# Shire of Koorda 2005 Operational Audit and Asset Management System Review

**Final Report** 



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**Operational Audits** 

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Report for: Shire of Koorda

## PREPARATION, REVIEW AND AUTHORISATION

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# **Executive Summary**

## **Background**

The Shire of Koorda was formally granted an Operating Licence for a term of five years on 29<sup>th</sup> April 1996. Amended Operating Licences were subsequently issued, by means of substitution on 21<sup>st</sup> May 1997 and 14<sup>th</sup> June 2002, and is valid up to and including the 29<sup>th</sup> April 2021. The Licence permits the Shire of Koorda to provide Non-potable Water Supply Services in the operating areas that are centred on the township of Koorda. The Economic Regulation Authority (the Authority) monitors the operational performance of the Shire of Koorda against its Operating Licence.

The Town of Koorda is located approximately 248 kilometres from Perth and the sewerage scheme services 138 properties. The Koorda sewerage system consists of 4403 metres of sewerage reticulation, a single pumping station with a single oxidation pond and irrigation pond (empty). The volume of wastewater treated is approximately 25,000 kL/annum.

In accordance with Section 37 (1) of the *Water Services Licensing Act 1995*, operational audits are required to be undertaken not less than once in every 24 month period, or such longer periods allowed for by the Authority. The primary objective of this audit is to determine the effectiveness of measures taken by the Shire of Koorda to maintain those quality and performance standards that are referred to in the Shire of Koorda's Operating Licence.

Section 36 of the *Water Services Licensing Act 1995*, and Clause 6 of the Attachment to the Shire of Koorda's Operating Licence, require the Shire of Koorda to provide and maintain an asset management system in respect of its assets. The system must set out the measures to be taken by the Shire of Koorda for the proper maintenance of its assets and for the undertaking, maintenance and monitoring of its water services works.

The Act further requires the Shire of Koorda to provide the Authority with a report by an independent expert on the effectiveness of the asset management system.

The Shire of Koorda, with the approval of the Authority, commissioned SMEC Australia to conduct the third operational audit and review of their asset management system. This report documents the findings of the audit/review.

# Objectives and Scope of Audit and Review

The scope of the operational audit was to assess the Shire of Koorda's systems and effectiveness of processes used to ensure compliance with the standards, outputs and outcomes which are:

- referred to in the Shire of Koorda's Operating Licence, and
- applied to the Shire of Koorda's Operating Licence, including those standards prescribed under Section 33 of the Water Services Licensing Act 1995.

The scope of the asset management review was to provide an opinion to the Authority on whether the Shire of Koorda has in place the appropriate systems for the planning, construction, operation and maintenance of its assets. The review examined:

- the adequacy of the asset management system by considering the outputs of the system, such as the operations and maintenance plans, asset registers and financial plans,
- the effectiveness of the asset management system by considering the systems established for the planning, construction, operation and maintenance of works,
- the identification, development and implementation of strategic initiatives to improve the effectiveness of asset management, and
- the Shire of Koorda's response to the recommendations made in the previous reviews.

The review focused on identifying those aspects of the asset management system that could be further strengthened, with the view to providing feedback to the Shire of Koorda on the adequacy and effectiveness of the system.

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## Time Frame of the Audit and Review

The audit and review covered the period of 1<sup>st</sup> December 2002 to 30<sup>th</sup> November 2005.

# **Overview of Compliance Performance**

It is the auditors' professional view that the Shire of Koorda is achieving a good level of compliance with the requirements of the Operating Licence.

Improvements to how the Shire of Koorda makes the Customer Charter available will ensure that a good level of compliance is provided.

The results of the assessment of the relevant standards, outputs and outcomes are summarised in the following table:

TABLE 1. SHIRE OF KOORDA- 2005 OPERATIONAL AUDIT SUMMARY LEVEL OF COMPLIANCE

Clause	Standard	Compliance
Clause 2(b)	Operating Area Schedule	Excellent
Clause 6	Asset Management	Inadequate
Clause 8	Technical Standards	Good
Clause 9	Industry Standards	N/A
Clause 10	Accounts	Excellent
Clause 11	Prices or charges	Excellent
Clause 12	Methods or principles to be applied in the provision of Water Services	Good
Clause 14	Specific information to be provided	Largely adequate
Clause 15/Sched 2	Performance Standards	Good
Charter	Overflows	Inadequate

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Charter	Blockages	Inadequate
Charter	Emergency response	Largely adequate
Charter	Responsiveness to Customer Complaints	Good
Clause 16	Terms and conditions of customer contracts	Good
Clause 17	Obligations to public authorities and other Licensees	Good
Clause 18	Consumer Consultation	N/A
Clause 19	Customer Service Charter	Largely adequate to good
Clause 20	Dispute Resolution	Good

Excellent: Exceeds requirements
Good: Meets requirements

Largely Adequate: Meets requirements – improvement suggested

Inadequate: Does not meet the requirement

N/A: Not applicable

# **Operational Audit Conclusion**

Overall, the Shire of Koorda's compliance with licence conditions was mainly good, with Clause 6 (Asset Management System) accounting for five of the seven non-compliances. This was due to the Asset Management Plan having not been updated since 1999.

The Authority has requested a simple compliance plan to be developed.

# **Overview of Asset Management System Review**

The results of the assessment of the relevant standards outputs and outcomes are summarised in the table on Page v.

# **Asset Management System Review Conclusion**

The 2005 Asset Management System audit is the third external assessment undertaken on Shire of Koorda's asset management system. The purpose of this review was to examine the Asset Management System in light of the recommendations made in the audit of 2003.

The Asset Management Plan has not been updated since 1999. As a result of this no review of the entire wastewater treatment system, including financial and capital expenditure planning, has been undertaken.

