

# AGENDA

Ordinary meeting of the

**Nelson Regional Sewerage Business Unit**

***Te Rōpū ā-Rohe Para, Whakatū / Te Tai o Aorere***

Date:	Friday 17 September 2021
Time:	2.00p.m.
Location:	Council Chamber Floor 2A, Civic House 110 Trafalgar Street, Nelson

Membership:

<b>Chairperson</b>	Tasman District Councillor Kit Maling
<b>Deputy Chairperson</b>	Nelson City Councillor Tim Skinner
<b>Members</b>	Nelson City Councillor Brian McGurk Tasman District Councillor Trevor Tuffnell Independent Member Brendon Silcock Industry Representative (non-voting) Philip Wilson

Quorum: 3

[Nelson City Council Disclaimer](#)

Please note that the contents of these Council and Committee Agendas have yet to be considered by Council and officer recommendations may be altered or changed by the Council in the process of making the [formal Council decision](#)

### ***Nelson Regional Sewerage Business Unit***

The Nelson Regional Sewerage Business Unit (NRSBU) is a joint committee of Nelson City and Tasman District Councils. Operation of the NRSBU is governed by a Board, as established by a Memorandum of Understanding (A1983271).

#### **Areas of Responsibility:**

- To manage and operate the wastewater treatment facilities at Bells Island and the associated reticulation network efficiently and in accordance with resource consent conditions to meet the needs of its customers.

#### **Powers to Decide:**

- The Councils are agreed that the responsibility for all management and administrative matters associated with the NRSBU operation shall be with the Board, and in particular the Board shall without the need to seek any further authority from the Councils:
  - Operate a bank account for the Business Unit;
  - Comply with the Procurement Policy of the Administering Council;
  - Enter into all contracts necessary for the operation and management of the Business Unit in accordance with the approved budgets and intent of the Business Plan;
  - Authorise all payments necessary for the operation and management of the Business Unit within the approved budgets and intent of the Business Plan;
  - Do all other things, other than those things explicitly prohibited by this Memorandum of Understanding or relevant statutes, that are necessary to achieve the objectives as stated in the Strategic Plan, Asset Management Plan or Business Plan approved by the Councils;
  - Comply with the Health and Safety Policy and requirements of the administering Council
- Contribute to the sanitary services assessment process of the Councils
- Contribute to and comply with the waste management plans of the Councils
- Contribute to the development of the Councils' Development and Financial Contribution policies
- Contribute to the Councils' Regional Policy Statement and Regional Plan Reviews
- Develop and keep under review an appropriate contract for the delivery of waste collection and disposal services with each of its customers
- Follow generally accepted accounting practices
- Follow good employment practices

#### **Powers to Recommend to Councils:**

- Any other matters under the areas of responsibility of the Business Unit and detailed in the Memorandum of Understanding.
- All recommendations to Council will be subject to adoption of an equivalent resolution by the other Council, unless it is a matter specific to one Council only.

#### **Quorum:**

- The Memorandum of Understanding governing the NRSBU allows for either six or seven members to be appointed. The quorum at a meeting is either three (if six members are appointed), or four (if seven members are appointed), including at least one from each local authority.

#### **Procedure:**

- The Standing Orders of the Council providing administration to the committee will be applied at each meeting.
- The Chairperson will not have a casting vote.
- Copies of minutes of meetings of the Joint Committee will be retained by each Council for record keeping purposes

**1. Apologies**

Nil

**2. Confirmation of Order of Business**

**3. Interests**

3.1 Updates to the Interests Register

3.2 Identify any conflicts of interest in the agenda

**4. Public Forum**

**5. Confirmation of Minutes**

5.1 11 June 2021

**7 - 10**

Document number M18699

Recommendation

*That the Nelson Regional Sewerage Business Unit*

- 1. Confirms the minutes of the meeting of the Nelson Regional Sewerage Business Unit, held on 11 June 2021, as a true and correct record.*

**6. Chairperson's Report**

**7. Nelson Regional Sewerage Business Unit Annual Report**

**11 - 48**

Document number R26152

Recommendation

*That the Nelson Regional Sewerage Business Unit*

- 1. Receives the report Nelson Regional Sewerage Business Unit Annual Report (R26152) and its attachment (A2497193).*

Recommendation to the Nelson City and Tasman District Councils

***That the Nelson City and Tasman District Councils***

1. ***Receive the Draft report Nelson Regional Sewerage Business Unit Annual Report (A2497193) of Report R26152.***

**8. Nelson Regional Sewerage Business Unit Capital Carryover Report 49 - 56**

Document number R26165

Recommendation

***That the Nelson Regional Sewerage Business Unit***

1. ***Receives the report Nelson Regional Sewerage Business Unit Capital Carryover Report (R26165); and***
2. ***Approves the carryover of capital (\$5.977M) and Renewals budgets (\$1.048M) from 2020/21 financial year to the 2021/22 financial year, to ensure continuation of urgent and planned works.***

**9. Draft Nelson Regional Sewerage Business Unit Business Plan 2022/23 57 - 73**

Document number R26215

Recommendation

***That the Nelson Regional Sewerage Business Unit***

1. ***Receives the report Draft Nelson Regional Sewerage Business Unit Business Plan 2022/23 (R26215) and its attachment (A2728794); and***
2. ***Approves the Draft Nelson Regional Sewerage Business Unit Business Plan (A2728794) for submission to Nelson City Council and Tasman District Council for their consideration and feedback.***



Recommendation to the Nelson City and Tasman District Councils

***That the Nelson City Council and Tasman District Councils***

1. ***Receive the Draft Nelson Regional Sewerage Business Unit Business Plan 2022/23 (A2728794) for review and provide feedback to the Nelson Regional Sewerage Business Unit if required.***

**10. Nelson regional Sewerage Business Unit General Manager Quarterly Report 74 - 85**

Document number R26161

Recommendation

***That the Nelson Regional Sewerage Business Unit***

1. ***Receives the report Nelson regional Sewerage Business Unit General Manager Quarterly Report (R26161).***

**CONFIDENTIAL BUSINESS**

**11. Exclusion of the Public**

Recommendation

***That the Nelson Regional Sewerage Business Unit***

1. ***Excludes the public from the following parts of the proceedings of this meeting.***
2. ***The general subject of each matter to be considered while the public is excluded, the reason for passing this resolution in relation to each matter and the specific grounds under section 48(1) of the Local Government Official Information and Meetings Act 1987 for the passing of this resolution are as follows:***

Item	General subject of each matter to be considered	Reason for passing this resolution in relation to each matter	Particular interests protected (where applicable)
1	Nelson Regional Sewerage Business Unit	Section 48(1)(a)	The withholding of the information is necessary: <ul style="list-style-type: none"><li>• Section 7(2)(i)</li></ul>

Item	General subject of each matter to be considered	Reason for passing this resolution in relation to each matter	Particular interests protected (where applicable)
	<b>Meeting - Confidential Minutes - 11 June 2021</b>	The public conduct of this matter would be likely to result in disclosure of information for which good reason exists under section 7.	To enable the local authority to carry on, without prejudice or disadvantage, negotiations (including commercial and industrial negotiations)
2	<b>Contract 25833: Nelson Regional Sewerage Scheme - Operations &amp; Maintenance</b>	Section 48(1)(a) The public conduct of this matter would be likely to result in disclosure of information for which good reason exists under section 7	The withholding of the information is necessary: <ul style="list-style-type: none"> <li>Section 7(2)(i) To enable the local authority to carry on, without prejudice or disadvantage, negotiations (including commercial and industrial negotiations)</li> </ul>
3	<b>Contract 25834: NRSBU Biosolids Application</b>	Section 48(1)(a) The public conduct of this matter would be likely to result in disclosure of information for which good reason exists under section 7	The withholding of the information is necessary: <ul style="list-style-type: none"> <li>Section 7(2)(i) To enable the local authority to carry on, without prejudice or disadvantage, negotiations (including commercial and industrial negotiations)</li> </ul>



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**Minutes of a meeting of the**

**Nelson Regional Sewerage Business Unit**

***Te Rōpū ā-Rohe Para, Whakatū / Te Tai o Aorere***

**Held in the Council Chamber, Floor 2A, Civic House,, 110 Trafalgar Street, Nelson on Friday 11 June 2021, commencing at 9.37a.m.**

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Present: Tasman District Councillor K Maling (Chairperson), Nelson City Councillors B McGurk, Tasman District Councillor T Tuffnell, Independent Member B Silcock and Industry Representative (non-voting) P Wilson

In Attendance: Group Manager Infrastructure (A Louverdis), Tasman District Council Engineering Services Manager (R Kirby), General Manager Regional Sewerage and Landfill (N Clarke) and Governance Adviser (J Brandt)

Apologies : Nil

**1. Apologies**

There were no apologies

**2. Confirmation of Order of Business**

There was no change to the order of business

**3. Interests**

There were no updates to the Interests Register, and no interests with items on the agenda were declared.

**4. Public Forum**

There was no public forum.

## 5. Confirmation of Minutes

5.1 14 May 2021

Document number M17644, agenda pages 6 - 8 refer.

Resolved NRSBU/2021/011

***That the Nelson Regional Sewerage Business Unit***

1. ***Confirms the minutes of the meeting of the Nelson Regional Sewerage Business Unit, held on 14 May 2021, as a true and correct record.***

Skinner/McGurk

Carried

## 6. Chairperson's Report

Document number R25934

There was no Chairperson's Report.

## 7. Nelson Regional Sewerage Business Unit General Manager's Report to 30 April 2021

Document number R25906, agenda pages 9 - 20 refer.

General Manager Regional Sewerage and Landfill, Nathan Clarke, presented the report. He answered questions about the Rabbit Island Biosolids consent application, the consultation process and engagement with iwi.

Mr Clarke answered questions about electricity costs, alternatives being explored to keep costs down, as well as the resignation of the Activity Engineer Regional Services.

Members requested that a Safe Work Observation site visit be scheduled for Members to visit the asset at Bells Island.

Resolved NRSBU/2021/012

***That the Nelson Regional Sewerage Business Unit***

1. ***Receives the report Nelson Regional Sewerage Business Unit General Manager's Report to 30 April 2021 (R25906).***

Tuffnell/Skinner

Carried

**8. Nelson Regional Sewerage Business Unit 2020/21 Capital/Renewals Expenditure and Carryover Update**

Document number R25911, agenda pages 21 - 25 refer.

Operations Manager Regional Services, Brad Nixon, presented the report. He answered questions about the capital works and renewals programme and the need for carryovers.

Resolved NRSBU/2021/013

***That the Nelson Regional Sewerage Business Unit***

- 1. Receives the report Nelson Regional Sewerage Business Unit 2020/21 Capital/Renewals Expenditure and Carryover Update (R25911); and***
- 2. Notes that a report to approve projected carryovers from 2020/21 to 2021/22 will be presented to the first Nelson Regional Sewerage Business Unit Board Meeting in the financial year 2021/22.***

Skinner/Tuffnell

Carried

**9. Exclusion of the Public**

Resolved NRSBU/2021/014

***That the Nelson Regional Sewerage Business Unit***

- 1. Excludes the public from the following parts of the proceedings of this meeting.***
- 2. The general subject of each matter to be considered while the public is excluded, the reason for passing this resolution in relation to each matter and the specific grounds under section 48(1) of the Local Government Official Information and Meetings Act 1987 for the passing of this resolution are as follows:***

Skinner/McGurk

Carried

<b>Item</b>	<b>General subject of each matter to be considered</b>	<b>Reason for passing this resolution in relation to each matter</b>	<b>Particular interests protected (where applicable)</b>
<b>1</b>	<b>Saxton Road Pumpstation Site Report</b>	Section 48(1)(a) The public conduct of this matter would be	The withholding of the information is necessary: <ul style="list-style-type: none"> <li>• Section 7(2)(i)</li> </ul>

Item	General subject of each matter to be considered	Reason for passing this resolution in relation to each matter	Particular interests protected (where applicable)
		likely to result in disclosure of information for which good reason exists under section 7	To enable the local authority to carry on, without prejudice or disadvantage, negotiations (including commercial and industrial negotiations)

The meeting went into confidential session at 10.29a.m. and resumed in public session at 10.46a.m.

## 10. Restatements

It was resolved while the public was excluded:

- 1 CONFIDENTIAL: Saxton Road Pumpstation Site Report**
- 3. *Agrees that this decision be made publicly available once the purchase has been completed; and*
  - 4. *Agrees that Report R25921 and attachment (A2669212) remain confidential at this time.*

There being no further business the meeting ended at 10.46a.m.

Confirmed as a correct record of proceedings:

\_\_\_\_\_ Chairperson \_\_\_\_\_ Date



## Nelson Regional Sewerage Business Unit

17 September 2021

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**Report Title:** Nelson Regional Sewerage Business Unit Annual Report

**Report Author:** Nathan Clarke - General Manager Regional Sewerage and Landfill

**Report Number:** R26152

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### Annual Report 2020/21

#### 1. Background

- 1.1 This Annual Report is a review of what has been achieved by the Nelson Regional Sewerage Business Unit (NRSBU) in the 2020/21 financial year and its level of performance against Key Performance Indicators.
- 1.2 The 2020/21 year included the preparation of the Activity management plan and the development of the regional pipeline upgrade. It also included the preparation of the new O&M contracts for the Biosolids Disposal and the Bell Island WWTP.

#### 2. Summary

- 2.1 The NRSBU achieved a surplus of \$1,137,000 compared to a budget surplus of \$1,531,000.
- 2.2 The principal driver for the variation was the significant change in fixed income, and the increases in O&M costs.
- 2.3 Fixed income decreased significantly with a 20% decrease in fixed revenue.
- 2.4 Operating and maintenance costs were 12% over budget. Budget increases were caused by increased O&M costs, increased electrical costs, increased biosolids disposal costs and increased consulting costs.

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- 2.5 Capital expenditure for the year totalled \$6,678,759 and included the installation of the effluent recycling facility, screening wash upgrades, inlet odour treatment upgrades, pond de-sludging, sea protection bund construction, replacement of the Dissolved Air Floatation (DAF) saturator tank, road renewals, pump station overflow screens and flooding resilience, as well as purchase of the Bell Island irrigation & fencing.
- 2.6 Odour generation from the WWTP has generally been minor, with no notifications received that were deemed to exceed consent parameters.
- 2.7 There were several odour reports received relating to biosolids application. The independent odour auditors' services were engaged to verify these reports. As a result of three confirmed odour reports biosolids application was relocated to mitigate odour generation.
- 2.8 Odour patrols carried out by an independent contractor has demonstrated that the residual odours at the treatment plant have been reduced.
- 2.9 The effluent discharge quality has met the consent conditions for the year.
- 2.10 The sludge treated at Bell Island consistently met the requirements for A Grade biosolids.
- 2.11 The operation and maintenance contractor maintained a high level of Health and Safety vigilance. There were no lost time injuries this year. A total of 48 minor incidents and near misses were reported.

### 3. Recommendation

#### ***That the Nelson Regional Sewerage Business Unit***

1. ***Receives the report Nelson Regional Sewerage Business Unit Annual Report (R26152) and its attachment (A2497193).***

Recommendation to the Nelson City and Tasman District Councils

#### ***That the Nelson City and Tasman District Councils***

1. ***Receive the Draft report Nelson Regional Sewerage Business Unit Annual Report (A2497193) of Report R26152.***

### 4. Discussion

- 4.1 Monitoring is undertaken by the NRSBU to assess performance for the facility, and to help assess the capacity of the system. This performance



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monitor is used to help assess where improvements or upgrades are needed.

### 4.2 Level of Service Performance

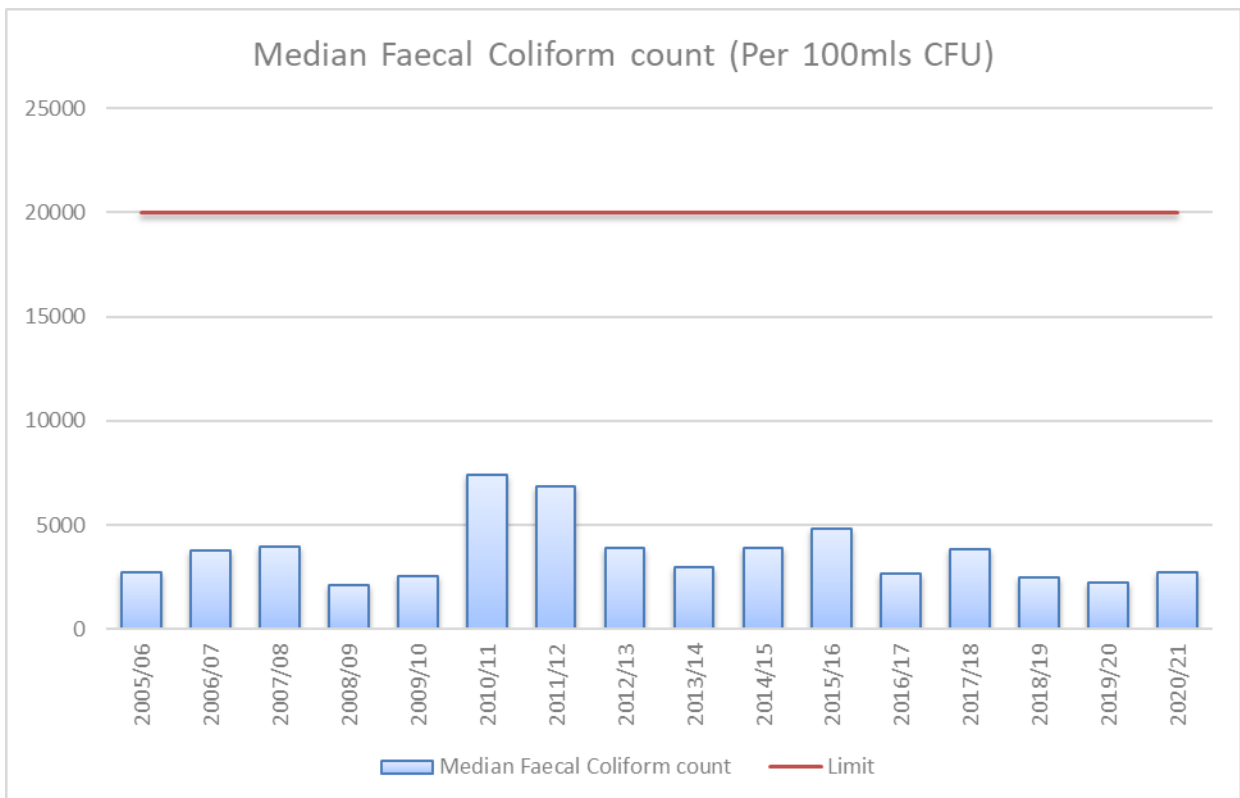
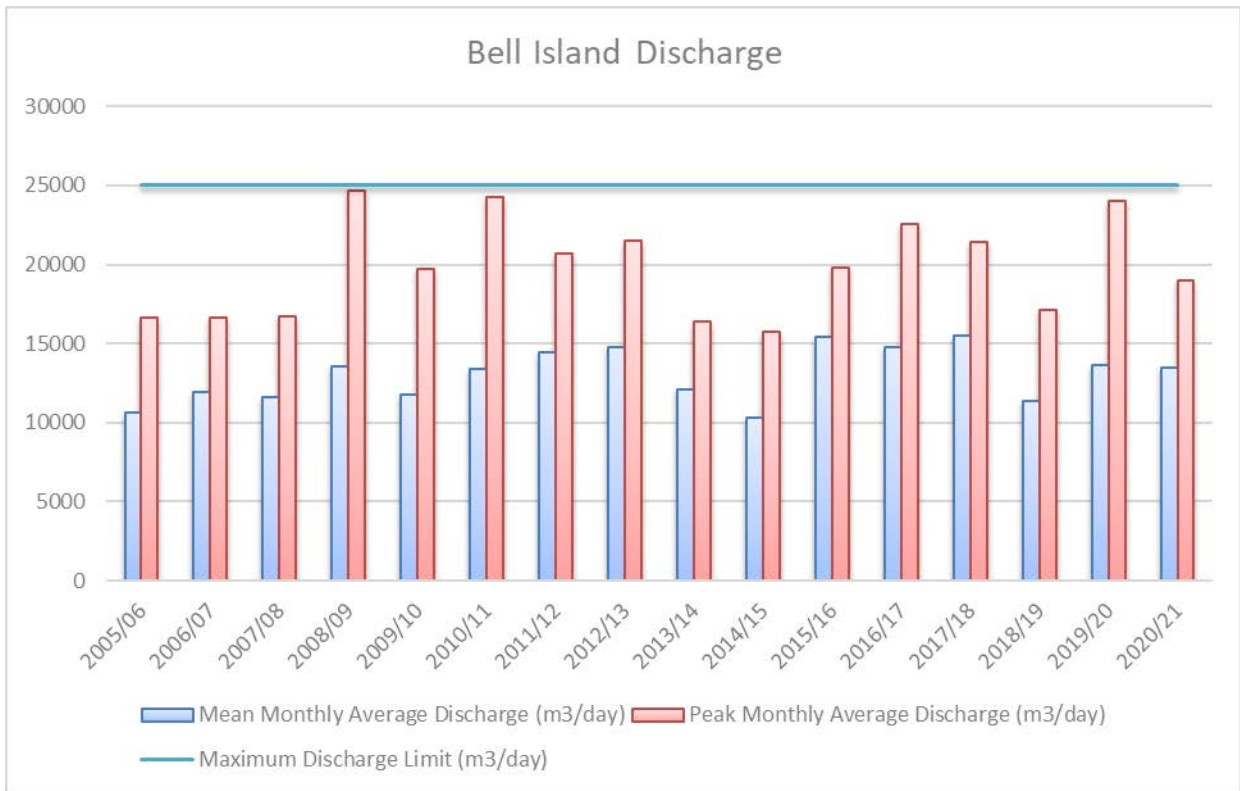
4.2.1 The levels of service recorded over the past three years have stayed reasonably consistent. The following table summarises compliance of the levels of service.

