

# APPENDICES

# LOCAL EMERGENCY MANAGEMENT COMMITTEE MEETING

To Be Held

Wednesday, 10 May 2023 Commencing at 10.00am

Αt

Shire of Dardanup
Administration Centre Eaton
1 Council Drive - EATON



Our reference: LEMC Dardanup Japanese Encephalitis Enquiries:

Councillor Michael Bennett Shire of Dardanup Email Address records@dardanup.wa.gov.au

Date: 9 March 2023

Dear Cr Bennett,

Ref: MEE-R1339337 LEMC Meeting – Japanese Encephalitis

Thank you for your query regarding Japanese Encephalitis and any threat to piggeries in Western Australia.

Japanese Encephalitis (JE) has not been diagnosed in Western Australia.

The JE virus (JEV) is spread by mosquitos which become infected through primarily biting infected wild water birds including herons and ibis or infected pigs. Water birds are usually asymptomatic. Pigs, if bitten by infected mosquitos amplify the virus and shows signs including still born and mummified piglets. Humans and horses are referred to as "dead end hosts", which means they may contract the disease when bitten by infected mosquitos, have clinical signs, but do not play a role in spreading the disease.

The most likely pathway for JEV introduction into Australia is from movement of infected wild water birds or mosquitos into WA, however the main migratory path of wild water birds is from the north down the east coast of Australia. Movement of infected pigs or pig semen can also spread the disease. The WA Department of Primary Industries and Regional Development (DPIRD) has regulated the introduction of both live pigs and semen from the affected states in eastern Australia to minimise the risk of JEV entering WA via this pathway.

As the cycle of Japanese Encephalitis is through wild water birds and mosquitos with pigs amplifying the amount of virus, WA piggeries are undertaking additional measures to reduce the presence of mosquitos around their properties by reducing stagnant water and applying vector management controls. The WA pig industry is very alert to the signs of Japanese Encephalitis and DPIRD has provided sampling kits to all piggeries to assist with sampling to ensure early detection of the disease.

For more information on Japanese Encephalitis please refer to the DPIRD webpage found here, <a href="https://www.agric.wa.gov.au/japanese-encephalitis">https://www.agric.wa.gov.au/japanese-encephalitis</a> and

strategies for mosquito control here

https://www.outbreak.gov.au/sites/default/files/documents/je\_mosquito\_management\_i n\_piggeries\_final.pdf

Should JE be detected in Western Australia, DPIRD and the Department of Health will work together to inform people and pig and horse owners of the risks and measure for prevention and control to minimise the risk of JE.

Yours sincerely

Dr Michelle Rodan

Mehelh Rodan.

Chief Veterinary Officer, Western Australia Animal Biosecurity and Welfare Sustainability & Biosecurity (LEMC Appendix 8.2B)

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### **WESTERN AUSTRALIA**

### SOUTH WEST REGION

# SEVERE WEATHER RESPONSE PLAN

January 2023

### PREPARED BY THE

Department of Fire and Emergency Services – South West Region

APPROVED BY Superintendent Andy Wright - South West Region

**DATE OF APPROVAL:** 

**REVIEW DATE:** 5 years

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### 1 INTRODUCTION

### 1.1 Background

Emergency Management (EM) legislation in WA is detailed in the Emergency Management Act 2005. Further policy outlining WA EM arrangements are contained in State Hazard Plan – Severe Weather. Legislation, supporting regulations and policy allocate responsibility for managing various emergencies to specific organisations known as Hazard Management Agencies. The Fire and Emergency Services (FES) Commissioner is the Hazard Management Agency (HMA) for the hazards of cyclone, flood and storm.

The State Hazard Plan – Severe Weather provides an overview of arrangements for the management of cyclones, floods and storms In Western Australia (WA) and contains information of prevention, preparedness, response and recovery. Collectively these three hazards are referred to as severe weather.

The FES Commissioner is therefore responsible for ensuring that all EM activities pertaining to the prevention, preparedness, response and recovery from the impact of severe weather on the community are undertaken. The FES Commissioner as HMA for severe weather has delegated these responsibilities to DFES.

### 1.2 Title

The title of this plan is the South West Region Severe Weather Emergency Management (EM) Plan (the Plan).

### 1.3 Aim

The aim of the Plan is to outline the regional arrangements to address the prevention, preparedness, response and recovery activities for a flood or storm event. The impact of cyclone in the South West Region (SWR) is not applicable.

### 1.4 Objectives

The Plan has the following objectives:

- a) To detail the hazard, describe the concepts and identify the roles and responsibilities for all organisations involved in the management of the flood and storm event;
- b) To establish emergency management principles for the management of the flood and storm event; and
- c) To provide the basis for flood and storm EM planning at local level.

### 1.5 Authority

DFES is responsible to discharge the duties of the HMA and Controlling Agency for severe weather emergencies, in accordance of the Emergency management Act 2005 and State EM Policy section 5 and State EM Plan section 5.

### 2 HAZARD DEFINITION AND IMPACT

The South West of Western Australia is subject to severe weather systems that can cause loss of life and significant damage to communities, businesses and industry. These weather systems can include large scale features such as winter-time cold fronts or can be more localised such as severe thunderstorms resulting in floods and storms.

