

**Report to the Ministry for the Environment  
on the Adapting to Climate Change Workshops  
held from 23 - 30 May 2006  
funded in part by the Sustainable Management Fund**

**PROJECT AIM AND OUTCOMES**

The project aim was to develop and deliver four one-day workshops for local authority politicians and officers to be held in Auckland, Palmerston North, Nelson/Christchurch and Dunedin on how local authorities can adapt to the impacts of climate change. The workshops will cover:

- Recent changes to the RMA relating to climate change impacts
- Simple step-by-step explanations as to how councils can consider climate change in their activities and decision-making, drawing on existing Quality Planning Website guidance note and the practical experiences of councils
- Development of local authority case studies on adaptation to climate change and presentation of these case studies at the workshops.

The outcomes of the project are:

- Development of practical case studies of work being undertaken by local authorities to help adapt to the impacts of climate change
- Four interactive and comprehensive workshops for local authority decision-makers and officers on adapting to the effects of climate change
- Enhanced awareness within local government of tools and information available to assist decision makers prepare for and adapt to the impacts of climate change.

**BRIEF OUTLINE OF THE PROCESS TO PREPARE FOR THE WORKSHOPS**

*Local Government New Zealand* worked with climate change officials at the Ministry for the Environment (MfE), particularly Katie Andrews-Cookson, Emily Ross and Julie King to decide when and where the workshops would be held and on the topics for the workshops.

*Local Government New Zealand* identified suitable people within the local government sector and externally to deliver the workshop topics.

*Local Government New Zealand* engaged a professional events organiser to organise the workshop logistics, venue and equipment hire, travel for speakers, lunch and morning tea for workshop participants, etc.

MfE officials and *Local Government New Zealand* discussed the briefs provided by the speakers on what their sessions would cover, provided feedback and approved them.

The speakers prepared their presentations, case studies and information to be distributed to the workshop participants.

*Local Government New Zealand* prepared the workshop packs containing copies of the presentations and information. We also prepared a CD containing either copies of or links to all the relevant information on adaptation that we could locate on websites, including the MfE website.

## **WORKSHOP PROGRAMME**

The programme for the workshops is attached in Appendix 1.

## **WORKSHOP ATTENDEES**

Of the 85 local authorities (regional, district and city councils) in the country on 28 attended the workshops. Some councils sent people to all four of the workshops. The breakdown is as follows in summary form (a detailed list of people who registered can be provided if required):

### **Auckland workshop - held on 23 May**

Attended by 36 people, plus speakers (registrations were 41).

A total of 14 councils were represented at the workshop, coming primarily from the Bay of Plenty, Waikato, Auckland and Northland areas.

Attendees included a fairly high number of politicians, planning and regulatory managers and officers, some energy managers and officers, and a few asset/infrastructure managers.

### **Palmerston North workshop - held on 24 May**

Attended by 28 people, plus speakers (registrations were 28 - we got some people attending who were not registered and others who were registered did not attend). We consider that numbers attending this workshop would have been greater if the weather had not closed many airports around the country, which meant around 8 people who were registered could not attend.

A total of 11 councils were represented at the workshop, coming primarily from the Wellington, Wairarapa, Manawatu and Hawkes Bay areas.

Attendees included lower numbers of politicians than in Auckland, planning and regulatory managers and officers, some energy managers and officers, a few asset/infrastructure managers, a chief executive and a person from ICLEI A/NZ.

### **Nelson workshop - held on 29 May**

Attended by 28 people, plus speakers (registrations were 35).

A total of 3 councils were represented at the workshop, with all but one person (from Wellington City Council) coming from Tasman District and Nelson City Councils.

Attendees included a fairly high number of politicians, planning and regulatory managers and officers, some energy managers and officers, a few asset/infrastructure managers and a chief executive (Tasman).

### **Dunedin workshop - held on 30 May**

Attended by 11 people, plus speakers (registrations were 16).

A total of 3 councils were represented at the workshop (4 had registered), with all but one person (from Wellington City Council) coming from Environment Southland and

Dunedin City Council. Several politicians came and went during the day due to a clash with a meeting with the Prime Minister.

