

Report on Waikato Biodiversity Forum Tokoroa 29 November 2007.

Approximately 50 people attended the Forum day in Tokoroa. The purpose of the Forum day was to update/share information about biodiversity issues and opportunities in the South Waikato District. The morning was facilitated by Helen Ritchie and the format was discussion and presentations. In the afternoon everyone went on a field trip to view sites of interest west of Tokoroa on Hancock Forest Management land.



The following points raised and recorded:

- Extent of loss depends on many factors e.g. large blocks small blocks corridors eg bats
- Climate.rainfall, rainfall was increasing at Kaingaroa
- Flannery weathermakers forestry making rain (Amazon)
- Vegetation is vital
- Groundwater
- Hydrology EW, NZ Hydrology Society Paul Mosely
- Recharge/contamination
- Water quality impacts
- N 400 tons extra into river from 60,000ha total
- Current extent of change less than 60,000ha
- Impact depends on N/P ratio and limiting factors
- Increase in bacteria depending on farm design and management of farms eg extent of riparian areas
- Sediment-increase from tracking/roading during logging stump removal-more soil loss
- Flood impacts -under sized culvert (District Council)
- A lot depends on how farms designed and run.

Questions asked on the Day

What we would like to know

- What are the groundwater impacts of land usage change, re-charge rates and contamination?
- Availability of funding- 0800 BIODIV (246348) provides information

- Scientific research locally ... How do we get hold of it.
- Is there any research/monitoring on ground water (quality and quantity) being done?
- How will conversion affect springs?
- How much pressure on the new land?
- What's happened to our birds?
- Don't know how much the new farm conversions will affect wetlands
- Do pine trees affect the water table?
- Wetland development-What are the opportunities in the South Waikato?
- How can we act LOCALLY?
- What does the new conservation minister know of biodiversity? How can she be brought up to speed?
- What is the impact on water quality of turning pine forest into pasture/cows?
- What is the level of effluent/sediment entering streams because of conversions?
- What is the effect of deforestation on climate and rainfall?
- Are species able to re-locate in the face of conversions?
- Forestry to farming What do we lose? Birds, insects, small reptiles, bats and flora. What happens to them?
- %biodiversity 100% native bush 80% forestry ??? farm
- 32,000 retained by CHH, 25,000 dairy conversion, that leaves 7,000ha what is happening with this?
- What is the extent of the non CHH conversions?
- How big is the total % area in the landscape?
- What is the scale and nature of this change?
- What are the local/regional authorities doing to manage the pine to dairy conversion?
- Is it a legal requirement for riparian margins to be protected when land converted from pine to pasture?
- Are the "operation standards" for conversion adequate to protect biodiversity?
- Is there a difference between forestry and farming standards between these two activities and Why?
- Are the "operational standards" being effectively monitored?
- Are the Councils adequately resourced to deal with the issue?
- What control are there and what is needed to protect biodiversity through land conversion?
- How is the Council coping?
- Processes for developers to protect and enhance remaining resource
- Is dairying sustainable?
- Who is monitoring water quality
- What are some mechanisms we can implement to gain a balance between biodiversity and economic land use
- Are the existing wetland and native areas within pine forests being adequately protected?
- What is the best practice for fence setbacks from wetland areas? Why blanket spray new planted forest areas instead of spot spray like in the PAST?
- Willows in wetlands

- What are the best methods for controlling blackberry, willow and wandering jew inside the fences?
- What kinds of trees are being planted in forests today?
- Is future forestry going to be a monoculture (because greater plant life diversity supports greater animal life?)

