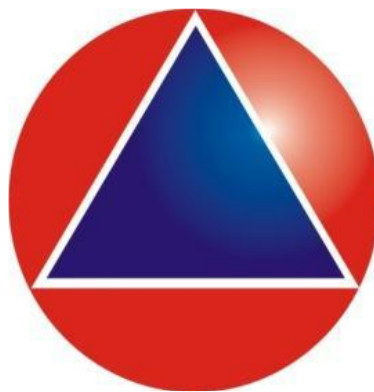




DISASTER RISK MANAGEMENT PLAN



MMM DISASTER RISK MANAGEMENT CENTRE

(Proposed amendment – January 2022)



VISION

Our vision is that Mangaung Metropolitan Municipality understands embraces and practice the disaster risk management principles to ensure a safe and resilient environment for its residents.

MISSION

It is our mission to establish and maintain an all-inclusive integrated and effective disaster risk management programme for the Mangaung Metropolitan Municipal area that will ensure effective and speedily response in case of disasters and emergencies to the benefit of all communities.

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CHAPTER 1

INTRODUCTION

1.1 PREFACE

The Mangaung Metropolitan Municipality's Disaster Management Plan serves to:

- establish a disaster management framework for the Municipality which is consistent with the provisions of the Disaster Management Act 2002
- define priority objectives which the municipality intends to achieve and is designed to:
 - anticipate the types of disasters that are likely to occur in Council's area and their possible effects, considering indigenous knowledge
 - identify individuals, households and communities in Council's area who are at risk to disasters
 - place emphasis on measures that will reduce the vulnerability of disaster-prone areas, communities and households which includes:
 - preventing disasters from occurring or reducing the risk of disaster,
 - mitigating the severity or consequences of those disasters which cannot be prevented,
 - facilitating and implementing maximum emergency preparedness measures,
 - ensuring a rapid and effective response to disasters and post disaster recovery and rehabilitation and
 - ensuring that developments which are subject to high risk are avoided
- identify and address weaknesses in capacity to deal with disasters
- seek to develop a system of incentives that will promote disaster management in the Municipality
- set out the Municipality's corporate structure and institutional arrangements for disaster management purposes,
- define roles and responsibilities of key personnel in the disaster management process
- contain contingency plans and emergency procedures in the event of a disaster and/or major incident.
- set out the arrangements for stakeholder participation and external liaison
- establish communication mechanisms, both internally and externally
- set out the strategy for administrative and financial arrangements

The fundamental process that will ultimately inform and underpin both the Integrated Development Planning and the Disaster Management Planning processes of Council is a thorough risk and vulnerability analysis. The result of the analysis leads to the development of risk profiles, which in turn, enable the identification of priorities for key output goals aimed at risk elimination and risk reduction. The implementation plans (better known as maintenance plans) are prepared on an annual basis for each key output goal identified. The implementation plans must be structured in such a way as to include key performance areas, specific objectives, and time frames (scheduling), as well as to allow for continuous monitoring of progress and regular review.

1.2 Socio-Demographics: Mangaung Metropolitan Municipality

The Mangaung Metro Municipality is a huge area covering a radius of 9899,1 km². It comprises the following prominent centres, which are surrounded by an extensive rural area.

