Marketing Plan

FINAL

THE NEW ZEALAND
POPLAR & WILLOW RESEARCH TRUST

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Contents

Executive Summary

Farming hill country can be challenging; the land's stability is not guaranteed. Even mild storms cause erosion, harming pastoral productivity and polluting waterways.
Most hill country is susceptible to soil erosion, and highly vulnerable when the ground is saturated. Poplar and willow trees planted appropriately can reduce susceptibility to erosion to close to zero.

Poplar and willow trees are our **"Hill Country Heroes"** securing New Zealand's hill country. The stabilising roots of poplars and willows keep hill country soils intact, pasture productive and waterways clean. These trees have been described as NZ's unsung, "hill country heroes".

To bring this about half a million hectares of pastoral hill country still remain unplanted or are only partially planted with trees. This pastoral land needs further protection to reduce erosion risk to near-zero levels.

NZ Poplar and Willow Research Trust (TRUST) presents a Marketing Plan developed in conjunction with Regional Councils, with support from Beef + Lamb NZ and Dairy NZ.
The marketing plan has as its key objective 'increasing the annual rate of planting of poplar and willow trees on erosion-prone hill country pastoral land by 50% by 2025.

Our vision

"All 700,000ha of at risk pastoral hill country is secured."

And we will achieve this at a faster rate than has occurred in recent years.

In association with our partners we have set the goal of a 50% lift in the current rate of planting by 2025. This is occurring through support for a collaborative marketing approach that harnesses the extension capabilities of our partners and is underpinned by:

- Our extensive poplar and willow research that is focussed on realising our vision through providing effective and viable tree solutions for farmers
- Enhanced collaboration among nursery managers and those providing advice on planting.

Our Mission

Is in getting the right tree in the ground, no matter the location, to retain highly productive pasture and clean waterways.

Partnerships

We will invite participation by new agribusiness partners keen to see the continuation of productive pastoral farming on the more than 500,000ha still subject to soil erosion. Desirably **$560,000pa** excluding GST needs to be raised to maintain a sustainable investment in poplar and willow research, deliver our marketing programme and achieve our goal of increasing the planting rate by 50% by 2025. The TRUST is seeking additional Partnership funding of **$200,000pa** to deliver on this.

The Plan, as presented, is for implementation by the TRUST in association with these key partners; in practice this means the TRUST playing a coordinating and support role for the much larger extension activities directed to farmers that are undertaken by its partners.

TRUST support will also include provision of on-line and printed information on best practice and media activity that highlights the benefits of planting poplars and willows.

This approach is directed at hill country farmers where the need for behaviour change is greatest but does not detract from the significant role that poplars and willows play in river protection undertaken by RCs and which are equally supported by the TRUST's research programme.

Steps needed to achieve the objective

- Increased production of poles
- More rapid production of new and relevant material
- Increased planting by landowners
- Improved extension material available to professionals
- Improved training of professionals who deal with the public
- Improved funding

2.0 Introduction

2.1 Who we are

The NZ Poplar and & Willow Research Trust (TRUST) carries out critically important research breeding new poplar and willow varieties with pest and disease tolerance and suitable for a wide range of climates.

The TRUST was formed in 2011 as an initiative of Ministry of Agriculture and Fisheries to take over the funding of research in poplars and willows and promotion of their use. Historically this role had been largely undertaken by central government.

The TRUST's purpose is:

"To benefit the New Zealand community by establishing a business platform to ensure the economic and financial viability of the research and development of poplar and willow trees and their genetic stock for such purposes as soil conservation, river control and sustainable land management along with undertaking promotion for these purposes."

The Chairperson of the TRUST is appointed by the CE's of the RCs and the Trust Board includes appointees from RCs Land and River Managers and Massey University, and elected trustees.

The TRUST is supported by RCs and Beef + Lamb NZ (B+LNZ) as core funding partners, and benefits from a levy per pole from purchases of 3 m poplar and willow (P+W) poles. The TRUST actively seeks funding support from other organisations as funding partners, and funders for specific projects. Central government has also provided support in the past but it is increasingly difficult to gain support going forward.

2.2 Background to the Marketing Plan

This Marketing Plan has been developed by the TRUST as an extension initiative to achieve increased plantings on farms in vulnerable hill country areas.

A TRUST workshop held with regional RCs representatives, B+LNZ, Dairy NZ, a commercial agribusiness organisation along with the chairman and management, provided the core elements of a marketing plan. The participants promoted greater collaboration among RCs along with other organisations involved in extension and funding of environment-related programmes to materially increase the rate of planting of P+W.

The approach will also increase awareness of the important work undertaken by the TRUST in breeding new pest and disease tolerant poplar and willow varieties suitable for a wide range of climatic conditions. Additionally it recognises the commitment from TRUST partners to improving the economic wellbeing of farmers.

2.2.1 The extent of the problem

- 700K ha of pastoral land is at risk of erosion, 500K ha of this is insufficiently planted with tree protection
- In the 2011 East Coast storm the average cost per farm consequent on the storm was $235K *(see Appendix 1*)
- Research shows it takes 30+ years for eroded hills to recover 70% of original production, with slow gains to 80% after 60+ years.
- The re-formation of lost topsoil is an extremely slow process

- Over half of hill country farms sold post Bola were converted into pine forests
- Every hill country farm will lose valuable soil to erosion over the next 25 years.

