

# MELBOURNE STORM REPORT

Analysis of early warnings issued by EWN

March 6 2010

Melbourne hail event

THE AUSTRALIAN EARLY WARNING NETWORK



## Case study in the effectiveness of early warning in the protection of property

25 March 2010

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## Executive Summary

On 6 March 2010 EWN issued a series of warnings to locations in and around Melbourne about to be impacted by severe thunderstorms packing hail, flash flooding and damaging winds. Warnings were sent to Mobile (text), email and desktopALERT. This report analyses and explains the process, details feedback from recipients and demonstrates the substantial success of the system to save property during this event.

**It is quite clear these warnings and the system saved people (and insurance companies) from considerable loss during this hail event.**

Detailed in this report is just some of the feed back we received from members describing their experience during the Melbourne hail event. We have a lot more feedback which reveals the behavior of those receiving warnings...and those who did not. Evident is that:

1. Many people were entirely unaware of the approaching storm or its nature
2. EWN members took heed of our warnings and successfully acted to protect property
3. Many more people other than EWN members were alerted as a result
4. Significantly more property could have been protected if assistance were provided to EWN

Feedback also confirms previous member survey results which show some 97% of them take action to protect property, 83%when possible log on to BOM website to continue to monitor the event and 92% tell others. These numbers seem high but are probably not surprising given they are from a population who have been proactive in joining EWN to do just that. It should be noted, that taking action may include further monitoring or information discovery.

As commented previously, EWN protected far more than just its members. It is not unusual for one warning to be distributed to hundreds of others. (*I have received back emails that have done the rounds with hundreds on the distribution list*)

Why does this matter? EWN is the only location based delivery system for severe weather in the world. Over three years of experience and technology development have produced a unique IP that is proven and highly effective in the protection of property. This is an initiative of global significance that reduces claims, protects property and helps make the community a safer place to live.

This is one case study of many. For more such reports please contact the author Kerry Plowright at the address provided or [kerry@ewn.com.au](mailto:kerry@ewn.com.au) on mobile 0403147197 or phone (07) 55904173

# Melbourne Hail Storm Warning

## Melbourne Hailstorm Warning

**COPY OF A WARNING**



VIC Severe Thunderstorm Warning:  
Large Hail, Flash Flooding, Damaging  
Winds



EWN FOUNDATION SPONSOR

Source: Bureau of Meteorology

For people in the Inner, Western, Geelong and Bellarine Peninsula, Port Phillip and parts of the South East, Eastern, Northern and Mornington Peninsula Local Warning Areas.

Issued at 2:02 pm Saturday, 6 March 2010.

The Bureau of Meteorology warns that, at 1:55 pm, very dangerous thunderstorms were detected on weather radar near Gisborne and Melton. These thunderstorms are moving towards the southeast. Very dangerous thunderstorms are forecast to affect Footscray, St Albans, Sunbury and Werribee by 2:25 pm and Caulfield, Craigieburn, Glen Waverley, Greensborough, Melbourne City and Preston by 2:55 pm.

Damaging winds, very heavy rainfall, flash flooding and large hailstones are likely.