This is a serious short-coming and the Shire must update the Asset Management Plan (AMP) as soon as possible. As part of this, a maintenance schedule and register needs to be developed, preferably in conjunction with the Works Manager, and implemented. A regular maintenance regime needs to be implemented to ensure the customers in the Shire of Koorda continue to receive the high level of service they currently do and to ensure the Shire receives maximum value from its assets.

The Shire of Koorda is fortunate that the system is simple and robust enough not to have had any failures, as indicated by the lack of customer complaints and breakdowns.



Activity	Description	Effectiveness Scale
Asset Planning/Creation /Acquisition	Asset creation means the provision or improvement of an asset where the outlay can be expected to provide benefits beyond the year of outlay.	Largely adequate
Environmental Analysis	Environmental analysis examines the asset system environment and assesses all external factors affecting the asset system.	Largely adequate
Asset System Analysis	Asset system analysis examines and documents the system and process for its effective operations.	Largely adequate to good
	Operation Plans document the knowledge of staff in the operation of assets.	
	Maintenance Plans cover the scheduling and matching of resources to the maintenance task so that work can be done on time and on cost. The Maintenance Plans should cover preventative and corrective maintenance.	
	Assessment of the asset system analysis components included examination of the asset register.	
Risk Analysis and Contingency Planning	Risk analysis involves the identification of risks and management to reduce the level of risk.	Inadequate
	Contingency plans document the steps to deal with an unexpected failure of a process, procedure or the asset management system itself.	
Financial Planning	The financial planning component of the asset management plan brings together the financial elements of the scheme to ensure its financial viability over the long term.	Largely adequate
Capital Expenditure Planning	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.	Largely Adequate
Review	Review of the asset management plan assists to ensure the effective development and operation of asset management plans.	Inadequate

#### Statement of Declaration

It is the Auditors' view that the Shire of Koorda is achieving a good level of compliance with the requirements of the Operating Licence. This report has identified seven instances (mainly with regard to Asset Management Systems) in which Shire of Koorda's compliance with Licence requirements may be improved upon.

The review revealed that the AMP is out of date and that maintenance is done on a reactive, rather than preventative basis. Capital expenditure planning has not been done since 1999 although there is a sewerage reserve fund which gets added to annually. Performance of the wastewater treatment system has been good, which indicates an appropriate level of assets for the customers.

The Asset Management Plan needs immediate attention, with particular reference given to the development of a maintenance schedule and register. This is the main area of non-compliance and once the AMP is updated and approved by the Authority, the licence compliance will be significantly improved.

Naomi Hill Auditor

Naom Gill

## 1 Introduction

In August 2005 SMEC Australia was awarded a consultancy by the Shire of Koorda, with the approval of the Authority, to undertake their third Operational Audit and Asset Management System Review. This audit/review assessed:

- the adequacy and effectiveness of measures taken by the Shire of Koorda to maintain those quality and performance standards referred to in the licence, and
- the effectiveness of processes implemented by the Shire of Koorda to maintain assets used in the provision of water services and for the undertaking, maintenance and operation of water service works.

Following acceptance of the Audit and Review Plan by the Shire of Koorda and the Authority, Naomi Hill undertook the on-site component of the audit and review on the 13th December 2005.

This report summarises the findings of the Operational Audit and Asset Management Review and identifies areas of the asset management system that could be improved or enhanced.

# 2 Objectives and Scope

# 2.1 Operational Audit

In accordance with Section 37 (1) of the *Water Services Licensing Act 1995* operational audits are required to be undertaken not less than once in every 24 month period, or such longer periods allowed for by the Authority.

The primary objective of this audit is to determine the effectiveness of measures taken by the Shire of Koorda to maintain those quality and performance standards which are referred to in the Shire of Koorda's Operating Licence.

Specifically, the audit considered the systems and effectiveness of processes used by the Shire of Koorda to ensure compliance with the following standards, outputs and outcomes required by the current Licence.

# 2.2 Asset Management System Review

The Water Services Licensing Act 1995 also requires that the Shire of Koorda provide for and maintain an asset management system. The system must set out the measures to be taken by the Shire of Koorda for the proper maintenance of its assets and for the undertaking, maintenance and monitoring of its water services works.

This review provides an opinion to the Authority on whether the Shire of Koorda has in place the appropriate systems for the planning, construction, operation and maintenance of its assets. In reaching this opinion, the review examined:

- the adequacy of the asset management system by considering the outputs of the system, such as the operations and maintenance plans, asset registers and financial plans;
- the effectiveness of the asset management system by considering the systems established for the planning, construction, operation and maintenance of works;
- whether the system provides for the identification, development and implementation of strategic initiatives to improve the effectiveness of asset management; and
- the Shire of Koorda's response to the recommendations made in previous reviews.