Appendix 1 provides a number of references to research demonstrating erosion impact and economic and other benefits of planting P+W

2.2.2 Solution to the problem

- Research studies show poplar and willow planting can achieve up to a 95% reduction in slippage compared with unplanted vulnerable hill country land and gullies.
- P+W are far more effective at reducing erosion in pastoral land than any other tree species
- Planting hill country with appropriately spaced trees is farming insurance
- P+W provide an additional range of benefits for farmers:
    - Farmers can achieve increased productivity through reduced loss of productive soil and costly infrastructure damage
    - Trees provide improved aesthetics
    - Shade benefits will deliver improved livestock growth rates while the improved shelter reduces stock losses, particularly newborn stock
    - Loss of stock condition, often experienced during droughts, can be reduced by feeding trimmings from the trees
    - P+W also contribute to bird corridors being the only tree plantings in some situations, while willow roots on the edge of streams provide valuable habitat for eels
    - Pollen from willows is the dominant protein source that builds bee colonies in spring in preparation for pollination of key agricultural and horticultural crops and to capture the flow of clover and manuka nectar for honey.
- P+W also offer great benefits in river management:
    - they confine rivers within channels
    - they reduce the erosion of river and stream banks
    - they provide important habitats for other plants and animals
    - Their effectiveness increases with time
    - They are a low cost solution to bank stabilisation

2.2.3 Invitation

To enhance its effectiveness the TRUST invites wider partnerships with agribusiness and industry organisations that have a commitment to the long term sustainability of farming. The TRUST has tools to help farmers and together with partners can work alongside these farmers in a time of recovery.

The TRUST considers that an industry-wide marketing approach will provide TRUST partners with good profile, provide a firm base for achieving adequate research funding and at the same time support a significant increase in the rate of erosion control planting.

What if the rate of plantings on vulnerable pastoral land could be significantly sped up?

- This will maintain productivity and farm access during storm events through retention of productive soil, stock and workable tracks, and avoid costly infrastructure damage.
- P+W come with additional benefits. They provide shade, shelter, and fodder which all serve to ease climatic stress on pasture and stock They raise soil pH, and enrich soil carbon, nitrogen and cation availability
- Their timber has many on-farm uses.

- Pollen from willows is the dominant protein source that builds bee colonies in spring in preparation for pollination of key agricultural and horticultural crops.

For RCs and central government, increasing annual plantings speeds up erosion control, slows run-off lessening river peak flows and flooding, and lifts water clarity.

2.2.4 Planting and Management across regions

There is considerable variation in most regions, RCs operate nurseries and are the major source of poles for planting, while in others private nurseries are the main suppliers. For planting on pastoral land some RCs oversee the process from propagating in their own nurseries, inspecting planting sites and determining location for pole planting and appropriate varieties through to selecting experienced contractors for undertaking planting. At another level RCs will give advice on plantings but leave farmers to source their own supply of poles. A number of RCs also subsidise plantings to reduce the cost to farmers

2.2.5 Challenges in increasing the rate of planting

Challenges exist in both supply of poles, successful establishment and ongoing tree management. It is important that these are understood in planning a marketing approach.

Nursery/Production Challenges

Material production: Quality, health, grading, suitability for the job

Management knowledge and expertise to reach production targets

Corporate commitment to nursery funding affects choice of nursery site, longevity of the operation

RCs ability to provide demand certainty for private growers

Profitability of growing poles with uncertain demand. This is a low return, high risk, high labour input enterprise which requires high value land

Pricing varies between regions due to various levels of RCs support/expectation of profit margin. This price differential can create problems when trading between RCs

Poles have increased in price due to rising labour costs, accounting for the real cost of nursery land and lowered subsidies in some regions

Farm Level Decision Making Issues

- Budget constraints (product prices, interest rates, poor seasons.
- Recent drought and/or imminent drought
- Poor Farmer role models
- Variable results from past tree planting
- Labour availability
- Work load
- Work type – unpleasant job (avoid/delay)
- Aged tree issues (broken trees, falling branches)
- Pasture loss
- Reconciling scrub removal programmes with planting more trees

- New tree issues (poor growth/survival, matching clone with site, pole condition/quality, pole handling and planting method, pole management/follow-up, drought/flood losses.

RC Personnel and Farm Advisor Understanding

- A lot of technical expertise has been lost from the industry in recent years and management levels of RCs do not necessarily understand the effectiveness of poplars and willows in controlling erosion on farmland.
- Farm advisors and industry consultants may not have the technical expertise or awareness of erosion issues

2.2.6 Existing marketing approach

RCs take the lead in extension programmes directed at landowners to encourage uptake of planting P+W. This is usually as part of working with the landowner in producing and implementing a comprehensive Whole Farm Plan (WFP). RCs Land Management Officers operate these programmes. One-on-one contact is the usual means of encouraging landowners to engage in WFPs and planting of P+W. In addition, promotion is undertaken through presentations at field days, etc.