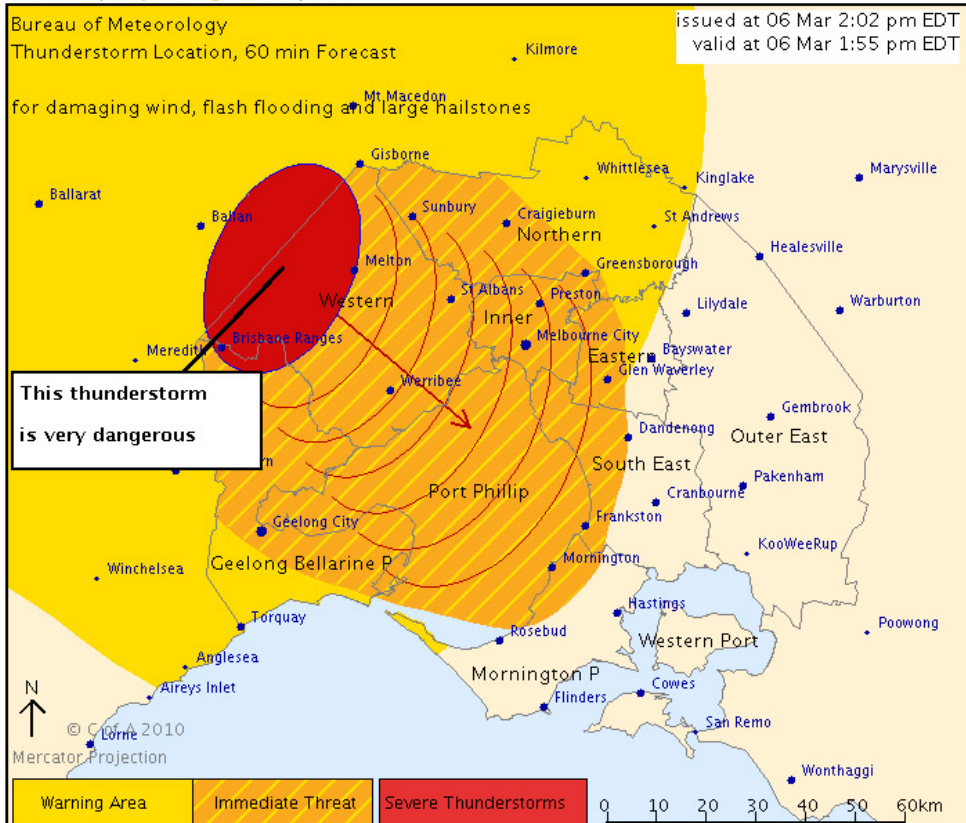
The State Emergency Service advises that people should:

- \* Keep clear of fallen power lines.
- \* secure any loose objects in the vicinity of your home.
- \* keep away from creeks and drains.
- \* do not drive vehicles through flooded areas.
- \* stay indoors if possible.
- \* Avoid using the phone during the storm.
- \* if you are outside, avoid sheltering under trees
- \* listen to the radio for storm updates
- \* switch off your computer and electrical appliances



**Emergency Pantry List**  
Ensuring the supply of critical foods and essential items for Australian conditions

BoM Radar | Early Warning Network | [Unsubscribe](#)



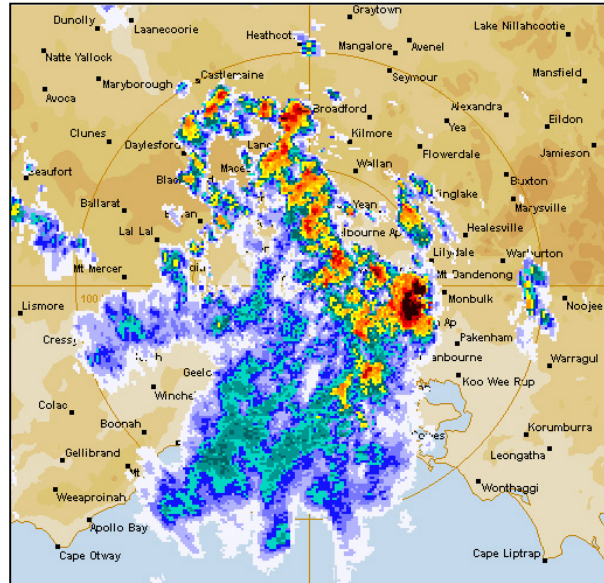


**Introduction**

EWN internal forecasting for Saturday 6 March 2010 was for severe weather. At 10:13AM EWN began to provide specific and geo targeted warnings to those populations that were going to be impacted by rapidly developing severe weather. This began in the middle and upper west of the state and by the end of the day had progressed across the greater proportion of Victoria.

The following pages break down EWN's warning process on that day illustrated by GNIS\* system reports of the areas targeted with each warning.

