

APRIL 2005

Waitohu Stream Study

Consultation summary

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1. Background

The Waitohu Stream flows from the Tararua foothills to the Tasman Sea north of Otaki. The catchment (54km²) incorporates a range of physical environments, including native and exotic forest, pastoral farmed floodplains, lakes, wetlands, sand dunes, urban areas and a coastal estuary. Tributaries include the Mangapouri Stream and the Ngatotara Stream/Drain.

Greater Wellington became involved in the management of the stream after local government reorganisation in 1989. It soon became apparent that there were a number of long standing and ongoing issues with the stream, including:

- Degraded water quality, in particular in the Mangapouri Stream but also in the lower reaches of the Waitohu.
- Lack of aquatic species diversity in the lower reaches of the stream.
- Stream bank erosion, leading to loss of land and to siltation of the streambed.
- Livestock in the stream channel.
- Flood risk, with occasional flooding of properties in Convent Road and Bennett Road.
- The movement of the stream mouth at Otaki Beach and a longstanding debate about how best to manage the mouth position.
- Spread of pest plant species like climbing asparagus, hornwort, banana passion fruit and tradescantia.
- Changing land use patterns in the Kapiti and Horowhenua from dairying to semi-rural lifestyle blocks.
- Extreme low flows in the stream in dry summers.
- Gravel build up in parts of the stream.

To better understand these issues and their inter-relationship, Greater Wellington initiated the “Waitohu Stream Study” in 2003.

1.1 Report structure

This report summarises the process findings from consultation undertaken with the community during the Waitohu Stream study. A record of who was met with and meeting notes are also included in the Appendices to this Report.

2. Background

2.1 Scope of the study

The Waitohu Stream Study involves gathering information about the stream and talking to the local community. The specific components of the study were investigating the flood hazard posed by the stream and reviewing the stream's water quality and ecosystem health. The latter component was a technical exercise using data about flooding and the results of our water quality monitoring.

People who live by and use the stream were also asked what they wanted for their stream, now and in the future.

The study covers the entire Waitohu catchment but concentrates on the stream itself. Investigations have considered the tributary streams in so far as they impact upon the main Waitohu Stream. The study has been broken down into several component investigations carried out in tandem with a consultation programme involving landowners, residents and relevant organisations. Each of these investigations including this consultation summary, have been published separately.

2.2 Flood hazard assessment

The specific outputs of the flood hazard assessment include:

- a series of technical reports which investigate a number of the stream's characteristics
- a computer hydraulic model of the stream
- a computer rainfall-runoff model for catchment hydrology
- flood hazard maps.

2.3 Water quality and ecosystem health assessment

Over the years there have been a number of studies of aspects of the stream such as riparian vegetation, freshwater fish, water quality and bird numbers. This information has been supplemented with further work on the stream's flows, habitat, ecosystem health and catchment characteristics.

3. Consultation

River and stream management today is no longer the responsibility solely of statutory authorities such as Greater Wellington; to be successful management requires involvement of the local community. This is particularly so in the case of the Waitohu Stream as almost all of the stream bed and catchment below the Tararua Forest Park is in private ownership.

3.1 What we did

Consultation with iwi, landowners and relevant organisations began in February 2004. The purpose of the consultation was to provide GW with an indication about community aspirations for the stream, to identify issues and concerns, to obtain additional information and baseline data, and to present findings arising from the Council's technical investigations.

Consultation was based on information sheets which were circulated to the wider community and a series of small and individual meetings with both interested and directly affected individuals, groups and organisations.

3.2 Community meetings

The community was divided into eight communities of interest and meetings were held with each of these groups:

Communities of interest

- Beach residents (lower reaches)
- Waitohu Stream Care Group
- Convent Road area residents
- Ngatotara/Taylor's Road residents
- Farmers – Lower reaches
- Residents/Landowners (above SH1)
- Residents / Land owners above Ringawhata Bridge
- Residents / Landowners above Water supply Bridge

Key findings from these meetings are summarised under the following headings below:

- How the stream affects them
- What they thought was important
- What they would like to see happen

Key Findings

How the stream affects them

Most people were aware and understood that the Waitohu Stream flooded. However, the extent of recent small events, including the January 2005 flood event, came as a surprise to some Convent Road residents. On the whole, more people were concerned about the smaller, more frequent events than the larger,

less frequent events. The reasons given were that smaller events were happening more often and were causing significant disruption in terms of damage to bank edges, fences, pasture, hay, out-buildings and loss of income. Disruption was worsened if flood water could not get away quickly.

A number of comments were made about the lack of maintenance in the stream, particularly in the lower reaches where willows were starting to clog the stream and erosion is occurring in flood events. There was a perception that GW lacked a visible presence in the Waitohu Stream. People did not think GW was actively managing the stream.

Gravel build up was mentioned by most groups as a problem. Residents in the upper reaches were concerned that gravel build-up was causing the stream to braid and the stream banks to erode. Residents in the lower reaches were concerned that gravel build up appeared to be increasing the risk of flooding.

