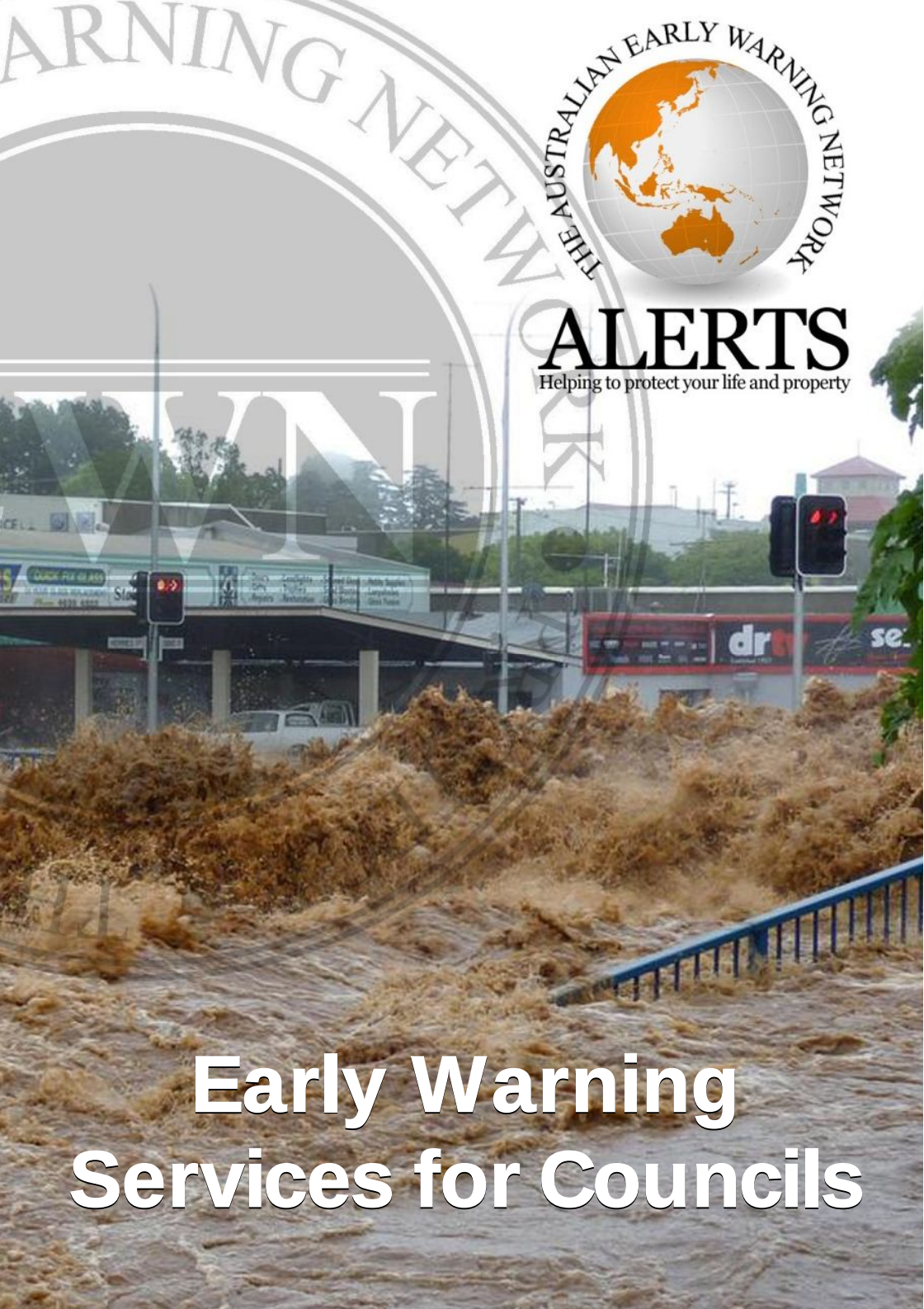
THE AUSTRALIAN EARLY WARNING NETWORK

ALERTS

Helping to protect your life and property



Early Warning Services for Councils

AT A GLANCE

EWN provides early warning services, technology and systems for emergency management and public notification purposes.