EWN has provided early warning to its members for every severe weather event experienced in Australia since September 2007, including targeted alerts on Black Saturday.



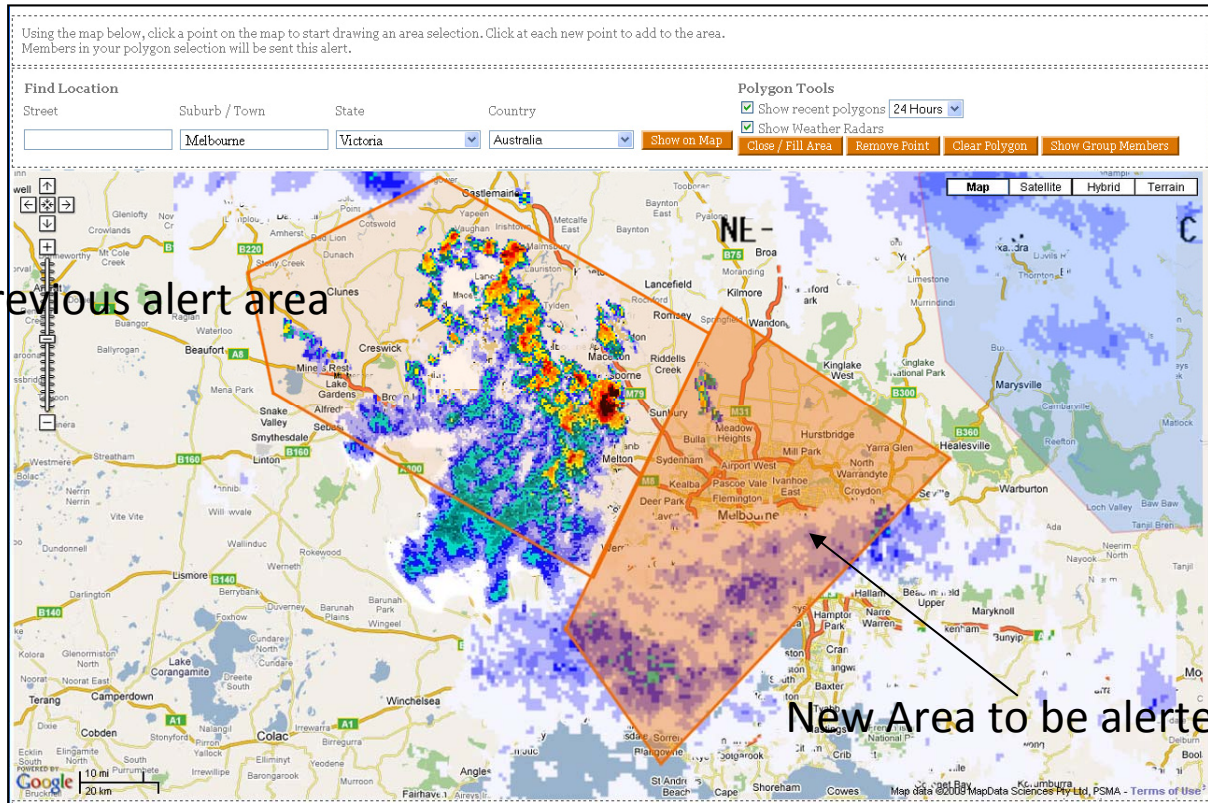
An example of the email warning can be viewed here:

[https://www.ewn.com.au/media/melbourne\\_hailstorm.aspx](https://www.ewn.com.au/media/melbourne_hailstorm.aspx)

The radar loop for the entire event can be viewed here:

<http://www.theweatherchaser.com/radar-loop/IDR023-melbourne/2010-03-06-00/2010-03-06-12>

To assist the reader in understanding how EWN tracks and provides warning, the screen grab below illustrates how weather radar is overlaid on EWN's mapping system along with previous alerts already delivered. This provides track history and allows projection of impact areas. The system is accurate to within ten metres.