Other more site specific issues were the inadequate length of bridges in the upper reaches causing erosion and flooding, loss of dunes at the mouth, the adverse effects of the present mouth cutting policy and poor water quality in the lower reaches which affected white baiting and breeding habitat.

What they thought was important

Most people thought good water quality in the Waitohu was important. A number of people expressed surprise at how poor water quality was, particularly in the lower reaches of the stream.

In the lower reaches white baiting, swimming, pedestrian access to the stream and a healthy dune system were important to people. In the upper reaches planting of stream banks had seemed to work well to reduce erosion.

What they would like to see happen

What people wanted to see happen varied depending where they lived along the stream. However, one issue that was raised by all groups was a need for increased maintenance of the stream, particularly dealing with overgrown willows and gravel build-up. A number of people also suggested an overall maintenance strategy that they could contribute to through removing willows on their properties or streamside planting. People wanted obstructions in the stream to be cleared regularly. Advice and help with clearing drains, and flood-proofing on individual properties was also suggested.

Most people wanted to see land uses remain the same or similar and were not keen on stop-banks and other expensive flood control options.

A number of more site specific issues were raised. In the lower reaches people would like improved access to, and along the stream. They suggested GW plant natives as alternatives to willows and would like to see more areas of the stream fenced off for streamside planting (while still allowing pedestrian access). They requested that GW review its mouth cutting policy and practices. Effective drainage was also mentioned.

A number of people wanted to see better flood warning and support during a flood event. This comment was made in light of the perceived lack of response from both GW and Kapiti Coast District Council after the January 2005 event.

In the Convent Road area people wanted GW to scrap a proposal to raise the Convent Road Bridge. Instead they want GW to look at the undersized culvert and blocked drains in Convent Road, the overall state of the Mangapouri Stream and the existing stop-bank which runs behind properties in Bennetts Road. Convent Road residents thought these issues should be treated as a matter of urgency.

In the upper reaches of the stream people wanted to see increased gravel extraction, the stream kept to one channel and preventing it meandering all over the place and increased water quality monitoring to see what is happening above State Highway 1.

3.3 Wider consultation

The wider Waitohu community including beach residents and Greenwood Boulevard residents were contacted via information sheets sent to individual property owners.

A number of public and private groups and organisations who had an interest in the study were also contacted.

Groups and organisations contacted

Organisations		
Department of Conservation	Sent copies of information sheets, met with them.	Sent draft consultation summary report
Fish & Game	Sent copies of information sheets	Not a significant river for Fish and Game but want to keep a watching brief.
TranzRail (now OnTrack)	Contacted TransRail – sent information sheets	Sent draft consultation summary report
Transit NZ	Contacted Transit – sent information sheets	Sent draft consultation summary report
Service providers		
Telecom	Contacted Telecom – sent information sheets	
Telstra Clear	Contacted Telstra Clear – no infrastructure in study area	No further contact required
Electra	Contacted Electra – sent information sheets	
Transpower	Contacted Transpower – sent information sheets	
NGC	Contacted NGC – sent information sheets	
Kapiti Coast District Council (Iain McIntosh/Andrew Guerin)	Met with KCDC – sent information sheets	Sent draft consultation summary report
Otaki Community Board	Attended community board meeting and gave	Sent draft consultation summary report

	brief presentation of study	
Local groups		
Environmental Groups, including local Forest and Bird Society	Contacted them by phone and followed up with information sheets	
Federated Farmers	Contacted them by phone and followed up with information sheets	
Community Groups, including Lower Waitohu Stream Care Group	Meet with Waitohu Stream Care Group	Sent draft consultation summary report
Fishers – local whitebaiters	Contacted Eric Mathews by phone and followed up with information sheets.	

Appendix 1

Meeting notes

Meeting with Waitohu stream care group

When: 18 April 2004

Where: Waitohu Beach

GW Staff: Tracy Berghan, Phil Wallace and Nigel Clarke

Phil Wallace introduced the purpose and reason for the study and outlined flood protection aspects. Nigel outlined ecological and stream health aspects of the study

Feedback

Flooding

Downstream of Old \ Coach Road Bridge

- Obstructions – willows overgrowing blocking the stream especially in the lower end
- Ponded water – water backs up
- Paddocks underwater – potential for grass to rot
- Willows need to be maintained – prefer natives – landowners to maintain their own banks

Water quality

- Improvement before Christmas – it has been back to murky after floods
- After flood – silt again – bed level lowered / increased bank erosion
- White baiting is important – has decreased although awareness of location of spawning areas may help
- Wetland plan includes proposals to remove willows in small sections in wetland area

Recreational use

Stream used for recreational use

- Swimming – limited access to stream
- Canoeing/boating
- Dodd's Crescent – willows blocking – oxygen weed – major problem just after Mangapouri
- Group felt more people would use it if it was clearer upstream
- Where public access exists – it should be well sign posted
- Waitohu Valley Road – would be a good place for public access – picnic tables etc

What is important?

- Access for Kayaks further upstream than currently possible because of willows constricting the channel
- Swimming

- White baiting
- Education about the stream's values
- Improve access where it is available
- Improve current access ways – clear weeds
- Willows – important for shade – however restricting access
- More natives
- Need better management
- Catchment management rather than stream channel management

Most people maintain their own riverbanks

Q Are people allowed to control willows?

