Ngā Hui a te Rōpū Kaitohutohu Take ā-Taiwhenua
Rural Advisory Panel

OPEN MINUTE ITEM ATTACHMENTS

<table>
<thead>
<tr>
<th>ITEM</th>
<th>TABLE OF CONTENTS</th>
<th>PAGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>6</td>
<td>Forestry and its Role in the Auckland/New Zealand Context</td>
<td></td>
</tr>
<tr>
<td></td>
<td>A. 7 June 2019 Rural Advisory Panel: Item 6 - Plantation Forestry; Significance to Auckland/New Zealand, presentation</td>
<td>3</td>
</tr>
<tr>
<td>7</td>
<td>Plan Change 1 - Waikato Regional Council</td>
<td></td>
</tr>
<tr>
<td></td>
<td>A. 7 June 2019 Rural Advisory Panel: Item 7 - RAP Briefing, Plan Change 1 - Waikato &amp; Waipa lessons, presentation</td>
<td>19</td>
</tr>
<tr>
<td>9</td>
<td>Climate Change Response (Zero Carbon) Amendment Bill - A Rural Viewpoint</td>
<td></td>
</tr>
<tr>
<td></td>
<td>A. 7 June 2019 Rural Advisory Panel: Item 9 - Climate Change Response (Zero Carbon) Amendment Bill, presentation</td>
<td>29</td>
</tr>
<tr>
<td>8</td>
<td>Rural Advisory Panel - Reviewing the Role of the Past 3 Years</td>
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</tr>
</tbody>
</table>
Plantation Forestry; Significance to Auckland/New Zealand

Presentation to Rural Advisory Panel, Auckland Council

7 June 2019
Two political ‘movers and shakers’
Plantation Forestry in Auckland
Plantation Forestry in Auckland

- Auckland is located in the Northland wood supply region; Major mills and port are in Northland. There are no significant processing facilities in Auckland.
- Relatively small areas of plantation forests (~40k ha x 2018 NEFD).
- Major plantation forests are Woodhill, Riverhead, Mahurangi and Hunua (~56%); balance is generally woodlots.
- As elsewhere with production forestry throughout New Zealand there are different forms of tenure (freehold / forestry Right / Crown Forestry Licence / Joint Venture).
- Up to early ‘90’s Crown was the major forest land owner in Auckland and practiced multiple land use forestry. Ownership of both trees and land has since changed at Woodhill and Riverhead.
- Unlikely to see any growth in estate size in Auckland due to pressure from other land uses and relatively high land values.
Plantation Forestry in Auckland continued

- Woodhill and Riverhead forests act as de facto regional parks
- Forests act as carbon sinks and are suitable for other complementary activities (eg apiary)
- Auckland forests tend to have material areas (10-20% of total area) in reserves (indigenous)
Plantation Forestry in the New Zealand context
The Forestry sector is a solid producer of export receipts for the NZ economy [source MPI/Stats NZ]