#### 2.1 Flood

The SWR are most likely to be impacted by two types of flooding: riverine and flash flooding. Other types of flooding may include back-water flooding, dam burst and storm surge.

### 2.1.1 Riverine flooding

A riverine flood occurs when water levels rise over the top of riverbanks due to excessive rain from weather systems producing widespread heavy rainfall. The flooding of rivers, creeks, lakes and basins following heavy rainfall is the most common form of flooding in WA. Historically, most floods in the South West occur during the winter however at present, however, summer rainfall is likely to cause almost as many flood emergencies in the south as winter rainfall.

### 2.1.2 Flash flooding

Flash flooding, is generally defined as flooding occurring within approximately six hours of rain, usually results from relatively short intense bursts of rainfall, commonly from thunderstorms, and is characterised by rapid rises in water-levels. Urban areas with poor drainage systems are particularly vulnerable to flash flooding. Flash floods are typically localised, rapid onset events and difficult to forecast. It is therefore difficult to provide effective warning against this type of hazard.

### 2.1.3 Back-water flooding

Back-water flooding occurs when the main stream of a watercourse is in flood causing the water level at the junction of tributaries to back up into those tributaries. The addition of flood run-off from the tributaries causes high back-water in the lower reaches of the tributary.

### 2.1.4 Dam burst

Dam burst is considered a flood event. The Water Corporation is responsible for dam maintenance and monitoring of public dams. Private dam safety is the responsibility of the dam owner.

### 2.2 Storm surge

Storm surges are powerful ocean movements caused by wind action and low pressure on the oceans surface. These types of events can swamp low-lying areas.

For further information on the flood hazard refer to the following websites:

- Bureau of Meteorology: http://www.bom.gov.au/water/floods/index.shtml
- WA Department of Water and Environmental Regulation: <a href="https://www.water.wa.gov.au/planning-for-the-future/flood-planning-andmapping">https://www.water.wa.gov.au/planning-for-the-future/flood-planning-andmapping</a>

#### 2.3 Storms

WA is impacted by two distinct types of storms, one type occurring in the warm season and one occurring in the cool season.

### 2.3.1 Warm season storms

Warm season severe thunderstorms generally occur October to April and can occur anywhere in the state. Weather phenomena associated with warm season severe thunderstorms are:

- Wind gusts of 90 km/h or more;
- Very heavy or intense rainfall that may lead to flash flooding;

- · Hail with a diameter of 2cm or more; and
- Tornadoes.

#### 2.3.2 Cool season storms

Cool season storms (generally May to September) are mostly associated with the passage of cold fronts and are usually confined to the South West Land Division, particularly coastal parts. Damage may be very localised and caused by weak tornadoes associated with a cold front or damage may be widespread and associated with the passage of a very intense cold front. Weather phenomena associated with cool season severe storms are:

- Mean winds in excess of 62 km/h or wind gusts of 90 km/h or more over land;
- Very heavy or intense rainfall that may lead to flash flooding;
- · Tornadoes: and
- · Storm surge.

The passage of strong winter-time cold fronts can produce a storm surge which can cause abnormally high tides along the west coast causing inundation of low-lying areas along Geographe Bay. Large swell and wave action can cause severe coastal erosion during these events.

For further information on severe storms refer to the following website: <u>Bureau of Meteorology Severe Weather Knowledge Centre</u>

### 3 ORGANISATIONAL ROLES

The concept used in this Plan envisages the implementation of prevention and preparedness programs prior to the onset of a flood or storm to minimize exposure of the community to injury, damage and isolation. The Plan also relies on the activation of effective response and recovery strategies once a severe weather emergency has commenced to ensure that assistance can be provided in a timely manner.

A coordinated response to a severe weather emergency requires EM agencies and support organisations to undertake a variety of agreed and statutory roles responsibilities. It is recommended that each agency with a role or responsibility under this Plan has appropriate operational procedures in place in accordance with this Plan.

More detailed information regarding the roles and responsibilities of relevant agencies under this plan are detailed in Appendix C

### 3.1 Hazard management agency responsibilities

DFES as the agency delegated the responsibilities of the HMA, undertakes to validate developments in flood prevention strategies and measures and advise government agencies and industry, at various levels, on their implementation. The provision of advice on emergency management matters relating to flood mitigation would be primarily undertaken at Regional and Local levels by DFES through Local Emergency Management Committees (LEMC) and District Emergency Management Committees (DEMC). State level advice will be through State Emergency Management Committee (SEMC).

The SWR Superintendent will confirm the appointment of the Operational Area Manager (OAM)whose responsibility it is for activating and managing flood and storm response operations and for appointment of local SES unit Incident Controllers (IC).

The primary response to a flood initially comes from within each Local Government (LG) area with the regional organisations providing the support necessary for local organisations to function effectively. LEMCs therefore having the responsibility to ensure that emergency management planning is undertaken, and that such arrangements interface with the Plan.