RCs have helpful information relating to choosing, planting and managing poplars and willows on their websites as does the TRUST. However it can be difficult for land owners to navigate RC web sites to find information on Soil Conservation and guidance on planting poplar and willow poles.

More recently B+LNZ have promoted planting, where appropriate, through their extension programme encouraging uptake of Land Environment Plans (LEPs).

The TRUST also informs on novel varieties and research findings for current and novel varieties through their website, presentations at field days, publications, research reports and articles in rural media.

3.0 The Marketing Plan

3.1 Plan objective

To achieve a 50% increase in the rate of plantings of poplars and willows on pastoral land by 2025.

This means increasing annual sales of 3 m P+W poles to 150K pa from 100K pa in 2014.

The timeframe coincides with central government's goal of doubling the value of agricultural exports between 2012 and 2025.

3.2 Plan ownership

The TRUST is a critical party in meeting the future needs of P+W use in New Zealand through its role as the provider of novel planting material and new research information. It therefore has a vital interest in a successful marketing plan being achieved, both in terms of achieving the plan objective and in providing a platform that will attract financial contributions to the marketing programme and to the research programme.

TRUST is mandate is to "undertake research and development in poplars and willows and promote their knowledge and use for the good of New Zealand."

The TRUST acknowledges that the primary role of marketing lies with RCs and rural industry stakeholders, e.g. B+LNZ and Dairy NZ.

The TRUST's role will be to coordinate plan elements such as extension that increases demand from farmers for planting P+W and in working with stakeholders to better share information leading to increased effectiveness in nursery production, sales and tree establishment.

3.3 Goals

- To maximise the area of land that can be used for sustainable pastoral production through retention of productive soil and reduction of erosion.
- To add value to pastoral farming through provision of more animal feed (direct through reduced soil loss and indirect through harvesting in drought situations) and better shade and shelter for livestock.
- To significantly improve water quality through sediment from New Zealand pastoral land and thus improve water clarity and reduce nutrient load.
- To achieve adequate funding of the TRUST to enable it to fully meet its purposes.
- To promote the benefits of P+W to the general public and legislators in relation to continued use of land for (intensive and extensive) pastoral farming where this is the best use of land.

- To gain additional funding partners for the initiative to support underpinning research undertaken by the TRUST and to fund the coordinating role in the extension and media programme; and
- To provide excellent profile for TRUST commercial partners.

3.4 Customers and stakeholders

Customers

Three key customer groups will be targeted by the marketing plan:

- Farmers
- RCs (unitary, regional or district)
- Partners

Customer groups have been separately identified to ensure effective channels and messages are employed for particular customers and to effectively reach customers. Customer segmentation will depend on the nature of the marketing activity *(see Appendix 3).*

Stakeholders

- Farmer, RCs and sponsor customers are also stakeholders
- Industry organisations
- New Zealand public
- Central government (including MPI, MfE, Ministers)
- Research providers
- Federation of Maori Authorities
- Federated Farmers
- QE II
- NZ Landcare Trust
- Bee industry
- Poplar and willow nursery operators; RCs and privately owned

3.5 Approach

3.5.1 Overview

To achieve the goal of a 50% increase in planting on pastoral farms by 2025 and taking account of scarce RCs resources the approach will need to focus on:

1. Increasing demand on the part of landowners – new as well as existing clients of RCs
2. Implement ways to lift production of poles
3. RCs implementing improved strategies to support best planting practice

The focus of the Marketing Plan is on increasing the demand on the part of the landowners.

However realisation of the goal requires investment in initiatives 2 and 3 above especially in view of financial constraints facing RCs who are primarily responsible for these activities. A carefully considered paper relating to these initiatives is found in *Appendix 2*.

The paper includes key observations in how to:

- Improve the amount of planting material available and the level of soil conservation planting activity
- Develop well organised and coordinated systems from nursery production to pole planting in the field
- Undertake long term monitoring of pole performance

The TRUST commends to RCs that full consideration be given to the detailed recommendations set out in the paper and is willing to support where possible their implementation.

Collectively activities will cover:

- Delivering new poplar and willow varieties and applied research findings
- Providing a national repository of all relevant supply and extension information
- Coordinating research and extension
- Undertaking an advocacy role including implementing a media plan
- Coordinating extension
- Maintaining strong links with interested organisations

The TRUST does undertake many of these activities, to a varying extent, already.

3.5.2 A Unifying Brand

Critical to delivering on the marketing plan is the development of a compelling brand, eg 'Securing New Zealand's Hill Country' and possibly subtitled "The right tree in the ground to retain highly productive pasture. This will acts as a unifier of stakeholder actions and as a central point for communicating with farmers to strengthen demand. Such a brand is in the process of development and all involved parties will be encouraged to brand their activities in support of the brand.