Long term

How do we manage the catchment?

- Who is responsible?
- What needs doing? (not just the main part of the stream need to define who does what)
- Who does what?

The stream mouth

- Potential use of sand sausage
- Mouth cutting – causes problems with water backing up and creating a surge when cut.
- Dune loss – particularly north dunes
- “fixing” the bend
- Breeding habitat
- Major loss of dunes – primarily due to mouth cutting
 - Regrowth of dunes is limited
 - Keep water levels down upstream
- What alternative management regimes are available e.g. control further out?
- No problem with mouth cutting – but seems to be single issue driven – are there other ways of achieving same effect.
- Access to beach and estuary– who pays/ how could it be done/ who is responsible?
- Frequency of cuts
- Timing of cuts
- Wildlife – what is there / what has changed?

Meeting with Ted and Jeff Sims

Subject: Discussion about stream mouth

When: 3 May 2004

Where: Jeff Sim's house

GW Staff: Tracy Berghan, Phil Wallace and Nigel Clarke

Ted and Jeff Sims met us to discuss the mouth and our policy for cutting it. They were concerned about the actual and potential effects of our policy on their property and the mouth itself.

Feedback

- Their preference is for more frequent cutting which could be less drastic and hence a lot less effort and expense.
- They believe the 2 metre trigger would be met all the time – because of the large escarpment on the northern dune which has been there for some time.
- They are concerned that GW lets the mouth meander too far north before cutting, undermining the northern dune system and resulting in a costly large cut which is often made too late after damage is done to the dune system.
- Think the stream should be held where it is currently and the mouth past the end of the northern dune allowed to move but not too drastically because this causes erosion of the dune system.
- Accept that there may be times where flooding/tides are such that stream will move from its existing position – agree that it would be appropriate for GW to put it back roughly in its current location.
- GW should develop policy for cutting the mouth – how often and when it should be undertaken.

GW agreed to raise mouth issue with GW staff including Gary Willams, Geoff Dick and Sharyn Westlake and agree on a GW position before coming back to them in the future.

Meeting with Farmers – lower reaches

- Subject:** Waitohu Stream study
- When:** 3 May 2004
- Where:** Jeff Sim's house
- GW Staff:** Tracy Berghan, Phil Wallace and Nigel Clarke

Phil Wallace introduced the purpose and reason for the study and outlined flood protection aspects. Nigel outlined ecological and stream health aspects of the study.

Feedback

Flooding

- Otaki Golf Club – 12 inches over the bridge
- Culverts – made a difference
- Market garden used to be flooded
- More metal downstream – removal of metal improves flow
- 1930/31 – last major flood through town
- Tasman Road – fences underwater
- Convent Road – floods every two years
- 1991/92 – major flood – bridge washed out
- Water sits – does not get away – Porirua Trust Land (low lying areas)
- Tides influence ability of water to move out 40-50 hectare – gone in 3 days
- Orchard – effective drainage

Stream maintenance

- Maintain Stream
- Ring Council – proactive
- Lack of willow maintenance clogging stream at Wooton Property
- What is currently being done is not enough
- More areas should be fenced off
- Willows shade out – grass – bare ground increased erosion
- Drains – sides slump – erosion (Trust Board Land)
- Original channel definition needs to be maintained

Q What does GW do about erosion?

- budget required for maintenance
- 1 side of stream in willows
- Digger access
- Remove willows from wet channel
- North side for planting
- Willows in conjunction with natives
 - Site by site
 - Wootons – willows removal /maintenance

Long term

- Need budget – definitely do not want budget cut
- A maintenance programme is very important
- Water flow down stream improved
- Soft engineering options
- Structural options not that useful
- Land-use – generally keep in farming / existing use
- Rating issues

Meeting with residents above Ringawhati Bridge

When: 26 May 2004

Where: Waitohu School

GW Staff: Tracy Berghan, Nigel Clarke, Laura Watts, Garry Baker

Introduction by Tracy Berghan – she asked people to fill in land use map and check flood map was an accurate reflection of the October 2000 flood.

Feedback

- Q What return period was the October 2000 event – how does this relate to the 100 year return period flood map. What was the size (m³/s) of the October 2000 flood.
- Q Which maps to follow – KCDC plans or ones being presented today?
- A Tracy explained the new maps are still being finalised and will be sent out as part of this project.
- Q About channel width and if gravel will be removed?
- Q Has metal ever been removed?
- A Older residents used to take gravel out of the mouth of Te Horo Stream and Waitohu Stream in 1940/50s, several people at the meeting felt strongly that metal should be removed.

Gary Baker outlined consent conditions and that the works they carry out where put in place by Manawatu Catchment Board. The current resource consents is aimed at keeping the stream within a buffer zone, but want to know from the community how we should continue to do this.

Local resident feels that as metal is not being removed the stream is wider and shallower which means the flooding is worse. In the 1940/50s when metal was removed flooding was not an issue.

