Report on the first consultation of tourism stakeholders in the Far North

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July 2010

Funding is provided by the Foundation of Research, Science and Technology.

Mode details on the project can be found at: www.lincoln.ac.nz/leap in the Climate Change, Peak Oil & Society Research Theme.

Project

The weather is very important to tourism: it allows tourists to participate in a wide range of activities, influences satisfaction and affects a business' bottom line. Climate change will change how weather impacts on tourism: it will provide new opportunities and exacerbate existing challenges. While we can not influence the weather or the climate we can proactively reduce our vulnerability, manage negative impacts and prepare for likely changes.

Lincoln University in partnership with Victoria University and NIWA is researching the relationship between tourism and the weather, with a longer term view of changing climatic conditions in New Zealand. As a result of our research we would like to share best practice and provide tools for businesses to improve their access to weather information, risk assessment and adaptation measures.

This report provides background information on the Northland case study (alongside a caste study of the Southern Lakes) and summarises first insights gained from a stakeholder consultation on the 14 and 15 July. Meetings were held with the Far North District Council, Te Runanga a Iwi o Ngapuhi, Taitokerau Maori & Cultural Tourism Association, and Destination Northland and five tourism operators.

Climate background

Northland is exposed to a range of weather hazards, including ex-tropical cyclones (weather bombs), leading to frequent flooding. The geology of rock types with low hydraulic conductivity and low gradient rivers leads to rapid increase of water levels and slow drainage. Flooding may be exacerbated by high tides, especially in estuaries and rivermouths. Weather in Northland is also influenced by El Nino/ La Nina phases with North-Easterly winds being more common during La Nina, bringing higher rains and more cyclones that pass close to New Zealand (McMillan, 2010).

The anticipated climate change impacts for Northland have been summarised as follows (Ministry for the Environment, 2008):

- Warmer temperatures: about 0.2 to 2.6 C by 2040 and 0.6 to 5.9 by 2090;
- Relatively greater warming in summer and autumn than in winter;
- Likely decreases in precipitation (e.g. Kaitaia), more likely in the winter months (annual decrease of between – 13 to 5% by 2040 and -22 to 5% by 2090) [slightly more pronounced in southern parts e.g. Whangarei];
- More intense rainfall events are likely;
- The extended winter rainfall period currently observed for May to October is expected to shorten under various climate scenarios (to June – September).
- Depending on the scenario, mean daily rainfall in winter could be reduced substantially;
- Extreme rainfall events are likely to be more frequent in summer (but not during the other seasons);

An archive analysis of weather events in the last 15 years provides useful insight into the range of events and impacts on tourism observed in Northland (see Table 1).

Table 1 Weather events reported in the media for Northland (Becken & Wilson, forthcoming)

