Koz Brown LOTY COUNCIL 351 12-015 10 BOX 40718 U.H. S40 526 7573 (02ab@ shopshot.co.12 3792 fallion fam 7 98 November 2012 Proposed Plan Change is VHCC PBAG 907 U. H. J 5140 Advantage in trade competition: NO. I do wish to be heard Specific Provisions PRCISE-Post reports Whole Document: 200 Recommendation gw / vHCC respons; b; litres. Submission: · No Index - No Grossary - Limbled Page #'s - Te Awa Madgaroa . Tie in with UHCC SustainabilityStat. - Willing to eco source seeds ? with F.B.

- Balane growth in Dermeable Surfaces () with depare. - Balance sedimentation with - Wisdom of residents to be used - St Pats Estate - separate of LO DP Change in ofm right.

13) 242 estuary for effects not mode Had (Rechimed)

Modelling limited Use real

Modelling limited Use real

Modelling limited Use real

Model (to scale) maybe though

Victoria Uni

NZ Chimate Change Research hot

ref attached.

"That council authorise compared to East Coast U.S.A The

WINDLE Plan is "minory"

- ty drawlic Neutrality - Sprawl

building I must be Hydraulically Newfold.

The conomic Reality. Work towards

regoliated Wir I vin Outcome Justin affected

officers. I seek he following decision from the local authority. The Council decision is to regect The council to engage in intitual honour with affected sitizens. 1x attachment. Dompost 27 Oct 2012 article. Ligned: Hoghon.

Plan now for future floods, urge scientists

As the Earth keeps warming, sea levels will rise and rainstorms will become more extreme, making areas like the Hutt Valley more vulnerable to flooding. Scientists are calling for a national framework to combat climate change and warning local authorities to be ready to adapt in this new age of weather whimsy. Matt Stewart reports.

HE Hutt River has a long history of flooding and a new study says it will only get worse with climate change during the next century.

Apart from the threat to the valley's 130,000 residents, \$6 billion in assets would be at risk the cost of a breach in one of Lower Hutt's stopbanks has been put at as much as \$1.7b.

Focusing on the Hutt River, the Victoria University-based New Zealand Climate Change Research Institute has looked at the rift developing as the need for constantly evolving responses to climate change collides with local authorities' desire for fixed planning

"Our research shows that local government agencies, which are responsible for much of the decision-making dealing with climate-related impacts, are increasingly aware of the need to silience can also collapse over take action," research team leader Professor Martin Manning says.

"However, it has also identified a number of barriers that create inertia and resistance in the communities they serve.'

The team produced reports on future flood scenarios in the Hutt Valley, as well as studies on a sealevel rise in Auckland, water management in Wellington, and the implications climate change has for local government decisionmaking.

Although stopbanks and other flood-protection systems shield crucial infrastructure such as Hutt Hospital, Prof Manning says the "bottom line" is that these guardians of life and property will have to be raised again and again.

More frequent flooding in the Hutt Valley will impair the floodprotection standards of existing and planned stopbanks, and produce continuing uncertainty.

Although not dramatic, increases in extreme weather are a definite trend. The prolonged closure of the Manawatu Gorge because of slips from heavy rain last year is a prime example, he says.

'We're not trying to be alarm- Greater Wellington regional council fact that they have to start the pro-

Flood-risk management in New Zealand is primarily the domain of local government.

This creates unique issues in the context of climate change because handling that escalating risk will require ever greater localised technical and financial clout and challenge the often short-term planning horizons of local authorities.

The Hutt Valley study included a survey of residents, which highlighted some of the issues faced by local authorities and property

"Homeowners who have experienced flooding first-hand tend to be better prepared," Prof Manning says. "But if they sell their house and move on a few years down the track, the new owners don't necessarily have an appreciation of the risk and often don't take precautionary measures.

"It shows that while you can build resilience to risks, that retime, There is a similarity between the responses to extremeweather events and to major earthquakes, which can start with action and then fade away by not addressing the ongoing risk."