3.5.3 Extension planning

Approach

A two-tiered approach will be adopted for farmers:

Tier One

Communication of good advice, backed by research and/or results on benefits, selection, purchase of poles and planting P+W for any interested party

Tier Two

Undertaking an intensive approach in areas of greatest need rolling out initially in a catchment area where Dairy NZ and Beef+Lamb NZ, along with related RCs, are already collaborating. The Whanganui catchment in the Horizons region and/or the Waipa catchment in the Waikato are the initial proposed target areas.

Methodology

Still to be refined but will cover:

Tier 1

Communication to farmers will be kept as simple as possible, e.g. avoid potential confusion around a wide range of cultivars

Collectively we will identify farmer champions and tell their stories of the benefits eg

> "Planting poplars and willows on erodible hill country is a no Brainer – it's my insurance for being able to carry on business when severe weather events occur, and they seem to be getting more frequent"
>
> Peter Gawith, Wairarapa Farmer

Cost benefit data will be collated and will be a key element in selling benefits including in the context of productivity.

Communication will link farmer customers with suppliers of poles and advice.

Include measures to increase transparency in supply chain including better publicising the role of the TRUST, e.g. include the TRUST logo and a brief note on its role in the annual Nursery catalogue.

Extension will be supported by sound research

Techniques will be developed to engage and convince non-routine users.

Best practice extension techniques which our customers and stakeholders are willing to share will be utilised.

Erosion-prone land will be targeted utilising GIS maps (catchment targeting brings community profile and raises the profile of the brand).

Tier 2

There will be focus on fixing the problems, e.g. reducing erosion risk.

A trial 'targeted approach' to extension will be undertaken initially. This will draw on the Dairy NZ format of:

- taking a catchment approach:
    - prioritising regions which already know what they want
    - garnering community spirit to make positive demonstrable progress
- identifying 'the opportunity', e.g. drive-down erosion
- using GIS mapping to identify target farms
- choosing farms, get it done, move on
- publishing case studies so that relevant websites and handouts focus on 'how to' rather than attracting or convincing users to some course of action

General

The approach will be designed to fit with the existing extension approaches being adopted by the present delivery organisation and some training may be undertaken.

Delivery providers will be provided with branded extension materials to use as appropriate. The nature of the materials and the approach to utilising them will be reviewed following the Tier Two trial.

A media plan will be developed to achieve better integration of coverage than at present (see below) and this will also be refined following the trial.

Extension materials

A number of resources (but not collated in any one place) are already available to assist extension delivery:

- Websites that give recipes/solutions rather than being a tool to create change
- Case studies
- Fact sheets
- Research updates
- Research reports
- Timely pest alerts
- Material for inclusion in e-diaries.

A comprehensive review will be undertaken of existing extension materials to determine gaps and put in place plans to fill them and to produce them in an easily understood and branded format which always brings benefits to the fore.

It is proposed that web based information is concentrated on the TRUST site, which will focus on ease of use and helpful content for landowners. RCs can provide links to the site which must be kept up to date.

In addition funding will be sought for the development of a decision support tool to assist farmers in identifying erosion-prone sites on their farm and provide planting and management recommendations (spacing, tree species, tree clone) for increasing soil stability on the site as recommended in the report by McIvor and others

3.6 Media planning

A media plan will be prepared and it will become an integral and ongoing part of the plan. A key consideration is that in addition to the three customer categories of farmers, RCs and partners – the public and industry good benefits will be highlighted to wider audiences as appropriate.

3.6.1 Method and Brief

Design and delivery will be best achieved using a contracted, single person who has a good knowledge of and connections to the rural media and farming in New Zealand. The contractor will have a media plan for a period of 12 months (rolling, with review) which targets specific media and is measurable (e.g. target for number of articles, etc). Reporting will be two-monthly and include copies of articles or coverage. The contractor will liaise with organisations such as B+LNZ, DairyNZ, NZIPIM, to provide written copy, contacts, spokespeople etc so as to get coverage for P+W in industry-type publications. Such organisations may also be in a position to allow for members of their media team to undertake some specific tasks.

Media planning will take account of regular seasonal considerations (e.g. time to order poles (autumn); events which heighten interest in land management (e.g. floods, droughts) but also get people preparing for the next event and use new, topical events (e.g. formation of PWSG). The contractor will require significant support from the TRUST with story ideas and access to appropriate spokespeople.

The media plan will support the targeted approach to extension by:

Creating national rural awareness of the catchment level activity

Targeting local publications in the catchment area

Generating coverage on case studies from the targeted catchment areas

Using industry good publications (including e-diaries, Friday Flash, Inside Dairy) to highlight activity in individual catchments.

3.6.2 Some storylines

'Primer' on P+W benefits and history of use in New Zealand and role of the TRUST as base material for media who do not know much about P+W

Releases of new varieties

Information on existing varieties for specific uses and environments

Extension activity and initiatives

Initiation of P+WSG

Weather events

Autumn ordering of poles

Profiles of farmers who are passionate about P+W use in New Zealand

4.0 Budget

4.1 For the marketing initiative (excluding GST)

Annual costs

Part-time Project Manager including responsibility for coordinating the extension programme (travel incl.)	$25,000
Part-time Media Manager	$15,000
Design, printing etc (allows for some in-kind & pro bono provision)	$5,000
Total	**$45,000**

The TRUST has agreed to put up seed funding of $35,000 for the year ended 31 March 2016 and additional funds will be sought going forward.