<table>
<thead>
<tr>
<th>Year ended 30 June</th>
<th>Dairy</th>
<th>Meat &amp; wool</th>
<th>Forestry</th>
<th>Horticulture</th>
<th>Seafood</th>
<th>Arable</th>
<th>Other primary sector²</th>
<th>Primary industries Total export revenue SNZ millions</th>
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<tbody>
<tr>
<td>Dairy</td>
<td>Export revenue SNZ millions</td>
<td>6,092 5,982 6,986 7,848 10,359 11,036 10,312 12,912 13,379 13,139 17,791 14,050 13,289 14,638 16,655 17,570 17,160 17,340 17,590 17,82</td>
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<tr>
<td>Meat &amp; wool</td>
<td>Export revenue SNZ millions</td>
<td>6,848 6,761 6,659 6,774 6,934 7,820 7,108 7,836 7,780 7,793 8,162 9,000 9,200 8,355 9,542 10,110 9,990 10,020 10,100 10,24</td>
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<tr>
<td>Forestry</td>
<td>Export revenue SNZ millions</td>
<td>3,294 3,242 3,249 3,648 3,295 3,615 3,921 4,588 4,332 4,527 5,199 4,683 5,140 5,482 6,382 6,830 6,760 6,750 6,780 6,85</td>
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<td>Horticulture</td>
<td>Export revenue SNZ millions</td>
<td>2,207 2,264 2,320 2,646 2,892 3,335 3,277 3,378 3,557 3,546 3,805 4,185 5,000 5,165 5,376 6,220 6,340 6,490 6,790 7,07</td>
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<tr>
<td>Seafood</td>
<td>Export revenue SNZ millions</td>
<td>1,257 1,266 1,278 1,312 1,272 1,460 1,405 1,563 1,545 1,546 1,500 1,562 1,768 1,744 1,777 1,880 1,930 2,000 2,060 2,12</td>
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<tr>
<td>Arable</td>
<td>Export revenue SNZ millions</td>
<td>94 90 108 110 142 157 146 157 182 229 232 181 210 197 243 235 250 255 255 26</td>
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<tr>
<td>Other primary sector²</td>
<td>Export revenue SNZ millions</td>
<td>1,178 1,360 1,392 1,546 1,578 1,622 1,574 1,720 1,820 2,015 2,002 2,417 2,714 2,638 2,706 2,800 2,870 2,910 2,950 2,99</td>
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<tr>
<td>Primary industries</td>
<td>Total export revenue SNZ millions</td>
<td>20,968 20,964 21,992 23,883 26,470 29,042 27,743 32,155 32,596 32,795 38,692 36,079 37,323 38,219 42,682 45,645 45,300 45,765 46,525 47,35</td>
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The One Billion Trees Policy

10 year goal (2018 -2027)
Includes trees replanted after harvest (expected to be 50% of total)
~100,000 ha per annum target
Some quick national statistics:

• New Zealand’s net stocked planted production forest covered an estimated **1.73 million hectares** as at 1 April 2018

• The total planted forest standing volume was estimated to be 491 million cubic metres with an average forest standing age (area weighted) of **17.63 years**

• The provisional new planting estimate for the year ending 31 December 2018 is **9,100 hectares**.

• Radiata pine is the dominant species in New Zealand, making up **90%** of the planted production forest area.
The good news..

• International outlook is good:

2020

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<tr>
<th>Region</th>
<th>Description</th>
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<tbody>
<tr>
<td>EU</td>
<td>Wood/biomass deficit 100-150 million m³/yr</td>
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<tr>
<td>RUSSIA</td>
<td>Same harvest level as today, or lower</td>
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<tr>
<td>JAPAN</td>
<td>Wood deficit: 50-60 million m³/yr</td>
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<tr>
<td>CHINA</td>
<td>Wood deficit: 150-200 million m³/yr</td>
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<tr>
<td>OCEANIA</td>
<td>+ 40 million m³/yr of industrial wood</td>
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<tr>
<td>SE ASIA</td>
<td>Deficit. 20 million m³/yr lower harvest</td>
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<tr>
<td>INDIA</td>
<td>Wood deficit: 20-30 million m³/yr</td>
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<tr>
<td>AFRICA</td>
<td>Wood deficit: 35 million m³/yr</td>
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<tr>
<td>LATIN AMERICA</td>
<td>+ 190 million m³/yr of industrial wood; domestically consumed</td>
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<td>U.S.A</td>
<td>Wood deficit: 25-30 million m³/yr; industrial coniferous</td>
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<tr>
<td>CANADA</td>
<td>Reduced harvest by 50-70 million m³/yr of industrial wood</td>
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</tbody>
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• Prices remain strong:
and carbon prices have risen..
But there are some risks:
and challenges...

- Continuing focus on safety and environmental ‘social licence to operate’ issues (eg Tolaga Bay storm damage and minimizing work place harm)
- Aging contractor work force
- Infrastructure (congested ports, poor local roading infrastructure in places)
- Log fumigation; Methyl Bromide being phased out but ERMA approval for EDN (likely successor) unlikely to be forthcoming by October 2020 deadline. Investment in debarking technology is also problematic
- International Maritime Organisation (IMO) 2020 rule implementation will significantly increase the cost of international sea freight
What is the Industry doing?