Attendees included some politicians, planning and regulatory officers, a few asset/infrastructure managers and a chief executive (Tasman).

## **NOTES FROM THE WORKSHOPS**

The notes from the workshops are attached as Appendix 2.

## **FEEDBACK FROM THE WORKSHOPS**

Feedback forms were distributed to workshop attendees. A total of 37 feedback forms or comments were returned. A summary of the workshop is attached in Appendix 3.

The feedback from the workshop attendees was overwhelmingly positive. There are some useful learnings in the feedback for any future workshops.

## **DISCUSSION SUMMARY**

Some of the key matters that came out of the discussion session at the workshop are summarised below:

### **1. Information gaps and needs of councils**

- Councils are seeking either more definite predictions of sea level rise, flood peaks, droughts, etc and when they are likely to occur; or guidance from the MfE on what figures they should use from the wide range they currently have to work with. (Note this same request came out of the Climate Change liability workshop *Local Government New Zealand* ran in July 2005 for local authorities.)
- National guidance from MfE on consistent methodologies for all councils to use to collect data would be helpful.
- Opportunities need to be created to share ideas, methodologies and technology across councils, to reduce costs and time spent on climate change work.
- Further data (e.g., sea level rise, storm surge, contour information, NIWA data, stormwater flows, rainfall data, river flows) are required at the local and catchment level to assist councils with identifying the risks and potential impacts of climate change. This information needs to be available to and affordable for councils.
- Lack of finance is a barrier to councils obtaining the information they need. Particularly as there are other more certain, short-term imperatives being faced by councils that are difficult enough to fund and deal with, without trying to address other more long-term impacts which are far more uncertain. There is a need for central government assistance to address this issue.
- Further information/workshops on the potential impacts of climate change are needed to convince councillors of the importance of adapting to climate for their communities.

- There is a need to get a wider range of professional within councils all having a greater understanding of climate change (e.g., politicians, senior managers, engineers, asset managers, planners, energy managers, etc)
- There is a need to get Territorial Authorities and Regional Councils working together within their regions on climate change.
- More information on climate change and its impacts is needed at the community level so that they support councils undertaking climate change work.
- More case studies on what councils are doing and can do to adapt, the feeling was if staff could show councillors/mayor/CE what other councils were doing in the way of adaptation it would be easier to get backing for similar projects of their own.
- Information is needed about energy conservation and mitigation methods, particularly more info on solar and wind power, and on building standards to improve energy efficiency.
- At all of the workshops some participants had difficulty understanding what was meant by “adaptation”. They generally understood “mitigation” but had trouble visualising what a council may do to adapt to the impacts of climate change. Further information and examples to clarify this would be useful.
- There is a need for risk assessment processes and standards for rural and urban protection.

## **2 The key adaptation challenges for councils**

- Costs of getting the data (e.g., NIWA data, flying catchments to get contour data) are too high/prohibitive.
- Difficult to get money from councils for collecting data when there are so many other conflicting priorities and more immediate issues to address than what may happen in the future due to climate change.
- Challenging to get political and community buy-in to address climate change matters, particularly in view of the range of views on whether climate change is a reality.
- A view was expressed that the challenge of getting political and community buy-in is greater because central government has not been seen to be taking leadership in the area of climate change policy. Some councils expressed concern at central government backing down and changing its policy (e.g., the flatulence tax, carbon tax) and not having the strength to face up to the issue. The view was also expressed that central government was devolving its climate change responsibilities to local government because they were too hard for it to address, and yet not providing councils with funding and support to enable them to address it.
- Difficulty of getting all the various disciplines in the council together to work on the problem of adaptation - it cannot be dealt with by one part of the council alone.
- Lack of expertise within councils on climate change and how to address the problems and impacts.
- Addressing stormwater, coastal inundation, water supply problems and biosecurity threats like invasive plant and animal pests, are major challenges for councils (depending on local circumstances).