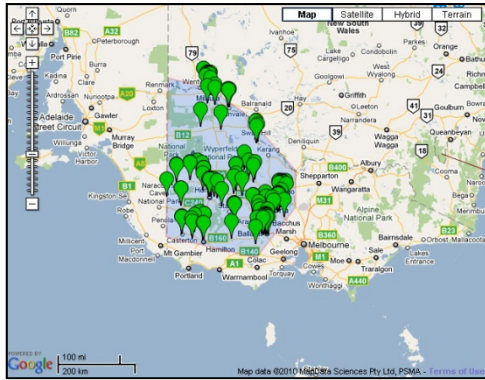
\*GNIS Geographical notification and Information System



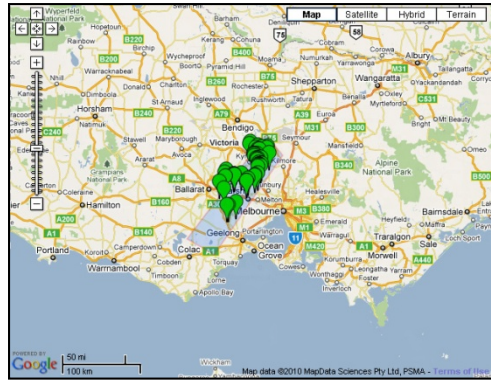
# CONFIDENTIAL REPORT

The following maps are delivery reports from Saturday March 6 2010. Icons below represent members of a specific group (Not all members). This is only a small part of the delivery report. Due to privacy reasons we are unable to show the full report.

