

# BUSINESS PLAN

## 2011/12



# Nelson Regional Sewerage Business Unit

## BUSINESS PLAN

| <b>CONTENTS</b> |                                   | <b>Page</b> |
|-----------------|-----------------------------------|-------------|
| 1               | INTRODUCTION                      | 3           |
| 2               | MISSION STATEMENT                 | 4           |
| 3               | STRATEGIC OBJECTIVES              | 4           |
| 4               | LEVELS OF SERVICE                 | 4           |
| 5               | BUSINESS IMPROVEMENT PLAN 2009/10 | 6           |
| 6               | FINANCIAL PLAN                    | 12          |
| 7               | LONG TERM FINANCIAL STRATEGY      | 12          |

### APPENDICES

- A. Strategic Plan 2009-2012
- B. Board Planning/Meeting Timetable
- C. 3 Year Financial Forecast
- D. 10 Year Plan Operations, Maintenance and Capital Expenditure
- E. Treatment Plant Schematic

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*NRSBU Approval:*

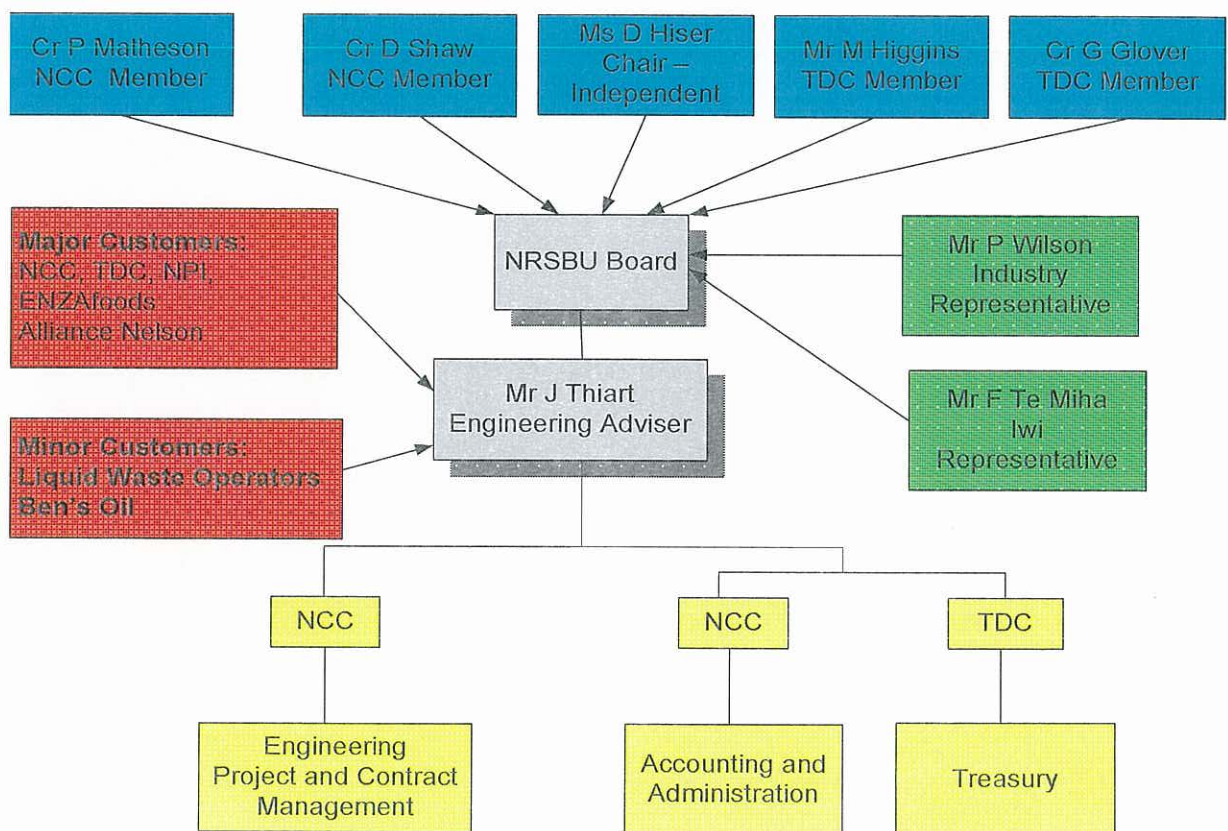
*Cover photograph: NRSBU Construction of Primary Clarifier on Bells Island*

## 1. INTRODUCTION

The NRSBU was established in July 2000, replacing the former Nelson Regional Sewerage Authority established in the 1970s, and the first business plan was written for the 2001/02 financial year. The 2004/05 business plan identified the need for a strategic review of the NRSBU, following local body elections in 2004 and the appointment of a new Board. The outcomes of the workshop, held with local authority representatives of the Board on 26 January 2005, were used to determine the direction of the NRSBU for the subsequent three years.

In April 2008 a strategic planning workshop was facilitated by Graeme Nahkies, of Boardworks, for members of the NRSBU Board and staff. The aim of the workshop was to provide the Board with governance training and to brainstorm issues to set the strategic direction of the NRSBU. A further outcome of the workshop was the development of a Board Charter. The Strategic Plan 2009 – 2012, attached as Appendix A has been produced since the workshop and gives direction to the NRSBU until 2012.

