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# 2007 Community preparedness survey results

## 1. Purpose

To inform the Wellington Region Civil Defence Emergency Management Group (CDEM Group) of the results of the recently commissioned Community Survey into Emergency Preparedness.

# 2. Background

The CDEM Group recognises the importance of gathering information to help gauge progress towards community awareness and preparedness for emergencies.

Since 2004 the Wellington Region Civil Defence Emergency Management Group has commissioned Peter Glen Research to undertake an annual telephone survey (in May) among a random cross-section of residents aged 16 years and over. The purpose of the survey has been to gather information that helps quantify the region's level of preparedness for a major civil defence emergency.

The primary research objectives for this research are:

- To gather information to help quantify progress towards the objectives of the Civil Defence Emergency Management Group Plan and target contained in some councils' Long-Term Council Community Plans.
- To obtain an updated measurement of public awareness, attitudes and behaviour relating to their preparedness for a major emergency, against the benchmark results obtained over the last three years.

The research was undertaken among a randomly selected sample of  $n=1100^{1}$  residents aged 16 years or older who live in the Wellington region. This

<sup>&</sup>lt;sup>1</sup> In 2004 and 2005 the number of resident interviewed was n=500. The sample size was expanded in 2006 and 2007 to allow for analysis by territorial authority.

sample size also enables results to be analysed with a degree of confidence at sub-region level.

# 3. Survey Results

Overall the Wellington region is moving in the right direction and several years of public education programmes to promote awareness and preparedness behaviours have produced very positive results.

Most of the residents are aware of the hazards the region is vulnerable to. They have quite accurate perceptions when comparing the potential risk of one hazard compared to another, with the rankings from residents matching the risk assessment that has been reported in the Wellington Region Civil Defence Emergency Management Group Plan.

Apathy still remains a barrier for those that have not prepared. Those who are easy converted to adopting preparedness behaviours are likely to have already done so, and therefore the more difficult conversions remain. It is important to consider this, and attempt to address the reasons for apathy in future public education strategies.

# 4. Future needs

The survey shows that many residents are apathetic about preparing for a disaster. They do not feel that the risks posed by hazards are specific to them. Therefore, our public information needs to address the potential impacts or consequences for each hazard – and make them real for people. For relatively frequent hazards, e.g. flooding, it is important for us to include information about magnitude and frequency of the events to impress upon people that these hazard events have a high probability of happening in their lifetimes.

The survey also showed that some residents were fatalistic and thought that any preparedness was futile. Therefore, it is essential that we help residents to feel empowered to take action and convince them that they do have a degree of control over the impact of an event on themselves and their family.

The household emergency plan still needs to be promoted as the survey showed that people still did not know that they needed a plan or, had not got round to developing a plan for themselves. Therefore, we need to reiterate the message that events can happen at anytime - and people need to plan for any eventuality.

# 5. Full survey results

A summary of the survey results are attached as **Attachment 1**. The full survey report may be obtained from the Wellington Region CDEM Group Office. Please contact Jessica Hare or Rian van Schalkwyk on 04 384 5708.

# 6. Recommendations

That the CDEM Group:

- 1. *receives* the report; and
- 2. *notes* the contents.

Report prepared by:

Dr Roger Blakeley Chair Co-ordinating Executive Group

Attachment 1: Full Survey Results

# Summary of 2007 survey results

#### Awareness of major hazards

Residents were asked to recall at least one hazard that might affect the region. Not surprisingly earthquakes was most often recalled (89%) followed by floods (61%) and Tsunami (40%). Interestingly, the spontaneous recall of flooding has steadily declined since 2004, which may be attributed to the absence of a large flood event since 2004.

The recall of major storms and major power blackouts has been steadily increasing since 2004.

	2004 %	2005 %	2006 %	2007 %
Earthquakes	87	95	93	89
Floods	76	67	66	61
Slips	28	15	17	21
Fire/Bush Fires	19	21	17	17
Tsunami/Tidal Wave	12	37	47	40
Hurricanes/Cyclones/Major Storms	7	12	11	15 1
High winds	6	18	15	19
Terrorism	5	1	2	5
Major power blackouts	5	9	7	12 1
Avian Bird Flu/Pandemic	-	-	11	5
Miscellaneous hazards	12	8	7	4
Respondents who identified a hazard	98%	98%	100%	100%
Average number of hazards recalled	2.6	2.9	2.9	2.9

#### Awareness of Major Hazards

#### Perceived impact of major hazards on people

In 2007 residents were asked to rate the level of *affect* a particular hazard would have on themselves and their family. The rating scale used was a five point scale where one was '*a minimal affect*' and five was '*an extremely large affect*'. The hazards that were included in this survey were the six hazards that pose the most significant risk to the Wellington Region in accordance with the Wellington Region Civil Defence Emergency Management Group Plan.