# 3 Risk Assessment

# Operating Audit Risk Calculation – Non–Potable Water Supply & Sewerage Services Licence

	Operating	Failure during period audited Consequence					Inherent	Adequac y of	Priority
Operating Licence Compliance Element	Licence Reference	С	(1) C C C C			Likelihood (2)	Risk (3)	Existing Controls	(5)
		1	2	3	О			(4)	
OPERATING AREAS									
Water Services in designated operating area	Sched 1	1	1	2	1	E	Nil	Strong	≥5
CUSTOMER COMPLAINTS	06 20()								
Recorded	Clause 20(a), (b)	2	1	1	1	$\mathcal{B}$	Low	Strong	≥ 5
Investigation, conciliation & arbitration	Clause 20	3	2	2	2	С	Low	Strong	≥5
Responsiveness (eg solution within 21 days)	Sched 2 sec 4	3	2	2	3	С	Medium	Strong	4
CUSTOMERS	I ac						71.0	71) C	
Charter in place, reviewed and followed	Clause 19	1	3	2	3	D	Medium	Weak	3
Ongoing consultation and feedback established	Clause 18	1	3	2	2	С	Low	Strong	≥5
WATER SERVICES PROVISION	1					_		_	
Conditions for connection followed	Clause 4	2	2	2	2	D	Low	Strong	≥5
Availability	Clause 12(b)	2	2	2	2	E	Low	Strong	≥5
Discontinuance	n.a.	<u> </u>							
Billing	n.a.	-							
INFO PROVIDED TO AUTHORITY	0.6.62	_	_	_	_		arr	as) c	> -
Customer complaints (12 monthly)	Sched 3	1	1	2	1	D	Nil	Weak	≥5
Quarterly reports	n.a. Sched 3	- 1	1	,	_		C	Characa	> 5
Annual Benchmarking report	Schea 3 Clause 14	2	2	3	2	D	Low	Strong	≥5 ≥5
Incidents (reported within 5 days) CONTRACTING OF SERVICES	Ciause 14	2	2	3		С	Low	Weak	23
Maintenance of Licence Standards	Clause 12	3	3	3	3	D	Medium	Ctrong	4
STANDARDS	Ciause 12	3	3	3	3	Ψ	меанит	Strong	4
Adherence to Regulation	Clause 5	3	3	3	3	С	Medium	Strong	4
Adherence to technical standards	Clause 8	2	2	3	3	E	Low	Strong	, ≥5
Adherence to industry codes	Clause 9	2	2	3	3	E	Low	Strong	≥5
Accounting records – prepared to standard	Clause 10	2	2	3	3	D	Medium	0.1.0	4
Pricing and charges – approval of the Authority	Clause 11	2	2	2	2	D	Low	Strong	≥ 5
Services provided by agreement documented	Clause 12	3	3	3	3	D	Medium	Strong	≥5
Obligations to other licensees adhered to	n.a.				_		3.2000000	Strong	
Customers advised re planned disruptions	As per charter	3	3	3	3	С	Medium	Strong	4
Customers contacted re emergency	•						a. C	Ŭ	
shutdowns	As per charter	3	3	3	3	С	Medium	Strong	4
Emergency telephone service operational	Clause 15(c)	3	3	3	3	С	Medium	Strong	4
STANDARDS SPECIFIC TO:									
DRINKING WATER									
Quality	n.a.								
Pressure and flow	n.a.								
Interruptions	n.a.								
Drought response	n.a.								
Leaks and bursts	n.a.	<u> </u>							
NON-POTABLE WATER	1	-							
Annual notification water not safe for	Clause 15(b)	3	3	3	3	D	Medium	Strong	4
drinking SEWERAGE	1	$\vdash$							
-	Clause 15(d),	1		<u> </u>	-				
Overflows	Sched 2	3	3	3	3	С	Medium	Weak	3
Blockages	Clause 15(e), Sched 2	3	3	3	3	С	Medium	Weak	3
IRRIGATION									
Quality	n.a.								
Supplied when required	n.a								
Monitoring of consumption is accurate	n.a			<u> </u>	<u> </u>				



# 4 Methodology

The audit and review was undertaken in accordance with the 'Scope and Guidelines for Water Service Licence: Operational Audit, and Asset Management Review for the Shire of Koorda' issued by the Economic Regulation Authority.

The work involved was divided into four distinct phases each with specific tasks, these being;

- risk assessment;
- development of the Audit and Review Plan
- site visit
- reporting and follow-up

This audit and review focused on the development of the Shire of Koorda's systems and procedures since receiving their initial licence, and their response and actions to recommendations from previous audits and reviews.

#### 4.1 Task 1 - Risk Assessment

Assess the risk posed by non-compliance with licence standards and the adequacy of internal controls by completing the Audit Risk Calculation Proforma. This completed proforma was forwarded and then discussed with the Authority and the Licensee before finalising the areas to focus in on during the audit.

# 4.2 Operational Audit

Specific tasks undertaken included:

- A review of key documents including;
  - the Shire of Koorda's Customer Charter for Wastewater Services;
  - relevant Policies and Procedures established by the Shire of Koorda for the provision of water services, management of customer services (including the receipt, handling, resolution and reporting of customer complaints), and performance reporting requirements;
  - relevant Performance Indicator data and reports;
  - the Shire of Koorda's customer complaints handling processes, procedures and reporting mechanisms;
  - Financial reports;
  - any relevant Service Agreements or Memorandum of Understanding with other agencies, and
  - any relevant correspondence between the Shire of Koorda and the Authority relating to Operating Licence requirements.
- review and analysis of all technical/operational and administrative aspects of those quality and performance standards maintained by the Shire of Koorda, enabling comparison with requirements of the Operating Licence;
- consultation and discussions with the Authority representatives (where necessary, within each of the four audit phases);
- discussions and interviews with key staff of the Shire of Koorda (within each of the four audit phases);
- observation of processes / procedures and operations;
- analysis of the extent to which the Shire of Koorda's information systems produce accurate and reliable information which complies with the requirements of its Operating Licence;
- technical assessment of the adequacy of measures taken by the Shire of Koorda in meeting the requirements relating to the provision of services;
- technical review of a sample of works requests relating to the provision of services;

- sampling source documents to determine whether established procedures relating to the provision of services and management of customer services were complied with;
- field inspections and observation of work sites relating to the provision of required services, and
- an assessment of the level of compliance with the operating licence requirements using the Compliance Key detailed in Section 3.4 of the 'Scope and Guidelines for the 2002 Audit of the Local Government Operating Licence holders and Asset Management Review' document, and repeated in Section 4.3 below.

Note: Where non-compliances with Operating Licence requirements were noted during the audit, an assessment was made on the adequacy and effectiveness of the Shire of Koorda's plans to resolve the matter of non-compliance.

