



Nelson Regional Sewerage Business Unit

17 September 2021

Report Title: Nelson Regional Sewerage Business Unit Annual Report

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Report Number: R26152

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

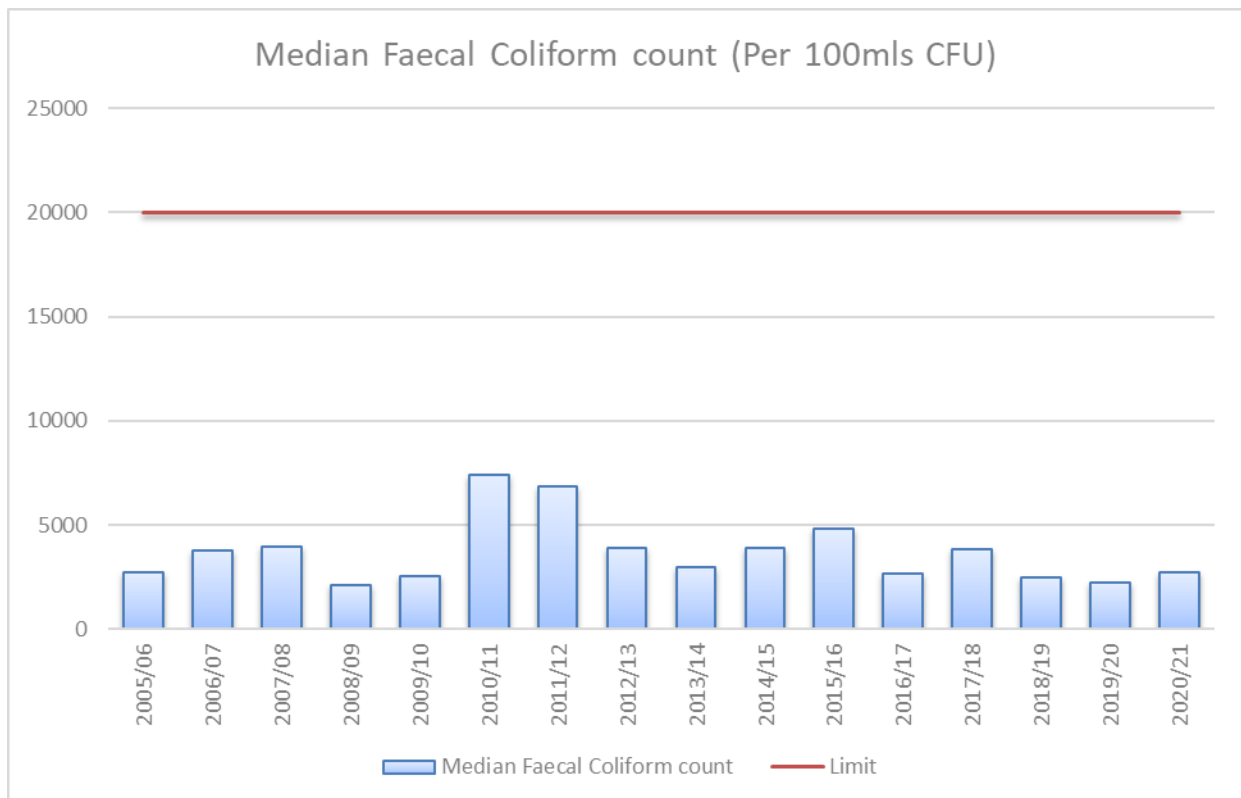
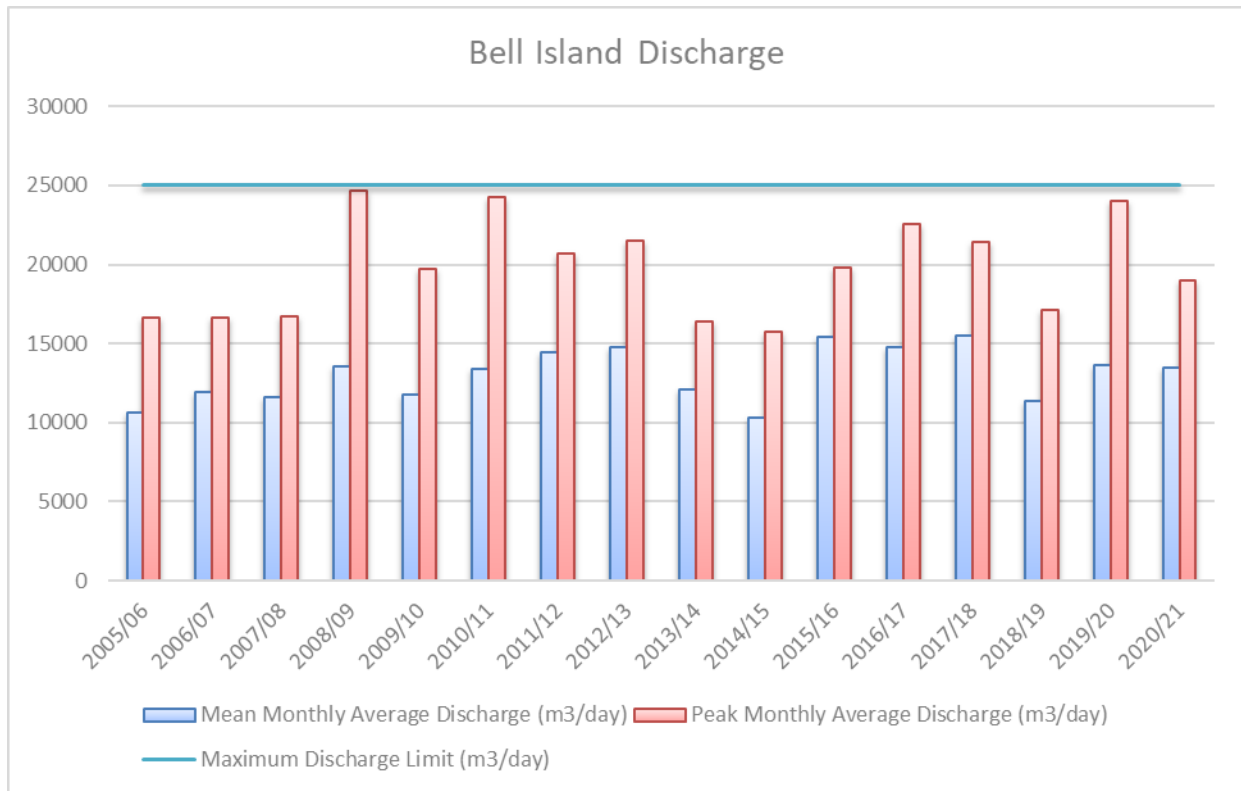
4.2.1 The levels of service recorded over the past three years have stayed reasonably consistent. The following table summarises compliance of the levels of service.

