
NZ LANDCARE TRUST

Restoration Plan Guide

ABOUT THIS DOCUMENT

The Restoration Plan Template comes in 2 parts - Guide & Template.

Part 1 - Guide: This guide has been developed by NZ Landcare Trust Ngā Matapopore Whenua to provide land managers with assistance in preparing a Restoration Plan.

Once the user has studied this guide document, they will have the tools and knowledge to complete the empty template (part 2) as it applies to their site.

Part 2 - Template: The blank template will need to be completed to meet the individual requirements of each site.

Advisory comments are included within this guide and are shown as:

- *Red italics - Guidance notes to be read and deleted.*
- Blue non-italicised - Add relevant information or choose one of the selected options. Remove blue text or keep text and change font colour to black as relevant. If the specific aspect is not relevant, this should be deleted.
- Black non-italicised - Standard report information that should not be deleted.

This covering page should be deleted once the template has been completed.



Restoration Plan

<Insert project title>

<Insert month/year>

REVISION STATUS RECORD

Revision No.	Revision date	Description of key changes
0		
1		

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1. PROJECT SUMMARY

This section gives a brief overview of the project. It can be used as a stand-alone for funding applications and reports etc. It does not need to contain all the details. A good aim is around 70-100 words.

1.1 PURPOSE

Provide a summary of why the project is being implemented. What is the current state? Why is the project necessary? What are some of the special features? Describe the expected outcome of the project.

1.2 PROJECT LOCATION

Include road, nearest town, district.

1.3 PROPOSED PROJECT ACTIVITIES

Summarise the proposed works; include components such as site preparation, broad timeframe, planting techniques, weed control etc. How many hectares are being restored?

2. PROJECT MAP

The project area is shown in Figure 1:

Insert aerial or topo map of area. This may be found on your Council website or use Google Maps.

Figure 1 – xx restoration area <amend as appropriate>

3. EXISTING ENVIRONMENT

3.1 PROJECT AREA

Provide context by describing the restoration area and adjoining land use:

- Describe the area to be restored, e.g. wetland, stream, forest*
- Provide details of the land tenure / ownership / zoning of the restoration area.*
- Is the restoration is being undertaken by a single landowner, catchment or community group?*
- What is the size of the restoration area?*
- What is its site history?*
- Is the project close to other natural areas; if so what and how far?*

3.2 SITE CONSIDERATIONS

Your site will influence what decisions you make regarding species, as well as ongoing management actions. Having a good understanding of your site, and planting and managing accordingly, will increase your planting survival rate.

- If possible, provide a brief description of soil type, hydrology, topography, prevailing wind, aspect and other relevant attributes. Often this information can be found on Council websites or try [Land Atlas NZ](#).*
- Are there potentially limiting factors that need to be addressed (e.g. soil compaction, erosion, salinity, weeds, feral animals etc).*

4. VISION AND GOALS

When working on a long-term project, it helps to have a vision and goals to keep you on track and help describe your project to others.

For example:

A Vision describes what the restoration area will be like in the future, e.g: Wairua Wetland is a healthy, connected floodplain, teeming with native freshwater and terrestrial wildlife.

The project goals outline the key areas of work that are required to achieve the vision. E.g:

'To establish an ecological corridor using native vegetation between the wetland and the xx River.

'To stabilise the stream banks with native vegetation and provide a buffer from surrounding land use'.

Note: goals (sometimes called objectives) are not actions. Actions should be SMART – Specific, Measurable, Achievable, Realistic and Time-bound. An action for the first goal in this example may be "Plant 3ha of riparian margin with eco-sourced species by July 2023." One goal is likely to require a number of actions.

5. IMPLEMENTATION

In this section give enough detail to describe your approach, but finer details can be included in the relevant appendices.

To meet the objective of <insert name of project restoration plan> the following restoration approach will be implemented.

5.1 SITE PREPARATION

Provide relevant details of works required prior to planting e.g:

- Will earthworks be required e.g. re-batter edges or return hydrological systems (if so, is resource consent required)?*
- What ground preparation will be required e.g. removal of rank grass, and/or scrub/weed tree species such as willow control? What methods will be used, manual, mechanical or with herbicides?*
- Will the site be fenced to prevent stock access?*

5.2 SPECIES SELECTION

Reference where you got an approved eco-sourced plant list from or any other technical advice. Your Regional Council, Department of Conservation website or other industry guides such as DairyNZ are good places to start. Waikato River Authority has a useful [plant selection tool](#) to select plants for certain conditions, but check the plants are suitable for your area.

The species list for this restoration plan was derived from xxx and is provided in Appendix B. Plants will be obtained from <insert details of nursery/seed supplier>.

5.3 PLANTING MAP

Include a map or drawing that shows different zones based on the site considerations (eg soil moisture, prevailing wind, aspect etc). Either insert the map here or refer to Appendix C.

The [plant calculator](#) from the Coastal Restoration Trust is a handy tool for working out how many plants of each species you will need .

A map (or drawing) showing different zones based on the site considerations is shown in Appendix C. Species, density and planting zone information is listed in Appendix B.