What we know

- Issue land use changes are occurring and this will impact on biodiversity.
- Loss of bird life due to conversions especially robins.
- Loss of ecological corridors
- Regional Policy Statement Appendix 3 Criteria for Determining Significant Indigenous Vegetation and Significant Habitats of Indigenous Fauna
- Impact of development on biological PARAMETERS
- Need to work together and share information and resources
- Streamcare is working well
- Trees moderate climate
- This is a free draining soil
- The land is erosion prone
- Trees stabilise the land
- Even exotic forests have biodiversity value
- There are restoration projects underway in the district
- Protection of streams and wetlands in conversion areas
- A lot of stream and riparian planting has been underway and is still going on
- Conversions have created a green biodiversity desert
- Native species inhabit pine plantations
- There is lack of local research and information
- 1080 keep up communication
- Opportunities for hunters to be part of pest management
- Good resource on the high ground –Mamaku Range
- Highly dominated by farming and forestry
- Trend to farming (intensification)-dairying
- Loss of habitat/ degradation of habitat eg bats will be depleted with pasture birds will translocate
- That most people don't know what biodiversity is here.
- Bats – scope to enhance farm landscape-retain or plant trees for bats
- Lower bats activity in areas of pasture
- Continued use of area by bats depends on landscape features eg wetlands (more insects) need roosting sites and they like linear landscape features eg lines of trees and rock faces Not that they won't be there but in lower numbers.

What we can do

Good Practice Ideas

- Managing pine plantations: emulate natural biodiversity pattern and process in the plantation setting and you will get a similar result to the dynamic natural landscape.
- Fencing and planting of riparian margins is vitally important
- Sustainable farming design

- Must manage on a catchment basis ALL GROUPS
- Must plan on a catchment basis no matter how small an area.
- Share monitor data with stakeholders and community eg existing groundwater monitoring records
- Maximise biodiversity opportunities in farmland(sustainable farm design)
- Look and understand processes
- Enhance existing biodiversity in the forests
- The importance of scale: This is a landscape scale transformation and the solutions –enhancements also needs to be at that scale. So if the biodiversity resource is currently depleted to 3% of the original then the response needs to contemplate increasing the resource significantly say to 10% if it is to be effective at protecting our unique biodiversity in perpetuity-against future shocks such as climate change
- Nutrient use and management suited to soil types for sustainable waterways
- Re-use of water such as grey water on farms
- Make use of existing forest biodiversity for education/recreation



Requests for Help

- Rotorua District Council would like ideas and perspectives on biodiversity for the District Plan review
- Sharing facilities and knowledge to grow/source plants for riparian planting
- Forest and Bird need young people and “manpower”
- School participation
- Better acknowledgement of local knowledge by authorities of birds plants and wetlands

Offers of Help

- Use existing funds South Waikato Environmental Initiatives Fund
- Waikato Catchment Ecological Enhancement Trust funding
- Clean Streams -information application pack phone 0800 800 401
- Biodiversity Advice Waikato help line available 0800 BIODIV (246348) for advice on pest management, plants to feed birds and native plants

- South Waikato Environmental Initiatives Committee can offer expertise/knowledge about sourcing and planting trees and riparian management
- Forest and Bird can assist with advocacy

Forestry to farming conversions

James Piddock, Environmental Monitoring Officer, South Waikato District Council

Topic covered

- The land comes up for subdivision, forest gets subdivided and this is how SWDC gets involved. Controlled – Council has to approve it with conditions
- Environmental effects relating to forestry to dairy conversions
- Current joint approach
- SWDC and EW planning framework
- What SWDC & EW have done to protect biodiversity values

Environmental effects relating to forestry conversions

- Biodiversity associated with indigenous & exotic vegetation
- Effects from stormwater runoff on land and properties in downstream catchments from short duration high intensity stormwater events
- Wetland hydrology, plant and animal communities
- Effects on recognised threatened species such as North Island fern bird, spotless crane, long tail bat and non migratory galaxids

The big picture

- CHH sale of forests to Hancock Natural Resources Group
 - CHH retained 32,000 ha of Kinleith land for conversion
 - Trees on CHH retained land was brought by Hancocks
- CHHP have indicated to Council that of the retained land 25,000 ha of this will be converted to dairy

Current joint approach from District and Regional Council's

- Joint monitoring, sharing of information and resources
- Environment Waikato provides expert comment on subdivision applications from a Regional Plan perspective

District and Regional Policy & Planning framework

- Forestry & Farming are permitted activities under the SWDC District Plan
- Subdivision of this type within the rural zone is a Controlled activity under the SWDC District Plan
- Stormwater Drainage: the SWDC District Plan requires the applicant to provide for drainage of upstream catchments and mitigate the effects of development on downstream land/properties
- Protection of Historical and Archeological sites
- Ecological Protection: the SWDC District Plan requires Council to consider the relevant criteria selected from Environment Waikato's Regional Policy Statement
- The Regional Policy Statement – Appendix 3 “Criteria for determining Significant Indigenous Vegetation and Significant Habitats for Indigenous Fauna”