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 ¹	No ¹	
	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	

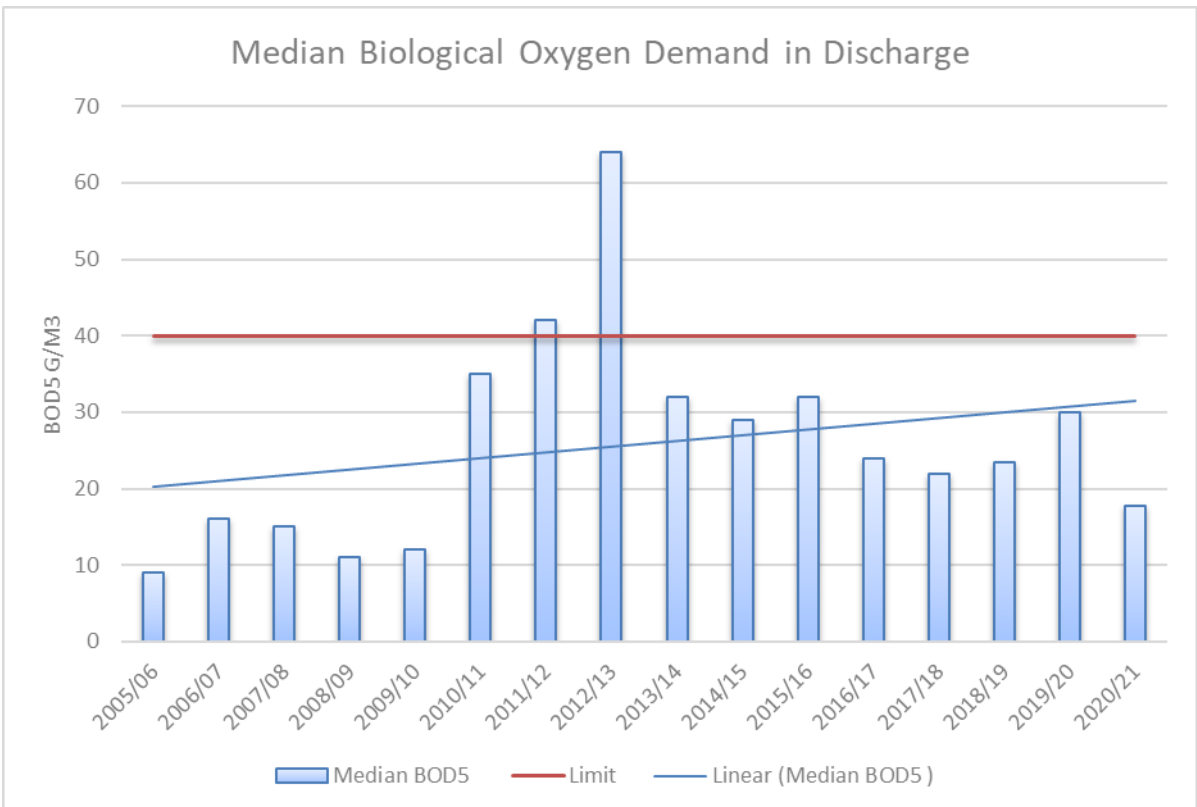
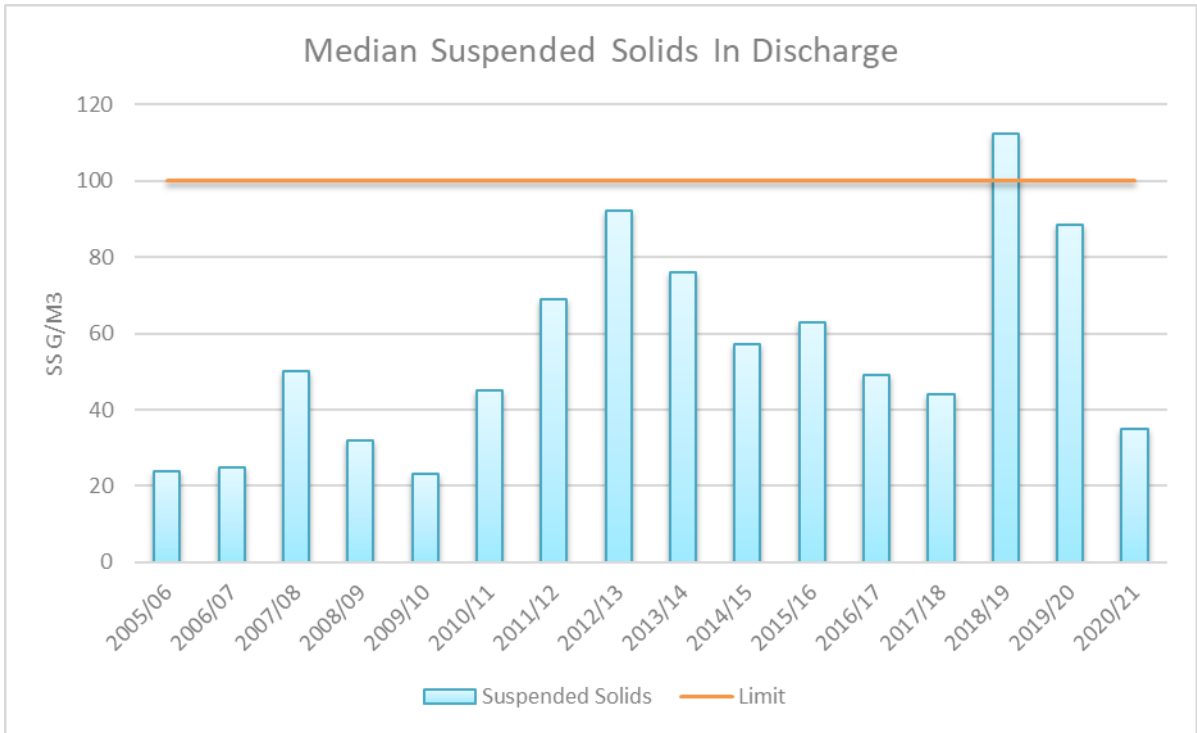
1. Consent non-compliance relates to provision of Cultural Health Indexing (CHI). NRSBU have been unable to get commitment from iwi to complete the required CHI.

