



Restoring Maori cultural landscape using ArcGIS as the key planning tool



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Overview

- Map location of site
- Background to NGĀ HAU E WHĀ O PAPARĀRANGI 20 year planting project
- Main objectives of the project
- Stakeholders involved
- GIS Usage
- Future plans



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NHEWOP site

- 15 min drive from city
- How many ha of land?
- Leasing land from Wellington City Council
- 250m above sea level
- Overlooking Wellington harbour





Base map Department of Conservation 2012



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INGĀ HAU E WHĀ O PAPANĀRANGI
the people of the four winds WWW.NHEWOP.ORG.NZ



www.nz.govt.nz/conservation/air-quality/imagery-2011



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WHAT? → 20 Year Planting Project

WHERE? → Nga Hau e Wha o Papararangi
Howokiwi – “The breeding place of Kiwi”
Newlands/Pukehuia - “The hill of the Huia Bird”

HOW? → Identify, Restore, Maintain & Harvest
the ngahere (native bush/plants) through:

- **Raranga** (weaving)
- **Rongoa** (medicine)
- **Maara kai** (food gardens & Maori cuisine)

WHY? →

- Return native bush to its original glory
- Return Kiwi & Manu (birds) to the whenua (land)

WHO? → NEXT SLIDE...



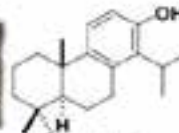
Kiwi



Manu



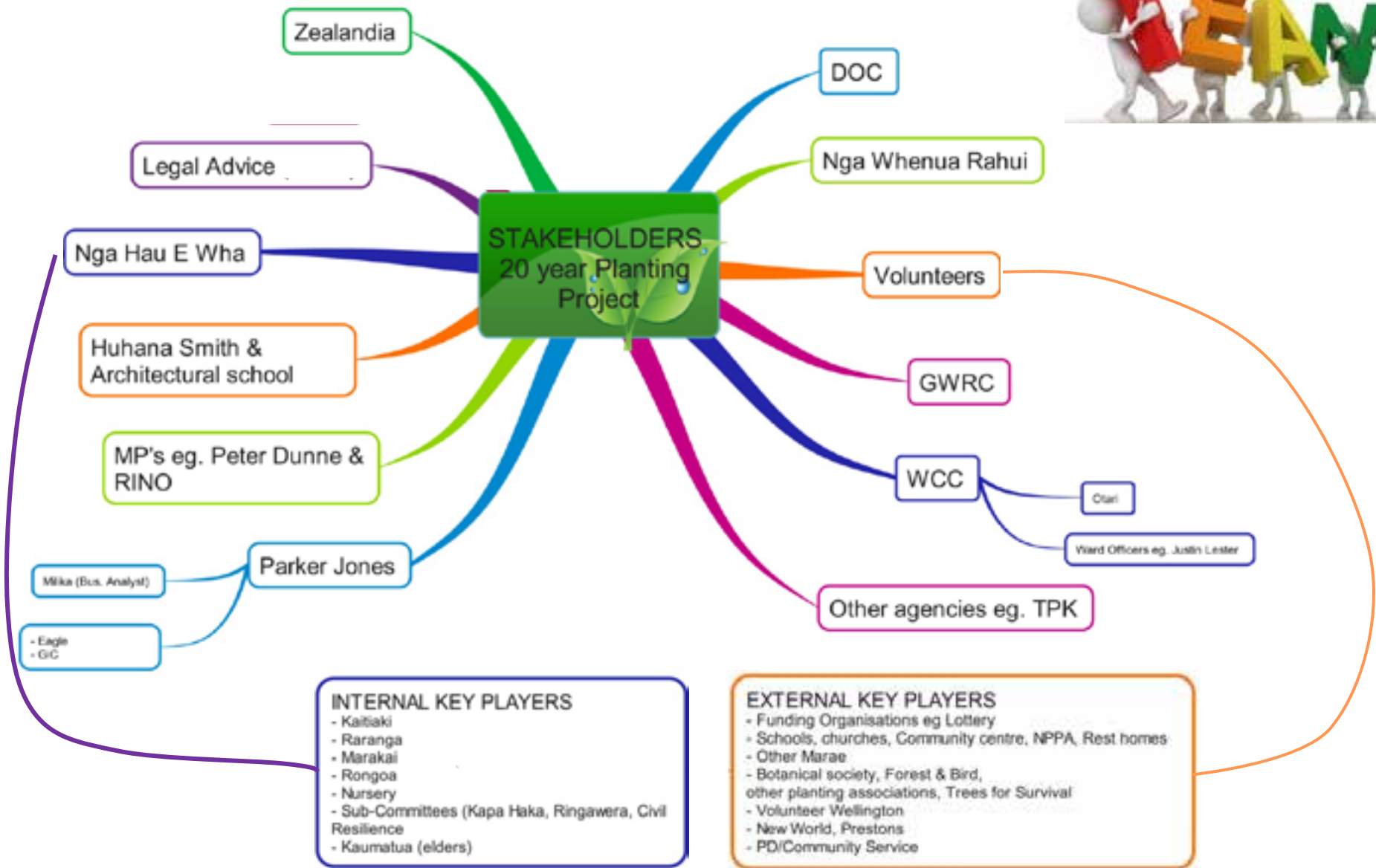
Rarangi



Rongoa



Maara kai





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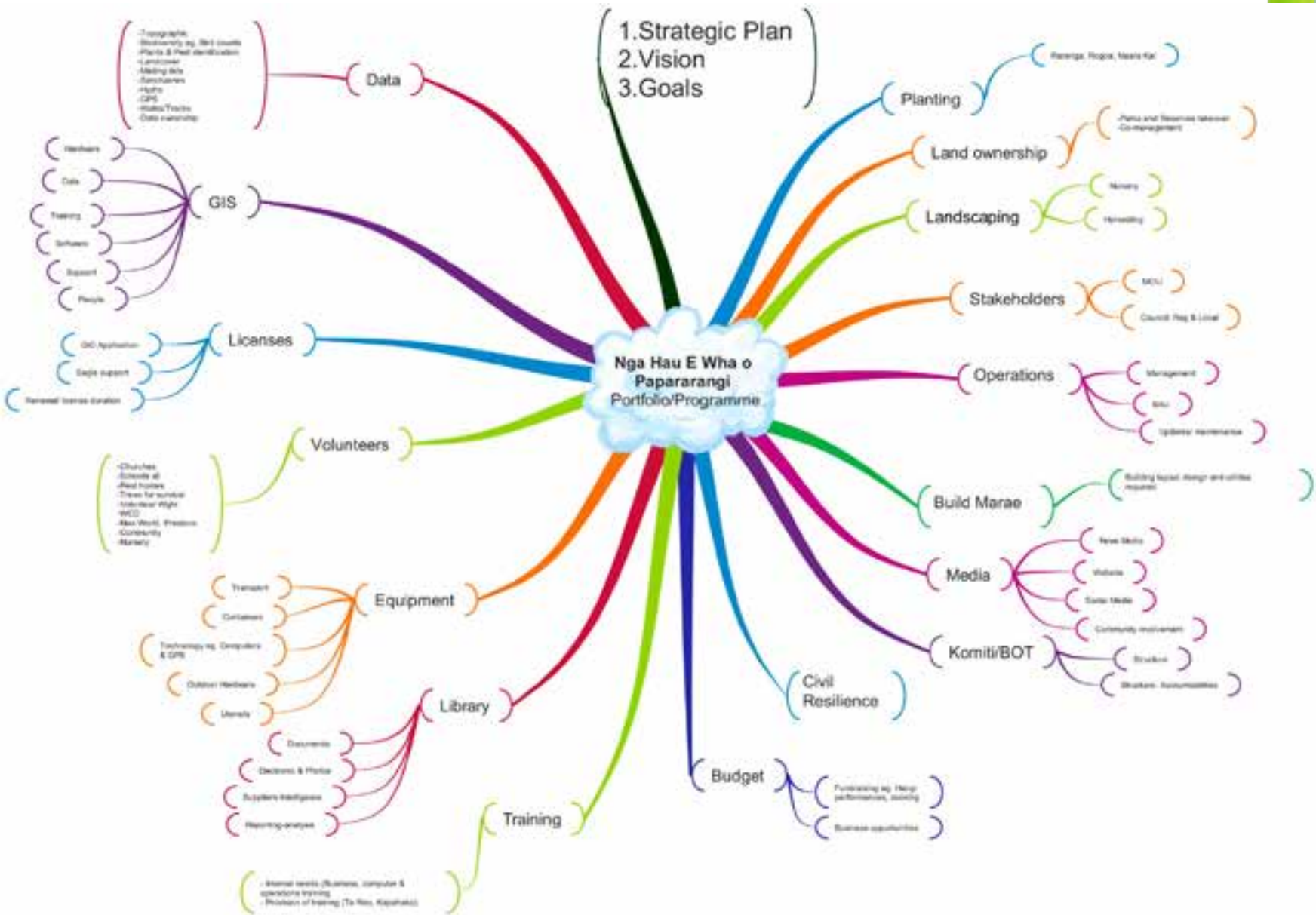
Wellington City Council