Features of the service and technology:

- **24x7 monitoring and early warning of all natural hazards**
- **Geographically targeted warnings to emergency management and/or public as required**
- **Mobile (Android/iPhone) alert applications**
- **Flash/creek flood monitoring and alerting**
- **Scaled warning types from threat advice to imminent danger**
- **Multi – channel, with capacity to simultaneously broadcast to one or one million recipients over mobile (SMS), email, landline, fax, web, desktopALERT™, Facebook and twitter – within three minutes*.**

Costs starting from $49mth

Just some of our customers, all sizes and across all industries

The Early Warning Network (EWN) operates Australia's only location based severe weather and incident early warning service. Nationally EWN monitors potentially dangerous incidents and tracks severe weather in real time alerting people directly in danger. Events include storms with potential for hail, flash flooding or damaging winds, fires, tsunami etc. The service is available to the public, business and government.

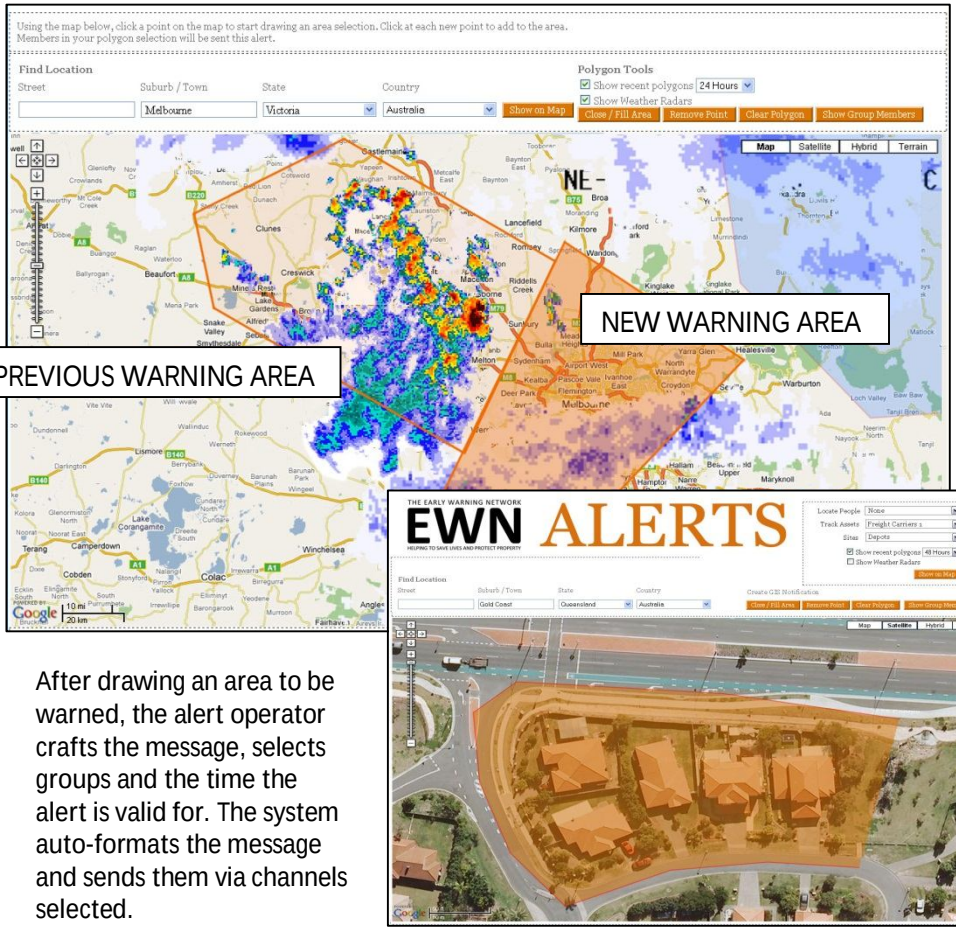
A key element of EWN's service is the Geographic Notification and Information System (GNIS) which enables true location based services – in other words, sending warnings based on your registered or physical location at the time.