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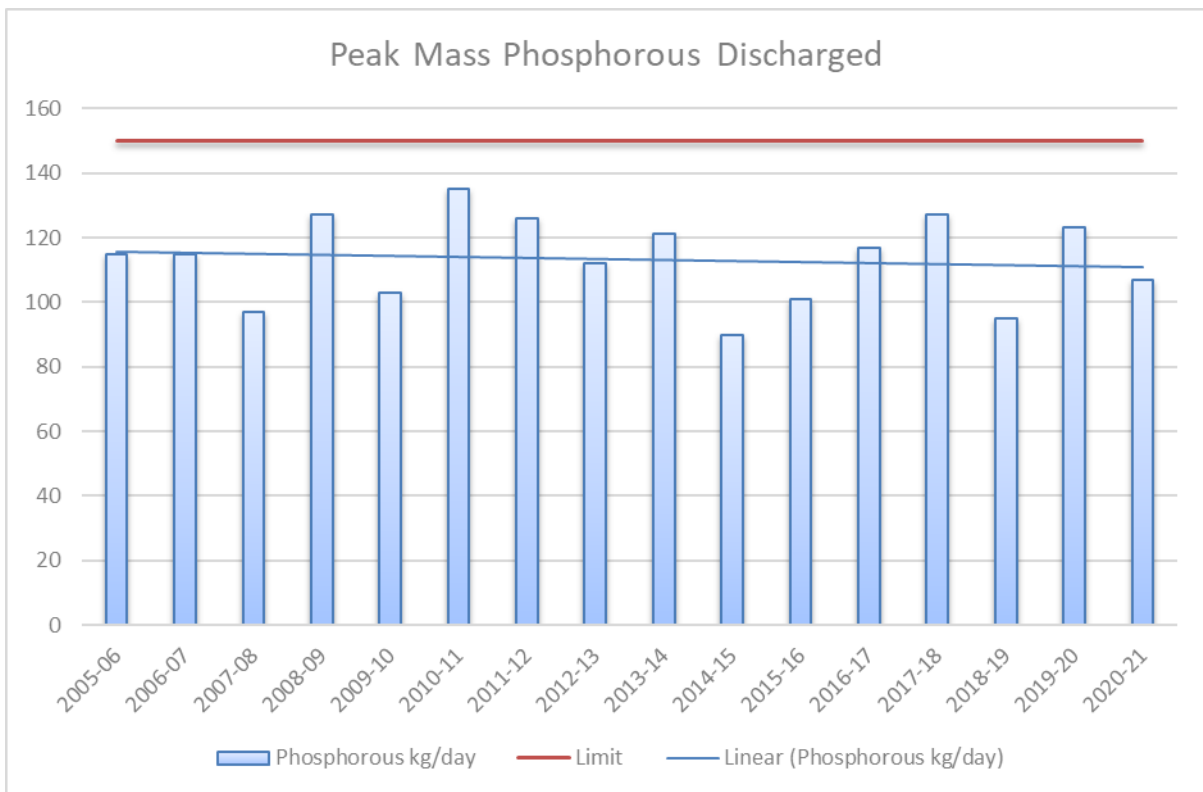
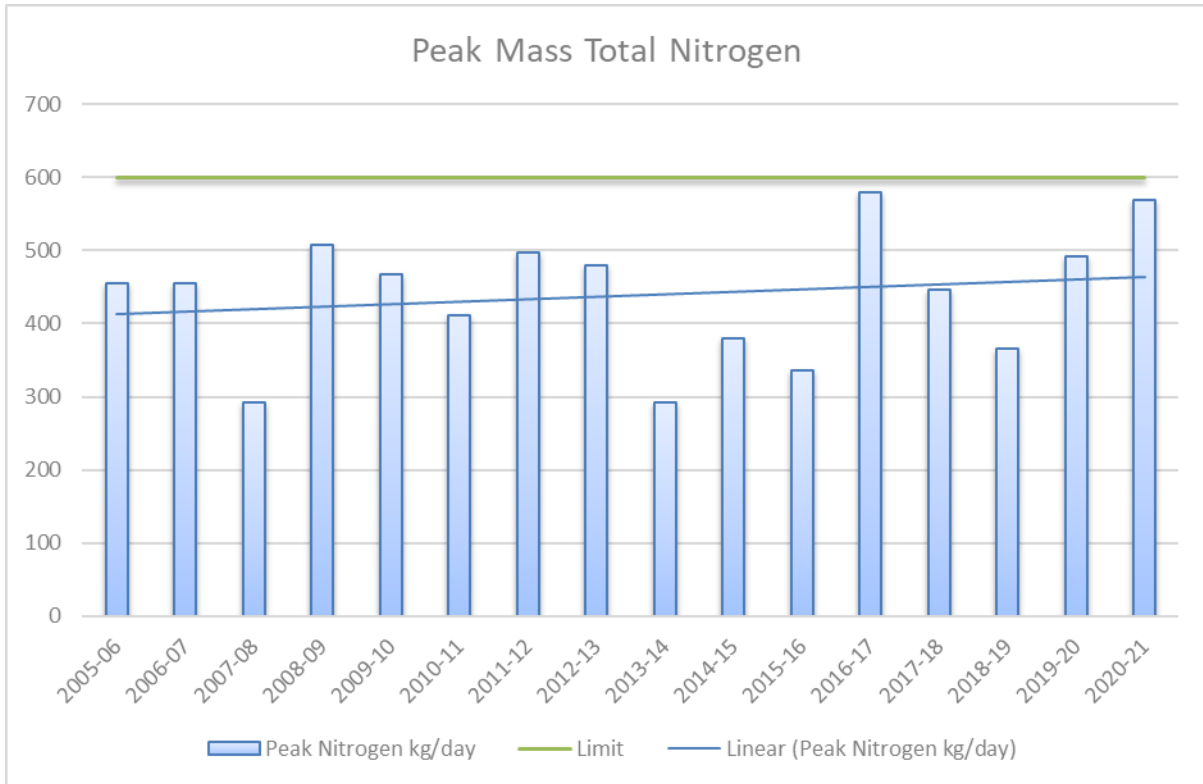
4.3 Discharge characteristics



