# Natural Regeneration Plan

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| **Date:** |   |
| **Property name:** |   |
| **Property address:** |   |
| **Regeneration goals and timeframe:** | *Goals may include reducing erosion, creating habitat and/or biodiversity. Note your goals and the timeframe for each of them.*  |
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| **Site details:** **Erosion** | *Identify highly erodible land to be converted to native forest. How?**Your knowledge of the land. Use Land use capability map:* [*Whenua Viz*](https://whenuaviz.landcareresearch.co.nz/) *and/or the* [*Map of observed erosion*](https://ourenvironment.scinfo.org.nz/maps-and-tools/app/Landscape/lri_observed_erosion) |
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| **Site details:** **Natural regeneration** | *Will native regeneration work at the identified site for conversion to native forest? How do I tell?**Your knowledge of the land. Is there native forest nearby? Use the Map of current and past vegetation* [*Explore NZ Landcover Change*](https://ourenvironment.scinfo.org.nz/maps-and-tools/explore-nz-landcover-change) *and/or Map of “*[*potential natural vegetation*](https://ourenvironment.scinfo.org.nz/maps-and-tools/app/Habitats/lenz_potnatveg)*”, to determine what the whenua might have looked like before human occupation. Are there already native shrubs or trees on my land that are spreading (e.g. mānuka or kānuka)?* |
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| **Natural Regeneration**There are two types of natural regeneration, passive and active. Passive regeneration requires fencing out of grazing animals and pest control will lead to forest naturally returning. Active regeneration requires planting of trees as well as fencing out grazing animals, and pest control.  | What do I need for natural regeneration? |
| *Is the identified area fenced off from stock?* |
| [ ]  *Yes* | [ ]  *No, I will l need fencing* | [ ]  *I will need*  *km of*  (*what type of) fence.*  |
| *Does the identified area have pest control?* |
| [ ]  *Yes* | [ ]  *No, I will l need pest control* | [ ]  *I will need to control*   |
| *Does the identified area have weed control?* |
| [ ]  *Yes* | [ ]  *No, I will l need weed control* | [ ]  *I need to control*   |
| *What land use is the identified area under now?*[ ]  *Pasture* [*Map of potential natural reforestation on marginal land*](https://www.landcareresearch.co.nz/assets/Discover-Our-Research/Climate-action/cecw/map-potential-reforestation.pdf)[ ]  *Passive regeneration (no planting)*[ ]  *Active regeneration (planting required)* [ ]  *Exotic trees*[ ]  *Trees will be clear-fell harvested* [ ]  *Trees will be selectively harvested to help natural regeneration*[ ]  *Trees will not be harvested*  |
|  | *Are there areas of historical or cultural significance at my identified site?* [ ]  *Yes, discuss with whānau, kaumātua, shareholders, and local council*[ ]  *No* |
| **Funding support** | *Do I need funding support for this regeneration?*[x]  *Yes, how do I do this?*[ ]  *No* *Funding may come from local iwi and hapū, local Councils or other Government agencies. Funding may also come from the profit made from harvesting exotic forests on the property. A funding agency will often request estimate costs for fencing, weed and pest control, and planting for your project. These estimates can be obtained by contacting local businesses and service providers for quotes.*  |

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| **Project map**Insert an image of your identified area: [Google Earth NZ](https://earth.google.com/web/%40-40.7998944%2C175.3101282%2C709.99560599a%2C4505062.98534636d%2C35y%2C0h%2C0t%2C0r/data%3DCmEaXxJZCiUweDZkMmMyMDBlMTc3Nzk2ODc6MHhiMWQ2MThlMjc1NmE0NzMzGYmXp3NFc0TAIYrG2t9Z3GVAKh7guJnguLTguKfguIvguLXguYHguKXguJnguJTguYwYAiABOgMKATA) is great for this, simply find your site, screenshot your site, and paste here. Or draw a sketch.  |
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| **Assign zones to your project map**Are there any dry or wet zones that might need different types of plants? Zones that are steep and may be hard to plant? Zones where there is no soil left and can’t be planted? Zones to be harvested? Any other zones that might need more care? Mark these zones on your project map and assign each zone with a label. |
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## Plantingplan

A planting plan can be used to seek funding support and identify how many plants you’ll need for each zone. A planting calculator can be found here: Tāne’s Tree Trust [Planting and Budgeting Calculator](https://toolkit.tanestrees.org.nz/planting-budgeting-calculator/). Suggest following the steps in this calculator to estimate potential costs – you will need information on plant prices in your area.