Nga Whenua Rahui Fund

The Nga Whenua Rahui Fund supports the protection of indigenous ecosystems on Maori land.





GIS in Conservation (GiC) (a chapter of SCGIS)



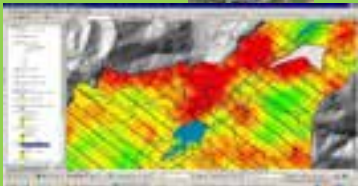
Esri Conservation Grant Scheme



*Working for
Conservation Groups*



2013: over \$250,000 Esri GIS Software Conservation grants



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- Identify key GIS users
- Establish the user environments & central database
- Train users on use of ArcMap & GPS
- Map a baseline of the area using **existing data**
Eg. Tracks, fence lines, parks & reserves, vegetation type, land ownership







Mentor & Empower users on use of GIS



“Our vision of what's important is...bringing together the best systems and the best software to empower people with rich information solutions.”

Bill Gates

Community Engagement & Crowdsourcing Getting community groups and volunteers involved



Identify & map sites of significant flora and fauna

-3 strands:

Raranga (weaving)

Rongoa (medicine)

Maarakai (food)



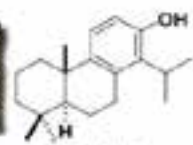
Korif



Maara



Raranga



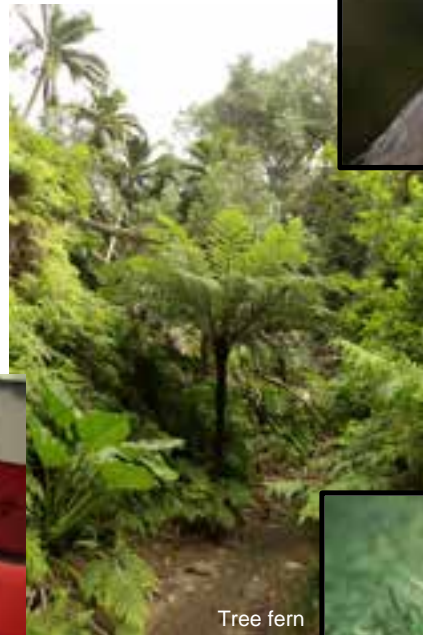
Rongoa



Maarakai



Kokako



Tree fern



Kiwi



Takahē



Kowhai



Where to from here?...

To be used as a case study - where GIS can help conservation groups achieve a conservation outcome

Replicated to other conservation groups

Develop interactive maps on NHEWOP website



Use existing services such as AGOL to provide a means of sharing data

Refresher GIS courses for key users & provide a supporting role



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[Maps.doc.govt.nz](https://maps.doc.govt.nz)
[Nhewop.org.nz](https://nhewop.org.nz)
gicnz.org.nz/



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