Level of Service	Function	Category	Target Technical Level of Service	Compliance			
				2018/19	2019/20	2020/21	
Environmental Impacts	Treatment & Disposal	RMA Consent - Wastewater Discharge to Coastal Marine Area	100% compliance with consent conditions	Yes	No	Yes	
		RMA Consent - Discharge of Contaminants to Air	100% compliance with consent conditions	Yes	No	Yes	
		RMA Consent - Discharge of Contaminants to Land	100% compliance with consent conditions	Yes	Yes	Yes	
		Equipment Failure of critical components within the treatment and disposal system	No equipment failures that impact on compliance with resource consent conditions	No	Yes	Yes	
		RMA Consent - Aberrational Discharge	100% compliance with consent conditions	No	No <sup>1</sup>	No <sup>1</sup>	
	Pump Stations	Odour complaints from pump stations	No odour complaints originating from pump stations	Yes	Yes	Yes	
		Pump station wet weather overflows	No overflows for all pump stations	Yes	Yes	Yes	
		Pump station overflows resulting from power failure	No overflow events occurring	Yes	Yes	Yes	
		Pump station overflows resulting from mechanical failure	No overflow events occurring	Yes	Yes	Yes	
		Reticulation Breaks	No reticulation breaks	Yes	Yes	Yes	
		Air valve malfunctions	No air valve malfunction that result in wastewater overflows	Yes	Yes	Yes	
	Capacity	Treatment & Disposal	Overloading system capacity	Treatment and disposal up to all contracted loads and flow	Yes	Yes	Yes
		Pump Stations	Overloading system capacity	No overflow events occurring for the contracted contributor flows	Yes	Yes	Yes
Reliability	Treatment & Disposal	Equipment failure of critical components	No equipment failures that could lead to non-compliance with resource consent conditions	Yes	Yes	Yes	
	Pump Stations			Yes	Yes	Yes	
	Pipelines			Yes	Yes	Yes	
Responsiveness	Treatment & Disposal	Speed of response for emergency and urgent maintenance works	Achievement of Response times specified in Maintenance Contract	No	Yes	Yes	
	Pipelines	Speed of response for routine and programmable maintenance works	Achievement of Response times specified in Maintenance Contract	No	Yes	Yes	
Key Contributor Relationships	Treatment & Disposal	Overall satisfaction	Agreed levels of service provided to all Contributors.	Yes	Yes	Yes	
	Pump Stations		Robust charging structure is put in place	Yes	Yes	Yes	
	Pipelines		Contributors are satisfied with Sewerage Scheme	Yes	Yes	Yes	

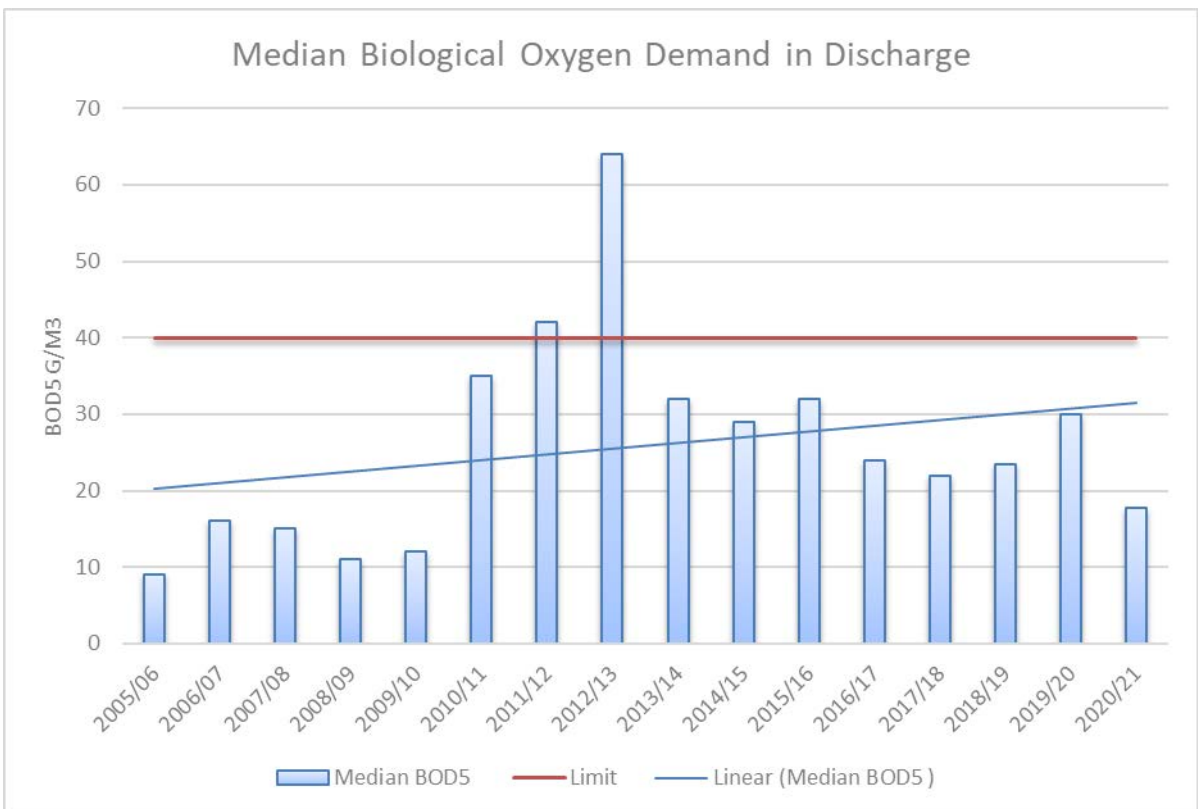
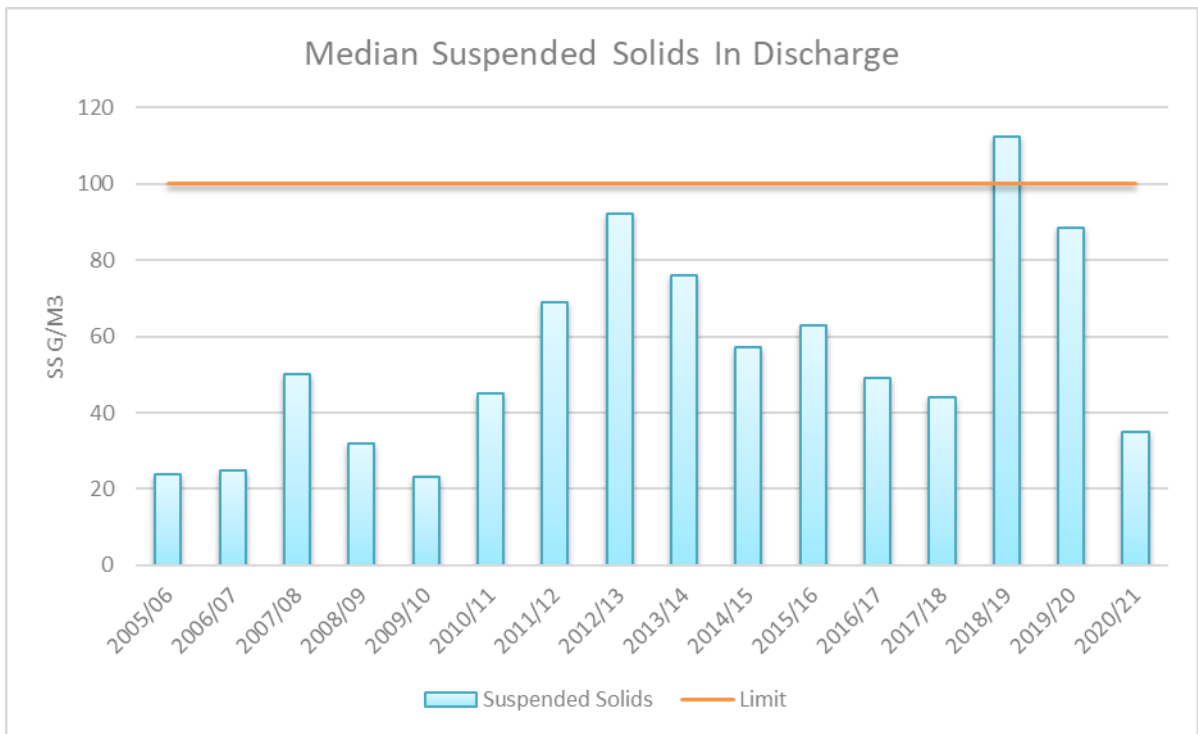
1. Consent non-compliance relates to provision of Cultural Health Indexing (CHI). NRSBU have been unable to get commitment from iwi to complete the required CHI.

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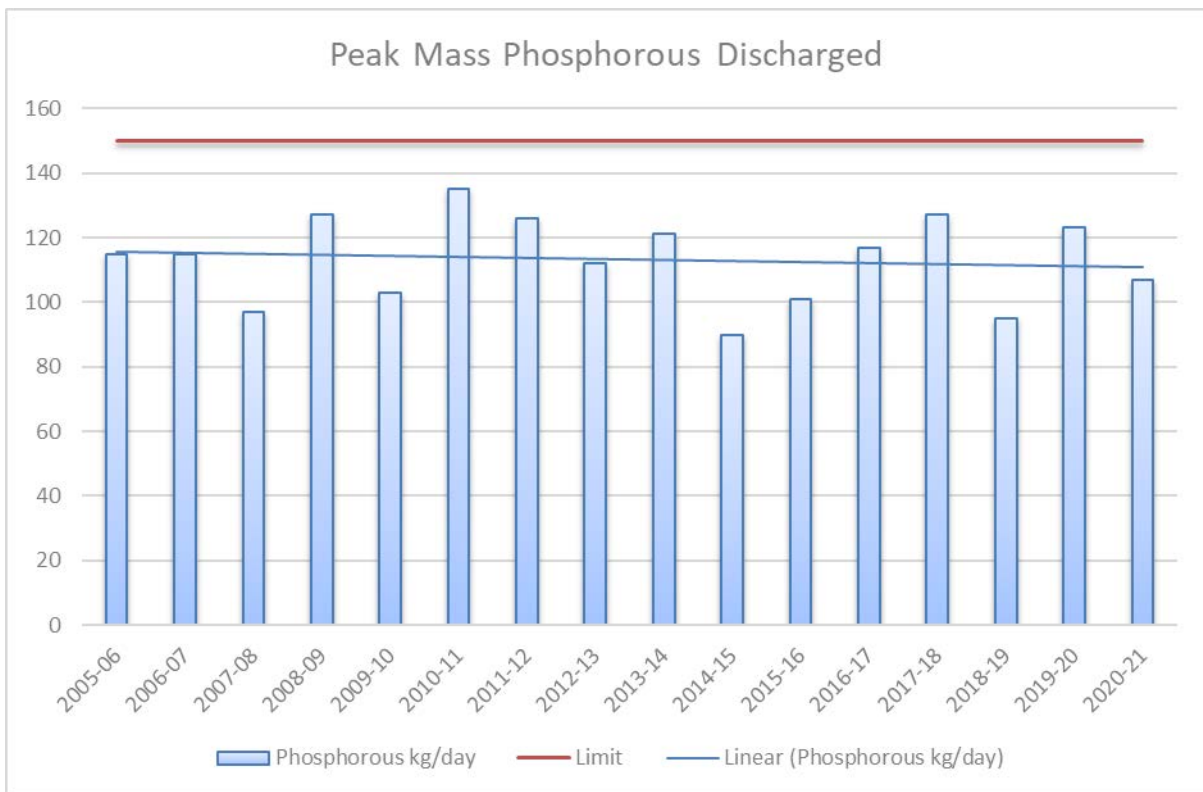
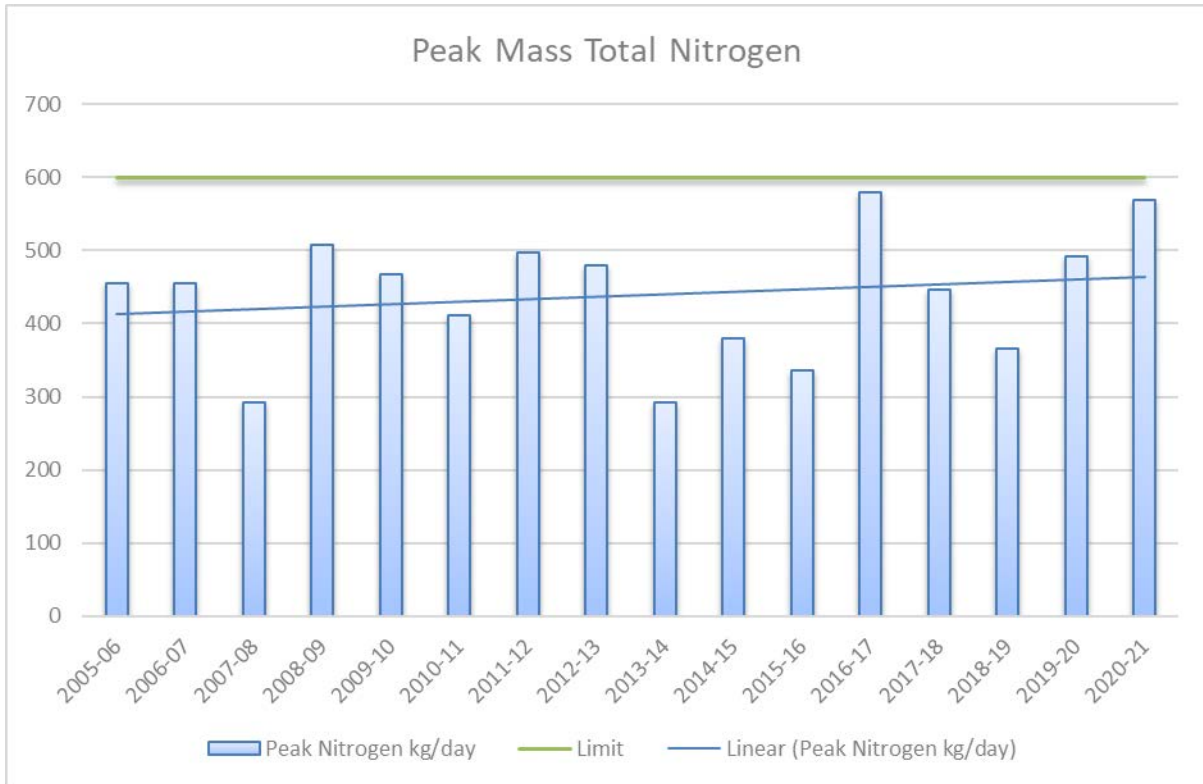
4.3 Discharge characteristics



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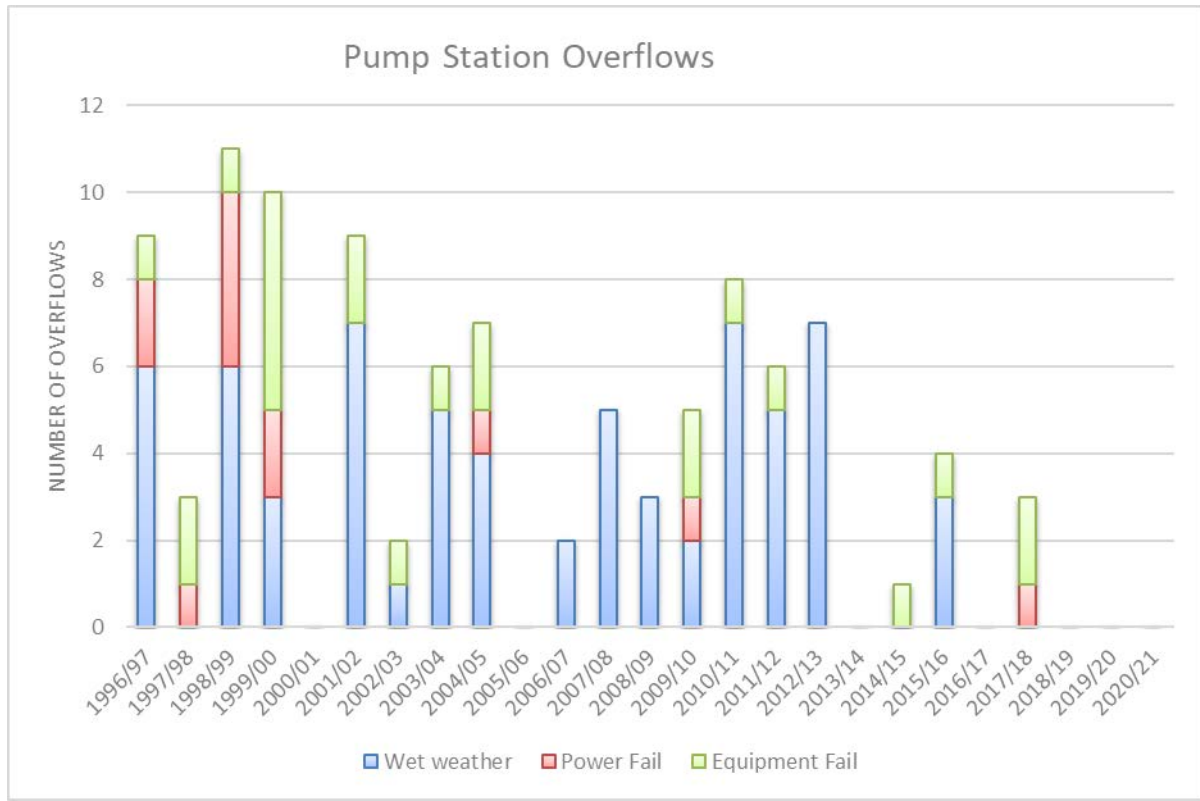
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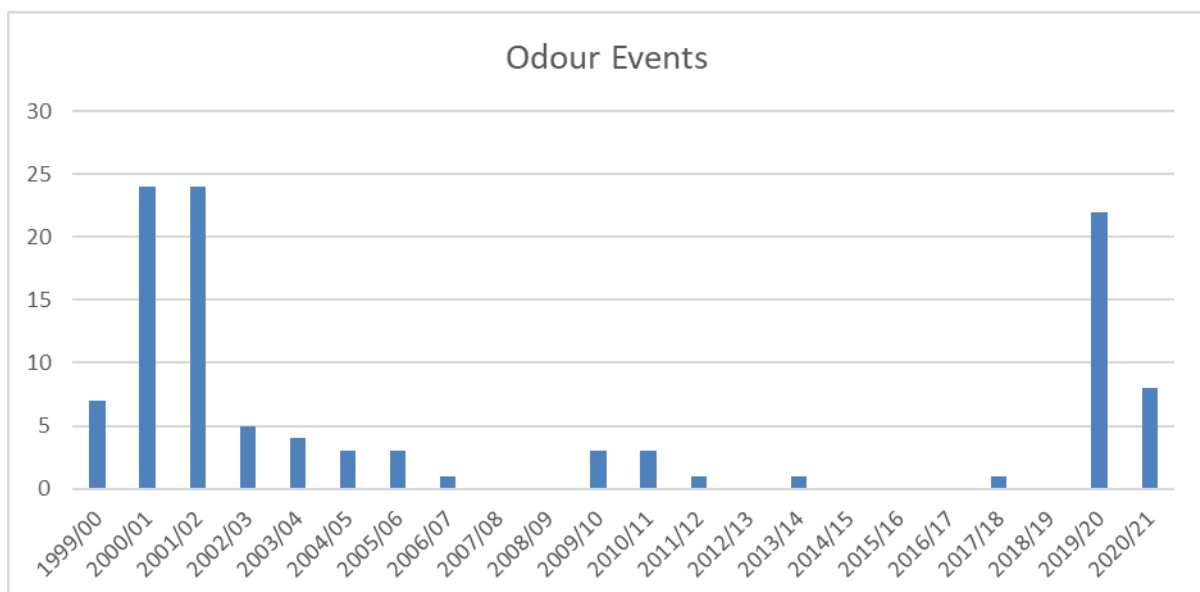
### 4.4 Scheme overflows

No overflow occurred during the past year.