Tracy explained that recent events have been more significant – flood risk from a large storm would be similar. Explained that there are several options for managing the flood risk – wanting feedback on preferred options that are best for all reaches of the stream.

Nigel – Faecal coliform problem caused by Mangapouri Stream.

- Q Asked what the effect of flushing of the water treatment plant would have on the Stream?
- A It has a huge effect on water quality, but as the plant is not longer operational that should not be a problem in the future.

Tracy outlined the Waitohu Stream Study process. Confirmed that the public will be able to view the final report in draft form.

Resident pointed out that the stream varies hugely (stream type and pollution levels), so there is not a single solution to the problem.

Nigel pointed out that whatever happens upstream affects downstream health. E.g. lack of vegetation/shade upstream.

Resident pointed out that bulldozing to flatten stream, making it wide and shallow, will adversely affect water quality – temperatures.

Tracy explained rating basis and funding.

Resident suggested willow planting was very important to stop gravel movement.

Garry noted that the Waitohu Stream is in total private ownership. It is a possibility that a private Waitohu flood management scheme is set up. This would be a different approach to the Regional Council doing the work and unlikely to be successful given the small size of the scheme and large cost of any scheme.

Resident concerned about the cost, he would prefer regular maintenance to avoid large cost of flood damage.

Residents – more metal needs to be extracted to lower the bed level, that way stop banks would not be needed.

Resident – existing willows need more maintenance.

Gary – budget is limited, plus cross-blading restrictions on the consent, in some areas gravel is degrading bed level (upstream of SH1).

Community agrees:

- willows do work, but are ugly
- in some areas create holes
- willows collapse once too tall

More maintenance, but not just bulldozer e.g. willows – do not want stopbanks

Concerns:

- Where gravel builds up in the middle of the stream branches and diverging branches create flood risk.
- Residents would prefer that the stream is not just left to meander – but kept to one channel

- Several comments made about Odlins logging referring to it having a significant impact on the stream and changes flows which has lead to increased flooding.

Q Maintenance lacking above Ringawhata Road – why?

A Regional Council not responsible for maintenance

Nigel clarified with Garry who is responsible for what.

Ringawhata Road and KCDC Water Supply bridges are too short.

Q How often is the Waitohu traversed for checking problems?

A Once per year, unless a flood.

Nigel outlined riparian management programme – if residents are interested (particularly on tributaries) Regional Council will help with plants and two years of maintenance.

Garry mentioned that Waitohu budget is ≈\$25K/yr including mouth maintenance.

Q How effective is willow planting

A Garry – only successful if they have time to establish.

Resident concerned that money has been wasted planting willows then they were ripped out.

Tracy explained that is why this study is more holistic in its approach.

Tracy asked about land use change and peoples feedback on subdivision. GW would likely be recommending that land use does not change and subdivision is restricted on flood prone land – residents agreed subdivision close to Waitohu Stream is not a good idea. – Hopefully this is adopted as part of KCDC plan.

Tracy – summary

- Plan to meet with those who could not make it
- Aim to come up with a plan for flood management works with the community
- The summary report will address funding options (if necessary). Still looking at issues/concerns not solutions at this stage.
- Content of report will reflect community aspirations

Outcomes

- Do not want stopbanks
- Maintenance of willows needed
- 40-75 metre wide channel is okay

- Not in favour of letting channel meander over a wide area – keep it to one channel
- Bridges are a problem – Ringawahti Bridge and the Water Supply Bridge create a problem downstream

Nigel asked how they would like feedback

- First they would like personal feedback – summary report mailed out after that.
- Technical reports are available on request
- Newsletters will advise residents when reports are completed

Meeting with Convent Road residents

When: 26 May 2004

Where: Waitohu Stream meeting – Rod Agar’s office, Otaki

GW Staff: Tracy Berghan, and Laura Watts

Tracy introduced the purpose and reason for the study and outlined flood protection aspects. Laura outlined ecological and stream health aspects of the study.

Feedback

Water Quality in Mangapouri Stream

- More targeted investigations required
- Voluntary water quality monitoring could be encouraged by GW
- Dredging of the stream – should it be done?
- Mangapouri Stream is culverted under the playground at Peter Chanel School – have been issues in the past with rats etc – can anything be done?

Old Coach Road Bridge Raising

- Should not be a high priority

Flooding

- Why is GW looking at the effects of a 1 in 100-year flood event when it is the more frequent events that are of most concern for residents of Convent Road?
- More frequent maintenance required to manage small floods
- Issue of flooding from surface runoff – is better drainage required?
- More frequent maintenance of Waitohu Stream is required to keep the stream within its channel during smaller flood events
- More frequent smaller scale works than what is currently undertaken are required
- GW should concentrate on preventing the Waitohu joining the Mangapouri in a flood event – if this were done then Convent Road would not be at risk of flooding in small to medium sized events.
- Stopbank between Golf course Bridge to Young’s \approx 500 metres long – who maintains it? Its conditions is fairly rough/rundown – What should land owners be doing?