The structure of the NRSBU is as follows:



The Asset Management Plan (AMP) was not reviewed in 2008, as intended, due to delays in the pipeline renewal project and the treatment plant upgrade. With the treatment plant upgrade now complete and phase one of the regional pipeline upgrade firmly set the review of the AMP is now programmed for completion in August 2011.

The treatment plant upgrade project commenced on site in October 2008 and was completed in June 2010. The installation of covers over the primary clarifier launder was deferred until after odours generated around the primary clarifier have been monitored/observed over the first summer period following the upgrade of the plant. When review of the biosolids produced at the plant and the capacity of the radiata pine plantations on Bells Island and Rabbit Island indicated that the land available for the disposal of biosolids is more than adequate it was decided to defer the installation of the centrifuge until the actual production of biosolids can be confirmed.

The customer agreements will be reviewed once the capacity of the wastewater treatment plant components are confirmed and are expected to be considered by the Board in February 2011.

The physical works for the pipeline and pump station upgrade project is expected to start during February 2011 and are programmed for completion in October 2011.

Practical completion of the outfall capacity upgrade is programmed for March 2011.

The levels of service, business improvement plan and three year financial forecasts for this business plan have been based on the NRSBU Asset Management Plan 2007.

The purpose of this plan is to establish management goals and strategies to improve the effectiveness and efficiency of the NRSBU.

## 2. MISSION STATEMENT

*“To manage the current treatment facilities and network efficiently and in accordance with resource consent conditions to meet the needs of the major Customers, and to plan for the future needs of the community in a cost efficient and environmentally sustainable manner.”*

## 3 STRATEGIC OBJECTIVES

The strategic objectives of the NRSBU (Appendix B) were written up following the NRSBU workshop held in April 2008. These objectives, which incorporate the intent of the Nelson City Council and Tasman District Council Memorandum of Understanding, are used to set the basis for the performance and the longer term strategies of the NRSBU.

## 4 LEVELS OF SERVICE

The following levels of service are included in the NRSBU Asset Management Plan 2007:

| <b>ENVIRONMENTAL</b>            | <b>Category</b>  | <b>Level of Service</b>   |
|---------------------------------|--|---|
| <b>Treatment &amp; Disposal</b> | RMA Consent - Wastewater Discharge to Coastal Marine Area                          | 100% compliance with consent conditions   |
|                                 | RMA Consent – Discharge of Contaminants to Air.                                    | 100% compliance with consent conditions   |
|                                 | RMA Consent - Discharge of Contaminants to Land                                    | 100% compliance with consent conditions   |
|                                 | Equipment Failure of critical components within the treatment and disposal system. | No equipment failures that impact on compliance with resource consent conditions. |

|                      |   |   |
|----------------------|---|---|
| <b>Pump Stations</b> | Odour complaints from pump stations                       | No odour complaints originating from pump stations                |
|                      | Pump station wet weather overflows                        | No overflow events occurring for the contracted contributor flows |
|                      | Pump station overflows resulting from power failure       | No overflow events occurring                                      |
|                      | Pump station overflows resulting from mechanical failure. | No overflow events occurring                                      |

|                  |                        |  |
|------------------|------------------------|--|
| <b>Pipelines</b> | Reticulation Breaks    | No reticulation breaks.                            |
|                  | Air valve malfunctions | No air valve malfunctions that result in overflows |

| <b>CAPACITY</b>                 | <b>Category</b>             | <b>Level of Service</b>                                     |
|---------------------------------|-----------------------------|---|
| <b>Treatment &amp; Disposal</b> | Overloading system capacity | Treatment and disposal up to all contracted loads and flows |
| <b>Pump Stations</b>            | Overloading system capacity | No overflows for all pump stations                          |

| <b>RELIABILITY</b>  | <b>Category</b>                          | <b>Level of Service</b>  |
|---|--|--|
| <b>Treatment &amp; Disposal<br/>Pump Stations<br/>Pipelines</b> | Equipment Failure of critical components | No equipment failures that could lead to non-compliance with resource consent conditions |

| <b>RESPONSIVENESS</b>   | <b>Category</b>  | <b>Level of Service</b>   |
|---|--|---|
| <b>Treatment &amp; Disposal<br/>Pump Stations<br/>Pipelines</b> | Speed of response for emergency and urgent maintenance works     | Achievement of response times specified in the maintenance contract |
|   | Speed of response for routine and programmable maintenance works | Achievement of times specified in the maintenance contract          |

| <b>KEY CUSTOMER RELATIONSHIPS</b>                               | <b>Category</b>      | <b>Level of Service</b>                            |
|---|----------------------|--|
| <b>Treatment &amp; Disposal<br/>Pump Stations<br/>Pipelines</b> | Overall satisfaction | Agreed levels of service provided to all Customers |
|   |                      | Robust charging structure is put in place          |
|   |                      | Customers are satisfied with sewerage scheme       |

## 5 BUSINESS IMPROVEMENT PLAN

This section is based on the Strategic Plan (Appendix A) developed at the NRSBU Board workshop held in April 2008. The long term financial strategies of the NRSBU (Appendix D) are an outcome of the Asset Management Plan 2007 and the Business Improvement Plan.

There are two parts to this business improvement plan; the first part comprises the objectives, strategies and key performance indicators and the second lists the renewal and upgrade costs over the next 3 years.