5.4 PLANTING SPECIFICS

Depending on your site considerations, additional measures may increase your success. Describe what activities will be conducted to increase plant survival, e.g:

- *Will fertiliser tablets and/or water crystals be used during planting?*
- *Will the plants be mulched, and if so, by what: eg commercial wool mats, wool dags, bark etc.*
- *Will they be staked (recommended for finding plants while small and obscured by rank grass).*
- *Will you be using protective sleeves?*

5.5 SITE MAINTENANCE

Maintaining your site while the plants get established is critical to increase survival and maximise your investment. The time and effort you need to do this will depend on your site considerations, but as a rule of thumb you should expect to maintain your site 1-2x/year for 2-3 years after planting.

Describe the schedule for vegetation maintenance, e.g.

- *What is the plant release schedule, weed control, possum/hare/rabbit/pukeko control (if required).*
- *Will plants be irrigated (over how long) or will supplementary irrigation be needed in dry periods. if so, how?*

Xxx and is outlined in Appendix E.

6. MONITORING

Monitoring changes over time is useful to determine whether further planting and/or maintenance is required. It is also useful for demonstrating success and telling the story of the project.

The simplest measure of plant success and growth is through [photo points](#). More complex methods, but which provide more information of health and diversity of the restoration, could be through [visual assessment](#), or [20x20 plots](#).

Provide details of monitoring. Include the timing of proposed monitoring. The number and position of the monitoring points should represent the restoration area and the type of vegetation.

7. CONSULTATION

There are a number of reasons for consultation: You may have a legal requirement, it may enhance the project to involve others, or it could be courteous to let others know. Parties to consult with may include neighbours, iwi/hapū/marae, Council/DOC technical advisors, resource consent advisors etc.

List parties that have been consulted with.

¹ *A general rule of thumb is 1m spacings for wetland plants and 1.5m spacings for dryland plants*

² *Plant release means removing the grass/weeds that are smothering the plant, either manually or using herbicide, usually 0.5-1m radius around the plant.*

APPENDIX A PRE-RESTORATION PHOTOPOINTS

<i>Photopoint 1. Looking xxxx <aspect>.</i>	<i>Photopoint 2. Looking xxxx <aspect>.</i>

Add as required

APPENDIX B TARGET PLANT SPECIES LIST FOR RESTORATION

Species Name	Zone	Spacing	Zone	Quantity	Source
<i>e.g. Carex secta</i>	<i>e.g. flood</i>	<i>e.g. 1m</i>	<i>e.g. flood</i>	<i>e.g. 100</i>	<i>e.g. ABC Nursery</i>
<i>Insert rows as required</i>					

APPENDIX C

SITE MAP

Show site variables such as areas of different zones that may impact on survival (riparian, terrace etc); soil moisture (wet, dry, ephemeral, flood), prevailing wind, shadiness.

Plant lists and locations may also be relevant e.g., to assist contractors

APPENDIX D CORRESPONDENCE

*Include any correspondence that may be useful to refer back to, e.g. letters of support, technical advice etc
If this section is not used, delete and renumber appendices.*

APPENDIX B MANAGEMENT ACTION TIMELINE

Adjust table contents and remove sections if not applicable; OR an example of a simpler table below

Management actions outlined in Table XX will be undertaken, where appropriate and required, for the restoration site.

Table XX: Management actions for <restoration plan name>

Topic	Action	Responsibility	Timing
Pre-Restoration planning	Conduct a preliminary assessment to ascertain/map soil moisture, zones, xxxx		month / year
	Develop species selection list		month / year
	Arrange seed purchase/collection or order plants		month / year
	Consents and permissions arranged – <i>list as relevant</i>		month / year
			month / year
			month / year
Site Preparation	Site earthworks undertaken.		month / year
	Weed eating of rank grass/weedy shrubs		month / year
	Spot spraying completed (4-6 weeks prior to planting)		month / year
	Fencing completed		month / year
			month / year
			month / year
Weed Control	Weed control carried out prior to vegetation establishment / planting <i>- list as relevant</i>		month / year
	Follow up weed control post planting (<i>e.g. 6 months</i>)		month / year
Planting	Phase 1 completed		month / year
	Phase 2 completed		month / year
Site Maintenance	Spring plant release		month / year
	Autumn plant release		month / year
Monitoring	Undertake monitoring actions. <i>Enter relevant monitoring actions as required.</i>		month / year
Reporting	Six-month report completed		month / year
	12-month report completed - <i>etc</i>		month / year

OR

Example of Work Plan/Timeline

	Stream health & photopoint monitoring	Order plants	Site preparation	Planting	Release new planting
JUL					
AUG					
SEPT					
OCT					
NOV					
DEC					
JAN					
FEB					
MAR					
APR					
MAY					
JUN					
JUL					
AUG					
SEPT					
OCT					
NOV					
DEC					

Details of parties who were consulted during the preparation of this plan are provided in Table X.
<Correspondence relevant to the preparation of this plan is included in Appendix D>

Table X - Consultation

Name	Role	Organisation	Comments	Consultation Date
				(day/month/year)

8. REPORTING

Some funders have a reporting requirement. Cover when and what will be reported. Delete this section if not relevant. Activities useful to report include number of volunteers, volunteer hours, number of plants planted, size of area planted, species, other activities such as weed control.

A restoration report outlining the activities and results of the monitoring for the site will be prepared annually.