- [i] **Bloemfontein** which is the sixth largest city in South Africa. It is the capital of the Free State Province and therefore, serves as the administrative headquarters of the provincial government. It is the Judicial Capital of South Africa. Bloemfontein is de facto the economic hub of the local and regional economy. Attached to Bloemfontein is a large township; Mangaung. Unlike other townships in the Municipality, Mangaung Township is relatively well serviced. This is obviously due to its proximity to the economic hub. However, its relative development has become a magnetic force that attracts people from other townships in search of improved livelihoods – thereby placing undue pressure on existing infrastructure.
- [ii] **Botshabelo** is located 55kms to the east of Bloemfontein. It is the single largest township development in the Free State. However, it is highly under-developed and lacks most basic services. As a result, the majority of its residents rely on the City of Bloemfontein [the City] for employment and other economic activities. It is estimated that more than 17 000 people commute between Botshabelo and Bloemfontein and Thaba Nchu and Bloemfontein daily. This has prompted Mangaung to subsidise transport to the tune of R80m annually.
- [iii] **Thaba Nchu** is situated 12kms further to the east of Botshabelo. It used to be part of the Bophuthatswana 'Bantustan'. As a result, it exhibits large areas of rural settlements on former trusts lands. In addition, Thaba Nchu has a scattered settlement pattern with 37 villages surrounding the urban centre – some as far as 35km from the centre.
- [iv] **Soutpan/ Ikgomotseng:** Soutpan is a very small town that was established due to the existence of salt in the immediate surroundings of the town. The town is still producing a vast amount of salt and the current inhabitants of Soutpan are employed by the salt production industry. The town is 52 kms away from the town of Bultfontein to the north and 38 km away from Bloemfontein to the south. The area is known for the Florisbad anthropological area and the Soetdoring Nature Reserve. Ikgomotseng is 5 km to the east of Soutpan and can almost be seen as a centre on its own.
- [v] **Ward 50:** This ward consists of the three towns De Wetsdorp, Wepener and Van Stadensrus, it previously formed part of the disestablished Naledi District Municipality. It is located in the eastern highland of the region and a border gate to Lesotho is just 7km from Wepener. It is a largely rural community, with almost a third of its land used for farming cattle, sheep and grain. The area is traversed by the N8 Maloti Tourism Route and the R26 route.

De Wetsdorp lies 75kms south-east of Bloemfontein on the R702. The town of De Wetsdorp is part of the Battlefields Route. One attraction is the British War Graves and Monument.

Wepener was founded in 1867 on the banks of Jammersbergsspruit, a tributary of the Caledon River. The Caledon Nature Reserve is about 15km south of Wepener on the R701. The Caledon River flows through the reserve, and the Welbedacht Dam is located in the southern region of the reserve.

The town of Van Stadensrus is located between Wepener and Zastron and is one of the frontier towns on the border of South Africa and Lesotho. It is in close proximity to the Egmont and Van Stadensrus Dams, and is on the Anglo-Boer War Route

Population and household distribution

According to Community survey by end of June 2016, Mangaung has a population of 787 804 with 265 561 households.¹

The table below depicts the population and household's statistics per area comparing the Community survey 2016 and Census 2011²

Area	Population Community survey 2016	Population Census 2011	Households Community survey 2016	Households Census 2011
Bloemfontein	494 517	483 340	169 614	155 361
Botshabelo	185 931	181 712	55 234	50 593
Thaba Nchu	84 133	82 379	26 556	25 967
Soutpan	2 206	2 157	748	695
Ward 50	21 267	20 797	13 409	10 629
Total	787 804	770 385	265 561	243 245

The table below depicts the type of dwellings.

Formal dwelling	Informal dwelling	Other	Grand Total
222 434	31 142	11 985	265 561

Mangaung Metro has the characteristic of a segregated and fragmented city. Bloemfontein is the economic bellwether upon which Botshabelo, Thaba-Nchu, Soutpan/Ikgomotseng, De Wetsdorp, Wepener and Van Stadensrus depend. The city has developed in a binary manner with much investment in the northern areas, growing speedily towards the western part of the City, whereas the south-eastern part has been characterised by low-income and low-density government subsidised settlements

The City is facing daunting challenges regarding service provision and eradicating the legacy of high levels of unemployment, poverty and inequality. The Community Survey conducted on 2016 revealed the following:

