reported in the Annual Report

In this section the auditor should comment on the verification of the data included in the service provider's Annual Report. It is suggested that the information be presented in a table. Each section of the table below should contain the data from the Annual Report to allow easier reference between the auditor's comments and the reported figures in the auditor's report. The auditor should provide comments on the methodology for monitoring, recording, reporting and responding to the performance

indicators and should also include comments relating to the audit trails carried out on the figures to verify their accuracy and reliability, and confidence grades. Comments will need to be added if the auditor judges that the confidence grades given by the service provider in the Annual Report are not appropriate. Issues of non-compliance, either provided by the service provider in the Annual Report, or found by the auditor during the audit process will also need to be addressed in this section. Suggested prompts and issues to be addressed in the verification of the Annual Report data have been provided in Appendix C of these guidelines.

Day to Day Continuity

Performance Indicator	Performance Measurement	Target	Actual	Satisfactory (Y/N)	Confidence Grading	
					Reliability	Accuracy
Extent of unplanned interruptions (incidents)						
Extent of unplanned interruptions (connections affected by an interruption)						
Time for restoration of service						
Customer interruption frequency						
Relative incidence of planned incidents						
Average interruption duration - planned						
Average interruption duration - unplanned						
Response/reaction times to incidents						
Non-conformance issues:						

Adequacy and Quality of Normal Supply

Performance Indicator	Performance Measurement	Target	Actual	Satisfactory (Y/N)	Confidence Grading	
					Reliability	Accuracy
Minimum pressure or minimum flow						
Connections with deficient pressure and/or flow						
Drinking water quality Compliance with NHRC Drinking Water Guidelines or Specific standards for physical/chemical quality						
Drinking water quality complaints						
Drinking water quality incidents						
Non-conformance issues:						

Continuity in the Long Term – Water

Performance Indicator	Performance Measurement	Target	Actual	Satisfactory (Y/N)	Confidence Grading	
					Reliability	Accuracy
Water main breaks and leaks						
System water loss						
Non-conformance issues:						

Effective Transport of Waste Effluent

Performance Indicator	Performance Measurement	Target	Actual	Satisfactory (Y/N)	Confidence Grading	
					Reliability	Accuracy
Total sewage overflows						
Sewage overflows to customer property						
Odour complaints						
Response/reaction times to incidents						
Non-conformance issues:						

Continuity in the Long Term – Sewerage

Performance Indicator	Performance Measurement	Target	Actual	Satisfactory (Y/N)	Confidence Grading	
					Reliability	Accuracy
Sewer main breaks and chokes						
Sewer inflow and infiltration						
Non-conformance issues:						

Customer Service Standards

Performance Indicator	Performance Measurement	Target	Actual	Satisfactory (Y/N)	Confidence Grading	
					Reliability	Accuracy
Non-conformance issues:						

8. Technical Ability of the Service Provider to Meet Standards Identified in the SAMP

In this section the auditor should comment on their judgement and opinions as to whether they consider that the service provider has the technical ability to meet the standards identified in the SAMP. Suggested prompts for both generic and more specific issues that would be expected to be addressed and commented on by the auditor have been provided in Appendix C of these guidelines.

Technical Area	Auditor Comments
Management understanding and commitments	
Appropriateness of standards	
Service provider staff and staffing levels	
Planning process relating to the achievement of service standards into the future	
Design criteria in relation to meeting service standards	
Operation and maintenance strategies	
Asset condition and performance monitoring	
Management of risk	
Knowledge management and information systems	
Overall comment	

9. Conclusions

A summary of the auditor's findings in relation to the SAMP review, compliance with the SAMP, the verification of the accuracy and reliability of the data submitted in the Annual Report, and the technical ability of the service provider to meet standards identified in the SAMP are to be included in this section.