The business improvement objectives only include the strategies and key performance indicators relevant to the 2011/12 financial year.

### 5.1 Business Improvement Objectives

The business improvement objectives are separated into 4 Key Result Areas namely;

- Collection System
- Waste Treatment and Disposal
- Management
- Stakeholder relationships

To achieve the objectives of the NRSBU Strategic Plan (Appendix A) the NRSBU will implement the following strategies for which there are key performance indicators (KPI).

#### 5.1.1. Collection System

|   |  |
|---|--|
| <b>Collection System – Capacity</b>   | <b>KPI</b>   |
| <ul style="list-style-type: none"> <li>• Liaise with TDC and NCC regarding peak flows and promote strategies for reducing stormwater inflow.</li> </ul> | No overflows due to design wet weather flows   |
| <ul style="list-style-type: none"> <li>• Adopt strategy and design for pipeline renewal and upgrade</li> </ul>  | Confirm pipeline upgrade strategy, design and costing<br><br>Implement pipeline renewal within budget. |
| <b>Collection System – Reliability</b>  | <b>KPI</b>   |
| <ul style="list-style-type: none"> <li>• Routinely assess the condition of pipelines and</li> </ul>   | No overflows due to power, system  |

|  |  |
|--|--|
| renew or upgrade before there is a risk of failure in sensitive locations  | or equipment failures  |
| <ul style="list-style-type: none"> <li>• Maintain and operate equipment in accordance with manufacturer's specifications</li> <li>• Routinely assess maintenance history and condition of major equipment to ensure timely and cost effective maintenance and renewal of assets</li> </ul> | Reactive maintenance is restricted to non-critical components which cannot affect the prescribed levels of service |

### 5.1.2. Treatment and Disposal

| <b>Treatment and Disposal - Resource Consent</b>  | <b>KPI</b>   |
|---|--|
| <ul style="list-style-type: none"> <li>• Routine inspection and maintenance of all odour mitigation equipment</li> <li>• Routine inspection and awareness of potential sources of odour, install odour mitigation equipment as required</li> <li>• Ensure all odours, other than those associated with normal seasonal fluctuations of oxidation pond operation, are investigated and mitigated or eliminated</li> </ul>  | No objectionable odour beyond the boundaries of the treatment plant as required by the resource consent for discharges to air  |
| <ul style="list-style-type: none"> <li>• Routine monitoring of influent to the plant and treatment plant operation to ensure that appropriate mitigation action can be taken if necessary</li> <li>• Staff are suitably trained and experienced, as prescribed in the operations and maintenance contract, to operate the treatment plant</li> <li>• Carry out routine monitoring of the quality of discharges and of the receiving environment</li> </ul>                        | Compliance with all limits and conditions in the resource consents   |
| <b>Treatment and Disposal – Capacity and Sustainability</b>   | <b>KPI</b>   |
| <ul style="list-style-type: none"> <li>• Identify equipment and environmental limits of the treatment plant</li> <li>• Analyse load and flow trends annually to confirm programmed upgrades are appropriate</li> <li>• Analyse outputs from the plant and project future outputs to ensure that the estuarine receiving environment will not be adversely affected by discharges</li> <li>• Limit total of all Customer contract commitments to plant and reticulation</li> </ul> | <p>That the estuarine environment is not adversely affected by discharges</p> <p>Report flow and load trends in annual report.</p> <p>Report on medium term load and flow projections in the annual report</p> |

|   |  |
|---|--|
| <p>capacity</p> <ul style="list-style-type: none"> <li>• Investigate all opportunities to minimise inputs to the reticulation system and treatment plant</li> <li>• Determine disposal requirements of biosolids annually, prior to the start of each financial year, and ensure sufficient land is available for a three year cycle based on load and flow projections to the treatment plant on Bells Island</li> </ul> | <p>Six monthly and annual report contains information on input into regional minimisation initiatives</p> <p>Sufficient land is available for the beneficial disposal of all biosolids</p> |
|---|--|

| <b>Treatment and Disposal – Beneficial re-use</b>  | <b>KPI</b>  |
|--|---|
| <ul style="list-style-type: none"> <li>• Investigate opportunities for beneficial reuse of biosolids (possibly together with other putrescible waste)</li> <li>• Investigate opportunities for the re-use of treated wastewater currently discharged to the Waimea Estuary, such as for pastures, golf courses and sport field irrigation</li> </ul> | <p>All biosolids produced at the Bells Island plant are applied to plantation forest or reused in other beneficial ways</p> <p>Report back on progress to the Board and Owners annually</p> |

### 5.1.3. Management

| <b>Management – Planning</b>  | <b>KPI</b>   |
|---|--|
| <ul style="list-style-type: none"> <li>• Record asset details, maintenance history and equipment performance on the Hansen asset management system</li> <li>• Investigate and implement benchmarking if feasible</li> <li>• Investigate asset renewal and upgrade strategies to ensure timely and cost effective replacement</li> <li>• Review the NRSBU Asset Management Plan, which identifies levels of service and incorporates risk, demand and life cycle management strategies, annually</li> <li>• Rewrite Asset Management Plan at least 3 yearly in accordance with International Infrastructure Management Manual</li> </ul> | <p>Asset Management Plan Levels of Service are achieved consistently</p> <p>Prepare benchmarking proposal for consideration by the Board in June 2011</p> <p>Report to the Board in June 2012</p> <p>Circulate the Asset Management Plan in July 2011 for comment by Board members</p> |
| <b>Management – Contracts</b>   | <b>KPI</b>   |
| <ul style="list-style-type: none"> <li>• Unless approved by the Board, all contracts are competitively tendered</li> </ul>  | <p>No significant variances from approved budgets and agreed</p>   |



