



**Notice of the Ordinary meeting of**

## **Forestry Subcommittee**

***Te Kōmiti Āpiti, Ngahere***

|           |   |
|-----------|---|
| Date:     | Wednesday 1 December 2021   |
| Time:     | 1.00p.m.  |
| Location: | Council Chamber<br>Floor 2A, Civic House,<br>110 Trafalgar Street, Nelson |

## **Agenda**

### ***Rārangi take***

**Chairperson**

Mr John Murray

**Members**

Her Worship the Mayor Rachel Reese

Cr Kate Fulton

Cr Tim Skinner

Independent Forestry Expert Peter Gorman

and Group Manager Infrastructure Alec Louverdis

Quorum: 5, comprising the Chair and two elected member (decision makers), plus one Council officer and the independent forestry expert (for advice only)

**Pat Dougherty  
Chief Executive**

Nelson City Council Disclaimer

Please note that the contents of these Council and Committee agendas have yet to be considered by Council and officer recommendations may be altered or changed by the Council in the process of making the formal Council decision. For enquiries call (03) 5460436.

## ***Excerpt from Nelson City Council Delegations Register (A11833061)***

### **Forestry Subcommittee**

This is a subcommittee that reports to Council.

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

- All matters relating to the commercial forestry operational portfolio including environmental and recreational issues

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

- In accordance with Council's Annual Plan and Long Term Plan:
  - Approval of forestry and harvesting management strategy and plans
  - Approval of the engagement of contractors/consultants and forestry tenders

#### **Powers to Recommend to Council:**

- Any actions relating to the oversight of all matters relating to the commercial forestry portfolio, falling outside the powers to decide, including:
  - Approval of forestry related budgets; and
  - Any other matters relating to continuing commercial forestry operations.

For the Terms of Reference for the Forestry Subcommittee please refer to document A1739267.

**1. Apologies**

Nil

**2. Confirmation of Order of Business**

**3. Interests**

3.1 Updates to the Interests Register

3.2 Identify any conflicts of interest in the agenda

**4. Public Forum**

**5. Confirmation of Minutes**

5.1 29 September 2021

**5 - 7**

Document number M18974

Recommendation

***That the Forestry Subcommittee***

- 1. Confirms the minutes of the meeting of the Forestry Subcommittee, held on 29 September 2021, as a true and correct record.***

**6. Chairperson's Report**

**7. Forestry High-level Review - Costs**

**8 - 13**

Document number R26263

Recommendation

***That the Forestry Subcommittee***

- 1. Receives the report (R26274); and***

2. ***Endorses the recommended approach as detailed in report (R26263) to fulfil the requirements of the high-level forestry review requested by Council; and***
3. ***Approves the next steps of appointing the suite of consultants (along with independent peer reviews), as detailed in Report (R26263), to undertake a high-level review of commercial forestry at an estimated cost of \$73,500 (excluding peer reviews).***

## **8. Forestry Activity Management Plan 2021-31 14 - 63**

Document number R22592

Recommendation

### ***That the Forestry Subcommittee***

1. ***Receives the report Forestry Activity Management Plan 2021-31 (R22592) and its Attachment (A2072414); and***
2. ***Approves the Forestry Activity Management Plan 2021-31 (A2072414) as the version to be forwarded to Council following approval of the Long-Term Plan 2021-31.***

Recommendation to Council

### ***That Council***

1. ***Adopts the revised Forestry Activity Management Plan 2021-31 (A2072414).***

## **9. Forestry Update - Number 17 64 - 82**

Document number R26274

Recommendation

### ***That the Forestry Subcommittee***

1. ***Receives the report (R26274) and its Attachments (A2779103, A2762279, A2788214 and A2783310).***



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**Minutes of a meeting of the  
Forestry Subcommittee  
*Te Kōmiti Āpiti, Ngahere***

**Held in the Council Chamber, Floor 2A, Civic House, 110 Trafalgar Street, Nelson on Wednesday 29 September 2021, commencing at 3.33p.m.**

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Present: Mr J Murray (Chairperson), Her Worship the Mayor R Reese, Councillor T Skinner, Independent Forestry Expert P Gorman and Group Manager Infrastructure A Louverdis

In Attendance: PF Olsen representatives (S Nuske and J Tansey), LandVision Ltd representative (L Grant), Governance Advisers (J Brandt and K McLean)

Apologies: Councillor K Fulton (other Council business)

**1. Apologies**

Resolved FS/2021/006

***That the Forestry Subcommittee***

- 1. Receives and accepts the apology from Councillor K Fulton – on other Council business.***

Murray/Her Worship the Mayor

Carried

**2. Confirmation of Order of Business**

There was no change to the order of business.

**3. Interests**

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

#### **4. Public Forum**

There was no public forum.

#### **5. Confirmation of Minutes**

##### **5.1 23 June 2021**

Document number M18743, agenda pages 5 - 7 refer.

Resolved FS/2021/007

##### ***That the Forestry Subcommittee***

- 1. Confirms the minutes of the meeting of the Forestry Subcommittee, held on 23 June 2021, as a true and correct record.***

Skinner/Her Worship the Mayor

Carried

#### **6. Chairperson's Report**

Document number R26268

There was no Chairperson's Report.

#### **7. Forestry Update - Number 16**

Document number R26006, agenda pages 8 - 66 refer.

Group Manager Infrastructure, Alec Louverdis, presented the report.

Tantragee Block harvesting. The Subcommittee expressed its thanks and appreciation to PF Olsen, Council officers and the affected residents for making the delivery of the Tantragee harvest a complete success.

Marsden Harvesting. PF Olsen representative, Sam Nuske, answered questions relating to wind damage and harvesting of this site.

LandVision representative, Lachie Grant, presented his alternative species update (attachment 6 to the report). He noted the damage to newly planted natives at the Brook site caused by high numbers of deer. Discussion took place regarding the timing of plantings and the Parks and Reserves deer reduction programme.

Resolved FS/2021/008

***That the Forestry Subcommittee***

- 1. Receives the report (R26006) and its Attachments (A2738154, A2738155, A2742664, A2719738, A2738156 and A2742185); and***
- 2. Notes that the harvesting of blocks in the Maitai Valley will commence in October 2021; and***
- 3. Approves the harvesting of around 15Ha of Block 42.05 (Marsden Valley) to occur in 2021/22, one year ahead of schedule.***

Skinner/Her Worship the Mayor

Carried

There being no further business the meeting ended at 4.17p.m.

Confirmed as a correct record of proceedings by resolution on (date)

Resolved

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## **Forestry High-level Review - Costs**

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### **1. Purpose of Report**

- 1.1 To provide an approach and cost estimate to undertake a high-level review of forestry, in line with the 24 June 2021 Council resolution.
- 1.2 To seek approval from the Forestry Subcommittee to proceed with the work.

### **2. Recommendation**

***That the Forestry Subcommittee***

- 1. Receives the report Forestry High-level Review - Costs (R26263); and***
- 2. Endorses the recommended approach as detailed in report (R26263) to fulfil the requirements of the high-level forestry review requested by Council; and***
- 3. Approves the next steps of appointing the suite of consultants (along with independent peer reviews), as detailed in Report (R26263), to undertake a high-level review of commercial forestry at an estimated cost of \$73,500 (excluding peer reviews).***

### **3. Background**

- 3.1 Council set aside funding of \$100,000 in Y1 of the 2021-31 Long-Term Plan (LTP) to consider the feasibility of alternative commercial species (other than *pinus radiata*).
- 3.2 Since then, a further issue relating to forestry was raised at the 24 June 2021 Council meeting, where it was resolved as follows:

*That the Council*

*"Requests a report on the potential costs, scope, and high-level implications (including financial) of undertaking*



## Item 7: Forestry High-level Review - Costs

*an independent review of Council's approach to forestry in the 21/22 financial year, including considering developing a regenerative forestry plan prioritising indigenous forest opportunities, climate leadership and innovation to inform the Forestry Activity Management Plan and Treasury Management Policy”.*

- 3.3 Officers advised the Forestry Subcommittee in September 2021 of the plan to co-ordinate these strands of work that will enable a framework to be developed that would guide scope and costs for consideration.
- 3.4 It was also noted in that report (and subsequently reported to Council as part of the Status Report update) that this will all be presented, in the first instance, to the Forestry Subcommittee in 2021/22 that would allow any works to be undertaken to inform the next Forestry Activity Management Plan (FAMP) and guide potential changes (if any) to the Treasury Policy.
- 3.5 The approach to give effect to the Council resolution is detailed hereafter, but in summary comprises several information gathering streams of work that will develop a framework to enable informed decisions.

### **4. Catalyst 2016 report review**

- 4.1 As a necessary and prudent first step to guide any high-level overview, officers commissioned The Catalyst Group to review their original 2016 report “Assessment of non-monetary values”. This report considered a range of criteria that set the basis for Council resolving in 2016 to retire around 25% of its commercial forestry.
- 4.2 The current work was commissioned to review and test the assumptions that underpinned the original report and to evaluate whether those recommendations are still applicable in the current environment considering Council’s LTP priorities and any new developments that have come into force since 2016 - such as the 2019 NES for Plantation Forestry and the 2020 NPS for Freshwater Management. This review will include a climate change adaptation and mitigation lens.
- 4.3 Work included interviews with a range of cross Council departments within Council, Chair of the Forestry Subcommittee, the independent forestry adviser, Landvision, PF Olsen and Group Manager Infrastructure.
- 4.4 The findings of the report, commissioned for \$12,500, were not available at time of writing.

### **5. Other complementary works**

- 5.1 In addition to the Catalyst report review, the following are proposed under two streams of work. All work will be again be undertaken with a climate change adaptation and mitigation lens.

**Stream 1 - Alternate commercial species assessment**

- 5.2 The first piece of work includes an assessment of alternate commercial species specific to Nelson – including the viability of species for Nelson, the economic assessment of Return on Investment of those species compared to pine, and the effect on the region’s work force and end of line product chain of those species. Species to be assessed includes eucalyptus, redwood, manuka, totara and cypress.
- 5.3 It is proposed to use PF Olsen to undertake this work (on the back of the extensive work they did for Gisborne on the same matter and the work they did as part of the FSC accreditation framework for NCC), but with two added inputs to demonstrate transparency and independence:
- Input #1 – Input into PF Olsen’s report by industry recognised species specialists:
    - Eucalyptus – Dryland Forest Initiatives; and
    - Redwood – NZ Redwood Company; and
    - Manuka – Manuka Farming NZ.
  - Input #2 - An independent peer review of the final report. It is recommended that Jacqui Aimers be used to undertake the peer review. Jacqui is a consultant research analyst and forestry scientist with a strong background in specialty species.
- 5.4 The total estimated cost for this work (excluding peer review) is \$35,000.

**Stream 2 - Indigenous conversion**

- 5.5 The second piece of work includes an assessment of the cost of developing a regenerative forestry plan prioritising indigenous forest opportunities. Work will include the costs of transitioning to indigenous forestry, the ongoing maintenance costs going forward and the effect of this on the regions work force and end of line product chain.
- 5.6 It is recommended that Dr Adam Forbes (Forbes Ecology) be engaged to undertake this work. Refer to the following link <https://www.forbesecology.co.nz/> for Dr Forbes’ bio and profile. Dr Forbes is highly respected in his field and is considered a national expert and works through Ministry of Primary Industries (MPI) as well as the Canterbury University School of Forestry. He is also involved in MPI funded Hill Country Erosion work and the MBIE Envirolink Grant on Transition Guidelines for Landowners from plantation forest to native forest working across the three top of the South Island Councils.
- 5.7 It is recommended that this work be independently peer reviewed by Wildland Consultants (Wildlands). Wildlands is an ecological consultancy committed to providing high quality ecological information with a very strong focus on the planning and implementation of ecological restoration. Refer to the following link <https://www.wildlands.co.nz/>.

## Item 7: Forestry High-level Review - Costs

5.8 The estimated cost for this work (excluding peer review) is \$26,000.

### 6. Financial

6.1 The estimated cost of the total proposed works is summarised below:

| Workstream                              | Delivery By  | Cost              |
|---|--|-------------------|
| 2016 Catalyst report review             | The Catalyst Group   | \$12,500          |
| Stream 1 - Alternate commercial species | PF Olsen with targeted input from species experts (with peer review) | \$35,000          |
| Stream 2 - Indigenous conversion        | Forbes Ecology (with peer review)                                    | \$26,000          |
|   | <b>TOTAL COST</b>  | <b>\$73,500 *</b> |

\* excluding peer reviews

### 7. Conclusion

7.1 Officers have done extensive work on developing a proposal (and cost estimate) to address the high-level review requested by Council. That includes a multi-pronged approach with several work streams using different consultants with all work stages independently reviewed to remove any perceived bias and to ensure transparency.

### 8. Next Steps

8.1 Should the Subcommittee approve the proposed approach by officers, the next steps would be to appoint the consultants that will allow work to proceed with the findings reported back to the Subcommittee.

**Author:** Alec Louverdis, Group Manager Infrastructure

### Attachments

Nil

|   |
|---|
| <p><b>Important considerations for decision making</b></p>  |
| <p><b>1. Fit with Purpose of Local Government</b></p> <p>The regular updates support the effective and efficient management of Council's productive forests and through best practices and sustainability contributes to Local Government well-beings of social, economic, environmental, and cultural.</p>     |
| <p><b>2. Consistency with Community Outcomes and Council Policy</b></p> <p>The Group aligns with the following outcome: "Our Council provides leadership and is supported by an innovative and sustainable economy".</p>  |
| <p><b>3. Risk</b></p> <p>The Subcommittee has been set up to specifically have an oversight on all things relating to forestry to reduce the risk to Council. The risk of this high-level review includes several checks and balances to ensure transparency and accountability.</p>                            |
| <p><b>4. Financial impact</b></p> <p>The Subcommittee has been set up to monitor forestry activity and to manage income and expenses accordingly. Any expenditure recommended in this report is in line with this oversight. Adequate funding exists in the LTP for this work</p>                               |
| <p><b>5. Degree of significance and level of engagement</b></p> <p>The proposed approach is not significant but commercial forestry has a high degree of interest from some sectors of the community. The proposal has several checks and balances in place to ensure transparency.</p>                         |
| <p><b>6. Climate Impact</b></p> <p>Climate change is included in all proposed works under this review.</p>  |
| <p><b>7. Inclusion of Māori in the decision-making process</b></p> <p>Iwi have not been consulted in the preparation of this report.</p>  |
| <p><b>8. Delegations</b></p> <p>The Forestry Subcommittee's areas of responsibility include:</p> <p>Areas of Responsibility:</p> <ul style="list-style-type: none"> <li><i>All matters relating to the commercial forestry operational portfolio including environmental and recreational issues</i></li> </ul> |

## Item 7: Forestry High-level Review - Costs

### Powers to Decide:

- *In accordance with Council's Annual Plan and Long-Term Plan:*
  - *Approval of forestry and harvesting management strategy and plans*
  - *Approval of the engagement of contractors/consultants and forestry tenders*

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## **Forestry Activity Management Plan 2021-31**

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### **1. Purpose of Report**

- 1.1 To approve the Forestry Asset Management Plan 2021-31 (FAMP), following approval of the Long-Term Plan 2021-31 (LTP), to be forwarded to Council for adoption.