4.2 For the TRUST

Current GST exclusive income is made up as follows:

Sponsorship	
Regional Councils	$175,000
Beef + Lamb	$50,000
Other	
Pole levy	$30,000
River Manager's support	$17,500
Interest	$8,000
Total direct to the TRUST	**$280,500**

In addition in-kind support of $45,000–$75,000 is received.

Desirably **$560,000pa** excluding GST needs to be raised to maintain a sustainable investment in poplar and willow research, deliver our marketing programme and achieve our goal of increasing the planting rate by 50% by 2025

In the year ended March 2015 Plant and Food Research contracts with government amounted to some $200,000 but all contracts had finished by June 2015 and while new opportunities are being actively pursued, no success has been achieved as at June 2016. Meetings with MPI personnel have suggested some areas where the TRUST might present research proposals that could allow for a continuation of this category of income, and these continue to be progressed.

To provide greater stability of funding the TRUST is seeking additional Partnership funding of **$200,000pa.**

5.0 Partnerships

Existing “Funding Partners” include the Majority of New Zealand’s Regional Council’s and B+LNZ. All of these partners are also involved in extension and are therefore essentially “Extension Partners’.

In addition the Trust has existing non funding partnerships as follows:

Research partners

- Plant and Food
- AgResearch
- Landcare Research
- Scion

Educational Partner

- Massey University

Extension Partners

- Federated Farmers
- Federation of Maori Authorities
- The Maori Trustee – Te Tumu Paeroa
- Ministry for Primary Industries
- NZ Farm Forestry Association

To enhance its effectiveness the TRUST invites funding and extension partnerships with agribusiness and industry organisations that have a commitment to the long term sustainability of farming.

This industry marketing approach will provide TRUST partners with good profile, provide a firm base for achieving adequate research funding and at the same time support a significant increase in the rate of planting. See *Appendix 4* for a more detailed description.

A funding partnership proposal has been developed.

6.0 Risks

A risk management plan will be prepared taking account of the possible risks to the successful implementation of the plan. Risks include:

Resourcing of plan too little to achieve objective

Target is too ambitious

Pole supply is not matched correctly with demand

Private nurseries may prove to be uneconomic and some probably provide poles of variable quality

RCs support may reduce, especially as super cities are formed likely resulting in reduced interest in the rural land base and stabilisation of soil

Buy-in is not achieved

Further biosecurity risks to P+W materialise

The project management is inadequate

The extension and media plan is not adequate to achieve the goals set, possibly as a result of the parties being reluctant to fully coordinate

The supply of poles does not increase from RCs and private suppliers to match demand

Commercial partners consider that they are not gaining sufficient profile.

Appendix 1: References

Douglas GB, McIvor IR, Manderson AK, Koolaard JP, Todd M, Braaksma S, Gray RA. 2001. Reducing shallow landslide occurrence in pastoral hill country using wide-spaced trees. *Land Degradation & Development*. http://onlinelibrary.wiley.com/doi/10.1002/ldr.1106/abstract or Vol 24, 103-114.

McIvor I, Clarke K, Douglas G. 2015. Effectiveness of conservation trees in reducing erosion following a storm event. In: Moving farm systems to improved attenuation (eds LD Currie and LL Burkitt). http://flrc.massey.ac.nz/publications.html. Occasional Report No.28. Fertiliser and Lime Research Centre, Massey University, Palmerston North, New Zealand. 12 pages.

A comprehensive analysis of soil erosion is contained in the paper titled *Hill Country Erosion: A Review of Knowledge on Erosion Processes, Mitigation Options, Social Learning and their Long Term Effectiveness in the Management of Hill Erosion* (http://maxa.maf.govt.nz/mafnet/rural-nz/slm-hill-country-erosion-programme/review-of-knowledge-on-erosion-processes.pdf).

http://www.mfe.govt.nz/publications/climate-change/quantification-flood-and-erosion-reduction-benefits-and-costs-climate-8

http://www.mfe.govt.nz/publications/climate-change/quantification-flood-and-erosion-reduction-benefits-and-costs-climate-8

https://www.soils.org/files/am/ecosystems/dominati.pdf

http://www.fao.org/forestry/21644-03ae5c141473930a1cf4b566f59b3255f.pdf

http://flrc.massey.ac.nz/workshops/15/Manuscripts/Paper_McIvor_1_2015.pdf

http://www.envirolink.govt.nz/PageFiles/1192/1259-HBRC175%20An%20ecosystem%20services%20approach%20to%20the%20cost%20of%20soil%20erosion%20and%20value%20of%20soil%20conservation.pdf

Appendix 2 Factors relating to use of Poplar and Willows in soil conservation at Regional Councils and Farm levels

A paper prepared by Peter Manson of HBRC

Introduction

The Trust is currently developing a marketing plan. While inputs at the TRUSTS level of direct influence such as promotion, information distribution and research are well covered, a number of elements at the farm and regional RCs level are important but outside the trusts direct influence.