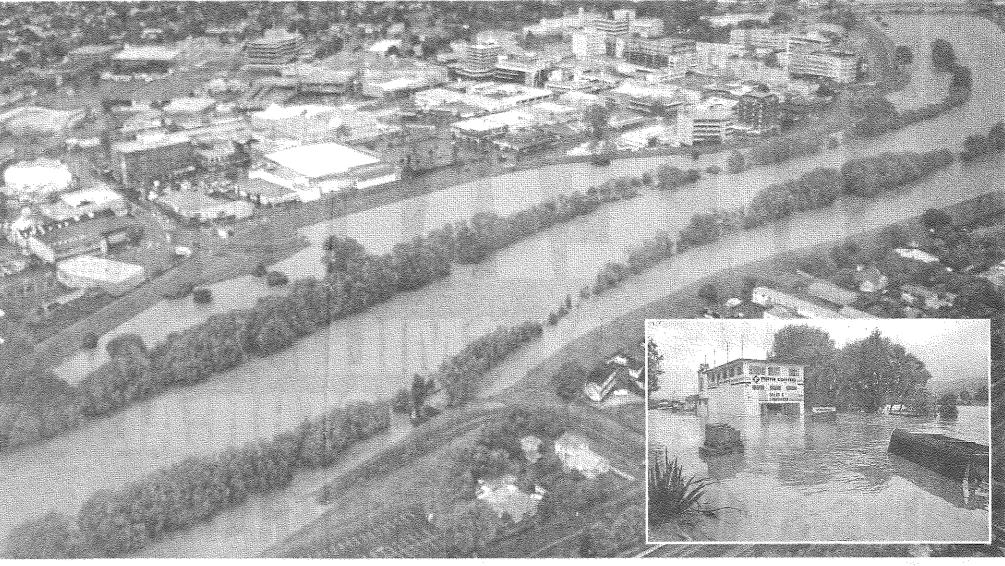
General understanding of flood risk levels was low in the Hutt Valley and few people had seen flood-hazard maps, the survey

The team concluded that effective flood-risk communication was vital, but found that hazard scenarios going ahead 50 or 100 years, often used by scientists to illustrate the potential impacts of climate change, were not the most effective way of getting people's

To combat the communication breakdown, the team has developed a more close-to-home floodrisk evaluation.

Instead of mapping out scenarios, the new method brings to mind wet feet or worse by showing the likelihood of above-floor-level inundation in the Hutt Valley floodplain under different flood

ist. We're alerting people to the developed a 40-year blueprint for flood protection in the Hutt Valley in 2001 -

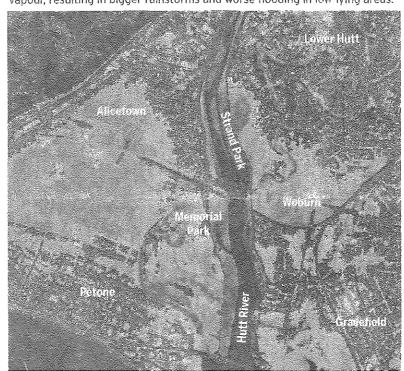


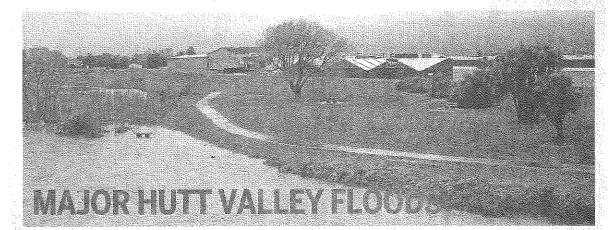
Overflow: The Hutt River in flood in 2005. Inset: The Firth Centre just north of Melling Railway station flooded by the Hutt River in 1994

Photo: ALEXANDER TURNBULL LIBRARY EP/1994/3399/21-F

GETTING WETTER

As the world warms up the atmosphere will be charged with more water vapour, resulting in bigger rainstorms and worse flooding in low-lying areas.





1855 - The river rises higher than ever seen before, destroying the third Hutt bridge.

1858 - Nine people die in Taita after a massive flood bursts the river's banks

1878 - Two big floods sweep the valley, inundating the entire

1893 - A large flood swamps some Petone properties to more than a

1898 - The largest recorded flood

in 30 minutes. A second flood prompts building of first major stopbanks.

1931 - A flood threatens Lower Hutt city as the river rises 5.2m. Manor Park Bridge and Haywards suspension bridge swept away. 1939 - A devastating deluge covers hundreds of acres. The entire valley from Silverstream to the Upper Hutt basin is flooded

wall-to-wall. 1976 - Flooding isolates Petone

flood protection system. 1998 - Two floods within a week of each other cause extensive riverbank damage but no breaches

recorded 2000 - Like 1998, two floods strike within a week of each other again the system copes well. 2004 - The Walwhetu Stream floods causing an estimated \$200m in damage

2005 - Water floods 10 Lower Hutt homes and causes severe