### **2. Recommendation**

***That the Forestry Subcommittee***

- 1. Receives the report Forestry Activity Management Plan 2021-31 (R22592) and its Attachment (A2072414); and***
- 2. Approves the Forestry Activity Management Plan 2021-31 (A2072414) as the version to be forwarded to Council following approval of the Long-Term Plan 2021-31.***

Recommendation to Council

***That Council***

- 1. Adopts the revised Forestry Activity Management Plan 2021-31 (A2072414).***

### **3. Background**

- 3.1 Draft Activity Management Plans (AMPs) are prepared for the approval of the Committee to inform development of the LTPs and include areas of focus for the activity during 2021-31; Levels of Service and the activity budgets for operations and maintenance, renewals and capital expenditure.

Item 8: Forestry Activity Management Plan 2021-31

- 3.2 The Draft FAMP was approved by the Subcommittee on 1 December 2020 and forwarded to Council to guide the 2021-31 LTP. The Subcommittee resolved as follows:

*That the Forestry Subcommittee*

2. *Approves the amended Draft Forestry Activity Management Plan 2021-31 (A2072414) as the version to be forwarded to Council as the version to inform the Long Term Plan 2021-31.*

*That the Council*

1. *Approves the amended Draft Forestry Activity Management Plan 2021-31 (A2072414) as the version to inform the Long Term Plan 2021-31; and*
2. *Notes that the amended Draft Forestry Activity Management Plan 2021-31 will be updated and, the final Activity Management Plan approved, after the adoption of the Long Term Plan 2021-2031.*

- 3.3 That draft FAMP presented to Council included the following revised Goal – *The Goal of the Forestry Activity in relation to its production forests are to manage its forest estate on a sustainable basis and to maximise net present value, and to implement best practice forest industry standards while protecting environmental and recreational values.*

- 3.4 Council resolved on 17 December 2020 as follows:

*That the Council*

1. *Approves the amended Draft Forestry Activity Management Plan 2021-31 (A2072414) as the version to inform the Long Term Plan 2021-31; and*
2. *Notes that the amended Draft Forestry Activity Management Plan 2021-31 will be updated and, the final Activity Management Plan approved, after the adoption of the Long Term Plan 2021-2031.*

- 3.5 Council resolved on 24 June 2021 as follows:

*That the Council*

*Requests a report on the potential costs, scope, and high level implications (including financial) of undertaking an independent review of Council's approach to forestry in the 21/22 financial year, including considering developing a regenerative forestry plan prioritising*

## Item 8: Forestry Activity Management Plan 2021-31

*indigenous forest opportunities, climate leadership and innovation to inform the Forestry Activity Management Plan and Treasury Management Policy.*

### 4. Discussion

- 4.1 The final FAMP (refer Attachment 1) has been updated. For ease of reading updates are highlighted yellow in the attachment. Significant additions include:
- 4.1.1 A section on Climate Change and Greenhouse Gas Emissions recognising Council's priority in this matter.
- 4.1.2 A section addressing Council's June 2021 resolution for an independent review of Council's approach to forestry in 2021/22. The cost of undertaking this work will be presented to, in the first instance, the Forestry Subcommittee and will inform the next 2024-34 FAMP.

### 5. Options

- 5.1 The Subcommittee has two options – either to approve or not approve recommending the final FAMP to Council for adoption. Officers support option 1.

| <b>Option 1: Approve the FAMP 2021-31 to be forwarded to Council for adoption. Recommended option.</b> |  |
|--|--|
| Advantages   | <ul style="list-style-type: none"><li>• Meets the requirements of the Local Government Act 2002</li><li>• Supports delivery of the recently adopted LTP 2021-31.</li></ul>   |
| Risks and Disadvantages  | <ul style="list-style-type: none"><li>• Nil</li></ul>  |
| <b>Option 2: Not approve the FAMP 2021-31 to be forwarded to Council</b>                               |  |
| Advantages   | <ul style="list-style-type: none"><li>• Nil</li></ul>  |
| Risks and Disadvantages  | <ul style="list-style-type: none"><li>• Not adopting the AMP would leave Council without a clear plan to mitigate risks and achieve levels of service</li><li>• Fail to meet requirements of the Local Government Act 2002</li></ul> |



## **6. Conclusion**

- 6.1 The FAMP has been updated following Council's approval of the LTP and the subsequent Council June resolution and is ready to be recommended to Council for adoption.

**Author: Alec Louverdis, Group Manager Infrastructure**

### **Attachments**

Attachment 1: A2072414 - Draft 2021-31 Forestry Activity Management Plan - 24Nov2021 [↓](#)

|  |
|--|
| <p><b>Important considerations for decision making</b></p>   |
| <p><b>1. Fit with Purpose of Local Government</b></p> <p>The Forestry AMP support the effective and efficient management of Council’s productive forests and through best practices and sustainability contributes to Local Government well-beings of social, economic, environmental and cultural.</p>  |
| <p><b>2. Consistency with Community Outcomes and Council Policy</b></p> <p>Forestry support the following community outcomes:</p> <p>“Our infrastructure is efficient, cost effective and meets current and future needs” and “Our communities are healthy, safe, inclusive and resilient.”</p> <p>The FAMP has been prepared in line with Council’s Treasury and Investment Policy.</p> |
| <p><b>3. Risk</b></p> <p>Adopting the FAMP is a low risk as it has been through the development process and reflects all the relevant LTP decisions.</p>   |
| <p><b>4. Financial impact</b></p> <p>There are no direct funding implications from the recommendation. The final AMP includes all work required by Council following the approval of the LTP. Any additional cost to fulfil the requirements of the 24 June 2021 Council meeting will be addressed via the Forestry Subcommittee.</p>  |
| <p><b>5. Degree of significance and level of engagement</b></p> <p>The LTP has been consulted on and Council has approved the LTP. The FAMP has been updated accordingly.</p>  |
| <p><b>6. Climate Impact</b></p> <p>The draft FAMP considers the potential impacts and risks climate change presents to the City as commercial pine forestry and harvesting is a sustainable practice.</p>  |
| <p><b>7. Inclusion of Māori in the decision-making process</b></p> <p>Iwi were engaged in preparing the draft FAMP.</p>  |
| <p><b>8. Delegations</b></p> <p>The Forestry Subcommittee is a subordinate decision-making body that reports to Council. The Group does not have the delegated authority to approve AMPs and for the Draft FAMP this is the responsibility of Council.</p>   |

## Item 8: Forestry Activity Management Plan 2021-31

The Group does however have the powers to consider all matters relating to continuing commercial forestry operations and that includes the FAMP.

The Forestry Subcommittee's areas of responsibility include:

*Areas of Responsibility:*

- *All matters relating to the commercial forestry operational portfolio including environmental and recreational issues.*

*Powers to Decide:*

- *In accordance with Council's Annual Plan and Long Term Plan:*
  - *Approval of forestry and harvesting management strategy and plans*
  - *Approval of the engagement of contractors/consultants and forestry tenders*

*Powers to Recommend to Council:*

- *Any actions relating to the oversight of all matters relating to the commercial forestry portfolio, falling outside the powers to decide, including:*
  - *Approval of forestry related budgets; and*
  - *Any other matters relating to continuing commercial forestry operations.*

*Council's delegations in this matter include:*

- *Developing, approving, monitoring and reviewing policies and plans, including activity management plans and the Financial Strategy*

# **Forestry Activity Management Plan 2021 – 2031**

**Mahere Ngahere 2021 – 2031**



**Contributors**

| <b>Authors</b>  | <b>Title</b>   |
|-----------------|--|
| Peter Gorman    | Independent Forestry Consultant                          |
| Sam Nuske       | PF Olsen   |
| Lachie Grant    | LandVision   |
| Laura Papp      | NCC Finance  |
| Alec Louverdis  | NCC Group Manager Infrastructure                         |
| Paul Harrington | NCC Team Leader Parks and Facilities Activity Management |

**Quality Assurance Statement**

| <b>Version No.</b> | <b>Date</b> | <b>Description</b>  | <b>Prepared by</b> | <b>Reviewed by</b>           | <b>Approved by</b>           |
|--------------------|-------------|---|--------------------|------------------------------|------------------------------|
| 1                  |             | Draft for officer review  | As above           | Group Manager Infrastructure | Group Manager Infrastructure |
| 2                  | 8 Sept 2020 | Forestry Advisory Group Workshop                                |                    | GM Infrastructure            | GM Infrastructure            |
| 3                  | 1 Dec 2020  | Draft approved by Sub-Committee                                 |                    | GM Infrastructure            | GM Infrastructure            |
| 4                  | Nov 2021    | Final approved by SLT following LTP adoption                    |                    | GM Infrastructure            | SLT                          |
| 5                  | 1 Dec 2020  | Final approved by Forestry Sub-Committee following LTP adoption |                    | GM Infrastructure            | Forestry Subcommittee        |
| 6                  | Dec 2021    | Final approved by Council following LTP adoption                |                    |                              | Council                      |

Pictures on front sheet: Roding Forest

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## EXECUTIVE SUMMARY

### i. The Purpose of the Plan

The Forestry Activity Management Plan (Plan) outlines the current and future operational requirements needed to meet Council's needs, in the most cost-effective manner.

This plan focuses on ensuring forestry assets are maintained to provide the desired level of service, and to meet the current and future community outcomes in a sustainable manner.

**The Goal of the Forestry Activity in relation to its production forests are to manage its forest estate on a sustainable basis and to maximise not present value and to implement best practice forest industry standards while protecting environmental and recreational values.**

The overall objective of Activity Management is to:

**Meet a required level of service, in the most cost-effective manner, through the management of assets for present and future customers.**

This plan will provide the substantiation for budget forecasts put forward in the Long Term Plan (2021-2031).

### ii. Philosophy

Management of the commercial forest land is driven by the recommendations of the 2016 review report which retains the majority of productive commercial forests and retires approximately 25% of commercial forests for alternate use. These alternate uses include manuka, amenity/long-rotation species, managed native regeneration, and replanting in native species.

**Production Forest:** The harvesting contractor is responsible for preparing a 10-year harvesting plan to maintain and harvest the remaining production forestry blocks.

**Environmental Issues:** 'Best Practice' forestry techniques will help manage sedimentary controls to prevent discharge to waterways and are driven by the National Environmental Standards (NES).

Council's commercial forestry is guided by Council's Treasury and Investment Policy.



### iii. Levels of Service

**Table E-1: Forestry Levels of Service**

|  |                             |  |                                  | Performance Targets                             |   |   |   |
|--|-----------------------------|--|----------------------------------|---|---|---|---|
| Community Outcomes   | Level of Service            | Performance Measurement  | Previous and Current Performance | 21/22 (Year 1)                                  | 22/23 (Year 2)                                  | 23/24 (Year 3)                                  | 24-28 (Years 4 to 10)                           |
| Our unique natural environment is healthy and protected                            | Maintained to good standard | Achieve Forest Stewardship Standard  | Previous and current             | Accreditation achieved                          | Maintained                                      | Maintained                                      | Maintained                                      |
|  | Achieve NES standards       | No breaches  | New                              | No breaches                                     | No breaches                                     | No breaches                                     | No breaches                                     |
| Our infrastructure is efficient, cost effective and meets current and future needs | Financial returns           | Costs and income meet NCC budget targets. Target allows for market price fluctuations. | Previous and current             | Maximise Council Treasury and Investment Policy | Maximise Council Treasury and Investment Policy | Maximise Council Treasury and Investment Policy | Maximise Council Treasury and Investment Policy |

### iv. Financial Summary

**Table E-2 – Forestry Account – Historical Income and Expenditure**

| Historical Income and Expenditure | 2016/17            | 2017/18            | 2018/19          | 2019/20            |
|-----------------------------------|--------------------|--------------------|------------------|--------------------|
| Operating Income                  | (3,248,593)        | (6,180,566)        | (2,348,479)      | (1,037,618)        |
| Operating Expenditure             | 1,915,403          | 4,081,049          | 1,947,700        | 950,324            |
| <b>Cash (Surplus) / Deficit</b>   | <b>(1,333,190)</b> | <b>(2,099,517)</b> | <b>(400,779)</b> | <b>(87,294)</b>    |
| Revaluation (Increase) / Decrease | (93,324)           | 1,473,060          | (166,736)        | (2,495,000)        |
| <b>Net (Surplus) / Deficit</b>    | <b>(1,426,514)</b> | <b>(626,457)</b>   | <b>(567,515)</b> | <b>(2,582,294)</b> |

| Forestry Asset Value (excl. Bell Island) | 2016/17          | 2017/18          | 2018/19          | 2019/20          |
|--|------------------|------------------|------------------|------------------|
| Opening Balance                          | 5,691,000        | 5,784,324        | 4,311,264        | 4,478,000        |
| Plus Revaluation Increase / (Decrease)   | 93,324           | (1,473,060)      | 166,736          | 2,495,000        |
| <b>Closing Balance</b>                   | <b>5,784,324</b> | <b>4,311,264</b> | <b>4,478,000</b> | <b>6,973,000</b> |

| Forestry (Loan) / Reserve     | 2016/17          | 2017/18          | 2018/19          | 2019/20          |
|-------------------------------|------------------|------------------|------------------|------------------|
| Opening Balance               | (2,182,485)      | (849,295)        | 1,250,221        | 1,651,000        |
| Plus Cash Surplus / (Deficit) | 1,333,190        | 2,099,517        | 400,779          | 87,294           |
| <b>Closing Balance</b>        | <b>(849,295)</b> | <b>1,250,221</b> | <b>1,651,000</b> | <b>1,738,294</b> |

**v. Forestry Sub-Committee**

Forestry is administered by the Forestry Sub-Committee. The sub-committee membership, as confirmed in the Terms of Reference, is as follows:

|                             |   |   |
|-----------------------------|---|---|
| Chair                       | <ul style="list-style-type: none"> <li>External appointee</li> </ul>  | Decision-maker<br>(Voting rights)       |
| Members                     | <ul style="list-style-type: none"> <li>Mayor</li> <li>Chair of Community and Recreations Committee</li> <li>Chair of Environment and Climate Committee</li> </ul> | Decision-maker<br>(Voting rights)       |
| Officers                    | <ul style="list-style-type: none"> <li>Officer with responsibility for forestry</li> <li>One other officer</li> </ul>   | To provide advice<br>(No voting rights) |
| Independent Forestry Expert | <ul style="list-style-type: none"> <li>External appointee</li> </ul>  | To provide advice<br>(No voting rights) |

Refer to Appendix for complete terms of reference.

## 1. INTRODUCTION

### 1.1 Background

Council's interest in forestry extends back to the 1940s, with additional forestry land being purchased in the 1980s and '90s to achieve a more viable scale.

Records note various reasons for purchasing forestry property: maintaining walkways; looking after areas of cultural significance; retaining a suitable catchment area for water treatment; managing environmental issues such as erosion/land stability; providing a scenic backdrop to the City; supporting future City growth; investment reasons; economic development and employment opportunities brought about by the forestry industry; connecting with and development of reserves and facilities such as Marsden Cemetery.