- Power generation is a big challenge. Difficulties getting distributed energy projects in place. Need to look at alternatives to transmission.
- The need for land use change to cope with increased droughts and changes in grass species, crops, tree species, etc.
- Daily priorities mean officers don't get the chance to do longer term planning.
- Growth is a major challenge, particularly development in coastal areas and near rivers.
- A key challenge is that the Crown doesn't pay any rates for its land, so the rest of the community has to subsidise it

### **3) The key adaptation opportunities for councils**

- Undertaking plan changes to identify areas where there are risks from climate change (e.g., sea level rise, increased likelihood of flooding, etc).
- The opportunity to work regionally to address climate change issues and to network and share ideas with other councils regionally and nationally.
- The opportunity to prepare integrated assessments across all infrastructure and to change design and thinking to address climate change impacts.
- Better information and communication between staff and politicians.
- Catchment studies to prevent building/development in flood prone areas.
- Water tanks in new buildings to decrease the capacity requirements on stormwater and requirements to take water from rivers or aquifers, particularly in drought prone areas.
- Land use change to grow suitable crops in the changing climate.
- To use parks and recreation areas for stormwater detention.
- Dune restoration projects and coastal planting as a good alternative to hard engineering. It is cheaper and seems to be effective in short timeframes.
- Growth can be an opportunity as well as a challenge. It can enable the strategic placement of infrastructure and planning for climate change in infrastructure design and development.

### **4) How the case studies helped workshop attendees**

- Rodney District Council case study helped and provided an example of what can be done and a process to follow to deal with sea level inundation.
- Good for council politicians and officers to get together at workshops like this to see examples of what other councils are doing and different approaches to problems.
- Good to be able to take examples back to politicians.
- Coastcare example was good and shows how the theory does translate into practice on the ground. This leads to decreasing doubts and more willingness to tackle other bigger issues if this type of adaptation project is shown to work
- Kapiti Coast District Council example of rain water tanks, as it starts people thinking about the issue.
- All the infrastructure based case studies were useful.

It was interesting to note some differences in between the workshops. For example, when a workshop had more politicians involved they were generally more interactive, as the politicians wanted to contribute to the discussion and debate. When a workshop had more officers in attendance they were less interactive but they focused more on the exercises that they were given, resulting in more robust outcomes. Another example is the difference in acceptance of the reality of climate change. There was more scepticism about climate change in the southern part of the South Island. This may also have contributed to the lower number of people attending the Dunedin workshop.

Another interesting finding was that people in the North Island seemed more willing to travel some distance to attend the workshops, than people in the South Island.

## LEARNINGS

There are some key learnings which have come out of running these workshops. They are as follows:

- Having a varied audience (e.g., politicians and officers) makes it hard to pitch sessions to suit everyone. But a varied audience has the advantage of getting staff from different disciplines and politicians from a council all discussing issues together.
- The timing of the workshops was bad due to the conflict with councils preparing their Long-term Council Community Plans. If possible, any future workshops should avoid first half of each third year when the LTCCPs are being prepared.
- There are definite benefits in having an events specialist managing the logistics and being there on the day to deal with any eventualities.
- The case study approach was very successful and made the issue of adapting to climate change real for the workshop attendees.
- The length of the workshops - from 10am until 3.00 pm - was about right, as was the length of the various sessions (which varied between 1 hour and 1 and a half hours each).
- It was good to mix up the presentations with time for questions at the end of each presentation and discussion sessions in both the morning and the afternoon.
- Not charging for the workshops meant that some councils sent along a large number of people to each workshop when they were in their locality (e.g., Nelson City Council and Tasman District Council).
- Councils were more likely to attend workshops if they were located near them, particularly in the South Island.
- We could have sent some information out to workshop attendees before the workshops to provide them with more data on the impacts of climate change, as this seems to have been a gap in the presentations.
- Putting all the resource information on a CD was seen by workshop attendees as more useful than providing the information in hard copy.

