



**Disaster Management Awareness And
Advocacy Working Session:
12-13 March 2019
Albert Luthuli Hall, Durban City Hall**

South African Weather Service

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Topics to be covered

- SAWS services to DM
- Severe Weather Warning System
- Weather Challenges Affecting KwaZulu-Natal
- Description and Precautions
- Recent rain in Durban area
- Outlook Weather Forecast for the Week
- How to access SAWS information
- Conclusion

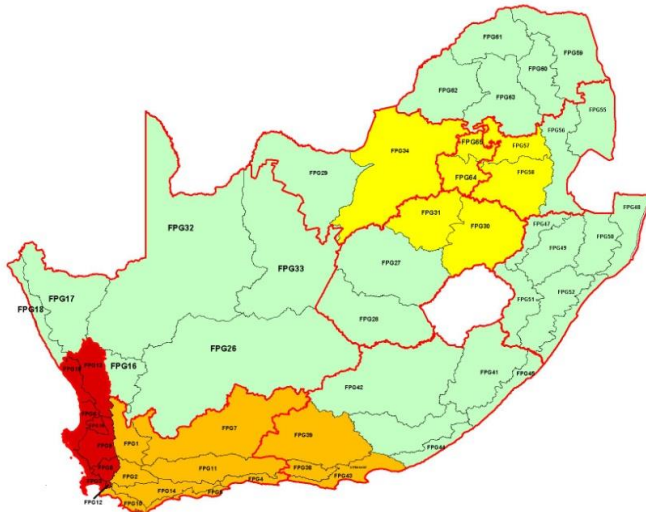
SAWS Services available to DM

- Climate Information (historical data and statistics)
- Analysis of Climate trends
- Short term forecasts, warnings and now-casts (very short range forecasts)
- Medium term weather forecasts and warnings
- Seasonal forecasts

Current Severe Weather Warning System

*Based on
weather
threshold*

No Alert	Special Weather Advisory	Weather Watch	Weather Warning
	Be Aware!	Be Prepared!	Take Action!
No hazardous weather expected	Early warning of <i>potential</i> hazardous weather	Weather conditions are <i>likely to</i> become hazardous	Hazard is <i>already occurring</i> or is <i>imminent</i>
	2 to 6 days	1 to 3 days	Next 24 hours
	Intense large weather systems Extreme heat Heat Waves Strong winds High discomfort	Heavy rain Disruptive snow Gales High waves Severe T/S Flooding Veldfire conditions	Heavy rain Disruptive snow Gales High waves Severe T/S Flooding Veldfire conditions



Future Severe Weather Warning System: Impact-based

Moving from:

What the weather will *be*:
(Meteorological thresholds)

- 50mm in 24 hours
- 35 knot winds



To:

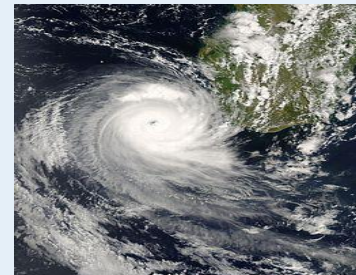
What the weather will *do*:
(Impact Warnings)

- Roads flooded
- Trees blown over
- Communities cut off



Weather Challenges Affecting KwaZulu-Natal

- Severe thunderstorms (hail, lightning, strong damaging winds including tornadoes, heavy downpours)
- Prolonged heavy rains (Cut Low, Tropical Moisture)
- Veld fires
- Heat waves (dehydration, hyperthermia, heat exhaustion)
- Extreme cold (frost)
- Drought (water shortage, shortage of pastures)
- Snowfalls on the Drakensberg mountains and high lying areas
- Tropical Cyclone



Precaution: Severe thunderstorms

Description: Severe Thunderstorms

Thunderstorms are violent weather phenomena that can be very dangerous. Any thunderstorm can produce any combination of **lightning, heavy downpours, very strong winds, hail and in some cases tornadoes.**

Precautions: Severe Thunderstorms

If outdoors seek shelter immediately but **DO NOT seek shelter, under a tree, under telephone and/or power lines, on hilltops, in isolated sheds, under unprotected gazebo's or picnic shelters.**

Avoid being near metal objects such as: - **fences, golf carts, telephone or power lines** and steel structures such as pylons and windmills. Do not: - **hold any metal object, use any electrical appliance, use the telephone, take a bath or shower.** Do not play sport during thunderstorms. Golfers and fishermen are at high risk.