# 4.3 Asset Management System Review

Specific tasks undertaken included:

- consultation and discussions with the Authority representatives;
- analysis of the Shire of Koorda's documented procedures related to its asset management system
  to determine whether they are consistent with the relevant requirements of its Operating
  Licence:
- discussions and interviews with key staff of the Shire of Koorda;
- observation of processes / procedures and operations;
- analysis of the Shire of Koorda's information systems supporting its asset management system;
- technical analysis of a sample of transactions or data relating to the Shire of Koorda's asset management system;
- field inspections and observation of work sites relating to the provision of the Shire of Koorda's asset management system, and
- where instances of non-compliance with Operating Licence requirements were noted during the review, an assessment was made on the adequacy and effectiveness of the Shire of Koorda's plans to resolve the matter of non-compliance.

Note: The review utilised the Asset management Review effectiveness rating scale detailed in the 'Scope and Guidelines for the 2002 Audit of the Local Government Operating Licence holders and Asset Management Review' document.

# 4.4 Compliance Key

For the Operational Audit, the Licensee was assessed for compliance with the licence requirements against the following scale:

- a. Exceeds minimum requirement
- b. Meets minimum requirement no improvement needed
- c. Meets minimum requirement improvement needed
- d. Does not meet the minimum requirement

In cases of non-compliance or where the auditor considers there to be action required (a rating of (c) to (d)), then a comment has been provided on actions required.

For the Asset Management Review, an asset management adequacy matrix was used to assess the effectiveness of the Licensee's asset management system.

# 5 Period Covered by the Audit/Review

The brief required the audit/review to cover the period from 1<sup>st</sup> December 2002 to 30<sup>th</sup> November 2002, as required by the Scope of Works. On site activities were conducted on 13th December 2005.

The review also focused on identifying those aspects of the asset management system which may be further strengthened, with the view to providing feedback to the Shire of Koorda on the adequacy and effectiveness of the system.

# 6 Staff Resources

## 6.1 Shire of Koorda Representatives

The following representatives of Shire of Koorda participated in the audit and review:

Mr Neil Flood Environment Health Officer (EHO)

Mr Darrin West Works Supervisor

Mr Graeme McDonald Chief Executive Officer (CEO)

#### 6.2 Audit and Review Team

The Team comprised:

Mark Warner Lead Auditor

Naomi hill Auditor

The following table provides a break up of hours spent on the review:

Task no.	Audit and Review Task	Hours
1	Risk Assessment	1
2	Development and approval of Audit and Review Plan	4
3	Site Visit	5
4	Reporting and Follow-up	5
	Total Hours	15

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## 7 Review of Previous Audit Recommendations

WES Engineering & Resource Consultant's Operational Audit and Review of Asset management System was reviewed and there were neither recommendations nor non-compliance issues made during the previous audit, except for 'suggests that Licensee keeps doing what they are currently doing'.

# 8 Operational Audit – Specific Compliance Issues Examined

# 8.1 Compliance Key

For the Operational Audit, the Licensee was assessed for compliance with the Licence requirements against the following scale:

Excellent: Exceeds requirements
Good: Meets requirements

Largely Adequate: Meets requirements – improvement suggested

Inadequate: Does not meet the requirement

N/A: Not applicable

# Shire of Koorda 2005 Operational Audit & Asset System Review 8.2 Shire of Koorda Operational Audit Checklist

Operating Licence Clause or Schedule	Specific Compliance Issues/Requirements	Auditee	Activity Compliance	Comments/Remarks	Actions
Clause 2(b) Operating Area Schedule 1	Does the operating area identified in Schedule 1 correspond to the area in which Shire of Koorda provides its water services?	Neil Flood	Excellent	Yes. Sighted AMP and licence  The Shire of Koorda utilises the Plan Number (OWR-OA-033 (B) Koorda as the primary reference to the Operating Area in which it provides water services.	None
Clause 6 Asset Management System	Is there an Asset Management System in place for the water service assets of the Shire of Koorda?	Neil Flood	Inadequate	Not found. No updates done since 1999.	Prepare an AMP immediately and submit to the Authority for approval



	Have the details of the system, and any changes, been forwarded to the Authority?	Neil Flood	Inadequate	Not since original AMP prepared.	Review the AMP immediately and submit to the Authority for approval
	Does the system set out the measures to be taken by the Shire of Koorda for the proper maintenance of its assets and the undertaking, maintenance and operation of water service works?	Neil Flood	Inadequate	Unknown.	Review the AMP immediately and submit to the Authority for approval
	Has the information on maintenance activities been collected and recorded in accordance with documented procedures?	Neil Flood	Inadequate	No maintenance records are kept although maintenance activities do occur.	Review the AMP immediately and submit to the Authority for approval
	Are the procedures understood by staff?	Neil Flood and Darrin (Works Supervisor)	Inadequate	The Works Supervisor was not aware of procedures documented in the AMP.	Review the AMP immediately and submit to the Authority for approval
Clause 8 Technical Standards	Does the Shire of Koorda comply with the technical standards for the provision of and the undertaking, maintenance and operation of Water Services works as published in the Government Gazette?	Neil Flood	N/A	Built to appropriate standards when constructed.	None
	Is the Government Gazette readily available and reviewed?	Neil Flood	Good	EHO, CEO receive copy. Forwarded as necessary.	None
Clause 9 Industry Standards	Does the Shire of Koorda observe the Sewerage Code of Australia WSA 02 1999 when designing/constructing works?	Neil Flood	N/A	After discussions with the EHO no works have been constructed recently.	None
Clause 10 Accounts	Are the Shire of Koorda's accounts consistent with the requirements of the Local Government Act 1995?	Neil Flood	Excellent	Yes. McCloud and Partners are independent auditors and verify that accounts are consistent with requirements.	None
	Does the Shire of Koorda prepare its accounts in a way which enables it to issue	Neil Flood	Excellent	Yes. Yes. McCloud and Partners are	None