Gravel

- Designated gravel extraction reaches required
- Channel should be deepened
- Size of culvert under Convent Road - is it sufficient?
- Soft engineering options
- Structural options not that useful
- Land-use – generally keep in farming / existing use
- Rating issues

Meeting with Carrolls/Gorrie

When: 23 June 2004

Where: Carrolls - Waitohu Valley

GW Staff: Tracy Berghan and Phil Wallace

Phil introduced the purpose and reason for the study and outlined flood protection aspects. Tracy outlined ecological and stream health aspects of the study.

Feedback

Flooding

Do not think so much gravel has been removed from the river lately.

Previously has frequent abutment erosion of Waitohu Valley Road Bridge – none since repair works undertaken

John's property was frequently flooded in the 1950s/60s, but Ringawhati Bridge not washed out.

Stream is steep immediately downstream of Waitohu Valley Road Bridge. The steepest section on the river?

Always have been boulders in the stream bed

Gorrie – no evidence of flood debris/marks etc on right bank fence line immediately upstream of SH1 bridge in October 2000 – (i.e. was there flooding as Phil's computer model predicted?).

More water in stream now, less taken from abstractions

Carrolls lost power and water during one flood event during early 1980's? Think 1990 would be the biggest food event with water flowing down Waitohu Valley Road as far as SH1 during a flood event.

Planting seems to be best solution to erosion etc – some planting upstream will help.

River has tended to be more aligned towards the right bank than the left – so greater erosion impact on right bank.

Meeting with residents with Adrian Jull and Peter Thorpe

When: 23 June 2004, 3.30pm

Where: Adrian Julls – Waitohu Valley

GW Staff: Tracy Berghan and Phil Wallace

Phil introduced the purpose and reason for the study and outlined flood protection aspects. Tracy outlined ecological and stream health aspects of the study.

Feedback

General

- Two parts to the Waitohu – variations in water quality
- Changes in river management influence water quality
- Planting program to reduce the amount of gravel coming down the stream
- Lack of resources to carry out maintenance
- Gravel management options – stopbanks/removal/planting –
- Keep flow in normal channel
- Existing willows – not taken down /perching falling over
- Odlins Logging – changed flows led to flooding

Stream maintenance

- Do not want stopbanks
- Maintenance of willows needed
- 40-75 metres wide channel is okay
- Not in favour of letting river meander in a wider channel
- River splits creates erosion
- Need channel maintenance to keep a main channel
- Bridges a problem affecting downstream reaches
- Original channel definition needs to be maintained

Flooding

- More frequent maintenance required to manage small floods
- Issue of flooding from surface runoff – drainage required?
- More maintenance needed to keep Waitohu within its channel during smaller floods – more frequent small-scale works?
- Designated gravel extraction reaches required
- Deepening of channel below SH1?

Meeting with Landowners/residents above Water Supply Bridge

When: 20 June 2004

Where: Quarry, Waitohu Valley Road

GW Staff: Tracy Berghan, Phil Wallace and Nigel Clarke

Phil Wallace introduced the study and flood protection aspects– he asked people to fill in land use map and check flood map was an accurate reflection of the October 2000 flood. Nigel outlined ecological and stream health aspects of the study

Feedback

- Q Why is Waitohu Stream so polluted?
- Q Hard to believe that stock is creating such a problem as not much between Quarry and SH1 bridge – could it be something else?
- Q What about septic tanks?
- Q Should GW be increasing testing between bridge and SH1 to find out what the problem is?
- Q Who is responsible for maintenance of the Stream – is there a lead organisation - this organisation should communicate with other organisations to provide a co-ordinated approach?

Bruce Cohler asked that we change “scrub” to plantation forestry on our catchment map.

Bruce Cohler also briefly introduced Waitohu Forestry Partnership – established in 1992.

- 267 hectares – 160 of which in Radiata Pine, the balance in regenerating native bush. Not all of the forestry block is in Waitohu Catchment. Only the bit at the top (60 hectares) needs to come out via Waitohu Valley Road. High growth rates of pine in the area. No stock on the property.
- Intend to harvest in around 26 years. Two bridges upstream of the water supply/quarry are not adequate for logging and will need to be upgraded prior to logging.

Effects of harvesting on stream? – maybe issues- will be dealt with at the time.

Approximately 15 years ago when pines were taken out a piece of the road collapsed causing a flash flood which affected Beehive Creek which flows into the Waitohu Stream.

Channel changes appear to be speeding up the river (making the water go faster) – is this true?

Current road is not on a legal title – where it should be.

Quarry currently maintains their own stopbank

Waitohu stream looks as if it wants to cut straight through below the Quarry – will this be an issue and if so should it be looked at now before becomes an issue.

The stream downstream of the quarry looks as if it wants to attack its banks and take a corner of land – if this happens stream would speed up into the Water supply bridge. No concern directly to people above the bridge, but potentially for the bridge – should anything be done now, will there be downstream effects?

Residents think there were gravel changes during the 1990's and a large amount of gravel appears to be coming through the system.

Seems to be a build up of gravel between here and Agars bridge – gravel already in the system between these two bridges is causing the channel to move.

Gravel needs to be removed – Waterworks Bridge /Ringawhati Bridge/Taylor's Road- Agars Bridge

Eric Johns put in flood level marks on or near the Ringawhati Bridge.