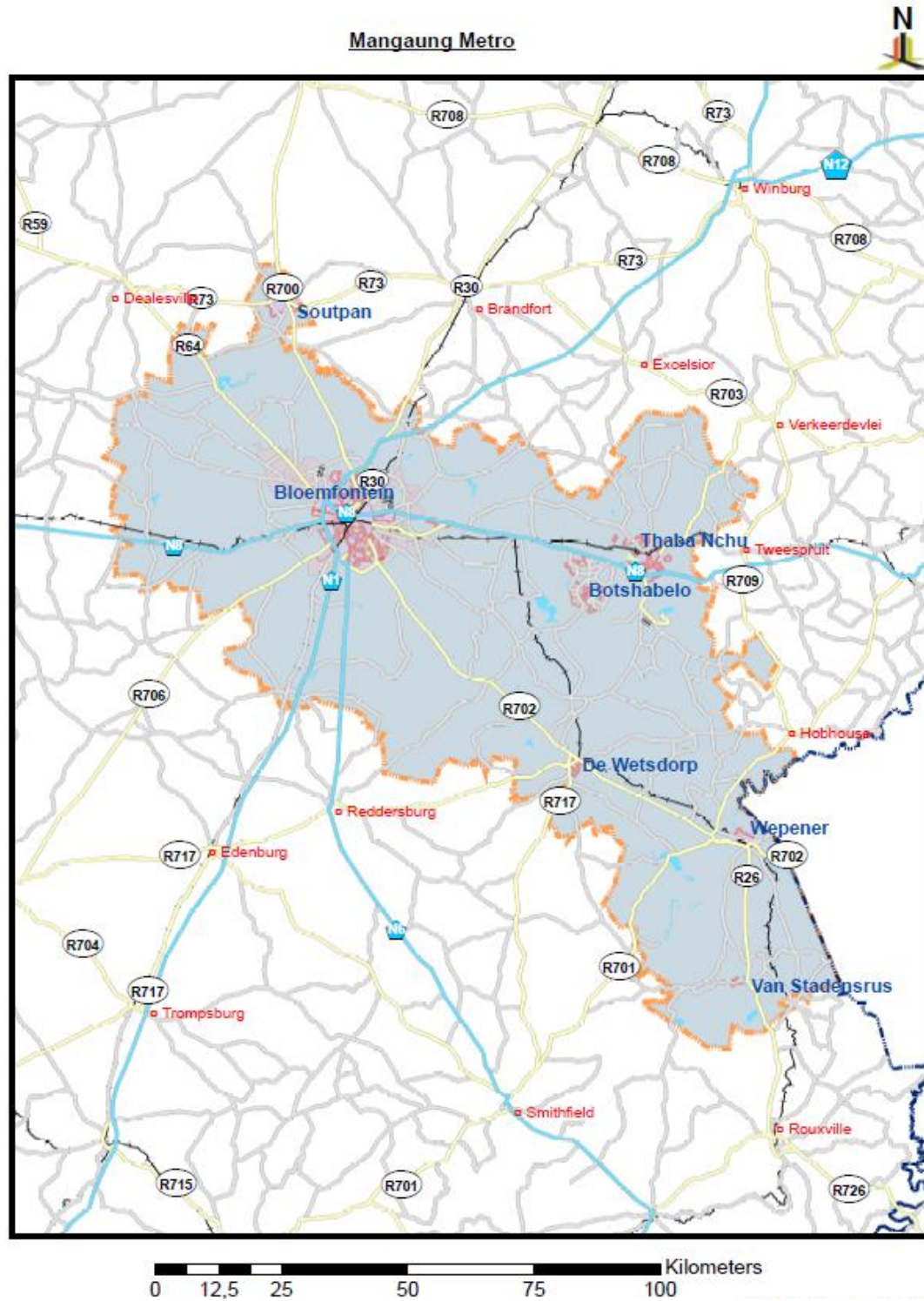
- 169 650 (64,9%) households have access to basic sanitation,
- 249 735 (94%) households have access to a weekly door to door refuse removal,
- 254 938 (95,9%) households have access to electricity,
- 254 672 (95,8%) households have excess to basic water provision,
- Education rate shows that 45, 8% of the population have matric or higher education.

Service backlogs and levels of disparities have the potential to create political pressure to extend services to un-serviced and under-serviced areas. Diversion of resources to new problems makes it extremely difficult to maintain existing infrastructure; with serious repercussions. There is now a desperate need to address the problems of ageing infrastructure networks with countless water leaks and sewage spillages. At the same time, roads and storm water, parks, water and sanitation services are all deteriorating gradually.

¹ SA Stats, Community Survey, 2016

² SA Stats, Census 2011

1.3. Jurisdictional map of the City



Map 1: Map showing the boundaries and different towns within the jurisdictional area of the Mangaung Metropolitan Municipality

CHAPTER 2

LEGISLATIVE MANDATE

The Constitution of the Republic of South Africa 1996

The Constitution redefined local government as a sphere of government that is distinctive from, yet interdependent and inter-related with provincial and national government. Importantly, the Constitution conferred developmental duties to local government.