The Nelson–Tasman region produces good quality timber trees with high growth rates, and high-density timber. Such timber has a higher number of end uses and potential markets than lower quality, lower density timber.

It is however, acknowledged that the forest estate has value beyond just commercial forestry operations. Forests are attracting increasing environmental interest as well as a growing recreational use.

The forest land covered within this Plan covers the commercial forestry holdings of Nelson City Council and does not refer to the management of the large areas of land with natural forest cover such as the Brook Waimarama Sanctuary, the Grampians, or any other Parks forestry and reserves assets.

Following an independent review of the Council's plantation forests in 2016 by the Catalyst Group (refer A1591849), Council adopted a strategy:

- a. That a single species (pinus radiata) will be used for replanting commercial stands; and
- b. That will result in approximately 25% of the forest area being retired from timber production and re-established in permanent forest cover consisting mainly of native forest species.

The plan detailing the alternate species is covered in a report prepared by Landvision Ltd – Nelson City Council Forestry Alternative Management (refer to A1989331).

Table E-4 shows the future land use of the forest area (some area has already been retired since 2016). This will see the retirement of approximately 29.9 hectares of Douglas Fir in the Brook / Maitai and Marsden blocks.

**Table E-3: Forestry Future Use Categories**

| Land use                                       | Stocked area (hectares) |
|--|-------------------------|
| Permanent forest cover (non-timber production) | 174.1                   |
| Timber production                              | 518.6                   |
| Amenity planting (exotic species)              | 1.4                     |
| <b>Grand Total</b>                             | <b>694.1</b>            |

A Forestry Sub-Committee, comprising councillors, officers, and a specialist forestry expert, approves forestry and harvesting management strategy and plans, engages contractors, approves budgets, and decides any other matters relating to commercial forestry operations. Operational management is carried out by a contracted forest manager.

#### **1.1.1 Organisation, Vision, Mission**

##### **Vision**

Nelson is the Smart Little City.

##### **Mission statement**

We leverage our resources to shape an exceptional place to live, work and play.

##### **Community outcomes**

Councils are required by the Local Government Act 2002 to have Community Outcomes – a statement of the measures of success that Council is working to achieve for the community. Council has eight current community outcomes that are summarised below:

- Our unique natural environment is healthy and protected
- Our urban and rural environments are people-friendly, well planned and sustainably managed
- Our infrastructure is efficient, cost effective and meets current and future needs
- Our region is supported by an innovative and sustainable economy
- Our communities are healthy, safe, inclusive, and resilient
- Our communities have opportunities to celebrate and explore their heritage, identity, and creativity
- Our communities have access to a range of social, educational, and recreational facilities and activities

- Our Council provides leadership and fosters partnerships, a regional perspective, and community engagement

## **1.2 Asset Management Practices**

### **Information systems**

All asset information is stored on ArcInfo (a computer based geographical information system).

### **Accounting and Financial Systems**

The Nelson City Council uses integrated computer software supplied by MagiQ.

### **Geographical Information System**

Data captured will be recorded to an accuracy as allowed for by current technology.

## **1.3 Monitoring and Improvement Programme**

This Plan is regularly revised and is an evolving document and will be reviewed annually and updated at least every three years to coincide with the Annual and Long Term Plans and to incorporate decision making, updated asset information, and Nelson City Council policy changes that may impact on the levels of service.

The Plan will be improved throughout its life cycle as further information about the forestry assets are collected. Nelson City Council is committed to advanced data collection and management systems that will allow for a greater appreciation of the assets.

Nelson City Council will report variations in the adopted annual plan budgets against the original asset management plan forecasts and explain the level of service implications of budget variations.

The effectiveness of the Plan will be monitored by the following procedures:

- Financial expenditure projections prior to year end
- Resource consent monitoring as required by consents
- Operations and Maintenance reports to the Forestry Advisory Group

## **1.4 Carbon Forestry**

Council approved the suite of recommendations listed below with respect to the Emission Trading Scheme (ETS) and all these items have been actioned.

1. Deregister the post-1989 forest from the ETS.
2. Assess the area of pre-1990 forest land that may be cleared for expansion of the York Valley landfill and retain sufficient NZUs from the

pre-1990 forestry allocation to meet any obligations to surrender NZUs in relation to deforestation.

3. Delay clearing of pre-1990 forest land for landfill expansion until the stands are at least eight years old in order to minimise ETS liabilities.
4. Sell Council's surplus pre-1990 carbon credits on the open market, or to Council's landfill account.

### **Emissions Trading Scheme (ETS)**

The ETS is a compliance scheme administered under the Climate Change Response Act 2002 that enables New Zealand to meet its international climate change obligations by placing a cost on carbon emissions. It requires persons who are responsible for carbon emissions to transfer New Zealand Units (NZUs) to the Government to cover these emissions. It also provides for persons to voluntarily register for certain activities that remove carbon from the atmosphere, and for the Government to transfer NZUs to these persons. NZUs were priced at \$34 in September 2020.

Forest land is classified under the ETS as either pre-1990 (generally land that was forested in 31/12/1989) and post-1989 (generally land that became forest after 31/12/1989). The Council's forest land has land in these classes as follows:

| <b>ETS Class</b> | <b>Area (hectares)</b> |
|------------------|------------------------|
| Pre-1990 exotic  | 600                    |
| Post-1989 native | 39                     |
| Post-1989 exotic | 94                     |

The Council also owns around 10,000 hectares of pre-1990 native forest which is out of the scope of the ETS.

The pre-1990 exotic forest was eligible for a one-off allocation of NZUs from the Government. 33,360 NZUs were received in 2012 and used to partially offset the Council's ETS obligation to transfer around 16,000 NZUs annually to the Government to cover its annual landfill emissions.

The Council registered its eligible post-1989 exotic forest in the ETS in 2012 and was issued 24,186 NZUs. In 2016 various options were considered for managing this forest area in the ETS, and a decision was made to deregister. Staying in the ETS would mean that nearly all the NZUs issued would have to be surrendered as the forest is harvested. This is because the post-1989 forest was planted over a compressed timeframe (84% was planted between 1994 and 1997). Alternative forest management options are fraught with difficulty, so the least risk option for the Council was to deregister.

### **Voluntary market**

Voluntary carbon markets are ones where participation is entirely voluntary. For example, a firm may wish to be carbon neutral and achieves this by reducing the emissions in its value chain, and by buying emission reductions (offsets) from other parties such as forest owners. The certification and verification requirements however are quite stringent. For example, to be considered credible, an offset must be measurable and verified, additional, not double

counted, and leakage and permanence must be addressed. The Council is unlikely to have any significant area that would meet these requirements.

### **Looking forward**

#### **Average accounting:**

The ETS now provides for average accounting where NZUs are issued to a post-1989 forest until it reaches its long-term average carbon storage – about mid-rotation for an exotic forest that will be regularly harvested and replanted. However, the Council's post-1989 exotic forests have already grown past their long-term average, so there is no opportunity to earn NZUs. The only way to earn NZUs under averaging would be to extend rotation length significantly (not desirable), or to replant a different tree species with significantly more carbon storage (not much scope for this).

#### **Conversion to native forest:**

This option involves re-establishing more of the exotic forest in permanent not-for-harvest native trees, after harvesting, noting that around 25% of the exotic forest is already intended to be converted. The post-1989 component could earn a stream of NZUs for a very long time.

It would result in environmental benefits, less sediment movement into waterways, less impact on landscape character, improved biodiversity, contribution to ecological corridors, less risk to urban water supply, better recreational opportunities, and protection of archaeological sites.

However, there are downside issues and risks:

- The transition to native forest would be achieved by a mix of replanting and natural regeneration of native forest trees. However, this is expensive particularly on warmer, sheltered sites where weed invasion requires repeated control work. The Council has gained some experience of the costs and practicalities of re-establishing native forest in the areas it has already decided to transition to native forest.
- There is a risk of establishment failure that would trigger a deforestation liability under the ETS in the order of \$20,000 per hectare.
- A cashflow analysis for post-1989 forest transition to native forest after harvest results in a negative net present value. This is due to the income stream from selling NZUs from the 94 hectares of post-1989 forest land being low relative to the high initial re-establishment costs. Also, there would be no net carbon growth until around 10 years after re-establishment because the decay of post-harvest roots and stumps from the previous forest has to be included in the calculation.
- Conversion would result in a loss of NCC net revenue, loss of regional jobs, reduced log supply to local timber industry, loss of value from sunk cost of existing infrastructure. On balance, this option has been discarded.

#### **Register post-1989 native forest in the ETS:**

In 2020, a desk-top GIS exercise showed there are around 39 hectares of potentially eligible naturally regenerated post-1989 native forest land in the Bolwell and Grampian Reserves, and the Marsden Valley. These could be registered as post-1989 forest land in the ETS and would generate a stream of

NZU income for the Council. Further investigation is required to determine feasibility.

## **1.5 Treasury and Investment Policy**

Council's commercial forestry is governed by its Treasury and Investment Policy. The relevant extract is as overleaf:

### **10.0 Forestry**

#### *10.1. Background*

*The Council has invested in and been involved in managing forestry interests since the 1940s and these are held as long term investments. Council-owned forests are located in the Brook, Marsden, Maitai and Roding. The total net stocked area as at 30 June 2019 is estimated at 579.3 hectares.*

#### *10.2. Policy*

*The Council's current policy for commercial forestry is:*

- *To not purchase land for forestry purposes nor plant more commercial forests other than replanting;*
- *Endorse and observe the provisions of the New Zealand Forest Accord (August 1991);*
- *Comply with the National Environmental Standard on Plantation Forestry*
- *Contract out forestry management to an independent Forest manager;*
- *To manage its forest estate on a sustainable basis and to maximise net present value.*
- *To fulfil its obligations under the NZ Emissions Trading Scheme (as set out in the Liability Management Policy).*

#### *10.3. Rationale*

*In the last few years the forestry and land management environment has changed considerably with a much greater emphasis on sustainability and the ongoing development of the Emissions Trading Scheme. Council reviewed the forestry strategy in 2016 and resolved to retain productive commercial forests that can be managed sustainably and retire some 140ha of forests and consider alternate use. The negative impacts of climate change and the likelihood of more extreme weather events is also a consideration for the future.*

#### *10.4. Benefits*

*The Council's forests are a significant resource, a means of generating revenue from public reserve land and provide for recreational use.*

#### *10.5. Financial Benefits*

*As well as revenue generation, there are also environmental and social benefits in that forests provide areas with public access for walking, biking, hunting and other recreation. Forestry operations contribute to local business operations including contract forestry management, logging*



*contractors, silvicultural contractors, transport contractors and Port Nelson.*

#### *10.6. Risks*

*Log prices are determined by market conditions and can therefore lose value if the market price falls. However forestry is still expected to be a low risk investment in the medium to long-term.*

#### *10.7. Financial Risks*

*Any forest is at risk from natural disasters, fire, and disease. Prices fluctuate and at any given time depend on world markets, particularly those in Asia. As development is funded from retained earnings within the closed account, any shortfall in earnings requires the Council to make additional external borrowings to fund development.*

#### *10.8. Environmental Risk*

*Poor management of logging operations could pose environmental risks, especially to water supply.*

#### *10.9. How the Investment is managed*

*The Council actively manages its investment in forestry by:*

- Contracting out forest management to reputable consultants;*
- Carrying out silviculture to a defined forestry management plan, which is reviewed every three years;*
- Revaluing forestry assets at 30 June each year*
- Minimising the impact of short-term decline in prices by delaying harvesting as appropriate;*
- Maintaining insurance cover for fire and wind damage.*

## **1.6 Forestry Stewardship Accreditation**

FSC accreditation is about applying good commercial forestry management practices to:

- Set a leadership example as a forest owner;
- To obtain best access opportunities to the local processing market.

The foundation of any FSC certification scheme is based on environmentally appropriate, socially beneficial, and economically viable forest management practices. Council is seeking accreditation in 2020/21.

The FSC renews each year following annual audits carried out on PF Olsen's various FSC client's forests.

## **1.7 Climate Change and Greenhouse Gas Emissions**

Climate change and a reduction in greenhouse gas emissions has been identified as an over-arching issue and a priority for Council. On 16 May 2019 Council declared a climate emergency accepting that it has a key role to understanding its emissions and, through Council's Certified Emissions Measurement and Reduction Scheme (CEMARS- Toitū Envirocare) Action Plan, create a resilient and

low emissions future. Central government has also introduced the Climate Change Response (Zero Carbon) Amendment Act in 2019 that sets greenhouse gas emission targets at zero by 2050. Council at its meeting of 13 August 2020 resolved to adopt these targets for Council's own greenhouse gas emissions reductions.

This AMP will look at better understanding its forestry activity greenhouse gas emissions with respect to its carbon footprint.

### **1.8 Future Works**

Council at its 24 June 2021 meeting resolved that work be undertaken to ascertain the costs of an independent review of Council's approach to forestry in 2021/22 (including potential costs, scope, and high-level financial implications), considering developing a regenerative forestry plan prioritising indigenous forest opportunities, climate leadership and innovation to inform the Forestry Activity Management Plan and Treasury Management Policy. This work will be scheduled, taking into consideration council priorities and staff workload, to inform the next 2024-34 Activity Management Plan.

## 2. LEVELS OF SERVICE (WHAT WE PROVIDE)

Activity Management Plans set out the level of service Council seeks to provide the community for the respective activity.

Levels of service statements describe the outputs Council plans to deliver to the community. They are the measurable effect or result of a Council service, described in terms of quality, quantity, reliability, timelines, cost, or similar variables.

This section documents the levels of service for the forestry activity, the current performance and the performance measures and targets by which achievement of these will be assessed.

This section also contains information on customer research undertaken, strategic and corporate goals and the legislative requirements adhered to in arriving at the levels of service.

Changes to the levels of service may significantly change funding requirements in some instances.

Performance measures that are included in the Long Term Plan are reported on annually, through the Annual Report.

Council uses the Significance and Engagement Policy to determine the level of engagement required for a particular issue e.g. levels of service change.

### 2.1 Customer Research and Expectations

The Long Term Plan and Annual Plan consultation process includes Forestry. The extent of the historical and additional proposed consultation is detailed below.

**Table 2-1:**

| Consultation Processes | Date Frequency  |
|------------------------|---|
| Long Term Plan process | Every 3 years   |
| Annual Plan process    | Each year that changes to the Long Term Plan are proposed |

#### **Customer research undertaken and proposed approach to future consultation**

An independent review in 2016 highlighted how Council's involvement in forestry intersects with many of Council's other activities, both regulatory and non-regulatory. It set out proposed responses to a range of factors including: proximity of residential development; the increase in mountain biking and

impact of harvesting on tracks; possible Nelson Plan requirements; and the conflict between Council's investment in removal of wilding pines with its own Douglas Fir stands.

The review made recommendations (adopted by Council) to address these and other issues it identified. The goal over the period of this Plan is to implement these recommendations.

Local residents and recreational user groups will be advised before harvesting operations begin in any of the Council's production forestry areas.

