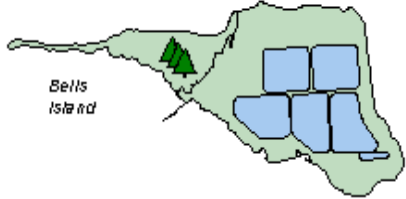


Nelson Regional Sewerage Business Unit

BUSINESS PLAN
2017/18



NRSBU BUSINESS PLAN 2017/18

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Cover photograph: Bell Island

1. PURPOSE

The purpose of the Nelson Regional Sewerage Business Unit Business Plan 2017/18 is to detail management goals and objectives to not only deliver the wastewater collection and treatment services to the region but to also improve the effectiveness and efficiency in the delivery of those services.

2. MEMORANDUM OF UNDERSTANDING REQUIREMENTS

The Memorandum of Understanding states that the NRSBU Board shall by 31st December each year supply to the Councils (Nelson City and Tasman District Councils) a copy of its Business Plan for the management of the Nelson Regional Sewerage Business Unit and the assets for the ensuing year, together with any variations to the charges proposed for that financial year.

3. INTRODUCTION

This Business Plan 2017/18 outlines the projects and initiatives to be implemented during the year. It also outlines the associated funding required and the details on the performance targets and measures.

The Business Plan is aligned with the NRSBU Strategic Plan and the NRSBU Wastewater Asset Management Plan 2014. It incorporates the business objectives and performance targets (Section 4) and the 3 year financial forecasts (Section 6). The following key pieces of information from these other documents are included in the appendices of this business plan;

Appendix A – Board Activity Schedule;

Appendix B - Targeted service levels established by the Asset Management Plan;

Appendix C - Internal business improvement plan;

Appendix D - The 10 year financial plan;

Appendix E - Schematic layout of the NRSBU operations.

4. MISSION STATEMENT

The NRSBU's mission statement is:

"To identify the long term wastewater processing and reticulation needs of our customers and to meet current and future needs in the most cost effective and sustainable manner."

5. STRATEGIC GOALS

The NRSBU aspire to achieve the following goals:

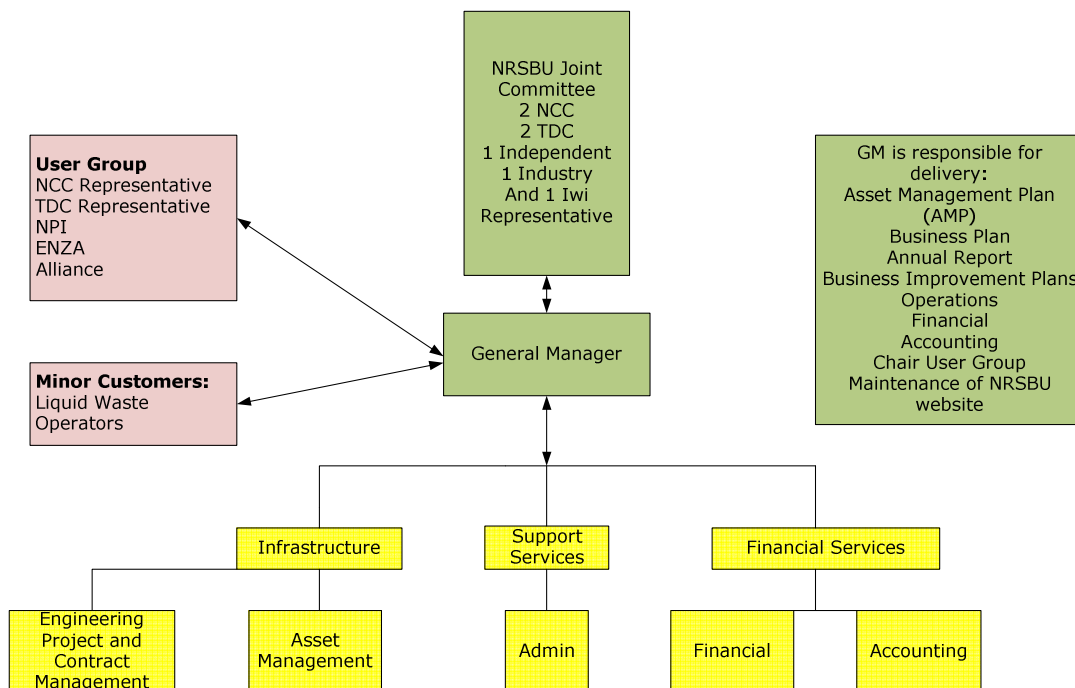
- Wastewater reticulation, treatment and disposal services meet customers' long term needs.
- The costs of wastewater reticulation, treatment and disposal services are minimised.
- Risks associated with the services provided are identified and mitigated to a level agreed with customers and owners.
- We engage the right people with the right skills and experience
- NRSBU operates sustainably and endeavours to remedy or mitigate any identified adverse environmental, social and cultural impact.
- Good relationships are maintained with all stakeholders.
- All statutory obligations are met.