## RECOMMENDATIONS

1. That the MfE and *Local Government New Zealand* work through the list of information gaps identified by councils during the workshops to decide where assistance can be provided and in what form that assistance will be (e.g., information, further workshops, guidance materials, etc).
2. That the MfE provides assistance to councils by either:
  - a) providing more definite predictions of sea level rise, flood peaks, droughts, etc, and when they are likely to occur, if such information is likely to be available in the near future; or
  - b) developing, in consultation with the local government sector, guidance on what figures councils should use in their modelling and planning from the range of data they currently have to work with.
3. That the MfE and *Local Government New Zealand* work with councils to clarify councils understanding of “adaptation” and to develop further case studies on adapting to climate change and make these available to staff and politicians. These and existing case studies could be presented to zone/sector meetings as a way of reaching and getting buy in from politicians.
4. That the MfE prepare further case studies of what overseas councils are doing about adapting to climate change, for example in Australia, UK, etc.
5. That the MfE arranges for case studies to be presented to relevant professional bodies (e.g., infrastructure case studies to IPENZ or asset managers).
6. That the MfE works with EECA to provide the information requested by councils on energy conservation and mitigation methods, on solar and wind power, and on building standards to improve energy efficiency.
7. That the MfE prepares further information or organises workshops on the potential impacts of climate change to inform councillors of the potential impacts of climate change and why it is important for their communities to adapt to those impacts.
8. That if any further workshops are undertaken, the “Learnings” from these workshops should be taken into consideration.
9. That the outcomes of the central government review on climate change and any support and financial assistance available to councils be communicated to local government.

## BUDGET

Information Attached in Appendix 4.

## CONCLUSION

It is our opinion that the workshops were valuable for local authorities. The case study approach was particularly helpful. Further work is needed to assist councils with their work on adapting to climate change and to build on the valuable start provided by these workshops.

11 May 2006

EN45-04

**Agenda for the Adapting to Climate Change workshops  
to be held from 10 am - 3 pm:  
23 May at Crowne Plaza, Auckland  
24 May at Rydges, Palmerston North  
29 May at Seifrieds, Nelson  
30 May at Mercure Hotel, Dunedin**

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Tea and coffee on arrival from 9.30am

- 10.00am Welcome and introduction - Susan Edwards, *Local Government New Zealand*
- 10.05am Background to climate change adaptation issues, outline of resources available to local authorities on adapting to climate change - Katie Andrews Cookson/Julie King, Ministry for the Environment
- 10.30am Case study on hazard planning and the potential impacts of sea level rise in Rodney District – Kim Buchanan, Rodney District Council
- 11.10am Case study on beaches and dune restoration in Bay of Plenty as an adaptation mechanism against sea level rise – Greg Jenks, Environment Bay of Plenty
- 11.45am Case study on infrastructure management in Hamilton and Wellington cities and the importance of factoring in climate change impacts – Nigel Jollands, Landcare Research
- 12.30pm Lunch
- 1.00pm Case study on infrastructure management in Kapiti – by Waverley Parsons/Tamsin Evans, Kapiti Coast District Council
- 1.30pm Break out sessions to discuss information from earlier presentation and how these approaches may be adapted for use by other local authorities
- 2.00pm Computer modelling exercise on hazard management by Richard Warrick, Waikato University

Workshop concludes around 3.00pm.

## Appendix 2

## Notes from Climate Change Adaptation Workshops

Auckland, 23 May 2006- 36 people attended plus speakers

### 1) Information gap and needs of councils

- Information for politicians to help them understand the implications of climate change and the need to adapt
- More definite predictions of sea level rise, flood peaks, droughts, etc, and when they are likely to occur, rather than the wide range councils currently have to work with
- More information on options for energy efficiency.
- General lack of data (land information/survey data as opposed to climate/climate change data), including some catchments which are un-surveyed and little or no data is available for them
- National guidance would be helpful, so that all councils do not have to work on climate change matters independently
- Consistent methodologies for all councils to use to collect data. This will help with credibility at the Environment Court or when dealing with landowners/developers. Councils can say they have used standard methodologies approved by MfE and landowners/developers will see that consistent approaches are being applied, even if there are differences across areas due to local information plugged into the methodology
- Shared technology across councils would help address costs and mean each council doesn't have to reinvent things
- Also need to share ideas (e.g., like the work Rodney District Council assessment of risk of inundation)
- Some participants had difficulty understanding what was meant by "adaptation". They generally understood "mitigation" but had trouble visualising what a council may do to adapt to the impacts of climate change.