|   |  |
|---|--|
| <ul style="list-style-type: none"> <li>• Long term contracts are reviewed annually for performance</li> <li>• Contracts are completed on time and within approved budgets</li> </ul>  | deadlines  |
| <b>Management - Financial</b>   | <b>KPI</b>   |
| <ul style="list-style-type: none"> <li>• Operate within the annual budget</li> </ul>  | O&M expenditure is not greater than the budget projection.   |
| <ul style="list-style-type: none"> <li>• Provide for maintenance and capital expenditure in accordance with the Asset Management Plan</li> </ul>  | Capital expenditure does not exceed budget without owner's (NCC and TDC) approval  |
| <ul style="list-style-type: none"> <li>• Fully fund the depreciation in accordance with the audited asset valuations</li> <li>• Fund the loan repayment programme, which provides for the repayment of loans over a thirty year period</li> </ul>   | Clear audit of annual accounts   |
| <ul style="list-style-type: none"> <li>• Report to the Board any event which might have a significant impact on the budget or operations</li> </ul>   | The Board are provided with current financial information monthly and quarterly reports on the operations and projects   |
| <ul style="list-style-type: none"> <li>• Report to the owners within two months after the end of each quarter with the following un-audited information <ul style="list-style-type: none"> <li>a) Summarised statement of financial performance disclosing actual and budgeted revenue and expenditure</li> <li>b) Summarised statement of financial position at the end of the period</li> <li>c) Brief commentary on the results for the period, noting any factors that could affect the results for the rest of the year</li> </ul> </li> <li>• Manage surplus funds and borrowings to ensure: <ul style="list-style-type: none"> <li>a) Adequate liquidity</li> <li>b) Maximum return on funds invested</li> <li>c) Minimum cost of funds</li> </ul> </li> </ul> | <p>Draft annual accounts, as at 30 June, are presented to the Board for approval by the 31 August</p> <p>Unqualified audited annual report is presented to the Councils by the 30 September.</p> <p>All reports to owners are delivered within the specified timeframes.</p> |
| <ul style="list-style-type: none"> <li>• Ensure valuations of assets are reviewed annually with full variance analysis on changes in valuations</li> </ul>  | Valuation review, as at 30 June, is reported to the Board at their first meeting of the financial year   |
| <b>Management – Cost Recovery</b>   | <b>KPI</b>   |
| <ul style="list-style-type: none"> <li>• Implement charging formula, included in Customer contracts, for all contributors to the</li> </ul>   | Costs of operating the scheme are recovered  |

|   |  |
|---|--|
| <p>scheme</p> <ul style="list-style-type: none"> <li>• Annual calibration of all monitoring equipment in June</li> <li>• Annual review of sampling and test procedures in June</li> <li>• Annual analysis of flows and loads from Customers and into the treatment plant on a mass balance basis</li> </ul> | Monitoring of Customer waste streams is accurate |
|---|--|

|   |   |
|---|---|
| <b>Management – Risk</b>  | <b>KPI</b>  |
| <ul style="list-style-type: none"> <li>• Identify risks and assess the likelihood and consequences of events and complete a risk rating of critical assets</li> </ul>   | Risk review to be completed annually by 31 March  |
| <b>Management – Contingency Plans</b>   | <b>KPI</b>  |
| <ul style="list-style-type: none"> <li>• Ensure that the NRSBU has a succession plan for the Engineering Adviser</li> <li>• Ensure that each of the major Customers has a contingency plan for a disruption to service</li> <li>• The rising Main Failure Contingency Plan is updated at least annually</li> <li>• Keep current all operational contingency plans and business continuity plans for Avian Flu or other pandemic events</li> </ul> | All contingency plans for the NRSBU are current   |
| <b>Management – Keeping Current</b>   | <b>KPI</b>  |
| <ul style="list-style-type: none"> <li>• Board, Staff and Contractors attend presentations, conferences and/or training as appropriate to update knowledge</li> <li>• Subscribe to relevant industry publications</li> <li>• Engineering Adviser is actively involved in networking through the NZWWA and Water Services Managers’ Group</li> <li>• Appropriate use of experts and consultants</li> </ul>   | <p>Staff, Board and Operators attend conferences and/or training annually</p> <p>Operators are qualified to the standard identified in O&amp;M contract</p> |