## **2.2 Legislative Requirements**

The legislative requirements form the minimum level of service Council is required to comply. The forestry activity is influenced by the following legislative requirements:

### **Health and Safety at Work Act 2015**

Council must ensure the safety of the public and all workers (including contractors) when carrying out works.

### **The Local Government Act 2002**

Defines the purpose of local authorities as enabling local decision-making by and on behalf of the community and allows local authorities the power of general competence. The Nelson City Council is a local authority established under the Local Government Act 2002 (the Act) with purpose and responsibilities set out in the Act, in particular: 10(1)(b), 10(2) and 14(1)(h).

### **Resource Management Act 1991**

The Nelson Resource Management Plan (NMRP) and Nelson Air Quality Plan (NAQP) are regulatory documents that cover both district and regional activities. Council seeks to operate the current network in compliance with these Plans and seeks resource consents where permitted standards cannot be met. To that end Council holds a range of resource consents for both global and site-specific activities.

The forests lie within the Nelson City Council boundaries and jurisdiction. The NRMP is a combined District (land use) and Regional (coastal, land disturbance and freshwater) Plan. The NAQP controls activities in relation to air quality, including discharges such as spraying herbicide. The Council has embarked on a process of reviewing these Plans through the Nelson Plan project. Alongside these Plans the National Environmental Standard for Plantation Forestry, which came into effect in May 2018, regulates the environmental management of forestry.

The NCC forests are identified in the NRMP as being in the 'Rural' zone. Within this zone many of the plantation forestry activities are permitted activities in the NRMP and no resource consent is required. Weed spraying under both The NAQP

and the NRMP may be a permitted activity subject to adherence to Appendix AQ7 of the Nelson Air Quality Plan.

In practical terms the current rules allow tending, harvesting, and subsequent replanting of the NCC forest resource including the maintenance of tracks, roads, fire breaks, landings, and fence lines without a resource consent being required if certain conditions are met. Significant work such as earthworks, tracking or the installation of bridges may require resource consent.

#### **Forestry Empowering Act 1978**

This Act provides Nelson City Council with the power (subject to other relevant legislation) to:

- acquire land for and to carry on the business of forestry
- carry on related industries
- allow the preparation of management plans for the forestry areas
- grant leases and licences and make bylaws.

An NES prevails over district or regional plan rules except where the NES-PF specifically allows more stringent plan rules. The NES-PF applies to any forest of at least one hectare that has been planted specifically for commercial purposes and will be harvested.

#### **Climate Change Response Act 2002**

Part of the Council's exotic forest land is pre-1990 forest land as defined under this Act. There are potential obligations attached to this land, that is, a requirement to surrender New Zealand Units under the Emissions Trading Scheme if any of the land is deforested.

#### **National Policy Statement for Freshwater Management 2020 (NPS-FM 2020), and the National Environmental Standard for Freshwater Management (NES-FM)**

The Freshwater NPS sets out how Councils will manage water quality and quantity. This AMP recognises the importance of protecting freshwater essential to the health and well-being of the wider environment and will be incorporated in management practices.

#### **Te Mana O Te Taiao Aotearoa NZ Biodiversity Strategy**

This strategy, launched in August 2020, sets out a strategic framework for the protection, restoration and sustainable use of biodiversity, particularly indigenous biodiversity, in New Zealand, from 2020 to 2050. This AMP recognises the importance of biodiversity essential to the health and well-being of the wider environment.

### **Nelson Biodiversity Strategy**

This Strategy was adopted in May 2007 and recognises the differing ecosystems that range from the mineral belt, to tall podocarp river flats, coastal cliffs, estuaries, and the greater marine environment. The key goals include the Active Protection of Native Biodiversity and Ecologically Sustainable Use of Biodiversity. The plan includes an action for council to retire Council owned forestry areas back into native forest where this buffers existing native vegetation and opportunities allow. Council is complying with this as part of its retirement regime and riparian work.

### **The National Environmental Standards for Plantation Forestry (NES-PF)**

Were published on 3 August 2017 and came into force on 1 May 2018.

The NES-PF were published on 3 August 2017 and came into force on 1 May 2018 with objectives to:

- maintain or improve the environmental outcomes associated with plantation forestry activities
- increase the efficiency and certainty of managing plantation forestry activities.

Councils previously managed the environmental effects of forestry activities through regional and district plans. As a result, the rules varied between and within regions. Sometimes these variations reflected local differences and community priorities. But where they didn't, it caused problems for the many forest owners who manage forests in 2 or more regions or have forests that straddle council boundaries. The variation resulted in:

- increased costs
- uncertainty about the plan rules they must follow.

The variations in rules also led to inconsistent environmental outcomes. The NES-PF provides a consistent set of regulations for plantation forestry activities. It covers 8 core plantation forestry activities, allowing these to be carried out as permitted activities, subject to conditions to manage potential effects on the environment.

Where it isn't possible to manage these effects – for example, the site is at high risk of erosion and needs greater controls – the activity requires resource consent.

How the NES-PF works - The NES-PF regulations cover 8 core plantation forestry activities that have potential environmental effects:

- afforestation (planting new forest)
- pruning and thinning to waste (selective felling of trees where the felled trees remain on site)
- earthworks
- river crossings
- forestry quarrying (extraction of rock, sand, or gravel within a plantation forest or for operation of a forest on adjacent land)

- harvesting
- mechanical land preparation
- replanting.

Impact on NCC Forestry operations - Some examples of the impact of conditions under the NES-PF regulations on NCC forestry operations are:

- setbacks when planting near rivers, lakes, wetlands, and coastal areas. These unplanted strips protect against erosion and sedimentation from afforestation
- identification and maintenance of storm water and sediment control measures for forestry activities
- bridging the Maitai River instead of building a concrete slab ford.

### Erosion Susceptibility Classification

The Erosion Susceptibility Classification (ESC) is the method which determines the level of controls imposed by the NES PF. ESC is classified into four erosion risk categories; Low (green), Medium (yellow), High (orange) and Very High (red) and has been determined based on a combination of erosion susceptibility (e.g. soil type), likelihood and severity of an erosion event, and the downstream consequences of an erosion event.

The NCC forest estate is considered medium risk under the Erosion Susceptibility Classification because despite being on steep land, they are located on very stable soils and underlying geology (**Table 2.2**). Erosion risk to the NCCs forests primarily lies with the deposition of fine sediment into waterways, which under the NES PF is deemed as manageable under the minimum requirements.

**Table 2.2: Erosion Susceptibility Classification by forest**

| Forest  | Erosion Susceptibility Classification |
|---------|---------------------------------------|
| Maitai  | 100% Moderate                         |
| Brook   | 100% Moderate                         |
| Marsden | 100% Moderate                         |
| Roding  | 98% Moderate and 2% High              |

Impact on NCC Forestry operations - Some examples of the impact of conditions under the NES-PF regulations on NCC forestry operations are:

- Setbacks when planting near rivers, lakes, wetlands, and coastal areas. These unplanted strips protect against erosion and sedimentation from ongoing forestry operations.
- Identification and maintenance of storm water and sediment control measures for forestry activities
- Bridging the Maitai and Roding rivers instead of utilising ford crossings.

## 2.3 Current Level of Service

**Table 2-3: Forestry Levels of Service Background and Targets**

| What Council will provide  | Performance Measures & Targets   |
|--|--|
| Financial return: Maximum economic return provided environmental impacts are minimised as far as practical.                              | Operational management is outsourced. Radiata pine is the principal forest species. Management and operational costs and log revenues meet market rates.                                     |
| Sustainability: Management of the forests in such a way as to ensure their long-term economic, social, and environmental sustainability. | Compliance with NZ forest industry codes of practice.<br>A long-term commitment to maintaining well managed forests under generally accepted sustainability standards.<br>FSC accreditation. |
| Quality: Forests are well maintained, and post-harvest areas comply with contractual terms for quality.                                  | Forest maintenance and protection practices meet best practice standards; post-harvest forest conditions comply with contractual agreements.   |
| Accessibility: Forests remain accessible to recreational users.  | Designated tracks maintained and remain open unless conditions dictate otherwise. Tracks closed during harvesting.   |

**Table 2-4: Forestry Levels of Service**

|  |                             |  |                                  | Performance Targets                             |   |   |   |
|--|-----------------------------|--|----------------------------------|---|---|---|---|
| Community Outcomes   | Level of Service            | Performance Measurement  | Previous and Current Performance | 21/22 (Year 1)                                  | 22/23 (Year 2)                                  | 23/24 (Year 3)                                  | 24-28 (Years 4 to 10)                           |
| Our unique natural environment is healthy and protected                            | Maintained to good standard | Achieve Forest Stewardship Standard  | Previous and current             | Accreditation achieved                          | Maintained                                      | Maintained                                      | Maintained                                      |
|  | Achieve NES standards       | No breaches  | New                              | No breaches                                     | No breaches                                     | No breaches                                     | No breaches                                     |
| Our infrastructure is efficient, cost effective and meets current and future needs | Financial returns           | Costs and income meet NCC budget targets. Target allows for market price fluctuations. | Previous and current             | Maximise Council Treasury and Investment Policy | Maximise Council Treasury and Investment Policy | Maximise Council Treasury and Investment Policy | Maximise Council Treasury and Investment Policy |



### **3. DEMAND (PLANNING FOR THE FUTURE)**

#### **3.1 Demand Drivers**

Unlike most other councils' forestry holdings, Nelson City Council has encouraged recreational development and use of its production forests. This does raise the potential for conflict between production values and the suite of values ascribed to, and uses of, the production forest resource.

The potential for conflict has been further heightened by recent developments adjacent to existing production forests such as residential subdivision development, and changes in the community's environmental awareness (for example, landscapes and water quality).

Implementation of the 2016 forestry review report is expected to mitigate or minimise conflict with non-timber values and uses of the forest area.

Implementation of the report's recommendations will reduce the production area from its 2016 area by 25% by removing areas where there is conflict with other values or uses. This will leave a production area that will be sustainable in the long term.

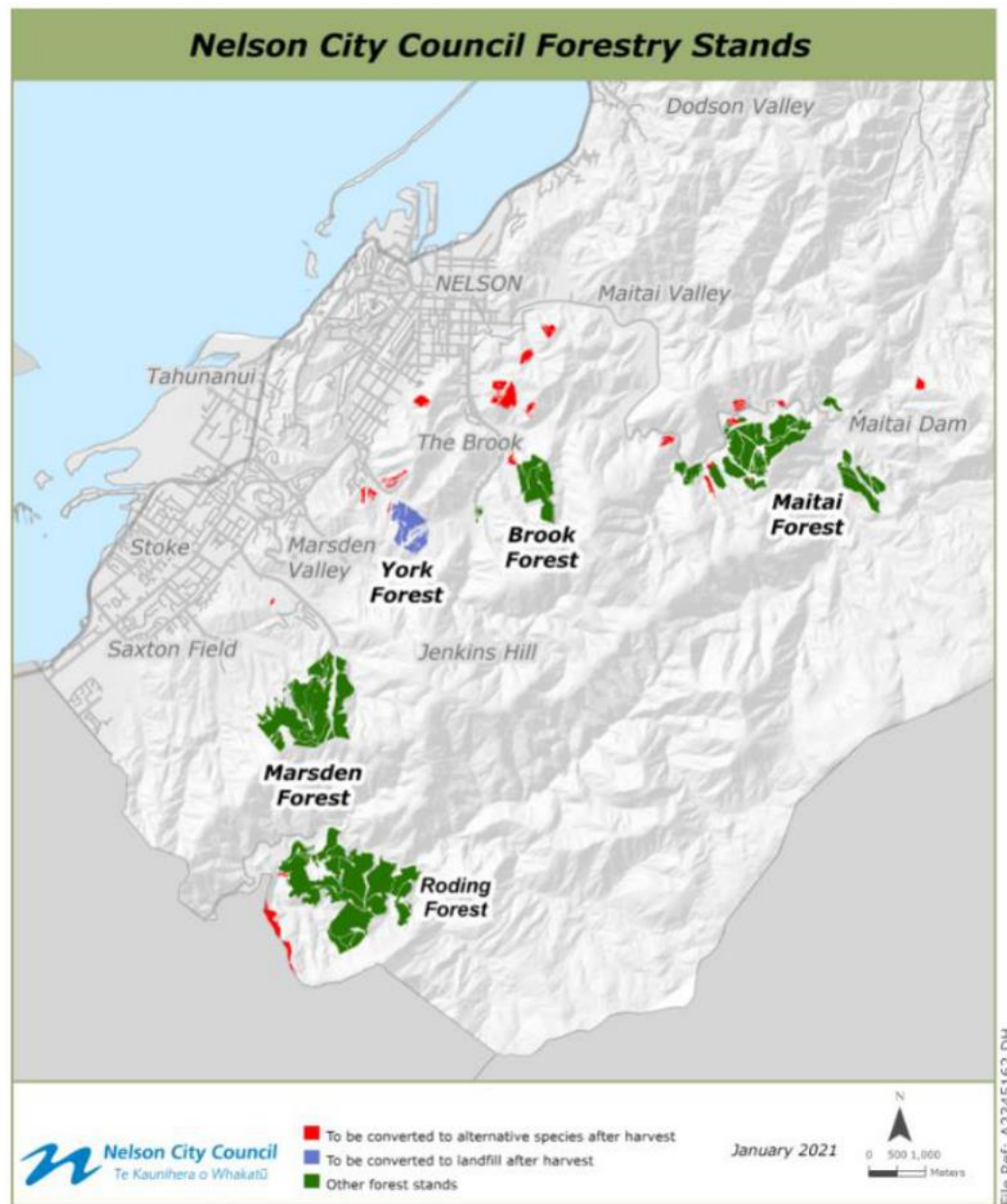
Council also intends not to delay harvesting beyond generally accepted clear fell ages. Much of the Council's current production forest is close to harvestable age. This puts it slightly (2–5 years) ahead of a spike in log availability from Nelson-Marlborough forests. The actual rate of harvest will be driven by market demand and logistics, but there will be more competition in the log market during this plan.

## 4. LIFECYCLE MANAGEMENT (HOW WE PROVIDE THE SERVICE)

### 4.1 Background Data

#### 4.1.1 Description of assets

Figure 4-1: Nelson City Council Forests



Council owns 694 hectares of production forest land spread across four blocks — Brook, Maitai, Marsden and Roding. The Brook block contains a sizeable area within the York Valley (35.1 hectares) on land that has been set aside for landfill expansion, where the trees may not reach harvestable age, depending upon the rate of landfill expansion. 18.4 hectares of Radiata pine on Bell Island in Tasman District is managed separately by the Nelson Regional Sewage Business Unit.

The following table and map describe the Council's forestry blocks.