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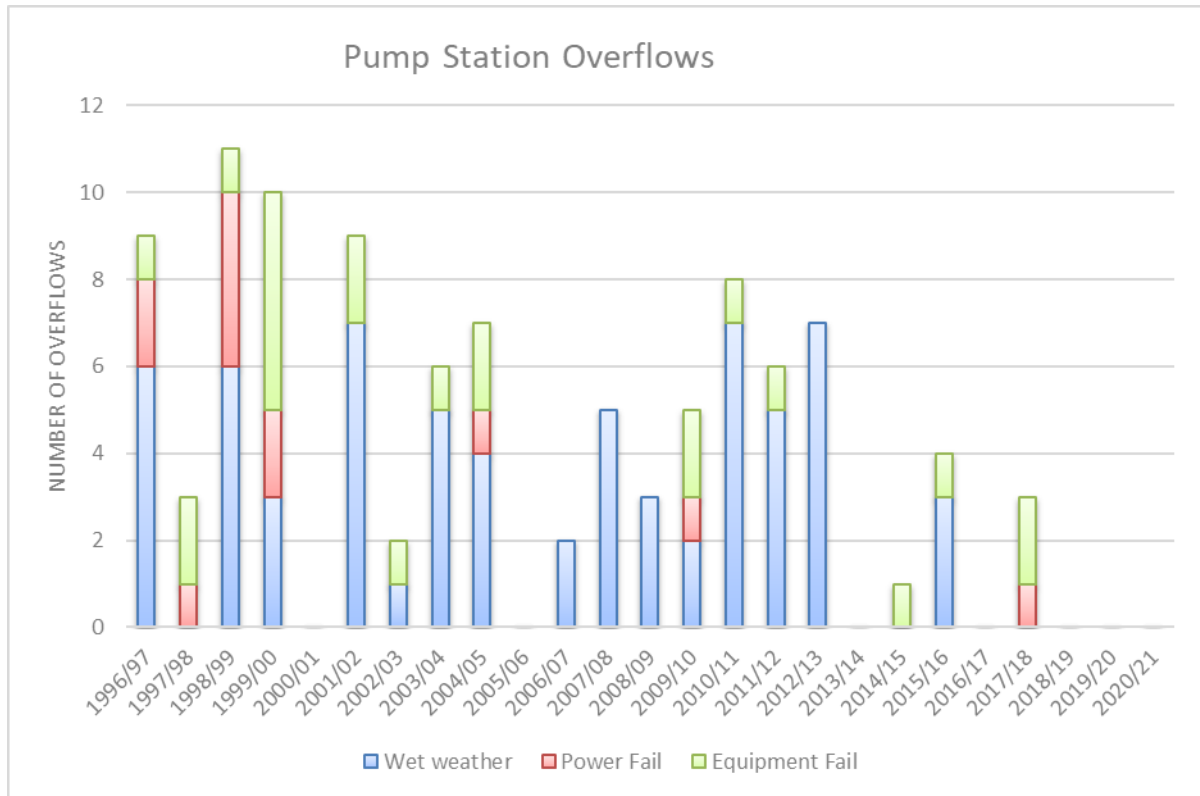
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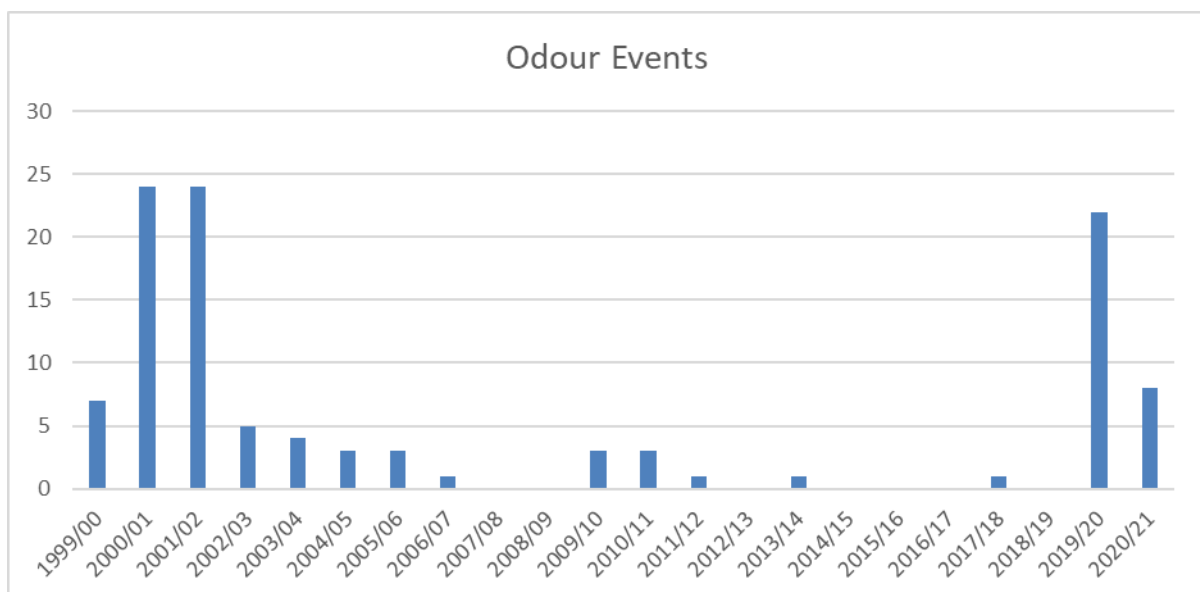
4.4 Scheme overflows

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.