- Forest Growers Levy Trust Board formed in 2013 (27 cents/tonne) under the auspices of the Commodities Levies Act
- Various industry good activities now funded through levy eg:
  - Continous work on industry best practices through Forest Practice guides (see NZFOA web site)
  - More research on improving identification of areas at risk of erosion (part of review of NES PF)
  - Research to reduce felling stem breakage and improved techniques for removal of slash from high risk areas
  - Investigating ways to reduce landing sizes and recoverable slash for chip or biofuel
  - Identification and formalization of protocols to manage rare and endangered species
  - Mapping (LiDAR) to better identify high risk areas
References:

Forest Owners Association
https://nzfoa.org.nz/

Forest Growers Levy Trust
http://www.fglt.org.nz/

Te Uri Rakau
RAP Briefing
Plan Change 1 – Waikato & Waipa Lessons
Context

NPS-FM & Auckland’s strategic needs

- **Policy A2** – specify targets and implement methods that consider sources of contaminants, to meet targets for FMU’s

- **Policy A3** – imposing conditions that ensure limits and targets in Policy A2 can be met; and making rules to adopt the best practicable option to prevent or minimise effects of contaminants discharged to water or land

NPS-FM means AC must account for & improve water quality through setting objectives and quantitative accounting on “values”
Initial observations
Waikato & Waipa Plan Change 1
Observations from…
WRC

- Waikato & Waipa Vision & Strategy is prime
- Adaptive approach – allocating later
- Monitoring set instream objective(s)
- PC1 choices driven by effects and opportunities
- PC1 led by collaborative stakeholder group
- PC1 implements 2014 version of NPS-FM
Lessons learned

HortNZ

- Concentrations not directly linked to land use
- Sub-catchment management more efficient
- Economic cost & benefit modelling limited – optimal plan?
- Load-based modelling and accounting very limited
Lessons learned
B&L

80-yr timeframe flexible but uncertain

Limited modelling of mainstems & less so tributaries
- Catchment variation in attenuation or farming efficiency?
- Trading and offsetting?
- Link to ecosystem processes?
- Prioritisation of FEPs?

NDA appears to promote “grand-parenting” & datasets behind are limited (unrepresentative – Upper Waikato “missing N-load”)
Lessons learned
Fonterra, DairyNZ

- FEP’s most efficiently delivered by industry
- PC1 does not promote Certified Industry Scheme
- Exempting extensive, hill country farming risks PC1 outcomes
- Application of the NDA inefficient for farmers & unduly risky
- Stock exclusion should be required based on effect, not farm system
Lessons learned
Federated Farmers

- PC1 delivers more than 10% of 80-yr change in 10-yrs
- V&S requirements are uncertain
- FEP delivery and implementation not aligned with industry (leadership of)
- Stock exclusion provisions now too ambitious (intermittent)
- Science of source, transformation & effects too limited
Hearings continuing…
FEP’s & lessons from WRC & MfE in August?

- Load & contaminant modelling needed
- Prioritisation of GFP
- Value-based, sub-catchment planning

RAP input to AC process

New FEP programme

Contact: andrew.chin@aucklandcouncil.govt.nz
Climate Change Response (Zero Carbon) Amendment Bill

Rural Advisory Panel

June 2019
Main elements of the bill

- **Climate Change Commission**: establishment of a new independent Climate Change Commission
- **Target**: set a new greenhouse gas target
- **Budgets**: establish a series of emissions budget as stepping stones towards the 2050 target
- **Adaptation**: establish a range of climate change adaptation measures
Climate Change Commission

- **Purpose:**
  - To provide independent expert advice to the Government on climate change mitigation and adaptation and monitor the progress

- **Commissions functions:**
  - Review 2050 target, and advise on the emissions budgets
  - Advice on quantity of emissions for budget periods and mitigation plans
  - Monitor & report on progress
  - Prepare a climate change risk assessment (CCRA)
  - Report on national adaptation implementation

- **Membership & other matters:**
  - a chairperson, a deputy chair & 5 other members
  - sound understanding of climate change, experience with central govt./local govt., technical expertise / skills / innovative approaches to climate change, Te Tiriti o Waitangi, and a range of sectors
Emission reduction targets