The system can simultaneously broadcast one or one million alerts and notifications to individuals, groups or persons in selected areas over multiple communication mediums. Alerts are sent via mobile (SMS), email, landline, fax,

web, twitter, facebook and desktopALERT™. The system can accurately send notifications to just those that need it within ten metres of their physical or registered location.

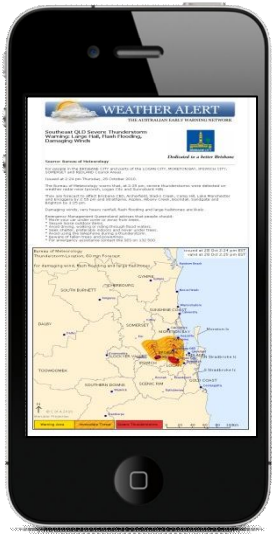
EWN has been continuously operating since late 2007 and is the only operator of such a service anywhere.

Example of alert map



After drawing an area to be warned, the alert operator crafts the message, selects groups and the time the alert is valid for. The system auto-formats the message and sends them via channels selected.

Alerts are sent simultaneously over multiple channels



A critical component of the EWN capability is the ability to define a geographical area likely to be impacted by severe weather and the ability to send alerts to all subscribers within the defined area.

When a resident registers to receive warnings, the system automatically geo-locates their address as a latitude and longitude (lat/long). The system utilises the lat/long to determine if a person is in a defined alert area - accurate to approximately ten metres. In other words, if need be just one house/building or property could be selected and alerted.

Likewise, if a registered mobile device moves into an active warning area it will be alerted.

EWN in Local Government – Brisbane City Council

How EWN works with Brisbane City Council provides an example of how future disasters might be mitigated. Like most authorities, Brisbane City Council has identified areas vulnerable to specific and predictable threats. In Brisbane, EWN's

warning system maintains shape files for various high tide events as well as areas prone to flash flooding. For example, the system accurately identifies anybody living on or below a 1.8m, 2m high tide mark. These people can subsequently be warned over multiple channels with the click of a button. This ensures only those that need it; get it, thus avoiding confusion and panic. These capabilities are further augmented with stream and flood gauges that trigger alerts into the EWN system when water levels reach a certain height or rainfall over a thirty minute period exceeds set parameters.

Better Informed Communities –discharging duty of care

EWN's multi-channel system provides any member of the community the most opportunity to be warned of an event. Aside from being telepathic, EWN reaches at risk residents over all available channels. Naturally whether a resident decides to utilise this is up to them, EWN has proven that opt-in systems are highly successful and work well in tandem with the Emergency Alert system. Following Brisbane; NSW State Water, Lake Mac City Council, Lockyer, Somerset regional councils, SEQ Water and many others are meeting the need to warn and inform over multiple channels to those at risk. Residents who opt-in are actively seeking more information in a timely manner. This permission to warn and inform over multiple channels results in a community that is better prepared. Opt-in permits local emergency management and councils to cover a far greater range of contingencies with greater control of the message they wish to convey to their community.