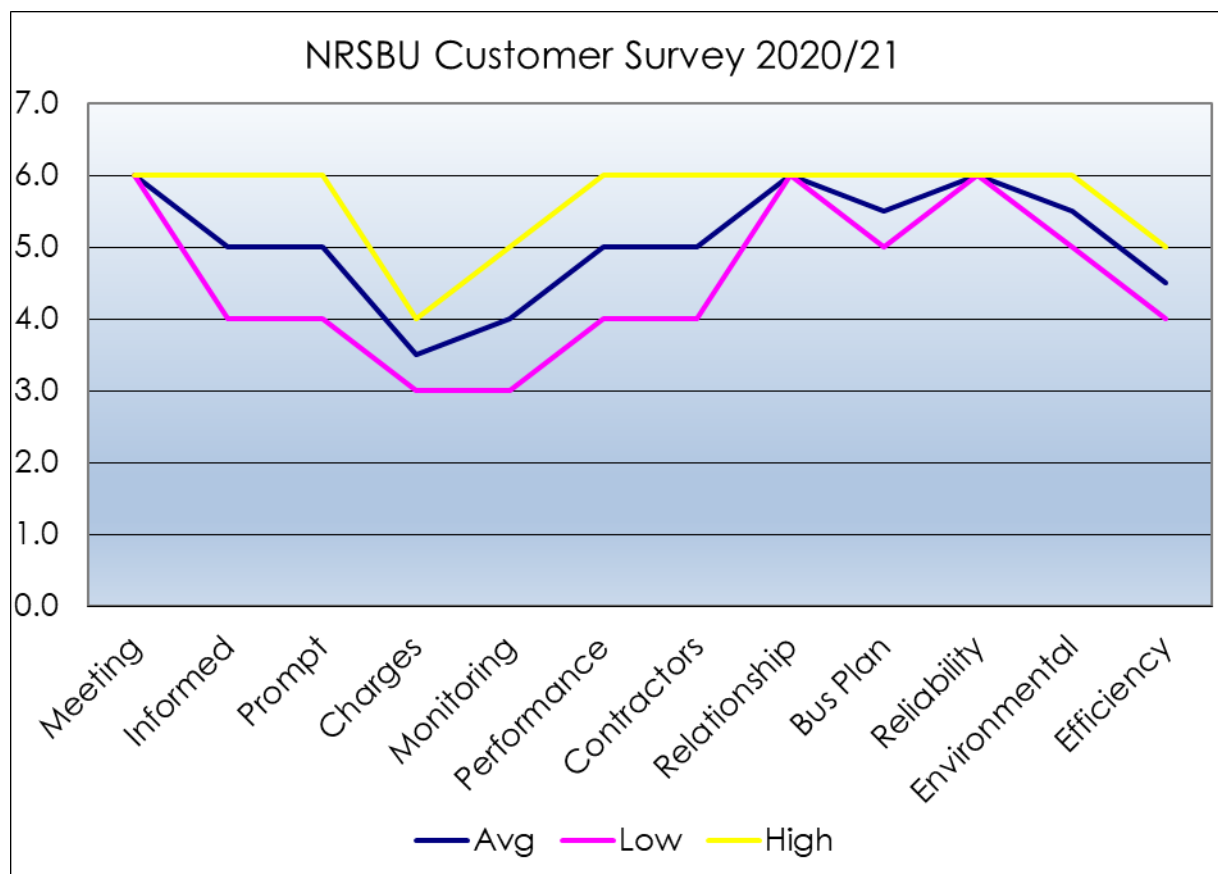


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4.6 Customer Group

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.

Objective	Key Performance Measures	Performance
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”

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

5.7 “Good relationships are maintained with all stakeholders.”

Objective	Key performance Measures	Performance
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”.

Objective	Key Performance Measures	Performance
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.

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Strategic Goal	Objective (This is what it looks like)	Level of Service (This is how we do it)	Performance	
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.	
	Resilient wastewater treatment that minimises the impact on the environment and community	The treatment plant can fully treat all dry weather flows	Achieved	
	Resilient wastewater treatment that minimises the impact on the environment and community	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.	
	Resilient wastewater treatment that minimises the impact on the environment and community	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	

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Strategic Goal	Objective (This is what it looks like)	Level of Service (This is how we do it)	Performance
	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.

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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
Capital Expenditure			
Renewals			
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
Total renewals	1,057,323	2,105,240	1,048,604
New Capital			-
Regional Pipeline duplication & Pumpstation	904,101	3,585,000	2,680,899
LOS from Consent requiremnts			
Capital: Resouce 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		
Other			
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 reilience	3,604		- 3,604
Songer Road PS Flooding reilience	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		-	
Total New Capital	5,621,436	11,598,711	5,977,747
Total Capital Expenditure	6,678,759	13,703,951	7,026,351

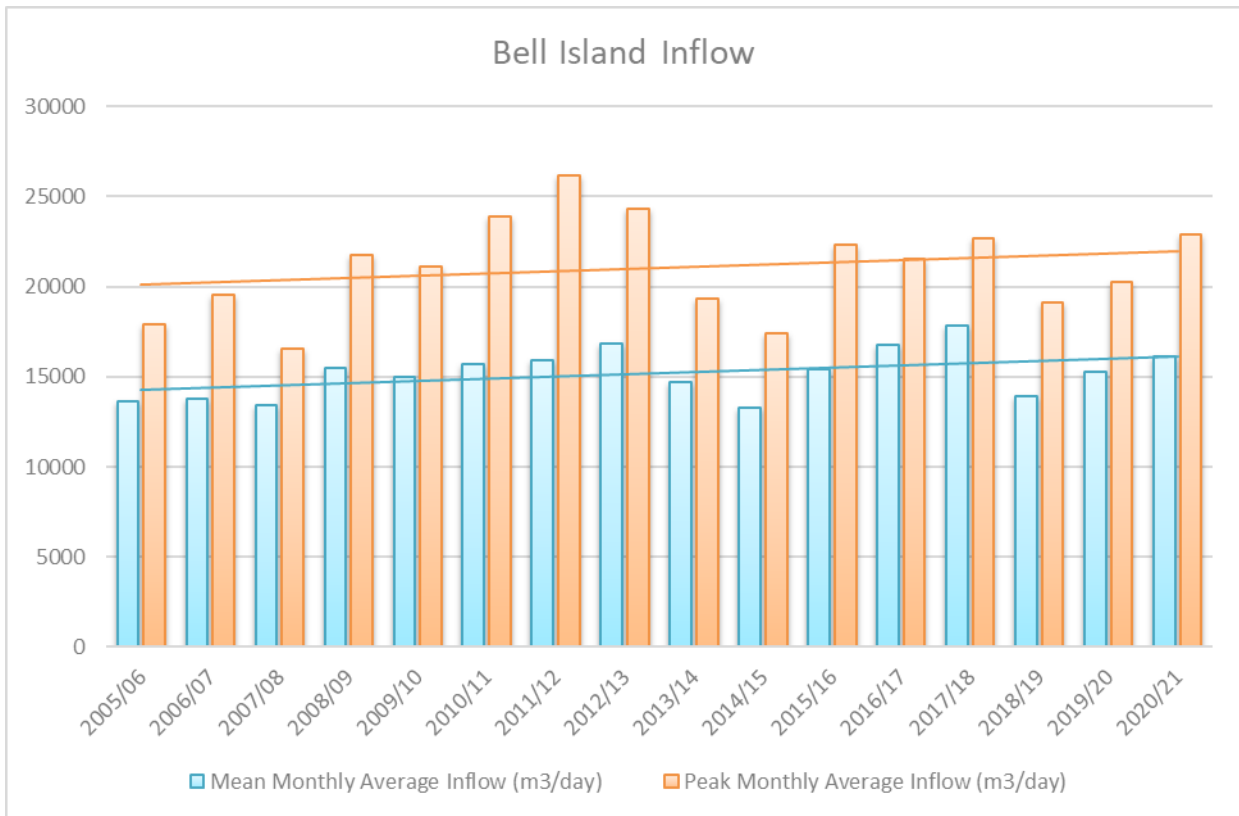
6.4 Scheme Capacity Trends

Capacity	Average flow m ³ /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.