### 2) What are the key adaptation challenges for your council?

- Costs of getting the data from NIWA, etc, or flying catchments to get contour data are too high/prohibitive
- Difficult to get money from councils for collecting data when there are so many other conflicting priorities and more immediate issues to address than what may happen in the future due to climate change
- Challenging to get political and community buy-in to address climate change matters
- Addressing stormwater is a major challenge
- Power generation is a big challenge. Difficulties getting distributed energy projects in place. Need to look at alternatives to transmission
- Dealing with biosecurity threats like invasive plant and animal pests

3) What are the key adaptation opportunities for your council?

- Plan changes are starting to happen to identify areas where there are risks from climate change (e.g., sea level rise, increased likelihood of flooding, etc)
- The opportunity to work regionally to address climate change issues
- To prepare integrated assessments across all infrastructure
- Better information and communication between staff and politicians

4) How have the case studies outlined today helped?

- Rodney District Council case study helped and provided an example of what can be done and a process to follow to deal with sea level inundation.

**Palmerston North, 24 May 2006- 28 people attended plus speakers**

1) Information gap and needs of councils

- Have to get more and better information from NIWA. This information needs to be more readily available to councils and more affordable
- Need applied research on grass species and also on pine trees - will Pinus Radiata still grow in changed climate
- Not sure what information the council currently has, so difficult to say what is needed
- More catchment capacity information is needed
- Need for territorial authorities to work more closely with regional councils
- Council studies tend to be based on historical data but this won't be good enough into the future
- Information on how climate change will affect return periods of events
- More involvement in workshops like this by politicians and engineers, rather than just planners
- Inundation mapping is a gap. Nationally available wave data is needed and should be funded by central government
- A national communications strategy on climate change issues and the need for adaptation
- Need for information that is locally based

2) What are the key adaptation challenges for your council?

- Urban drainage/stormwater is a major challenge for Upper Hutt City Council
- Coastal inundation and erosion is a major challenge for Hawkes Bay Regional Council
- Water supply problems
- The need for land use change to cope with increased droughts and changes in grass species
- Resources are a barrier - particularly lack of funding; and skilled and experienced officers

- Daily priorities mean officers don't get the chance to do longer term planning
- Difficult to get money from councils for collecting data when there are so many other conflicting priorities and more immediate issues to address than what may happen in the future due to climate change
- Problem getting buy-in from councillors and engineering staff, and also from the community. Community education is needed
- Barriers include: residents, politicians, lack of funding, lack of expertise, developers and lawyers
- There is a need to identify problems and prioritise them within local council areas, to identify local responses to local problems
- To get all the various disciplines in the council together to work on the problem of adaptation - it cannot be dealt with by one part of the council alone

### 3) What are the key adaptation opportunities for your council?

- Catchment studies to prevent building/development in flood prone areas
- Change the current driver which is to consider the needs of the current population, to consider what future population needs may be
- Water tanks in new buildings to decrease the capacity requirements on stormwater and requirements to take water from rivers or aquifers, particularly in drought prone areas
- Land use change to grow suitable crops in the changing climate
- To use parks and recreation areas for stormwater detention in Palmerston North City Council
- Dune restoration projects
- District Plan changes to address inundation and flooding issues
- Changes to design and thinking (e.g., stormwater infrastructure design)
- To prevent development in marginal areas because know things get worse in the future
- Networking with other councils

### 4) How have the case studies outlined today helped?

- The Kapiti Coast District Council presentation was good and gave a process to work through. It showed how things can be implemented
- The case studies give politicians and council staff an opportunity to see how big the problem is and what other councils are doing
- They provide a central information source on what works and what doesn't.

### **Nelson, 29 May 2006 - 28 people attended plus speakers**

#### 1) Information gap and needs of councils

- Generally councils don't know enough about what they need to do to adapt to climate change. Further information is needed.