**Table 4-1: Forestry Block Descriptions**

|   |  |
|---|--|
| <b>Maitai</b><br><b>186.8 hectares</b>  | <p>The Maitai Forest is made up from several small blocks, which stretch from several kilometres to the east of the city for approximately 10 kilometres on the Maitai Valley Road.</p> <p>Approximately a quarter of the stocked area falls within the Maitai water reserve area. The remaining forest areas are on predominately steep hill country, which drops down into the Maitai River. Although these areas fall outside of the physical water catchment area they have been regarded as buffer zones for the catchment.</p> <p>Access is from Maitai Valley Road via formed tracks to compartments 3 to 10. Access to compartments 1 and 2 is currently via Koata Ltd land, through forestry managed by Tasman Pine Forests Ltd.</p> <p>Some of the Maitai stands are recommended to be retired for alternative landuse, mainly those in proximity to the Maitai River or the Maitai Dam. There is some recreation activity through these forests, including some mountain biking trails and a section of the Coppermine Trail.</p> |
| <b>Marsden</b><br><b>142.4 hectares</b>   | <p>Marsden Forest is located 4 kilometres south east of Stoke at the end of the sealed Marsden Valley Road.</p> <p>The main plantation is on north-facing slopes on the Barnicoat Range between Jenkins Hill and Saxton Hill. The forest bounds an indigenous reserve on the north-eastern side with farmland to the west and neighbouring exotic forest plantation to the south.</p> <p>Formed access roads connect with Marsden Valley Road.</p> <p>The forest attracts a range of recreation activities, primarily accessed through Glider Road. This includes walking, running, paragliding and access to popular mountain bike trails such as Involution. A stand of Douglas fir on the higher slopes are harvested and will be replanted in radiata pine.</p>  |
| <b>Brook</b><br><b>(Includes York Forest &amp; College Block).</b><br><b>132.4 hectares</b> | <p>The Brook Forest is in four separate blocks.</p> <p>One block is a backdrop to the Brook Street section of Nelson City.</p> <p>The second is further up the Brook Valley on steep hill country.</p> <p>The third is in York Valley behind the Bishopdale suburb of Nelson City. Part of the York Valley Block is on land designated for refuse disposal.</p>  |

|                                  |   |
|----------------------------------|---|
|                                  | <p>The fourth area is located on the Grampians and is a north facing slope above a residential area of Nelson City.</p> <p>All these areas are heavily used for recreation including the Grampians, Codgers Trails, and the Coppermine Trail. The majority of the forestry stands in the Brook are recommended for retiring for alternative landuse, with the exception of the blocks on Fringed Hill.</p>  |
| <b>Roding<br/>232.5 hectares</b> | <p>Roding Forest is located approximately 13 kilometres east of Richmond at the end of the metalled Aniseed Valley Road.</p> <p>The forest is within the waterworks reserve and is bounded by reserve on all but the south-western boundary, which is exotic pine plantation.</p> <p>The topography is generally very steep, and the altitude rises to 900 metres.</p> <p>Recreation is less common in these areas due to the distance from urban areas, however the Roding has a rich mining history and there are a number of remaining remnants.</p> <p>Walking and mountain biking is popular, albeit on a smaller scale.</p> <p>Some areas e.g. the higher slopes of Mt Malita have been recommended to be retired into alternative use.</p> |

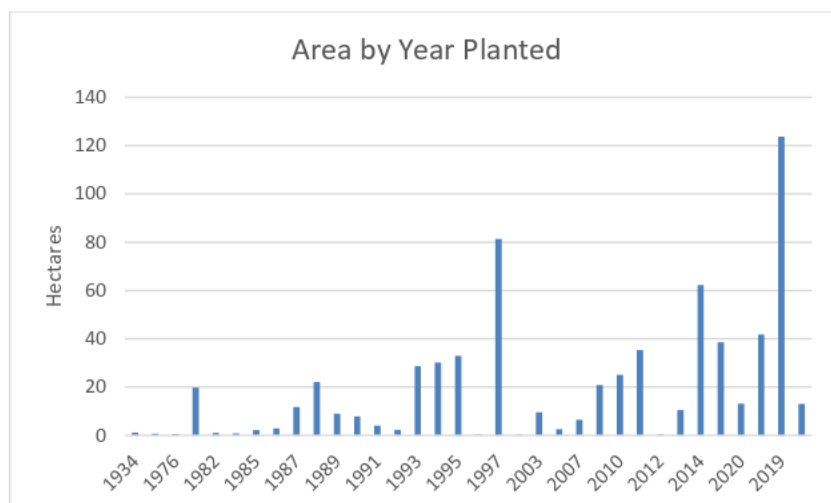
Source: Nelson City Council's production forests- Assessment of non-monetary values. Catalyst 2016 (A1591849)

The forest species are primarily Radiata pine and Douglas Fir as shown below.

**Table 4-2: Forest Species Area**

| Species                        | Area (hectares) |
|--------------------------------|-----------------|
| Radiata pine                   | 589.8           |
| Douglas Fir                    | 29.9            |
| Cypress                        | 11.0            |
| Redwood and other softwoods    | 3.1             |
| Eucalyptus and other hardwoods | 5.9             |
| Cutover and retirement areas   | 54.4            |
| Total                          | 694.1           |

The distribution of area by year planted/replanted is quite irregular which is due to the original uneven planting rate. The Roding block is into its third rotation of plantings (i.e. there have been two tree harvests from this block previously), the Brook block and parts of the Maitai block are in their second rotation, and the remainder of the Maitai block and Marsden blocks are in their first rotation.

**Figure 4-2: Forestry Area distribution by year planted**

#### 4.1.2 Asset valuations

As at 30 June 2020, the market value of the tree crop owned by Council, assessed for financial reporting purposes, is estimated at \$7.115 million plus GST (if any).

The assessed value is the estimated market price that would be agreed between a willing seller and a willing buyer, both well informed and conducting an arm's length transaction. This value is for the tree crop only and does not include the value of the land or improvements thereon such as tracks and fences.

The value of the tree crop is estimated by assessing the net present value of estimated future costs and revenues pertaining to the standing crop, using a discount rate derived from recent forest transactions. A discount rate of 6.0% has been applied to the post-tax costs and revenues pertaining to the tree crop. The tax perspective adopted is that of a purchaser.

The valuation methodology applied meets New Zealand Accounting Standard NZ IAS 41, and the New Zealand External Reporting Board Public Benefit Entities Standard IPSAS 27, Agriculture. This valuation also complies with the NZ Institute of Forestry Forest Valuation Standards.

## 4.2 Operations and Maintenance Plan

### 4.2.1 Operations and maintenance plan

The contracted forest manager prepares plans and budgets for Council approval and is responsible for programming, controlling, and reporting of forest operations. A work programme and associated budget is prepared for the financial year commencing 1 July by the forest managers and is presented to the Forestry Subcommittee during October of the preceding year.

The forests are forecast on average to produce a substantial positive annual cashflow through to 2025, followed by a ten-year period of forest losses (due to very little harvest activity, as trees are not at harvestable age), and followed again by an extended period of forecast profit.

#### **4.2.2 Maintenance and harvest**

Annual forest health inspections have been carried out under the NZ Forest Owners Association Scheme throughout all the Council's forests. No significant pests or diseases of concern have been detected.

Most of the forests are marginally deficient in nitrogen and phosphate but not at levels that it would be economic to warrant application of fertiliser. The trace element Boron is also at marginal levels in most of Nelson forests. Foliage sampling of 3-year-old trees is routinely carried out and where levels are marginal, corrective applications with ulexite fertiliser are carried out. An allowance is made in the annual costs for Boron fertilising of stands at age 3.

Infection levels from the needle cast fungus *Dothistroma pini* are assessed annually, and stands are aerially sprayed with copper fungicide as required.

Operational schedules are driven by the strategy agreed under the 2016 review. Designated stands include stands that will be cleared to waste as soon as possible to remove the risk of wilding spread; stands that will be replanted and managed as production forest; and stands that will be converted to a non-timber use after their scheduled harvest. Funding has been included in Landscape Reserve budgets to complete conversions of selected areas from productive forestry to alternative uses. For the blocks identified for alternative use a general assessment as to their future management (native plantings, native regeneration, or alternative exotic species) has been made and this is contained in the Forestry Alternate Management Plan (A1989331).

#### **4.2.3 Area specific management practices**

The forestry plantations are currently managed by PF Olsen Ltd (PF Olsen) from the Nelson Branch Office with backup from the company's head office in Rotorua.

PF Olsen has comprehensive quality management and environmental management systems in place. These systems are independently certified to ISO 9002 and 14001 standards respectively.

**4.2.4** Replanting / Weed control budgets for Alternate Use Plan

| <b>Financial Year</b> | <b>Operational<br/>Budget<br/>(weed control)<br/>*</b> | <b>Capital Budget<br/>(Planting)<br/>**</b> |
|-----------------------|--|---|
| 2021/2022             | \$29,000   | \$205,000                                   |
| 2022/2023             | \$30,000   | \$141,000                                   |
| 2023/2024             | \$28,000   | \$278,000                                   |
| 2024/2025             | \$30,000   | \$120,000                                   |
| 2025/2026             | \$23,000   | \$79,000                                    |
| 2026/2027             | \$25,000   | \$13,000                                    |
| 2027/2028             | \$22,000   | \$10,000                                    |
| 2028/2029             | \$24,000   | \$10,000                                    |
| 2029/2030             | \$20,000   | \$10,000                                    |
| 2030/2031             | \$21,000   | \$10,000                                    |
| <b>Total</b>          | <b>\$252,000</b>                                       | <b>\$876,000</b>                            |

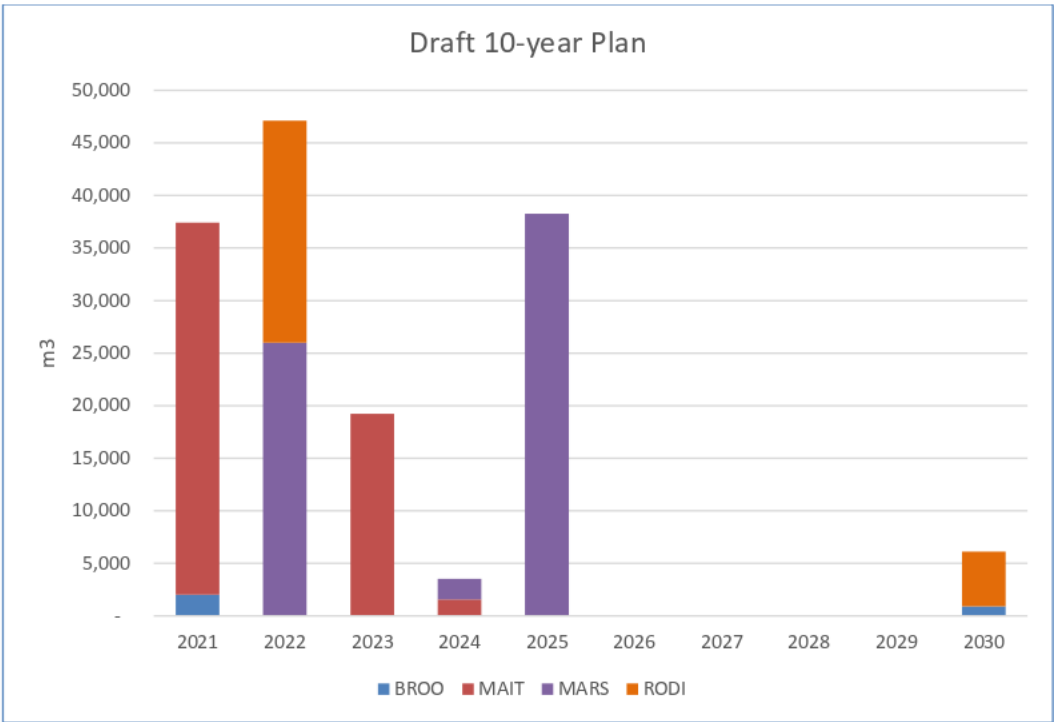
\* Part of Forestry \*\* Part of Parks and Reserves Activity Budgets

**4.2.5** 10 Year Harvesting Plan

| Per Year | Brook<br>(Ha) | Maitai<br>(Ha) | Marsden<br>(Ha) | Roding<br>(Ha) | Total Area<br>(Ha) |
|----------|---------------|----------------|-----------------|----------------|--------------------|
| 2021     | 4             | 50             |                 |                | 54                 |
| 2022     |               |                | 46              | 27             | 73                 |
| 2023     |               | 29             |                 |                | 29                 |
| 2024     |               | 5              | 6               |                | 11                 |
| 2025     |               |                | 51              |                | 51                 |
| 2026     |               |                |                 |                |                    |
| 2027     |               |                |                 |                |                    |
| 2028     |               |                |                 |                |                    |
| 2029     |               |                |                 |                |                    |
| 2030     | 2             |                |                 | 10             | 11                 |

| Per Year | Brook<br>(m³) | Maitai<br>(m³) | Marsden<br>(m³) | Roding<br>(m³) | Total Area<br>(m³) |
|----------|---------------|----------------|-----------------|----------------|--------------------|
| 2021     | 2,032         | 35,380         |                 |                | 37,412             |
| 2022     |               |                | 25,995          | 21,111         | 47,106             |
| 2023     |               | 19,217         |                 |                | 19,217             |
| 2024     |               | 1,577          | 1,953           |                | 3,530              |
| 2025     |               |                | 38,250          |                | 38,250             |
| 2026     |               |                |                 |                |                    |
| 2027     |               |                |                 |                |                    |
| 2028     |               |                |                 |                |                    |
| 2029     |               |                |                 |                |                    |
| 2030     | 907           |                |                 | 5,203          | 6,110              |





**4.2.6 Post-harvest land management**

Harvested areas in the production zone are prepared and replanted in either the subsequent winter or the next one. Young stands are thinned once and pruned in two stages on more fertile sites.

The post-clearing management of land in the other categories is under consideration.

As all of the forests already have plantation crops in situ, the harvesting of the current crop is the trigger for the restarting of the rotation. Harvested areas in the production zone are prepared and replanted in either the subsequent winter or the next one.

Land preparation prior to planting includes the raking of slash by excavators into windrows on less steep terrain, and the blanket spraying of weeds with a helicopter.

Planting is carried out using high-quality genetic seedlings which have improved growth, disease resistance and wood characteristics.

Following planting, seedlings are sprayed either using knapsacks or blanket helicopter sprays which targets weeds, allowing the seedlings to get ahead.

At age 8, 30% of the worst trees are thinned to a final crop stocking of 600 stems/ha.

The target optimum rotation age for harvesting is age 28.

### **4.3 Renewal/Replacement Plan**

#### **Roading and infrastructure**

Roads and landings built for previous harvesting operations in second or third rotation areas are generally reused for current harvesting operations. In first rotation stands existing track systems are significantly upgraded as width, water tabling, corner radius, and metalling are in most cases inadequate for harvesting traffic.

The main requirement of the roading plan is that roads are constructed between 6 and 12 months prior to logging. Harvesting landings and associated spur roads may be constructed closer to the commencement of harvesting.

## **5. RISK MANAGEMENT PLAN (DEALING WITH UNCERTAINTY)**

Applying risk management procedures enables decisions to be made about the best use of limited resources to achieve as much as possible of the Council's objectives from the maintenance and development of the forestry assets.

Threats and opportunities are assessed against forestry objectives and levels of service.