#### 5.1.4. Stakeholder relationships

|   |  |
|---|--|
| <b>Stakeholder – Relationships</b>  | <b>KPI</b>   |
| <ul style="list-style-type: none"> <li>• Ensure all Customer Contracts are signed and implemented, including for Customers who discharge directly to the treatment plant</li> </ul> | <p>All Customer contracts are renegotiated and signed before proceeding with upgrade projects</p> <p>Uninterrupted service at contracted</p> |

|   |   |
|---|---|
|   | loads is provided to Customers  |
| <ul style="list-style-type: none"> <li>• Maintain contact, at least annually, with neighbours of the treatment plant and follow up any issues as and when they arise</li> <li>• Consult stakeholders on issues that may impact on them</li> </ul> | Stakeholders are generally supportive of the actions taken by the NRSBU |

| <b>Stakeholder – Information</b>   | <b>KPI</b>  |
|--|---|
| <ul style="list-style-type: none"> <li>• Maintain regular contact with Industry representatives</li> </ul>   | Convene quarterly major Customer’s meetings<br><br>Advise Customers of monitoring results monthly   |
| <ul style="list-style-type: none"> <li>• Undertake an annual survey of customer satisfaction</li> </ul>  | Major Customers are satisfied with the management and operation of the regional sewerage scheme   |
| <ul style="list-style-type: none"> <li>• Issue media releases as and when appropriate that reflect positively on the NRSBU</li> </ul>  | At least four media releases are issued annually.   |
| <ul style="list-style-type: none"> <li>• Include information on the NRSBU on the NCC and TDC web sites, including performance information, plans and up to date information about beneficial re-use and sustainability initiatives</li> <li>• Publish updates on NRSBU projects in Council publications</li> </ul> | Web site is up-dated at least quarterly and all information is accurate.<br><br>Good rating in Council surveys, and positive outcomes from consultations, and resource consents processes |

## 5.2 Three Year Capital Expenditure Forecast (\$'000)

| <b>Renewal Plan (\$,000)</b>               | <b>Budget<br/>10/11</b> | <b>Proj<br/>10/11</b> | <b>1<br/>11/12</b> | <b>2<br/>12/13</b> | <b>3<br/>13/14</b> |
|--|-------------------------|-----------------------|--------------------|--------------------|--------------------|
| Miscellaneous                              | 20                      | 5                     | 20                 | 20                 | 20                 |
| Pump Stations and Rising Mains             | 152                     | 0                     | 22                 | 211                | 456                |
| Inlet, Aeration Basin, Clarifier and Ponds | 14                      | 14                    | 85                 | 279                | 26                 |
| Solids Handling                            | 135                     | 32                    | 35                 | 172                | 119                |
| Rabbit Island                              |                         |                       | 20                 |                    | 10                 |
| Roads                                      |                         |                       | 190                |                    |                    |
| <b>Total =</b>                             | <b>321</b>              | <b>51</b>             | <b>372</b>         | <b>682</b>         | <b>630</b>         |

| Upgrade Plan (\$,000)                    | Budget & Carryover | Proj            | 1                | 2        | 3          |
|--|--------------------|-----------------|------------------|----------|------------|
|  | 10/11              | 10/11           | 11/12            | 12/13    | 13/14      |
| New R/M and P/S:<br>Richmond to Bells Is | 18,615             | 7,000           | 4,500            |          |            |
| Outfall Capacity Upgrade                 | 1,000              | 690             |                  |          |            |
| Primary Clarifier                        | 857                | 857             | 680 <sup>1</sup> |          |            |
| Expand Biosolids<br>Treatment Facilities |                    |                 | 1,000            |          |            |
| Anaerobic Digestion and<br>Co-generation |                    |                 |                  |          | 650        |
| Forest Planting (Bells)                  | 30                 | 85 <sup>2</sup> |                  |          |            |
| Resource Consent                         | 15                 | 15              |                  |          |            |
| Purchase of land                         |                    |                 | 150 <sup>3</sup> |          |            |
| <b>TOTAL</b>                             | <b>20,517</b>      | <b>8,647</b>    | <b>6,330</b>     | <b>0</b> | <b>650</b> |

Note <sup>1</sup> Installation of centrifuge and primary clarifier launder covers.

Note <sup>2</sup> Replanting the Bell Island plantation and restoration of spit.

Note <sup>3</sup> Purchase of 4 Saxton Road from New Zealand Transport Agency

## 6 FINANCIAL PLAN

The 3 year financial forecast, included in Appendix C, shows the summary of income and expenditure forecast for the next 3 years.

## 7 LONG TERM FINANCIAL STRATEGY

The long term financial strategy is a complete picture of the operations and maintenance costs predicted for the next 10 years, and capital projects (renewal and upgrade) likely to be undertaken over the next 10 years ( included in Appendix D). This strategy is based on the NRSBU Asset Management Plan 2007 and the rising main and treatment plant upgrade projects currently underway.

## NELSON REGIONAL SEWERAGE BUSINESS UNIT STRATEGIC PLAN 2008-2011

### Mission Statement

The NRSBU's mission statement is as follows:

*"To manage the current treatment facilities and network efficiently and in accordance with resource consent conditions to meet the needs of the major contributors, and to plan for the future needs of the community in a cost efficient and environmentally sustainable manner."*

### Strategic Objectives

The strategic objectives as detailed below were developed in 2008 and take due regard to the Mission Statement and the objectives detailed in the Memorandum of Understanding between NCC and TDC.

### Key Principles

- ✓ Achieve maximum economic benefit from all existing plant and infrastructure
- ✓ Reduce the use of non-renewable energy and work towards optimising energy efficiency, including consideration of energy regeneration
- ✓ Encourage the minimisation of waste streams – domestic and industrial
- ✓ Work with the local authority customers to minimise storm water inflows to the Scheme
- ✓ Continue to investigate ways to minimise the cost of the treatment process to customers
- ✓ Consider options for alternative sites away from the coast in areas of future growth
- ✓ Continue to consider treatment at source in order to minimise energy costs and maximise reuse opportunities
- ✓ Consider international best practice and sustainability in all planning for growth

### 1 Collection System

- 1.1 To ensure that the reticulation system operated by NRSBU has sufficient pump and pipe capacity to meet the current and forecast requirements of the customers in a cost effective and sustainable manner.
- 1.2 To implement appropriate operations, maintenance and renewal strategies to ensure that pumps and rising main pipelines meet their expected economic life.