Public Finance Management Act No. 1 of 1999 (as amended by the Public Finance Management Amendment Act No. 29 of 1999)

To regulate financial management in the national and provincial governments; to ensure that all revenue, expenditure, assets and liabilities of those governments are managed efficiently and effectively; to provide for the responsibility of persons entrusted with financial management in those governments; and provide for matters connected therewith.

Municipal Systems Act of 2000

The Act introduces changes towards the manner in which municipalities are organized internally, the way they plan and utilize resources, monitor and measure their performance, delegate authority, deliver services and manage their finances and revenue. Critically, the MSA formalises a range of alternative service delivery mechanisms that could be used to complement traditional service delivery mechanisms / arrangements used by municipalities.

Municipal Demarcation Act of 1998

The Municipal Demarcation Act of 1998 provided for the re-demarcation of municipal boundaries.

Municipal Structures Act No. 117 of 1998 as amended

The Act defined new institutional arrangements and systems for local government. Importantly, the Act laid a foundation for local government performance management and ward committee systems.

The Fund-Raising Act No. 107 of 1978

It provides for the declaration of a disaster by the President in order to provide relief to the Victims of disasters such as drought disaster.

Disaster Management Act 57 of 2002

Streamlines and unifies disaster management and promotes a risk reduction approach particularly at provincial and local levels. It eliminates the confusion around disaster declaration and addresses current legislative gaps.

National Disaster Management Framework (Notice 654 of 2005)

The framework provides guidelines for the development of the provincial and municipal disaster management frameworks.

Fire Brigade Act No. 99 of 1987

Forms an element of disaster management in terms of norms and standards in the prevention of fires or any hazards leading to risks and or disasters.

National Veld and Forest Fires Act No. 101 of 1998

It emphasizes the formation of Fire Protection Associations for the purpose of predicting, preventing, managing and extinguishing veld fires.

The National Environmental Management Act of 1999

Provides for environmental management strategies to prevent and mitigate environmental disasters.

CHAPTER 3

DEFINITIONS

3.1 Adaptation

Means-

- (a) in relation to human systems, the process of adjustment to actual or expected climate and its effects, in order to moderate harm or exploit beneficial opportunities; and
- (b) in relation to natural systems, the process of adjustment to actual climate and its effects.

3.2 Climate change

A change in the state of the climate that can be identified by changes in the variability of its properties and that persists for an extended period, typically decades or longer.

3.4 Disaster

A disaster is a progressive or sudden, widespread or localised, natural or human caused occurrence which causes or threatens to cause

- death, injury or disease
- damage to property, infrastructure or the environment; or
- disruption of the life of a community; and

is of a magnitude that exceeds those affected by the disaster to cope with its effects using only their own resources.

3.5 Disaster Management

Disaster Management encompasses a continuous, integrated, multi-sectoral and multi-disciplinary process of planning and implementation measures incorporating strategies for pre- disaster risk reduction as well as post disaster recovery, aimed at:

- preventing or reducing the risk of disasters
- mitigating the severity or consequences of disaster
- emergency preparedness
- rapid and effective response to disasters
- post disaster recovery and rehabilitation

It is important to note that these measures should not be regarded as a sequence of separate phases or stages but as a continuous and integrated process with the emphasis shifting according to the relationship between hazards and vulnerabilities, and with development as the continuous thread woven into the fabric of this management concept.

3.6 Disaster Mitigation

In relation to-

- (a) a disaster or disaster risk means the lessening of the potential adverse impacts of physical hazards, including those that are human-induced, through actions that reduce hazard, exposure and vulnerability; or
- (b) climate change means a human intervention to reduce the sources or enhance the sinks of greenhouse gases;

3.7 Disaster Prevention

Disaster prevention involves the implementation of measures - particularly developmental initiatives - aimed at stopping a disaster from occurring or preventing an occurrence from becoming a disaster.