- More information is needed on ground contours - costs of flying for lidar information is very expensive
- More information needed about river flows (data, and how to adapt)
- More information is needed on sea level rise, storm surge, how local landforms affect the need to adapt, and coastal adaptation information (build on Greg Jenks' presentation)
- More case studies on what councils are doing to adapt, the feeling was if staff could show councillors/mayor/CE what other councils were doing in the way of adaptation it would be easier to get backing for similar projects of their own
- Information on infrastructure and preparing for climate change, particularly need information on stormwater flows in relation to service levels and capacity, and modelling information for infrastructure and hazard mapping
- More information about hazard monitoring is needed. Hazard planning and guidelines could be a soft introduction to adapting to climate change
- Info about energy conservation, particularly more info on solar and wind power, and on building standards to improve energy efficiency
- There is a need for risk assessment processes and standards for rural and urban protection

## 2) What are the key adaptation challenges for your council?

- Adaptation challenges need to be better integrated across councils
- Climate change isn't widely accepted by politicians
- Contour data needs to be better - not sure what this is or who should lead?
- Lack of funding and resources available to councils to assist with climate change adaptation
- The range of views on climate change (is it a reality) mean that it is difficult to get buy-in from councillors and communities - this in turn affects the willingness of councils to increase rates to address climate change adaptation
- Growth is a major challenge, particularly development in coastal areas and near rivers
- A key challenge is that the Crown doesn't pay any rates for its land, so the rest of the community has to subsidise it

## 3) What are the key adaptation opportunities for your council?

- The need to build in margins into asset design and management to address the impacts of climate change
- Growth can be an opportunity as well as a challenge. It can enable the strategic placement of infrastructure and planning for climate change in infrastructure design and development
- Coastal planting as a good alternative to hard engineering. It is cheaper and seems to be effective in short timeframes, but need better information on it

#### 4) How have the case studies outlined today helped?

- Good for council politicians and officers to get together at workshops like this to see examples of what other councils are doing and different approaches to problems
- Good to be able to take examples back to politicians
- Coastcare example was good and shows how the theory does translate into practice on the ground. This leads to decreasing doubts and more willingness to tackle other bigger issues if this type of adaptation project is shown to work
- Kapiti Coast District Council example of rain water tanks, as it starts people thinking about the issue
- All the infrastructure based case studies were useful

#### **Dunedin, 30 May 2006 - 11 people attended plus speakers**

Immediately following the Ministry for the Environment presentation there was quite a lot of discussion around climate change and cynicism about whether it is a reality. Workshop participants also expressed cynicism about whether central government is going to do anything about climate change. If central government isn't going to come to the party or finds it too difficult, then why should local government take it on.

The view was expressed that the challenge of getting political and community buy-in is greater because central government has not been seen to be taking leadership in the area of climate change policy. Some councils expressed concern at central government backing down and changing its policy (e.g., the flatulence tax, carbon tax) and not having the strength to face up to the issue. The view was also expressed that central government was devolving its climate change responsibilities to local government because they were too hard for it to address, and yet not providing councils with funding and support to enable them to address it.

#### 1) Information gap and needs of councils

- Critical for councils to work together - regional councils and territorial authorities - on this issue. This approach needs to happen
- Local authorities need best practice examples and guidance materials that they can use. These should be provided from the national level/central government. It would be a waste of local government resources for each council to have to develop their own approaches, methodologies, technology, etc
- Councils need to know what support central government will be providing them with - including funding and resourcing issues

#### 2) What are the key adaptation challenges for your council?

- Working across councils
- Councils warn people not to build (e.g., in flood prone areas) but they do it anyway

- How do councils establish what is reasonable to plan for? - Modelling is too expensive for councils to run and also too expensive to collect local data to input into models
- Infrastructure is “out of sight” therefore “out of mind” and is hard to get money from councillors and from communities to pay for upgrading it
- The impact of depleting ground water aquifers and salination because of increased demands for water takes to due drought

3) What are the key adaptation opportunities for your council?

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4) How have the case studies outlined today helped?