- **Targets for 2050**
  - Emissions of all greenhouse gases, excluding biogenic methane, to be **net zero by 1st January 2050**.
  - Gross emissions of biogenic methane:
    - **10% less than 2017 emissions by 1st January 2030**
    - **At least 24% to 47% less than 2017 by 1st January 2050**
  - Targets to be reviewed when setting new budgets or as requested by the Minister.
  - Targets can only be amended if a significant change has occurred.
Setting emission budgets

- **Purpose:**
  - Maintain and meet the 2050 target and to provide predictability for those affected

- **Duty of minister to set emissions budgets and ensure they are met:**
  - From 31 Dec 2021, 3 consecutive emissions budgets must be set

- **Content of emissions budgets:**
  - Total emissions for the relevant 5-year period – $CO_{2}eq$
  - Each budget include all greenhouse gases
  - Revise emissions budgets if significant changes to the base assumptions
  - Emissions can be banked and borrowed (up to 1%) between budgets
Setting emission budgets

- **Emissions reduction plan**
  - Prepare and publish a plan after the release of each budget
  - Plan no later than 12 months before the beginning the period
  - Minister must consider the advice received from the Commission
  - Ensure adequate consultation with sector representatives and affected communities

- **Monitoring**
  - Annual reporting on the most recent year of the budget period
  - Include projections for current and future emissions
**Adaptation**

- Undertake a national climate change risk assessment (NCCRA) every 6 years
- Prepare a national adaptation plan within two years of each NCCRA
- Commission to produce a progress report every two years
- Power to request information from organisations (reporting power) on:
  - Assessment of the effects of climate change
  - Proposals and policies for addressing the impacts
  - Assessment of current progress
  - Timeframes
- Local government and CCOs are included within the list of reporting organisations.
Developing Auckland Council’s response

- Council & CCOs currently developing a response

- Agriculture researchers/organisations approached to discuss methane targets

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<tr>
<th>Organisation</th>
<th>Name</th>
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<tr>
<td>AgResearch</td>
<td>Robyn Dynes</td>
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<tr>
<td>Federated Farmers</td>
<td>Andrew Hoggard</td>
</tr>
<tr>
<td>Dairy NZ</td>
<td>Jenny Cameron</td>
</tr>
<tr>
<td>Horticulture NZ</td>
<td>Michelle Sands</td>
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</tbody>
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Overview of reaching targets in agriculture sector

- 10% reduction in methane levels (from 2017) by 2030 is feasible
- Agricultural sector accepts the net zero nitrous oxide emissions, it will be challenging
- Technology advancements required to reach the 24 – 47% methane target by 2050. Potential technologies include:
  - Feed inhibitors
  - Vaccinations
  - GE rye grass
Summary of Topics at Meetings

- 52 presentations for discussion

Key areas:
- Auckland Plan refresh and Long-term Plan
  10 Reports
- National Policy statement on freshwater management.
  6 Reports
Other Topics

- Auckland Ballance Farm Environment Award Winners  5
- Emergency Management  3
- Structure Planning  3
- Climate change impacts  3
- Forestry  2
- Maori cultural sites of significance  2
- Regional Pest Management Plan  2
- Auckland Unitary Plan  2
- Auckland Transport  2
- Coastal  2
Attachment A

Item 8

Other Topics

- Mayor’s Address
- Public Nuisance Bylaw
- NZ food story – Pukekohe
- Resource Consent Compliance
- Fonterra presentation
What would you like to see less of?

What would you like to see more of?
Purpose

As one of council's engagement mechanisms with the rural sector in Auckland, the Rural Advisory Panel provides advice to the council within the remit of the Auckland Plan on the following areas:

- Council policies, plans and strategies relevant to rural issues
- Regional and strategic matters relevant to rural issues
- Any matter of particular interest or concern to rural communities
Selection process

The mayor appoints panel members in consultation with the chair of the panel and council staff.

Panel members are selected on the basis of their:

- Association with a rural sector group or organisation
- Ability to provide expert advice on rural issues
- Understanding of the rural sector of Auckland