	an operating statement which accurately describes its income and expenditure in relation to the Water Services provided under the Licence on an accruals basis?			independent auditors and verify that accounts are consistent with requirements.	
Clause 11 Prices or charges	Do the prices and charges set by the Shire of Koorda comply with the Health Act 1911 and the Local Government Act 1995?	Neil Flood	Excellent	Yes. McCloud and Partners are independent auditors and verify that accounts are consistent with requirements.	None
Clause 12  Methods or principles to be applied in the provision of Water	How does the Shire of Koorda ensure that water services provided on its behalf comply with the terms and conditions of the Licence and relevant legislation?	Neil Flood	Good	Council regulates and provides all water services, maintenance and audits	None
Services	How does the Shire of Koorda ensure that its water services are available for connection on request to any land within the Operating Area?	Neil Flood	Good	1 connection occurred. Sewerage scheme was developed. Spare capacity in the system allows connections in the townsite. New connections examined as part of the Building Approval system.	None
Clause 14 Specific information to be provided	How does the Shire of Koorda ensure that the services it supplies are safe, reliable and financially viable?	Neil Flood	Largely adequate	Safe: Regular monitoring for bacteria in effluent reuse, site is fenced and kept clean.  Reliable: Regular checking occurs.  Financially viable: income and expenditure allowed for in annual budget.	Regular maintenance program needs to be updated and followed.

	Has the Shire of Koorda informed the Authority within five days of any overflows from wastewater/sewerage infrastructure?	Neil Flood	Inadequate	No.	Provide the annual statistics immediately and ensure that future statistics are provided as per the requirements of the licence.
	If the Authority requested any detailed reports on overflow events, have they been provided within 14 days of the request?	Neil Flood	N/A	A recent overflow has not been reported (Nov 2005).	Provide the annual statistics immediately and ensure that future statistics are provided as per the requirements of the licence.
	Has the Shire of Koorda provided the information in Schedule 3 been reported to the Authority within 30 days of the end of each financial year?	Neil Flood	Largely adequate	Sighted Schedule 3 but unaware if this has been forwarded to the Authority.	The Shire is required retain all correspondence as evidence to prove if the Authority has received the information. Resend the Schedule if the Authority has not received it.
Clause 15/Schedule 2 Performance Standards	Are customers provided with non-potable water annually notified that the water supplied is not potable?	Neil Flood	N/A	No non-potable water is used by the Shire due to a lack of storm water and high evaporation rates.	When the Shire's commences the use of non-potable water, a notification about the use of treated effluent on the sports field will need to be sent out with rates notice and signs erected.
Overflows	Have 90% or more of customers had no sewerage overflows onto their properties?	Neil Flood	Good	No, 8 overflows occurred during this auditing period which equates to 3 % of Customers experienced overflows each year.	None
Blockages	Were there less than 40 blockages per 100 km length of sewer?	Neil Flood	Inadequate	No. 8 blockages occurred during this auditing period. This is the equivalent of 182 blockages per 100 km assuming the length of the sewerage system is	Inform the Authority of all blockages. Develop an Action Plan on how you will reduce the number of blockages.

	perational Audit & Asset System Review			4.403 km)	The Action Plan will need to be forwarded to the Authority for approval.
Emergency response	Has Shire of Koorda implemented an emergency telephone number? Do 90% of customers receive advice within one hour of reporting an emergency?	Neil Flood	Largely adequate	Yes. In AMP and Customer Charter (Allen Hicks).	AMP to be updated.
Responsiveness to Customer Complaints	Are 90% of written customer complaints resolved within 21 days?	Neil Flood	Good	No written complaints received. However, the CEO had a comprehensive understanding of procedures.	None
Clause 16 Terms and conditions of customer contracts	Have the Shire of Koorda entered into agreements with customers to provide water services?	Neil Flood	Good	No the Shire of Koorda has not provided water services to clients.	None
or customer continues	If so, have any of the terms and conditions been modified without written approval from the Authority?	Neil Flood	Good	N/A	None
Clause 17 Obligations to public authorities and other Licensees	Do the wastewater treatment plants operated by the Shire of Koorda have the relevant licences from the Department of Environment and are they operated in accordance with these licences?	Neil Flood	Good	Yes. Sighted a letter from the Department of Environment.	None
Clause 18 Consumer Consultation	Have the Shire of Koorda held a public meeting or advertised for written submissions prior to making major changes to the operation of the water service?	Neil Flood	N/A	15 minutes at the start of Council meetings. No changes have occurred to the operation of this water service.	None
	Does the Shire of Koorda allow customers to raise matters of concern regarding the sewerage system at public question time in accordance with the <i>Local Government Act</i> 1995?	Neil Flood	Good	15 minutes at the start of Council meetings. All questions that Customers have are answered.	None
Clause 19	Does the Shire of Koorda have a "plain	Neil Flood	Largely	Yes. Last reviewed in Feb 2005 and	Update to reflect current

Customer Service	English" Customer Service Charter?		adequate	Staff has changed since the last review.	staff.
Charter	Does the Charter address all of the service issues reasonably likely to be of concern to its Customers?	Neil Flood	Good	Yes. Sighted the Customer Service Charter	None
	Has the Charter been reviewed within the last three years?	Neil Flood	Good	Yes Sighted the Customer Service Charter	None
	Have any changes to the Charter been approved by the Authority?	Neil Flood	Good	Yes. Sighted a letter from the Authority Approving the Customer Service Charter	None
	How does the Shire of Koorda make the Charter available to its Customers?	Neil Flood	Largely adequate	Available on request	Shire to display Charter in a prominent position and to send a notice Customers annually.
	Does the Shire of Koorda provide services that are consistent with the Charter?	Neil Flood	Good	Yes, as indicated by lack of complaints.	None
Clause 20 Dispute Resolution	Is there a system in place for recording, managing and resolving customer complaints?	Neil Flood	Good	Yes. Customer Complaints register under the counter and sighted completed forms.	None
	Are there officers designated to deal with complaints, and are they authorised to settle disputes, including monetary compensation where necessary?	Neil Flood	Good	Graeme MacDonald CEO	None
	Are Customers made aware that they can refer any dispute between themselves and the Shire of Koorda to the Water Services Planning Branch of the Department of Water?	Neil Flood	Good	Yes. Stated in Customer Charter.	None



# 9 Summary of Operational Audit Findings

Overall, the Shire of Koorda's compliance with licence conditions was mainly good, with Clause 6 (Asset Management System) accounting for five of the seven non-compliances. The following section details these issues as well as providing some recommendations in regard to corrective action.