The NRSBU functional activities are managed by the Nelson City Council and therefore the NRSBU functional activities shall comply with the requirements of the Nelson City Council Health and Safety Policy, and fully subscribe to the vision for a Zero Harm Culture.

All strategic goals are important and no one goal will be pursued at the expense of another.

6. NRSBU STRUCTURE AND BACKGROUND

The structure of the Nelson Regional Sewerage Business Unit is as follows:



The Nelson Regional Sewerage Business Unit was established in July 2000, replacing the former Nelson Regional Sewerage Authority established in the 1970s.

Following the adoption of a new Strategic Plan in August 2013 the 2014 Wastewater Asset Management Plan was developed and adopted on 28 November 2014. A draft of the long term financial plan based on the Asset Management Plan was provided to Nelson

City and Tasman District Council Engineers in October 2014 to enable them to consolidate the NRSBU long term plan into their own strategic documents.

The Memorandum of Understanding (MOU) was reviewed during 2015. The new MOU commenced on 1 July 2015 and shall terminate on 30 June 2025.

With the completion of significant upgrade programmes over the last few years the treatment plant now has adequate capacity to treat projected loads to 2025 without further significant capital investment. A review of the biosolids produced at the plant, as well as the capacity of the Radiata pine plantations on Bell Island and Rabbit Island to receive biosolids, has demonstrated that the land available for the disposal of biosolids is also adequate for projected loads up to 2025.

7. BUSINESS OBJECTIVES AND PERFORMANCE MEASURES

The objectives outlined below describe the long term aims of the business unit. Performance measure targets and dates (where they are not specified below) are set annually in the Business Plan along with performance measures for projects identified in the Asset Management Plan. Performance will be reported quarterly to the Board and annually or six monthly, as appropriate, to the shareholding Councils.

Long Term Objectives	Key Performance Measures
<i>Wastewater reticulation, treatment and disposal services meet customers' long term needs</i>	
Sufficient reticulation, treatment and disposal capacity is available for loads received.	Loads do not exceed the capacity of the system components.
Intergenerational equity is maintained.	Loans are repaid over 30 years (the average life of the assets).
Customers are encouraged to engage with the organisation and are satisfied with the service.	All customer representatives attend at least 75% of customer meetings. Customer surveys show an average score of at least 5 out of 7 on satisfaction with services.
Levels of service are defined in all contracts and are met.	100% compliance with service level agreements by all major contractors.
<i>The cost of wastewater reticulation, treatment and disposal services are minimised</i>	
The costs of reticulation, treatment and disposal are minimised.	The operational costs of reticulation, treatment and disposal processes are benchmarked against costs incurred up to 30 June 2014. All capital projects are delivered within budget.
The economic lives of all assets are optimised.	Three yearly independent audit of asset management practices confirms this.
Customers understand the benefits of demand management and the costs, risks and environmental implications of increasing demand.	Combined loads do not exceed the capacity of the components of the system.

Long Term Objectives	Key Performance Measures
New technology choices are well understood and are proven to be reliable, sustainable and cost effective.	All significant technology choices are supported by cost benefit analysis, independent peer review, energy efficiency analysis, risk analysis and, where appropriate, by other users of those technologies.
<i>Risks associated with the services provided are identified and mitigated to a level agreed with customers and owners.</i>	
Risk management plans include all significant health and safety, environmental, cultural, social, economic and contractual risks.	No event, which impacts on agreed levels of service, occurs that has not been identified in the NRSBU risk management plans. Customer representatives review and approve the risk management plan annually and following any incidents which require activation of the plan.
Contingency plans adequately address emergency events.	Customer representatives review and approve the plans annually. Effectiveness of plans is reviewed and confirmed following incidents which require activation of the plan.
<i>We engage the right people, with the right skills and experience.</i>	
Those engaged with the NRSBU have the right skills, experience, and support to perform well.	Annual staff performance reviews include assessment of the skills and experience required in their role in NRSBU and their development needs are identified and met. Development and succession plans are in place. The Board reviews its performance at least annually.
Operation and maintenance manuals reflect best practice for the management of the plant and reticulation systems and are followed consistently.	An independent audit every three years confirms this.
<i>NRSBU operates sustainably and endeavours to remedy or mitigate any identified adverse environmental, social or cultural impact</i>	