Year	Newspaper	Event	Impacts
1989 (Jan 20):	*New Zealand Herald*	Cyclones Eseta and Delilah	Effects of on the Bay of Islands holiday season. Mentions Fullers Corporation.
1997 (Jan 13):	*The Daily News*:	Cyclone Drena	Forecast of Drena frustrated northern tourist operators; anger after warnings of a second cyclone within a fortnight appeared an over-estimation
1999 (April 25):	*Radio New Zealand Newswire*	La Nina weather	Drop in visitor numbers. Destination Northland said these weather conditions hurt a region popular for outdoor pursuits, also widespread predications of cyclones took their toll on visitor numbers
2002 (Feb 4):	*The Northern Advocate*	Temperature measurements	Whangarei – want measurement site moved
2005 (Feb 16):	*MetService Press Release*	New weather station at Waitangi	Combined efforts of Destination Northland, tourism operators and local business associations – hope to give visitors a better idea of weather, more domestic visitors will help Northland to extend its tourism. Destination Northland designated as new owner of weather station
2007 (Jan 10):	*New Zealand Herald*	El Nino	Lower than normal surface sea temperatures – around Upper North Island between 1C and -2C cooler, open fire ban around Mangonui, water shortages
2007 (Feb 2):	*Radio New Zealand Newswire*	"Weather bomb"	Stranded tourists at Waitaki Landing, near Cape Reinga. Power cuts caused by lightning strikes, roads closed, bridge washed out at Te Rangi station, Waitaki Landing bridge under water with high tide.
2007 (Mar 30):	*The Dominion Post*	Heavy rain in Northland	Haruru Falls Resort flooded (and landslide, guests evacuated), motorists stranded, Whangarei's business district evacuated, power cuts in region, Kerikeri Mission Station and Stone Store endangered (staff protected artefacts, archives and other treasures and tried protecting the buildings with sandbags)
2007 (Mar 31):	*The Dominion Post*	Fierce storm	Bay of Islands a health menace, swimming and shellfish gathering off-limits as tonnes of sewage swept into sea, access roads damaged, camping ground was swept away when Waitangi River burst its banks
2008 (Oct 30):	*New Zealand Herald*	Weather forecast	Caused thousands of holidaymakers to cancel Labour weekend breaks– motels, hotels, pubs, restaurants and tourism ventures all missed out on long-weekend trade, Doubtless Bay Information Centre in Mangonui confirmed that a large number of people had cancelled Labour weekend accommodation (town had been pressing TV3 for inclusion on nightly weather reports)
2008 (Nov 27):	*New Zealand Herald*	High winds	Cape Reinga signpost destroyed
2010 (Jan 6):	*The Northern Advocate*	Summer / drought	Perfect summer weather contributing to unexpected bonanza for regions' tourism operators: Lot of last minute bookings

Tourism in Northland

Tourism in Northland is very seasonal with a clear peak in January. Based on the Commercial Accommodation Monitor, guest nights in January are typically between 300,000 and 350,000 (Figure 1).

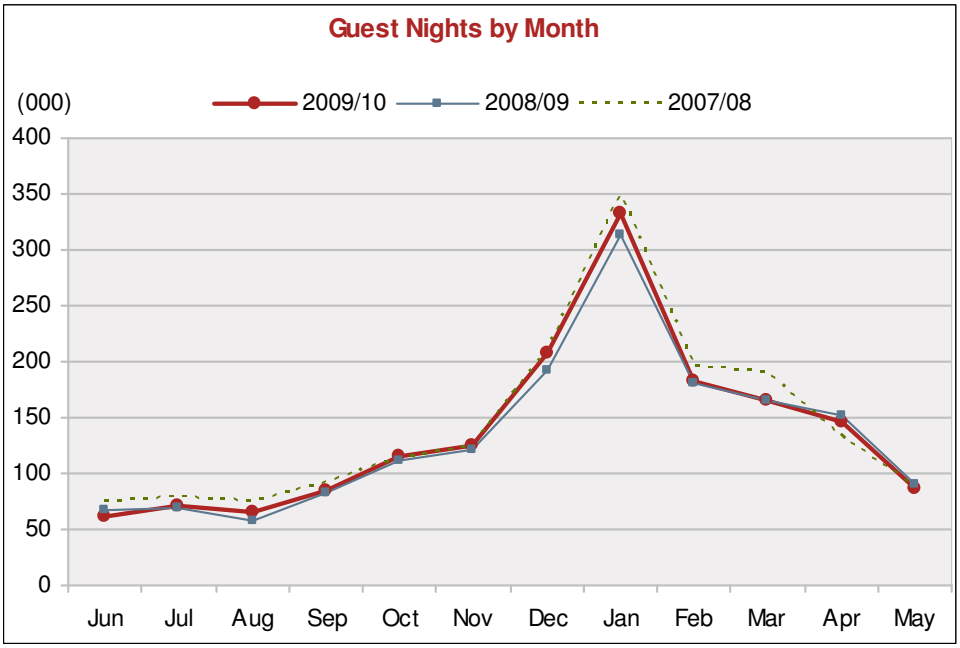


Figure 1 Guest nights in Northland based on the Commercial Accommodation Monitor (www.tourismresearch.govt.nz).