### 2 Treatment and Disposal

- 2.1 To ensure that the wastewater treatment and disposal systems fully comply with all resource consent conditions in relation to the discharges to air, land and to the Waimea Estuary.
- 2.2 To ensure that the scheme has sufficient treatment and disposal capacity to manage current and forecast loads such that the scheme provides for its customers in a cost effective, timely and sustainable manner.
- 2.3 To ensure that as much of the treated waste from the catchment area as is practicable is re-used to the benefit of the environment.

### **3 Management**

- 3.1 To optimise the operation and maintenance of the NRSBU through:
- a) Effective long term planning
  - b) Good management of contracts
  - c) Sound financial management
- 3.2 To maintain a charging structure that properly reflects both the short and long term costs to the NRSBU of any particular source of effluent, in terms of capital, plant maintenance, operational and administration costs.
- 3.3 To undertake risk assessment and mitigation reviews which define an appropriate balance between risk and cost.
- 3.4 To develop contingency plans to ensure the impact of any abnormal or emergency event is minimised.
- 3.5 To ensure that the organisation is fully informed on issues, current and future technology and trends in wastewater management, the beneficial re-use of waste and opportunities to reduce inputs rather than increase capacity.

### **4 Stakeholder relationships**

- 4.1 To maintain good working relationship with all stakeholders including owners, customers, contractors, neighbours, iwi and the general public.
- 4.2 To ensure that all stakeholders are provided with an appropriate level of information so that they can have a positive influence on the scheme and support of NRSBU plans is not compromised by misinformation, insufficient information or lack of trust.

## NRSBU BOARD PLANNING/MEETING TIMETABLE 2011-12

| Date  | Activity   | Papers required  |
|---|--|--|
| 17 June 2011<br>Board meeting                   | Review customer satisfaction survey results<br>Annual review of strategic plan<br>Set Engineering Adviser's performance measures for 2011/12 | Customer survey report<br>Strategic plan<br>Draft GM's performance measures                        |
| 26 August 2011                                  | Review draft annual report<br>Performance review with GM   | Draft annual report<br>Results of GM's performance measures and summary of board members' comments |
| 23 September 2011                               | Deliver annual report to Councils<br>(required within 90 days from financial year end)   | Annual report  |
| 2 December 2011<br>Board meeting                | Review board planning/meeting timetable<br>Adopt business plan for presentation to JSC<br>Review and update Interests Register               | Planning/meeting timetable<br>Strategic Plan<br>Business Plan<br>Interests Register                |
| December 2011<br>Combined Shareholders' meeting | Present business plan for 2012/13 year   | Business Plan  |

|   |   |   |
|---|---|---|
| March 2012<br>Board meeting                     | Review draft six monthly report<br>Review board performance<br>Review governance policies   | Draft six monthly report<br>Checklist for board effectiveness<br>Governance charter |
| March 2012<br>Board Workshop                    | Update on waste industry changes and trends<br>Lunch or Dinner with Board   | Guest Speaker   |
| March 2012<br>Combined Shareholders'<br>meeting | Present six monthly report  | Six monthly report as at Dec 2012   |
| June 2012<br>Board meeting                      | Review customer satisfaction survey results<br>Annual review of strategic plan<br>Set Engineering Adviser's performance<br>measures for 12/13 | Customer survey report<br>Strategic plan<br>Draft GM's performance measures         |



## 3 YEAR FINANCIAL FORECASTS

**Nelson Regional Sewerage Business Unit  
Budget Summary for 2010 to 2014**

|                             | Projection | Budget |       |       |
|-----------------------------|------------|--------|-------|-------|
|                             | 10/11      | 11/12  | 12/13 | 13/14 |
| <b>Income</b>               |            |        |       |       |
| Contributors                | 6,902      | 7,396  | 8,498 | 8,429 |
| Interest                    | 1          | 1      | 1     | 1     |
| Other Recoveries            | 224        | 195    | 195   | 195   |
| <b>Total Income</b>         | 7,127      | 7,592  | 8,694 | 8,625 |
| <b>Expenditure</b>          |            |        |       |       |
| Operations & Maintenance    | 3,175      | 3,521  | 3,510 | 3,521 |
| Interest                    | 812        | 1,315  | 1,437 | 1,382 |
| Insurance                   | 25         | 25     | 25    | 25    |
| Depreciation                | 1,626      | 1,671  | 1,856 | 1,856 |
| <b>Total Operating Cost</b> | 5,638      | 6,532  | 6,828 | 6,784 |
| <b>Surplus/Deficit</b>      | 1,489      | 1,060  | 1,866 | 1,841 |
| <b>Use of Funds</b>         |            |        |       |       |
| Loan Repayment              | 1,575      | 1,299  | 1,174 | 1,226 |
| Renewals                    | 51         | 372    | 682   | 630   |
| Owners Distribution         | 1,489      | 1,060  | 1,866 | 1,841 |
| Upgrades                    | 8,647      | 6,330  | 0     | 650   |
|                             | 11,762     | 9,061  | 3,722 | 4,347 |
| <b>Sources of Funds</b>     |            |        |       |       |
| Surplus/Deficit             | 1,489      | 1,060  | 1,866 | 1,841 |
| Depreciation                | 1,626      | 1,671  | 1,856 | 1,856 |
| New Loans                   | 8,647      | 6,330  | 0     | 650   |
|                             | 11,762     | 9,061  | 3,722 | 4,347 |