Recent Approved Applications

- Maxwell Farms development along Commons Road
- Lichfield Farms development along Wiltsdown Road

- Calford Holdings development along Sloan Road

What SWDC And Environment Waikato Have Done To Protect Biodiversity Values

- Use of consent conditions and consent notices to protect known ecological sites
- Use of the “Operational Standards for Conversions” as a tool to minimise/avoid environmental effects from the conversion activities
- Regular monitoring of conversion site before and after the subdivision
- Requesting the applicant to provide a stormwater assessment, of the affected catchments

Operational Standards for Conversions

- Standards address
 - Runoff and sediment control
 - Protection of Riparian margins and vegetation
 - Fencing
 - Vegetation removal
 - Archaeological and Cultural Sites

Alan Campbell Environment Waikato

Pine-pasture conversions

More than 60,000 ha

WPL = 22,500 ha

CHH = 25,000 ha to be converted to dairy (2,200 ha outside catchment) **See**

Andy’s report for an update on the hectares as this has been reduced.

10,000 ha already sold

4,000 ha lifestyle

4,000 ha undetermined

What are the downstream risks?

- Water quality -release of contaminants and nutrients transient
- Water allocation
- Impact on Hydro
- Iwi issues
- Kyoto costs
- Flood management
- Peak floods will be longer, more intense and more frequent long terms effects caused by farming.

Regulatory issues Environment Waikato

- Environment Waikato does not generally regulate the use of the land
- Clearing of vegetation may need consent in some locations; is a permitted activity in much of the plantation forest estate
- Farm waste management may require consent, but application of waste to land generally a permitted activity
- Taking water for personal and stock use permitted; irrigation take may require consent

What policy options are possible?

- Government regulations
- New regional rules
- More resources for enforcement of PA rules
- Economic incentives

- Directed education (ICM)
- Industry Accords
- Generalised education campaigns

Steph O’Sullivan Environmental Manager Raukawa Trust Board

Background to Raukawa

- Hoturoa (Captain of Tainui waka)
- 8 Generations Later – Turongo
- Turongo & Mahinarangi = Raukawa
- 500 years on
 - Discovery
 - Conquest
 - Ongoing Occupation
- Key Boundaries to rohe –
- 4 Pou (areas)

Raukawa Trust Board

- Formed in 1987
- Charitable Trust
- Purpose: To work in the best interests of Nga Uri o Raukawa
- The Trust Deed – some interesting elements...

Biodiversity within Te Ao Maori

- Biodiversity – is it well known?
- Inherent in concepts such as kaitiakitanga, matauranga Maori, ahi kaa, etc
- Is an important element of our Environmental Management Group Strategic Plan
- Challenge – how do we incorporate it into our Iwi Management Plan in a meaningful way?

South Waikato Environment A Unique History

- Significant Volcanic history
- Impact of Taupo Eruption on vegetation
- Were significant Moa hunting grounds around Tokoroa
- Bird snaring, gardening, fishing, etc
- Raukawa were traditionally very migratory people. Did not settle in one place for entire year – impact & use of flora and fauna
- On European settlement there were significant podocarp forests in area
- (is this common knowledge?)
- Native logging, pastoral farming & forest development in early 1990’s = 3% of South Waikato indigenous vegetation left.
- A unique Geological/Social/Cultural/Economic history

Our Current Work Programme

- Raukawa – Biodiversity protection & enhancement is a priority. Prioritisation of sites for management needs to be done
- Working on the ground in a contemporary setting:
 - Plantation Forest – all aspects of HFMG operations
 - Extensive agriculture – pine to pasture, a ‘temporary’ land use issue
 - Other opportunities e.g. River Trail
- The Key - A partnership approach – working together for mutual benefits

- Wider Policy & Regulatory Environment e.g. RPMS, LTCCP's, RPS Review etc

Challenges & Issues

- How do we raise the profile of Biodiversity –raise the profile / raise the priority
- Inadequate information & monitoring – has impact on on ground work, budgeting, policy development etc
- How do we integrate Biodiversity within the development of an IMP?
- Integration of contemporary knowledge and matauranga Maori – opportunities!