Positively, residents perceive the potential impacts and therefore the risk they face from these hazards to be similar to risk assessment<sup>2</sup> when identifying the order from greatest risk to least greatest risk.

<sup>&</sup>lt;sup>2</sup> Provided in the Wellington Region Civil Defence Emergency Management Plan.

These results show that the public have quite good understanding of the risks they face from the hazards and can accurately differentiate between the differing degrees of impact. The only concern would be the lack of understanding at present as to the degree of impact a pandemic may have as although pandemic is ranked second, it is ranked as having substantially less impact compared to earthquakes, and not much higher than storms.

	Rating '4' or '5' (i.e. a large or extremely large affect) %	Ranking in CDEM Group Plan
Earthquake	81	1
Pandemic	50	2
Storm	43	3
Flooding	41	4
Landslide	39	5
Tsunami*	31	6

#### Perceived Impact of Major Hazards on People

\* Note Tsunami source not specified to respondents. Local Source would rank 5 and Distant source ranks 6 in regards to potential risk to the Wellington Region as specified in the Wellington Region Civil Defence Emergency Management Group Plan.

#### Perceived impacts on people by area

When looking at the perceived impact across different areas not surprisingly there are some differences. Flooding is perceived to have a larger impact in Lower Hutt, Upper Hutt and Wairarapa.

Some interesting points to note is that Kapiti Coast residents perceived earthquakes to have a smaller impact, and Wairarapa residents perceive pandemic to have a larger impact when compared to other areas within the Wellington region.

	Wellingt on Region %	Kapiti %	Porirua %	Wellingt on %	Lower Hutt %	Upper Hutt %	Wairarap a %
Earthquake	81	66	74	85	84	82	81
Pandemic	50	54	53	49	42	44	71
Storm	43	34	44	45	43	45	42
Flooding	41	22	42	34	56	46	50
Landslide	39	29	42	44	34	40	29
Tsunami*	31	30	36	24	45	21	30

#### Perceived Impact of Major Hazards on People - Analysis by Area

• Note Tsunami source not specified to respondents. Local Source would rank 5 and Distant source ranks 6 in regards to potential risk to the Wellington Region.

#### Public information about hazards

When looking at the extent to which the public feel '*well informed*' about hazards, we see that regionally almost three quarters (74%) feel '*well informed*'. When looking at these results by area we see that those residing in Upper Hutt and Wairarapa feel most informed, whilst those residing in Porirua and Kapiti feel least informed.

Compared to previous years all areas experienced a decline in the proportion of resident who feel well informed about the hazards in the Wellington region.

	2004 %	2005 %	2006 %	2007 %
Region	69	80	81	74
Kapiti	62	94	79	69
Porirua	55	70	70	65
Wellington	71	73	76	74
Lower Hutt	70	86	89	76
Upper Hutt	63	88	90	84
Wairarapa	69	85	88	82

#### Extent Public Feel Well Informed About Major Hazards - Analysis by Area

#### Perceived public preparedness

Since 2004 there has been a gradual rise in the proportion of residents in the Wellington region who rate their level of preparedness as 'good' or better. In 2007, 65% rate their preparedness as 'good' or better, which is a nine percentage point increase in three years (56% in 2004, 59% in 2005 and 63% in 2006).

When looking at the level of perceived preparedness within each area we see that those residing in Wairarapa (71%) consider themselves most prepared, and those resident in Porirua (56%) consider themselves least prepared.

	2004 %	2005 %	2006 %	2007 %
Wellington Region	56	59	63	65
Kapiti	60	88	68	69
Porirua	47	61	61	56
Wellington	49	35	50	63
Lower Hutt	69	85	82	61
Upper Hutt	51	68	70	61
Wairarapa	66	56	64	71

Extent Public Feel Prepared for Major Hazards

- Analysis by Area

Filtering the results based on the composition of the household, show that those who are *single/flatting or living alone* consider themselves the least prepared. Not surprisingly *older couples* perceive themselves to be well prepared which may be enhanced by these residents having more exposure to hazard events and are therefore more motivated to take measures to prepare themselves.

#### Poor/ Very Very Good/ Fair / Good Excellent poor % % % Single/flatting/living alone 20 57 23 Couple with no children 18 50 32 Single/couple with children (including secondary 14 53 33 school) Single/couple with adult children 14 51 35 Older couple 5 56 39 15 54 31 Wellington Region

#### Extent Public Feel Prepared for Major Hazards

- Analysis by Household Composition

#### Items needed to survive an emergency

In 2007 residents were asked to identify what items they felt they would need to survive a major emergency<sup>3</sup>. Positively, when asked to recall emergency survival items both food and water recorded high levels of spontaneous recall (88% and 93% respectively). Over three quarters of residents (77%) also mentioned other emergency supplies and equipment (doesn't include food and water).