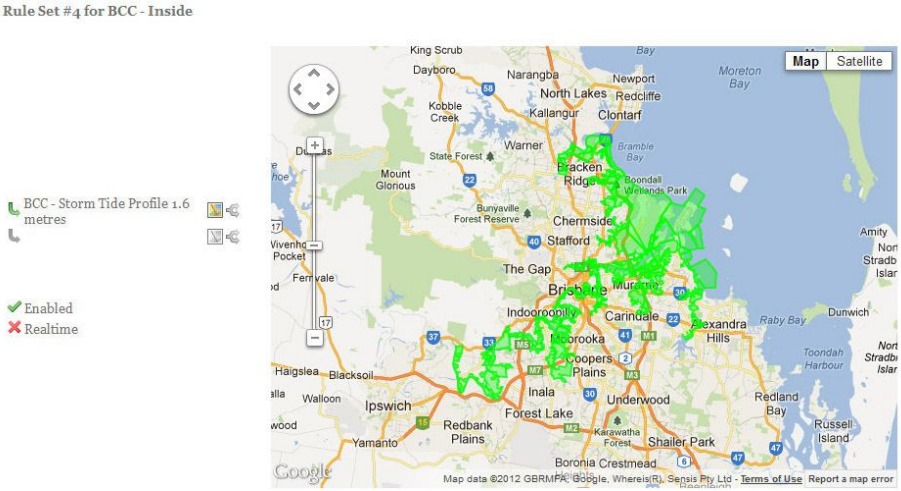
The ability to communicate with the public using email, web, mobile and social networks results in greater community resilience. This is a mechanism and opportunity to help educate people in high-risk regions to prepare for and respond to a potential emergency or natural disaster.

Bushfire and Creek Flood Event Notifications

Two years ago EWN developed Auto Alerts for bushfire warnings. This process automatically geo-locates fire incidents and sends messages to anyone located within 2km of that location – namely Watch and Act and Emergency Alerts. We also do the same for flash flooding. Brisbane City Council operates the Flood Wise system. This system utilises a network of gauges that measure rainfall, creek and river levels within areas vulnerable to flooding or flash flooding. A number of these are connected to the EWN system. When activated they send messages via SMS into the EWN Alert Engine. Similar to the bushfire capability these warnings can be automatically delivered to those registered to a group or to a defined

geographic area. We currently capture these alerts so the Alert Operator can authenticate the warning (Cross checks rainfall and other data) before sending it.

The BCC 1.8 king tide polygon used along wit 1.6 and creek flood polygons for alerting



Close up of inundation area

The EWN system can import, reference and geo-locate external databases or recipients can register online, via mobile or by mail.

REGISTRATION PAGE

To register for Community Messaging, you will need to provide address details, a
phone numbers. If you experience any difficulties or do not have an email addres
9000.

1 Login Details
Please enter your email address.

E-mail Address

Confirm E-mail Address

2 Who Are You

Title

Your First Name

Surname

3 Your Location
We only send you alerts for threats happening in your area.

Street Name & Number

Suburb / Town / Locality

Postcode

State: Queensland

4 SMS Alerts
A mobile phone number must be entered if you wish to receive FREE text alerts.

Mobile Number (0400 123 456)

5 Voice Alert
For severe events, we can also attempt to call your landline phone using text to voice alerts.

Landline Number (02 1234 5678)

Member Records

The system maintains detailed history and records for all recipients.

Terms and Co

Townsville City Co
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messaging mediu
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- any inaccuracie

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Member Profile

Registered members and organisations can log back into the system to manage locations, contact details, methods, types of alerts, history and other settings.

Warnings You Can Understand

Recent comments to the Queensland Floods Commission of Inquiry have reflected on what 'meaning' a recipient might derive from a short message and the potential for undesirable behaviours that could place people at greater risk. This is why EWN seeks to provide context and situational awareness through a range of alerts leading up to an event. EWN issues the following types of warnings for severe weather:

1. A national **Severe Weather Outlook** (daily). This provides emergency and OHS managers of large distributed organisations situational awareness at glance;
2. The **Severe Weather and Rainfall Alert** produced for specific locations daily. This expands on situational awareness with a detailed assessment and forecast;
3. **Pre Alerts** are issued to the public within vulnerable locations on days of high threat. If residents receive one of these alerts from us, they need to pay extra attention and take care.
4. **Severe Weather Alerts** are issued over multiple channels for locations expected to be impacted within minutes or hours.


WEATHER ALERT

THE AUSTRALIAN EARLY WARNING NETWORK

Thunderstorm and Rain Threat Advice

BRISBANE CITY

Dedicated to a better Brisbane

THUNDERSTORM/RAIN THREAT ADVICE FOR BRISBANE
Thursday 3 March 2011

An SMS or phone message HAS NOT been issued with this email. An alert via SMS or phone will be issued if appropriate.

