Te Hira Whanau
BACH 101
Case Study
Rangitoto Island

Te Hononga - UNITEC Dept of Architecture
Te Hononga – Centre for Maori Architecture & Appropriate Technologies

- Established in 1999 at the Unitec Department of Architecture, Auckland, Aotearoa / New Zealand
- Intension to provide opportunities for students to connect with Maori community architectural needs and aspirations
- Annual design studio project located within the Maori community
- Hands on build component (50 – 100hrs)
- Te Hononga Process: Client engagement, Research, Design, Construction, ongoing Relationship…..
Whare Raumati 2002

Te Hononga Projects
Whare Raupo 2003

Te Hononga Projects
Whare Nikau 2006

Te Hononga Projects
Pungarehu Marae 2007

Te Hononga Projects
Te Hira Whanau Bach

- Bach originally built on Rangitoto Island in 1919 by Bill Davidson and Bill Dawson
- Te Hira Whanau lease since 1936 – through uncle Bill Dawson
- 60m2 – 2 bedroom, bunk room porch
- Cooking in kitchen lean to & cave
- Current lease to Minnie Te Hira nee Dawson – now 93 years
- Historic Places Trust Category B
- Department of Conservation restriction on alterations and additions
The Sentry - Islington Bay
90 years on...

1950s aerial photo of Islington bay Bach community

Te Hira Whanau gathering
Section West to East
Whanau restoration priorities

- South wall deteriorated, rotten window frames & weather boards
- 300m walk / run to public toilet at wharf or brave the ‘short drop’
- Rusted / leaking roof
- Cave roof structural restoration required
- Lighting – need to move away from Candles & lamps (use of naked flame and fossil fuels)
Bach 101
Team Process

- 11 x 2\textsuperscript{nd} year Architecture Students - July - September 2008
- Historical Research of Rangitoto Island
- Bach research
- Whanau meetings / site visits
- Planning the build elements
- Sourcing & costing materials / sponsorship
- Arranging shipping
- 1 week build 1-6 September 2008
Sustainability?

Focus on:

- Sustainability of the bach itself – deferred maintenance had left the bach in poor shape
- Sustainability of the bach typology (under threat due to gentrification of coastal areas and removal of bachs on Public land)
- Sustainability of the Te Hira Whanau tenure on the Island
- Sustainability of a true bach lifestyle
  - Very low water supply controls demand
  - Photovoltaic lighting system – safety
  - Composting toilet – no water use
  - Insulated south wall and ceiling
Minnie Te Hira – lease holder
Bach Interior
The true kiwi bach now an endangered species
Sustaining the unique Rangitoto bach typology is absolutely crucial
Prior to Build
The Big Build - Roof
The Big Build - Roof
The Big Build – South Wall
The Big Build – South Wall
The Big Build – Composting Toilet
The Bio-loo
The Big Build – Composting Toilet
Team, Whanau & SHaC Judges
... and Bach 101 endures for future generations of the Te Hira Whanau
Team Bach 101
“A bach hopes to be a permanent structure. Its occupants only temporary whom come and go constantly evolving over time, then so does their place. The historical concept of contributing some addition to a space with unconsciously realising the connection they've established with their unknown future. The bach encompasses a different quality of life that can be experienced. It signifies solitude freedom and peacefulness.”
Key findings

- Strategic interventions sufficient to increase comfort, usage and sustainability
- Modest budget $16,500 incl GST
- Whanau engagement with renovations / interventions post build
- Part of the success of the project is what we didn’t do to the bach!