Biodiversity in the Plantation Forest Sally Strang Hancock Forest Management (NZ) Ltd

- Is there biodiversity in the Plantation Forest?
- Where?
 - Indigenous forest remnants
 - Wetlands (natural and manmade)
 - Retired production areas
 - The growing exotic forest

Presentation Outline

- Hancock Forest Management (NZ) Ltd
- Biodiversity in the Plantation Forest
- Current protection mechanisms for biodiversity

Hancock Forest Management (NZ) Ltd

- Hancock Forest Management NZ Ltd is a subsidiary of Hancock Natural Resources Group based out of Boston USA
- HNRG manage client investments in 'timberlands'
- HNRG clients own 1.5 million hectares of forest located in US, NZ, Australia and Brazil
- Hancock Forest Management business established to manage these forests
- Hancock Forest Management NZ established in Dec 04 to manage the newly acquired Tiaki Forests
- HFM NZ directly manage just under 300,000 ha in NZ
- Strong emphasis on 'Good Stewardship'

Relationship to forest conversions

- Kinleith forest includes freehold, leasehold and forestry right land
- Approx 35,000 ha of Kinleith Forest retained by CHH Properties for possible dairy conversion & other uses
- Taumata Plantations Ltd hold the forestry right over some of that area
- As land is harvested it returns to CHH Properties
- HFM NZ currently have no direct involvement in forest to farm conversions in NZ

Biodiversity in the Plantation Forest

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- Indigenous forest remnants
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Bats and NZ Falcon in the forest

Biodiversity Protection Mechanisms

HFM NZ Environmental Management System

- Specifies environmental requirements for planning and managing all forestry operations
- Auditing of operations to confirm compliance
- A range of supporting environmental systems to meet FSC requirements – incident reporting, complaints management, reserves management, social impact assessment etc

HFM NZ Reserves Management Programme

- All indigenous remnants mapped in GIS and protected
- Ecological assessments undertaken by Wildlands to understand and document environmental values, and also threats to those values.
- Included recommendations for future management
- Active management through an annual work programme (plant & animal pest control)

FSC Certification

- HFM NZ certified since 2004
- Certificate recently expanded
- Specific FSC requirements relating to management of
 - Rare, threatened and endangered species
 - Indigenous remnants
 - High Conservation Value Forests

Further protection mechanisms....

- NZ Forest Accord
- Principles for Commercial Plantation Forest Management in NZ
- NZFOA Environmental Code of Practice for Plantation Forestry
- Regional and District Plan Rules
- Resource Consents



Carter Holt Harvey Properties Andy Woolhouse

110,000ha total Kinleith Forest

35,000ha retained

12,000ha converted to pasture 7,000 ha by end of 2007 and 5,000 ha over the next 5 years

Land Conversion Kinleith Forest (Thousand ha)

Former Kinleith Forest	CHHP Conversion	Area retained in trees/native	% of former forest converted to pasture	% of former forest remaining in trees
110*	12	98	11%	89%

*area at time of partial sale to Taumata Plantations (excludes other land sales over the previous 5 years)

Land Conversion Comparison (Thousand ha)

	S&B	Dairy	Unconverted	Total
Wairakei Pastoral	11	11	3	25
CHHP		12 (7+5)	2	14
CHHP Previous reported target		35		35

Land Conversion Kinleith Forest

Within the former Kinleith Forest, CHHP expect to have converted 7,000 ha by the end of 2007, with up to 5,000 ha additional area over the next 5 years.

Within an overall conversion area of 14,000 ha, there will be 2,000 ha of retained wetlands, riparian margins, steep land and other areas which will not be converted

Environmental Standards

CHHP have a series of operational environmental standards which apply to all activities. These are based on the former CHH Forests Environmental Standards, expanded to cover conversion activities. They include (among others).

- Fencing of perennial streams
- Fencing setback specifications
- Fencing of 'identified' wetlands
- Compliance with EW 25 degrees soil disturbance rules
- Compliance with EW riparian soil disturbance rule
- Compliance with other EW Permitted Activity Rules