Risk management is not simply about uncertain events with a downside (such as financial loss or legal proceedings); the process can also be used to identify and decide on the merits of uncertain opportunities for the Council to do things more innovatively, sustainably, and effectively.

### **5.1 Risk Management Plan**

Nelson City Council is committed to using risk management principles and techniques to understand and appropriately manage all internal and external factors and influences which affect the achievement of its objectives. Doing this will:

- Provide a reliable basis for sound decision making
- Increase the likelihood of achieving objectives
- Provide an agreed basis for prudent risk taking
- Enable the organisation to understand the level of risk associated with each decision as well as the Council's aggregate exposure to risk
- Improve accountability and assurance of control
- Enable the Council to avoid threats and seize opportunities
- Foster an organisational culture based on reasonable foresight and responsible hindsight.

The Council's standardised risk assessment method explicitly follows the process part (section 5) of AS/NZS 31000:2009.

#### **5.1.1 Fire**

Fire is an ever-present danger to the forests especially as recreation reserves and roads border them. The fire danger is compounded by high summer temperatures and the presence of a very heavy understorey scrub vegetation layer which is highly flammable.

Fire Emergency New Zealand (FENZ) Rural Fire Network is the fire control authority with respect to all forests. A fire control plan which includes surveillance and response measures, contact details, and forest access and location maps is updated annually. Adequate supervision of public access and

recreation areas is carried out to ensure fire risk from this source is minimised. Public access and the use of plantation and recreation areas may be excluded during periods of extreme fire danger. Regular maintenance of internal forest roads, firebreaks, fire ponds and road signage are required. Refer to Parks and Reserves, Fire Risk Procedures, A2240085.

### 5.1.2 Fire Risk Assessment of NCC Forestry Blocks

In light of the recent fires in Tasman the Forestry Sub-Committee requested an analysis of the potential fire risk to their forestry blocks and consideration of options for reducing this risk.

### 5.1.3 Methodology

The fire risk has been determined using a Fire Risk Matrix that considered three components: the fire potential, the potential fire intensity and the potential fire damage or hazard. The definitions of these are:

**Fire potential**—the probability that a fire might ignite. Determined by ease of access, public use, proximity to population and the presence of fuel for a fire to start.

**Fire intensity**—the magnitude of the flames, strength of the fire, speed at which it expands and potential scale of the fire. Determined by the state of the fuel, vegetation, current weather, or the environmental conditions, easy or difficulty to control.

**Fire damage or hazard**—the potential associated damage and destruction. Determined by the adjacent land use and proximity to residential dwellings etc.

The following table shows the Fire Risk Matrix.

| Fire Damage | Fire Potential | Low |     |      |      | Medium |     |      |      | High |     |      |      |
|-------------|----------------|-----|-----|------|------|--------|-----|------|------|------|-----|------|------|
|             | Fire Intensity | Low | Med | High | Extr | Low    | Med | High | Extr | Low  | Med | High | Extr |
|             | Insignificant  | L   | L   | M    | M    | L      | L   | M    | M    | L    | M   | H    | H    |
|             | Minor          | L   | M   | M    | M    | M      | M   | M    | H    | M    | M   | H    | H    |
|             | Moderate       | M   | M   | M    | H    | M      | M   | H    | H    | M    | H   | H    | E    |
|             | Major          | M   | M   | H    | H    | M      | H   | H    | E    | H    | H   | E    | E    |

Key – L = low, M = Medium, H = High, E = Extreme

In using the above matrix, the Fire Potential is first determined by ranking it as either low, medium and high. Then the potential Fire Intensity is ranked from low to extreme. This is then followed by the rating of the potential Fire

Damage from insignificant to Major. From here the Potential Fire Risk is determined.

If you use the forestry at the Marsden Valley Block as an example, the fire potential is high due to its easy access to the public and the number of people that pass through that area. The fire intensity was considered medium as the pines are pruned and the Douglas at the top of the hill are considered lower risk due to their higher stocking and overall moisture content compared with pines. The fire damage was considered as moderate due to the surrounding landuse and associated vegetation. The overall fire risk would be rated as high.

To reduce the risk requires reducing one of the risk components. Using the Marsden Valley block as an example the potential for a fire to start can be manipulated by restricting access when the vegetation index is high or the amount of fuel reduced by pruning where there is high public access.

#### **5.1.4 Results**

The following table details the results from the different blocks and the opportunities to reduce the risk.

| Block                            | Fire potential | Fire Intensity | Fire Damage | Overall risk | Opportunities / comments  |
|----------------------------------|----------------|----------------|-------------|--------------|---|
| Marsden Valley                   | High           | Medium         | Moderate    | High         | <p>Limit access when the vegetation index gets to a certain level starting with partial restriction through to total restriction.</p> <p>Consider for the next rotation pruning buffer zones adjacent to the high use areas for the public.</p>   |
| Maitai                           | High           | Medium         | Moderate    | High         | <p>Limit access when the vegetation index gets to a certain level starting with partial restriction through to total restriction. This should ideally be led by the parks and reserves team.</p> <p>Consider for the next rotation pruning buffer zones adjacent to the high use areas for the public.</p>  |
| Brook – Fringe Hill compartments | High           | High           | Moderate    | High         | <p>Public access in this area in the future may increase from expansion of mountain biking track network.</p> <p>Limit access when the vegetation index gets to a certain level starting with partial restriction through to total restriction.</p> <p>There is an option to reduce the risk of the Fringe Blocks by pruning these stands. A decision on this needs to be made now due to the age of the trees.</p> |

|  |             |             |                 |               |  |
|--|-------------|-------------|-----------------|---------------|--|
| Brook – Codgers<br>(being retired for<br>alternative use)                | <b>High</b> | <b>High</b> | <b>Moderate</b> | <b>High</b>   | The 2011 stand is unpruned and un thinned. Creating a pruned buffer zone adjacent to mountain bike tracks is an option or whole block pruning.<br><br>The alternative species – higher flammability species have been planted however these are considered less risky than the alternative gorse and broom areas.<br><br>Limit access when the |
| Brook - York<br>(rubbish dump)<br>(being retired for<br>alternative use) | <b>High</b> | <b>High</b> | <b>Moderate</b> | <b>High</b>   | There should be a fire break between the landfill and the trees to minimise the risk from the landfill site.   |
| Roding   | <b>Low</b>  | <b>High</b> | <b>Minor</b>    | <b>Medium</b> | No actions required.   |

#### 5.1.5 Conclusions

1. There is an overall high fire risk potential for the Brook (including the York), Maitai and Marsden Valley forestry blocks owned by NCC whilst the Roding is medium. The potential for ignition, intensity and damage does however vary between blocks. To reduce the overall potential is easiest achieve by either reducing the potential for the fire to ignite or by reducing the intensity by fire through management.
2. Contractors or forestry workers have trigger points based on a vegetation index as to what tasks that can be undertaken and whether partial or full restriction is required over the high fire risk period. These strategies need to be extended to public access rather than just open or closed irrespective of other variables.
3. The amount of fuel can be manipulated with pruning and thinning buffer zones adjacent to high access areas. This will come at a cost of approximately \$3,550/ha.
4. The Forestry Advisory Group need to make a decision on the Fringed Hill block as to whether the risk on the young stands should be reduced through pruning. These trees are at an age where this decision cannot be delayed otherwise the trees will become too large.

### **5.1.6 Other risks**

#### **Market risks**

There is a risk that the price of logs delivered to export, and domestic markets may fall to levels that significantly reduce the net return to Council or make harvesting a stand uneconomic. Export log price slumps happen regularly but their duration is short. They are caused by the build-up of excessive log inventory in importing countries, changes in exchange rate and increases in shipping rates. The domestic market is much more stable. The outlook for log prices is that they will continue at their long-term level with possible upside potential. Drivers are demand in Asia, competition from other countries, global growth rates and the development of manufactured timber products in New Zealand. Marketing of logs from Council forests is also diversified between export and domestic customers so that reliance on the more volatile export market is reduced.

#### **Off-site impacts from forestry**

Trees may fall and slip down slopes. This risk which is greater during harvesting has been mitigated by not replanting areas on steep land above residential areas.

There is also a risk that slash (small timber and branches left after harvesting) may be flushed down steep slopes during high-intensity rain events, damaging farmland, and buildings on downstream properties. This is mitigated as far as possible by logging practices that avoid the accumulation of slash in waterways and on steep slopes around landings and following resource consent requirements.

Transporting logs through urban areas to mills and the port can create a risk to pedestrians, especially around schools. This is being mitigated by imposing speed limits that apply to high-risk zones for certain times of the day.

#### **Injury to recreational users of forests during harvesting**

Public use of roads and tracks during harvesting can be dangerous due to logging truck movements, tree felling and extraction. This is managed by implementing traffic control practices with VHF radio communication on the roads used by logging trucks. The public are excluded from harvesting sites while the operations are in progress. User groups such as mountain bikers are notified of the closure of specified tracks in advance of the operations, and harvesting may be rescheduled to avoid conflict with recreational events.

#### **Wind**

Unusual high-intensity wind events can cause large areas of damage with trees blown down or broken. This risk is mitigated by early thinning which promotes wind stability and not delaying harvesting as taller trees are more at risk. Financial loss is mitigated by insurance and salvage of wind thrown trees.



### Damage by insect attack and fungal pathogens

This is potentially a significant risk if certain insects or pathogens find their way into New Zealand. Fortunately, any impacts to date have been manageable especially by ensuring stands are healthy by appropriate thinning practices and not planting them on sites where the environmental conditions may make them more susceptible.

## 5.2 Risk Assessment

### 5.2.1 Top risks and how these will be managed

The level of risk established from the assessment process (formally called residual risk) is compared with the Council's residual risk tolerance as set out in Table 3 of the Council's risk criteria.

The table sets out priorities for action and at what level of Council decisions should be taken to either accept (tolerate) the risk or take further actions to manage the risk to achieve a more acceptable risk level.

In many cases risks have already been acted on by officers in the course of the normal work of managing the forestry activity and no further action is required.

In other cases, specific decisions may be required to either accept the current level of risk or place actions in this plan to reduce the level of risk.

The following table provides an indication of areas of high residual risk and some information about how these could be further treated (i.e. further controls implemented, or choices made to reduce risk levels).

**Table 5-1: Forestry Risk Summary**

| <b>RISK REGISTER</b>  |                    |                   |               |  |                 |
|---|--------------------|-------------------|---------------|--|-----------------|
| <b>Risk Description</b>   | <b>Consequence</b> | <b>Likelihood</b> | <b>Rating</b> | <b>Existing Controls</b>               | <b>Response</b> |
| Prices in international markets fluctuate beyond assumed range              | Major              | Possible          | High 16       | Stop harvesting if prices fall too low | Accept          |
| Trees fall due to wind/rain that cause damage to buildings or injure people | Major              | Unlikely          | Medium 5      | Do not replanting in high-risk areas   | Accept          |
| Injury to recreational users of forests during harvesting                   | Major              | Unlikely          | Medium 6      | Notify users of harvesting             | Accept          |
| Forest fire   | Major              | Possible          | High 16       | FENZ and Parks processes               | Accept          |
| Environmental impacts from forestry   | Major              | Possible          | High 16       | Follow resource consent requirements   | Accept          |

### 5.3 Infrastructure resilience approach

**Table 5-2: Forestry Insurance Cover**

|                         |   |
|-------------------------|---|
| <b>Tree Crop</b>        | Full replacement value based on most recent tree crop valuation                                 |
| <b>Replanting</b>       | \$3,500 per hectare   |
| <b>Public Liability</b> | Council's own cover   |
| <b>Fire Fighting</b>    | \$500,000 extension to PL cover to meet requirements of Fire and Emergency New Zealand Act 2017 |
| <b>Wind</b>             | \$500,000   |

## 6. FINANCIAL SUMMARY (WHAT IT WILL COST AND HOW WE PAY FOR IT)

Financial Statements and Projections - Table 6-1: Ten Year Forecasts

|                                      | Budget<br>(2021/22) | Budget<br>(2022/23) | Budget<br>(2023/24) | Budget<br>(2024/25) | Budget<br>(2025/26) | Budget<br>(2026/27) | Budget<br>(2027/28) | Budget<br>(2028/29) | Budget<br>(2029/30) | Budget<br>(2030/31) |
|--------------------------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|
|                                      | \$000's             | \$000's             | \$000's             | \$000's             | \$000's             | \$000's             | \$000's             | \$000's             | \$000's             | \$000's             |
| <b>Operating (Surplus) / Deficit</b> | 235                 | (1,589)             | (298)               | (1,136)             | 630                 | 463                 | 513                 | 534                 | 532                 | 465                 |
| <b>Income</b>                        | (3,050)             | (6,599)             | (3,213)             | (4,429)             | 0                   | 0                   | 0                   | 0                   | 0                   | 0                   |
| Brook / York Valley Forest           | (795)               |                     | (341)               |                     |                     |                     |                     |                     |                     |                     |
| Maitai Forest                        | (1,320)             | (4,170)             | (976)               |                     |                     |                     |                     |                     |                     |                     |
| Marsden Forest                       | (935)               |                     | (1,896)             | (4,429)             |                     |                     |                     |                     |                     |                     |
| Roding Forest                        | 0                   | (2,429)             |                     |                     |                     |                     |                     |                     |                     |                     |
| <b>Expenses</b>                      | 3,285               | 5,010               | 2,916               | 3,294               | 630                 | 463                 | 513                 | 534                 | 532                 | 465                 |
| Staff Operating Expenditure          | 200                 | 205                 | 209                 | 212                 | 218                 | 221                 | 225                 | 230                 | 236                 | 241                 |
| Forest management: Brook/York        | 14                  | 23                  | 58                  | 21                  | 11                  | 12                  | 10                  | 10                  | 10                  | 10                  |
| Forest management: Maitai            | 30                  | 114                 | 144                 | 56                  | 42                  | 24                  | 73                  | 20                  | 20                  | 20                  |
| Forest management: Marsden           | 20                  | 43                  | 79                  | 130                 | 133                 | 35                  | 35                  | 15                  | 15                  | 15                  |
| Forest management: Roding            | 60                  | 61                  | 79                  | 28                  | 82                  | 24                  | 24                  | 109                 | 104                 | 30                  |
| Forest management: General           | 90                  | 79                  | 79                  | 79                  | 79                  | 79                  | 79                  | 79                  | 79                  | 79                  |
| Brook/York Valley Harvest Costs      | 820                 |                     | 358                 |                     |                     |                     |                     |                     |                     |                     |
| Maitai Harvest Costs                 | 895                 | 2,937               | 687                 |                     |                     |                     |                     |                     |                     |                     |
| Marsden Harvest costs                | 690                 |                     | 1,154               | 2,696               |                     |                     |                     |                     |                     |                     |
| Roding Harvest Costs                 | 0                   | 1,479               |                     |                     |                     |                     |                     |                     |                     |                     |
| Rates                                | 6                   | 6                   | 7                   | 7                   | 7                   | 7                   | 7                   | 8                   | 8                   | 8                   |
| Insurance                            | 27                  | 28                  | 28                  | 29                  | 30                  | 31                  | 31                  | 32                  | 33                  | 34                  |
| Valuation Fees                       | 4                   | 4                   | 4                   | 4                   | 4                   | 4                   | 4                   | 4                   | 4                   | 4                   |
| Tantragee Hazardous tree removal     | 300                 |                     |                     |                     |                     |                     |                     |                     |                     |                     |
| Forestry disestablishment            | 29                  | 31                  | 29                  | 32                  | 25                  | 27                  | 25                  | 27                  | 23                  | 25                  |
| Commercial Species Investigation     | 100                 | 0                   | 0                   | 0                   | 0                   | 0                   | 0                   | 0                   | 0                   | 0                   |
| <b>Source of Funds</b>               | 860                 | (1,323)             | (124)               | (866)               | 630                 | 463                 | 513                 | 534                 | 532                 | 465                 |
| Transfer from Reserves               | 860                 | (1,323)             | (124)               | (866)               | 630                 | 463                 | 513                 | 534                 | 532                 | 465                 |
| <b>Capital Expenditure</b>           | 625                 | 266                 | 174                 | 270                 | 0                   | 0                   | 0                   | 0                   | 0                   | 0                   |
| Brook/York Valley Rooding            | 80                  |                     | 16                  |                     |                     |                     |                     |                     |                     |                     |
| Maitai Bridge & Rooding              | 125                 | 181                 | 42                  |                     |                     |                     |                     |                     |                     |                     |
| Marsden Rooding                      | 60                  |                     | 115                 | 270                 |                     |                     |                     |                     |                     |                     |
| Roding Bridge & rooding              | 360                 | 84                  |                     |                     |                     |                     |                     |                     |                     |                     |

## **7. APPENDICES**

### **7.1 Forestry Subcommittee Terms of Reference**

## Terms of Reference

### Forestry Subcommittee

#### 1. Purpose

The purpose of the Forestry Subcommittee is to:

- Maintain oversight (ie ensure that works are being undertaken in line with sound management practices) on all matters relating to the commercial forestry operational portfolio including environmental and recreational issues;
- Focus on effective management of forestry in conjunction with governance oversight; and
- To recommend decisions relating to the forestry activity to Council.