Long Term Objectives	Key Performance Measures
<p>NRSBU minimises adverse environmental, social and cultural impacts where this is economically viable.</p>	<p>That progress towards meeting energy efficiency targets reported on and reviewed annually in June. Current capacity to utilise beneficial application of biosolids to land is sustained. Beneficial economic and environmental reuse of treated waste water is maintained or increased. Environmental, social and cultural impacts are considered in all decision making.</p>
<p><i>Good relationships are maintained with all stakeholders</i></p>	
<p>Shareholders are satisfied with the strategic direction and the economic performance of the business unit.</p>	<p>All strategic and business plans are approved by shareholders. All budget projections are met.</p>
<p>Good relationships are maintained with all stakeholders including owners, iwi, customers, contractors, neighbours, and the wider community.</p>	<p>All complaints or objections are addressed promptly. All applications for resource consents are approved. Up to date information on activities and achievements are publically available.</p>
<p><i>All statutory obligations are met</i></p>	
<p>All statutory obligations are identified and met and are included in contracts with suppliers.</p>	<p>100% compliance with all statutory obligations.</p>
<p>All resource consent requirements are met.</p>	<p>100% compliance with all resource consents.</p>

8. THREE YEAR RENEWAL EXPENDITURE FORECAST (\$'000)

Renewal Plan (\$,000)	Budget 2016/17	2017/18	2018/19	2019/20
Miscellaneous	20	20	20	20
Pump Stations and Rising Mains	69	139	258	72
Inlet, Aeration Basin, Clarifier and Ponds	281	724	199	256
Solids Handling	521	51	526	357
Rabbit Island	98	0	46	8
Roads	30	0	0	0
Septage reception				66
Consents	20	228	0	235
Total =	1,039	1,162	1,049	1,014

The renewal programme of NRSBU assets is developed around lifecycle and condition assessment. An iterative process is followed whereby the renewal programme is considered annually with inputs from the Operation and Maintenance operator and the review of remaining useful life of assets.

Condition assessment reports are commissioned where additional information is required to ensure optimal spend on renewals. This approach works well due to the relatively small number of different assets managed by the NRSBU.

The major components that will be considered for renewal during 2017/18 are:

- Treated Effluent Discharge Consent;
- Electrical renewal at sludge and dissolved air flotation facilities;
- Control upgrade at activated sludge and sludge facilities;
- Renewal of check valves at pump stations;
- Renewal of aeration basin aerators.

9. NRSBU Capital Upgrade Plan (\$,000)

The following table outlines the capital upgrades proposed over the next 3 years. This is followed by a commentary outlining more detail on each of the proposals.

Year	Description of Projects	Estimated Costs
2017/18	Sludge management	200,000
	Desludging oxidation ponds	100,000
	Generator at Inlet/Outlet	143,000
	Regional pipeline upgrade (Review strategy)	40,000
2018/19	Desludging oxidation ponds	1,400,000
	Treatment Plant Upgrade (Consent dependent)	2,500,000
2019/20	Modification Facultative Ponds	420,000
	Treatment Plant Upgrade (Consent dependent)	2,500,000

Commentary on Upgrade Proposals for 2017/18;

Sludge Management: The installation of a second sludge storage tank will provide flexibility for sludge management and allow for increased capacity to store sludge at Bell Island in the event that rain events constrain biosolids spraying activities. The project is under review following significant operational improvements following a change in biosolids spraying contractor.

Desludging of Ponds: The desludging will be carried out over two financial years.

Generator at Inlet/Outlet: Business continuity in case of power supply failure.

Regional Pipeline Strategy Review: Consider impact of changes to growth projections on the Regional Pipeline Strategy.

10. FINANCIAL PLAN

**Nelson Regional Sewerage Business Unit
Budget Summary for 2017 to 2020**

	Projection	Budget		
	16/17	17/18	18/19	19/20
Income				
Contributors	6,862	7,235	7,557	7,763
Interest	0	0	0	0
Other Recoveries	144	144	144	144
Total Income	7,006	7,379	7,701	7,907
Expenditure				
Operations & Maintenance	3,162	3,189	3,210	3,198
Interest	510	577	720	839
Insurance	63	60	60	60
Depreciation	1,767	1,795	1,816	1,884
Total Operating Cost	5,502	5,621	5,806	5,981
Surplus/Deficit	1,504	1,758	1,895	1,926
Use of Funds				
Loan Repayment	727	633	767	870
Renewals	1,040	1,162	1,049	1,014
Owners Distribution	1,504	1,758	1,895	1,926
Upgrades	922	483	3,900	2,920
	4,193	4,036	7,611	6,730
Sources of Funds				
Surplus/Deficit	1,504	1,758	1,895	1,926
Depreciation	1,767	1,795	1,816	1,884
New Loans	922	483	3,900	2,920
	4,193	4,036	7,611	6,730