## 9.1 Asset Management System (Clause 6)

There was no current AMP available for review at the time of the audit. The AMP has not been updated since it was produced in 1999; the Maintenance Schedule contained within the AMP is currently not being followed as there is no knowledge amongst the staff of the AMP.

#### Recommendation

The Asset Management Plan will need to be updated immediately. As part of this, an Asset Maintenance Plan and Register must be updated, usually by the EHO in conjunction with the Works Manager, and implemented. Once finalised, all appropriate staff should be notified of the existence of the AMP and of the proper procedures for operations, maintenance and administration of the wastewater treatment system.

## 9.2 Performance Standards – Overflows and Blockages

The Shire of Koorda did not inform the Authority of an overflow that occurred from the system in November 2005. The overflow did not affect any customers. There is no evidence to prove that the Authority received Schedule 3 from the Shire.

#### Recommendation

Shire of Koorda to inform the Authority of all spills and blockages. The Shire is required to retain all correspondence as evidence to prove if the Authority has received the information. Determine if the Authority has received this information and if not provide the annual statistics immediately to the Authority and ensure future statistics are provided as per the requirements of the licence.

The following issues were regarded as 'Largely adequate'.

# 9.3 Methods or principles to be applied in the provision of Water Services (Clause 12)

A regular maintenance program needs to be developed and implemented and the sewerage reserve fund should be increased on an annual basis.

# 9.4 Customer Service Charter (Clause 19)

The Charter was reviewed in February 2005, so is due for a review and update in 2008. The Charter was reviewed in 2005, but needs to be reviewed as some names contained within it are out of date. The Charter also needs to be displayed in a visible area in the Shire of Koorda's office and sent annually to customers.

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# 10 Asset Management System Review – Key Outputs and Performance

# 10.1 Effectiveness Rating Scale

For the Asset Management Review, an asset management adequacy matrix was used to assess the effectiveness of the Licensee's asset management system. The rating scale uses the following levels:

- Excellent
- Good
- Largely adequate
- Inadequate

### 10.2 Asset Planning/Creation/Acquisition

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. In the case of major capital expenditure, full project evaluation should be undertaken and life cycle costs assessed.

Item No.	Test	Comments	Effectiveness
a.	Have the strategic objectives for assets been identified?	Yes. The strategic objectives are stated in the Customer Charter and the AMP, although the AMP is out of date (1999) and needs immediate updating.	Largely adequate
b.	Have the life cycle costs been considered?	Yes. Operation and maintenance costs have been allowed for in the annual budget. The upgrading of the sewerage system has been allowed for via the Sewerage reserve fund.	Largely adequate



Item No.	Test	Comments	Effectiveness
c.	Has the need for new assets been determined and full project evaluation processes been followed, including comparative assessment of non-asset solutions?	Yes. Sighted in AMP	Good
d.	Have documents recording relevant details on the asset been collected?	The Asset Register has not been updated since 1999, and there has been a sewer extension and an effluent reuse system added to the system since then.	Inadequate
e.	Do assets reflect the objectives identified in the asset creation/acquisition phase?	Yes.	Good
f.	Are actual costs as predicted?	Yes. Sighted Financial Plan	Good

### **Overall Comment**

Update the existing AMP. As a result, no provision has been made for any asset planning, creation and acquisition.

## 10.3 Environmental Analysis

Environmental analysis examines the asset system environment and assesses all external factors affecting the asset system.

Item No.	Test	Comments	Rating
a.	Have the performance requirements (availability of service, capacity, continuity, emergency response) been documented?	Yes. The levels of service have been mentioned but not detailed.	Largely adequate
b.	Are the asset system objectives documented?	Yes. Sighted Mission Statement in the AMP	Largely adequate
c.	Have the opportunities and threats in the system environment been assessed?	No. No risk assessment has been undertaken with remedial actions and contingency plans	Inadequate
d.	Are regulatory obligations and statutory/regulatory requirements documented?	Yes. Sighted in the AMP	Good
e.	Is the asset meeting the level of service required by users of the service?	Yes. There has been no written complaints reflecting that the asset is meeting the required level of service.	Good
f.	Do the assets meet regulatory requirements?	Yes. The AMP documents the performance requirements for the assets as set out in the Water Services Operating Licence.	Good

### **Overall Comment**

Due to the lack of a current AMP, no risk assessment of all external factors affecting the system has been undertaken. As the system is simple and quite small, the main risk of failure is environmental rather than to humans. The AMP will need to include an environmental analysis and this will need to be developed ASAP.

## 10.4 Asset Management System Analysis

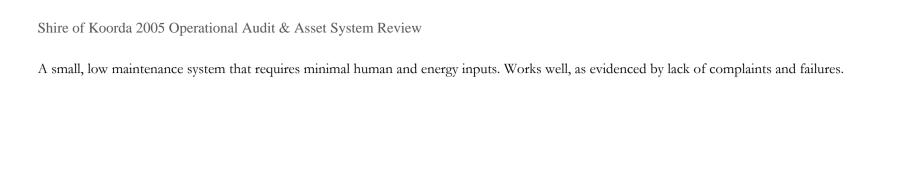
An asset system analysis examines and documents the system and processes for its effective operations. Operations plans document the knowledge of staff in the operation of the asset. Maintenance plans cover the scheduling and matching of resources to the maintenance task so that work can be done on time and on cost. The maintenance plans should cover preventative and corrective maintenance. Assessment of the asset system analysis components would include examination of the asset register.