3.8 Disaster Response

Disaster response encompasses measures taken during or immediately after a disaster in order to bring relief to people and communities affected by the disaster

3.9 Disaster Risk Reduction

Means either a policy goal or objective, and the strategic and instrumental measures employed for:

- (a) anticipating future disaster risk;
- (b) reducing existing exposure, hazard or vulnerability; and
- (c) improving resilience

3.10 Emergency Preparedness

Means –

- (a) a state of readiness which enables organs of state and other institutions involved in disaster management, the private sector, communities and individuals to mobilise, organise and provide relief measures to deal with an impending or current disaster or the effects of a disaster; and
- (c) the knowledge and capacities developed by governments, professional response and recovery organisations, communities and individuals to effectively anticipate, respond to and recover from the impacts of likely, imminent or current hazard events or conditions

3.11 Incident

A hazard occurrence or situation requiring intervention ranging from a limited co-ordination of emergency resources to a more extensive multidisciplinary operation

3.12 Post Disaster Recovery and Rehabilitation

Post disaster recovery and rehabilitation incorporates efforts, including developmental initiatives, aimed at creating a situation whereby:

- normality in conditions caused by a disaster is restored by the restoration, and improvement, where appropriate, of facilities, livelihoods and living conditions of disaster-affected communities, including efforts to reduce disaster risk factors
- the effects of a disaster are mitigated or,
- circumstances are created that will reduce the risk of a similar disaster occurring again in the future

3.13 Relief

Means the provision of assistance or intervention during or immediately after a disaster or an incident, in order to bring relief to people.

3.14 Risk assessment

Means a methodology to determine the nature and extent of risk by analysing potential hazards and evaluating existing conditions of vulnerability that together could potentially harm exposed people, property, services, livelihoods and the environment on which they depend.

3.15 Vulnerability

It implies the conditions determined by physical, social, economic and environmental factors or processes, which increase the susceptibility of a household or a community to the impact of hazards.

CHAPTER 4

INTEGRATED INSTITUTIONAL CAPACITY

In terms of Section 53 of the Disaster Management Act, 2002 each Municipality must prepare a Disaster Management Plan for its area, according to circumstances prevailing in the area. Council must co-ordinate and align the implementation of this plan with other organs of state and institutional role-players and must regularly review and update the plan.³

4.1 THE DISASTER MANAGEMENT PLAN AS A CORE COMPONENT OF COUNCIL'S INTEGRATED DEVELOPMENT PLAN

The Disaster Management Plan forms a core component of the municipality's Integrated Development Plan in terms of the requirements of Section 26(g) of the Municipal Systems Act (Act No.32 of 2000), as well as Section 53(2)(a) of the Disaster Management Act, 2002.⁴

In view of the fact that Disaster Management is a cross-sectoral task which, in a similar way to environmental issues, relates to a wide range of sectors and aspects like avoiding settlements or investments in high risk locations, construction technologies, water management, health services etc., it is not an issue that can be dealt with by a special project, but it requires that any developmental measures are compliant with basic principles of disaster prevention and mitigation. Rather than taking any possible disaster into consideration, one has to focus on risks which are very likely, and which justify the efforts of preparedness.

Therefore, in the context of the IDP process, a Disaster Management Plan, in contrast to the various cross-cutting issues related to 'integrated plans', is not a compilation of aspects and components from various project plans, but a distinct plan on its own which indicates the preparedness of a municipality to cope with possible disaster scenarios.

Accordingly, the Disaster Management Plan must be prepared parallel to the IDP process. The plan must therefore be available for checking the compliance of IDP projects with disaster management guidelines.

4.2 THE CUSTODIAN OF THE DISASTER MANAGEMENT PLAN

The Head of the Disaster Risk Management Centre, The City Manager or the authorised delegated official in the position of General Manager Disaster Risk Management, is the custodian of the Disaster Management Plan for the Mangaung Metropolitan Municipality and is responsible to ensure the regular review and updating of the plan.

The Head of the Centre is also responsible to ensure that a copy of the plan as well as any amendments to the plan is submitted to:

- the National Disaster Management Centre (NDMC), and
- the Disaster Management Centre of the Province of the Free State (PDMC)

³ Disaster Management Act, No 57 of 2002, Chapter 5, Section 53, Disaster management plans for municipal areas.