### 4.5 Odour Management

8 reports were received. Of these three were attributed to the biosolids application operation, two were attributed to Bell Island WWTP, and two were unable to be identified.

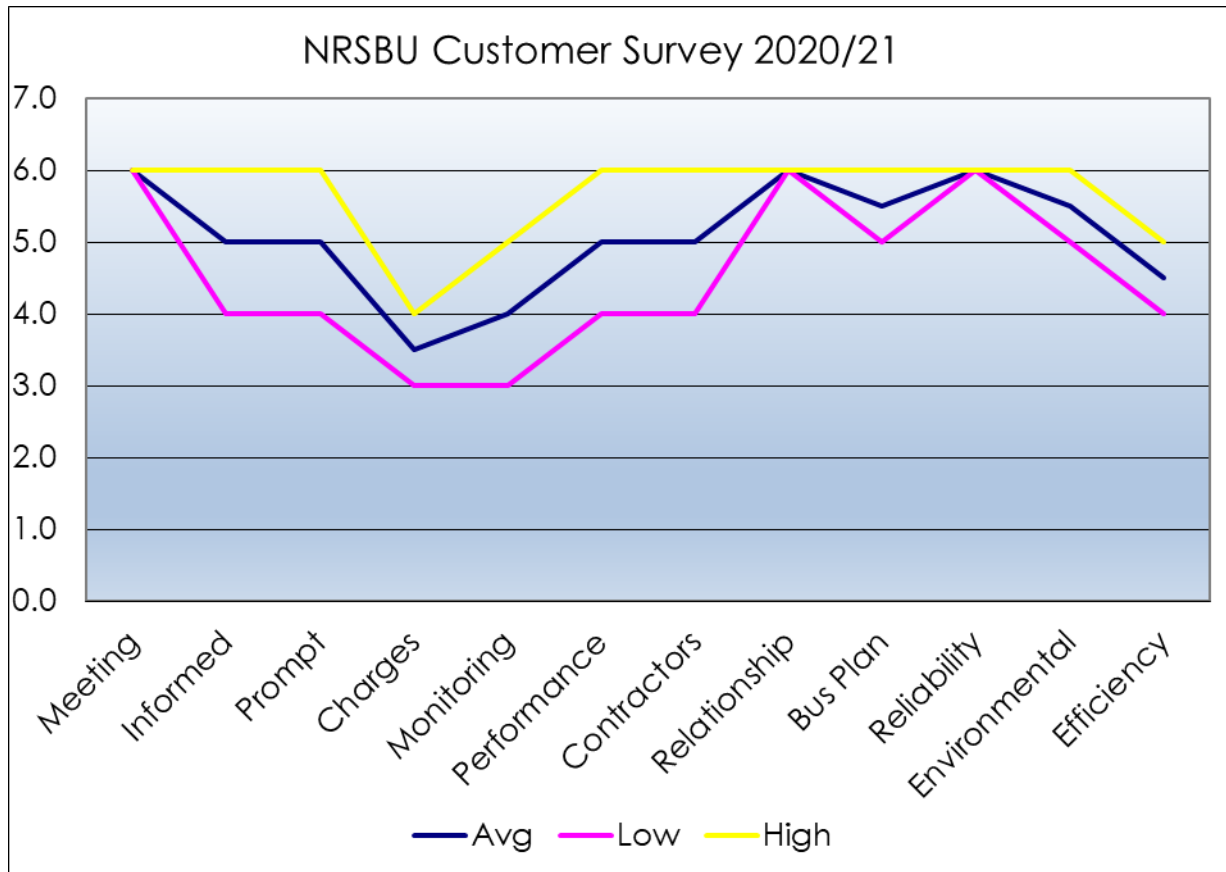


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4.6 Customer Group

4.6.1 Customer group meetings were held during the year and most contributors attended the meetings.

4.6.2 Customer survey responses were received from two of the five contributors – Tasman District Council, and Nelson Pine Industries



5. Performance assessment when compared to historic performance measures.

5.1 Previous annual reports have used performance measures included in the NRSBU business plan for the year. The NRSBU 2020/2021 business plan included different strategic goals which are discussed later in this report, however for comparison against previous reports an assessment has been made against the historic performance measures.

5.2 Wastewater reticulation, treatment and disposal services meet customers' long term needs."

Objective	Key Performance Measures	Performance
Sufficient reticulation, treatment and disposal	Loads do not exceed the capacity of system components.	Not achieved. The reticulation is currently unable to convey peak

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capacity is available for loads received.		flows from Tasman District Council.  The treatment plant has limitation on treatment capacity through the mechanical treatment plant.
Intergenerational equity is maintained.	Loans are repaid over 30 years (the average life of the assets).	Achieved.
Customers are encouraged to engage with the organisation and are satisfied with the service.	All customer representatives attend at least 75% of customer meetings.	Achieved.
	Customer surveys show an average score of at least 5 out of 7 on satisfaction with services.	Two customers responded to Customer survey.
Levels of service are defined in all contracts and are met.	100% compliance with service level agreements by all major contractors.	Achieved.

5.3 The cost of wastewater reticulation, treatment and disposal services are minimised”.

The above performance measure was changed in 2019 to reflect the fact that NRSBU was not focussed on minimising cost, but rather providing a cost effective service.

<b>Objective</b>	<b>Key Performance Measures</b>	<b>Performance</b>
The costs of reticulation, treatment and disposal processes are cost effective.	The operational costs of reticulation, treatment and disposal processes meet the approved Annual Budgets.	Achieved. Despite a number of significant changes to overall budgets, the cost of operations is 3.5% higher than budget for the 2020/21 year.
	All capital projects are delivered within budget.	Not achieved. Capital budgets were significantly underspent due to Regional Services staff capacity, and the requirement for the new staff to learn the NCC systems.
The economic lives of all assets are optimised.	Three yearly independent audit of asset management practices confirms this.	Achieved. NRSBU has had a number of assets independently valued by quantity surveyors and in-depth asset inspections have been undertaken on around 1/3 of NRSBU assets.
Customers understand the benefits of demand management and the	That progress made by NCC and TDC with implementation	Both Councils have developed inflow and infiltration strategies in their

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costs, risks and environmental implications of increasing demand.	of load management policies, priorities.	asset management plans and these strategies are part of their Long Term Plans.
	Combined Loads do not exceed the capacity of the components of the system.	Achieved.
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.	Achieved.

5.4 “Risks associated with the services provided are identified and mitigated to a level agreed with customers and owners”.

Objective	Key Performance Measures	Performance
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 Nelson Regional Sewerage Business Unit risk management plans.	Achieved.
	Customer representatives review and approve the risk management plan annually and following any incidents which require activation of the plan.	Achieved.
Contingency plans adequately address emergency events.	Customer representatives review and approve the plans annually.	Achieved. These matters are considered during the development of the asset management plan and considered at customer meetings.
	Effectiveness of plans is reviewed and confirmed following incidents which require activation of the plan.	Achieved. Incidents reported in quarterly reports and considered at customer meetings.

5.5 “We engage the right people, with the right skills and experience”.

Objective	Key Performance Measures	Performance
Those engaged with the Nelson Regional Sewerage Business	Annual staff performance reviews include assessment of the skills and experience	Not achieved.



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Unit have the right skills, experience, and support to perform well.	required in their role in Nelson Regional Sewerage Business Unit and their development needs are identified and met.	NRSBU is understaffed. Concern regarding staffing levels has been communicated to the board.
	Development and succession plans are in place.	Staff capacity issues have limited the ability of staff to undertaken development activities.
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.	Achieved. The plans are currently in the process of being updated.

5.6 “Nelson Regional Sewerage Business Unit operates sustainably and endeavours to remedy or mitigate any identified adverse environmental, social or cultural impact”

<b>Objective</b>	<b>Key Performance Measures</b>	<b>Performance</b>
Nelson Regional Sewerage Business Unit minimises adverse environmental, social and cultural impacts where this is economically viable.	That progress towards meeting energy efficiency targets are reported on and reviewed annually.	Achieved. Energy efficiency is now reported by the O&M contractor monthly. Power consumption was over budget by \$100,000 due to changed electrical supply contract, and increased rainfall compared to 2019/20
	Current capacity to utilise beneficial application of biosolids to land is sustained.	Achieved. 100% of biosolids treated at Bell Island are beneficially applied to Radiata pine plantations belonging to Tasman District Council and Nelson City Council.
	Beneficial economic and environmental reuse of treated waste water is maintained or increased.	The lessee continued to use the irrigation system on Bell Island. A test water recycling facility is has been constructed and now provided reuse water for the facility.
	Environmental, social and cultural impacts are	While this is not directly measured the Assessment of Environmental

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<b>Objective</b>	<b>Key Performance Measures</b>	<b>Performance</b>
	considered in all decision making.	demonstrates that the NRSBU are achieving quality environmental outcomes.

5.7 “Good relationships are maintained with all stakeholders.”

<b>Objective</b>	<b>Key performance Measures</b>	<b>Performance</b>
Shareholders are satisfied with the strategic direction and the economic performance of the business unit.	All strategic and business plans are approved by shareholders.	Achieved.
	All budget projections are met.	Not achieved. Capital Expenditure was under budget.
Good relationships are maintained with all stakeholders including owners, iwi, customers, contractors, neighbours, and the wider community.	All complaints or objections are addressed promptly.	Achieved. While some odour issues were notified, customers were satisfied with the NRSBU response to odour complaints.
	All applications for resource consents are approved.	Achieved. Currently still in the process of applying for the Rabbit Island Biosolids Application Consent.
	Up to date information on activities and achievements are publicly available.	Not achieved, The NRSBU website has not been updated as was planned during 2020/2021.

5.8 “All statutory obligations are met”.

<b>Objective</b>	<b>Key Performance Measures</b>	<b>Performance</b>
All statutory obligations are identified and met and are included in contracts with suppliers.	100% compliance with all statutory obligations.	Achieved.
All resource consents requirements are met.	100% compliance with all statutory obligations.	Not achieved. Aberrational discharge consent condition requirements are not met due to issues with getting Cultural Health Indexing undertaken.

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### 5.9 "Wastewater reticulation, treatment and disposal services meet customers' long term needs."

Objective	Key Performance Measures	Performance
Sufficient reticulation, treatment and disposal capacity is available for loads received.	Loads do not exceed the capacity of system components.	Achieved, no overflow occurred.  However, it is known that the capacity within the regional rising main network is insufficient to meet the wet weather needs of the Tasman District Councils catchment and this is in the process of being resolved.
Intergenerational equity is maintained.	Loans are repaid over 30 years (the average life of the assets).	Achieved.
Customers are encouraged to engage with the organisation and are satisfied with the service.	All customer representatives attend at least 75% of customer meetings.	Achieved.
	Customer surveys show an average score of at least 5 out of 7 on satisfaction with services.	Only 2 customers chose to respond to the survey. NRSBU takes this as an indication that the other contributors hold no significant issues with NRSBU performance.
Levels of service are defined in all contracts and are met.	100% compliance with service level agreements by all major contractors.	Achieved.

## 6. Assessment of performance against the Business Plan Strategic Goals.

6.1 The strategic goals of the NRSBU set the basis for performance measurement and long-term strategies. These strategies are the outlined performance targets in the 2020/21 Business plan.

6.2 The following tables outline the performance objectives, key performance measures and what was achieved:

### 6.2.1 Table of NRSBU Strategic Goals as outlined in the 2020/2021 Business plan.

Strategic Goal	Objective (This is what it looks like)	Level of Service (This is how we do it)	Performance
We will implement and operate infrastructure considering	Containment and conveyance that is resilient and minimises adverse impacts	We have sufficient capacity in our network to cope with peak flows	Not achieved – NRSBU has insufficient to accommodate the flows from TDC network. Upgrades are underway to resolve this.

## Item 7: Nelson Regional Sewerage Business Unit Annual Report

<b>Strategic Goal</b>	<b>Objective (This is what it looks like)</b>	<b>Level of Service (This is how we do it)</b>	<b>Performance</b>	
the needs of our community. Our priorities for this are protection of public health, the environment and cultural values.	on the health of the environment and community	We are resilient to mechanical and electrical failures and natural hazards	Not achieved – Electrical system not sized for storm flows.	
			Mechanical Resilience achieved.	
		We can readily maintain the network	Not achieved – maintenance requires the network to be removed from service.	
	Resilient wastewater treatment that minimises the impact on the environment and community	The treatment plant can reliably accept (N+1 for critical assets) all peak flows from the network	Not achieved- Capacity insufficient with current storm pumps and pipe network. Upgrades are currently underway.	
		The treatment plant can fully treat all dry weather flows	Achieved	
		The treatment plant does not create odour issues for the community	Not achieved, but upgrades are underway, and performance has improved compared to previous years.	
		Effluent Quality meets or exceeds required discharge requirements	Achieved	
	Long term vision that considers the future needs of the community	Our ongoing business is safeguarded through engagement with council planning processes	Achieved	
		We have long term plans for our activities and their impacts	Achieved	
		Have systems in place for the ongoing monitoring and reporting of emissions	Achieved – Further development are in progress.	
	Alternative methods of biosolids disposal that protect public health and the environment and are sensitive to cultural values	Have a backstop for issues with biosolids disposal	Not achieved. No backstop is currently available for biosolids disposal.	
	We will work towards the beneficial reuse of resources	Use of ongoing improvement processes to identify, implement and operate feasible biosolids reuse	Treatment to maintain 100% reuse of biosolids	Achieved
			Increase reuse value	Not achieved – no work has been undertaken on this this year.
		Maintain 100% diversion of biosolids from disposal to landfill	Achieved	

Item 7: Nelson Regional Sewerage Business Unit Annual Report

<b>Strategic Goal</b>	<b>Objective (This is what it looks like)</b>	<b>Level of Service (This is how we do it)</b>	<b>Performance</b>
	Identified implement and operate feasible systems and infrastructure for the reuse of wastewater	We minimise the amount of effluent we discharge to water	Achieved – Reuse of water commenced during the year.

## Item 7: Nelson Regional Sewerage Business Unit Annual Report

### 6.3 Capital Expenditure 2020/21

An amount of \$6.678 million was spent during 2020/21 on capital and renewals projects, compared the budget of the \$13.709 million – this budget included carry over from 2019/20.

Capital expenditure: Renewal and Upgrade:

	Actual YTD 30th June 2021	Full Budget 2020/21	Budget Unspent
<b>Capital Expenditure</b>			
<b>Renewals</b>			
Renewals: Buildings	22,749	245,000	222,251
Renewal Inlet	60,818	300,000	239,182
Renewals: Pump Stations and Rising Mains	43,008	50,000	6,992
Relining Estuary pipeline - Nayland to Martins Poi	687		
Road renewal	265,215	92,433	- 172,782
Renewal Aeration Basin	20,680	20,680	0
Renewal Primary Clarifier	25,458	30,000	4,542
Renewal: Sludge Storage	134,183	200,000	65,817
Renewal: Aerators		123,400	123,400
Renewals sludge treatment	8,803	8,803	- 0
Renewals: Outfall	-	-	-
Renewal: Sundry Plant	95,491	120,000	24,509
Bell Island Discharge Consent	140,609	139,240	- 1,369
Rabbit Island renewals	43,119	30,000	- 13,119
Renewal: Ponds	72,887	70,221	- 2,666
Renewal: Saxton Is Air Valve Chambers	2,746	150,000	147,254
Renewal: DAF Saturator Tank	120,871	140,000	19,129
Carryover - Aerators		385,463	385,463
<b>Total renewals</b>	<b>1,057,323</b>	<b>2,105,240</b>	<b>1,048,604</b>
<b>New Capital</b>			-
<b>Regional Pipeline duplication &amp; Pumpstation</b>	904,101	3,585,000	2,680,899
<b>LOS from Consent requirements</b>			
Capital: Resource Consent Accid	137,611	85,000	- 52,611
Pump Station Overflow Screens	216,466	480,000	263,534
Inlet Odour upgrade	700,994	400,000	- 300,994
Generator Project	352,284	1,400,000	1,047,716
Washwater and Water recycling	901,230	750,000	- 151,230
ATAD Odour Upgrade	50,905	750,000	699,095
Sludge Management in Ponds at Bell	1,458,525	803,669	- 654,856
Capital: Oxidation Ponds	1,190	755,242	754,052
Rabbit island Consent requirement	280,815	300,000	19,185
Carbon Management system		50,000	50,000
Duplicate Pipeline - Saxton PS to Nayland rd	472		
<b>Other</b>			
Airport PS Flooding resilience	2,746	100,000	97,254
Saxton PS Flooding resilience	27,180	100,000	72,820
Biosolids Upgrades	93,548	107,437	13,889
Beach Road Pump Station Bund	89,227	115,000	25,773
Songer St Pump Station Bund	65,299	85,000	19,701
Beach Road PS Flooding resilience	3,604		- 3,604
Songer Road PS Flooding resilience	2,157		- 2,157
Operator Building	15,713	300,000	284,287
Data and record systems		30,000	30,000
Bell Island Electricity Supply	34,260	28,100	- 6,160
Bell Island road Improvements		50,000	50,000
Best Island improvements	84,672	50,000	- 34,672
Capital: Plant and Equipment	38,471	100,000	61,529
Bell Island Irrigation & Fencing	159,793	300,000	140,208
Rabbit Island Water Pipeline variations		50,000	50,000
Sludge Storage Tanks	174	750,000	749,826
Rabbit Island Tanks		74,263	74,263
Primary Clarifier		-	
<b>Total New Capital</b>	<b>5,621,436</b>	<b>11,598,711</b>	<b>5,977,747</b>
<b>Total Capital Expenditure</b>	<b>6,678,759</b>	<b>13,703,951</b>	<b>7,026,351</b>

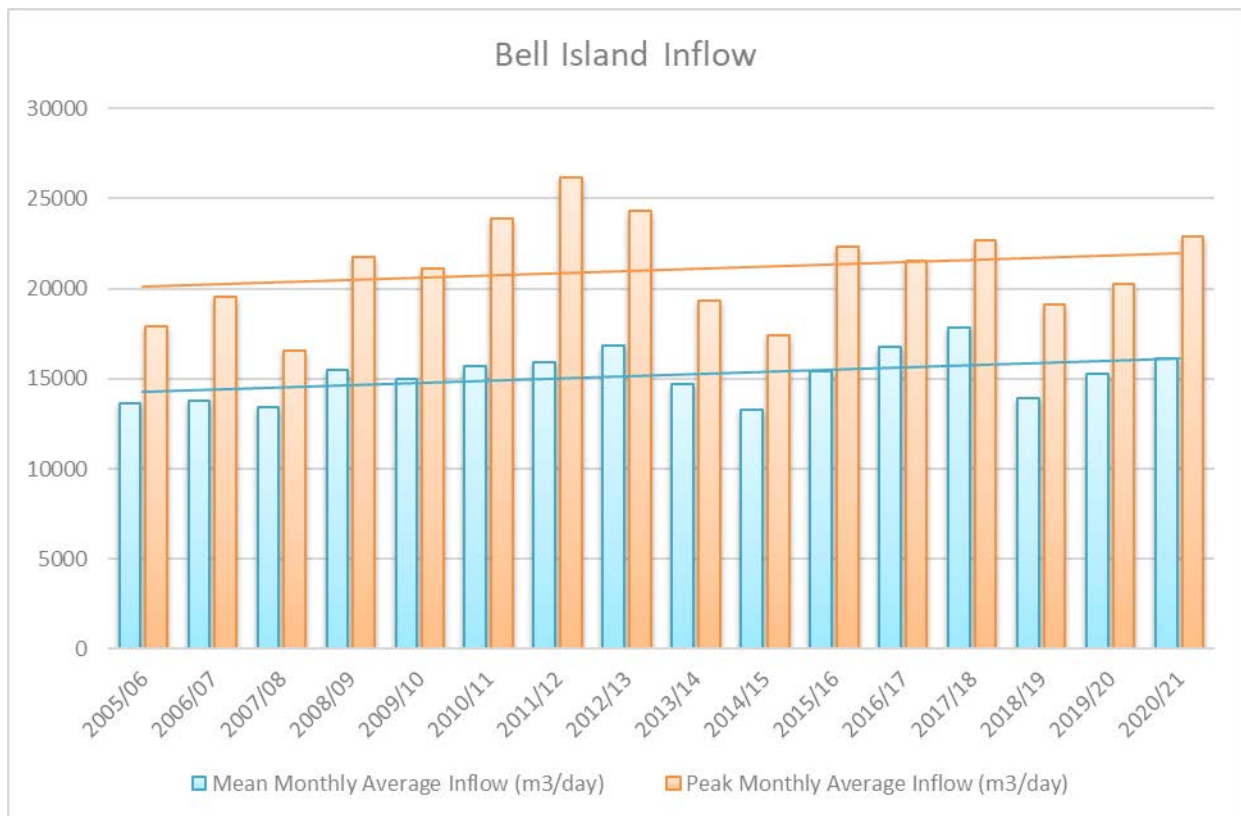
6.4 Scheme Capacity Trends

Capacity	Average flow m <sup>3</sup> /day	Peak flow l/s	BOD kg/day	COD kg/day	SS kg/day	TKN kg/day	TP kg/day
Estimated Capacity	25,920	1,508	12,226	28,000	11,000	750	230

**Figure 2.18: Bell Island Wastewater Treatment Plant Capacity**

Bells Island inflow figures are trending consistently upwards. This trend can be attributed to population growth within the contributory catchments.