Wetland plants: Waikato Regional Council has a [Wetland planting guide](https://www.waikatoregion.govt.nz/assets/WRC/Services/publications/other-publications/Wetland-factsheet-3-Planting-guide.pdf). Your local Council website might also have information relevant to your region.

Dry or erosion prone: Marlborough District Council has [notes for native planting on dry hills and terraces](https://www.marlborough.govt.nz/repository/libraries/id%3A2ifzri1o01cxbymxkvwz/hierarchy/documents/environment/tui-to-town-planting-list/Restoring_Native_Vegetation_Hill_slopes.pdf), Hawke’s Bay Regional Council has a [guide of Native plants for erosion control](https://www.hbrc.govt.nz/assets/Document-Library/Information-Sheets/Land/LMNT1.pdf). Your local Council website might also have information relevant to your region.

Considerations for other planting factors: Manaaki Whenua – Landcare Research has a [guide for improving resilience of planted native woody seedlings to drought](https://www.canopy.govt.nz/assets/content-blocks/downloads/Improving-resilience-of-planted-native-woody-seedlings-to-drought.pdf), some of these are in the planting and budgeting calculator from [Tāne’s Tree Trust](https://www.tanestrees.org.nz./).

### Schedule

Consider when and how often you will need to do fence, weed and pest control maintenance, a planting schedule (if needed) and maintenance, in fill planting (where plants have died) and/or enrichment planting (to increase the number of plant species).

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| **Activity** | **Jan** | **Feb** | **Mar** | **Apr** | **May** | **Jun** | **Jul** | **Aug** | **Sep** | **Oct** | **Nov** | **Dec** | **Cost ($)** |
| **YEAR 1** |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Site preparation (Spraying) |[ ]  [ ]  |[ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ]    |
| Planting |[ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ]    |
| Post-planting release |[ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ]    |
| Weed control |[ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ]    |
| Pest control |[ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ]    |
| **YEAR 2** |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Site preparation (Spraying) |[ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ]    |
| Planting |[ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ]    |
| Post-planting release |[ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ]    |
| Weed control |[ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ]    |
| Pest control |[ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ]    |
| **YEAR 3** |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Site preparation (Spraying) |[ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ]    |
| Planting |[ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ]    |
| Post-planting release |[ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ]    |
| Weed control |[ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ]    |
| Pest control |[ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ]    |

## Budget

*Many of the activities in the budget summary below are also in the planting calculator and can be estimated after discussing with local businesses and service providers who meet the needs of your project.*

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| **Activity** | **Year 1** | **Year 2** | **Year 3** | **Total** |
| Fencing |   |   |   |   |
| Site preparation |   |   |   |   |
| Planting |   |   |   |   |
| Weed control |   |   |   |   |
| Pest control |   |   |   |   |
| Infill planting |   |   |   |   |
| Enrichment planting |   |   |   |   |
| **Total** |   |   |   |   |

## Monitoring

You may decide to monitor the success of your project and several funding agencies will require this information.

How can you monitor your project success?

* Photos of the site over time
* Checking plant survival over time. There are some tips here: Tāne’s Tree Trust [Monitoring native planting programmes](https://www.tanestrees.org.nz/projects/monitoring-native-planting-programmes/)
* Bird counts. Here is a guide to do 5-minute bird counts: Department of Conservation [Five-minute bird counts – monitoring](https://www.doc.govt.nz/our-work/five-minute-bird-counts/)
* Pest tracking tunnels: Predator Free NZ Trust [Tracking cards and tunnels](https://predatorfreenz.org/toolkits/know-your-target-predators/tracking-cards-and-tunnels/)
* Camera traps: Predator Free NZ Trust [Using cameras for remote monitoring](https://predatorfreenz.org/toolkits/is-your-predator-control-working/using-cameras-for-remote-monitoring/)
* Forest monitoring and Assessment Kit: FORMAK [Forest Monitoring manual](https://www.formak.co.nz/webfolder.html)