LONG TERM FINANCIAL STRATEGY

The long term financial strategy (Appendix D) is a complete picture of the operations and maintenance costs and capital projects to be undertaken over the next 10 years. This strategy is based on the Nelson Regional Sewerage Business Unit Asset Management Plan 2014.

APPENDIX A

NELSON REGIONAL SEWERAGE BUSINESS UNIT BOARD ACTIVITY SCHEDULE 2015-16

Date	Activity	Papers required
By 15 August 2017	Review draft Annual Report and Financial Statement.	Draft annual report and financial statement.
By 30 September 2017	Deliver annual financial statement to Councils.	Financial Statement.
8 December 2017	Review board planning/meeting timetable. Adopt draft business plan for presentation to Tasman District Council and Nelson City Council. Review and update Interests Register. Adopt business continuity plan.	Planning/meeting timetable. Business Plan. Interests Register. Draft business continuity plan.
9 March 2018	Present Annual Report and Business Plan to Tasman District Council and Nelson City Council.	Annual Report and Business Plan.

Date	Activity	Papers required
By 22 June 2018	<p>Review board performance</p> <p>Review governance policy</p> <p>Review Demand Management Plan</p> <p>Receive report on Contingency Plan review by customer representatives.</p> <p>Receive report on Risk Management review by customer representatives.</p> <p>Review customer satisfaction survey results</p> <p>Annual review of Strategic Plan</p> <p>Adopt Energy Conservation Plan</p> <p>Review Audit Management Report</p>	<p>Checklist for board effectiveness.</p> <p>Governance Policy</p> <p>Draft Demand Management Plan.</p> <p>Report on Contingency Plan review by customer representatives.</p> <p>Report on Risk Management review by customer representatives.</p> <p>Customer survey report.</p> <p>Strategic plan.</p> <p>Energy Conservation Programme.</p>

APPENDIX B

LEVELS OF SERVICE

The following levels of service are included in the Nelson Regional Sewerage Business Unit Asset Management Plan 2014 and compliance demonstrates progress towards achieving the Strategic Goals:

ENVIRONMENTAL	Category	Level of Service
Treatment & Disposal	RMA Consent - Wastewater Discharge to Coastal Marine Area	100% compliance with consent conditions
	RMA Consent - Discharge of Contaminants to Air.	100% compliance with consent conditions
	RMA Consent - Discharge of Contaminants to Land	100% compliance with consent conditions
	Equipment Failure of critical components within the treatment and disposal system.	No equipment failures that impact on compliance with resource consent conditions.
Pump Stations	Odour complaints from pump stations	No odour complaints originating from pump stations
	Pump station wet weather overflows	No overflow events occurring for the contracted contributor flows
	Pump station overflows resulting from power failure	No overflow events occurring
	Pump station overflows resulting from mechanical failure.	No overflow events occurring
Pipelines	Reticulation Breaks	No reticulation breaks.
	Air valve malfunctions	No air valve malfunctions that result in overflows

CAPACITY		Category	Level of Service
Treatment & Disposal		Overloading capacity system	Treatment and disposal up to all contracted loads and flows
Pump Stations		Overloading capacity system	No overflows for all pump stations for the contributor flows
RELIABILITY		Category	Level of Service
Treatment & Disposal		Equipment failure of critical components	No equipment failures that lead to non-compliance with resource consent conditions
Pump Stations			
Pipelines			

RESPONSIVENESS		Category	Level of Service
Treatment & Disposal		Speed of response for emergency and urgent maintenance works	Achievement of response times specified in the maintenance contract
Pump Stations		Speed of response for routine and programmable maintenance works	Achievement of response times specified in the maintenance contract
Pipelines			
KEY CUSTOMER RELATIONSHIPS		Category	Level of Service
Treatment & Disposal		Customer satisfaction	Agreed levels of service provided to all Customers
Pump Stations			Robust charging structure is in place
Pipelines			

Appendix C

BUSINESS IMPROVEMENT PLAN

This section describes initiatives to improve the efficiency and effectiveness of the Business Unit and is based on the Nelson Regional Sewerage Business Unit Strategic Plan and referenced to the 2014 Wastewater Asset Management Plan.