⁴ Municipal Systems Act, No.32 of 2000, Section 26(g) read with Section 53 (2) (a) of the Disaster Management Act, No 57 of 2002

4.3 THE PLANNING FRAMEWORK

Given the fact that the disaster management function is an extremely complex multi-sectoral and multi-disciplinary process, and taking international benchmarks into consideration, the presentation of a combined, comprehensive plan would result in a bulky and cumbersome volume, which would not be user-friendly in any way. The concept therefore of producing a Disaster Management Plan which provides a strategic blueprint of the Municipality's Disaster Management arrangements, and then expanding the plan by the addition of various annexes detailing the multi-sectoral and multi-disciplinary measures, is considered the most practical and workable approach.

Disaster Risk Management can be explained through the **Disaster Risk Management Continuum**:

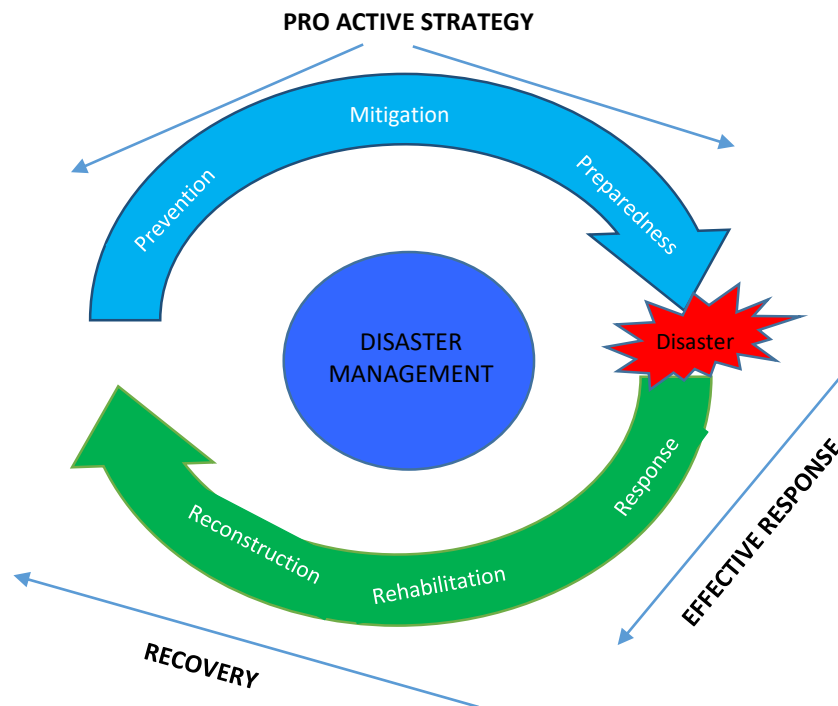


Figure 1: Disaster Risk Continuum

The continuum clearly indicates that Disaster Risk Management is a continuous process which involves pro-active and re-active actions aiming at preventing disasters, mitigating the impact of disasters and implementing effective response and recovery if and when a disaster strikes. However, the success of all these actions needs and integrated approach by all municipal functionaries.

Thus, the slogan: "Disaster Risk Management is Everybody's Business"

4.4 Annexes to the Corporate Plan

Included in the annexures to the plan are:

- Disaster Management Framework of Mangaung Metropolitan Municipality
- A Risk and Vulnerability Analysis for the area of jurisdiction of the Mangaung Metropolitan Municipality which includes:
 - Area description
 - Maps
 - History of disasters (considering indigenous knowledge)
 - Hazard analysis
 - Vulnerability assessment
 - Risk profile
- Contingency plans and emergency procedures
- The Communication Plan
- Information Technology Recovery Plan

In all respects every effort will be made to ensure that the contents of the annexes are consistent with the intentions of the Municipality's Disaster Management Framework, the Disaster Management Plan and the Integrated Development Plan.

The compilation of contingency plans for high risk and vulnerable areas do form an integral part of the preparedness plan for the MMM area. These areas include amongst others old age homes, schools, hospitals, shopping centres, sport facilities etc. Copies of all contingency plans are kept in a safe area for activation should it be necessary.

4.5 THE MANGAUNG METROPOLITAN MUNICIPAL DISASTER MANAGEMENT FRAMEWORK (MMDMF)

The disaster management framework of Mangaung Metropolitan Municipality which was approved in 2013 is consistent with:

- the provisions of the Disaster Management Act, 2002
- the national disaster management framework and
- the disaster management framework of the Province of the Free State.