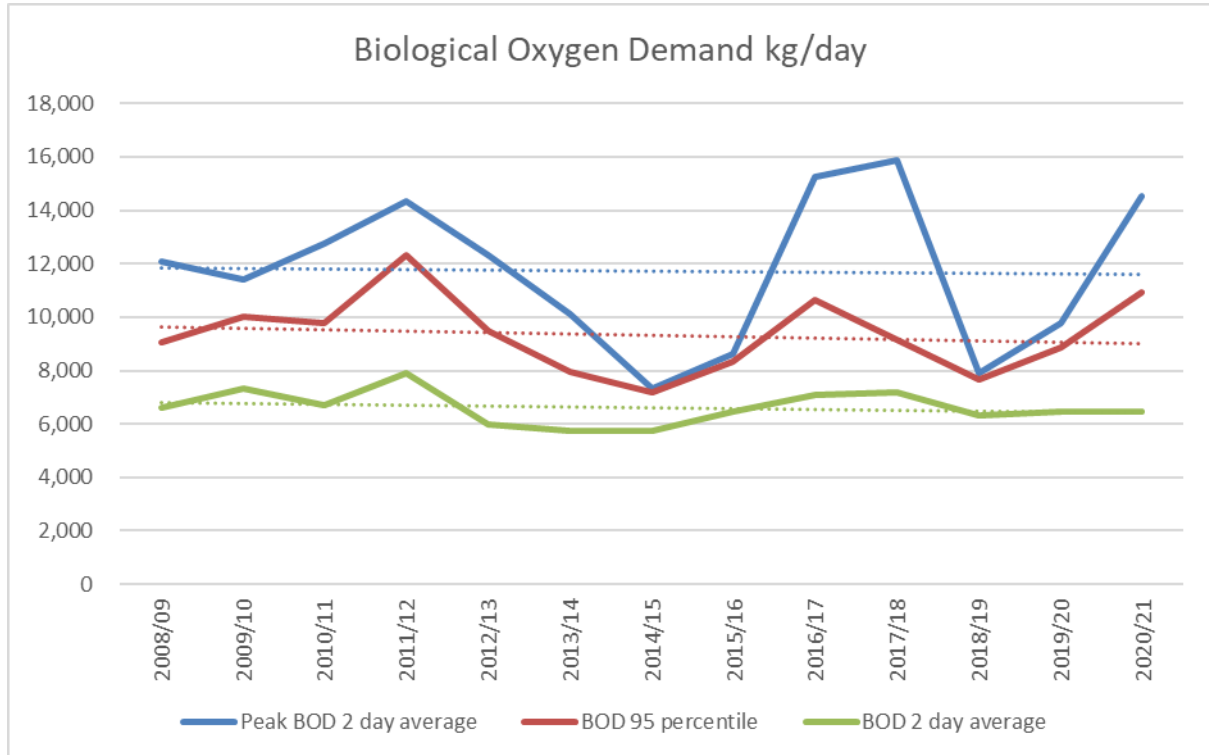
Analysis of the average vs peak inflow trendlines indicates that any reduction in inflow & infiltration within the contributory catchments has been minimal.



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### 6.5 Influent characteristics

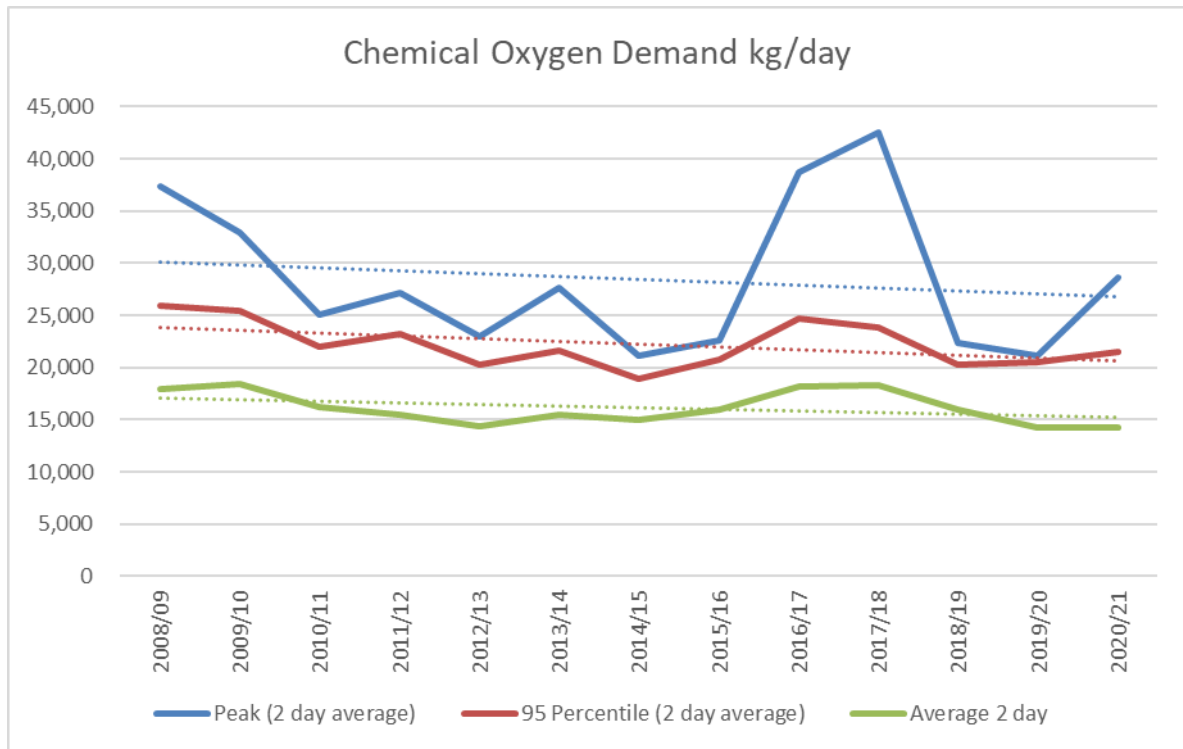
The Biological Oxygen Demand (BOD) peak & 95<sup>th</sup> percentile figures spiked during 2020/21. With average BOD remaining constant this would indicate a wider range of BOD concentrations over 2020/21





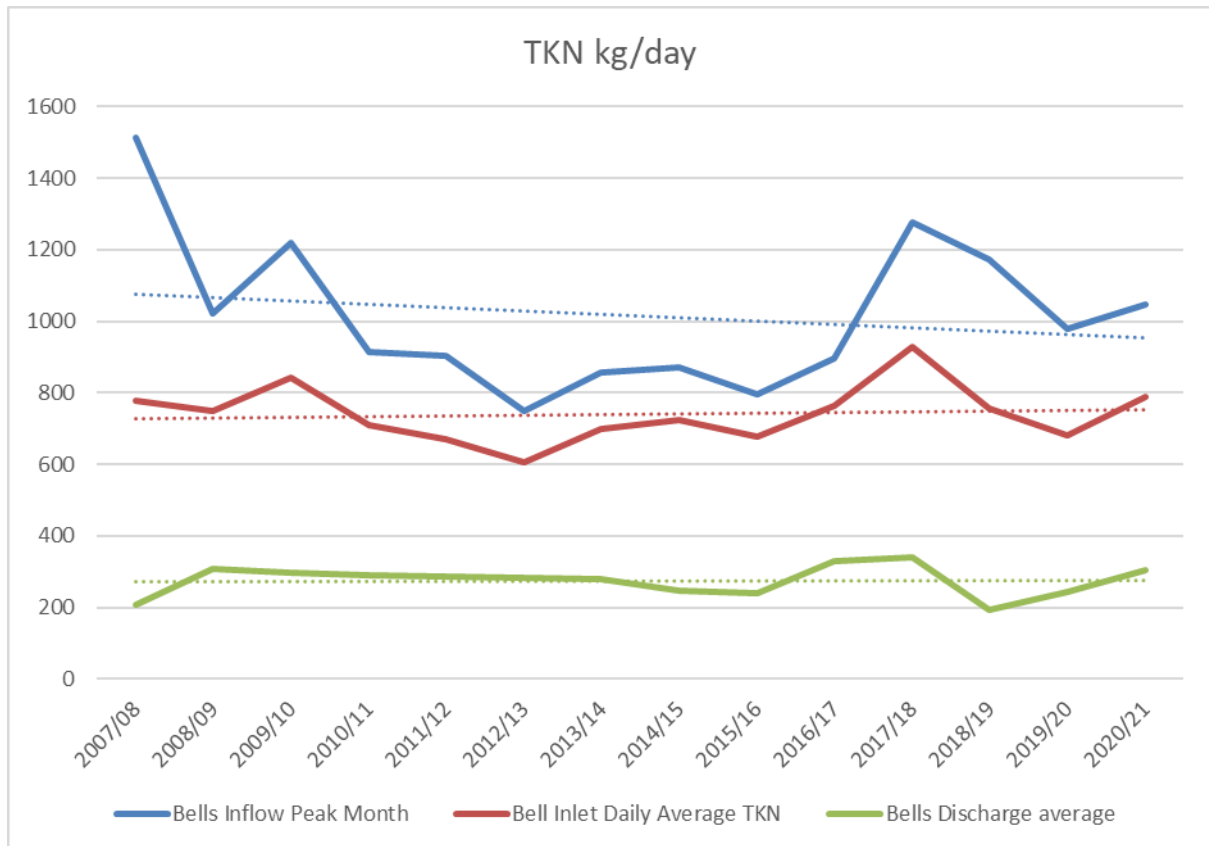
## Item 7: Nelson Regional Sewerage Business Unit Annual Report

The Chemical Oxygen Demand (COD) has continued the decrease over the last ten years. This demonstrates that the trade waste agreements continue to provide an incentive for industrial customers to improve on site treatment of waste water. The converging trendlines continue to confirm this.



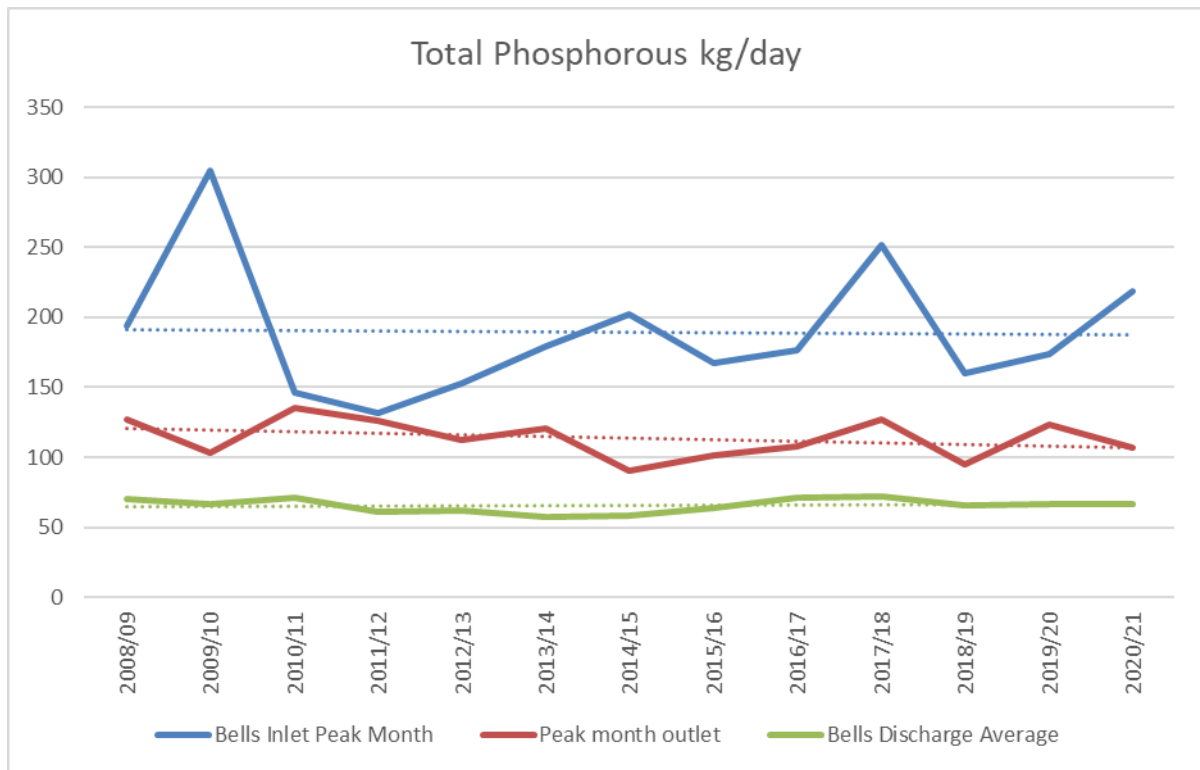
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The Total Kjeldahl Nitrogen (TKN) peaks in the wastewater received at the Bell Island Treatment Plant continues to follow a reducing trend, with a notable convergence between the average & peak trendlines.



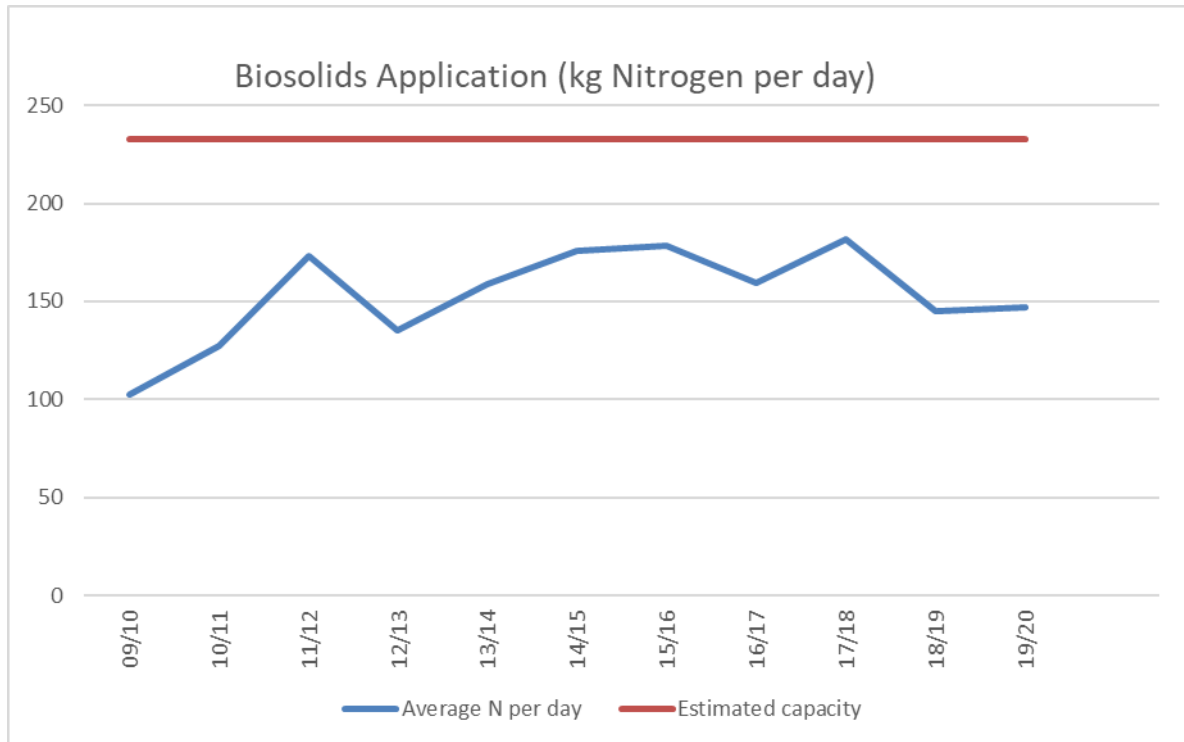
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Peak phosphorus levels in the influent increased over 2020/21, however peak discharge levels decreased. Discharge average phosphorus remained constant.



## 6.6 Nitrogen application via biosolids

The graph below shows that the application of nitrogen at Rabbit and Bell Island through biosolids application is within the capacity of these areas to receive nitrogen.



## 7. Conclusion

7.1 The assessment of environmental effects carried out as part of the resource consent application demonstrates the effectiveness of the Bell Island Wastewater Treatment Plant to treat wastewater so that the discharge from Bell Island has only a minor effect on the receiving environment. The AEE for Rabbit Island submitted as part of the NRSBU application for Biosolids Discharge consent also found no areas of environmental concern and it was concluded that our system is the best practicable option.

7.1.1 Analysis of the scheme capacity trends shows that loads to the plant have not increased at the growth projections used to develop the 2010 upgrade. The plant is well placed to continue to operate and minor improvements to capacity will be required to overcome flow related capacity issues.

7.1.2 Analysis of the scheme capacity shows that flows to the plant continue to increase and no improvement is being observed in PWWFs. Plant capacity is becoming constrained by volumetric flows, and it is expected that this will become significantly worse during rainfall events once the upgraded pipelines have been implemented. Consideration into volumetric capacity

## Item 7: Nelson Regional Sewerage Business Unit Annual Report

improvement at Bell Island need to be undertaken to assess the impact of this growth.

7.1.3 Analysis of the trends demonstrates that the quality of the discharge meets the required standards. Additional sampling undertaken during 20/21 for virus contaminants has not detected significant virus contaminants in the plant discharge.

7.1.4 Desludging of pond F2 is underway this will increase the available storage and treatment capacity within the facility.

### 7.2 Financial Performance

Explanations for major variations from the Nelson Regional Sewerage Business Unit's 2020/21 Business Plan are as follows:

#### Statement of Comprehensive Income

7.2.1 Total Income is \$148,080 below budget. The sales include a capital charge for access to treatment and an operational charge based on actual usage and actual operating cost. The capital charge budgeted was \$4,510,000 however recovery against this was \$891,890 less than budgeted.

7.2.2 Variable charges were budgeted at \$3,935,000 with the actual annual charge being \$500,053 above budget at \$4,435,053.

7.2.3 Total expenses are \$245,856 more than budget due to increased operation and maintenance largely related to the increased depreciation, management costs, and O&M costs and Biosolids disposal costs.

<b>NELSON REGIONAL SEWERAGE BUSINESS UNIT</b>					
<b>Statement of Comprehensive Revenue and Expense</b>					
<b>For the year ended 30 June 2021</b>					
	Notes	Actual 2020/21	Budget 2020/21	Actual 2019/20	
<b>Revenue</b>		\$	\$	\$	
Sales		8,053,163	8,445,000	8,079,533	
Other Recoveries		367,929	158,000	254,990	
Interest		29	-	141	
Gain in Fair Value of Forestry	5	33,800	-	23,560	
<b>Total Revenue</b>		<b>8,454,920</b>	<b>8,603,000</b>	<b>8,358,223</b>	
<b>Less Expenses</b>					
Management		589,837	500,000	798,966	
Audit Fees		-	-	1,250	
Interest Paid		272,314	714,000	334,339	
Insurance		91,283	75,000	85,415	
Depreciation	6	2,460,050	2,265,000	2,090,140	
Electricity		999,560	900,322	800,224	
Operations & Maintenance		1,703,599	1,454,657	1,527,174	
Monitoring		184,244	291,000	134,583	
Biosolids Disposal		817,645	658,571	866,614	
Consultancy		59,256	75,000	81,894	
Sundry		140,064	138,446	76,973	
<b>Total Expenses</b>		<b>7,317,852</b>	<b>7,071,996</b>	<b>6,795,072</b>	
<b>Net Surplus</b>		<b>1,137,068</b>	<b>1,531,004</b>	<b>1,563,151</b>	
<b>Other Comprehensive Revenue and Expense</b>					
Gain on revaluation of Fixed Assets	1(b)	3,529,790	-	2,602,714	
<b>Total Comprehensive Revenue and Expense</b>		<b>4,666,858</b>	<b>1,531,004</b>	<b>4,165,865</b>	

Item 7: Nelson Regional Sewerage Business Unit Annual Report

**Author:** Nathan Clarke, General Manager Regional Sewerage and  
**Landfill**

**Attachments**

Attachment 1: A2497193 NRSBU Annual Finance Report

**NELSON REGIONAL SEWERAGE BUSINESS UNIT**

**ANNUAL FINANCIAL STATEMENTS**

**For the Year ended 30 June 2021**

A2497193

## **NELSON REGIONAL SEWERAGE BUSINESS UNIT**

### **Representatives for year ended 30 June 2021**

Representing Tasman District Council  
Cr K Maling (Chairperson)  
Cr T Tuffnell

Representing Nelson City Council  
Cr T Skinner (Deputy Chair)  
Cr B McGurk

Iwi Representative  
Frank Hippolite (Resigned 29 January 2021)

Independent member  
Mr B Silcock

### **Principal Administration Office**

C/- Nelson City Council  
110 Trafalgar St  
Nelson

### **Bankers**

Westpac New Zealand Ltd  
Queen St  
Richmond

### **Solicitors**

Duncan Cotterill  
197 Bridge St  
Nelson



## **NELSON REGIONAL SEWERAGE BUSINESS UNIT**

### **Statement of Accounting policies**

**For the year ended 30 June 2021**

#### **Reporting Entity**

The Nelson Regional Sewerage Business Unit (the Business Unit) is a Joint Committee of Nelson City Council and Tasman District Council, under Section 48 of the Local Government Act 2002.