Quarry area is only part of the stream that runs through rock (approx. 150-200 metre long), therefore looks after its self.

River in the upper reaches has degraded between 1990 and 2000.

Issues with DOC over road access and upgrading of the bridges

Bush above the quarry is regenerating

Meeting with Taylors Road residents

When: 20 June 2004

Where: Gilbert Kimberly's house

GW Staff: Tracy Berghan, Phil Wallace and Nigel Clark

Introduction by Tracy covered the study process, Phil introduced the flooding issues and Nigel outlined the stream health and ecological components of the study.

Feedback

Knowing the potential frequency of flooding – not necessary the size of floods is important.

- useful to include variety of flood depths/maps

Problems caused to fences/pastures/hay/income

Some land water sits for some time – Goldsmiths – Increase capacity of Waitohu - keep it clear as much as possible

Flooding worse without main drain

What is the status of the various streams/drains

- Clarification of who is responsible for clean up/maintenance

- Clearing of culvert under Waitohu Stream

Gravel – economic effect of taking gravel? – possible to facilitate local use?

Has there been a change in riverbed material over time?

Confirm what information is available on monitoring of this area? – Nigel

Increased monitoring at Ngatotara drain/siphon

Culvert on the Ngatotara – undersize – Greenwood Boulevard drainage

Most important blockage on the Ngatotara – removal of blockage would mean it would flood more quickly but also drain more quickly.

Water seems to seep away rather than flow – silt seems to be left

Lack of maintenance on lower reaches – major concern

Rabbits are a problem – Edwards/Graham/Kimberley's

Gravel

- Might be some local demand for gravel – e.g. driveways from local landowners
- What is gravel extraction policy?
- Boulders in the river seem bigger than in the past.

Water quality

- Voluntary water quality monitoring?
- Landowners are keen to plant riparian strips and undertake other planting where appropriate.

Flooding

- Aware of the potential for 1 in 100 year event, however it is the smaller more frequent events that pose more of a problem for people.
- What frequency of events is modelled – can GW provide corresponding maps for 1 in 10/20/50 year flood event for landowners?
- Management of the 5 and 10-year events may be more useful?
- More frequent maintenance required to manage small floods – keep drains clear
- Potential issue of flooding from surface run-off - drainage required
- Whose responsibility is it to keep drains clear, owner, KCDC or GW?
- Removal of the obstruction under the siphon dropped water levels considerably

Meeting with DOC

When: 6 July 2004

Where: DoC – Thorndon Quay

GW Staff: Tracy Berghan, Phil Wallace and Nigel Clarke

DOC staff: Claire Graham and Nadine Gibbs

Phil Wallace introduced the study and flood protection aspects and Nigel outlined ecological and stream health aspects of the study.

Feedback

- DoC consider that as much area as possible should be retired for riparian planting
- Structures that are no longer necessary should be removed.
- Any upgrading of bridges/culverts should be adequate to accommodate waterways
- Pollution major issue for DoC– keep us up to speed
- Main concern is freshwater fish habitat – fish access/riparian margins restored
- Ongoing cumulative development of erosion structures – avoiding piece meal development.

Meeting with Ted and Jeff Sims

Subject: Follow up meeting about stream mouth

When: 28 September 2004

Where: Ted Sims house

GW Staff: Tracy Berghan and Nigel Clarke

Feedback

The Sims believe that the two metre vertical escarpment trigger has been present at the mouth for some time.

Given that this is the case we are proposing the following

- Increase the frequency of cutting to at least twice a year.
- Reduce the amount the mouth meanders to the north before cutting it to about 750 metres rather than the 1000 metres at present. This will allow the mouth to move but not too drastically avoiding erosion of the dune system.
- Cut the mouth angling back toward the south – as the stream wants to do naturally

GW suggest that this policy is pursued for a two year trial period – the outcomes of which would be fed into the up coming review of the Regional Coastal Plan.

In suggesting the above policy there will be times where flooding/tides are such that the stream mouth may move more dramatically than is anticipated and potentially erode dunes to the north and south. Whether this occurs or not it is outside of the control of GW. If this were to occur GW would put the mouth back into the location as outlined above.

Meeting with Val Collins

Subject: Follow up meeting with Convent Road - residents

When: 17 February 2005

Where: Val Collins – 49 and 59 Convent Road, Waitohu

GW Staff: Tracy Berghan and Phil Wallace

Feedback

Property had water through the front garden and blocked their access to Convent Road. Water flowed from north partially through neighbour's property as well as from Convent Road. Lost planting and some landscaping. House was well above water

The flood noise was a roar. Water knee deep on road – covered fences and over the white railings on underside of culvert – and was difficult to walk in. Water extended along road as far as the power pole on the bend to the south of the culvert.

Received advice from security guard who had attended alarms going off at Golf Course about 4.00am. Fire Brigade knocked on their door about 5.30am. No one else came to see them.

Water was flowing quite swiftly along Convent Rd as well as in and over the culvert outside their house. Water scoured out the road reserve in front of their property and dumped some gravel. They have replanted some vegetation in an attempt to prevent future erosion.