DFES will undertake operational lessons management activities after all incidents

### 3.2 Local government responsibilities

The main responsibility for flood prevention rests with LG who is responsible for ensuring that the vulnerability of their communities to the effects of flooding is reduced. LGs can exercise their community responsibility in relation to flood mitigation by informed land use planning for vulnerable areas and by maintaining close working relationships with LEMC's and DEMC's.

Local arrangements rely heavily on liaison between the DFES, LGs and other government agencies involved in emergency management (EM).

Under section 38 of the *Emergency Management Act 2005*, a LG is required to establish one or more Local Emergency Management Committees (LEMCs) for the LG's district. The LEMC is to be managed and chaired by the local government, with representation from organisations and agencies that play a key role in emergency management within their district.

The functions of a LEMC, in relation to its district or the area for which it is established, are:

- To advise and assist the local government in ensuring that Local Emergency Management Arrangements (LEMAs) are established for its district;
- To liaise with public authorities and other persons in the development, review and testing of the LEMA; and
- To carry out other emergency management activities as directed by the SEMC or prescribed by the regulations.

Urban storm water flooding (flash flooding) has the potential to cause serious problems to communities due to its swift onset. This type of flooding does not allow adequate lead-time for warnings to be issued. LGs should analyse the hazard and put procedures into place to mitigate the effects of this type of flooding. This type of flooding contingency is not covered in the Plan.

In areas where the river system runs through more than one local government area, coordinated flood planning should occur. It is necessary for all LGs to be aware of and agree to prevention strategies that are put into place along the course of the river.

### 3.3 State and Commonwealth government agency responsibilities

State and Commonwealth Government agencies can have a significant role in the implementation of flood prevention measures especially around infrastructure planning and land use.

### (LEMC Appendix 8.2C)

### SW REGION FLOOD EMERGENCY MANAGEMENT PLAN

The responsibility for the collection of rainfall data rests with the Bureau of Meteorology who also issues flood warnings. The collection of river level and flow data is undertaken jointly by the Bureau of Meteorology (BoM) and the hydrology services of the Department of Water and Environmental Regulation (DWER).

DWER is responsible for providing information, advice and management of flood plans based on flood behaviour research and flood plain mapping of the State's major rivers. DWER uses data from past flood events and catchment modelling to understand flood behaviour and prepare floodplain mapping for the state's major rivers. This is used to guide land-use planning and development decisions and assists government, industry, insurers and the community to prepare for, and respond to a flood emergency.

DWER has floodplain mapping for many waterways across Western Australia. The DWER Floodplain Mapping Tool at <a href="https://www.water.wa.gov.au/planning-for-the-future/floodplanning-and-mapping/floodplain-development-advice">https://www.water.wa.gov.au/planning-for-the-future/floodplanning-and-mapping/floodplain-development-advice</a> represents the defined flood event (DFE) used to inform land use planning for each waterway. In most cases, the DFE represents the 1 in 100 (1%) annual exceedance probability (AEP) flood event.

The 1% AEP flood has a 1% chance of occurring in any given year. Floods larger than this will occur but are less likely. Floodplain mapping has not been completed for every waterway in Western Australia

The floodplain maps provided in the tool are intended to be used for general interest and as a land use planning guide. The maps should not be used by the public to make decisions during a flood emergency.

### 3.4 Incident Support Group

The Incident Support Group (ISG) who is made up of LG and other government agencies will assemble when requested by the HMA or the District Emergency Management Advisor (DEMA) to assist in the coordination of an incident and support the response arrangements for the incident.

### 3.5 Operational Area Support Group

The purpose of the Operational Area Support Group (OASG) is to provide strategic support to the emergency response, when multiple agencies need to be coordinated at a district level or multiple incidents are occurring simultaneously within one operational area.

### 4 PREVENTION AND MITIGATION

As the HMA, the FES Commissioner has overall responsibility for risk reduction aspects of flood and storm events, within the limitations of legislation, resource capabilities and capacity.

LGs are responsible for planning in their local communities by ensuring appropriate local planning controls, which need to be consistent with objectives and requirements set by the Western Australia Planning Commission (WAPC). LGs together with registered building surveyors, have responsibility for ensuring adherence to construction standards.

The Local Government Act 1995 empowers LGs to conduct mitigation activities such as earthworks or other works on land for the prevention or reduction of floods. DWER also has risk treatment responsibilities related to the development of floodplain management strategies which are empowered by the Water Agencies (Powers) Act 1984.

### 4.1 Mitigation strategies

Mitigation strategies contribute to the increased resilience of our communities. Floods and storms cannot be prevented, but strategies to reduce their impacts on communities can be developed and implemented.

### Key strategies include:

- Engineering solutions, such as the building and maintaining of levees;
- Land use planning and design decisions that avoid developments and community infrastructure in areas prone to hazards;
- Institutional strategies such as the development and enforcement of building codes;
- Design improvements to infrastructure or services such as roads and telecommunications; and
- Awareness campaigns to enhance knowledge of how to prepare for disaster events.

The complete list of key strategies adopted by the State associated with flood and storm can be found in Section 2.3 of the State Hazard Plan – Severe Weather.

Impacts from riverine flooding can be largely mitigated against by restricting construction of dwellings and other buildings in flood prone areas. Where this is not possible, engineering solutions, such as the building of levees can significantly reduce the risk of flood impact.