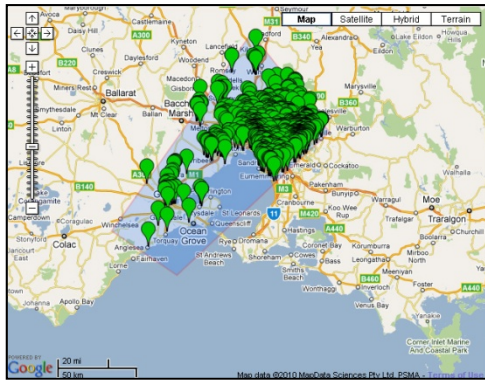
10:13AM



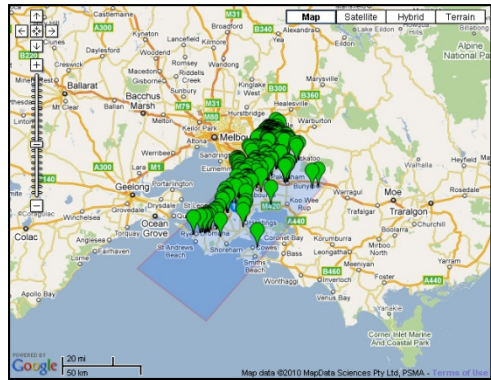
12:13PM



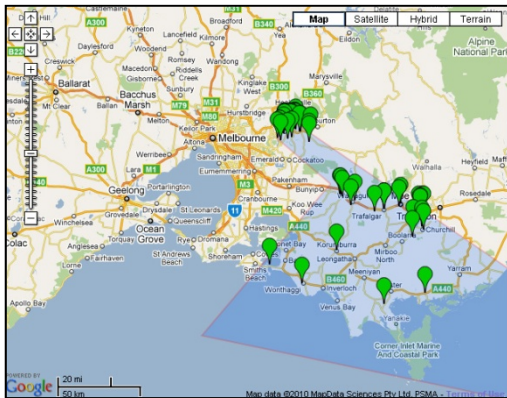
12:47PM



2:11PM



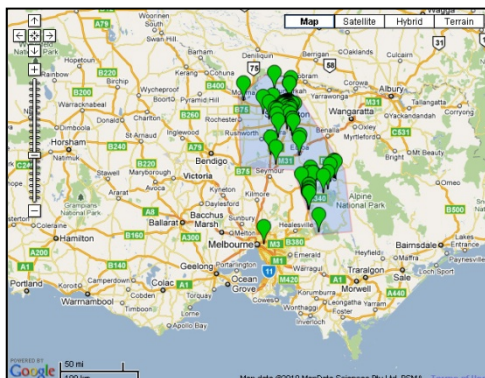
2:57PM



3:36PM



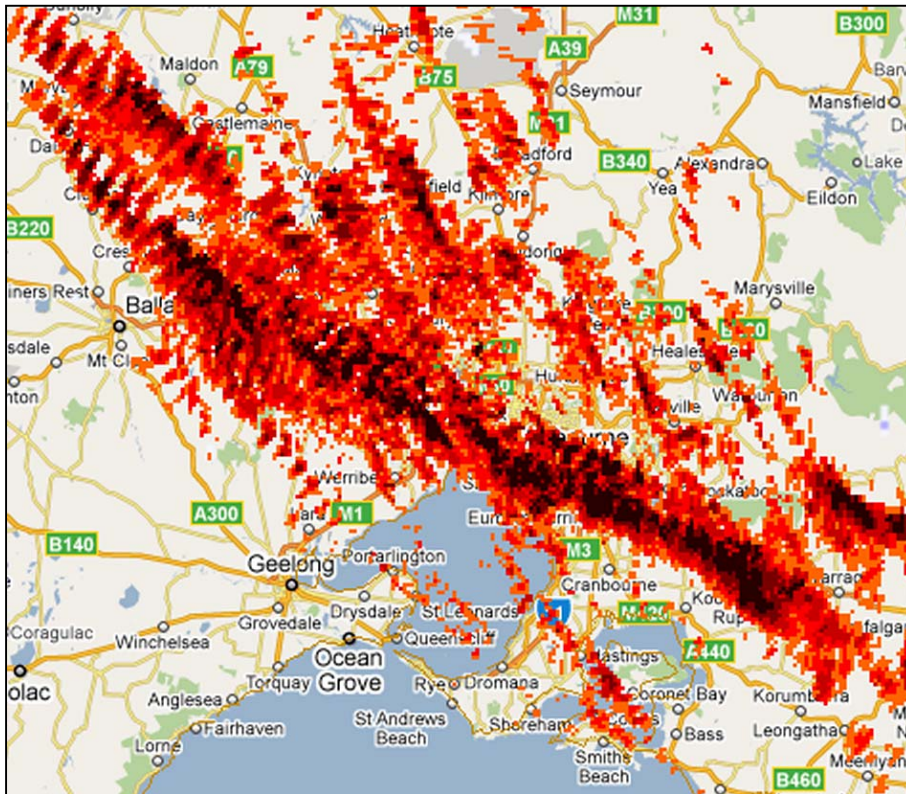
3:56PM





# CONFIDENTIAL REPORT

Radar track from the day



“SMS Message sent to mobile



“Thank you for the warning I put my car in the carport and left the misses out, hers is totalled many thanks”



## CONFIDENTIAL REPORT

### Member Experiences

Hi Kerry, because of the early warning alert I went straight onto the Bureau of Meteorology and checked out our area.....could see it coming and new it was going to be bad (Shepparton was in the direct path) and our town a little off the direct path. This enabled us to sandbag all the doors to our hotel and our damage because of this was fairly minimal. Would have been completely flooded out like a few business.'s in our town if we were not warned in time.  
Thanks for the service. Anne & Nick...Criterion Hotel in Tatura. Vic.

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Our next door neighbours, who don't have a garage, have had their car written off by their insurance company due to hail damage. Because of your early warning system we drove our car in off the street and parked it in the garage. It was completely undamaged during the storm.

We have also found the warnings valuable for less important things like picking up kids from school instead of letting them walk home and bringing in washing - small stuff in the scheme of things but useful in daily life.