The following headings and notes may help to clarify some of the more important factors which influence poplar and willow sales, end use and effectiveness. Further, there may be opportunity to improve the outcomes in some cases.
I have tried to categorise issues but in reality many of these are closely related.

Production

Presently RCs obtain poles by:

- Production from own nurseries
- Contract growers
- Occasional growers
- Farm nurseries
- Purchase from other RCs

Nursery/Production Issues

- Quality, health, grading, suitability for the job
- Management knowledge and expertise which affects how long it talks to reach production targets
- Corporate backing which affects choice of nursery site, longevity of the operation and commitment to nursery funding
- RCs ability to provide certainty to private growers
- Profitability of growing poles. This is a low return, high risk, high labour input enterprise which requires high value land
- Pricing; this varies between regions due to various levels of RCs support/expectation of profit margin. This price differential can create problems when trading between RCs

There are two main themes here;

RCs nurseries – where significant improvements can be made with a strong commitment to nursery development, site selection, investment in infrastructure and staff training.

Private nurseries – which are an alternative option for regions but there are two issues; quality of product and sale of poles. Closer alignment of the interests of RCs and private nurseries would be a positive outcome.

Sales

Soil conservation is only the large scale end use for poplar and willow poles. Demand is driven by regional RCs policies:

- Regulation e.g. GDC/Govt. (ECFP), NPS Fresh Water (all regions in the future)
- Grant Schemes e.g. ECFP (Govt), soil conservation assistance programmes which vary greatly between RCs depending on priorities and budgets.
- RCs policies determine; total budget for funding, grant rates, degree of promotion/education/advice.
- Small margins mean that RCs nurseries try to produce and sell the entire production rather than over produce.

Two improvements to sales can be made firstly; by promoting the products and their benefits, providing information and education about the successful use of poplars and willows. Secondly; by providing grant assistance which is targeted to key areas is and pitched at the right level.

Farm Level Decision Making

Economic Factors

- Budget constraints (product prices, interest rates, poor seasons.

Risk Factors

- Recent drought
- Imminent drought
- Poor results from tree planting

Logistical factors

- Labour availability
- Work load
- Work type – unpleasant job (avoid/delay)

Historical factors

- Aged tree issues (broken trees, falling branches)
- Pasture loss
- Reconciling scrub removal programmes with planting more trees
- New tree issues (poor growth/survival, matching clone with site, pole condition/quality, pole handling and planting method, pole management/follow-up, drought/flood losses.

Four main action points are recommended in this section:

- Encourage planting and management of willows for drought fodder (providing a solution rather than a drought problem)
- Provide good information to farmers and even on-site assistance if required
- Try to match the regional work load with suitable contractors
- Provide good information on suitable clones for different sites and strategic planting for best results

Promotion

RCs mainly promote pole planting to:

- Established 'clients' due to limited funding and material availability.
- Catchment scheme landowners
- General hill country landowners (along with advice and support for new clients)

Technical Knowledge and Advisory Services

This service is provided by regional RCs Land Management/Soil Conservation staff with back up from Plant and Food Research Staff
Knowledge is gained from:

- Time in the field (years) i.e. clone recognition, matching clone to site, knowing establishment and management needs
- Networking and sharing knowledge with LM peers in other RCs. This is partly dealt with by TRUST and Nursery managers meetings. Both are annual events and involve limited numbers. There is no other forum for this purpose.
- Internal RCs training

The Nursery Managers Group has widened its scope to include evaluation of end use plantings. However there are many other Land Management staff who are not involved and therefore miss this information.
It is recommended that a poplar and willow soil conservation forum for regional RCs land management staff is created to extend knowledge of research findings and to share knowledge on effective extension approaches. The Willow & Poplar Research Collective (WPRC) which is already funded by RCs could have its scope and possibly membership widened to become such a forum acknowledging that some more resource input may be needed.

Website Support Information

- Regional RC web sites
- TRUST Website

Regional RCs web sites tend to be focussed on urban perspectives of environmental issues and extremely variable in ease of navigation. It can be difficult for land owners to find information on Soil Conservation and guidance on planting poplar and willow poles.

While the TRUST site is the logical place to collect and manage the huge amount of information, the TRUST site must be easy to navigate and RCs sites must have local information and contacts. Web sites need to be regularly updated (clones available and their uses, latest research data – interpreted and summarised, contacts, sources of materials, catalogues and pricing).

Recommendation: That web based information is concentrated on the TRUST site. The TRUST has greater control of this site which can be focussed on ease of use and helpful content for landowners. RCs can provide links to the site which must be kept up to date.

RCs priorities

Land Management activities have become very much broader in scope than in the days when Soil Conservation was a function on its own. There are many benefits in a holistic approach to land conservation and production however, for some regions this has resulted in a watering down of resources once dedicated to soil conservation and hence poplar and willow planting.

This is partly due to pressures to deal with freshwater policies which have completion deadlines, but also a perceived lack of erosion control progress over the preceding decades.

Land Management staff are now often involved in freshwater management (riparian), farm planning, community group facilitation and even biosecurity. Soil conservation work has become very much a condensed seasonal activity due to other resource pressures. There is a possibility that this will change as freshwater catchment plans migrate to include tertiary hill country.