This advice is a heads-up for possible severe thunderstorms later today, this evening and overnight. The main threat is flash flooding though damaging winds are possible in some locations. Areas of rain with some moderate to heavy falls are likely during Friday, persisting until early Saturday.

Recipients are advised to monitor media a

Brisbane forecast from the BoM issued at
A shower about this morning, increasing i
Light to moderate N/NE winds. Friday: Sh

THE EARLY WARNING NETWORK
EWN
HELPING TO SAVE LIVES AND PROTECT PROPERTY

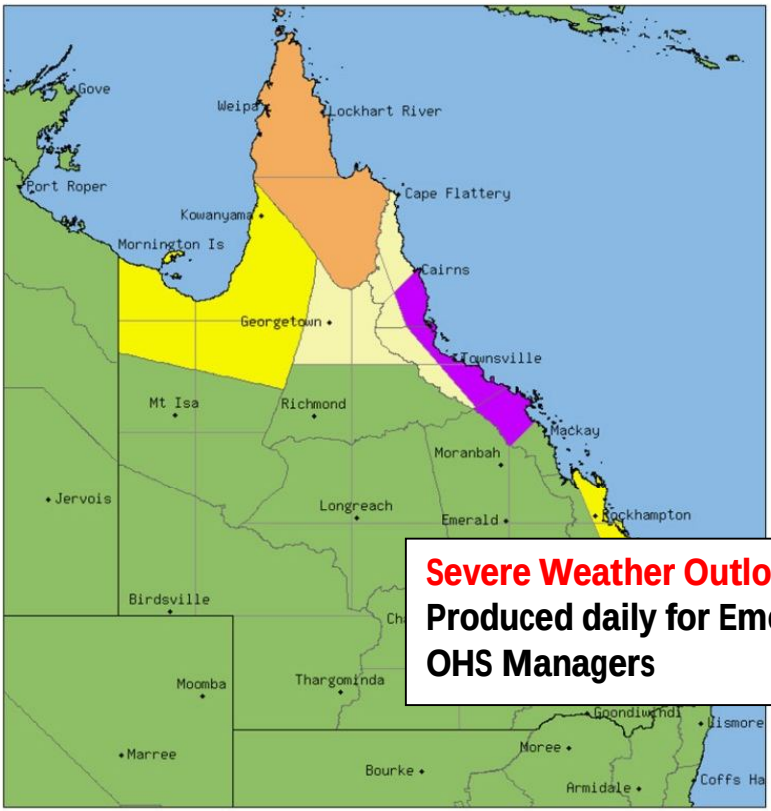
BoM Radar | Early Warning Network | Unsubscribe

Pre Alerts

Produced daily but only issued to vulnerable locations on days of high threat

THE AUSTRALIAN EARLY WARNING NETWORK

Radar | EWN Warnings | BoM Warnings | Threat Maps | Daily Brief

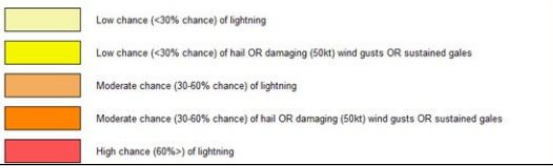


Severe Weather Outlook

Produced daily for Emergency and OHS Managers

Threat Maps:

The following map lists lightning and windd threats for a 24 hour period from 9am the 1 9th of March, 2012 to 9am the 20th of March 2012. It also includes an "exceptional" category for extreme weather events. During this 24 hour period, mudslides occurred through Cairns homes and job sites, and a tornado occurred in Townsville (both within the exceptional risk zone)..