A number of the key risk strategies relevant for this Plan are:

Developing resilience in the community and minimising the vulnerability of communities to effects of flood and storm	DFES in partnership with local governments
Promotion of and participation in community awareness campaigns for 'at risk' communities	Local governments assisted by DFES
Identification of suitable buildings for designation as evacuation centres	Local governments in consultation with Department of Communities (DoC)
Maintenance of a register of potential evacuation centres	DoC in consultation with LEMC

Key mitigation strategies include maintaining structures to existing building codes and communicating to the community via websites and other media the importance of removing items that may become projectiles in high winds, such as trees or branches and outdoor furniture.

DFES, LGs, Geoscience Australia and the BoM provide a contribution to education programs developed to inform and educate the public on severe weather notification, risk and management. These programs focus on providing knowledge and skills that aim to encourage behavioural change and enhance community resilience.

### 5 PREPAREDNESS

The preparedness phase for severe weather events encompasses a range of activities that assist communities prepare for the impacts of floods and storm. It should be noted that there would be a certain amount of overlap between activities conducted during the Prevention and Preparedness Phases.

Preparedness activities may include:

- Understanding hazard exposures, vulnerabilities, impacts and triggers;
- Developing plans and arrangements based on risk assessments across the continuum of prevention, preparedness, response and recovery;
- Establishing, maintaining and enhancing capabilities and whole-of-sector interoperability needed to cope with and recover from floods and storms; and
- Supporting the resilience of communities by promoting activities to raise hazard awareness and strengthen core capabilities necessary to manage future risks.

Validating arrangements in severe weather events by conducting single and multi-agency exercises on a regular basis and by conducting detailed postoperative reviews of these arrangements.

DFES has the overall responsibility to raise, train and equip an emergency service organisation capable of assisting the community to combat the effects of floods. DFES also has a responsibility to ensure that emergency management planning in relation to floods is conducted at the local and regional levels.

#### 5.1 Planning and arrangements

A successful response operation to a severe weather event depends on sound planning, effective resource utilisation and a coordinated response which is timely, efficient and effective.

The concept of the Plan is to employ and coordinate the resources of State and Commonwealth government departments, authorities and agencies for severe weather operations. This concept is based on:

- Availability of the DFES 24-hour for receipt and actioning of weather alerts and warnings:
- Establishment of operational facilities at three levels (State, Regional and local), from which management of severe weather emergency management operations take place;
- Deployment of emergency service personnel;
- Provision of expert technical advice on severe weather impact modelling by State and Commonwealth agencies when requested by DFES;
- Provision of expert technical advice on roadways and transport routes by MRWA, when requested by DFES;
- Provision of expert technical advice on critical infrastructure by relevant agencies, when requested by DFES;
- Tasking of agencies in a coordinated manner in support of DFES. Agency procedures are then employed to carry out tasks; and

 Delivery of coordinated, accurate, timely and actionable information to the community.

Local government is responsible for the development of local emergency management arrangements. The LEMC is to provide advice to local government in this regard.

Whilst the activities listed above will generally be coordinated by the DFES, there are activities which individual agencies should undertake on a regular basis. A detailed list of agency responsibilities can be found in Part 8 of this document however, in general terms most agency activities should include the following:

- Reviewing internal flood plans and procedures:
- · Confirming the availability and readiness of resources;
- · Testing of communications systems; and
- Testing of emergency procedures.

These arrangements should be tested locally on a regular basis.

### 5.2 Community education and information

DFES, local governments, GA and the BoM provide a contribution to education programs developed to inform and educate the public on severe weather notification, risk and management. These programs focus on providing knowledge and skills that aim to encourage behavioural change and enhance community resilience. Campaigns include *FloodSAFE* and *StormSAFE*.

DFES conducts a series of community engagement programs and campaigns focused on providing knowledge, skills and behaviour change to achieve a greater level of community capacity and preparedness to respond to an emergency.

During severe weather events, DFES will provide community information in a coordinated manner through the Incident Controller and/or Operational Area Manager (OAM). Media and public information strategies are reviewed annually by DFES to ensure appropriate communication of severe weather information to the community.

### 6 RESPONSE

As the HMA, The FES Commissioner is responsible for the coordination of a response to flood and storm events. To facilitate these responsibilities, DFES follows strategic control priorities as outlined in the State Hazard Plan – Severe Weather (section 4.1.1).

The speedy recovery of a community affected by a severe flood is dependent on the actions taken during the response phase. Flooding, other than flash flooding, is not an impact disaster and as a result response can be affected immediately a flood warning is issued. This enables the HMA to ensure that strategies are put in place prior to the floodwaters reaching a threatened community to mitigate the affect. For example, levees could be checked and the evacuation of persons in the predicted flood area could commence.

In accordance with the State Emergency Management Framework, the management of a severe weather emergency is based on a graduated approach using the guiding principles outlined in the State Hazard Plan – Severe Weather (section 4.1.2).