Many thanks,  
Evelyn & Howard Sylven



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My early warning sms for the pending storms on 6th March 2010 in Melbourne arrived on my phone a number of hours prior, whilst I was out and about. With this information, I looked in to the details of the warning and saw it was going to be a big one although I never imagined it to be anywhere near as big as it was. I went home and prepared my property, moving cars undercover, pulling down external blinds, bringing in the more fragile things and making sure my dogs were properly secured and their shelter was ready.



I left the house to continue on with my day including visiting some relatives on the other side of town.

I was on the road near the city when the storm first roled in. I never saw any hail. Watching the news websites intently, i hear reports coming back that Ferntree gully (where i live) and Rowville have been hit by tennis ball sized hail with a lot of damage being caused.

I was dreading heading back home. I knew i prepared, but surely with this degree of hail i would have some damage somewhere. I had spoken to some neighbors before i left for home and they confirmed the tennis ball sized hail had hit our court. As i drove up my court in the dark i was looking around at the parked cars, window after window smashed, panels made to

resemble the surface of a golf ball. I got home. First, check the cars, no visible damage (in the dark), then up on to the roof to check my solar panels which i had covered in a blanket, no damage. My roof is a flat metal roof so i didn't expect any damage here. I checked the Plastic roof section, got lucky here, no damage, shed, no damage, house windows, no damage.

After this initial survey and another look in daylight the following day, i found only 2 very minor dents on one vehicle which are not the sort worth fixing (i have been quoted \$200)

If i had not prepared, i would have ended up like many of my neighbors with tens of thousands of dollars damage and the inconvenience of living with waiting for repairs and dealing with insurance claims.

I would not have known to prepare without the SMS from "The early warning network"

A car yard nearby had nearly their entire stock damaged and the rumor is that they only had partial



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insurance. Had they had an early warning, they could have fitted the majority of their stock in to the mechanical workshop avoiding much of the damage they have.  
Thankyou EWN. Keep up the good work. Matt – Ferntree Gully

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Your EWN helped me because I got to my work site just before the rains and hail could come down. Infact I made sure my car was covered up too. All in good time.  
Lorraine Rodrigues

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I would like to thank you for the Early Warning SMS - I was out shopping, when I received the Warning SMS, and so, I immediately left what I was doing and drove home - parked my car securely in the garage and locked the door... I was safe and so was my car...

Unfortunately, my husband does not get the SMS's directly from the Early Warning Network (as I forward the SMS's I receive, to him). For some unknown reason this time he did not get my SMS either, and as a result, his car was badly damaged - looks like it will be a write off - with the car dented all over (the dints the size of oranges) and a cracked window...

We are glad though, that at least one of our main possessions was spared on this occasion, as we weren't so lucky 7 years ago when one of these Hail Storms hit, and unfortunately damaged both our cars. I had a convertible with a soft top, and the roof was shredded to pieces at that time. (Perhaps, we would have been spared on that occasion also, had we had the Early Warning Network SMS's in place back then).

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I live in Rowville and we suffered a lot of damage from the hailstorm. I was able to close our garage door (saved two cars from damage) and pull all my washing in off the clothesline (3 loads on a Saturday) before the storm struck – my clothesline is having to be replaced as it was damaged! We kept an eye on the storm via Bureau of Metreology as well,. We were home and had the dog inside before it hit. I appreciate the alerts, I actually signed up more for alerts while I am at work as my workplace sells stock that needs to be weighted down on windy days, not knowing it would affect me at home as well. Thanks - Gail

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I'm Casey. I got caught in the storm at Belgrave. The EWN tip was helpful enough that when I got the message We got under cover at the Belgrave Convention Centre Hall and it didnt come for bout another 10 minutes. Here is 3 pictures, one is of the stairs with all the hail, another is a piece of hail that hit me in the head and another that hit me in the eye.

The hand that is holding the hail is big (cause the hail in my hand was the size of my whole palm).

But thought I'd give you this . . . I got a couple video clips but not sure if you wanted them. If you do let me know and I can send em to ya.