Severe Weather and Rainfall Alert
Produced daily for specific locations

WEATHER ALERT

THE AUSTRALIAN EARLY WARNING NETWORK

Severe Weather and Rainfall Alert

Issued at 0900, 1st of January, 2011 for Brisbane

Today's Severe Weather Threat is: **High**

Discussion: A trough will bring some late afternoon and evening showers and thunderstorms today across the Brisbane region. Due to the very strong instability there is the high chance of hail and strong winds. Overnight storms will weaken into rain areas with the rain clearing during the early to mid afternoon. A drier change will then bring fine weather for Wednesday and Thursday but some isolated showers and storms could redevelop on Friday but at this stage these are not expected to become severe.

Weather Brief

	Mon 1st	Tue 2nd	Wed 3rd	Thu 4th	Fri 5th
Maximum	33	28	29	30	31
Minimum		23	21	22	23
Brief Forecast	late storm	rain periods clearing later	fine	fine	Chance late shower/storm
Max Rainfall Chance (9am to 9pm)	70%	80%	0%	0%	40%

Chance of Rainfall

	Mon 1st	Tue 2nd	Wed 3rd
0900 - 1200	0%	85%	0%
1200 - 1500	10%	65%	0%
1500 - 1800	70%	15%	0%
1800 - 2100	70%	5%	0%
2100 - 0900	80%	0%	0%
24 hour rain	15-25mm	15-20mm	0mm

Severe Weather Threat - Next 24 hours

	Chance Hail 2cm	Chance wind gust 65km/h	Chance wind gust 90km/h
0900 - 1200	0%	0%	0%
1200 - 1500	10%	10%	5%
1500 - 1800	55%	70%	60%
1800 - 2100	25%	60%	35%
2100 - 0900	10%	15%	5%