The framework provides a clear, logical, transparent and inclusive policy on disaster management for the municipal area, which ensures a focus commensurate with the types, severity and magnitude of disasters that occur or may occur in the municipal area.

The framework establishes vulnerability, reduction, mitigation and prevention in areas, communities and households, which are at risk to disasters, as fundamental principles of disaster management. It must provide for active participation of all relevant role-players, stakeholders, the community and volunteers, and promotes the concept of co-operative governance.

The establishment of joint standards of practice to ensure an integrated and co-ordinated response to disasters which occur or may occur in the municipal area is a key principle. The facilitation of disaster management capacity building, training and education opportunities and programmes to ensure an alert self-reliant and aware community enjoy high priority.

4.6 Arrangements for Integrated Disaster Risk Management Policy

The purpose is to stimulate a consultative process, in order to establish and sustain a holistic Disaster Management structure and practice that will support and enhance development in the municipality through disaster risk management.

The following schematic representation denotes the internal institutional arrangements for disaster management.

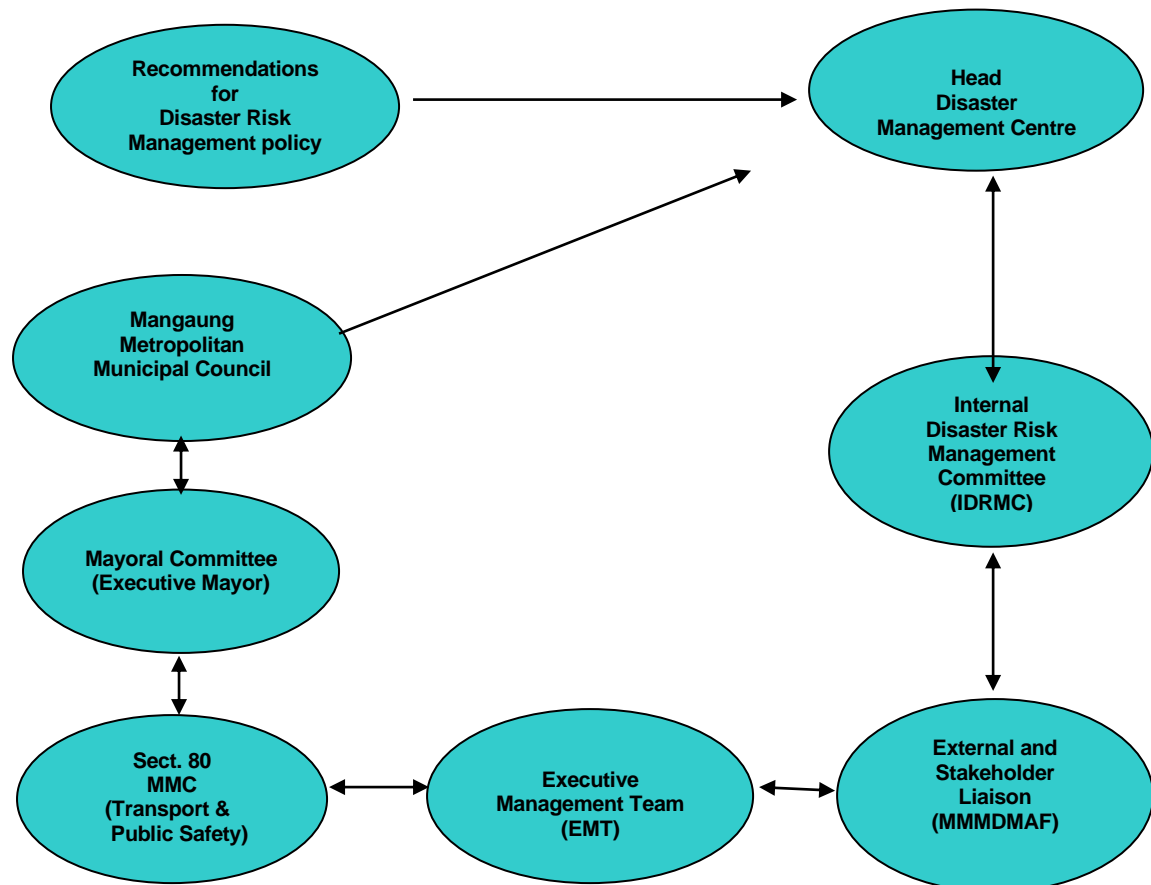


Figure 2: Internal Institutional process

4.6.1. The Council

Council is responsible to ensure the implementation of the Disaster Management Act, 2002 for the area of the Mangaung Metropolitan Municipality as a whole; and to make all policy decisions in relation to disaster management.