#### 2. Membership

The Group membership is as follows:

|                                    |   |   |
|------------------------------------|---|---|
| <b>Chair</b>                       | <ul style="list-style-type: none"> <li>• External appointee</li> </ul>  | Decision-maker<br>(Voting rights)       |
| <b>Members</b>                     | <ul style="list-style-type: none"> <li>• Mayor</li> <li>• Chair of Community and Recreations Committee</li> <li>• Chair of Environment and Climate Committee</li> </ul> | Decision-makers<br>(Voting rights)      |
| <b>Officers</b>                    | <ul style="list-style-type: none"> <li>• Officer with responsibility for forestry</li> <li>• One other officer</li> </ul>   | To provide advice<br>(No voting rights) |
| <b>Independent Forestry Expert</b> | <ul style="list-style-type: none"> <li>• External appointee</li> </ul>  | To provide advice<br>(No voting rights) |

The Subcommittee will meet every 3 months (or more frequently if required).

#### 3. Quorum

A quorum for any meeting will be five, being the Chair, at least two elected members, one Council officer and the independent forestry expert.

#### 4. Areas of Responsibility

The Subcommittee's areas of responsibilities are to maintain oversight of all matters relating to the commercial forestry operational portfolio, including environmental and recreational issues.

All media releases will come from the Chair who will liaise with Council's Communications team as required.

A1739267

Commercial forestry is defined as Council's productive *pinus radiata* forests (around 500 Ha) spread across four main blocks in the Brook, Maitai, Marsden and Roding catchments.

## **5. Powers to decide**

Powers to decide in order to ensure operational continuity include:

- Forestry and harvesting management plans (including replanting) as prepared by the forestry contractor and endorsed by the independent forestry expert; and
- Engagement of consultants required to undertake all works necessary to guide recommendations to Council.

## **6. Powers to recommend**

Powers to recommend to Council will include all actions relating to the oversight of all other matters relating to the commercial forestry portfolio, falling outside the powers to decide, in accordance with Council's Annual Plan and Long Term Plan as follows:

- Approve forestry-related budgets;
- Decide on any matters relating to continuing commercial forestry operations; and
- Development of the Forestry Activity Management Plan, for recommendation to Council

## **7. Role of staff**

Officers and the independent forestry expert will provide technical and financial expertise and an update of project risks.

All meetings and decisions will be minuted, with recommendations made to Council where required.

## **8. Conflicts of Interest**

Conflicts of interest will be declared at the start of meetings.

## **9. Reporting**

The provisions of the Local Government Official Information and Meetings Act 1987 (Part 7) applies to meetings of the Forestry Subcommittee.

This means that:

- Meetings will be publicly notified
- Formal agendas will be prepared, and minutes of meetings taken, and
- Standing orders will apply to all meetings.

## **10. Review Period**

The Forestry Subcommittee will be reviewed at the end of each triennium.

---

## **Forestry Update - Number 17**

---

### **1. Purpose of Report**

- 1.1 To provide an update to the Forestry Subcommittee on forestry activities undertaken since Council adopted the Forestry Review recommendations in September 2016, and since the September 2021 update.

### **2. Recommendation**

***That the Forestry Subcommittee***

- 1. Receives the report Forestry Update - Number 17 (R26274) and its Attachments (A2779103, A2762279, A2788214 and A2783310).***

### **3. Harvesting**

#### **Bridges**

- 3.1 Progress on the bridges is shown below.

|        |   |
|--------|---|
| Maitai | Work is complete                                    |
| Roding | Work will commence once consents have been secured. |

#### **Brook/Tantragee harvesting**

- 3.2 Harvesting along with native planting and remediation of the Dun Mountain track is complete.

#### **Maitai harvesting**

- 3.3 Harvesting in the Maitai Valley has commenced.

#### **Marsden Harvesting**

- 3.4 Harvesting of Block 42.05 (around 15Ha) has commenced and includes remediation to the slips.



#### **4. Tasman Pine Forests and Waahi Taakaro harvesting**

- 4.1 When Tasman Pine Forests Ltd harvest the block adjacent to the Waahi Taakaro Golf Club, the work will also include harvesting the small area planted by them on Council land. When this work is undertaken, PF Olsen will monitor the work to ensure that the trees on Council owned land are harvested to the required standards. The small area will be replanted with indigenous species. No date has been provided by Tasman Pine Forests for the harvesting.

#### **5. Health and Safety**

- 5.1 No Safe Work Observations (SWOs) were conducted by NCC between September and December. PF Olsen continue to undertake regular internal SWOs.

#### **6. Finance**

- 6.1 An updated summary of Council budgets to September 2021 is appended as Attachment 1 (A2779103). PF Olsen's Annual Report (1 July 2020 to 30 June 2021) is appended as Attachment 2 (A2762279) and PF Olsen's quarterly report July – September 2021 is appended as Attachment 3 (A2788214).

#### **7. Alternate Uses**

- 7.1 Council agreed to retire approximately 140Ha of forestry and consider alternate uses and an Alternate Use Plan has been approved. Refer to Attachment 4 (A2783310) for an update. Lachie Grant (Landvision) will be in attendance to update the Subcommittee further.

**Author: Alec Louverdis, Group Manager Infrastructure**

#### **Attachments**

Attachment 1: A2779103 - NCC Forestry Accounts Summary at 30 Sep 2021 [↓](#)

Attachment 2: A2762279 - NCC Forestry Annual Report 2020-21 [↓](#)

Attachment 3: A2788214 - NCC Quarterly Report - Q1 - 2021 - 22 [↓](#)

Attachment 4: A2783310 - Alternative Species Update 5 November [↓](#)

|   |
|---|
| <b>Important considerations for decision making</b>   |
| <p><b>1. Fit with Purpose of Local Government</b></p> <p>The regular updates support the effective and efficient management of Council's productive forests and through best practices and sustainability contributes to Local Government well-beings of social, economic, environmental, and cultural.</p>     |
| <p><b>2. Consistency with Community Outcomes and Council Policy</b></p> <p>The Group aligns with the following outcome: "Our Council provides leadership and is supported by an innovative and sustainable economy".</p>  |
| <p><b>3. Risk</b></p> <p>The Subcommittee has been set up to specifically have an oversight on all things relating to forestry to reduce the risk to Council. Key risks identified in this report relate to harvesting in the Brook and Maitai, which are adequately mitigated by planned safety measures.</p>  |
| <p><b>4. Financial impact</b></p> <p>The Subcommittee has been set up to monitor forestry activity and to manage income and expenses accordingly. Any expenditure recommended in this report is in line with this oversight.</p>  |
| <p><b>5. Degree of significance and level of engagement</b></p> <p>The report deals with several matters that have required individual engagement with individuals/groups.</p>  |
| <p><b>6. Climate Impact</b></p> <p>Commercial pine forestry and harvesting is a sustainable practice and contributes positively to climate change mitigation.</p>   |
| <p><b>7. Inclusion of Māori in the decision-making process</b></p> <p>Iwi have not been consulted in the preparation of this report.</p>  |
| <p><b>8. Delegations</b></p> <p>The Forestry Subcommittee's areas of responsibility include:</p> <p>Areas of Responsibility:</p> <ul style="list-style-type: none"> <li><i>All matters relating to the commercial forestry operational portfolio including environmental and recreational issues</i></li> </ul> |

## Item 9: Forestry Update - Number 17

### Powers to Decide:

- *In accordance with Council's Annual Plan and Long-Term Plan:*
  - *Approval of forestry and harvesting management strategy and plans*
  - *Approval of the engagement of contractors/consultants and forestry tenders*

# Item 9: Forestry Update - Number 17: Attachment 1

## NCC Forestry Accounts Summary at 30 September 2021

| Account  | YTD<br>Actuals | YTD<br>Operating<br>Budget<br>2021/22 | YTD<br>Variance  | Total<br>Operating<br>Budget<br>2021/22 | LTP<br>2021-31<br>Final<br>Year1<br>(2021/22) |
|--|----------------|---------------------------------------|------------------|---|---|
| <b>Grand Total</b>                             | <b>455,806</b> | <b>262,695</b>                        | <b>(193,111)</b> | <b>582,250</b>                          | <b>582,255</b>                                |
| <b>Income</b>                                  | <b>0</b>       | <b>(410,511)</b>                      | <b>(410,511)</b> | <b>(3,490,726)</b>                      | <b>(3,490,722)</b>                            |
| <b>Other Income</b>                            | <b>0</b>       | <b>(410,511)</b>                      | <b>(410,511)</b> | <b>(3,490,726)</b>                      | <b>(3,490,722)</b>                            |
| 154005100232. Brook / York Valley Forest       | 0              | (21,335)                              | (21,335)         | (213,350)                               | (213,350)                                     |
| 154005100233. Maitai Forest                    | 0              | (389,176)                             | (389,176)        | (3,891,760)                             | (3,891,756)                                   |
| 15400730. Revaluation movements                | 0              | 0                                     | 0                | 614,384                                 | 614,384                                       |
| <b>Expenses</b>                                | <b>455,806</b> | <b>673,206</b>                        | <b>217,400</b>   | <b>4,072,976</b>                        | <b>4,072,977</b>                              |
| <b>Staff Operating Expenditure</b>             | <b>51,702</b>  | <b>49,911</b>                         | <b>(1,791)</b>   | <b>199,637</b>                          | <b>199,637</b>                                |
| 15401602. Support Services Overhead            | 49,456         | 48,300                                | (1,156)          | 193,196                                 | 193,196                                       |
| 15401672. Parks & Facilities                   | 2,246          | 1,611                                 | (635)            | 6,441                                   | 6,441   |
| <b>Base Expenditure</b>                        | <b>259,973</b> | <b>430,677</b>                        | <b>170,704</b>   | <b>3,244,338</b>                        | <b>3,244,341</b>                              |
| 154020190232. Forest management: Brook/York    | 16,415         | 14,011                                | (2,404)          | 14,011                                  | 14,011  |
| 154020190233. Forest management: Maitai        | 11,515         | 12,354                                | 839              | 64,860                                  | 64,857  |
| 154020190234. Forest management: Marsden       | 256            | 1,469                                 | 1,213            | 12,386                                  | 12,389  |
| 154020190235. Forest management: Roding        | 10,038         | 9,930                                 | (108)            | 45,444                                  | 45,444  |
| 154020190800. Forest management: General       | 25,557         | 19,000                                | (6,557)          | 71,398                                  | 71,400  |
| 154023100232. Brook/York Valley Harvest Costs  | 101,967        | 57,716                                | (44,251)         | 172,709                                 | 172,712                                       |
| 154023100233. Maitai Harvest Costs             | 45,947         | 283,037                               | 237,090          | 2,830,370                               | 2,830,368                                     |
| 15402621. Rates                                | 5,654          | 6,275                                 | 621              | 6,275                                   | 6,275   |
| 15402637. Insurance                            | 34,696         | 26,885                                | (7,811)          | 26,885                                  | 26,885  |
| 15402693. Admin (advertising, mapping, H&S)    | 3,640          | 0                                     | (3,640)          | 0                                       | 0   |
| 15402720. Valuation fees                       | 4,287          | 0                                     | (4,287)          | 0                                       | 0   |
| <b>Unprogrammed Expenses</b>                   | <b>144,131</b> | <b>179,718</b>                        | <b>35,587</b>    | <b>500,001</b>                          | <b>500,000</b>                                |
| 154033100232. Tantragee Hazardous tree removal | 144,131        | 179,718                               | 35,587           | 500,001                                 | 500,000                                       |
| <b>Programmed Expenses</b>                     | <b>0</b>       | <b>12,900</b>                         | <b>12,900</b>    | <b>129,000</b>                          | <b>129,000</b>                                |
| 154040168020. Forestry disestablishment        | 0              | 2,900                                 | 2,900            | 29,000                                  | 29,000  |
| 15404041. Commercial Species Investigation     | 0              | 10,000                                | 10,000           | 100,000                                 | 100,000                                       |

A2779103

# NELSON CITY COUNCIL FORESTRY

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## ANNUAL REPORT 2020/21 1 July 2020 - 30 June 2021 September 2021

*New bridge across Maitai River South Branch*



Prepared for:

**Alec Louverdis**  
Nelson City Council



Prepared by: Sam Nuske  
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Author:



30 September 2021

.....  
*Sam Nuske*  
*Branch Manager*

## 1. HEALTH AND SAFETY

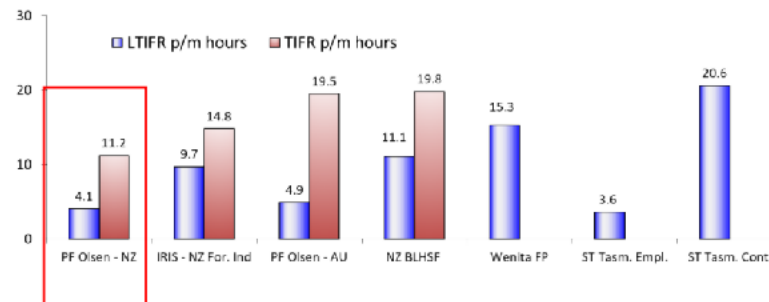
### Incidents

No incidents recorded over the period.