THE EARLY WARNING NETWORK

NEW MOBILE SITUATION ROOM FOR EMERGENCY & OHS MANAGERS

Brings together all hazard warnings, observations and monitoring tools

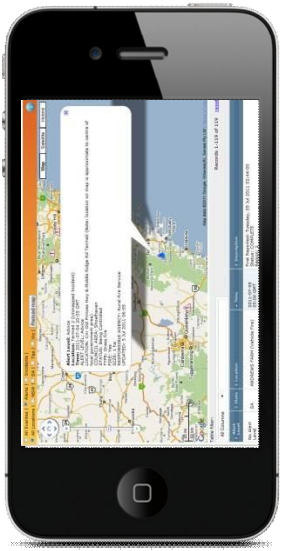
MOBILE SITUATION ROOM

RADAR

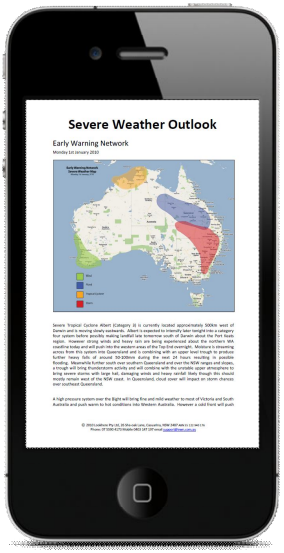
CURRENT EWN ALERTS

NATIONAL OVERVIEW

NATIONAL FIRE/INCIDENTS MAP



NATIONAL/STATE SEVERE WEATHER OUTLOOKS



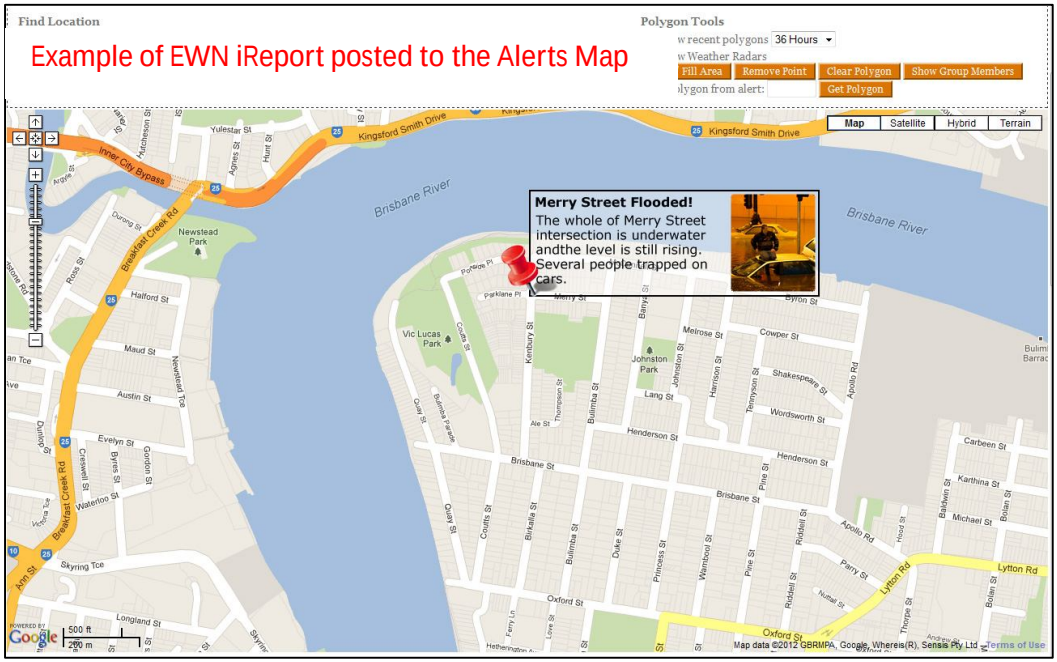
iPhone and Android Applications for Councils

EWN has developed its mobile alert platform with a specific focus on delivering features that will be useful to council and state authorities. These include:

1. Members submitting geo-tagged images and messages
2. The ability for administrators to view mobile/All members – and contact members at specific locations if required
3. Ability to view warning reports and contact recipients geographically in real time to gather critical intelligence
4. Enhanced capacity for members to rapidly share alerts

This will enable councils and state authorities to provide their members a FREE mobile application that will:

1. Provide warnings to residents based on their physical location
2. Warnings to include council initiatives/feeds
3. Residents will be able to report on incidents/emergencies or other council matters using geo-located images and messages.
4. When reporting incidences, the application will note which jurisdiction it is located in and will post reports to the responsible administrator