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## Adapting to Climate Change Workshops Feedback Forms Summary

The following is a summary of the feedback received from the workshop attendees. The feedback was overwhelmingly positive. I have summarised the overall impressions and other feedback by providing actual comments given by attendees. These comments are useful when thinking about any further workshops in terms of what worked well, what didn't work well and on what other topics may be good to hold workshops on. However, I have summarised the feedback received on each of the presenters and on the other matters we sought feedback.

### Overall impressions:

The overall impressions of the workshops were generally very good. There were a few climate change sceptics which provided the sort of feedback expected. Below are all the comments received from workshop attendees in terms of their overall impressions of the workshops:

- Workshop was extremely/very useful and informative x14
- Could have used more of the day - started earlier and finished later to have more time
- I thought the workshop was a little rushed x2
- Very good opportunity to get all the departments of the council sitting and working together on an issue x2
- Length of workshop and sessions was good x6
- Very interesting and thought provoking x2
- Sessions were generally of a very good standard
- I came away from the day convinced that our council has to invest in a range of scenarios
- Felt the main benefit was having the practical examples/seeing what other councils are doing about climate change/examples were fantastic x8
- Good publicity about it
- Liked not having to pay/was the reason we attended x3
- Workshop has given me a good overview of the issues associated with climate change and adaptation to it
- Would have liked the workshop to contain more sessions especially on other councils experiences in this field
- Resource materials are extremely valuable x6
- Presenters and presentation content were excellent x7
- In the coming year our council will be looking at the impacts of climate change and trying to predict the impact on its infrastructure. Hence this workshop was very timely and extremely useful
- Ideas for further workshops are: one issue that limits our council doing further work in the area of climate change, and particularly in mitigating climate change, is the uncertainty around whether and how much human influence is effecting climate change. With a recent NZ lobby group developed and concerns around Kyoto I think a workshop on the facts around climate change

would be good - yes there will always be a lack of info and uncertainty but it would be good to at least see what science/facts current climate policy is based on . I not the green party and the likes of the UK consider climate change to be the most important environmental issue we face - if this is the case I consider we need to do a lot better job and conveying how serious it is, because the public (in Southland at least) generally don't register it as a major issue compared to say water quality. Just claiming it is a major problem isn't enough

- Good at raising awareness about the need to do something on adaptation x2
- Sessions were varied and relevant x2
- Would have been better if you had allocated people randomly to seating to split off people from their peers and councillors
- Morning session was more useful to us
- Given the speculative nature of the degree of the "climate change apocalypse" the seminar was of little use in quantifying the likely degree of change or how to adapt to the unknown effects. It was some use in comparing various approaches to know phenomena such as storm surges, earth movement, erosion and accretion and wind.
- Workshop was okay
- Less "concrete" information than I had hoped for, much of it was "progress to date". Will be keen to hear the recommendations made at the workshop have been followed up on by Local Government New Zealand and the actions they result in. Of particular interest will be whether a firm recommendation from central government on appropriate levels to be used as a basis for planning will be forthcoming. The variety of models/variables presented in various sessions did not help much with the widely divergent opinions of some of our councillors who will no doubt use the figures best suited to their personal views in further discussions of appropriate planning levels
- Overall it exceeded my expectations. I was pleased to see more interaction via the CLIMFACTS model session and the use of case studies. However, there still remains a dire need for more specific recommendations/guidance on climate change (such as actual input parameters into models, etc), whether they be nationally or regionally based. There also needs to be consistency across the country from storm water networks to river flood plain management and floor level assessments. Current information still requires a significant amount of interpretation and discretion and it should therefore not just be regarded as an RMA "black box" issue (what about the Building Act, CDEM Act, etc?)

#### **MfE Background presentation:**

The general feeling from the feedback forms was that this presentation provided a good overview. Some people said it was a bit light on content and would have preferred it to be more technical in nature with more data (e.g., David Wratt from NIWA type presentation). Some people expressed concern that it increased the uncertainty around climate change and the data.

#### **Rodney District Hazard Planning Case Study:**

The general feeling from the feedback was that this was an excellent presentation, highlighting the importance of development planning and getting the natural hazards map and plan together. Some commented that the information was "an eye opener",

as to the proactive approach taken by other councils to the potential risks of climate change. Several comments were made that the presentation outlined what could be done and the difficulties that Territorial Authorities faced when trying to address climate change impacts.