No signs on Convent Road and large trucks were continuing to go through causing wake.

Felt more action was needed in particular:

- Fixing culvert under Convent Road. This is undersize and doesn't allow water to get away instead ponds all over the road.
- Metal dumped at culvert exit and should be removed? Fix scour at the exit.
- Signs on Convent Road – should have been in place warning motorists about the flooding.

Meeting with Daldins, Gilliland and McAsey

Subject: Follow up meeting with Convent Road - residents

When: 17 February 2005

Where: Daldins – 40 Convent Road
Mario and Teddy Daldin – 40 Convent Rd
Robby Gilliland – Convent Rd
Debbie McAsey – 30 Convent Rd

GW Staff: Tracy Berghan and Phil Wallace

Feedback

Mario and Teddy have lived in Convent Road for about 50 years.

6th Jan 2005 event - all three properties had water on them. The Daldins had water in the rear part of their house. Got up at 4:30am and 4:50am, didn't notice any water. At 5:30am, water was everywhere – and as deep as it got in this event. About knee height. Water drained away in afternoon - at about 5pm?

Understand that Val Collins had water at 4:30am.

No sirens (4 years ago, sirens went off). No one came to check. KCDC never showed up.

Damage to floor coverings and washing machine in the lower portion of the house.

The last time they were flooded was in the 2000 event. AMI have not insured Daldins for flood damage since 2000.

Two floods in one year - 1998?

Tired of getting flooded. Accept that it will flood, but want to see water get away quicker.

Believe that culvert under Convent Rd is a restriction – the culvert replaced a bridge in the 1960s – so waterway went from 11' to 4'.

Mangapouri – used to be able to eat the eels. Now is very smelly, not cleaned or maintained.

Robby – the biggest flood he has seen (he has been there 12-14 years). Used to put his car on a ramp, but did not this time. His house has a higher floor level (a KCDC requirement).

Debbie – The first time that water has been around the flats on her property.

Felt a number of improvements could be made including:

- Fixing culvert under Convent Road. This is undersize and doesn't allow water to get away instead ponds all over the road.
- Mangapouri Stream – has not been cleared for years – smells on occasion
- Lack of presence from council officers – George Grey was very visible.

No one thought raising Convent Road Bridge would help although all were aware of house raising. They also thought deepening Mangapouri Stream and finishing culverts along Mangapouri Stream should be undertaken or at least a decision made and then clearing done instead.

Meeting with Pene Smith

Subject: Follow up meeting with Convent Road - residents

When: 17 February 2005

Where: Pene Smith – 58 Convent Road, Waitohu

GW Staff: Tracy Berghan and Phil Wallace

Feedback

Property had water around and underneath the floor boards of the house and inside outbuildings. Appeared to have been under the house before. Water flowed from north across front paddock (which is parallel with Convent Road) between out buildings and house toward neighbours. Water was flowing like a river in the back yard, around the buildings. At 12pm, water was still raging over the cattle stop, pouring through the culvert. Water almost reached the floor level.

Lost income from grazing/hay. Appliances flooded but still working.

Considering flood proofing techniques – e.g. sills around buildings

Received no warning – water appeared to rise very quickly. No one came to see them. Water was still across the cattle stop on Convent Rd about 2pm.

Did have a LIM report but relies on someone being able to interpret what it means – not necessarily that clear in what events might expect flooding to occur.

Have insurance but choose not to claim to avoid losing insurance in longer term.

Have subsequently cleared out a considerable amount of debris from drain on their property.

Felt they needed some advice about the following:

- how to clear out drain running parallel with Convent Rd:
- were they considered for house raising
- what they could do about flood proofing their existing buildings and house
- flood warning in the future

Meeting with Otaki Golf Course Manager

Subject: Follow up meeting with Covent Road - residents

When: 17 February 2005

Where: Otaki Golf course

GW Staff: Tracy Berghan and Phil Wallace

Feedback

Golf course had water running across front part of the site. Alarms went off about 3.30am. Did not feel flood was as extensive as previous ones and drained reasonably quickly. Water level would have been \approx 1 metre deep.

Thought 1998/2000 events were bigger.

Felt a number of improvements could be made including:

- Fixing culvert under Covent Road.
- Putting signs on the road warning about flooding would have helped.

Meeting with Gilbert Kimberly

Subject: Follow up meeting with Taylors Road – residents

When: 18 February 2005

Where: Gilfbert Kimberly – Taylors Road

GW Staff: Tracy Berghan and Phil Wallace

Feedback

Water began rising at 4:30am, rose until 6am. 300mm higher than ever before. Water lasted for a week.

He has levels in the flood near his house at 10.57m to “L&S” datum. (He has a survey pin near his house, which could be used for future flood events as well). Has flood photos if we need them.

Blockage in siphon. Some flooding over SH1 – signs were out? Some scour on the SH1 road verge.

Agar clearing has lowered water levels in the pond.

He can do drain clearing.