The primary purpose of the Business Unit is to manage the treatment facilities and network in a cost efficient and environmentally sustainable manner rather than making a financial return. Accordingly, the Business Unit has designated itself as a public benefit entity for the purposes of financial reporting.

The financial statements of the Business Unit are for the year ended 30 June 2020. The financial statements were authorised for issue by the Committee on the 27th August 2021.

#### **Basis of Preparation**

The financial statements have been prepared on the going concern basis, and the accounting policies set out below have been consistently applied to all periods presented in the financial statements.

#### **Statement of compliance**

The financial statements of the Business Unit have been prepared in accordance with the requirements of the Local Government Act 2002, which includes the requirement to comply with New Zealand generally accepted accounting practice (NZ GAAP).

The financial statements of the Business Unit have been prepared in accordance with Tier 2 PBE standards on the basis that the Business Unit does not have public accountability (as defined) and has total annual expenditure of less than \$30 million.

These financial statements comply with Tier 2 PBE standards.

#### **Measurement base**

The financial statements have been prepared on a historical cost basis, modified by the revaluation of land, infrastructural assets and biological assets.

#### **Functional and presentation currency**

The financial statements have been prepared in New Zealand dollars and all values are rounded to the nearest dollar. The functional currency of the Business Unit is New Zealand dollars.

### **Accounting Policies**

The following particular accounting policies which materially affect the measurement of results and financial position have been applied:

#### **a) Revenue**

Revenue is measured at the fair value.

Interest income is recognised using the effective value method.

#### **Exchange and non-exchange transactions**

An exchange transaction is one in which Business Unit receives assets or services, or has liabilities extinguished, and directly gives approximately equal value in exchange. Non-exchange transactions are where Business Unit receives value from another entity without giving approximately equal value in exchange

#### **Sales and provision of services**

Revenue from the rendering of services is recognised by reference to the stage of completion of the transaction at balance date, based on the actual service provided as a percentage of the total services to be provided. These are exchange transactions and include charges to the two owner Councils, three large industrial customers and Septage tank operators, and rentals. The contracts with the two Councils and three large industrial customers provide for a capital charge for access to treatment and an operational charge based on actual useage and actual operating costs.

#### **b) Borrowing Costs**

Borrowing costs are recognised as an expense in the period in which they are incurred.

#### **c) Cash and Cash equivalents**

Cash and Cash equivalents includes cash on hand, deposits held at call with banks and other short term highly liquid investments with orginal maturities of three months or less.

#### **d) Trade and other receivables**

Trade and other receivables are initially recorded at face value less any provision for uncollectability.

A provision for impairment of receivables is established when there is objective evidence that the Business unit will not be able to collect all amounts due according to the original terms of the receivables. The amount that is uncollectable is the difference between the amount due and the present value of the amount expected to be collected.

#### **e) Trade and other payables**

Short term creditors and other payables are recorded at their face value.

#### **f) Borrowings**

Borrowings are initially recognised at their face value plus transaction costs. After initial recognition, all borrowings are measured at amortised cost using the effective interest method.

Borrowings are classified as current liabilities unless the Council or group has an unconditional right to defer settlement of the liability for at least 12 months after balance date.

#### **g) Income tax**

As a Joint Committee of Nelson City Council and Tasman District Council the Business Unit's surplus is incorporated into the accounts of the two councils. The Business operations are a non-taxable activity for each Council.

#### **h) Goods and Services Tax**

The financial statements have been prepared exclusive of goods and services tax (GST) with the exception of trade receivables and payables, which are stated with GST included.

#### **i) Distribution Policy**

Any Net Surplus Income before extraordinary items over budget, as decided by the Committee, is returned to the Councils on an equal share basis. These are exchange transactions.

#### **j) Property, Plant and Equipment**

There are three categories of Property, Plant and Equipment:

- Freehold land
- The Infrastructural Network – incorporates pipelines, pump stations, ponds, aerators, clarifiers, odour control unit, power supply and buildings
- Work in Progress

#### **Revaluation of property plant and Equipment**

- Land is reviewed annually and revalued at market value every five years or if there is a material movement. The latest valuation was conducted as at 30 June 2021 by QV Valuations.

- Infrastructural assets are valued annually internally at depreciated replacement cost by Council engineers as at 30 June 2021. The valuation methodology has been peer reviewed by Opus International Consultants Ltd and revaluations are updated annually. Work in progress is recognised at cost less impairment and is not depreciated.

The results of revaluing land and infrastructural assets are credited or debited to other comprehensive revenue and expense and are accumulated to an asset revaluation reserve in equity for that class of asset. Where this results in a debit balance in the asset revaluation reserve for any class of asset, this is expensed in the Surplus or Deficit. To the extent that increases in value offset previous decreases debited to the Surplus or Deficit, the increase is credited to the Surplus or Deficit.

#### **Additions**

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The cost of an item of property, plant and equipment is recognised as an asset if, and only if, it is probable that future economic benefits will flow to the Business Unit and the cost can be measured reliably.

Vested infrastructure assets have been valued at the time of vesting based on the actual quantities of infrastructure components vested and the current 'in the ground' cost of providing identical services.

Work in progress is measured at cost less impairment and is not depreciated.

New Business Unit assets are added between valuations are recorded at cost except when acquired through a non-exchange transaction. Where an asset is acquired through a non-exchange transaction, such as vested assets it is recognised at fair value as at the date of acquisition.

**k) Depreciation**

Depreciation is provided on a straight line basis on all PPE other than Land at rates which will write off the cost/valuation of the assets over their useful lives. The useful lives of the major classes of infrastructural assets have been estimated as follows:

Sewerage Network	10 - 999 years
Buildings	50 years
Plant & Equipment	5 - 50 Years

The Business Unit has implemented an activity management plan for the continuing replacement and refurbishment of components to ensure that conveying, treatment and disposal systems are maintained to provide a satisfactory service on an ongoing basis.

iii) Work in progress is valued at cost of construction. Depreciation is applied at time of commissioning.

**l) Biological Assets**

Forestry consisting of 18 hectares planted on Bell Island adjacent to the ponds is revalued annually by P F Olsen and Company Ltd to Market Value. The latest valuation available is at 30 June 2020.

The movement in the Forestry valuation is recorded in the Surplus or Deficit as income if a credit and as an expense if a debit.

**m) Budget figures**

The budget figures are those approved by the Committee at the beginning of the year in the Business Plan. The budget figures have been using accounting policies that are consistent with those adopted by the Committee for the preparation of financial statements.

**n) Critical accounting estimates and assumptions**

In preparing these financial statements the Business Unit has made estimates and assumptions concerning the future. The key assumptions relate to the valuation of the Business Unit's property, plant and equipment. These estimates and assumptions may differ from the subsequent actual results. Estimates and assumptions are continually evaluated and are based on historical experience and other factors, including estimates and expectations of future events that are believed to be reasonable under the circumstances.

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**NELSON REGIONAL SEWERAGE BUSINESS UNIT****Statement of Comprehensive Revenue and Expense  
For the year ended 30 June 2021**

	Notes	Actual 2020/21	Budget 2020/21	Actual 2019/20
<b>Revenue</b>		\$	\$	\$
Sales		8,053,163	8,445,000	8,079,533
Other Recoveries		367,929	158,000	254,990
Interest		29	-	141
Gain in Fair Value of Forestry	5	33,800	-	23,560
<b>Total Revenue</b>		<u>8,454,920</u>	<u>8,603,000</u>	<u>8,358,223</u>
<b>Less Expenses</b>				
Management		589,837	500,000	798,966
Audit Fees		-	-	1,250
Interest Paid		272,314	714,000	334,339
Insurance		91,283	75,000	85,415
Depreciation	6	2,460,050	2,265,000	2,090,140
Electricity		999,560	900,322	800,224
Operations & Maintenance		1,703,599	1,454,657	1,527,174
Monitoring		184,244	291,000	134,583
Biosolids Disposal		817,645	658,571	866,614
Consultancy		59,256	75,000	81,894
Sundry		140,064	138,446	76,973
<b>Total Expenses</b>		<u>7,317,852</u>	<u>7,071,996</u>	<u>6,795,072</u>
<b>Net Surplus</b>		<u>1,137,068</u>	<u>1,531,004</u>	<u>1,563,151</u>
<b>Other Comprehensive Revenue and Expense</b>				
Gain on revaluation of Fixed Assets	1(b)	3,529,790	-	2,602,714
<b>Total Comprehensive Revenue and Expense</b>		<u><u>4,666,858</u></u>	<u><u>1,531,004</u></u>	<u><u>4,165,865</u></u>

**Statement of Changes in Equity  
For the year ended 30 June 2021**

	Actual 2019/20	Actual 2019/20
<b>Equity at the start of Year</b>	\$	\$
Opening Equity	52,265,552	49,662,837
Plus Total Comprehensive Revenue and Expense for the year	4,666,858	4,165,865
Less Owners Distribution	1,137,068	1,563,151
<b>Equity at the end of Year</b>	<u><u>55,795,342</u></u>	<u><u>52,265,552</u></u>

Explanations of major variances against budget are found in note 11.

The attached notes form part of and should be read in conjunction with these financial statements.

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**NELSON REGIONAL SEWERAGE BUSINESS UNIT****Statement of Financial Position  
as at 30 June 2021**

	Notes	Actual 2021	Actual 2020
<b>Equity</b>		\$	\$
Accumulated Funds	1(a)	15,819,055	15,819,055
Contingency reserve		100,000	100,000
Revaluation reserve	1(b)	39,876,286	36,346,496
<b>Total Equity</b>		<u>55,795,341</u>	<u>52,265,551</u>
This was represented by:			
<b>Current Assets</b>			
Cash and cash equivalents		3,778	4,382
Trade receivables from exchange transactions		280,691	568,279
Inter-entity receivables from exchange transactions		325,091	357,949
<b>Total Current Assets</b>		<u>609,560</u>	<u>930,610</u>
<b>Current Liabilities</b>			
Trade Payables from exchange transactions		415,037	535,273
Sundry Creditors and other payables from exchange transactions		0	21,081
Inter-entity payables from exchange transactions	4	2,253,704	1,960,928
Current portion Inter-Entity Borrowings	2	740,000	960,000
<b>Total Current Liabilities</b>		<u>3,408,741</u>	<u>3,477,282</u>
<b>Net Working Capital</b>		<u>(2,799,180)</u>	<u>(2,546,672)</u>
<b>Non Current Assets</b>			
Property, plant and equipment	6	78,499,922	70,751,423
Forestry assets	5	94,600	60,800
<b>Total Non Current Assets</b>		<u>78,594,522</u>	<u>70,812,223</u>
<b>Non Current Liabilities</b>			
Borrowings	2	20,000,000	16,000,000
<b>Total Non Current Liabilities</b>		<u>20,000,000</u>	<u>16,000,000</u>
<b>Net Assets</b>		<u>55,795,341</u>	<u>52,265,551</u>

For and on behalf of the Nelson Regional Sewerage Business Unit

Chairman

General Manager

Date 11th September 2020

The attached notes form part of these financial statements

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**NELSON REGIONAL SEWERAGE BUSINESS UNIT**Statement of Cash Flows  
For the year ended 30 June 2021

	Notes	2020/21 \$	2019/20 \$
<b>Cash Flows from Operating Activities</b>			
Receipts from customers		8,741,537	8,435,324
Interest received		29	141
		<u>8,741,566</u>	<u>8,435,464</u>
Payments to suppliers		(3,914,519)	(3,232,929)
Interest paid		(272,314)	(334,339)
		<u>(4,186,833)</u>	<u>(3,567,268)</u>
<b>Net Cash Flows from Operating Activities</b>	3	<u>4,554,733</u>	<u>4,868,196</u>
<b>Cash Flows from Investing Activities</b>			
Purchase of property, plant and equipment		(6,772,186)	(6,089,902)
<b>Net Cash from Investing Activities</b>		<u>(6,772,186)</u>	<u>(6,089,902)</u>
<b>Cash Flows from Financing Activities</b>			
Owners Distribution		(1,563,151)	(1,978,374)
Loan repayment		(220,000)	0
Loan raised		4,000,000	2,960,000
<b>Net Cash from Financing Activities</b>		<u>2,216,849</u>	<u>981,626</u>
<b>Net Increase/(Decrease) in cash and cash equivalents</b>		(604)	(240,080)
Cash and cash equivalents at beginning of the year		4,382	244,462
Cash and cash equivalents at the end of year		<u>3,778</u>	<u>4,382</u>

The attached notes form part of these financial statements

A2497193

**NELSON REGIONAL SEWERAGE BUSINESS UNIT**Notes to and forming part of the Financial Statements  
for the year ended 30 June 2021

	2020/21	2019/20
	\$	\$
<b>1 Equity</b>		
The Business Unit is jointly owned by the Nelson City Council and the Tasman District Council.		
<b>1(a) Accumulated Funds</b>		
Opening Balance	15,819,055	15,819,055
Net Surplus	1,137,068	1,563,151
Distribution to Owners	<u>(1,137,068)</u>	<u>(1,563,151)</u>
Closing Balance	<u>15,819,055</u>	<u>15,819,055</u>
<b>1(b) Revaluation Reserve</b>		
Opening Balance	36,346,496	33,743,782
Revaluation Movements		
Land revaluation	327,500	0
Buildings revaluation	4,468	(20,418)
Sewerage network revaluation	3,197,822	2,636,877
Plant & Equipment revaluation	<u>0</u>	<u>(13,745)</u>
Total Revaluation Movement	<u>3,529,790</u>	<u>2,602,714</u>
Closing Balance	<u>39,876,286</u>	<u>36,346,496</u>
<b>Balance held as follows:-</b>		
Land	2,738,357	2,410,857
Buildings	324,642	320,174
Sewerage network	36,616,927	33,419,105
Plant & Equipment	<u>196,360</u>	<u>196,360</u>
<b>Total Revaluation Reserve</b>	<u>39,876,286</u>	<u>36,346,496</u>

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**2 Term Loans**

A core funding facility exists with Tasman District and Nelson City for 110% of the current funding with a constant maturity of no less than five years.

Interest rates payable range was 1.455% to 1.455% with a weighted average of 1.455%. (For 2019/20 the range was 2.58% to 1.775% with a weighted average of 2.379%).

	2020/21	2019/20
Total Loans	20,740,000	16,960,000
Less Current Portion	740,000	960,000
Term Portion	<u>20,000,000</u>	<u>16,000,000</u>
1 to 2 years	-	-
2 to 5 years	<u>20,000,000</u>	<u>16,000,000</u>
	<u>20,000,000</u>	<u>16,000,000</u>

A working capital facility exists with Nelson City with interest rates payable on the same rate as the core funding facility. At 30 June \$740,000 was drawn down (2019 \$960,000).

The interest rate on the borrowings from the two Councils is set at the three year swap rate plus a margin equivalent to the rate charged by Westpac bank to Nelson City Council. As at 30 June 2021 this rate was 2.225% which will be used to calculate the Capital Charge in the Trade Waste charges to customers for 2021/22. (June 2020 1.455%)

**3 Related party transactions**

Related party disclosures have not been made for transactions with related parties that are within a normal supplier or client/recipient relationship on terms and conditions no more or less favourable than those it is reasonable to expect the Business Unit would have adopted in dealing with the party at arm's length in the same circumstances.

**4 Inter-entity payables from exchange transactions**

Inter-entity payables from exchange transactions is the amount owing to the two Council owners in regard to the unpaid owners distribution.

**5 Forestry Assets**

The Biological Assets are valued at Fair Value less cost to sell. Any movement in the valuation is recorded in the Profit and Loss Account.

	<u>2021</u>	<u>2020</u>
	\$	\$
Opening Balance	60,800	37,240
Current increase (decrease) in Market Value	<u>33,800</u>	<u>23,560</u>
Closing balance	<u>94,600</u>	<u>60,800</u>

**6 Property, plant and equipment continued - further disclosures**

There are a number of Estimates and Assumptions exercised when valuing the infrastructural assets using the depreciated replacement cost method. These include:

- Estimating any obsolescence or surplus capacity of the asset.
- Estimating the replacement cost of the assets.
- Estimating the remaining useful life over which assets are depreciated. To minimise this risk, infrastructural assets useful lives have been determined with reference to the NZ Infrastructural Asset Valuation and Depreciation Guidelines and have been adjusted for local conditions based on past experience. Asset inspections, deterioration, and condition modelling are also carried out regularly as part of the asset management planning activities, which provides further assurance over useful life estimates.

There are no restrictions on the Business Units' Property, plant and equipment.

**7 Financial Instruments**

The Business Unit is party to financial instrument arrangements as part of its everyday operations. These financial instruments include cash and cash equivalents, accounts receivable and payable, investments, and loans which have all been recognised in the financial statements. Revenues and expenses in relation to all financial instruments are

**a) Credit Risk**

Financial instruments which are potentially subject to credit risk consist of bank balances, accounts receivable and short term deposits.

	<u>2021</u>	<u>2020</u>
	\$	\$
Bank Balances	3,778	4,382
Accounts Receivable	605,782	926,228

No collateral is held on the above accounts

**b) Concentration**

Concentrations of credit risk with respect to accounts receivable are high, with Nelson City Council, Tasman District Council and three private users as major customers. However, all are considered high credit quality entities.

**c) Currency Risk**

Nelson Regional Sewerage Business Unit has no currency risk as any financial instruments it deals with are all in New Zealand dollars.

**d) Fair value interest rate risk**

The Business Unit is exposed to interest rate risk and seeks to minimise this exposure through the adopted treasury policy which provides for an interest rate based on a 3-year market swap rate on the facilities with the two owner councils.

**8 Statement of Contingent Assets and Contingent Liabilities**

The Business Unit has no contingent asset or contingent liabilities as at 30 June 2020 (2019 Nil).

**9 Statement of Commitments**

The Business Unit has capital commitments of \$3,200,000 as at 30 June 2021. (2020 \$970,000).

	<u>2021</u>	<u>2020</u>
Operating Leases as lessor		
Less that one year	-	-
One to Five years	-	-
Over five years	-	-

**10 Subsequent events**

There are no material adjusting events after balance date.

**11 Explanation of major variances against budget**

**Statement of Comprehensive Revenue and Expense**

Total Revenue is \$148,000 less than budget. The sales include a capital charge for access to treatment and an operational charge based on actual usage and actual operating cost. The capital charge was \$892,000 less than budget and the operational charge was \$500,000 more budget due to recovery of operational costs above budget under the charging formula. Other recoveries are up \$210,000 due to increased recoveries from Septage operators.

Total expenses are \$246,000 more than budget due to higher operations and maintenance costs of \$492,000 and depreciation of 4195,000 less Interest savings of \$442,000. The higher operations and maintenance costs were due to increased operational costs, biosolid disposal, electricity and management costs less lower monitoring costs.