APPENDIX E

Statutory declarations

Statutory Declaration by the Auditor

Oaths Act 1867

Statutory Declaration

QUEENSLAND TO WIT

I, <<insert name of the auditor making the declaration>> of <<insert address>>, in the State of Queensland do solemnly and sincerely declare that:

1. I hold the following professional qualifications: <<insert details of auditors qualifications>>.
2. I am a registered professional engineer under the *Professional Engineers Act 2002* registration number <<RPEQ No>>.
3. My experience in relation to audits of SAMPs prepared under the *Water Act 2000* is as follows: <<insert details of auditors experience relevant to the audit>>.
4. I conducted a regular audit of the strategic asset management plan (SAMP) of <<insert service provider name >> pursuant to Section 418(4) of the *Water Act 2000* and prepared the audit report dated <<insert report date>>.
5. To the best of my knowledge information and belief, I have not knowingly included any false, misleading or incomplete information in the report.
6. To the best of my knowledge information and belief, I have not knowingly failed to reveal any relevant information or document to the regulator; and
7. I certify that to the best of my knowledge, information and belief,
 - the report addresses the relevant matters for evaluation and is factually correct; and
 - the opinions expressed in it are honestly and reasonably held.

And I make this solemn declaration conscientiously believing the same to be true, and by virtue of the Oaths Act 1867.

<<signature>>

Taken and declared at <<insert town or city and suburb where declaration signed>> this <<insert date>> of <<insert month>> 20<<insert year>>, before me

<<signature of person before whom the declaration is made - to be signed by a person who is able to witness a Statutory Declaration under the Statutory Declarations Act 1959 - eg Justice of the Peace, Commissioner of Declarations>>

Justice of the Peace/Commissioner for Declarations

Statutory Declaration by the Service Provider

Oaths Act 1867

Statutory Declaration

QUEENSLAND TO WIT

I, <<insert name of the person making the declaration on behalf of the service provider>> of <<insert address>>, in the State of Queensland do solemnly and sincerely

declare that:

1. I am the <<insert position title of person authorised to sign this declaration on behalf of the service provider>> of <<insert service provider's registered legal name and ACN/ABN number (if applicable)>>.
2. Through the course of the regular audit of the strategic asset management plan (SAMP) by <<insert name of auditor>> for the audit period ending <<insert year of audit>>, which has resulted in this regular audit report dated <<insert date>>, that:
 - officers and employees of <<insert service provider name>> have not knowingly given any false or misleading information to the auditor who conducted the regular audit of the SAMP mentioned above ; and
 - officers and employees of <<insert service provider name>> have given all relevant information to the auditor who conducted the regular audit of the SAMP mentioned above.

And I make this solemn declaration conscientiously believing the same to be true, and by virtue of the Oaths Act 1867.

<<signature>>

Taken and declared at <<insert town or city and suburb where declaration signed>> this <<insert date>> of <<insert month>> 20<<insert year>>, before me

<<signature of person before whom the declaration is made - to be signed by a person who is able to witness a Statutory Declaration under the Statutory Declarations Act 1959 - eg Justice of the Peace, Commissioner of Declarations>>

Justice of the Peace/Commissioner for Declarations

Definitions

“the Act” – means the *Water Act 2000* and references to sections means sections of the Act

“information notice” - means a formal notice of a decision made under the Act. The Act states when information notices must be sent. Information notices must state the following:

- The decision made (Water Act requirement)
- The reasons for the decision (Water Act requirement)
- The name and address of any other person who was given the notice
- That the person given the notice may appeal against the decision, or apply for arbitration, within 30 business days after the day the notice is given (Water Act requirement)
- Include a copy of the relevant appeal or arbitration provisions of the Act (Water Act requirement)
- The decision maker’s findings on material questions of fact (section 27B *Acts Interpretation Act 1954* requirement);
- The evidence on which those findings were based (section 27B *Acts Interpretation Act 1954* requirement)

“NRMW” - means the Department of Natural Resources, Mines and Water

“registered professional engineer” – means a person registered as a professional engineer as defined under the Professional Engineers Act 2002.

“registered service”, for a service provider, means a water or sewerage service for which the service provider is registered

“regular audit” – means an audit conducted under s.417.

“review” – means a review conducted under s.415 and specified in the notice approving the SAMP under s.411

“regulator” – means the Director-General, Department of Natural Resources, Mines and Water (NRMW).

“show cause notice” – means a notice issued by the regulator to a service provider under section 778 (of the Act).

“SAMP” - means a strategic asset management plan.

“strategic asset management plan” - means a plan certified by a registered professional engineer under Chapter 3, Part 3, Division 1 (of the Act)