Casey xx

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I greatly appreciate the early warning system and so do the staff where I work. The recent rain storm that flooded Elizabeth Street in Melbourne occurred around going home time (this seems to be the trend in Melbourne) was a good case in point. I asked my staff to put the warning on the intranet and they forgot to so many staff were caught out when they went home - myself included. I was drenched.



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A previous episode was maybe three years ago when thousands of homes and traffic lights were without power in Melbourne due to a substantial storm. That was also around going home time. It allowed some staff to leave early and miss most of the traffic chaos.

The Melbourne hail storm was on a Saturday but I received the message just after I had removed most of the weatherboards of the western side of my house (the most exposed side). I was able to get cover up in time to prevent serious damage to the house and to my friend and me from golf-ball sized hail (no exaggeration – this is the first time I have seen such a thing). The Cancer Council buildings sustained minor damage but nothing that could we could not handle.

The service is great, accurate and useful. Thank you so much  
- Garth Stewart  
Corporate Services Manager, Cancer Council Victoria



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I was one of the extremely fortunate folk who receive extreme weather warnings from the EWN, thus giving me precious time to move my brand-new car into the garage before the recent hail storm in Victoria. Considering the carnage wreaked upon our neighbourhood, and the extensive hail damage my other vehicles sustained, I cannot praise this service enough!

Kind regards,

Lucas Randall  
Sassafras, VIC.

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I live in the western suburbs of Melbourne. I can only say how grateful I've been to have your email/text message service available to me. A property has been under construction next door to me now for over 7 months. I have had endless problems with flooding of my property from lack of stormwater connection and blockages in their stormwater connection. Had I not had your text message on Saturday 6 March, I would have been away from my home and unable to take some action to protect my property. I also forwarded your message on to my son who was about to travel from West Footscray into the CBD for Moomba. He told me later that had it not been for the message, he and his girlfriend would have been "in the thick of it" in the Melbourne CBD.

Thanks again for what is a wonderful service.  
Lois Stephen

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Thankyou for the great work you do. We got your report of the hailstorm coming and tried to act on it! We didn't quite make it home and got some hail damage to the car. But we did make it home in time to stop our house flooding from the huge amount of water that was coming down the street. We Thankyou Very much. Keep up the good work.  
Regards Jeanette

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This is William Yu from Melbourne. I believe this service is really helpful.

I received the email and SMS that day and cancelled my trip even though I didn't realize the hail storm was that ferocious. I also moved my car to the car port. Thanks a lot for the great service.  
Regards, William

## CONFIDENTIAL REPORT

Thank you for the warning I put my car in the carport and left the misses out, hers is totalled many thanks  
Christopher XXXXX (EWN edited for privacy reasons)

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I think the EWN service is amazing, we were caught up in the severe storms that lashed the Goulburn Valley a few weekends ago and getting an email and text message with a warning gave me enough time to protect my assets and as a result have minimal damage.

I am a SES volunteer and am quite surprised and amazed that your warnings ALWAYS beat the ones we get on our pagers by at least 45 minutes. Good Job.

Justin

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Very useful program. Diverted my car under a sheltered overhang as the storm hit. Thanks.  
**Hakan Gunday | Project Manager | Bovis Lend Lease**  
New Royal Children's Hospital Site Office, Flemington Road, Parkville , VIC

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Just a quick note to say how useful it was to have the prior warning about the recent severe weather, via SMS and email. I was able to warn others (who were not on the net at the time) and they were able to get their vehicles under cover before the hail arrived. Unfortunately, there were a number of other friends who weren't aware that the wild weather was coming, and paid the price through their vehicles being written off due to the damage that was sustained.  
Bryan W. Simm

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Whilst away on holidays i got the message regarding the damaging winds and large hail stones. I phoned home to inform the rest of the family there, they then packed up any loose items in the yard and moved the new car from the driveway to the garage... saving it from damage.

Brilliant service... Keep up the great work.