**6 Property, plant and equipment**

	Land	Sewerage Network	Buildings	Plant & Equipment	Vehicles	Total
<b>Valuation / Cost</b>						
Balance June 2019	3,095,000	60,522,831	289,727	316,780	-	64,224,338
Additions 2020	3,103,500	2,827,694	55,034	28,283	-	6,014,511
Revaluation 2020	-	2,636,877	(20,418)	(13,745)	-	2,602,714
Revaluation transfer 2020	-	(2,038,534)	(15,419)	(36,187)	-	(2,090,140)
Balance June 2020	6,198,500	63,948,868	308,924	295,131	-	70,751,423
Additions 2021	-	6,549,971	56,004	28,283	44,501	6,634,258
Revaluation 2021	327,500	3,197,822	4,468	-	-	3,529,790
Revaluation transfer 2021	-	(2,392,594)	(21,843)	(45,613)	-	(2,460,050)
Balance June 2021	6,526,000	71,304,066	347,553	277,801	44,501	78,455,421
<b>Accumulated Depreciation</b>						
Balance June 2019	-	-	-	-	-	-
Depreciation charge 2020	-	2,038,534	15,419	36,187	-	2,090,140
Revaluation transfer 2020	-	(2,038,534)	(15,419)	(36,187)	-	(2,090,140)
Balance June 2020	-	-	-	-	-	-
Depreciation charge 2021	-	2,392,594	21,843	45,613	-	2,460,050
Revaluation transfer 2021	-	(2,392,594)	(21,843)	(45,613)	-	(2,460,050)
Balance June 2021	-	-	-	-	-	-
<b>Carrying amounts</b>						
Balance June 2020	6,198,500	63,948,868	308,924	295,131	-	70,751,423
Balance June 2021	6,526,000	71,304,066	347,553	277,801	44,501	78,455,421
<b>Work in Progress (Included above)</b>						
Property, plant and equipment in the course of construction by class of assets is detailed below						
Balance June 2020	-	1,505,026	-	-	-	1,505,026
Balance June 2021	-	4,024,868	-	-	-	4,024,868



## Nelson Regional Sewerage Business Unit

27 August 2021

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**Report Title:** Nelson Regional Sewerage Business Unit Capital Carryover Report

**Report Author:** Nathan Clarke - General Manager Regional Sewerage and Landfill

**Report Number:** R26165

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### 1. Purpose of Report

- 1.1 To consider and approve the 2020/21 capital and renewals carryover requirements to 2021/22.

### 2. Summary

- 2.1 A significant amount of Capital upgrading work has commenced but has not been completed during the 2020/2021 year. This work is necessary, and it is therefore important to carry over unspent capital from 2020/21 to 2021/22 to allow this work to be undertaken.

### 3. Recommendation

*That the Nelson Regional Sewerage Business Unit*

1. ***Receives the report Nelson Regional Sewerage Business Unit Capital Carryover Report (R26165); and***
2. ***Approves the carryover of capital (\$5.977M) and Renewals budgets (\$1.048M) from 2020/21 financial year to the 2021/22 financial year, to ensure continuation of urgent and planned works.***

## Item 8: Nelson Regional Sewerage Business Unit Capital Carryover Report

### 4. Background and Discussion

- 4.1 NRSBU has been undertaking a challenging renewals and expenditure programme during the 2020/21 financial year.
- 4.2 Officers generally approach capex projects with a three-year duration, allowing a year for concept development, a year for detailed design and consenting (if required), and a year for construction.
- 4.3 Officers are now approaching a year's employment within Regional Services, and as a result the current renewals and capex projects have had to be completed within an accelerated timeframe.
- 4.4 Business unit resource levels are lower than needed to meet the workloads, and whilst assistance has been provided from NCC Capital Projects and external support has been engaged from consultants, delivery timeframes have had to be extended.
- 4.5 To ensure that the final project outcomes represent high quality, high performing, and value for money installations, several project timelines have been delayed. This will result in funding required to be carried over from 2020/21 to 2021/22.
- 4.6 Ensuring that the correct contractor, both in terms of capability and value, has been selected for the work has also impacted on completion timeframes. This is due to the market experiencing significant capacity constraints through high post-COVID shutdown workloads.
- 4.7 The following tables detail overall renewals and capital expenditure as at 30 June 2021, along with the 2020/21 proposed carry-over

Carry Over Renewals Summary				
	Month Actual	Actual YTD	Full Budget	Budget
	30th June 2021	30th June 2021	2020/21	Carryover
Renewals: Buildings	\$ 350	\$ 22,749	\$ 245,000	\$ 222,251
Renewal Inlet	-\$ 5,541	\$ 60,818	\$ 300,000	\$ 239,182
Renewals: Pump Stations and Rising Mains	\$ 9,150	\$ 43,008	\$ 50,000	\$ 6,992
Relining Estuary pipeline - Nayland to Martins	\$ -	\$ 687		
Road renewal	\$ 90,812	\$ 265,215	\$ 92,433	-\$ 172,782
Renewal Aeration Basin	\$ -	\$ 20,680	\$ 20,680	\$ 0
Renewal Primary Clarifier	\$ -	\$ 25,458	\$ 30,000	\$ 4,542
Renewal: Sludge Storage	\$ 32,647	\$ 134,183	\$ 200,000	\$ 65,817
Renewal: Aerators			\$ 123,400	\$ 123,400
Renewals sludge treatment	\$ -	\$ 8,803	\$ 8,803	-\$ 0
Renewals: Outfall	\$ -	\$ -	\$ -	\$ -
Renewal: Sundry Plant	\$ 2,172	\$ 95,491	\$ 120,000	\$ 24,509
Inlet. Aeration Basin, Clarifier & Ponds			\$ -	\$ -
Bell Island Discharge Consent	\$ -	\$ 140,609	\$ 139,240	-\$ 1,369
AM: Bell Island Discharge Consent	\$ -	\$ -	\$ -	\$ -
Rabbit Island renewals	\$ 25,596	\$ 43,119	\$ 30,000	-\$ 13,119
Renewal: Ponds	\$ 43,107	\$ 72,887	\$ 70,221	-\$ 2,666
Renewal: Saxton Is Air Valve Chambers	\$ 250	\$ 2,746	\$ 150,000	\$ 147,254
Renewal: DAF Saturator Tank	\$ 20,273	\$ 120,871	\$ 140,000	\$ 19,129
Carryover - Aerators			\$ 385,463	\$ 385,463
<b>Total renewals</b>	<b>\$218,814</b>	<b>\$1,057,323</b>	<b>\$2,105,240</b>	<b>\$1,048,604</b>



## Item 8: Nelson Regional Sewerage Business Unit Capital Carryover Report

4.8 The following table details the capital expenditure carryover summary.

Capital Project Carry-over Summary				
	Month Actual	Actual YTD	Full Budget	Budget
	30th June 2021	30th June 2021	2020/21	Carryover
Land purchase	0	0	0	0
Regional Pipeline duplication & Pumpstation Upgrades	\$ 26,328	\$ 904,101	\$ 3,585,000	\$ 2,680,899
LOS from Consent requirements				
Capital: Resource Consent	\$ 30,331	\$ 137,611	\$ 85,000	-\$ 52,611
Pump Station Overflow Screens	\$ 48,680	\$ 216,466	\$ 480,000	\$ 263,534
Inlet Odour upgrade	\$ 84,664	\$ 700,994	\$ 400,000	-\$ 300,994
Generator Project	\$ 325,945	\$ 352,284	\$ 1,400,000	\$ 1,047,716
Washwater and Water recycling	\$ 47,128	\$ 901,230	\$ 750,000	-\$ 151,230
ATAD Odour Upgrade	\$ 17,852	\$ 50,905	\$ 750,000	\$ 699,095
Sludge Management in Ponds at Bell	\$ 88,884	\$ 1,458,525	\$ 803,669	-\$ 654,856
Capital: Oxidation Ponds	\$ -	\$ 1,190	\$ 755,242	\$ 754,052
Rabbit island Consent requirement	\$ 6,227	\$ 280,815	\$ 300,000	\$ 19,185
Carbon Management system			\$ 50,000	\$ 50,000
Ponds Effluent improvement			\$ -	\$ -
Duplicate Pipeline - Saxton PS to Nayland rd	\$ 382	\$ 472		
<b>Other</b>				
Airport PS Flooding resilience	\$ 300	\$ 2,746	\$ 100,000	\$ 97,254
Saxton PS Flooding resilience	\$ 25,183	\$ 27,180	\$ 100,000	\$ 72,820
Biosolids Upgrades	-\$ 50,666	\$ 93,548	\$ 107,437	\$ 13,889
Beach Road Pump Station Bund	\$ 70,283	\$ 89,227	\$ 115,000	\$ 25,773
Songer St Pump Station Bund	\$ 37,001	\$ 65,299	\$ 85,000	\$ 19,701
Beach Road PS Flooding reilience	\$ 300	\$ 3,604		-\$ 3,604
Songer Road PS Flooding reilience	\$ 849	\$ 2,157		-\$ 2,157
Operator Building	\$ -	\$ 15,713	\$ 300,000	\$ 284,287
Data and record systems	\$ -		\$ 30,000	\$ 30,000
Bell Island Electricity Supply	\$ 1,722	\$ 34,260	\$ 28,100	-\$ 6,160
Bell Island road Improvements			\$ 50,000	\$ 50,000
Best Island improvements	\$ 54,537	\$ 84,672	\$ 50,000	-\$ 34,672
Capital: Plant and Equipment	\$ 20,880	\$ 38,471	\$ 100,000	\$ 61,529
Bell Island Irrigation & Fencing	\$ 159,793	\$ 159,793	\$ 300,000	\$ 140,208
Rabbit Island Water Pipeline variations			\$ 50,000	\$ 50,000
Sludge Storage Tanks	\$ -	\$ 174	\$ 750,000	\$ 749,826
Rabbit Island Tanks			\$ 74,263	\$ 74,263
Primary Clarifier			\$ -	
<b>Total New Capital</b>	<b>\$ 996,600</b>	<b>\$ 5,621,436</b>	<b>\$ 11,598,711</b>	<b>\$ 5,977,747</b>

4.9 Specifics of proposed renewal carryovers are as follows:

- 4.9.1 Buildings: During the concept design process for the new operator facilities/workshop building it was identified that the concept building would be at risk of future sea level rise. An alternative structure, on an elevated platform was preferred as an appropriate solution. Earthworks is programmed to be completed this FY, with building construction during the 2021/22.
- 4.9.2 Inlet: Refurbishment works to the concrete inflow structure have been delayed whilst the inlet odour upgrade, high pressure milliscreen wash systems and milliscreen safety upgrades were completed. This work is now programmed for the first half of 2021/22.
- 4.9.3 Sludge Storage: The refurbishment of the sludge storage tank was cancelled in lieu of a new, dual tank, system. This allows for system redundancy, which will allow future maintenance works to

## Item 8: Nelson Regional Sewerage Business Unit Capital Carryover Report

be completed on the new tanks, greatly extending their life. Design work on the tanks is complete, and construction will commence in the first half of 2021/22.

- 4.9.4 Saxton Island air valve chambers: Funding was reallocated to these works following inspections identifying chamber issues and storm surge/wave action susceptibility. Remedial measures are identified, with work due to commence in the first quarter of 2021/22.
- 4.9.5 Aerators: There is a significant renewals project for the aeration basin scheduled to commence in 2021/22. Funding was held back this year to allow staff to review the aeration delivery system, with the intention to complete a major overhaul – resulting in greater flexibility, and significantly improved power efficiency for the aeration basin.
- 4.10 Specifics of proposed capital carryovers are as follows:
- 4.10.1 Regional pipeline duplication: Contractors have been secured to complete both section 9 (Saxton PS to SH6 – Turners & Growers), and section 11 (SH6 to Monaco lining).
- Physical works through section 9 (Turners & Growers) has been deferred to 2021/22 to take advantage of significant savings presented by selecting a contractor who was not able to start in this FY. This contract has been awarded.
  - Procurement of a contractor to install the remedial lining to section 11 was extended, to allow NRSBU staff to de-risk the contractual arrangements around installation. This has been finalised, and the contractor selected, with physical works due to start in the first quarter of 2021/22.
- 4.10.2 Pump station overflow screens: Detailed design of the Songer St and Whakatu pump stations revealed several constraining factors, with insufficient hydraulic head eliminating the option of a screened gravity overflow. The requirement to install pumped overflows presented issues due to the small site footprints. To reduce construction costs, build time and constructability risks, officers identified options to repurpose existing structures to house the overflow screens and new pumps.
- The Songer St screen install is due to start this FY, with completion in the first quarter of 2021/22.
  - Whakatu has ongoing design issues relating to installing an overflow pipeline. Final design is expected to be completed early in the first quarter of 2021/22, with construction due to commence following the completion of the Songer St screen
- 4.10.3 Generators: The procurement of new emergency generators took longer than anticipated, in part due to officers working to ensure



## Item 8: Nelson Regional Sewerage Business Unit Capital Carryover Report

the selected units provided better than specified emissions. The generators have been ordered, with units to arrive and be installed in the first half of 2021/22.

- 4.10.4 ATAD Odour Upgrade: Commencement of works was deferred to allow completion of the water recycling facility, and inlet odour works. Design is now completed, with the contractor securing materials, and modifying the old DAF saturator tank for re-use as an ammonia scrubber. Works will continue during the first quarter of 2021/22.
- 4.10.5 Sludge Management: Construction of the bund foundations is complete; this is ahead of programme. Desludging has progressed, but slightly slower than anticipated due to some equipment failures and a pause to allow F2 pond conditions to stabilise. Funding is already included in 2021/22 budgets, with carryover to supplement this and allow the full desludging scope to be completed.
- 4.10.6 Bell Island Irrigation & Fencing: The purchase of the existing fencing and irrigator will be completed in the 2020/21 FY, along with some upgraded fencing on Bell Island. The remainder of the fencing work will be completed in the first half of the 2021/22.
- 4.10.7 Sludge Storage Tanks: This funding also includes refurbishment of the existing biosolids tank, and construction of a new duplicate tank and mixing/transfer system. The sludge & biosolids tank project also includes replacing the existing submersible mixer systems with an externally pumped, nozzle mixing system which should improve in tank mixing, and reduce solids settleability. Additional work has also been undertaken to include the existing, unused, heat exchanger in the biosolids pumping system, to reduce the temperature of pumped biosolids. This is in preparation for possible replacement of the aging biosolids transfer pipe to Rabbit Island with an HDPE pipe. Work on these upgrades is scheduled to commence early in the 2021/22.
- 4.11 Officers have been advised by TDC that because of changes to the NRSBU 2020/21 renewals/capital expenditure programme, TDC have elected to expend a portion of the funding allocated to NRSBU on work at their Motueka WWTP. As NRSBU will be completing 2020/21 work in 2021/22 these funds are still required.

**5. Options**

5.1 Two options have been considered for the carryover – Approving the carryover and not approving the carryover. These are outlined in the table below.

5.2 Officers support Option 2 – Approving the carryover.

<b>Option 1: Do not approve the carryover</b>	
Advantages	<ul style="list-style-type: none"> <li>• Less money will be spent, resulting in lower financing costs to contributors.</li> <li>• Less stress of Regional Service staff</li> </ul>
Risks and Disadvantages	<ul style="list-style-type: none"> <li>• The capital upgrade works will not be undertaken resulting in environmental and performance issues.</li> </ul>
<b>Option 2: Approve the carryover</b>	
Advantages	<ul style="list-style-type: none"> <li>• The capital projects will be able to continue</li> <li>• Upgrades will be possible to reduce environmental and performance issues</li> </ul>
Risks and Disadvantages	<ul style="list-style-type: none"> <li>• Regional services staff will be stressed delivering the capital projects</li> <li>• More capital money will be spent, which will increase the financing costs to contributors.</li> </ul>

**6. Conclusion**

6.1 It is recommended that \$1.048M of renewals and \$5.977M of capital funds will be required to carried forward into 2021/22. Of this total approximately \$4.25M has already been committed either via stand-alone contracts, or through the NRSS O&M contract.

6.2 Expenditure of these funds is generally programmed for completion in the first half of 2021/22.

**Author:** Nathan Clarke, General Manager Regional Sewerage and Landfill

**Attachments**

Nil

<p><b>Important considerations for decision making</b></p>
<p><b>Fit with Purpose of Local Government</b></p> <p>The NRSBU is a joint committee constituted pursuant to the provisions of Schedule 7 to the Local Government Act 2002 and contributes to the four Local Government well-beings of social, economic, environmental, and cultural.</p>
<p><b>Consistency with Community Outcomes and Council Policy</b></p> <p>Our infrastructure is efficient, cost effective and meets current and future needs.</p>
<p><b>Risk</b></p> <p>The risk of not approving the carry-overs is that contracts let and equipment ordered will not be able to be completed, and that urgent and planned works will not be able to be undertaken.</p>
<p><b>Financial impact</b></p> <p>This report has considered funding approved by the Councils and transfers capital funding to allow the delivery of the required capital upgrades as outlined in the annual and long term plans.</p>
<p><b>Degree of significance and level of engagement</b></p> <p>The NRSBU is a Joint Committee of the two Councils and its activities are included in the Long-term Plans and Annual Plans of each Council. Consultation is undertaken by both Councils in the preparation and adoption of these plans</p>
<p><b>Climate Impact</b></p> <p>A key feature of the capital programme is the ability to implement systems to reduce greenhouse gas emissions and environmental and cultural issues. Carryover of funds allows these programmes to continue.</p>
<p><b>Inclusion of Māori in the decision making process</b></p> <p>No engagement with Māori has been undertaken in preparing this report but iwi have representation on the Board.</p>
<p><b>Delegations</b></p> <p><i>The Councils are agreed that the responsibility for all management and administrative matters associated with the NRSBU operation shall be with the Board, and in particular the Board shall without the need to seek any further authority from the Councils:</i></p>

Item 8: Nelson Regional Sewerage Business Unit Capital Carryover Report

*Enter into all contract necessary for the operations and management of the Business Unit in accordance with approved Budgets and the intent of the Business Plan.*

*Authorise all payments necessary for the operations and management of the business unit within the approve budgets and the intent of the Business Plan*

*Do all other things, other than those things explicitly prohibited by this MOU or relevant statutes, that are necessary to achieve the objectives as stated in the strategic Plan, Asset Management Plan or Business Plan approved by the councils.*

*Powers to Recommend to Councils:*

*Any other matters under the areas of responsibility of the Business Unit and detailed in the Memorandum of Understanding*

*All recommendations to Council will be subject to adoption of an equivalent resolution by the other Council, unless it is a matter specific to one Council only*



## Nelson Regional Sewerage Business Unit

17 September 2021

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**Report Title:** Draft Nelson Regional Sewerage Business Unit Business Plan 2022/23

**Report Author:** Nathan Clarke - General Manager Regional Sewerage and Landfill

**Report Number:** R26215

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### 1. Purpose of Report

1.1 This report provides a summary of the Nelson Regional Sewerage Business Unit (NRSBU) Draft Business Plan 2022/23 (Draft BP) and seeks approval of this document for circulation to Nelson City Council (NCC) and Tasman District Council (TDC) for review and feedback.

### 2. Summary

2.1 The Draft BP (A2728794) is attached for approval at this meeting. The Draft BP has been developed based on the NRSBU Activity Management Plan 2021 -2031 (A2588648) adopted by NRSBU and approved by NCC and TDC during June 2021.

### 3. Recommendation

***That the Nelson Regional Sewerage Business Unit***

1. ***Receives the report Draft Nelson Regional Sewerage Business Unit Business Plan 2022/23 (R26215) and its attachment (A2728794); and***
2. ***Approves the Draft Nelson Regional Sewerage Business Unit Business Plan (A2728794) for submission to Nelson City Council and Tasman District Council for their consideration and feedback.***

## Item 9: Draft Nelson Regional Sewerage Business Unit Business Plan 2022/23

Recommendation to Nelson City Council and Tasman District Council

### ***That the Nelson City Council and Tasman District Councils***

- 1. Receive the Draft Nelson Regional Sewerage Business Unit Business Plan 2022/23 (A2728794) for review and provide feedback to the Nelson Regional Sewerage Business Unit if required.***

#### **4. Background and Discussion**

- 4.1 The NRSBU Memorandum of Understanding (MOU) outlines several activities required by the NRSBU along with specified timing for these activities.
- 4.2 The MOU also requires that the NRSBU prepare a Draft Business Plan and that this be presented to the councils by 31 December each year.
- 4.3 A draft Business Plan has been prepared to reflect the activities proposed in the second year of the NRSBU Activity Management Plan 2021 – 2031 (AMP) and as approved by each Council as part of the Long Term Plan process.

#### **5. Discussion**

- 5.1 The AMP includes a significant amount of capital expenditure throughout the 10-year period, and the Business Plan outlines the expected expenditure over the 22/23 year period based on the AMP and for a three-year period.
- 5.2 This capital expenditure is required to implement several improvements to the capacity of the regional pumping and pipework network. The plan includes additional features to allow improved maintenance, and resilience to avoid overflows from the network that could contaminate the Waimea Estuary.
- 5.3 The AMP includes an allowance for the changes to levels of service related to redundancy and resilience. These changed levels of service will allow improved pipeline maintenance and resilience which will reduce the risk of overflows to the environment.
- 5.4 Key aspects of this Draft BP include:
  - 5.4.1 A new Biosolids Application Operations and Maintenance (O&M) Contract.
  - 5.4.2 A new Bell Island O&M contract.

## Item 9: Draft Nelson Regional Sewerage Business Unit Business Plan 2022/23

- 5.4.3 Additional revenue has been identified associated with the increased recoveries from the septage facilities and irrigation of Bell and Best Island.