If possible stay indoors well clear of windows shelter pets and cover vehicles, disconnect electrical appliances.

Precautions: Heavy rain/flooding

Description: Flooding / Heavy Rain

Flooding occurs when water overflows its normal channels such as streams and storm water drains. It can occur with **prolonged period of rain, with continuous heavy falls or in the form of flash floods which are usually associated with severe thunderstorms**. Heavy rain may also result in river flooding causing damage downstream to areas that may receive no rainfall at all during the flooding event.

Precautions: Flooding / Heavy Rain

If possible stay indoors and off the roads, **avoid crossing rivers and swollen streams** where water is above your ankles. If trapped in flooding in a vehicle, abandon it and climb to higher ground. In buildings, move valuables to a safe place above the expected flood level. **Switch off electricity** at the supply point to the building. In rural areas protect/relocate animals to a safe place on higher ground. Abandon your home immediately if evacuation is recommended, before access is cut off by flood water. **NEVER drive on a road covered by water**. You do not know how deep it is or if the road has been washed away. If the vehicle stalls, leave it immediately and seek higher ground. Be especially cautious at night when it's harder to recognize flood dangers.

Precaution: Veld fires

Description: Dangerous veld/bush fire conditions

Whenever there are prolonged periods of little and no rain coupled with warm dry winds, veldt or bush fires can easily be sparked and will spread rapidly in strong winds.

Precautions: Dangerous veld/bush fire conditions

Don't make **fires in the open** and/or leave fires unattended. Don't **throw cigarette butts out of cars** or in the open veldt. Don't throw **bottles in the veldt** as they can magnify the sun's rays and start fires. Prepare and maintain fire breaks in controlled manner. In the case of a large fire report it immediately and move away from the area to let the professionals deal with it. Never throw water onto a fire started by an electrical fault or fires started by oil or paraffin lamps. In this case sand or a blanket should be used to smother the fire.

Recent rain in Durban area

- Cut of low was situated over the south-west of the country with perturbation moving through the eastern parts of the country
- At the surface, the high pressure system was ridging to the east of the country advection low level moisture
- This resulted in some sort of under cutting
- Rainfall measured yesterday morning 08H00 SAST: FALE W/O 5.8mm, and Mt Edgecombe 65.4mm
- KwaMashu ARS: Between 15H30-16H00 SAST, the rain picked up from 0.2mm to 30mm but from 16H00-18H00, rain picked up to a total of 60mm
- From 20H00 to 21H00 10.00mm was measured and all and all® from 15H30 to 23H00 about 80mm was measured in KwaMashu

Outlook weather forecast for the week

- Cut of Low pressure system is slipping south of the country
- Scattered showers and thundershowers are expected to the south-west of the W-Cape, otherwise isolated in most of the areas of NW, FS, E-N-Cape, E-Cape, KZN and MP
- Watch: Heavy rain expected over the Cape Winelands and Overberg District of the W-Cape
- Watch: Severe thunderstorms expected over the E-Cape
- Rest of the week: Only Isolated thunderstorm expected over the western and southern parts of KZN.

Access to weather forecasts and Warnings

- Forecasts are available at www.weathersa.co.za
- On request at National Forecasting Centre and Regional Offices(FALE)
- Cell Phone App
- Media
- Social media (tweeter and face book)
- Warnings directly to DM's on sms and email

Conclusion

- SAWS will continue issuing weather alerts for public
- SAWS will continue working with all the stakeholders in order to disseminate weather alerts so that we can able to reduce the risk of loss of life and property damage
- We need to make sure that people, do understand our weather language and alerts

END