10 YEAR PLANS

OPERATIONS, MAINTENANCE AND CAPITAL EXPENDITURE

NELSON REGIONAL SEWERAGE BUSINESS UNIT  
12 Year Operations and Maintenance Plan (\$,000)

| Budget<br>10/11 | Proj<br>10/11 | 1<br>11/12   | 2<br>12/13   | 3<br>13/14   | 4<br>14/15   | 5<br>15/16   | 6<br>16/17   | 7<br>17/18   | 8<br>18/19   | 9<br>19/20   | 10<br>20/21  | 11<br>21/22  | 12<br>22/23  |
|-----------------|---------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|
| 124             | 124           | 144          | 124          | 124          | 144          | 124          | 124          | 144          | 124          | 124          | 144          | 124          | 124          |
| 1,391           | 812           | 1,315        | 1,437        | 1,382        | 1,534        | 1,796        | 1,840        | 1,758        | 1,616        | 1,528        | 1,392        | 1,296        | 1,200        |
| 1,698           | 1,626         | 1,671        | 1,856        | 1,856        | 1,856        | 2,142        | 2,342        | 2,342        | 2,342        | 2,342        | 2,342        | 2,342        | 2,342        |
| 693             | 786           | 754          | 754          | 754          | 612          | 612          | 612          | 612          | 612          | 612          | 612          | 612          | 612          |
| 1,214           | 1,181         | 1,408        | 1,433        | 1,433        | 1,455        | 2,445        | 2,445        | 2,445        | 2,445        | 2,445        | 2,445        | 2,445        | 2,445        |
| 448             | 374           | 462          | 462          | 462          | 462          | 462          | 462          | 462          | 462          | 462          | 462          | 462          | 462          |
| 180             | 173           | 215          | 198          | 210          | 216          | 182          | 231          | 180          | 198          | 210          | 216          | 217          | 180          |
| 50              | 50            | 50           | 50           | 50           | 50           | 50           | 50           | 50           | 50           | 50           | 50           | 50           | 50           |
| 25              | 25            | 25           | 25           | 25           | 25           | 25           | 25           | 25           | 25           | 25           | 25           | 25           | 25           |
| 26              | 26            | 26           | 26           | 26           | 26           | 26           | 26           | 26           | 26           | 26           | 26           | 26           | 26           |
| 15              | 20            | 15           | 15           | 15           | 15           | 15           | 15           | 15           | 15           | 15           | 15           | 15           | 15           |
| 1               | 1             | 1            | 1            | 1            | 1            | 1            | 1            | 1            | 1            | 1            | 1            | 1            | 1            |
| 414             | 420           | 427          | 427          | 427          | 427          | 427          | 427          | 427          | 427          | 427          | 427          | 427          | 427          |
| 20              | 20            | 20           | 20           | 20           | 20           | 20           | 20           | 20           | 20           | 20           | 20           | 20           | 20           |
| <b>6,298</b>    | <b>5,638</b>  | <b>6,532</b> | <b>6,828</b> | <b>6,784</b> | <b>6,843</b> | <b>8,326</b> | <b>8,620</b> | <b>8,507</b> | <b>8,363</b> | <b>8,287</b> | <b>8,177</b> | <b>8,061</b> | <b>7,929</b> |

Total Management  
Total Financial  
Depreciation  
Total Electricity  
TP Maintenance  
PS & RM Maintenance  
Total Monitoring  
Consultancy  
Insurance  
Rates  
Water Charges  
Forestry  
Biosolids Disposal  
Telephone/Computers  
Total Expenses

NELSON REGIONAL SEWERAGE BUSINESS UNIT

| 12 Year Renewal Plan (\$,000)              | Budget<br>10/11 | Proj<br>10/11 | 1<br>11/12 | 2<br>12/13 | 3<br>13/14 | 4<br>14/15 | 5<br>15/16 | 6<br>16/17   | 7<br>17/18 | 8<br>18/19   | 9<br>19/20 | 10<br>20/21  | 11<br>21/22 | 12<br>22/23  |
|--|-----------------|---------------|------------|------------|------------|------------|------------|--------------|------------|--------------|------------|--------------|-------------|--------------|
| Miscellaneous                              | 20              | 5             | 20         | 20         | 20         | 20         | 20         | 20           | 20         | 20           | 20         | 20           | 20          | 20           |
| Pump Stations and Rising Mains             | 152             |               | 22         | 211        | 456        | 44         | 26         | 38           | 24         | 254          | 123        | 54           |             | 1,055        |
| Inlet, Aeration Basin, Clarifier and Ponds | 14              | 14            | 85         | 279        | 26         | 43         | 17         | 441          | 68         | 68           | 75         | 873          | 762         |              |
| Solids Handling                            | 135             | 32            | 35         | 172        | 119        | 24         | 235        | 3,366        |            | 261          |            | 1,150        | 95          | 76           |
| Rabbit Island                              |                 |               | 20         |            | 10         | 10         | 10         | 45           | 45         | 45           | 45         |              |             |              |
| Roads                                      |                 |               | 190        |            |            |            |            |              |            |              |            |              |             |              |
| Consents                                   |                 |               |            |            |            |            |            |              |            | 369          |            | 178          |             |              |
| <b>Total =</b>                             | <b>321</b>      | <b>51</b>     | <b>372</b> | <b>682</b> | <b>630</b> | <b>141</b> | <b>307</b> | <b>3,911</b> | <b>156</b> | <b>1,017</b> | <b>264</b> | <b>2,275</b> | <b>877</b>  | <b>1,151</b> |