### (LEMC Appendix 8.2C)

### SW REGION FLOOD EMERGENCY MANAGEMENT PLAN

### 6.1 Response arrangements

DFES will undertake a range or pre-emptive activities prior to the onset of the hazard, during the time of impact and reactively post impact including formation of IMTs and development of an Impact Statement to manage operations and ISGs or OASGs to support operations.

Locally the responsibility for the conduct of flood operations rests with the Incident Controller at local SES unit level. Additional SES resources may be deployed by the ROC. If further resources are required from other regions they will be requested through the State Operation Centre and deployed as directed.

If the impact of the flood results in two or more SES local units or government agencies becoming involved and the Regional Duty Coordinator considers the associated responsibilities are inappropriate for local Incident Controllers, the RDC shall establish a suitable management/coordination structure.

The level of implementation of plans and operational structures can vary considerably depending upon circumstances including the degree of threat to a community, the number of LG areas impacted by the severe weather event and whether a multi-agency response is required.

A successful response operation to a severe weather event depends on sound planning, effective resource utilisation and a coordinated response which is timely, efficient and effective. The concept of this Plan is to employ and coordinate the resources for severe weather operations. This concept is based on:

- Establishment of the South West Regional Operations Centre (ROC) and local operational facilities (SES) from which management of severe weather emergency management operations take place;
- The deployment of emergency service personnel;
- The provision of expert technical advice on severe weather impact modelling, impacts on roadways and transport routes and impacts on critical infrastructure by relevant agencies, when requested by DFES;
- Tasking of agencies in a coordinated manner in support of DFES and
- The delivery of coordinated, accurate, timely and actionable information to the community.

The LG is responsible for the development of local emergency management arrangements with the LEMC to provide advice to LG in this regard.

### 6.2 Resources

DFES is responsible for the overall provision and management of resources and personnel required to physically respond to a severe weather event, including acquisition, prepositioning and inventory management. Specific responsibilities include:

- Establishing, equipping, training and maintaining a Urban Search And Rescue (USAR) Task Force;
- Prioritising, procuring and allocating specialist equipment and vehicles; and
- Safely storing equipment and vehicles in locations that provide ease of access but protection from damage from hazards such as fires and structural collapse.

### (LEMC Appendix 8.2C)

### SW REGION FLOOD EMERGENCY MANAGEMENT PLAN

Emergency management agencies and support organisations are required to provide their own resources in the first instance and request additional resources from DFES if required. When the total resources of the region cannot reasonably cope with the needs of the operation, a request for assistance from State will be made through the ROC.

A list of available DFES local resources is included in Appendix???.

Add SES units, specialised equipment, materials, etc.

### 6.3 Notifications

DFES is advised by the BOM if severe weather or flooding may occur. The RDC will notify relevant parties of all warnings that are received, through templated notification emails of SMS messages. During an incident, the RDC will notify the relevant IC of any warnings that are issued.

### 6.3.1 Severe weather warnings

BOM issues Severe Weather Warnings whenever severe weather is occurring in an area or is expected to develop or move into an area. The warnings describe the area under threat and the expected hazards. Warnings are issued with varying lead-times, depending on the weather situation, and range from just an hour or two to 24 hours or sometimes more.

Severe Weather Warnings are issued for:

- Sustained winds of gale force (63 km/h) or more;
- Wind gusts of 90 km/h or more;
- Very heavy rain that may lead to flash flooding;
- Abnormally high tides (or storm tides) expected to exceed highest astronomical tide;
   and
- Unusually large surf waves expected to cause dangerous conditions on the coast.

### 6.3.2 Severe thunderstorm warning

BOM issues Severe Thunderstorm Warnings to alert communities of the threat of these more dangerous thunderstorms.

A severe thunderstorm is one that produces any of the following:

- Large hail (2cm in diameter or larger);
- Giant hail (5cm in diameter or larger);
- Damaging or destructive wind gusts (generally wind gusts exceeding 90 km/h);
- Heavy rainfall which may cause flash flooding; and
- Tornadoes.

Most thunderstorms do not reach the level of intensity needed to produce these dangerous phenomena so the Bureau of Meteorology does not warn for all thunderstorms.

#### 6.3.3 Flood watch

BOM is responsible for monitoring and predicting a flood and may issue a Flood Watch or Flood Warning.

BOM will issue a Flood Watch when forecast rainfall suggests that local and riverine flooding is possible. Its purpose is to provide early advice of a developing situation that may lead to flooding. A Flood Watch isn't a warning of imminent flooding.

A Flood Watch provides information about a developing weather situation including forecast rainfall totals and catchments at risk of flooding. It can also indicate how severe a possible flood might be. It provides links to weather warnings, other flood-related information, and contact details of relevant emergency services.

A Flood Watch can be issued up to four days in advance of expected flooding. They are updated at least daily and finalised once all areas are covered by Flood Warnings or the risk of flooding has passed.

### 6.3.4 Flood warning

BOM issues a Flood Warning when there is more certainty that flooding is expected at a particular location. Flood Warnings are more targeted and are issued for specific catchments and locations within catchments.

Flood Warnings typically include predictions about the level a river is expected to rise to. Where less data are available, Flood Warnings may include a statement about future flooding that is more general.