Meeting with Ross Hendy

Subject: Follow up meeting with Taylors Road – residents

When: 18 February 2005

Where: Ross Hendy – 27 Taylors Road

GW Staff: Tracy Berghan and Phil Wallace

Feedback

Awoke to floodwaters at 3:15am. Water was in garage and came to within 100mm of the lower floor level of house. Water was around for 4-5 hours – i.e. gone not long after 7am. Two cars written off due to flood damage.

Fire Brigade contacted them initially. Rang KCDC about 3am some one came about 9.00am.

Possible assistance from GW

- Gravel extraction from Waitohu where river broke out
- Improved warning systems.

Meeting with Goldsmiths and Gabrielle Rikihana

Subject: Follow up meeting with Taylors Road – residents

When: 18 February 2005-07-19

Where: Goldsmiths – 107 Taylors Road

Worse flooding they have seen, by close to 1m. Woke up to the flooding at 5:45am. Removed stock then. Water rose 300-350mm in the next hour. Estimate water >2m deep in what are normally dry areas. Water took 5-6 days to drain completely.

- Lost hay ready to cut (~\$2500) and lost income from grazing 10 cattle. Still insufficient pasture and feed. Will cost \$3000 to restore.
- Willows a problem in drain.

Old stream channel that goes under the railway and towards Ngatotara was a raging torrent, even near the confluence with the Ngatotara. Orders of magnitude more flow than in Ngatotara.

The crossings across the tributary into the Ngatotara did not seem to be a problem – the problem was the siphon under the Waitohu.

How regularly was siphon checked by GW- believed farm manager on Agar property checked regularly – does GW liaise with him?

Gabrielle Rikihana – the access to her land was gouged out, covered in debris.

Possible Assistance from GW

- Would like advice on how to deal with the willows on their land. Willows could result in blockage of the siphon.
- What help/assistance is available?
- Improved warning systems.

Meeting with Eustaces

Subject: Follow up meeting with Convent Road – resident

When: 18 February 2005

Where: Arthur Eustace – 66 Convent Road

GW Staff: Tracy Berghan and Phil Wallace

Feedback

Arthur has lived in Convent Road since 1989. His property is just south of Convent Rd Bridge (Rose Cottage).

6 January 2005 flood had more silt than previous ones – water came across paddocks and picked up material – recently ploughed?

Water level was ~ 600mm below house. Water was across bridge.

Seemed to be more water than in 1993, yet flooding up and down the road was more extensive in 1993.

Disagree with idea of raising bridge. Need to deal with floods of the size experienced in the last 15 years or so. Culvert under Convent Rd needs improving.

Have spoken to Mrs Taylor and thinks Malcolm Phillips (06) 368-7080 (now in Levin) will know what happened in this flood.

Meeting with John McLennan

Subject: Follow up meeting – Bennetts Road residents

When: 18 February 2005

Where: John McLennan – Bennetts Road

GW Staff: Tracy Berghan and Phil Wallace

Feedback

John has lived in Bennetts Road for 30 years. His property is east of Jenny Qwilliam's and goes across the road. It is located between the Mangapouri Stream to the south and Waitohu Stream to the north.

6th Jan the highest he has seen by 4". Lasted 2-3 days. Flood waters 400mm deep. Water flowed from direction of Waitohu stopbanks. Suspects seepage from the Waitohu stopbanks. High tide was about 10am.

His daffodil bulbs in ground appear unaffected. (They can withstand a week of inundation – but more impact in winter).

Thinks Waitohu stopbanks could be raised by 6".

Flooding on Tasman Rd – the first time for years.

Mangapouri is a holding pond, and any measures to reduce any overflow from Waitohu to Mangapouri will put more pressure on the Waitohu downstream of Convent Rd.

High tides can hold up floodwaters by 4-5 hours.

Floods in 1998, 1999, 2000 etc all came to within a few inches of the top of Waitohu stopbank.

Waitohu stopbanks rebuilt in 1970s? Stopbanks have rabbit holes etc, and have stock crossing them a little upstream.

Meeting with Jenny Qwilliam

Subject: Follow up meeting – Bennetts Road residents

When: 18 February 2005

Where: Jenny Owilliam – 40 Bennetts Road

GW Staff: Tracy Berghan and Phil Wallace

Feedback

Jenny has lived in Bennetts Road for 9 years. Her property goes across the road and is located between the Mangapouri Stream to the south and Waitohu Stream to the north.

Existing house built in 1940s – in a large flood in 1940's water had reached back step. Level of her house supposedly used as a sort of benchmark for other floor levels?

6th Jan event: Water flowed 200-300mm max deep over property. Reached to just below the concrete floor in the adjacent shed. Water flowed vigorously from McLennan property upstream. Water lasted for 1-2 days. Thought high tide had an influence.

Water came to within inches of top of the Waitohu stopbank at the north of her property – likewise in McLennan property. Water flowed across the “stopbanks” (potentially old drains) –adjacent to the Mangapouri stream on her property (to the south). Water filled the lower portions of her property adjoining the Mangapouri.

Suspects seepage from the Waitohu stopbanks.

Field tiles in property from the Waitohu. Drain into ditch and under Bennetts Rd and into Mangapouri.

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