Exposure to risk was limited as there were only 1941 hours worked over the period (1FTE).

### Safety Performance Statistics

The below graph shows that PF Olsen NZ continues to outperform the overall industry on Lost Time Incident statistics, with 4.1 Lost Time Injuries per million hours worked vs 9.7 for the national forest industry.



### H&S Lead Indicators

The main lead H&S indicators for our business that we continue to focus on are:

- Mechanisation
- Bi-monthly H&S meetings with all contractors
- Contractor site and system auditing
- H&S policy setting and review

These areas require significant focus resources to continue to work hard on, although the result is having a safe workforce in a relatively high risk industry.

## 2. ENVIRONMENTAL

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**Incidents**

No environmental incidents were recorded over the period.

---

**Forest  
Stewardship  
Council  
Certification**

The NCCs forest estate achieved Forest Stewardship Council certification during the period. This involved the preparation of an extensive forest management plan which was widely consulted on in the community.

Logs from the NCC estate will now have improved access to sawmills that recognise FSC certification, these include Southpine, Carter Holt Harvey, Nelson Pine and One Forty One.

As a result of the management plan, significant work is ongoing to survey:

- Native lizards
  - Bats
  - Native vegetation
  - Water quality (pre and post harvesting)
-



### 3. FORESTRY

#### Financial summary – All forests

| Forest Budget                    | Year to<br>Date<br>Actual (\$) | Annual<br>Budget (\$) | Comments   |
|----------------------------------|--------------------------------|-----------------------|--|
| Roading                          | 26,630                         | 20,000                | Routine road maintenance in Brook and Maitai.  |
| Land Preparation & Establishment | 36,309                         | 130,358               | Less establishment operations carried out due to deferred harvesting.                                      |
| Tending                          | 63,542                         | 396                   | Thinning in Maitai and Brook which was deferred from previous year(s).<br>Fertilising at Roding.           |
| Protection                       | 6,521                          | 8,000                 | Dothistroma control.   |
| Property Maintenance             | 958                            | 8,000                 |  |
| Forest Management                | 32,125                         | 0                     | Implementation of ecological survey work and general forest management.                                    |
| Rates & Insurance                | 11,015                         | 0                     | NCC forest estate is newly insured through PF Olsen  |
| Admin/Management                 | 13,664                         | 20,000                | General forest administration charges.   |
| Consulting                       | 34,866                         | 40,000                | Costs associated with involvement in Forestry Subcommittee, pipeline management and recreation management. |
| Valuation Fees                   | 4,150                          | 4,300                 | Annual forest valuation.   |
| FSC Certification Fees           | 6,097                          | 5,000                 | Preparation of FSC management plan and certification process.  |
| Tantragee Hazardous Trees        | 10,637                         | 0                     | Planning of removal of Tantragee trees above Brook Street.   |
| <b>TOTAL</b>                     | <b>246,514</b>                 | <b>236,054</b>        |  |

#### Estate losses/gains

N/A

#### Next Financial Year - Highlights

The next financial year will see higher land preparation and establishment costs as the harvested areas designated for commercial replanting are prepared for establishment in the winter of 2022.

## 4. HARVESTING

### Harvesting Costs and Revenue: 1 July 2020 – 30 June 2021

| Maitai                  | Tonnes Harvested | Profit          | Avg. profit per tonne | Av cost per tonne |
|-------------------------|------------------|-----------------|-----------------------|-------------------|
| 1 <sup>st</sup> Quarter | 0                | -16,075         | N/A                   | N/A               |
| 2 <sup>nd</sup> Quarter | 0                | -41,267         |                       |                   |
| 3 <sup>rd</sup> Quarter | 0                | -33,810         |                       |                   |
| 4 <sup>th</sup> Quarter | 0                | -223,747        |                       |                   |
| <b>Total</b>            | <b>0</b>         | <b>-314,899</b> |                       |                   |

| Brook                   | Tonnes Harvested | Profit         | Avg. profit per tonne | Av cost per tonne |
|-------------------------|------------------|----------------|-----------------------|-------------------|
| 4 <sup>th</sup> Quarter | 0                | -24,228        | N/A                   | N/A               |
| <b>Total</b>            | <b>0</b>         | <b>-24,228</b> |                       |                   |

| Roding                  | Tonnes Harvested | Profit         | Avg. profit per tonne | Av cost per tonne |
|-------------------------|------------------|----------------|-----------------------|-------------------|
| 1 <sup>st</sup> Quarter | 0                | -17,175        | N/A                   | N/A               |
| 2 <sup>nd</sup> Quarter | 0                | -4,818         |                       |                   |
| 3 <sup>rd</sup> Quarter | 0                | -500           |                       |                   |
| 4 <sup>th</sup> Quarter | 0                | -1,502         |                       |                   |
| <b>Total</b>            | <b>0</b>         | <b>-23,995</b> |                       |                   |

No harvesting activity in the Marsden forest.

| Current Year                 | Actual     | Annual Budget | % Actual vs budget | Comments  |
|------------------------------|------------|---------------|--------------------|---|
| Profit                       | -\$363,182 | \$720,265     | N/A                | Planning and construction of Maitai and Roding bridges. No harvesting over the period – deferred. |
| Area                         | 0          | 38            |                    | No harvesting over the period – deferred.   |
| Tonnes harvested             | 0          | 23,342        |                    | No harvesting over the period – deferred.   |
| Tonnes/ha                    | 0          | 614           |                    |   |
| Average Net Income per tonne | \$0        | \$30.86       |                    |   |

#### Next Financial Year - Highlights

Harvesting which has been deferred from the 20/21 financial year will be undertaken.

The Maitai and Roding bridges will be completed.

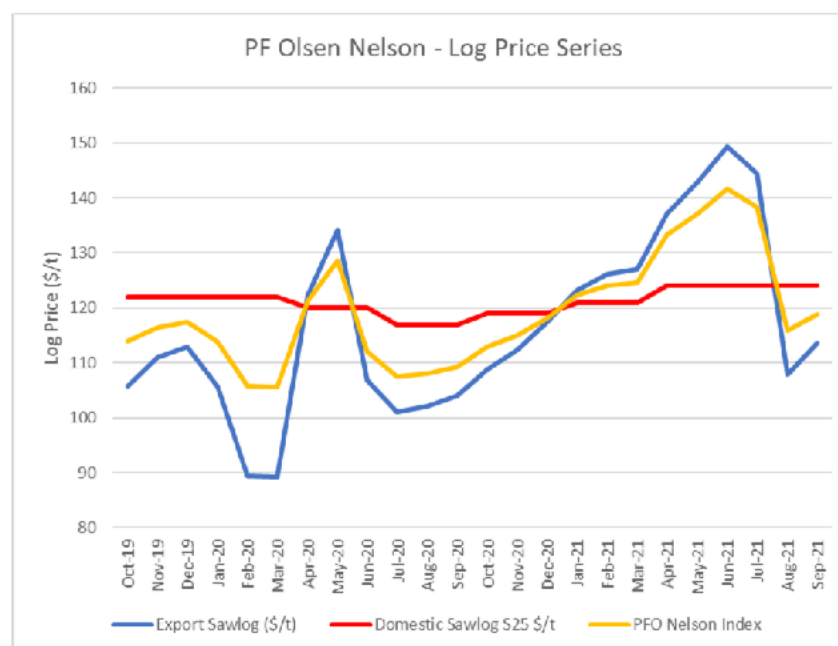
## 5. LOG MARKETS

### Review and Forecast

**Export markets** have been very volatile over the period due to a global slowdown as covid forced lockdowns, following by government stimulus packages buoying industry.

**Domestic sawmills** have reported strong demand for wood products, although due to the more stable pricing model of domestic customers, this has only resulted in a steady increase in log prices.

### Log Price Index



## Nelson City Council Forestry

---

### Quarterly Report Budget Year 2021/22

**Q1: July – September 2021**



*The first load of logs to pass over the new Maitai South Branch bridge*



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A2788214

## 1. Summary

### Health and Safety

4.3K hours were worked over the period, with one operational issue incident occurring.

### Environmental

Two compliance visits were completed at the Brook harvesting. Ecological surveys are ongoing.

### Harvesting

| Harvesting | Q1 Actuals | YTD Actuals | Full Year Budget | % Budget Achieved |
|------------|------------|-------------|------------------|-------------------|
| Profit     | -131 916   | -131,916    | 1,102,026        | -12%              |
| Volume     | 7,131      | 7,131       | 37,412           | 19%               |

Harvesting occurred in the Brook forest, which has a high cost structure. Construction of the Maitai bridge took place over the period.

### Forest Management

| Forest Management | Q1 Actuals | YTD Actuals | Full Year Budget | % Full Year Budget Achieved |
|-------------------|------------|-------------|------------------|-----------------------------|
| Cost              | 247,099    | 247,099     | 208,103          | 118%                        |

Costs were predominantly for the removal of the Tantragee hazardous trees.

Post-storm road maintenance was completed at the Roding forest.

Blanking planting completed at the Maitai forest.

## 2. Health and Safety

---

**Hours Worked**

4,309 hours were worked in the NCC forestry estate.

---

**Incidents**

One operational issue incident was recorded during the Tantragee harvest where a member of the public breached the cycleway closure.

---

**D&A testing**

Nil.

---

**PF Olsen  
Auditing**

One systems audit was completed throughout the period on Taylors Contracting Co Ltd.

---

**Worksafe  
inspections**

Nil.

---

**Meetings**

A Local Safety Meeting was held in July.

---

### 3. Environmental

---

|   |  |
|---|--|
| <b>Incidents</b>                        | There were no environmental incidents recorded throughout the period.  |
| <hr/>                                   |  |
| <b>PF Olsen Auditing</b>                | Four audits were completed throughout the period on harvesting operations at the Brook forest.   |
| <hr/>                                   |  |
| <b>RMA/Compliance</b>                   | Two visits by the NCC compliance officer were undertaken at the Brook forest to inspect harvesting operations. These were recorded as achieving high compliance.   |
| <hr/>                                   |  |
| <b>Forest Stewardship Council (FSC)</b> | <p>Work is planning to be, or is already, underway for the following surveys:</p> <ul style="list-style-type: none"><li>- Bats - completed</li><li>- Lizards - completed</li><li>- Water quality - underway</li><li>- Fresh water invertebrates – underway</li><li>- Vegetation - planned</li></ul>  |
| <hr/>                                   |  |
| <b>New Environmental Manager</b>        | <p>Heather Arnold has taken over from Kit Richards as PF Olsen Environmental Manager. We are lucky to have Heather based in the Nelson branch, working remotely and travelling to cover the NZ operations.</p> <p>Formerly the Environment Manager for One Forty One in Nelson, Heather brings her skills and local knowledge to PF Olsen and our clients.</p> |
| <hr/>                                   |  |

## 4. Harvesting

## Financials by Forest

| Maitai       | Volume (T)   | Profit (\$)    | Profit (\$/T) | Budget Volume (T) | Budget Profit (\$) | Budget Profit (\$/T) |
|--------------|--------------|----------------|---------------|-------------------|--------------------|----------------------|
| Q1           | 0            | -65,933        | 0             |                   |                    |                      |
| <b>Total</b> | <b>0</b>     | <b>-65,933</b> | <b>0</b>      | <b>35,380</b>     | <b>1,061,388</b>   | <b>30</b>            |
| Brook        | Volume (T)   | Profit (\$)    | Profit (\$/T) | Budget Volume (T) | Budget Profit (\$) | Budget Profit (\$/T) |
| Q1           | 7,131        | -65,983        | 0             |                   |                    |                      |
| <b>Total</b> | <b>7,131</b> | <b>-65,983</b> | <b>0</b>      | <b>2,032</b>      | <b>40,638</b>      | <b>20</b>            |

## Financials Summary

| Current Year  | Current Year | YTD      | Annual Budget | %    | Comments |
|---------------|--------------|----------|---------------|------|----------|
| Volume (T)    | 7,131        | 7,131    | 37,412        | 19%  |          |
| Profit (\$)   | -131,916     | -131,916 | 1,102,026     | -12% |          |
| Profit (\$/T) | 0            | -18.50   | 29.46         | -62% |          |

## Operational Update

Significant harvesting of areas in the Brook that are set for retirement from commercial forestry were completed. This was a successful harvest in terms of being completed without property damage or injuries in a very high risk site.

The Maitai bridge construction was completed, although delays with the building consent Certificate of Completion caused operational issues for the harvesting operation that began in early October.

Due to windthrow in the Marsden forest, a harvest salvage operation has been scheduled to begin in Q2 and continue into Q3. This will run concurrently with the scheduled harvesting operation in the Maitai.



## 5. Forest Management

| Forest Budget             | Q1 Actuals (\$) | YTD (\$)       | Annual Budget (\$) | Comments      |
|---------------------------|-----------------|----------------|--------------------|---------------|
| Roding                    | 20,780          | 20,780         | 27,792             | Roding forest |
| Land Preparation          | 0               | 0              | 39,054             |               |
| Establishment             | 4,253           | 4,253          | 3,134              |               |
| Tending                   | 0               | 0              | 38,929             |               |
| Protection                | 120             | 120            | 22,929             |               |
| Property Maintenance      | 0               | 0              | 1,390              |               |
| Forest Mgmt               | 7,541           | 7,541          | 3,475              |               |
| Monthly Admin fee         | 3,640           | 3,640          | 20,000             |               |
| NCC Valuation             | 4,287           | 4,287          | 4,400              |               |
| FSC Mgmt fees             | 10,225          | 10,225         | 7,000              |               |
| Misc Consulting           | 8,200           | 8,200          | 40,000             |               |
| Tantragee Hazardous Trees | 188,053         | 188,053        | 0                  |               |
| <b>TOTAL</b>              | <b>247,099</b>  | <b>247,099</b> | <b>208,103</b>     |               |

### Operational Update

The Tantragee removal was completed under budget and without issue.

Road repair works were completed in the Roding forest to clear slips following storms in July.

Blanking planting was completed in the Maitai forest following goat/deer damage.

Ecological surveys were ongoing through the period as per the FSC management plan.

Fertilising and continued ecological surveys are the main operations scheduled for Q2.

Alternative species update – 5 Nov 2021

| Forest | Compartment              | Update 5 November 2021   |
|--------|--------------------------|--|
| Brook  | 29/01 (above the houses) | <ul style="list-style-type: none"> <li>Replanted with native species at about 1.7m spacings by Nelmac.</li> <li>Difficult site with limited topsoil.</li> <li>Area under the poisoned trees also planted with natives.</li> <li>Issues with feral deer.</li> </ul> |
| Brook  | 22/08                    | <ul style="list-style-type: none"> <li>Replanted 50% of the block. The remainder will be replanted next winter.</li> </ul>   |
| Brook  | 22/02 & 22/06            | <ul style="list-style-type: none"> <li>Aerial herbicide proposed for late summer/autumn period prior to planting 2022.</li> </ul>  |
| Brook  | 22/02                    | <ul style="list-style-type: none"> <li>Weed control for gorse and broom. Released plantings from 2019 and 2020 completed.</li> </ul>   |