When there are insufficient data to make specific predictions, or in the developing stages of a flood, BOM will provide generalised flood warnings. These are based on forecast rainfall and knowledge of historical flood response. Generalised warnings advise that flooding is expected in particular river valleys but don't provide information about how severe the flood may be or precise locations.

BoM issues alerts through media outlets, email, internet, marine communications and aircraft communications.

### 6.4 Public warnings and information

DFES has developed a Community Alert System for use throughout the State where severe weather poses a risk to the community that are informed by BoM warning products, based on the amount of time until the severe weather is expected to affect communities.

During severe weather events, DFES will provide community information in a coordinated manner through the Incident Controller and/or Operational Area Manager (OAM).

The best way to keep informed during an emergency is to seek information from a variety of sources including:

- Going to the Emergency WA website (www.emergency.wa.gov.au);
- Staying in touch with neighbours, family and friends;
- Being alert and aware of your surroundings;
- Following DFES on <u>Facebook</u> and <u>Twitter</u>;
- Listening to ABC local radio; and
- Tuning in to 6PR in the metropolitan area.

### (LEMC Appendix 8.2C)

#### SW REGION FLOOD EMERGENCY MANAGEMENT PLAN

### 6.4.1 Emergency WA

Emergency WA (emergency.wa.gov.au) is Western Australia's official source of emergency information for Cyclone, Flood and Storm. Emergency WA provides information on a range of emergency incidents, and warnings where there is a potential threat to life or property. Warnings published on Emergency WA are simultaneously distributed to:

- DFES Emergency Information Line: 13 DFES (13 33 37)
- DFES Twitter at www.twitter.com/dfes\_wa
- DFES Facebook at <a href="https://www.facebook.com/dfeswa">www.facebook.com/dfeswa</a>
- ABC radio and other media outlets for the purposes of emergency broadcasting.

### 6.4.2 Telephone warning system

The Telephone Warning System (TWS) is a system to alert people within a specific location for any emergency where there is an imminent threat. The TWS provides warnings to fixed line phones (based on service address) and mobile phones (based on billing address and location based) in a defined area. The IC or IC delegate can request activation of the TWS in support of incidents and emergencies.

### 6.4.3 Standard Emergency Warning System

The Standard Emergency Warning Signal (SEWS) is a distinctive siren sound to alert the community to the broadcast of an urgent safety message relating to a major emergency. SEWS is intended for use as an alert signal to be played on public media such as radio, television, public address systems to draw listeners' attention to the emergency warning that follows. SEWS should only be used when issuing critical warnings where there is a need to warn people to take urgent and immediate action to reduce the potential for loss of life or property from emergency events. Note that SEWS is not required for all Emergency Warnings.

### 6.4.4 DFES flood community alerts

Once BoM issue a Flood Watch or Warning, DFES will provide alerts and warnings:

There are five warning levels that align with the expected timing of floods.

- **Prepare now for flooding:** Review your plan and prepare your home.
- Take action now for flooding: Relocate machinery and livestock.
- Prepare to evacuate due to flooding: Have your emergency kit ready.
- Evacuate now due to flooding: Go to a safer place with your emergency kit.
- Cancellation of flood warning: Avoid floodwaters, be careful driving.

### 6.5 Evacuation arrangements

Evacuation is a risk mitigation strategy that may be used to mitigate the effects of an emergency on a community. Evacuation centres should be identified in each LGs LEMA and are identified and established in partnership with LGs and Department of Communities (DoC). The DoC is responsible for maintaining a list and providing information on evacuation centres.

The decision to recommend evacuation shall be made by the DFES as HMA in consultation with the relevant Emergency Coordinator and OASG. Any evacuation shall be coordinated by WA Police. Security of evacuated areas is a normal WA Police responsibility.

### 6.6 Traffic management during emergencies

In order to ensure community safety, it is often necessary to alter the normal flow of traffic through an area affected by an emergency or its immediate surrounds. Traffic management at an incident is managed by the WA Police, Main Roads WA and LGs on behalf of the IC.

Closure of main roads may be undertaken as a flood control measure by the HMA. Closure of main roads is to be authorised by IC in consultation with Main Roads W A, WA Police, the LG and the OASG. The power to close roads is detailed in The EM Act 2005.

### 6.7 DFES regional procedures

The Regional Operations Centre (ROC) is the centre from which the RDC or Operations Area Manager (OAM) will coordinate the regional flood response operation. The centre also has co-ordination facilities, which may be used by the Local Emergency Co-ordinator and/or the Operations Area Support Group to co-ordinate resource support when requested by Incident Controller.

Management of Flood operations relies on the continuous exchange of information amongst emergency services and support organisations. This exchange can only be effective when each participating organisation is either represented by a senior officer in the ROC authorised to make decisions relating to financial/resource commitments by their agency or has such an officer who is readily able to be contacted. All participating organisations should regularly update their local contacts in the LEMAs.

On advice from the BOM of the Flood Warning, the RDC will distribute the warning to relevant stakeholders via TIMS. informs local SES units and appropriate regional agencies will also be notified directly.

The RDC will activate appropriate plans, including activating the ROC, discuss the need for community warnings with local ICs and undertake any pre-emptive actions that can be taken.