The following graph provides a longer term trend of guest nights per year. The highest numbers were achieved in 2007, followed by a significant decrease and a low point in early 2009 (Figure 2). The key drivers of this downward trend are not known, but could be a combination of high fuel prices in 2008, the global recession and negative perceptions related to the 2007 floods in March.

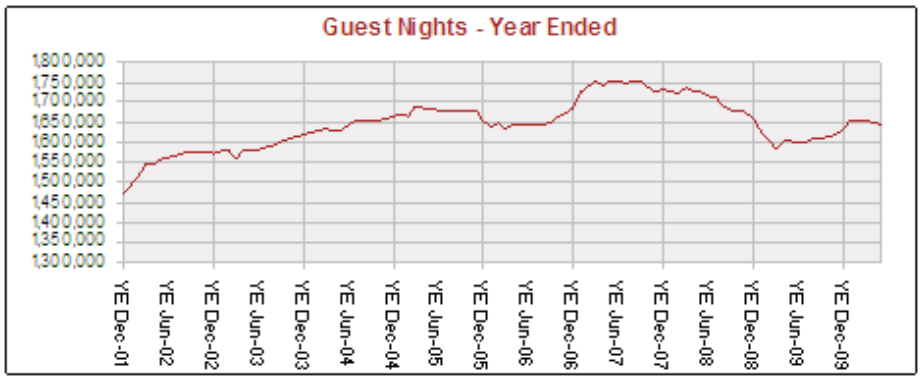


Figure 2 Guest nights from December 2001 to December 2009 (Northland) (www.tourismresearch.govt.nz).

Holiday parks and campgrounds are by far the most popular accommodation choice in Northland. At the same time, the seasonality is most pronounced for campgrounds, as can be seen in the sharp peak in Figure 3. Backpacker accommodation, whilst smallest in number, is the least seasonal. The visitation of motels shows a slightly different pattern from the other provides, with an extended summer/should season until April; and in some years a small peak in July/August.

Most visitors to Northland are domestic (largely from Auckland, but also from other origins). Figure 4 below shows that domestic tourism is considerably more seasonal than international tourism. The clear peak is in January and the lowest visitation by domestic tourists is in July. Some years seem more seasonal than others; for example the peak in 2008 was particularly pronounced. These may reflect seasonal weather conditions.