iPhone and Android Applications for Councils

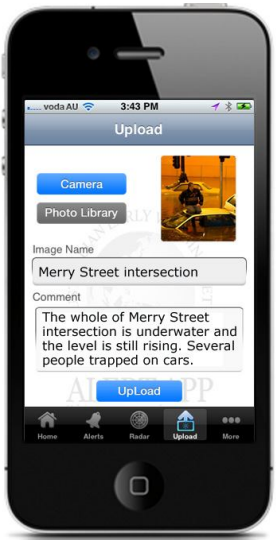
Refers to warning details

Checks radar

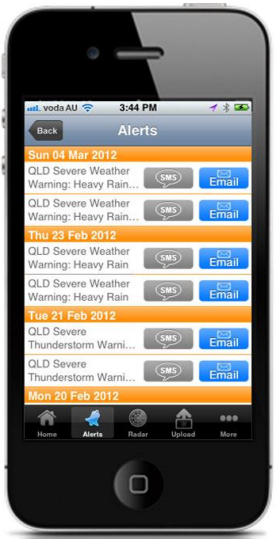
Forwards Message to contact list

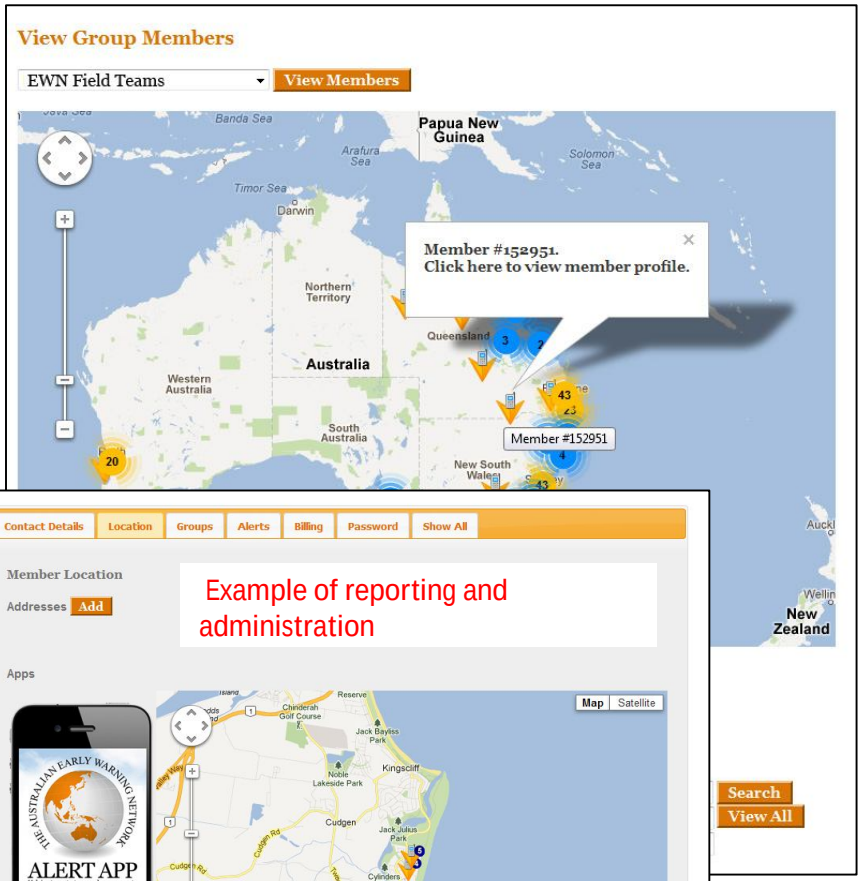
Forwards detailed Message to contact list

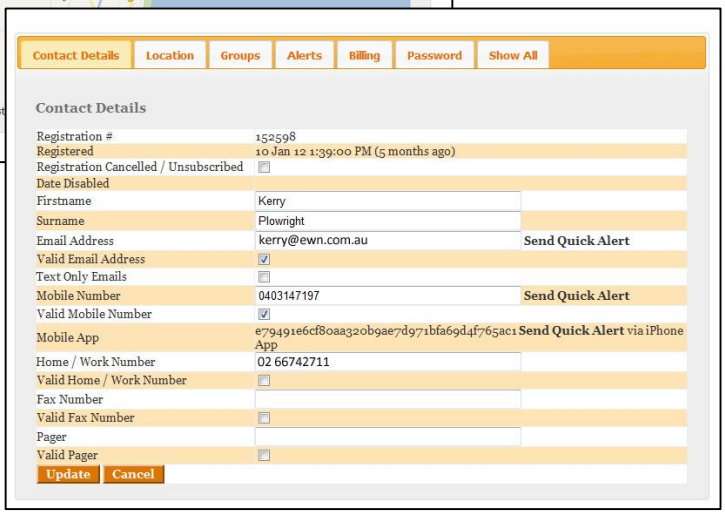
Reports on incidences sending geo tagged images



Review latest Alerts







Contact Details

Registration #	152598	
Registered	10 Jan 12 1:39:00 PM (5 months ago)	
Registration Cancelled / Unsubscribed	☐	
Date Disabled		
Firstname	Kerry	
Surname	Plowright	
Email Address	kerry@ewn.com.au	Send Quick Alert
Valid Email Address	☑	
Text Only Emails	☐	
Mobile Number	0403147197	Send Quick Alert
Valid Mobile Number	☑	
Mobile App	e79491e6cf80aa320b9ae7d971bfa69d4f765ac1	Send Quick Alert via iPhone App
Home / Work Number	02 66742711	
Valid Home / Work Number	☐	
Fax Number		
Valid Fax Number	☐	
Pager		
Valid Pager	☐	

Update Cancel

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CONTACT DETAILS
Kerry Plowright
Managing Director
The Early Warning Network
www.ewn.com.au
kerry@ewn.com.au
Mobile: 0403147197
Phone: 1300 703 017