| Total For<br>10 Years                                     | Actual<br>up to<br>09/10 | Budget &<br>C/O<br>10/11 | Proj<br>10/11 | 1<br>11/12   | 2<br>12/13 | 3<br>13/14 | 4<br>14/15   | 5<br>15/16   | 6<br>16/17 | 7<br>17/18 | 8<br>18/19 | 9<br>19/20 | 10<br>20/21 | 11<br>21/22 | 12<br>22/23 |
|---|--------------------------|--------------------------|---------------|--------------|------------|------------|--------------|--------------|------------|------------|------------|------------|-------------|-------------|-------------|
| Pump Stations & Rising Mains<br>Regional Pipeline Upgrade | 4,500                    | 18,615                   | 7,000         | 4,500        |            |            |              |              |            |            |            |            |             |             |             |
| Bells Island Treatment Plant                              |                          |                          |               |              |            |            |              |              |            |            |            |            |             |             |             |
| Outfall Capacity Upgrade                                  | 0                        | 1,000                    | 690           | 680          |            |            |              |              |            |            |            |            |             |             |             |
| Primary Clarifier   | 680                      | 857                      | 857           | 1,000        |            |            |              |              |            |            |            |            |             |             |             |
| Expand Biosolids Treatment<br>Facilities                  | 1,000                    |                          |               |              |            | 650        | 6,500        |              |            |            |            |            |             |             |             |
| Anaerobic Digestion and Co-<br>generation                 | 7,150                    |                          |               |              |            |            |              |              |            |            |            |            |             |             |             |
| Nitrogen Removal  | 3,500                    |                          |               |              |            |            |              | 3,500        |            |            |            |            |             |             |             |
| Phosphorus Removal  | 500                      |                          |               |              |            |            |              | 500          |            |            |            |            |             |             |             |
| Pond Desludging   | 1,000                    |                          |               |              |            |            |              | 1,000        |            |            |            |            |             |             |             |
| Biosolids Facility  |                          |                          |               |              |            |            |              |              |            |            |            |            |             |             |             |
| Forest Planting (Bells)                                   | 0                        | 30                       | 85            | 0            |            |            |              |              |            |            |            |            |             |             |             |
| Resource Consent  | 30                       | 15                       | 15            | 150          |            |            |              |              |            |            |            |            |             |             |             |
| Purchase of land  | 150                      |                          |               |              |            |            |              |              |            |            |            |            |             |             |             |
| <b>TOTAL</b>  | <b>18,480</b>            | <b>20,517</b>            | <b>8,647</b>  | <b>6,330</b> | <b>0</b>   | <b>650</b> | <b>6,500</b> | <b>5,000</b> | <b>0</b>   | <b>0</b>   | <b>0</b>   | <b>0</b>   | <b>0</b>    | <b>0</b>    | <b>0</b>    |

**Note:** PROJECT COSTS ARE ESTIMATES ONLY

- 1 The pipeline across the estuary has been assessed as an extreme risk and there are potential capacity issues in the near future. Construction of duplicate pipeline from Monaco to Bells Island, upgrade of Beach Road, Saxton Road and Airport pump stations, and construction of a new pump station at Songer Street.
- 2 Treated waste water re-use project to supply water for irrigation in Nelson and Tasman District
- 3 The outfall is not capable of discharging design flows and in storm events it takes several days, at times weeks, to reduce pond levels to normal, which creates a risk of overflows. As discharges to the plant increase the issue becomes more critical and already in the recent past a retrospective consent has been required for pond overflows and an emergency discharge consent to allow extended discharges to provide buffer storage in the ponds for rainfall events.
- 4 The treatment plant upgrade was completed and is fully operational. The installation of the centrifuge and launder covers were delayed to allow further evaluation.

- 5 Additional ATAD tank required to accommodate growth. At this stage the Board have considered converting the solids treatment facility to an anaerobic system when the rest of the ATAD tanks reach the end of their economic life. This project may be brought forward instead of adding an additional tank.
- 6 Once ATAD tanks have reached the end of their economic lives the opportunity exists to investigate other options which may be more sustainable.
- 7 Removal of nitrogen and phosphorus to ensure compliance with coastal permit and to ensure adequate land available for biosolids application.
- 8 Build up of sludge in ponds is monitored annually as it affects the effectiveness of the waste treatment process.
- 9 Replanting the Bell Island plantation and restoration of spit.
- 10 Discharges from Pump Stations as required by NRMP
- 11 Purchase the land at 4 Saxton Road on which the Saxton Road pump station is located from New Zealand Transport Agency

BELLS ISLAND TREATMENT PLANT SCHEMATIC