The initial response will be from local SES units with ICs monitoring the flood threat to the local community and provide regular Incident Situation Reports (ISRs) to the ROC. The ROC will compile all ISRs into a a Regional Situation Report (RSR) to the DFES State Operations Centre.

#### 7 RECOVERY

The HMA is responsible for initiating both relief and recovery during severe weather events. The recovery phase will in most situations, commence while the response phase is still under way and the two phases may exist in parallel for a period of time.

Generally once the severe weather threat to the community has subsided, the immediate lifesaving activities has ended and impact assessment is completed, the response phase may be considered to be completed. Recovery basically involves those processes undertaken to restore a community to the status it enjoyed prior to the impact of the emergency event. All LGs are to have LEMAs which include provisions for actions to assist in the short and medium recovery of the community.

### 7.1 Rapid damage assessment

DFES can employ its Rapid Damage Assessment (RDA) team to undertake the initial assessment of flood and storm impacts. The RDA can be requested by the IC through the ROC.

The RDA Team is deployed to conduct assessments of critical infrastructure and property for damage and loss after any significant emergency including fire, cyclone, flood, storm, earthquake, collapse and tsunami. RDA Teams will enter the affected area under the control of the IC and conduct these assessments in order to further inform the response and recovery effort.

### 7.2 Impact statement

An Impact Statement is used to collect information about all known and emerging impacts from a level 2 or level 3 incident. Where required an Impact Statement must be completed prior to the transfer of responsibility for management of recovery from the HMA to the affected LG(s). The information collected in an Impact Statement provides a point-in-time, concise summary of:

- · Known and emerging impacts,
- · Management actions currently in place,
- · Responsible agencies,
- · Future management actions required, and
- Changes to responsibility for impact management.

Transfer of responsibility to the LG(s) for the management of recovery requires the receiving LG to have a clear picture and understanding of all aspects of the incident and the immediate, short-term and medium-term actions it will be required to undertake to effectively manage the incident and associated recovery.

The Impact Statement should be developed in consultation with the members of the ISG, Local Government Recovery Coordinator/s and other relevant agencies. The HMA will assist relief agencies to deliver essential services in safe and accessible community-based locations.

The recovery phase may in some cases, be quite lengthy in duration, especially after the impact of a severe flood on a community. The responsibility for long term recovery assistance for local communities will be that of a designated recovery committee, who will assume the responsibility for the detailed coordination of the recovery process.

#### 8 AGENCY ROLES AND RESPONSIBILITIES

The DFES Commissioner, as the HMA for floods in WA has the primary organisational responsibility for the mitigation of these events, however it is only possible to fulfil this responsibility with, the support and assistance of other organisations and agencies as part of an integrated community response.

### 8.1 Agency responsibilities

The primary organisations and agencies that have a direct responsibility in the management or mitigation of the severe weather threat in susceptible areas of the South West Region of Western Australia and their responsibilities are listed below.

All agencies will have a responsibility to participate in the local government emergency management committees

A more detailed list of agency responsibilities can be found in Appendix C of the State Hazard Plan – Severe Weather.

Organisation	Responsibilities	
DFES	<ul> <li>Preparation and planning</li> <li>Discharge the duties of HMA for severe weather emergencies, in accordance with the Emergency Management Act 2005 and State EM Policy section 5 and State EM Plan section 5.</li> <li>Develop, implement and revise the South West Severe Weather Response Plan, in consultation with key stakeholders.</li> <li>Liaise with other agencies to ensure response operations are coordinated.</li> <li>Periodically test and validate local and regional/severe weather response plans.</li> <li>Recommend the adoption of risk treatment strategies to District and Local Emergency Management Committees.</li> <li>In cooperation with other agencies, provide communities with severe weather risk awareness, information and education.</li> <li>Raise, train and equip an emergency service capable of responding to the effects of a severe weather event.</li> <li>Liaise with local government in the provision of incident control centres.</li> <li>Facilitate the provision of assistance as required.</li> <li>Response</li> <li>Maintain a ROC and Incident Control Point/Operations Centre from which to coordinate regional support activities and manage flood operations.</li> </ul>	
	<ul> <li>Appoint an Incident Controller and Operational Area Manager as required.</li> <li>Activate the Regional Severe Weather Response Plan.</li> <li>Monitor "at risk" communities.</li> <li>Collect, collate and interpret operational information.</li> <li>Distribute Flood, Severe Weather and Thunderstorm Alerts and Warnings as required.</li> <li>Coordinate the provision of additional DFES support and material resources as requested by ICs.</li> <li>Keep the OAM/Superintendent/ROC/SOC informed of current events and likely future operations and resource needs.</li> <li>Coordinate media and community information as required.</li> </ul>	