Item No.	Test	Comments	Effectiveness
a.	Are the asset system components documented?	Yes. AMP	Good
b.	Has the asset performance and condition been assessed?	The asset register describes each asset, when it was constructed, expected life and an overall assessment as to its condition.	Good
c.	Does the asset management plan include an asset register and plans of asset system components?	Yes. AMP	Good
d.	Does the register record asset type, location, material and an assessment of assets' physical/structural condition?	The asset register with the AMP provides much of the necessary data except for location.	Largely adequate
e.	Are systems in place to assess asset and practice efficiency?	There is a complaints register which contains all complaints made to the Shire. If counter staff unable to handle query, forwarded either to EHO or CEO.	Largely adequate
f.	Assets assessed for capability and deficiencies of current assets to meet performance requirements?	Based on complaints/breakdown and 5 year AMP review.	Largely adequate
g.	Are practices covering operating rules and maintenance documented?	Yes. Sighted AMP and Mark Johnston keeps documentation of all maintenance and repairs.	Good
h.	Do maintenance plans cover preventative and corrective maintenance?	Yes. AMP	Good



Item No.	Test	Comments	Effectiveness
i.	Are actual assets and human resources appropriate for performance requirements?	The level of asset development and staffing appears adequate to meet the performance requirements. EHO, Accountant and Works Supervisor share the responsibility of the asset.	Good
j.	Do operation and maintenance practices reflect performance targets?	Practices are appropriate for scale and value of assets.	Good
k.	Are costs measured and recorded?	Yes. Sighted Financial Performance Spreadsheet	Largely adequate
1.	Is the asset under-utilised?	Yes. It has greater capacity than it currently utilises and even with growth it probably will never reach its capacity. The assets have been developed for the Town size with the capability to add more sewage connections	Good
m.	Is the level of maintenance justified against replacement cost?	Yes. Although not documented the level of maintenance is justified against replacement costs.	Good
n.	Has the asset been inspected?	Yes. In 1998 a full inspection occurred and during routine maintenance the asset is inspected.	Good
0.	Is the assets' theoretical life known?	Yes. Sighted in AMP	Good
p.	Does the assess management plan enable the prediction of asset deterioration and failure.	Yes. Sighted AMP that predicts the asset deterioration based on life span. This aspect of the AMP requires further development. The asset plan could be used in conjunction with systematic patterns to determine actual asset deterioration and failure.	Largely Adequate
q.	Do the maintenance plans and operational plans relate to what is required to achieve the levels of service required of the system?	Yes. Sighted basic principals of operation and maintenance within the AMP	Good

## **Overall Comment**



## 10.5 Risk Analysis and Contingency Planning

Risk analysis involves the identification of risk and management within an acceptable level of risk. Contingency plans document the steps to deal with the unexpected failure of an asset.

Item No.	Test	Comments	Effectiveness
a.	Has a risk assessment of assets been conducted?	There is no evidence of Risk Assessment	Inadequate
b.	Has the probability and consequences of asset failure have been identified?	The probability and consequences have been considered and identified but not documented.	Inadequate
c.	Are appropriate contingency plans in place?	There is no written contingency plan.	Inadequate
d.	Is risk management practiced?	Risk management is considered, although not documented.	Inadequate
e.	Where unacceptable risks have been identified have risk control measure been implemented?	No unacceptable risks were identified during the informal risk assessment.	Largely adequate
f.	Where events that may result in severe consequences have been identified have contingency plans been developed?	There is no contingency plan	Inadequate

### **Overall Comment**

The analysis of risk is at an inadequate/non-existent level. An overflow and emergency procedure needs to be developed.

### 10.6 Financial Planning

The financial planning component of the asset management plan brings together the financial elements of the scheme to ensure its financial viability over the long term. 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 be based on firm estimates.

Item No.	Test	Comments	Effectiveness
a.	Does the Financial Plan provide projections of operating statements (profit and loss) and statement of financial position (balance sheets)?	Yes. Sighted Shire of Koorda Financial Report For the Year Ending 30th June 2005. Profit was made.	Good
b.	Does the financial plan cover the financial objectives and strategies and actions to achieve the objectives?	Yes. Sighted Shire of Koorda Adopted Budget for the year of Ended 30 June 2005.	Good
c.	Does the financial plan identify the source of funds for the capital expenditure plan?	No. The capital expenditure plan is located in the AMP (requires updating)	Inadequate
d.	Are the sources of funds for operation, maintenance and administration identified in the financial plan?	Yes.	Good
e.	Does the financial plan provide firm predictions on income for the next five years and reasonable indicative predictions beyond this period?	McCloud and Partners Financial plan is based on a yearly calculation. Capital expenditure needs to also be updated in the AMP.	Largely adequate
f.	Does the financial plan provide for the operation and maintenance, administration and capital expenditure requirements of the scheme?	Yes. Requires updating	Largely adequate

#### **Overall Comment**

Other than the annual budget detailing operation and maintenance revenue and expenditure, financial planning could be improved. This should be done as part of the AMP review. Once asset life and expected replacements are determined, this information could be used to feed into the Principal Activities Plan. The Shire has adequate Reserve Funds to support current operations.

## 10.7 Capital Expenditure Planning

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. This can be expressed as a schedule of projected annual expenditures offset by possible income from asset disposal, supported by documentation of the reasons for the decisions and evaluation of alternatives and options.