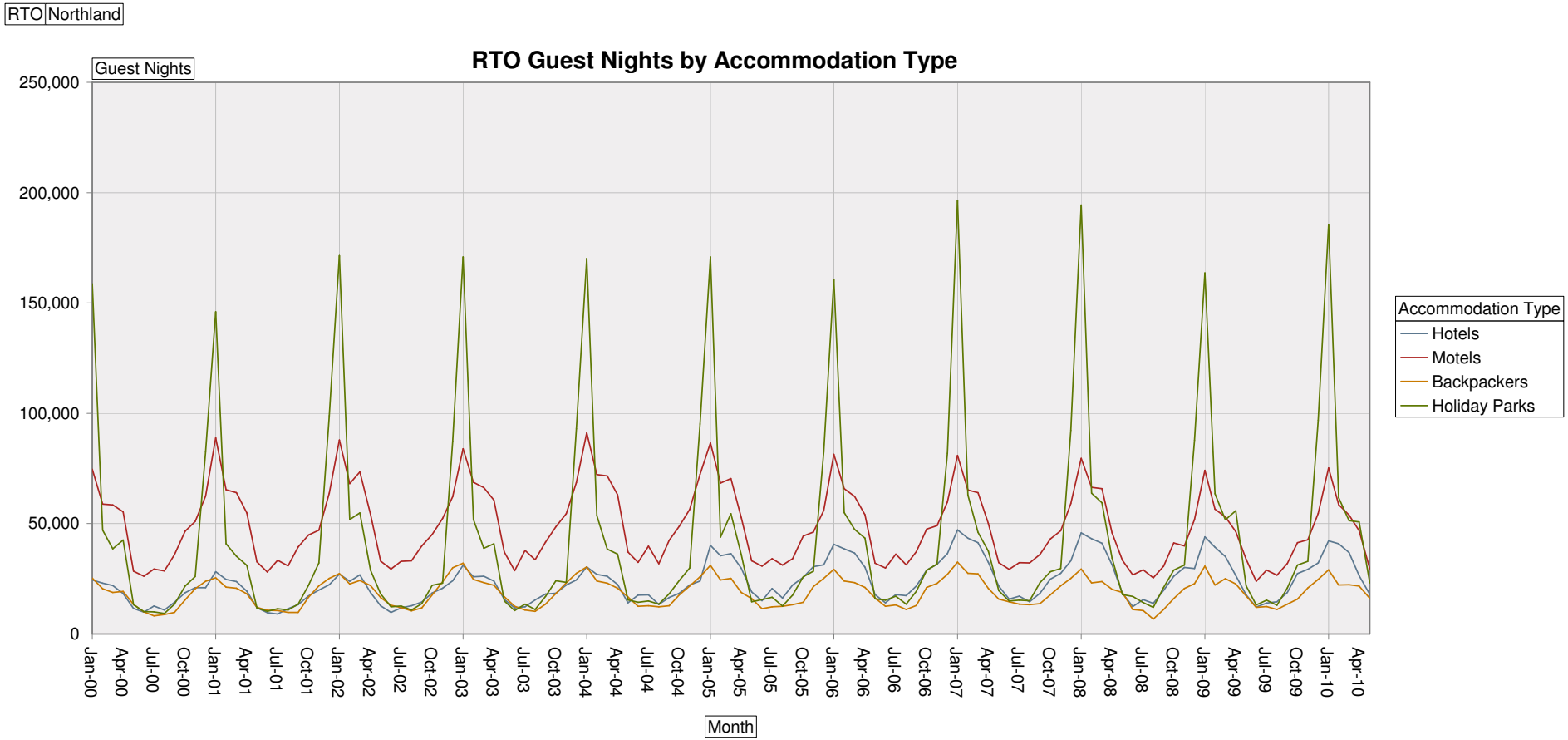
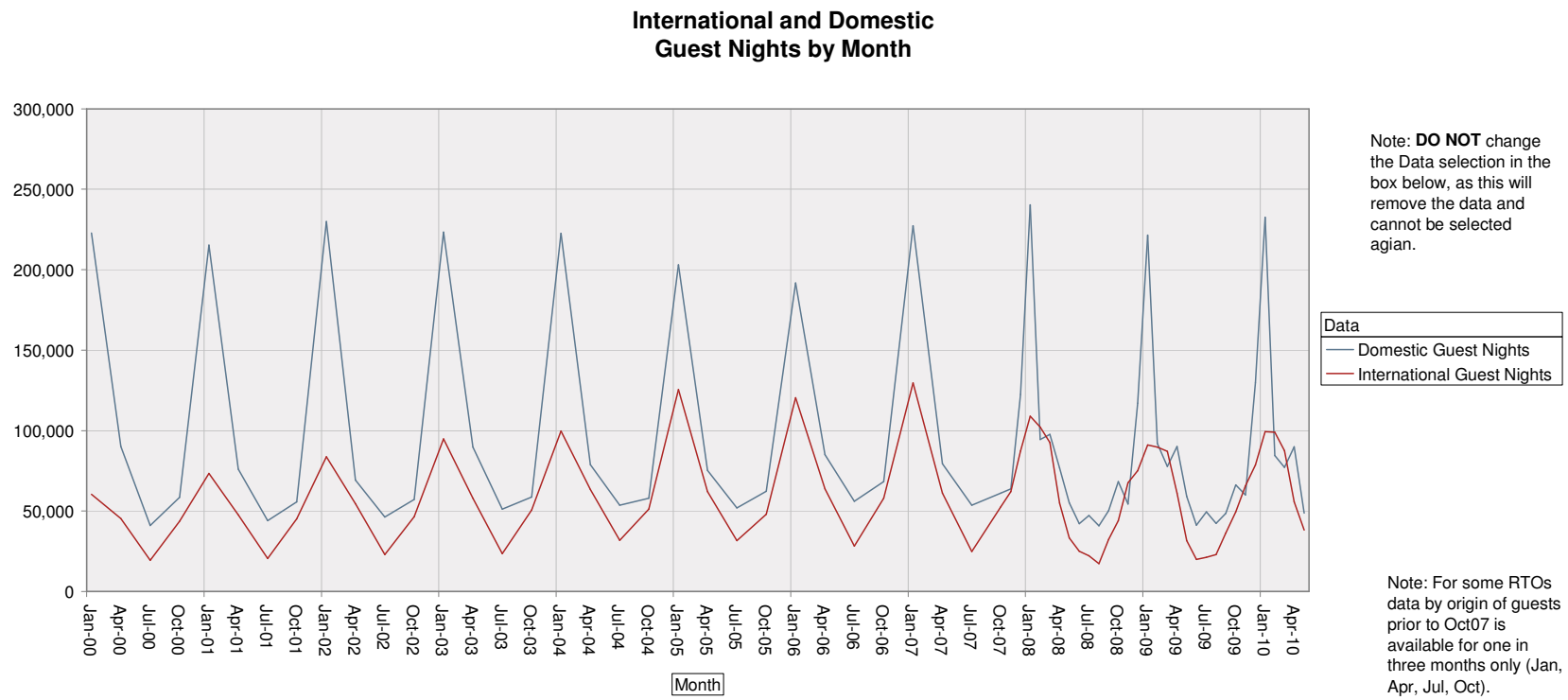