IP	Description	Resource Requirements	Progress
IP-1	Review manuals annually.	In-house	Part of O&M contract.
IP-2	Consolidate all natural disaster information and review 3 yearly.	In-house	On-going.
IP-3	Internal benchmarking carried out annually.	In-house	Annually.
IP-4	Review risk of contributors leaving NRSBU.	In-house	Annually.
IP-5	Review capacity of treatment components.	In house, O&M contractor and consultants.	Annually.
IP-7	Annual review of contractor performance.	In-house.	Annually.
IP-13	Renewal of effluent discharge permit	In-house and contractors.	2016/18

APPENDIX D

10 YEAR PLANS

OPERATIONS, MAINTENANCE AND CAPITAL EXPENDITURE

NELSON REGIONAL SEWERAGE BUSINESS UNIT											
10 Year Operations and Maintenance Plan (\$,000)											
	Proj	1	2	3	4	5	6	7	8	9	10
	16/17	17/18	18/19	19/20	20/21	21/22	22/23	23/24	24/25	25/26	26/27
Total Management	227	230	230	230	230	230	230	230	230	230	230
Total Financial	510	577	720	839	865	829	790	758	719	701	694
Depreciation	1767	1795	1816	1884	1913	1913	1913	1913	1913	1921	1936
Total Electricity	715	739	739	739	739	759	759	759	759	759	759
TP Maintenance	947	1017	1017	996	996	996	996	996	996	996	996
PS & RM Maintenance	229	243	243	243	243	243	243	243	243	243	243
Total Monitoring	213	188	176	216	168	226	166	168	166	216	228
Consultancy	72	75	75	75	75	50	50	50	50	50	50
Insurance	63	60	60	60	60	60	60	60	60	60	60
Rates & Rental	57	32	32	32	32	32	32	32	32	32	32
Water Charges	16	22	22	22	22	22	22	22	22	22	22
Forestry	42	10	43	13	4	36	13	4	36	13	4
Biosolids Disposal	641	630	630	630	630	630	630	630	630	630	630
Telephone/Computers	3	3	3	3	3	3	3	3	3	3	3
Total Expenses	5502	5621	5806	5981	5979	6028	5906	5867	5858	5875	5886

NELSON REGIONAL SEWERAGE BUSINESS UNIT

10 Year Renewal Plan (\$,000)	Proj 16/17	1 17/18	2 18/19	3 19/20	4 20/21	5 21/22	6 22/23	7 23/24	8 24/25	9 25/26	10 26/27
Miscellaneous	20	20	20	20	20	20	20	20	20	20	20
Pump Stations and Rising Mains Inlet, Aeration Basin, Clarifier and Ponds	69	139	258	72		173	406	222	278	232	34
Solids Handling	281	724	260	256	247	563	30	400	400	215	9
Rabbit Island	521	51	526	357	794	268	719	350	401	546	801
Roads	98		46	8	46	32	11	50	22		
Beach road septage reception Consents	30			66							
	20	228		235							
Total =	1,040	1,162	1,049	1,014	1,107	1,057	1,486	1,042	1,121	1,013	844

Note: More detailed review of expected life of solids handling facilities and electrical control and equipment are likely to affect the renewal programme.

The renewal programme beyond year 1 is indicative total cost only. Specific renewal items will be subject to condition and lifecycle assessment leading up to the development of the 2018/19 Business Plan.

Upgrade programme		
Year	Description of Projects	Estimated Costs
2017/18	Sludge Management	200,000
	Desludging oxidation ponds	100,000
	Regional pipeline upgrade (Review strategy)	40,000
2018/19	Desludging oxidation ponds	1,400,000
	Treatment Plant Upgrade (Consent dependent)	2,500,000
2019/20	Modification Facultative Pond (Consent dependent)	420,000
	Treatment Plant Upgrade (Consent dependent)	2,500,000
2024/25	Disposal of dried sludge	700,000
2025/26	Songer street upgrade (Demand dependent)	100,000
	Disposal of dried sludge	700,000
2026/27	Disposal of dried sludge	700,000
2029/30	Richmond Regional Pipeline (Demand dependent)	1,000,000
2030/31	Activated sludge management (2 nd Secondary clarifier)	2,800,000
2031/32	Richmond Regional Pipeline (Demand dependent)	6,500,000
2032/33	Richmond Regional Pipeline (Demand dependent)	6,500,000

APPENDIX E

BELL ISLAND TREATMENT PLANT SCHEMATIC