Item No.	Test	Comments	Effectiveness
a.	Has a capital expenditure plan been prepared?	Yes but needs updating 2003/04 is last projected requirement	Inadequate
b.	Does the plan cover the issues to be addressed, the actions proposed, the centre of responsibilities, and deadline dates?	No	Inadequate
c.	Does the plan provide reasons for capital expenditure and timing of expenditure?	Yes. AMP	Largely adequate
d.	Is the capital expenditure plan consistent with the asset life and condition identified in the asset management plan?	Requires updating	Largely adequate

#### **Overall Comment**

As the AMP has not been updated, it was not possible to examine the capital expenditure planning against asset life and condition. As there is no Asset Register, it is not possible to adequately plan for future capital requirements. Thus, as part of an AMP, an asset register should be prepared.

# 10.8 Review of Asset Management Plan

Review of the asset management plan assists to ensure the effective development and operation of asset management plans.

Item No.	Test	Comments	Effectiveness
a.	Is a review process in place to ensure that asset management plans are kept current?	No	Inadequate
ь.	Are asset management plans being reviewed at appropriate intervals?	No	Inadequate
c.	Are the asset management plans current?	No	Inadequate

### **Overall Comment**

The AMP has not been updated since it was prepared in 1999. Since then there have been some changes to the system. The AMP needs to be updated to reflect these changes, as well as all the other details.

# 11 Summary of Asset Management Review Findings

## 11.1 Introduction

The 2005 Asset Management System audit is the third external assessment undertaken on Koorda's asset management system. The purpose of this review was to examine the Asset Management System in light of the recommendations made in the audit of 2003.

The Asset Management Plan has not been updated since 1999. As a result of this no review of the entire wastewater treatment system, including financial and capital expenditure planning, has been undertaken.

This is a serious short-coming and the Shire must update the AMP as soon as possible. As part of this, a maintenance schedule and register needs to be developed, preferably in conjunction with the Works Manager, and implemented. A regular maintenance regime needs to be implemented to ensure the customers in the Shire of Koorda continue to receive the high level of service they currently do and to ensure the Shire receives maximum value from its assets.

The Shire of Koorda is fortunate that the system is simple and robust enough not to have had any failures, as indicated by the lack of customer complaints and breakdowns.

# 11.2 Specific Findings and Recommendations from Current Review

## 11.2.1 Asset Planning/Creation/Acquisition

The existing AMP has not been updated. As a result, no provision has been made for any asset planning, creation and acquisition or how the strategic objectives for the wastewater treatment system may have changed.

Currently there have been no breakdowns or complaints which would indicate that the level of assets is adequate for the service required.

#### Recommendation

The Asset Management Plan needs to be updated and forwarded onto the Authority for approval.

Assessment: Largely adequate.

#### 11.2.2 Environmental Analysis

The operating environment is adequately understood, with the service delivery of a largely adequate standard. This is due to the lack of a current AMP, no risk assessment of all external factors affecting the system has been undertaken. As the system is simple and quite small, the main risk of failure is environmental rather than health and safety.

### Recommendation

Opportunities and threats need to be assessed and documented.

Assessment: Largely adequate.

## 11.2.3 Asset Management System Analysis

Due to the AMP being out of date, this part of the asset management system is quite inadequate.

There is no regular maintenance regimen followed. Maintenance is done on a reactive basis, not proactive basis. Due to the system being simple, small and over designed, it is quite robust. Also, a maintenance schedule and register should be developed and implemented.

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This is a small, simple system that requires minimal human input. It works well and is maintained appropriately as indicated by lack of complaints and failures. No regular preventative maintenance is conducted, only reactive. It is fortunate that the system is robust enough to not have suffered any failures.

However, operational costs are covered in the annual budget.

#### Recommendations

The Asset Management Plan must be updated, including the asset register, and a maintenance schedule and register must be prepared and implemented. The Maintenance Schedule should be developed in conjunction with the Works Manager to ensure that it is appropriate for the system.

Assessment: Largely adequate.

## 11.2.4 Risk Analysis and Contingency Planning

No risk assessment and analysis has been conducted.

#### Recommendation

Risk analysis and contingency planning of the wastewater treatment system should be undertaken as part of the AMP review.

Assessment: Inadequate.

## 11.2.5 Financial Planning

The Annual Budget details the operations and maintenance incomes and expenditure, and the Plan of Principal Activities would detail the capital expenditure of any new sewerage works. There is also a 5 year projection of income and expenditure in the annual budget.

An AMP should be prepared. This should include a Financial Plan.

#### Recommendation

As part of the AMP review, the financial planning needs to be updated.

Assessment: Largely adequate.

### 11.2.6 Capital Expenditure Plan

As the AMP was not sighted, it was not possible to examine the capital expenditure planning against asset life and condition. As there is no Asset Register, it is not possible to adequately plan for future capital requirements. Thus, as part of an AMP, an asset register should be prepared.

There is a Sewerage Reserve Fund, but it could do with being increased.

#### Recommendation

As part of the AMP review, the capital expenditure planning needs to be updated. A review of existing asset life, capital replacement and asset acquisition needs to be undertaken to determine when future expenditure is likely to be required.

Assessment: Largely adequate.

#### 11.2.7 Review

The AMP should be prepared and submitted to the Authority for review. Customer Charter is slightly out of date. It was prepared in 2005 but the emergency contact names have not been changed.

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#### Recommendation

The AMP should be reviewed and updated as soon as possible.

The AMP and Charter should be reviewed every 12 months at the same time as the annual budget, and updated as necessary. They should be updated within every 36 months, thus the Charter is due to be updated next year.

Assessment: Inadequate.

# 12 References

- Shire of Koorda Operational Audit and Review of Asset Management System: 2003
- Shire of Koorda Customer Services Charter for Wastewater Services February 2005
- Letter from DoE re: Registration Application
- Shire of Koorda's Community Amenities Financial Statement for the Period Ending 30/6/05
- Asset Management Plan 1999