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We have been signed on to EWN now for quite some time. Even prior to the devastating bushfires of last year we have been well warned in all events. Our friends and family are also signed up which was a relief as the bushfires were a real threat for many of them as well.  
I am now convinced EWN is crucial. On the Saturday of the hail storms my family and I were having a lovely bbq with friends at their home in the hills. No possible sign of a storm. Out of no where the terrifying storm arrived. We were completely helpless as we watched all four vehicles be destroyed to the point of write off by hail stones the size of tennis balls. When the storm passed and I returned to the car I remembered the nappy bag in the back seat, complete with my mobile phone, the one the warning came on. Had I had it with me we would have had sufficient time to have us all out of harms way! We are just grateful no one was hurt. If this helps to illustrate how important such a service is then I am happy to lend my support. My mobile is now permanently attached! 20 minutes of mahem and weeks later we are still looking for cars and are thousands of dollars out of pocket! Thanks EWN.  
Yours faithfully,  
Michelle Lewis

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On 6 March 10 my husband and I drove our Kombi van down to Doveton to watch my brother play cricket. Our two small children, and my friend, were with us.

We all got an early warning text at about the same time, warning of dangerous storms approaching. We decided to pack up our picnic and leave for home to avoid the storm.

As it happened, we didn't avoid the storm - we got stuck in the middle of it. Fortunately we were



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driving our Kombi and not our other car, which would likely have been destroyed.

We are all extremely supportive of the EWN network and believe that on the 6 March 2010 it probably saved lives. Picnic-ers, motor cyclists, hikers...anyone hit on the head by one of those hail stones (we saw one the size of a cricket ball) could have been badly hurt or killed.

Regards  
Brigid Foster

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Thanks for the alert. We were able to move the car out of range. Captain Jack

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I failed to take advantage of the warning. As a result I suffered 15K of damage. (Perhaps the cars could have been put undercover).

Regards  
Gwyn XXXXX (EWN edited for privacy reasons)

This service has been hugely beneficial and potentially saved our brand new car from being hail damaged in the recent Melbourne hail storms. We were able to delay going out until the storm had passed as a precautionary measure and take all messages received very seriously - thank you!!  
Charmian Gaskill

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Your warnings have been extremely helpful to me and my family. Recently members of the family were in Mildura, Vic. and were able to locate to a safer place due to my passing on your warning to me about that area. They had been camped by the river for water skiing races!

Also just before the hail storms in Melbourne, I was about to leave home to go shopping when your alert came through to my mobile phone. I heeded it as your warnings are spot on so even although the sun was shining brightly, I left my car in the garage and me safely in the house and any likely missiles from the garden were secured. Fortunately there was no damage to me or my property although my suburb did bear a fair share of the ferocity of the hail storm.

Thank you so much for this very much valued service

Regards  
Roberta S Ashby

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## Conclusion

**It is quite clear the system saved people (and insurance companies) from considerable loss during the March 6 Melbourne hail event.**

Detailed in this report is some of the feed back we have received for the Melbourne hail event.. We have a lot more feedback a lot of which reveals the behavior of those receiving warnings...and those who did not. Evident is that:

1. Many people were either entirely unaware of the approaching storm or its nature
2. EWN members took heed of our warnings and successfully acted to protect property
3. Many more people other than EWN members were alerted as a result
4. Significantly more property could have been protected if assistance were provided to EWN

Borne out by this feedback is confirmation from previous survey results that in addition to taking action to protect property, recipients (83%) when they are able to log on to BOM website to continue to monitor the event and 92% tell others. It is is not unusual for one warning to be distributed to hundreds of others. (*I have received back emails that have done the rounds with hundreds on the distribution list*)

EWN is the only location based delivery system for severe weather in the world. Over three years of experience and technology development have produced a unique IP that is proven and highly effective in the protection of property.

**“EWN has provided early warning to its members for every severe weather event experienced in Australia since September 2007, including targeted alerts on Black Saturday.”**

This is one example of many. For more such reports please contact the author Kerry Plowright at the address provided or [kerry@ewn.com.au](mailto:kerry@ewn.com.au) on mobile 0403147197 or phone (07) 55904173