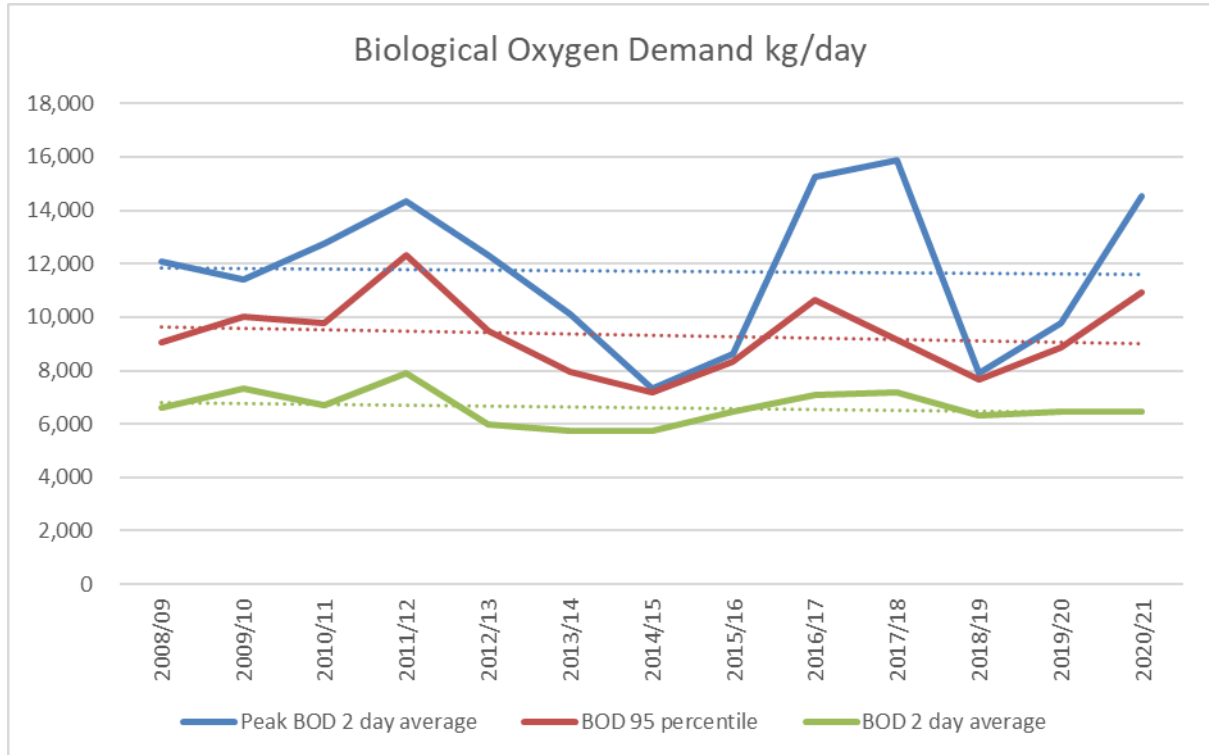
Analysis of the average vs peak inflow trendlines indicates that any reduction in inflow & infiltration within the contributory catchments has been minimal.



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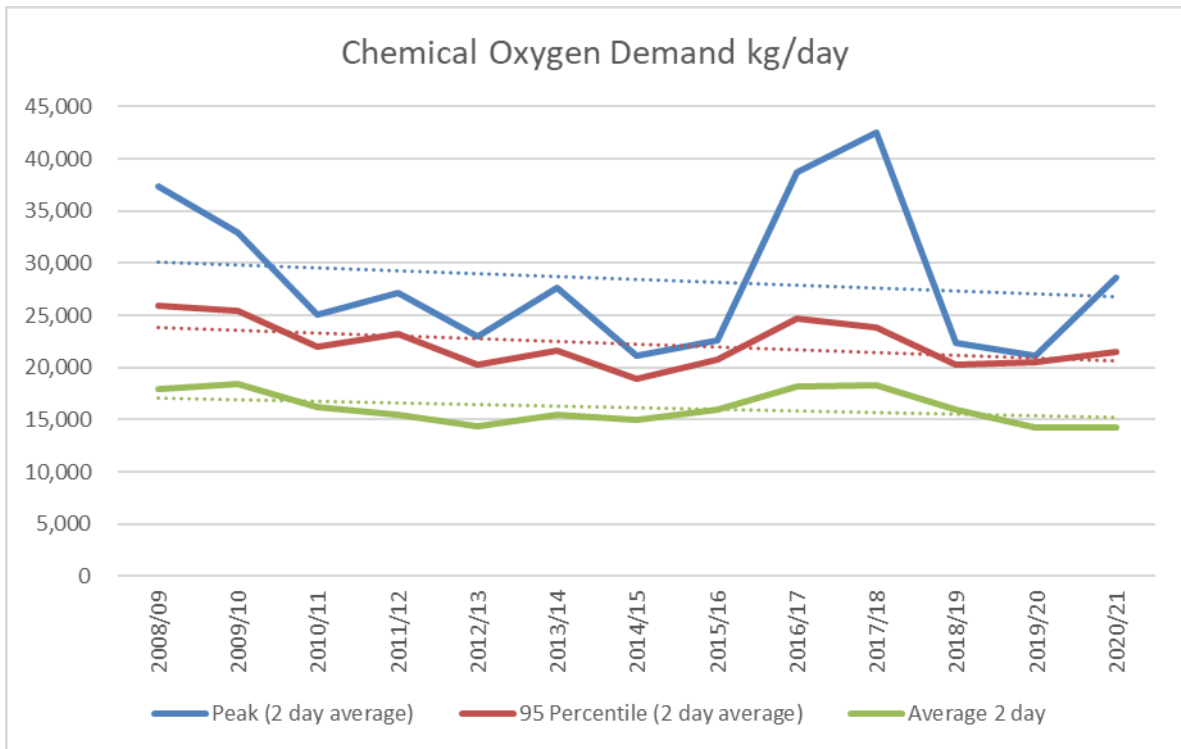
6.5 Influent characteristics