Landowners will be required to implement farm plans using proven methods. RCs will need to ensure that the utmost support is given to landowners.

Recommendation:
That the TRUST develops and promotes comprehensive planning and operational guidelines for soil conservation practitioners using pole planting as a tool.

Regional Council Budgets

To improve the amount of planting material available and the level of soil conservation planting activity, RCs budgets must allow for:

- Nursery development costs and early operating budgets
- Advisory, support and staff expertise to establish and run nurseries
- Grant assistance schemes with effective grant rates for soil conservation planting
- Dedicated soil conservation field staff who are available to deliver advisory and educational services.
- Promotional material and events
- Support of staff to engage in inter-RCs forums focussed on use of poplars and willows

Regional Council Systems

This is closely related to the above.
Well organised and coordinated systems from nursery production to pole planting in the field, are very effective at producing quality products, matching supply with demand (which is internally generated) and ensuring that poplars and willows are established successfully to achieve their intended purpose of soil conservation.
Greater Wellington has such a system which:

- Is Farm Plan focussed
- Targets areas of high soil conservation need
- Efficiently coordinates distribution from nursery to farm
- Ensures that poles are planted properly and on the right sites
- Includes follow up checks
- Involves long term monitoring of pole performance and excellent information for other RCs

This is a very effective system.

Affordability

In terms of benefits the price of poles continues to represent a good investment with the main drivers on cost being:

- Accounting for the real cost of nursery land
- Cost of labour (nursery and farm)
- Cost of managing new nursery pests and diseases
- Cost of pole protectors

- Lowered by grant rates in some regions

Solutions to rising costs are difficult to find however, innovation will play a key part. Possible innovations include using smaller grades of poles with cheaper sheep protectors and temporary electric wire exclusion for young cattle eg dairy heifers. Costs can also be reduced by ensuring a very high planting success rate in the field

Footnote

The Governments' NPS-Fresh water is now directing many of the policies and activities of RCs. This is providing an opportunity to encourage increased production and use of poplars and willows in North Island hill country. However, unlike the government grant driven demand of the 1970's and 80s', this upturn will be driven by sediment reduction outcomes.

A lot of technical expertise has been lost from the industry in recent years and management levels of RCs do not necessarily understand the effectiveness of poplars and willows in providing the best means of controlling soil erosion, sediment loads and improving water quality in farmed hill country environments.
Assuming that NPS driven catchment management plans will be implemented, farmers will have great difficulty carrying out the necessary planting programmes without grant assistance, logistical help and innovative methods.

The TRUST is ready to play a role in some of these areas.

Appendix 3: Customer Segmentation

Farmers	RCSs	Partners
Location: Nationally By island (e.g. NI/SI) By macro region (e.g. East Coast North Island By region Zonally By catchment	Level of funding support being provided for P+W planting: Large funder Small funder Non-funder	Funding type: Cash In kind / contra Cash and in kind
Farm type: Dairy Sheep/Beef/Deer Horticulture	Groups within RCS: Land managers River managers	Participation in stakeholder group: participant non-participant
Topography: Hill country Flat land Braided rivers Streams		Involvement in P+W value chain: Supplier, e.g. plants, P+W advice, extension services Non-supplier (but targeting same customers / customer segments
Farmer typology: Product champion/ enthusiast Key influencer Innovator Early adopter Majority Late adopter		Company size Large Medium Small
Age		

Appendix 4: Funding Partnerships

Our Story

Poplar and willow trees are our **"Hill Country Heroes"** securing New Zealand's hill country.

Farming hill country can be harsh; the land's stability is at the whim of Mother Nature. Even mild storms cause erosion harming pastoral productivity and polluting waterways. But there is a solution. The Poplar and Willow Research Trust undertakes extensive research and breeding programmes to grow the most effective poplars and willows for preventing erosion. Working with local government and valued commercial partners, we then help farmers select the right trees for their area.

- Well planted mature trees will retain up to 95% of the nutrient rich topsoil under severe weather conditions compared with significant slippage on neighbouring properties.
- P+W are far more effective at reducing erosion in pastoral land than any other tree species
- Planting hill country with appropriately spaced trees is one of the best forms of farming insurance available

To deter erosion and improve water quality through sediment reduction, a complementary relationship between trees and pasture is needed on 700,000 ha of NZ pastoral hill country.

Our vision

“700,000ha of at risk pastoral hill country is secured.”

And we will achieve this at a faster rate than has occurred in recent years.

In association with our partners we have set the goal of a 50% lift in the current rate of planting by 2015. This is occurring through support for a collaborative marketing approach that harnesses the extension capabilities of our partners and is underpinned by:

- Our extensive poplar and willow research that is focussed on realising our vision through providing effective and viable tree solutions for farmers
- Enhanced collaboration among nursery managers and those providing advice on planting.

Our Mission

Is in getting the right tree in the ground, no matter the location, to retain highly productive pasture and clean waterways.