When looking at the number of items recalled, 72% could recall at least three emergency survival items. The majority of this recalled three items (60% of all residents), with only a very small proportion able to recall all four items (12%). This drop off is likely to be due to those who we unable to recall needing a household emergency plan, with only 14% identifying the need to have a plan.

<sup>&</sup>lt;sup>3</sup> This question was unprompted; therefore all responses that were given were recalled and not a 'yes or no' answer when asked.

## Items Identified as Needed to Survive in a Major Emergency

	2007 %
Emergency food supplies	88
Emergency water supplies	93
Other emergency supplies and equipment	77
An Household Emergency Plan	14
Recalled no more than two items	28
Recalled three items	60
Recalled all four items	12

#### - Unprompted Awareness

Residents were then asked whether they had each of the four main emergency survival items (food, water, other supplies and equipment, and a household emergency plan)<sup>4</sup>. As with the spontaneous recall food (72%), water (71%) and other emergency supplies and equipment (74%) were most often identified as currently available in the household specifically for use in a major emergency. Surprisingly the proportion of household emergency plans was higher for actual completion (38%) (residents have these plans in place), compared to spontaneous recall (14%). This is probably due to many of these plans being in the form of a *verbal agreement* between household members.

Nearly two thirds of all residents (63%) have at least three survival items that are for use during a major emergency. However, when looking at the number of those who are *fully* prepared with emergency water, emergency food, other emergency supplies and equipment and an emergency household plan **only 30%** of all residents meet these criteria. In addition, 12% have no supplies which equates to approximately 51,000 people currently not prepared to look after themselves at all during an emergency.

<sup>&</sup>lt;sup>4</sup> This question was prompted with a each resident asked whether they currently had water, food, other supplies and equipment and a household plan specifically intended for the use during a major emergency.

#### Items Households Currently Have to Survive in a Major Emergency

	2007 %
Emergency food supplies	72
Emergency water supplies	71
Other emergency supplies and equipment	74
An Emergency Household Plan	38
Currently have no emergency supplies	12
Currently have no more than two items	11
Currently have three items	33
Currently have all four items	30

- Prompted Awareness

The types of items included in other emergency supplies and equipment are included in the table below with the majority steadily increasing over time.

	2005 %	2006 %	2007 %
Torch	65	70	71 †
First Aid supplies	63	69	71 †
Radio	56	62	62
Spare batteries	51	57	62 †
Emergency cooker (e.g. Primus, BBQ)	49	54	56 1
Spare clothing	37	45	50 ↑
Spare blankets/bedding	60	62	67 †
Plastic bags	*	68	68
Medication (Paracetamol, Tamiflu, etc)	*	53	59
Antibacterial hand washes	*	45	44
Gloves/goggles/masks	*	37	37

# Supplies and Equipment Held for an Emergency - Prompted Awareness

\* Note: note not asked in 2005, therefore unable to determine trends.

Residents who didn't have a particular survival item were asked why they did not have each of these items. Across all items 'not getting around to it' and 'haven't thought about it' were the main reasons provided. The 'cost or expense' was also mentioned regularly by those who did not have emergency food or other emergency supplies and equipment.

#### Relationship between awareness and action

There is often an assumption made that if residents are aware of the need to prepare and how to do it, they will adopt preparedness behaviours. The table below shows that this is not always the case by highlighting the difference between awareness and action. As shown, 88 percent of residents are aware that they need emergency food supplies, however only 72% have actioned this. Therefore nearly one in five residents are not changing their behaviour even though they are aware that they should. This may be due to some residents knowing they should, but may not feel that *they personally do not need to* or it is *not a priority* for them to have emergency food supplies.

Positively, of those who recalled at least three items (72%), 88% (63% of all residents) also have at least three survival items specifically for use during a major emergency. This confirms that the more residents are aware and gain a comprehensive understanding of what is required to survive an emergency, the more likely they are to action this and adopt preparedness behaviours.

#### Relationship Between Recalled Items for Preparedness and Actual Items for Preparedness - Wellington Region

	Items Recalled %	Current Items in Household* %	Difference +/- %
Emergency food supplies	88	72	-16
Emergency water supplies	93	71	-22
Other emergency supplies and equipment	77	74	-3
A Household Emergency Plan	14	38	+24
Mentioned / Currently have three items	60	33	-27
Mentioned / Currently have all four items	12	30	+18

\* Note current supplies in the household was prompted, where as supplies identified and needed to survive was spontaneous awareness.

Included overleaf is the relationship between recalled items and actual items in the household for each of the areas in the Wellington region. For all areas there was a sizable group that currently have three emergency survival items, but are missing the household emergency plan to enable them to be *fully* prepared.