	<ul> <li>Direct the conduct of severe weather rescue and operations.</li> <li>Coordinate the initial response for treatment and care of victims.</li> </ul>
	<ul> <li>Assist the evacuation of persons from the impacted area if required.</li> <li>Coordinate the provision and distribution of food and medical supplies to isolated persons and/or communities where necessary.</li> <li>Ensure essential communication links are maintained.</li> <li>Arrange for logistics support for emergency service workers.</li> <li>Arrange for the temporary repair of damaged buildings.</li> <li>Ensure the provision of public information to affected communities is maintained.</li> </ul>
Local Government	<ul> <li>Establish and manage the LEMC.</li> <li>Participate in community awareness programs on severe weather hazard risks.</li> <li>Provide resources to assist DFES when requested.</li> <li>Make available suitable local government buildings to be used as evacuation centres.</li> <li>Issue closure notices for airports and airfields when necessary.</li> <li>Close and open roads within their jurisdiction, when requested by DFES.</li> <li>Provide details on road conditions to DFES.</li> <li>Initiate and lead the local community through the recovery process.</li> <li>Assisting DFES in managing the emergency.</li> <li>Conducting Emergency Management Planning in relation to floods.</li> <li>Providing EM advice and Treatment Options to the appropriate local, regional or state governments.</li> <li>Inspect and declare severe weather hazard-affected properties fit for habitation.</li> </ul>

Bureau of Meteorology	<ul> <li>Provide a flood prediction and interpretation service including advice and outlooks on meteorological forecasts, catchment conditions, rainfall and quantitative precipitation forecasts.</li> <li>Collaborate with DFES in the issuing of Flood Watch and Flood Warning messages</li> <li>Establish and maintain real-time rainfall data collection networks and monitoring and dissemination systems.</li> <li>Store and provide historical water and flood intelligence data and information.</li> <li>Contribute to the planning, installation and maintenance ogf new and improved flood warning systems.</li> </ul>
Department of Water and Environmental Regulation	<ul> <li>Collect river level data and provide to DFES (where practicable).</li> <li>Maintain real-time river level monitoring systems.</li> <li>Store and provide historical river flood information.</li> <li>Contribute to the planning, installation and maintenance of new and improved flood warning systems.</li> <li>Participate in community awareness programs on total flood warning systems.</li> </ul>
Western Australian Police Force	<ul> <li>Assist with evacuation and/or traffic management on request.</li> <li>Maintain public order where required.</li> <li>In the event of mass casualties, provide Disaster Victim Identification.</li> <li>Provide liaison officers/representation to any IMT/ISG/OASG.</li> <li>Provide emergency coordinators as appropriate to assist DFES in the provision of a coordinated response.</li> </ul>
Department of Planning, Lands and Heritage	Incorporate severe weather emergency risk treatment measures into state and local planning and development processes.

Department of Communities	<ul> <li>In consultation with DFES, and consideration of available resources, determine the number and location of evacuation centres to be opened during the cyclone emergency.</li> <li>In consultation with the Local Emergency Management Committee, determine a register of potential evacuation centres.</li> <li>Staff Welfare/Evacuations centres.</li> <li>Facilitate evacuee registrations.</li> <li>Participate in the emergency recovery arrangements for people affected by severe weather.</li> </ul>
Main Roads WA.	<ul> <li>Provide advice to DFES of the potential and actual impacts of severe weather emergencies on the State road network.</li> <li>Close and open State roads when requested to do so by DFES. This Plan recognises that the Commissioner of Main Roads (or delegated Officers) has the power to close or open roads under the Main Roads Act 1930.</li> <li>Assist in the recovery process through State road and State road infrastructure repair and reconstruction.</li> <li>Communicate road closures to the public.</li> </ul>
Department of Health	<ul> <li>Coordinate the health response in a severe weather emergency, including the activation of the State Health Emergency Response Plan if required.</li> <li>Advise DFES on all medical and health aspects in relation to a severe weather emergency.</li> <li>Through the hospital stream, provide acute medical care and relief to injured persons.</li> <li>Through the public health stream, provide environmental health, public health, mental health and communicable disease control services, as required.</li> <li>Maintain an awareness of the readiness of health service infrastructure including assessment of impact on clinical services, response and/or evacuation requirements.</li> <li>Provide health advice and support to the designated recovery committee.</li> <li>Provide acute health services, particularly to those persons within the affected community who have chronic medical conditions.</li> </ul>
Water Corporation	<ul> <li>Maintain oversight of public dam water storage areas.</li> <li>Restore water supplies and sewerage systems as prioritised by DFES or the designated recovery coordinator.</li> <li>Ensure water quality delivered by the system meets appropriate health standards.</li> <li>Assist with the provision of potable water to affected communities until normal services are restored.</li> </ul>

Western Power	<ul> <li>Disconnect and restore energy services as prioritised by DFES or the designated recovery authority. Restoration priority will include consideration of other lifeline interdependence requirements.</li> <li>Provide technical advice to DFES in relation to energy supply, disconnection and restoration.</li> <li>Assist in the provision of emergency energy as requested by DFES or the designated recovery authority.</li> </ul>
Telstra.	<ul> <li>Provide advice regarding the provision of emergency communications services.</li> <li>Give priority consideration to emergency communications requirements of authorities responsible for hazard and emergency management within WA.</li> </ul>

# (LEMC Appendix 8.2C) sw region flood emergency management plan

### **Document History**

VERSION	DATE	DESCRIPTION OF CHANGE
1.0	Mar 23	Rewrite of FESA Flood Emergency Response Plan