Our Research

Our breeding programme creates tailored poplar and willow seedlings to test in field trials. In our nursery we evaluate their phenology, disease resistance, branch angle, stem form, brittleness and plant vigour. The best seedlings are then selected for field trials. We monitor in the field for up 15 years to evaluate survival, growth and compatibility with grazing stock and pests. We also examine water-use efficiency, rooting capability, ease of propagation, tolerance to wind and drought, and wood properties. The occasion of severe rain events allows us to measure the stabilising effect of poplar and willow species, tree spacing, and size. Current research is investigating how tree root development on slopes varies with age, soil type and pollarding management. Our research also develops strategies for minimising

the impact of pests and diseases through cultivar selection and management. Using results of our intensive research, we provide an advisory service to regional councils, and support users through our website www.poplarandwillow.org.nz, publications, and speaking at field days and workshops. Having good validated science demonstrated on farm is a key to uptake by farmers. Our partners can also take information from the trust and package it in a way that aligns their business to the adoption of sustainable practices.

The Opportunity

Of the 700,000ha of vulnerable hill country pastoral land some 500,000ha is yet to be planted putting at risk the cleanliness of the nation's waterways, the productive potential of the land and in turn the opportunities for supplying goods and services to those farming on this significant proportion of our pastoral land. This pastoral land needs further protection to reduce erosion risk to near-zero levels.

Poplars and willows are a key environmental resource but also provide shade and shelter for livestock as well as drought feed and amenity. A successful outcome also delivers huge benefits to urban neighbours whose homes and businesses become less subject to flooding as a result of judicious planting of poplars and willows on slopes and in gullies and along rivers and streams.

The recent flood damage and impact of soil erosion in the Western North Island is going to have long term impacts for farmers in that region. The Trusts approach is to ensure the tools are there to help farmers and in turn our partners can work alongside those farmers through this time of recovery

We will be telling the story of poplars and willows along with our exciting goals and successes to our farmers as well as to all New Zealanders using skilled media partners.

Becoming a commercial partner means playing a key part in this strategy. It is one that also incorporates a catchment approach working through regional councils and others in a manner that brings in one on one contact with many of our hill country landowners.

Our plan is comprehensive and has the support of regional councils and other partners. Our new brand conveys action and the strategy is designed to achieve a much more powerful advocacy for protecting our productive land along with our waterways.

We invite you to join with us on this journey which provides strong opportunities for commercial partners to be seen to be associated with our vision of securing 500,000ha of at risk pastoral hill country and at the same time help in securing retention of farming businesses in this type of country rather than seeing it revert over time into scrub or be acquired for forestry.

This is an opportunity to participate in a programme that is strongly focussed on environmental sustainability which is becoming of increasing importance among farmers and in society as a whole. Further this means supporting a programme where the tools are provided to farmers to get the right outcomes as distinct from some other initiatives that just recognise the end result.

Other benefits

- An excellent platform for presenting other positive messages to a range of customers recognising the breadth of benefits resulting from planting poplars and willows
- The 10-year goal of achieving a 50% increase in the rate of planting also coincides with the government's push for a doubling of the value of agricultural exports which provides longevity to a sponsor investment
- The initiative will quickly get up to speed given considerable activity is already taking place, be it largely under the radar, and apart from core investors such as councils and B+LNZ, little organisational input is required of sponsors should they wish not to get directly involved in extension activities
- A good fit with all businesses and organisations involved with the pastoral sector and with a brand that has a low risk of being devalued
- The next decade will see increased demand for improved environmental stewardship and this initiative represents an uncomplicated response to some of the environmental challenges of the pastoral sector
- A wide range of stories spread throughout the year can be linked to the initiative, e.g. Shade and drought fodder in summer, shelter, erosion control, reduced flooding and clearer streams in winter
- Given that there are already a number of entities funding pastoral extension, adding a push for increased plantings of P+W represents a good return on investment
- This initiative is distinctly different from others in the pastoral environment sector
- There are good opportunities for commercial sponsors, regional teams and central government agencies' field teams to get engaged especially in terms of channelling information and in advice and in provision of stories customised for sponsors' own communications
- Risks are low and will be managed by appointment of experienced professional part-time contractors to oversee the initiative and to manage branding and the media strategy
- In turn the project is overseen by an experienced board including as Chair Bruce Wills former president of Federated Farmers and a strong advocate for marrying economic and environmental sustainability.
- Enhancing the partners image with farmers, shareholders and the general public
- Building customer relationships – buyers of poplars and willows are also customers for other farm goods and services
- Retention of customer purchasing power – good soil conservation means farming businesses are better able to withstand adverse weather events and carry on farming.

Resources / In-Kind

Resources needed by the marketing plan which could be procured through in-kind partnership include:

- Integration with the existing extension approaches being adopted by the present delivery organisations
- B+LNZ and DairyNZ are already cooperating in some regions on environmental matters, and the intent that the use of P+W in these regions becomes a ‘bolt on’ is a specific example of this
- Media and marketing teams of one or more partners may be able to provide their services as a form of in-kind support
- Similarly hands-on support in project management including drafting of extension materials may be provided by funding partners on an in-kind basis.