### **6. Operational Costs**

- 6.1 The costs to run the NRSBU will increase significantly in 22/23 based on the increase in depreciation and financing costs and on the expected cost increases for new Biosolids Application O&M contract and the new Bell Island O&M contract. These increased costs have been allowed for in the AMP.
- 6.2 The Draft BP is based on assumptions and data associated with costs incurred during the 2021/2022 financial year.
- 6.3 Regional Services staff do not have capacity to carry out the amount of work required in the capital budgets for NRSBU, and additional resources will be required.

### **7. Conclusion**

- 7.1 The Draft BP varies very little compared to the programme and budgets outlined in the approved NRSBU AMP.
- 7.2 NRSBU will need to obtain additional resources to deliver the programme of works required by the Draft BP.

### **8. Next Steps**

- 8.1 The Draft BP will need to be circulated to Nelson City Council and Tasman District Council for their feedback.
- 8.2 Following receipt of any feedback NRSBU will update the document as required for approval at the December 2021 NRSBU Board meeting.

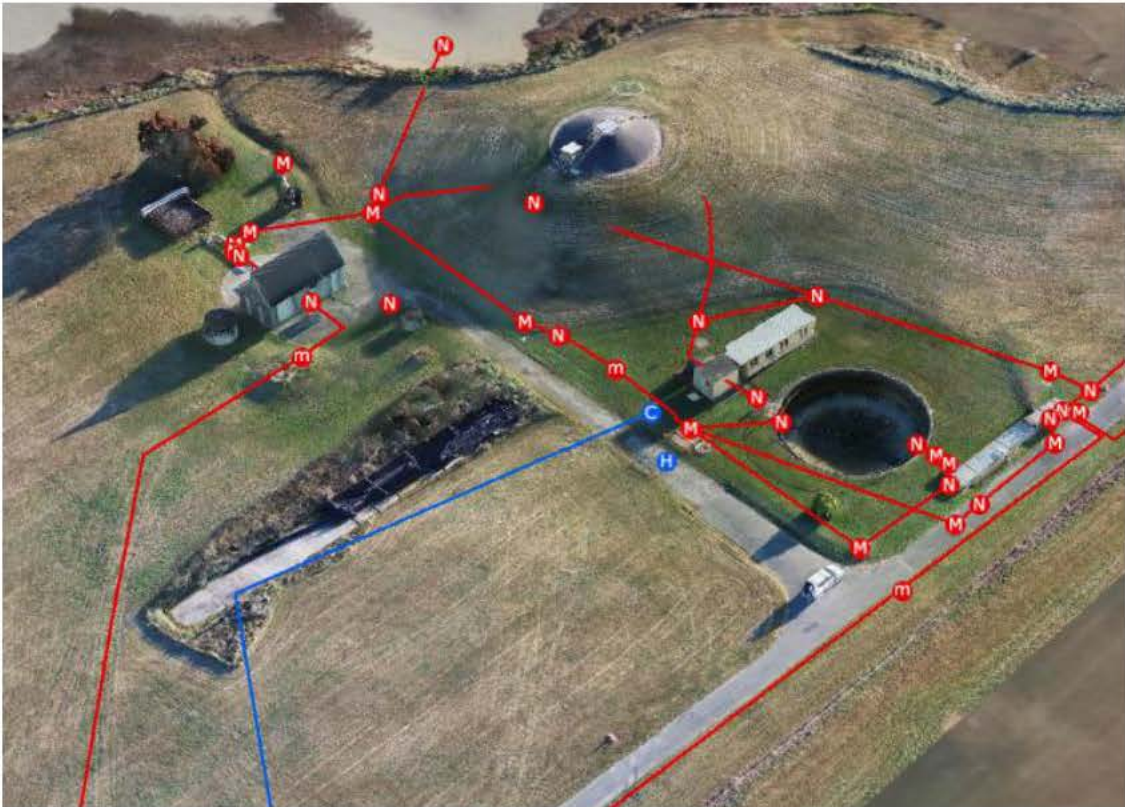
**Author:** Nathan Clarke, General Manager Regional Sewerage and Landfill

### **Attachments**

Attachment 1: A2728794 - NRSBU Bus Plan 2022-2023 Ver 0

**Nelson Regional Sewerage Business Unit**

**BUSINESS PLAN  
2022/2023**



A2728794



## NRSBU Business Plan 2022-2023

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Draft Rev 0 August 2021 for Board-prepared by:

Nathan Clarke, GM NRSBU with input from  
Brad Nixon - Operations Manager NRSBU  
Morgelyn Leizour – Acting Activity Engineer NRSBU

Approved by:

Nathan Clarke

**Cover**

Image of GIS system for Airport Pump Station

**1. PURPOSE**

The purpose of the Nelson Regional Sewerage Business Unit Business Plan 2022/2023 is to summarise management goals and objectives to deliver wastewater collection and treatment services to the region; and to 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 31 December each year supply to the Councils (Nelson City and Tasman District Councils) a copy of its draft Business Plan. The Business Plan outlines 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.

The Memorandum of Understanding (MoU) commenced on 1 July 2015 and shall terminate on 30 June 2025. The MoU was updated in March 2019.

**3. INTRODUCTION**

This Business Plan 2022/23 outlines the projects and initiatives to be implemented during the year. It also outlines the associated funding required and the details of the performance targets and measures.

The Business Plan is aligned with the NRSBU Strategic Plan and the Draft NRSBU Activity Management Plan 2021-2031. It includes business objectives and performance targets (Section 7) and the three-year financial renewal forecasts (Section 8) and the three-year capital plan (Section 9). The following key pieces of information from those other documents are included in the appendices of this business plan:

Appendix A - Committee Activity Schedule

Appendix B - Internal business improvement plan

Appendix C - Schematic layout of the NRSBU operations

Appendix D - Reduction of Adverse Environmental Effects

**4. MISSION STATEMENT**

The NRSBU's mission statement is:

**Resilient, reliable, and effective infrastructure that supports and protects our community and environment.**

Area	Goal
Our approach	Implement and operate infrastructure considering the needs of our community. Our priorities for this are protection of public health, the environment, and cultural values.
Our Vision/Ambition/Aspiration	We will work towards the beneficial reuse of resources.
Our conduct	We will undertake our activities transparently, fairly, respectfully, in a timely manner and we will provide regional infrastructure leadership.

## 5. STRATEGIC GOALS AND PERFORMANCE OBJECTIVES

The NRSBU aspires to achieve the following goals:

<b>Strategic Goal</b>	<b>Objective (This is what it looks like)</b>	<b>Level of Service (This is how we do it)</b>	
We will implement and operate infrastructure considering the needs of our community. Our priorities for this are protection of public health, the environment, and cultural values.	Containment and conveyance that is resilient and minimises adverse impacts on the health of the environment and community	We have sufficient capacity in our network to cope with peak flows	
		We are resilient to mechanical and electrical failures and natural hazards	
		We can readily maintain the network	
	Resilient wastewater treatment that minimises the impact on the environment and community	The treatment plant can reliably accept (N+1 for critical assets) all peak flows from the network	The treatment plant can fully treat all dry weather flows
			The treatment plant does not create odour issues for the community
			Effluent Quality meets or exceeds required discharge requirements
	Long term vision that considers the future needs of the community	Our ongoing business is safeguarded through engagement with council planning processes	We have long term plans for our activities and their impacts
			Have systems in place for the ongoing monitoring and reporting of emissions
Alternative methods of biosolids disposal that protect public health and the environment and are sensitive to cultural values	Have a backstop for issues with biosolids disposal		
We will work towards the beneficial reuse of resources	Use of ongoing improvement processes to identify, implement, and operate feasible biosolids reuse	Treatment to maintain 100% reuse of biosolids	
		Increase reuse value	
		Maintain 100% diversion of biosolids from disposal to landfill	
	Identified implement and operate feasible systems and infrastructure for the reuse of wastewater	We minimise the amount of effluent we discharge to water	

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.

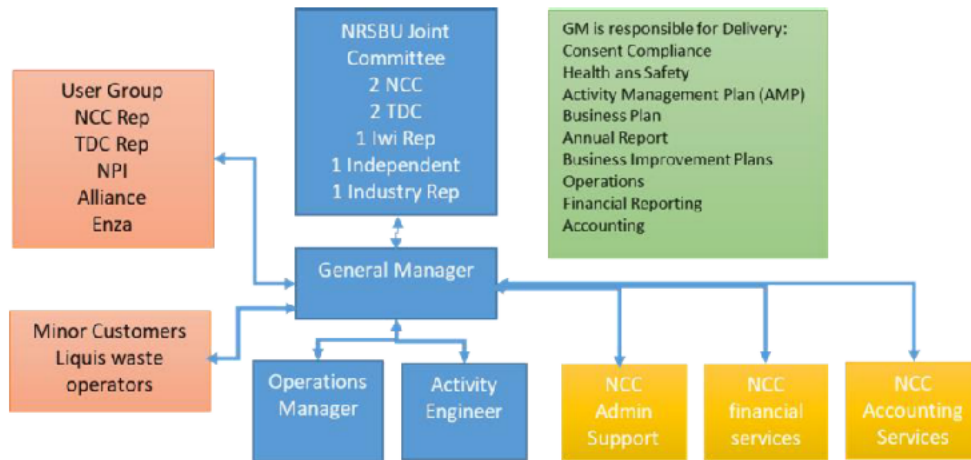
All strategic goals are important and no one goal will be pursued at the expense of another.

It is important to note that discussion is occurring nationally regarding the delivery of water services in New Zealand. This discussion includes the implementation of national discharge standards for wastewater treatment facilities. This work could have a significant influence on NRSBU, at this time NRSBU is unable to identify the outcome of this work and therefore will continue with Business as Usual.

It is necessary for NRSBU to maintain an understanding of these issues so that an appropriate response can be made if required.

## 6. NRSBU STRUCTURE

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.

This business plan relates to the second year of the NRSBU Activity Management Plan 2021-2031 adopted by NCC and TDC during June 2021.

## 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 Activity Management Plan. Performance will be reported quarterly to the Board and annually to the shareholding councils.

Performance Measure (This is how we know we're doing it)	Target
Number of overflows per year (all networks) due to NRSBU network capacity constraints, or mechanical or electrical failures.	Zero
Number of pump stations with redundant pumps and power supply.	All by June 2023**
Pump stations are to a level 3 importance level standard.	All by 2023
Number of pump stations where able to carry out routine PS maintenance works while managing ADWF.	All by 2031
Number of times PWWF flows exceed inlet works capacity.	Zero by 2031
Number of times diurnal flows bypass the mechanical system annually OR Treatment capacity of mechanical plant.	Zero OR 500L/s by 2029
Number of odour complaint events annually.	Zero by 2025
Pond free water above sludge layer.	>1m in all ponds by June 2023
Chemical Parameters comply with consents for discharge to water when discharge occurs.	Ongoing consent compliance for all parameters
Effluent quality appropriate for safe and sustainable use with land irrigation systems.	Pathogens, Nitrogen defined for land application requirements by 2023
Obtain reuse consents for appropriate land areas for Reuse Water.	Demonstrated quality performance and consents in place for reuse for dust suppression by June 2024
We have up to date plans as follows: Master plan (50 years focus) Activity Plan (10 years Focus) Business plan (1 year focus, but also with tentative three-year actions)	Master plan developed by June 2023 Activity and Business Plans are reviewed annually
The number of alternate methods/options for biosolids disposal.	One by 2035
Increase in quality of biosolids.	Biosolids Reuse Development Plan Draft by June 2023
Percentage of biosolids that is reused.	100%
Annual volume of biosolids sold.	Biosolids Reuse Development Plan Draft by June 2023
Proportion of biosolids to land or reuse/sale	100%
Number of days effluent is discharged to water in summer period (1 Dec to 31 March).	Draft Wastewater reuse plan developed by June 2023, with a goal to reaching zero by 2035
Volume of high-value water-reuse we achieve.	Draft Wastewater reuse plan developed by June 2023
Amount of total flow we can divert from discharge to water during summer period.	At least 75 <sup>th</sup> percentile by 2040

**\*\* Redundant pumps may include Duty / Assist with a Shelf Spare until pumpstation upgrades are complete**

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

<b>Renewal Plan (\$,000)</b>	<b>2021/22*</b>	<b>2022/23</b>	<b>2023/24</b>	<b>2024/25</b>
Pump Stations and Rising Mains	539	537	168	635
Inlet, Aeration Basin, Clarifier and Ponds	1409	41		610
Solids Handling and Biosolids pipelines.	592	254	1704	100
ATAD rust proofing				30
Rabbit Island	91	49		20
Fittal Street Septage Facility				200
Facilities and Roads	222	135	11	25
Wet Weather Discharge Pump				95
Road and causeway renewals	173			
General	217	130	41	120
<b>Total</b>	<b>3243</b>	<b>1146</b>	<b>1924</b>	<b>1835</b>

\* 2021/22 renewals budgets include carry overs from the 2020/2021 financial year

The renewal programme of the 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 a review of remaining useful life of assets.

Condition assessment reports may be commissioned where additional information is required to ensure optimal spend on renewals.

One key renewal item that is currently unquantified is any repair works arising following the inspection work in 21/22 for the existing 600mm diameter concrete pipe between Monaco and Bell Island. This work may necessitate reprioritisation of the Capital and Renewal plans if significant repairs are required.

General items are at the discretion of the General Manager.

## 9. THREE YEAR CAPITAL UPGRADE PLAN

The following table outlines the capital upgrades proposed over the next three years.

### Capital upgrades:

Project	21/22	22/23	23/24	24/25
Improved Operator Facilities	313			
Road Improvements	50			
Regional Generator Upgrade	1042			
Management systems	80			
Sludge Storage Tanks	750			
Pump station overflow screens and monitoring	300			
Regional pipeline capacity upgrades	6400	2,470	2,150	2,000
Inlet and ATAD Odour Upgrade	340			
Pump and discharge pipework upgrades at		2,050	350	250
Strategic review and seismic strengthening of PSs	50		50	
Flood protection of pump stations	120			
Storage at pump stations			50	50
Additional screening and duplicate grit trap at				50
Hydraulic capacity upgrades at WWTP		80	1,500	
Design of system to remove algae from pond	20			
Desludging ponds	499			25
New technology assessments to meet Consent	50			
Biosolids drying		100		
Odour and equipment upgrades at Rabbit Island	200		150	
Buffer storage at WWTP			25	200
Best Island irrigation	100	100	50	
Bell Island irrigation and effluent re-use	250	50		
Rabbit Island Irrigation	124			
Resource Consents	90			
<b>Total capex upgrades</b>	<b>10,778</b>	<b>4,850</b>	<b>4,325</b>	<b>2,575</b>

Note: the 2021/22 column has been updated to include the 2020/21 carryover.

### Commentary on Upgrade for 2022/23

The programme of work for the NRSBU has been significantly altered as a result of the Activity Management review. The smoothing undertaken during the AMP process means that the regional pipework funding may need to be bought forward if the schedule can be accelerated. Tasman District Council staff have requested NRSBU minimise delays in implementation of the upgrade.

A number of overflows to the estuary have been caused by insufficient capacity being available at the Beach Road Pumpstation.

Pump station upgrades to comply with the conditions of the aberrational discharge consent have been partly completed, the final pump station (Saxton Rd) needs to be completed during the 2022/2023 year.

The rising main upgrades for Saxton to Monaco, and Beach Road to Saxton Road have been spread over four years to reduce the expenditure profile.

**The Capital upgrades for 2022/23 covers items such as:**

- Works associated with the Beach Road to Saxtons Rd pipeline, including pump reconfiguration, MCC upgrades and new pipework.

**Regional Pipeline Upgrade:**

- Capacity improvements (in particular, downstream of Beach Road), but this programme of work has been extended into 2023/24 due to concerns that NRSBU staff will not be able to deliver the programme of works.

**Emission Management System**

Emission management will be ongoing, however 2022/23 will be used to implement initial steps for reducing emissions developed from the Emission mitigation plan developed during 2021/22.

This Emission Management work involves an assessment of the emission profile from the Bell Island WWTP ponds during 2022/23, review of emissions from Rabbit Island Biosolids application system and the Nelson Regional Sewerage System.

It will include a calculation method that can be used annually to redo the Carbon Emission Assessment based on the information collected as part of the Operations and Maintenance.

This model should be suitable for use by NRSBU staff to annually assess and report on the emissions from the NRSS and to outline emission reduction opportunities.

It needs to be noted that this calculation method may result in a different emission profile compared to a standard emission model that only uses theoretical emission factors which is what is currently used by NCC and NRSBU

**NRSBU Records and data:**

Additionally, we will continue to collate all the NRSBU historic and current information into a single access point electronic storage location, and this record system will disaggregate the asset information further than currently undertaken by NCC GIS system. The system will include all NRSBU data irrespective of it being located in TDC or NCC territories.



## 10. FINANCIAL PLAN

<b>Nelson Regional Sewerage Business Unit</b>				
<b>Budget Summary for 2022/23</b>				
	<b>Budget</b>	<b>1</b>	<b>2</b>	<b>3</b>
	21/22	22/23	23/24	24/25
<b>Income</b>				
Contributors	9,522	10,594	11,117	12,020
Interest	0	0	0	0
Other Recoveries	158	330	330	330
<b>Total Income</b>	<b>9,680</b>	<b>10,924</b>	<b>11,447</b>	<b>12,350</b>
<b>Expenditure</b>				
Operations & Maintenance	4,277	4,241	4,279	4,629
Management	500	500	500	500
Interest	730	1,167	1,401	1,604
Insurance	98	98	98	98
Depreciation	2,553	3,039	3,148	3,221
<b>Total Operating Cost</b>	<b>8,159</b>	<b>9,045</b>	<b>9,425</b>	<b>10,052</b>
<b>Surplus/Deficit</b>	<b>1,521</b>	<b>1,879</b>	<b>2,021</b>	<b>2,298</b>
<b>Use of Funds</b>				
Loan Repayment	(718)	1,894	1,224	1,386
Renewals	3,272	1,146	1,924	1,835
Owners Distribution	1,521	1,879	2,021	2,298
Upgrades	10,778	4,850	4,325	2,575
	14,852	9,769	9,494	8,094
<b>Sources of Funds</b>				
Surplus/Deficit	1,521	1,879	2,021	2,298
Depreciation	2,553	3,039	3,148	3,221
New Loans	10,778	4,850	4,325	2,575
	14,852	9,769	9,494	8,094

Note: the 2021/22 New Loan has been changed to reflect the carryover from 2020/21

## APPENDIX A

## Nelson Regional Sewerage Business Unit Committee Activity Schedule 2022-2023

Date	Activity	Papers required
By 31 August 2022	Review draft Annual Report and Financial Statement.	Draft annual report and financial statement.
By 30 September 2022	Deliver annual financial statement to Councils.	Financial Statement.
By 31 December 2022	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.
By 20 March 2023	Present Annual Report and Business Plan to Tasman District Council and Nelson City Council.	Annual Report and Business Plan.
By 30 June 2023	Review board performance Review governance policy. Review Demand Management Plan. Receive report on Contingency Plan review by customer representatives. Receive report on Risk Management review by customer representatives. Review customer satisfaction survey results. Annual review of Strategic Plan. Adopt Energy Conservation Plan. Review Audit Management Report. Annual Carbon Emission Review.	Checklist for committee effectiveness. Governance Policy. Draft Demand Management Plan. Report on Contingency Plan review by customer representatives. Report on Risk Management review by customer representatives. Customer survey report. Strategic plan. Energy Conservation Programme. Carbon Mission Measurement System development

**Appendix B****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 2017 Wastewater Asset Management Plan.

<b>IP</b>	<b>Description</b>	<b>Resource Requirements</b>	<b>Progress</b>
IP-1	Consolidate all data and information; review and develop access method.  July 22- June 23 will include disaggregation of assets within this system, and to include links from this system to Dashboards, Infor and other visualisation tools.	In-house and consultants  External consultants will need to work with NCC IT and GIS to host the new system	Implementation ongoing for completion by June 2022 for the initial consolidation access method.  July 22- 23 progress is expected to include all critical equipment to have specific assets with data and maintenance information accessible through this single system
IP-2	Continue sludge removal programme.	In-house and Contractor	On-going, Sludge Bund Consent granted 2019/2020 complete.  Sludge containment area complete 2020/2021  Desludging to be begin 2020 – Pond F2 complete by Calendar Year End 2021.  F1 and F3 desludging to be completed during 2022/23.
IP-3	Determine the long-term strategy (Master Plan)	In-house and consultants	Consultant seconded to assist preparation.  Draft to be available by June 2022 and the finalised Master Plan to be completed by December 2022
IP-4	Implement Hazardous Gas Management system for Gravity Belt Thickener system	In-house and consultants	This is programmed for early 2022/23.
IP5	Electrical Supply to Bell Island	In-house and Consultants.	Investigation and implementation of mitigation measured.  Progress 2021/22 Generators to be installed.  21/22 Solar array options reviewed  22/23 Additional Power cable options review and Consent Application

APPENDIX C

BELL ISLAND TREATMENT PLANT SCHEMATIC



## APPENDIX D

### FOCUS ON COMMUNITY AND ENVIRONMENTAL BENEFITS

The NRSBU intends to:

- have facilities that are robust and resilient – focusing on collection and conveyance system, followed by Bell Island volumetric treatment capacity.
- reduce overflows into the coastal marine environment and Tasman Bay beyond
- have a greater focus on the immediate coastal marine environment and impacts on the ecology of Tasman Bay
- Develop a water reuse strategy and implement initial reuse actions using existing reuse water and expand as financial constraints allow reuse water volume and infrastructure.
- reduce the volume of wastewater discharged to Waimea Inlet over time
- Maintain focus on biodiversity and estuary health as priorities over the next two years.
- increase attention to facilitating cultural and recreational and educational activities where these don't adversely affect core business activities.