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



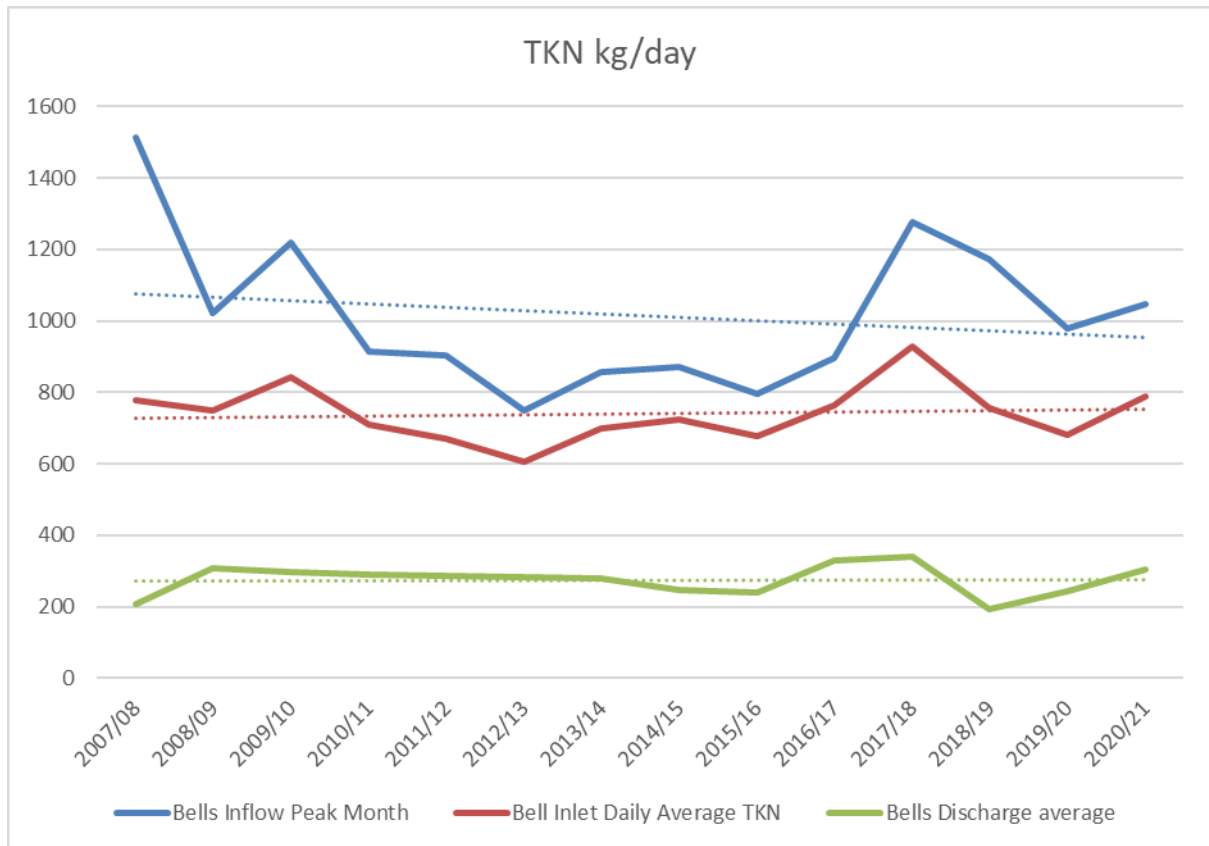
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The Chemical Oxygen Demand (COD) has continued the decrease over the last ten years. This demonstrates that the trade waste agreements continue to provide an incentive for industrial customers to improve on site treatment of waste water. The converging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



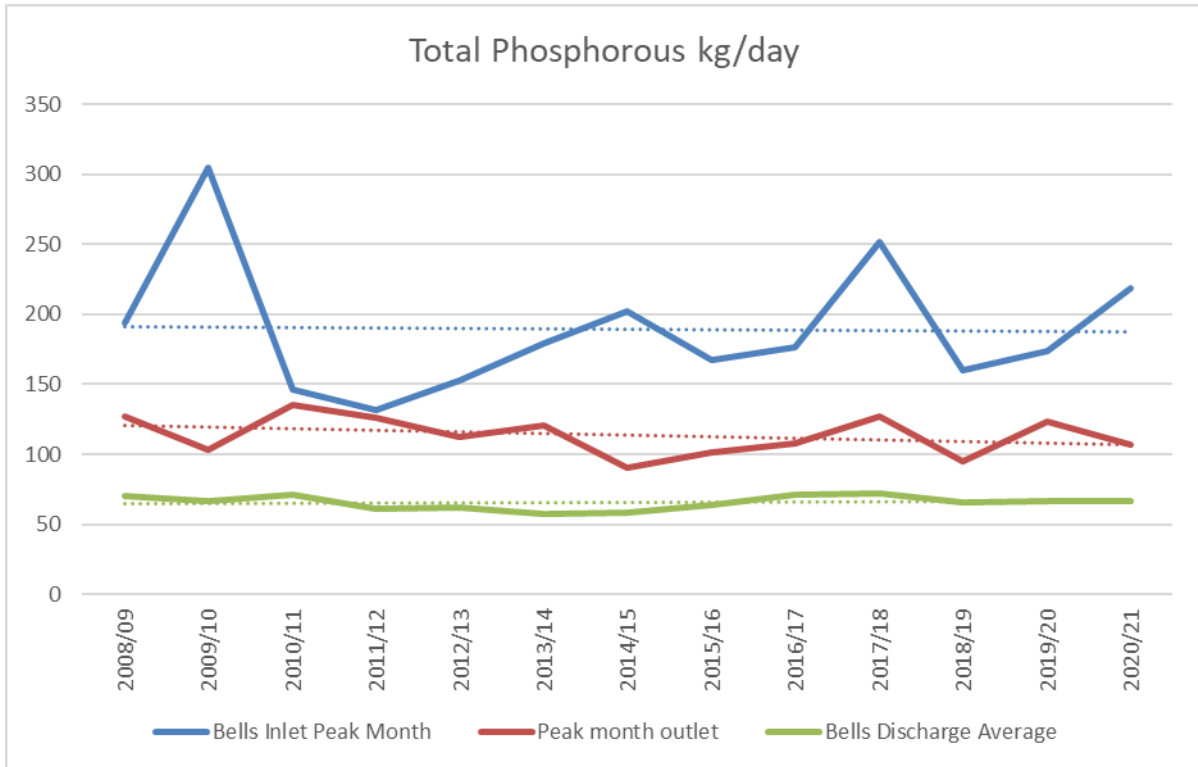
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The Total Kjeldahl Nitrogen (TKN) peaks in the wastewater received at the Bell Island Treatment Plant continues to follow a reducing trend, with a notable convergence between the average & peak trendlines.