# Relationships Between Recalled Items for Preparedness and Actual Items for Preparedness

- Kapiti

	Items Recalled %	Current Items in Household* %	Difference +/- %
Emergency food supplies	86	88	+2
Emergency water supplies	84	85	+1
Other emergency supplies and equipment	64	79	+15
A Household Emergency Plan	10	38	+28
Mentioned / Currently have three items	NA	35	Of those who had 3
Mentioned / Currently have all four items	NA	33	but not 4 items - 89% didn't have a plan

•Note current supplies in the household was prompted, where as supplies identified and needed to survive was spontaneous awareness.

Is it interesting to note that Kapiti has experienced an increase between those that recalled an item to those that actually have these items. This may be due to the aging population in Kapiti not necessarily able to recall items but may have them in the household.

#### Relationships Between Recalled Items for Preparedness and Actual Items for Preparedness

	Items Recalled %	Current Items in Household* %	Difference +/- %
Emergency food supplies	83	67	-16
Emergency water supplies	92	65	-27
Other emergency supplies and equipment	82	79	-3
A Household Emergency Plan	7	32	+25
Mentioned / Currently have three items	NA	36	Of those who had 3
Mentioned / Currently have all four items	NA	22	but not 4 items - 86% didn't have a plan

#### - Porirua

\* Note current supplies in the household was prompted, where as supplies identified and needed to survive was spontaneous awareness.

# Relationships Between Recalled Items for Preparedness and Actual Items for Preparedness

- Wellington

	Items Recalled %	Current Items in Household* %	Difference +/- %	
Emergency food supplies	89	68	-21	
Emergency water supplies	94	69	-25	
Other emergency supplies and equipment	80	74	-6	
A Household Emergency Plan	16	40	+24	
Mentioned / Currently have three items	NA	33	Of those who had 3	
Mentioned / Currently have all four items	NA	30	but not 4 items - 82% didn't have a plan	

\* Note current supplies in the household was prompted, where as supplies identified and needed to survive was spontaneous awareness.

# Relationships Between Recalled Items for Preparedness and Actual Items for Preparedness

- Low	er Hutt
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	Items Recalled %	Current Items in Household* %	Difference +/- %	
Emergency food supplies	89	74	-15	
Emergency water supplies	96	71	-25	
Other emergency supplies and equipment	73	72	-1	
A Household Emergency Plan	15	38	-23	
Mentioned / Currently have three items	NA	36	Of those who had 3	
Mentioned / Currently have all four items	NA	28	but not 4 items - 81% didn't have a plan	

\* Note current supplies in the household was prompted, where as supplies identified and needed to survive was spontaneous awareness.

# Relationships Between Recalled Items for Preparedness and Actual Items for Preparedness

	Items Recalled %	Current Items in Household* %	Difference +/- %	
Emergency food supplies	90	66	-24	
Emergency water supplies	92	69	-23	
Other emergency supplies and equipment	81	71	-10	
A Household Emergency Plan	21	39	-18	
Mentioned / Currently have three items	NA	22	Of those who had 3	
Mentioned / Currently have all four items	NA	35	but not 4 items - 86% didn't have a plan	

- Upper Hutt

\* Note current supplies in the household was prompted, where as supplies identified and needed to survive was spontaneous awareness.

# Relationships Between Recalled Items for Preparedness and Actual Items for Preparedness

- Wairarapa

	Items Recalled %	Current Items in Household* %	Difference +/- %	
Emergency food supplies	88	79	-9	
Emergency water supplies	94	69	-25	
Other emergency supplies and equipment	79	74	-5	
A Household Emergency Plan	9	39	+30	
Mentioned / Currently have three items	NA	32	Of those who had 3	
Mentioned / Currently have all four items	NA	33	but not 4 items - 85% didn't have a plan	

\* Note current supplies in the household was prompted, where as supplies identified and needed to survive was spontaneous awareness.

#### Relationship between perceived preparedness and actual preparedness

Another question is whether there is a relationship between those that state that their households current level of preparedness and their actual preparedness. The research suggests that the short answer to this question is yes, as the higher the stated level of preparedness, the more items these households currently have specifically for use during an emergency.

However, are residents that state their current households' level of preparedness is excellent *fully* prepared? The majority are with 68% of those with a self proclaimed '*very good or excellent*' level of preparedness currently having all four emergency survival items in the household. Yet, 32% are not *fully* prepared, and as seen in earlier sections, this drop off is due to 78% (of those that didn't have all four items) not having a household emergency plan.

	Fair / Poor/ Very poor %	Good %	Very Good/ Excellent %	Points to note
Currently have no items	28	5	1	
Currently have one Item	35	3	-	The majority of these had other emergency supplies only
Currently have two items	13	20	-	The majority of these had food + water, or food + other supplies
Currently have three items	23	47	31	The majority of these had food + water + other supplies
Currently have all four items	1	24	68	Of those who didn't have four items, 78% didn't have a plan

#### Relationships Between Perceived Preparedness and Actual Items for Preparedness