Figure 3 Guest nights in the Northland Regional Tourism Organisation, broken down into accommodation types (www.tourismresearch.govt.nz).

RTO Northland



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Note: For some RTOs data by origin of guests prior to Oct07 is available for one in three months only (Jan, Apr, Jul, Oct).

Figure 4 Guest nights in Northland by domestic and international visitors from 2000 to 2010 (www.tourismresearch.govt.nz).

Weather and climate issues arising for tourism

The consultation with key stakeholders in the Far North highlighted the following issues in relation to weather, climate and tourism.

Opportunities

One of the key challenges for tourism in Northland and the Bay of Islands is the seasonality of visitation. Climate Change with its higher temperatures and reduced overall precipitation (and shortening of the winter rainfall period) is likely to assist the destination's aspirations to become an all-year destination. Key to this is an enabling communication strategy that positions Northland favourably in the light of potentially unfavourable perceptions created by incorrect or biased media coverage.

Another opportunity lies in the further development of the yachting segment. Already, this provides an important contribution to the local economies (e.g. by servicing and maintaining boats, but also by long-staying visitors). Future increases in cyclone activity in the South Pacific could make the Bay of Islands a safe harbour for yacht tourists.

A more explicit integration of the food, wine and tourism sectors could provide a great opportunity for a differentiation of Northland as a sustainable (organic) tourism destination. Already, there are great linkages between the agricultural, horticultural, aquaculture and tourism sectors, but these could be improved. A greater integration of local produce into tourism catering would benefit the regional economy and also decrease carbon footprints of transportation. Also, encouragement of "caps & taps scheme" and an increased self-sufficiency would reduce risks in the case of access problems (e.g. in the case of flooding). Food events also provide pull-factors for tourists in the off-season.

Fostering and supporting community-initiated responses to local impacts of climate change can enable practical expression of important cultural values such as:

- Rangatiratanga (involvement in local decision-making)
- Kaitiakitanga (responsible cultural & environmental practises)
- Manaakitanga (looking after people/visitors including around calamity)

Challenges

The key challenges related to climate change were identified to be flooding and drought.

The greatest impact of flooding relates to access and being cut off from major transportation routes for up to 3 days. This is inconvenient and hazardous for locals and tourists, and also puts a major burden on the local roading budget (therefore preventing other improvments or infrastructure investments).