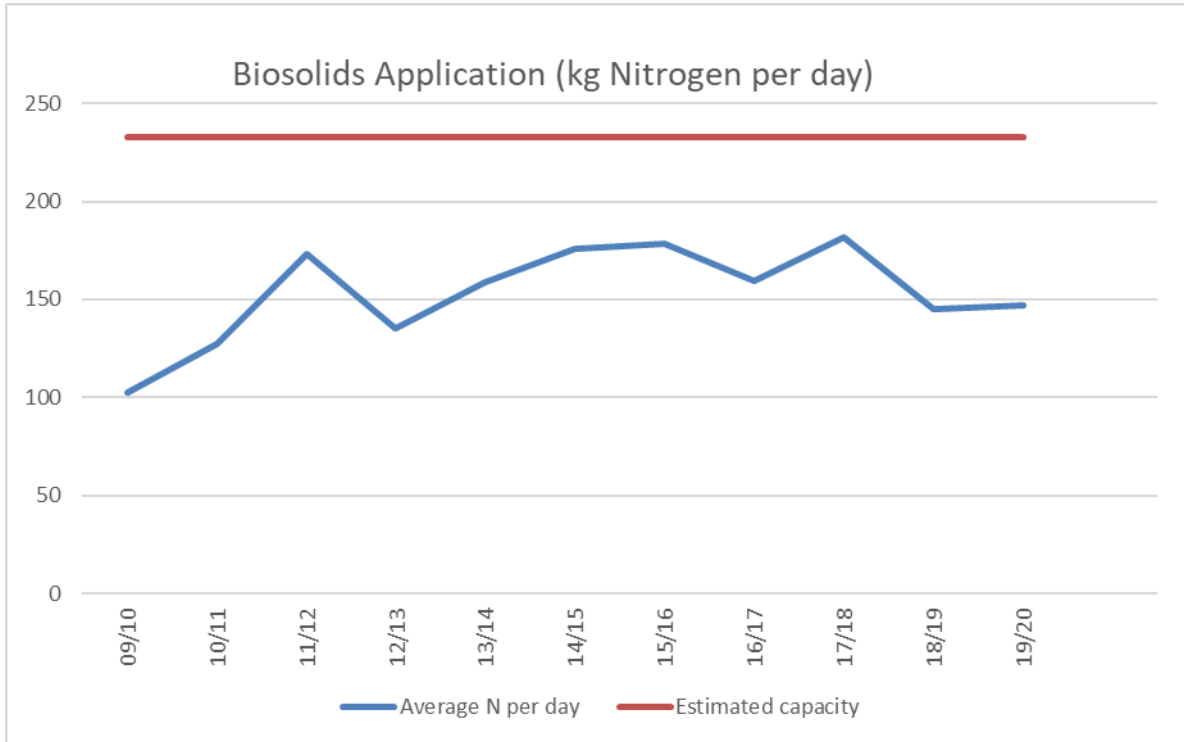
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Peak phosphorus levels in the influent increased over 2020/21, however peak discharge levels decreased. Discharge average phosphorus remained constant.



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

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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.

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
		\$	\$	\$
Revenue				
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
Total Revenue		8,454,920	8,603,000	8,358,223
Less Expenses				
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
Total Expenses		7,317,852	7,071,996	6,795,072
Net Surplus		1,137,068	1,531,004	1,563,151
Other Comprehensive Revenue and Expense				
Gain on revaluation of Fixed Assets	1(b)	3,529,790	-	2,602,714
Total Comprehensive Revenue and Expense		4,666,858	1,531,004	4,165,865

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 original 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.

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
Revenue		\$	\$	\$
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
Total Revenue		<u>8,454,920</u>	<u>8,603,000</u>	<u>8,358,223</u>
Less Expenses				
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
Total Expenses		<u>7,317,852</u>	<u>7,071,996</u>	<u>6,795,072</u>
Net Surplus		<u>1,137,068</u>	<u>1,531,004</u>	<u>1,563,151</u>
Other Comprehensive Revenue and Expense				
Gain on revaluation of Fixed Assets	1(b)	3,529,790	-	2,602,714
Total Comprehensive Revenue and Expense		<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
Equity at the start of Year	\$	\$
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
Equity at the end of Year	<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
Equity		\$	\$
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
Total Equity		<u>55,795,341</u>	<u>52,265,551</u>
This was represented by:			
Current Assets			
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
Total Current Assets		<u>609,560</u>	<u>930,610</u>
Current Liabilities			
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
Total Current Liabilities		<u>3,408,741</u>	<u>3,477,282</u>
Net Working Capital		<u>(2,799,180)</u>	<u>(2,546,672)</u>
Non Current Assets			
Property, plant and equipment	6	78,499,922	70,751,423
Forestry assets	5	94,600	60,800
Total Non Current Assets		<u>78,594,522</u>	<u>70,812,223</u>
Non Current Liabilities			
Borrowings	2	20,000,000	16,000,000
Total Non Current Liabilities		<u>20,000,000</u>	<u>16,000,000</u>
Net Assets		<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 \$
Cash Flows from Operating Activities			
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>
Net Cash Flows from Operating Activities	3	<u>4,554,733</u>	<u>4,868,196</u>
Cash Flows from Investing Activities			
Purchase of property, plant and equipment		(6,772,186)	(6,089,902)
Net Cash from Investing Activities		<u>(6,772,186)</u>	<u>(6,089,902)</u>
Cash Flows from Financing Activities			
Owners Distribution		(1,563,151)	(1,978,374)
Loan repayment		(220,000)	0
Loan raised		4,000,000	2,960,000
Net Cash from Financing Activities		<u>2,216,849</u>	<u>981,626</u>
Net Increase/(Decrease) in cash and cash equivalents		(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

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

	2020/21	2019/20
	\$	\$
1 Equity		
The Business Unit is jointly owned by the Nelson City Council and the Tasman District Council.		
1(a) Accumulated Funds		
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>
1(b) Revaluation Reserve		
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>
Balance held as follows:-		
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>
Total Revaluation Reserve	<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
Valuation / Cost						
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
Accumulated Depreciation						
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	-	-	-	-	-	-
Carrying amounts						
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
Work in Progress (Included above)						
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

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