### **Bay of Plenty Dune Restoration Case Study**

The general feeling from the feedback was that this was an excellent presentation. People commented that the pictures and results spoke for themselves. People found the presentation very informative and helpful.

### **Infrastructure Management in Hamilton and Wellington Cities Case Study**

The general feeling from the feedback was that this presentation was a useful overview of what could be done. It really highlighted the importance of development planning and having data.

### **Infrastructure Management in Kapiti District Case Study**

The general feeling from the feedback was that this was an excellent and very useful presentation. People commented that the case study was well researched and that Kapiti had approached the issue sensibly, using supporting data and modelling very well. Several people noted that the approach used by Kapiti was very helpful to them.

### **Waikato University Computer Modelling Exercise**

The feedback on this model and exercise was generally positive, stating that the model would be very helpful to their council with its modelling and planning for the impacts of climate change. Some people (particularly politicians) found the presentation and exercise too technical and academic.

### **CD for information - Did you find it helpful to receive the background papers on a CD rather than in hard copy and are you likely to use the information in the future?**

The feedback on the CD was very positive, with people saying it is much easier to store the information with it being on a CD and far easier to share it with others. Also, good as it doesn't waste resources.

### **Venues and Logistics - were you happy with the venue and general logistics?**

Comments on the venues and logistics were very good. The only less positive comments were about the Palmerston North venue and lunch.

### **Registration processes - was it easy and convenient?**

Workshop attendees found the registration process easy and convenient.

### **Other feedback**

A range of other feedback was received from workshop attendees. Below is a summary of the comments received:

- Thank you for your good work and offering the workshops x4

- Could potentially have sent out some background on the theories and data on climate change prior to the workshop
- Like to have seen someone like David Wratt or Jim Renwick to give the background scene setter for climate change
- Would like our council to get a range of possible scenarios from NIWA, MOE and others based on predictions for say 30 years out and 80 years out. If the 30 year predictions appear realistic nearer to 2036 then we should be making meaningful plans for 2086
- Workshop timing was unhelpful to councillors - struggling through LTCCPs
- Why were none of the South Island councils used as case studies?
- Workshop was generally well run x3
- Found the case studies informative
- Purpose of the break sessions wasn't clear
- Would be good to have the contact list for all the participants and speakers x2
- Workshop was great, would like to see more TAs taking part
- MfE people were operating at a high level, rather than getting into details about numbers, predictions, and actions. This was being left to the TAs. If my understanding is correct there is a hierarchy set down through the RMA from items of national importance/national policy statements etc through RPs to district plans, rules etc to the actions/controls on the ground. I would have thought that sea level rise/climate change would be where this hierarchy would work. I didn't see this happening here.
- Overall the workshop was excellent, I look forward to seeing the outcomes
- There is a need for a second workshop with emphasis and guidance from central government on how to move forward to mitigate climate change impacts. Perhaps a minimum objective of what is required and goals above these, which are optional so all sizes of TAs can have buy in.
- There is a real need to get the message across to the wider community. The adoption of integrated Public Risk Management Systems and adoption of the proposed Flood Mitigation Protocol being developed by MfE, DMPC and Regional Council will assist in awakening of minds
- Overall one of the better workshops I have attended
- I really enjoyed the day. Nice to see positive changes council are making with regards to planning for the future and also implementing strategies to lead by example in the community. Hopefully our Council heads in the same direction very soon!
- Well worth doing but a bit more substance would have been useful (been following climate change matters for 15 years, so have lots of background)
- Very positive - need to get my CEO and Mayor along to this
- Useful to compare other councils practical solutions to infrastructure problems but not to predict the future. If a sudden climate change did occur probably of little use. If hydrocarbon gasses are the harbingers of climate disaster the travel involved in the seminar would have contributed to the problem
- Concerned that MfE is using fear to turn weather into an industry
- Would be good to mix these sorts of forums with developers and consultants. I'd like to see what actual numbers/percentages they use for climate change in their river modelling for example. Well done and thanks for the invitation/opportunity to attend.