Another issue related to flooding is sedimentation and overflow of wastewater into the Bay of Islands. This not only causes aesthetic problems of poor visibility and water quality, but also affects the ecosystem, shellfish harvesting, and safety of water sports participants. NIWA is currently undertaken a detailed study on this in

partnership with local interest groups. Stormwater systems are potentially inadequate to deal with excessive rainfall.

Flooding also causes damage to property and potentially to lives. Settlements and assets at rivermouths are most vulnerable to flooding, especially in combination with high tides (and sea level rise). It is not clear to what extent smaller businesses have insurance cover.

Finally, extensive and repeated flooding has a major impact on visitors' decision (esp. those from Auckland who come for a short break) to travel North. There are long lasting effects of a negative image and perception.

The last summer saw a drought in Northland, which – while beneficial for tourism in some sense – also causes some problems in terms of water supply. It was noted though that this was mainly a problem for agricultural businesses and households, and not so much for tourism. However, businesses in Russell did rely on the provision of fresh water delivered by trucks. This is costly and could in the long term undermine the bottom line. The council observed an increased trend in the installation of water tanks. This would ensure self-sufficiency and could be a good adaptation option for tourism businesses. Collecting your own water would also resonate well with Northland's endeavours as a sustainable destination.

The issues of sea level rise and increased cyclonic activity were not discussed as much as flooding and drought, although it is acknowledged that both would exacerbate the risk and magnitude of flooding. Strong winds are potentially impacting on power lines and other built assets. To protect Pahia and its infrastructure from cyclones and sea level rise, an artificial breakwater is proposed. While the tourism industry is very supportive of such an investment, there are cultural issues related to Maori customary use of the affected islands and waterways.

OTHER ISSUES DISCUSSED

The following issues were raised by some of the consulted stakeholders:

- The question was asked who pays for infrastructure designed to adapt to the long-term effects of climate change.
- Transportation networks, the unfavourable situation of rail transport, and the proposal of a new motorway linking Auckland with the North. Different ideas around airport development were discussed as well.
- The wider context of future challenges other than climate change, for example increasing oil prices.
- The large number of small businesses operating in the region (about 1100).
- The need for new technologies and ways to provide timely, accurate and tailored information on the weather to tourists (and businesses).
- The need for more shaded areas on the beach for tourists (more days with blue skies).

- The cycle trail linking the East and the West and economic opportunities associated with it.
- Increased participation of hapu in land and water based environmental care (adaption) programmes provides additional potential for the provision of authentic visitor experiences (e.g. Lake Omapere, Cape Reinga, Rawhiti Birdsong)

Further steps

The consultation indicated great interest in this research and willingness to collaborate. Two key issues emerged. One relates to the flow of weather information and its use by the tourism sector. Accurate recording, reporting and forecasting is critical for business and safety decisions made by businesses and other stakeholders. It appeared from the discussions that the nature and distribution of information could be improved to meet the needs of tourism.

The other issue clearly relates to water management, both with respect to flooding and drought. Here, longer term investments and decisions may be required that would, by nature, involve organisations, such as local and regional councils and others with a longer term view. It was noted that most Maori businesses are also likely to hold long term views due to their close relationship to the land. There are also a large number of non-Maori tourism businesses that have been operating for a long time and that show strong interest in the long term viability and sustainability of tourism.

The research team also noted general interest in weather and climate issues and will organise a public presentation on this topic in the near future. We will then also seek to engage with a small number of tourism businesses to hear their (more detailed) views on some of the issues briefly discussed above. In the longer term the team would like to work with the council and other relevant organisations to better understand tourism's vulnerability to water issues and identify suitable adaptation measures.

References

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McMillan, H., 2010. Flood Risk Under Climate Change: A framework for assessing the impacts of climate change on river flow and floods, using dynamically-downscaled climate scenarios. NIWA Client Report: CHC2010-033.