To implement this vision, the NRSBU will:

- develop a programme of work to investigate and implement ways to reduce overflows from the sewerage pump stations to the estuary
- implement the conditions associated with the pump stations Aberrational Discharge resource consent
- undertake a trial to re-use treated wastewater to clean the inlet screens (reducing the use of potable water and consequently the volume discharged to the estuary)
- further develop investigations into the potential re-use (by others) of treated wastewater
- investigate potential tree and vegetation planting around the perimeter of Bell Island
- continue to operate the treatment plant well and achieve high quality effluent
- commission a high-level report into alternative wastewater treatment systems (that would avoid or significantly reduce the discharge of treated wastewater to the Waimea Inlet).

Item 10: Nelson regional Sewerage Business Unit General Manager Quarterly Report



## Nelson Regional Sewerage Business Unit

27 August 2021

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**Report Title:** Nelson regional Sewerage Business Unit General Manager Quarterly Report

**Report Author:** Nathan Clarke - General Manager Regional Sewerage and Landfill

**Report Number:** R26161

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### 1. Purpose of Report

1.1 This report is a three-monthly update by the General Manager (GM) on activities undertaken to the end of April 2021 by the Nelson Regional Sewerage Business Unit (NRSBU).

### 2. Summary

2.1 Operations are generally running well.

2.2 Several rainfall events have resulted in overflows within the network during late July and August. No overflows occurred prior to 30 June 2021.

2.3 Health and Safety (H&S) improvement activities have largely been completed and there are now no significant outstanding issues. There is still a programme of improvements which are considered noncritical. These are continuing to be addressed along with any additional issues identified.

2.4 A Registration of Interest (ROI) for the lease of Best and Bell Island land process was undertaken and a lease has been signed with Raine Farms Ltd. The irrigator and fences on Bell Island have been purchased from Raine Farms as part of this transaction.

2.5 Desludging is progressing on pond F2 at Bell Island. The work is progressing steadily but has stopped for several weeks due to debris in the pond causing issues with the dredge. The desludging is expected to continue until pond F2 desludging has been completed.

## Item 10: Nelson regional Sewerage Business Unit General Manager Quarterly Report

- 2.6 The regional pipeline rehabilitation project design and procurement is well underway, with construction contracts signed and commenced for the SH6 to Monaco section and the Turners and Growers section. The T&G section of the pipeline construction is approximately 50% complete.
- 2.7 The new generators for the pumpstations and Bell Island are due to arrive in October and November with enabling preparation works in development.
- 2.8 The concept design for the renewal of the sludge storage tanks and the biosolids storage tanks has been developed and we are still awaiting quotes from external suppliers for the works.
- 2.9 Financial performance to 30 June 2021 is below budget, with a significant decrease in fixed contributions compared to budget. This is mostly compensated by an increase in variable contributions and other recoveries. These cost increases have occurred due to changes outside of NRSBU control.
- 2.10 One change from the previous quarter is the continued increase in consultancy costs related to the retendering of the NRSS O&M contract, activity management support, and assistance with the NRSS valuation.

### 3. Recommendation

*That the Nelson Regional Sewerage Business Unit*

1. ***Receives the report Nelson regional Sewerage Business Unit General Manager Quarterly Report (R26161).***

### 4. Background and Discussion

- 4.1 This report is the GM update to 30 June 2020. It outlines the activities, issues and opportunities that have occurred during this period.

### 5. Health and Safety (H&S)

- 5.1 H&S at the sites is being managed well, and no significant safety issues are currently outstanding. The programme of safety improvements is currently ongoing. Progress on these activities is being updated by the contractor in each monthly report.
- 5.2 A visit to the site by NRSBU board members was undertaken in July 2021.
- 5.3 Table 1 below shows a list of H&S notifications for the period 30 April 2021 to 30 June 2021

Item 10: Nelson regional Sewerage Business Unit General Manager Quarterly Report

Health and Safety notifications for the period to 30 April 2021			
Jan 2021	Incident	Operator splashed with wastewater	Changing diffuser plate in an aerator and when pressing on the diffuser plate wastewater sprayed out bolt hole onto the staff member.
Jan 2021	Incident	Operator banged into low hanging equipment	Walked into pumpstation and walked into endless chain. No injury.
March 2021	Incident	Minor vehicle damage	Closed garage door hit vehicle when closing.
March 2021	Near Miss	Operator splashed with wastewater	Residual pressure caused Wastewater to squirt out of pipeline. – no injury.
March 2021	Incident	Trailer drawbar support leg on trailer not correctly Engaged.	Trailer tipped to angle and cause minor diesel spill.  Spill cleaned up, trailer support reviewed, and engineering modification made to support to prevent future occurrence.
April 2021	Incident	Wind caught vehicle door and swung it open causing minor damage.	Minor property damage, no injury.



Item 10: Nelson regional Sewerage Business Unit General Manager Quarterly Report

Table 2 below summarises the H&S improvements being undertaken on site.

H&S Projects	Comments
Work completed in the last three months:	<ul style="list-style-type: none"> <li>• Inlet screen odour ducting completed</li> <li>• Sealing inlet area</li> <li>• New pumpstation wet well covers at Saxton and Airport with integral fall protection.</li> </ul>
Notable works currently under way:	<ul style="list-style-type: none"> <li>• Inlet odour upgrade</li> <li>• Autothermal Thermophilic Anerobic Digestion (ATAD) odour upgrade</li> <li>• Grit removal handrail replacement</li> </ul>
Notable H&S improvement works to be commenced in the next 3 months.	<ul style="list-style-type: none"> <li>• Replacement of Beach Road PS wet well covers with integral fall protection.</li> </ul>

## 6. NRSBU Activities

6.1 NRSBU staff continue to be very busy during the period with numerous activities and projects in progress. Regional services staff capacity has become a constraint despite the secondment of an Acting Activity Engineer.

6.2 Workload has increased further, and delays have begun to occur on some projects. Without additional resource ongoing performance and projects will become further delayed.

6.3 Projects underway at present include:

6.3.1 NRSS O&M contract procurement,

6.3.2 Moturoa Rabbit Island Biosolids O&M procurement,

6.3.3 Moturoa Rabbit Island Biosolids discharge consent,

6.3.4 Rising main pipework upgrades including:

## Item 10: Nelson regional Sewerage Business Unit General Manager Quarterly Report

- Relining between SH6 and Monaco
  - T&G site pipe replacement including agreeing easements
  - Section through Heslops to coincide with Saxton Creek Stage 4 project
- 6.3.5 New generator installation at the NRSS pump stations (PS)
- 6.3.6 Overflow screening at Songer St PS
- 6.3.7 Overflow screening at Wakatu PS
- 6.3.8 Replacement of all NRSBU PS covers to improve safety and improve odour containment, and to reduced inundation risks on all the low-lying sites.
- 6.3.9 Consideration of site for overflow storage at Saxton Rd
- 6.3.10 Site improvement works at Bell Island including:
- Generator procurement and installation
  - Recycle water system optimisation.
  - Inlet works area paving improvements
  - Pond desludging and sea defence bund.
  - Vehicle underbody wash to reduce corrosion from salt water.
  - An Expression of Interest document has been developed and is ready for review prior to release to the market. The EOI has been prepared to identify parties interested in the supply and installation of a solar power systems at the Bell Island facility. The EOI would include NRSBU considering agreeing a power purchase agreement (PPA) with an appropriate party to give electricity power supply price certainty for a long period of time and a slight saving on current power costs. This would also reduce NRSBU carbon emissions. We have had three parties' express interest in this already prior to release of the documents.

This process is been undertaken in response to a company requesting information on which to base an offer for the installation of a system. NRSBU consider it appropriate to allow all interested parties to consider the opportunity rather than deal with just one party. There is no commitment to proceed further if the expressions of interest do not provide appropriate benefit to NRSBU.

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### 6.3.11 Other Bell Island Projects

- Sludge tanks replacement design
- Facilities upgrade design.
- Odour upgrades at inlet works
- Odour upgrade work at ATAD system

### 6.3.12 Renewals and maintenance on buildings and equipment.

## 7. Update on Significant projects

- 7.1 **Rabbit Island Biosolids Application Consent** – The Rabbit Island Biosolids Application consent has been publicly notified with submissions closing on 19 May 2021. NRSBU have received the information and have responded to TDC asking for additional time to see whether agreement on conditions and term of the consent can be reached with the submitters.
- 7.2 **Bell Island O&M contract** - The RFP for the Operations and Maintenance of the Bell Island facility is underway, interactive meetings have been held with the tenderers. The closing date for the Tender is date for the Tender was 19<sup>th</sup> August 2021. A change to the transfer date for the current contract is being negotiated to allow time for the transfer if there is a new contractor. The outcome of the tender is included on the NRSBU on 17 September 2021 agenda for the NRSBU board to consider and approve the procurement of the new O&M contract.
- 7.3 **Rabbit Island O&M contract** - The documents for the Biosolids Application Operations and Maintenance Contract have been released to the market. The tender process closes on 4 September 2021.
- 7.4 **NRSS pipeline upgrade -Section 11** (Relining the section between Martin point and SH6) – has commenced. The liner will arrive in New Zealand in November 2021 and the lining project is expected to be complete before the end of the 2021 calendar year.
- 7.5 **NRSS pipeline upgrade - Section 9** – T&G pipe replacement, construction is underway with only minor weather-related issues being encountered to date. The contract is approximately 50% complete with the contract completion before November 2021.
- 7.6 **Generator Purchase** - The supply contract has been signed with the supplier, and the new generators are expected to arrive in October and November 2021.
- 7.7 **Desludging of the Bell Island ponds** is underway, progress has been slower than desired due to debris in the pond causing issues with the dredge. At present 10 dewatering bags have been filled, and we are

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expecting to have up to 30 dewatering bags at the end of the desludging process.

7.8 **Asset inspections** - a concerted effort has been made to inspect the NRSS assets and undertake condition assessments over the last six months. NRSBU has engaged external resource to undertake these assessments so that the information will be available for the O&M tender process.

### 8. **Contract 3458 – Nelson Regional Sewerage System Operations Update**

8.1 Operations are generally running well.

8.2 A significant improvement has been made in the flow metering with it being identified that the NRSS Beach Road outflow meter and the Saxton Road inflow meter both having issues. These issues have now been resolved and the flow balance is now matching within expected tolerances. This is a significant improvement.

8.3 There were no odour notifications during this period.

### 9. **Contract 3619 – Biosolids Application Operations Update**

9.1 Application of biosolids on Moturoa Rabbit Island has been working well during this period. The contractor has had issues with failed machinery. The Biosolids Application Contract has passed the original termination date and the contractor is working under a short-term extension while NRSBU tender the service. As such the contractor does not propose to replace the failed equipment unless he is successful with the new tender.

9.2 NRSBU Officers are working with the contractor to ensure strategies are in place to ensure application capacity is retained during the tender period.

### 10. **Finance**

10.1 The NRSBU finances improved since the third quarter, however NRSBU incurred a loss for the year.

10.2 There are four changes that have influenced the finances over the last quarter.

10.3 The first significant factor is the ongoing lower interest rate, which reduces the Return on Investment, and therefore the revenue that NRSBU collects from the Fixed Contributions. The effect of this change is a continued reduction in revenue which now equates to an under recovery against budget of \$891,000 for the year to date.

10.3.1 The second issue is an increase in consultancy charges in relation to the NRSBU O&M tender contract development and the collection of Asset Data for the O&M tender. The costs for

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consultancy support have exceeded the budget by \$91,000 for the year. Ongoing increases against budget should be expected in the 2021/22 year due to external consultants being seconded to support Regional Services Staff.

10.3.2 The third factor for the increase costs is the change to the Operations and Maintenance contract. The cost of the Operations and Maintenance has increased because of increased monitoring required by the resource consent. The unit costs also increased when the Nelmac contract was extended. The full year overspend is \$219,000.

10.3.3 The additional costs are partly compensated by the reduced interest charges on the term liabilities, and by an increase in revenue from the Best Island sand royalty payments and an increase in septage disposal charges for the year totalling \$209,000

10.3.4 The costs are also partly compensated by the increased flow received during the last quarter that raise variable charges with a full year surplus compared to budget of \$500,000

10.4 The NRSBU has a deficit for the period to 30 June 2021 of \$393,000, which is up \$10,000 from the deficit of \$382,000 for the third quarter.

10.5 Table 3 below shows the NRSBU Financial Report to 30 June 2021.

<b>Nelson Regional Sewerage Business Unit</b>								
<b>Financial Report</b>								
<b>Income Account for the period to</b>				<b>30th June 2021</b>				
	<b>Actual</b>	<b>Budget</b>	<b>Actual</b>	<b>%</b>	<b>%</b>	<b>2020/21 Budget</b>		
	<b>Month</b>	<b>Month</b>	<b>YTD</b>	<b>YTD</b>	<b>Year</b>	<b>YTD</b>	<b>Annual</b>	<b>YTD Variation</b>
<b>Income</b>								
Contributions Fixed	301,509	375,833	3,618,110	80	80	4,510,000	4,510,000	(891,890)
Contributions Variable	575,228	327,917	4,435,053	113	113	3,935,000	3,935,000	500,053
Other Recoveries	26,084	13,166	367,929	233	233	158,000	158,000	209,929
Interest	-	-	29			-	-	29
Forestry Income	33,800	-	33,800			-	-	33,800
<b>Total Income</b>	<b>936,620</b>	<b>716,916</b>	<b>8,454,920</b>	<b>98</b>	<b>98</b>	<b>8,603,000</b>	<b>8,603,000</b>	<b>(148,080)</b>
<b>Less Expenses</b>								
Management	31,179	41,667	482,903	97	97	500,000	500,000	17,097
Electricity	97,317	75,027	999,560	111	111	900,322	900,322	(99,238)
Contract Maintenance	76,504	58,877	925,873	131	131	706,492	706,492	(219,381)
Reactive and Proactive Maintenance	67,031	61,469	777,726	104	104	748,165	748,165	(29,561)
Monitoring	8,166	24,251	184,244	63	63	291,000	291,000	106,756
Consultancy	20,114	6,250	166,190	222	222	75,000	75,000	(91,190)
Insurance	6,341	6,250	91,283	122	122	75,000	75,000	(16,283)
Sundry	9,900	11,537	140,042	101	101	138,450	138,450	(1,592)
Biosolids Disposal	170,784	54,881	817,645	124	124	658,571	658,571	(159,074)
<b>Operating &amp; Maintenance Expenses</b>	<b>487,336</b>	<b>340,209</b>	<b>4,585,466</b>	<b>112</b>	<b>112</b>	<b>4,093,000</b>	<b>4,093,000</b>	<b>(492,466)</b>
Financial	25,600	59,500	272,336	38	38	714,000	714,000	441,664
Depreciation	250,297	188,750	2,460,050	109	109	2,265,000	2,265,000	(195,050)
<b>Total Expenses</b>	<b>763,233</b>	<b>588,459</b>	<b>7,317,852</b>	<b>103</b>	<b>103</b>	<b>7,072,000</b>	<b>7,072,000</b>	<b>(245,852)</b>
<b>Net Income</b>	<b>173,387</b>	<b>128,457</b>	<b>1,137,068</b>	<b>74</b>	<b>74</b>	<b>1,531,000</b>	<b>1,531,000</b>	<b>(393,932)</b>

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10.6 The NRSBU financial Position as at 30 June 2021 is shown in Table 4 Below

<b>Nelson Regional Sewerage Business Unit</b>			
	<b>Balance Sheet as at</b>	<b>30th June 2021</b>	
	<b>Current</b>	<b>Last Month</b>	<b>June 2020</b>
<b>Equity</b>			
Opening Equity (July)	52,165,551	52,165,551	49,562,837
Plus Net Income YTD	0	963,681	0
Plus Revaluation	3,529,790	0	2,602,714
<b>Closing Equity</b>	<b>55,695,341</b>	<b>53,129,232</b>	<b>52,165,551</b>
Contingency Reserve	100,000	100,000	100,000
	<b>55,795,341</b>	<b>53,229,232</b>	<b>52,265,551</b>
Which was Invested as follows -			
<b>Current Assets</b>			
Bank	3,778	3,778	4,382
Debtors	280,691	54,697	568,279
NCC Current account	0	0	0
<b>Total Current Assets</b>	<b>284,469</b>	<b>58,475</b>	<b>572,661</b>
<b>Fixed Assets</b>	<b>78,594,522</b>	<b>74,065,814</b>	<b>70,812,223</b>
<b>Current Liabilities</b>			
Creditors	0	(117,457)	(21,081)
NCC Loan	(740,000)	(740,000)	(960,000)
TDC Current Account	(243,443)	0	(423,626)
NCC Current account	(2,100,207)	(37,600)	(1,714,625)
<b>Total Current Liabilities</b>	<b>(3,083,650)</b>	<b>(895,057)</b>	<b>(3,119,333)</b>
<b>Term Liabilities</b>	<b>(20,000,000)</b>	<b>(20,000,000)</b>	<b>(16,000,000)</b>
Derivative Financial Instruments	0	0	0
	<b>55,795,341</b>	<b>53,229,232</b>	<b>52,265,551</b>

## 11. Discharge performance

11.1 The wastewater discharge performance from Bell Island WWTP has meet all the consent criteria for the period to June 2021, however a request for an increased discharge was requested from TDC during July 2021 to permit an increase in discharge greater than allowed under the NRSBU discharge consent. This was due to the significant and prolonged rainfall.

## 12. NRSBU Resourcing

12.1 There are ongoing resource capacity issues for regional services staff. Projects are starting to be delayed due to resourcing constraints.

12.2 The works programme is being implemented for both NRSBU and NTRLBU concurrently and this includes a significant amount of capital and renewals works.

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- 12.3 NRSBU has engaged additional support for assets inspections to allow the asset information to be ready for the O&M tender process.
- 12.4 The resourcing constraints are leading to some capital and operational works being delayed, and further delays are expected because of reduced staffing levels in the regional services team.

**Author:** Nathan Clarke, General Manager Regional Sewerage and Landfill

**Attachments**

Nil

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<b>Important considerations for decision making</b>
<b>Fit with Purpose of Local Government</b> The NRSBU is a joint committee constituted pursuant to the provisions of Schedule 7 to the Local Government Act 2002 and contributes to the four Local Government well-beings of social, economic, environmental, and cultural.
<b>Consistency with Community Outcomes and Council Policy</b> Our infrastructure is efficient, cost effective and meets current and future needs.
<b>Risk</b> This report allows the NRSBU board to monitor and review the ongoing operations of the NRSBU. The report considers risks from health and safety and compliance, and with resource consents.
<b>Financial impact</b> This report has no financial impacts. It summarises financial performance against budgets.
<b>Degree of significance and level of engagement</b> The NRSBU is a Joint Committee of the two Councils and its activities are included in the Long-term Plans and Annual Plans of each Council. Consultation is undertaken by both Councils in the preparation and adoption of these plans
<b>Climate Impact</b> A key feature of the Business Plans for NRSBU is the inclusion of a long-term objective of greenhouse gas emissions with the commitment to measure and reduce greenhouse gas emissions from the facility and consideration about site location and retreat for vulnerable sites.
<b>Inclusion of Māori in the decision-making process</b> No engagement with Māori has been undertaken in preparing this report but iwi have representation on the Board.
<b>Delegations</b> <i>The Councils are agreed that the responsibility for all management and administrative matters associated with the NRSBU operation shall be with the</i>



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*Board, and in particular the Board shall without the need to seek any further authority from the Councils:*

*Enter into all contract necessary for the operations and management of the Business Unit in accordance with approved Budgets and the intent of the Business Plan.*

*Authorise all payments necessary for the operations and management of the business unit within the approve budgets and the intent of the Business Plan*

*Do all other things, other than those things explicitly prohibited by this MOU or relevant statutes, that are necessary to achieve the objectives as stated in the strategic Plan, Asset Management Plan or Business Plan approved by the councils.*

*Powers to Recommend to Councils:*

*Any other matters under the areas of responsibility of the Business Unit and detailed in the Memorandum of Understanding*

*All recommendations to Council will be subject to adoption of an equivalent resolution by the other Council, unless it is a matter specific to one Council only.*