In the event of a local disaster, Council may by notice in the provincial gazette, declare a local state of disaster, make by-laws, issue directions or authorise the issue of directions if the circumstances warrant such declaration.

In the event that a municipal entity fails to submit information requested by the disaster management centre, or to submit a copy of its disaster management plan or of any amendment to the plan, to the Disaster Management Centre, the centre must in accordance with Section 52(2)(b) of the Act, report the failure to the Executive Mayor who must take such steps as may be necessary to secure compliance, including reporting the failure to Council.

The disaster management centre must submit a report on its activities annually to Council.

4.6.2 City Manager

The City Manager is responsible for the effective implementation of the Disaster Management Act, 2002 within the directorates and other municipal entities within the MMM and for the integration of disaster risk management plans with the IDP Process.

The Municipal Manager shall ensure that Disaster Management is a standing agenda item in all Management meetings.

4.6.3 Municipal Disaster Risk Management Centre

The City established its Municipal Disaster Management Centre in 2014 in terms with Section 43 (1) of the Disaster Management Act. It fulfils its mandate based on the powers and responsibilities in terms of Section 44 of the Act, which can be outlined as follows:

- Specializing in issues concerning disasters and disaster management;
- Promoting integrating and coordinated approaches within the municipality;
- Acting as a repository and conduit for information;
- Acting as an advisory and consultative body;
- Making recommendations regarding funding for disaster management;
- Making recommendations related to relevant legislation on whether or not a local disaster should be declared;
- Promoting the recruitment, training and participation of volunteers;
- Promoting capacity, building, training and education in schools;
- Promoting research in the field of disaster management;
- Providing advice to vulnerable communities;
- Exercising powers and delegations by the national and provincial disaster management centres;
- Assisting with implementation of legislation requirements of other sectors in relation to disaster management.

4.6.4 Head of the Disaster Management Centre

The Head: Disaster Management is responsible for the compilation, maintenance and distribution of the City's Municipal Disaster Management Plan and its supporting risk-specific Departmental Disaster Management Plans. The Head is also responsible for the performance by the Centre of its Disaster Management functions as per Section 44 of the Disaster Management Act 57 of 2002 and to implement and coordinate the City's Municipal Disaster Management Plan.

The Head must:

1. When deemed necessary, consider the declaration of a local state of disaster as per the Disaster Management Act 57 of 2002
2. Liaise with provincial and national officials [PDMC and NDMC]
3. Activate the Disaster Operations Centre and when necessary due to a disaster occurrence call the [Disaster Executive Team](#) into session
4. Secure resources as required
5. Assist the [Disaster Executive Team](#) in the decision-making process
6. Maintain ongoing assessment of the threat/hazard and co-ordinate appropriate responses.
7. Provision of any other interventions in accordance with statutory obligations or as circumstances dictates.

The responsibilities of the Head Disaster Risk Management Centre in this regard include:

- facilitating and coordinating the relevant department or entity's disaster risk management planning and operational activities for risk reduction and for response and recovery;
- ensuring that the planning and operations are consistent with the requirements of the Act, national and provincial disaster risk management framework;
- ensuring the integration and alignment of the entity's planning and operations with that of the provincial and national organs of state and other institutional role players;
- ensuring the integration of the risk reduction and response and recovery planning and operations with Councils Integrated Development Planning process, the Spatial Development Framework, Environmental Management Framework and Climate Change Strategy;
- ensuring the regular review of plans and that planning remains dynamic and relevant in accordance with developmental changes taking place within, or which may impact on Council's area; and
- submitting a copy of the entity's disaster risk management plan and any amendments thereof to the disaster risk management centre for forwarding to the disaster risk management centre of Free State Province and to the National Disaster Management Centre.
- Sections 47 and 52 of the Act stipulate that each municipal entity must establish its role and responsibilities and must assess its capacity to fulfil the requirements. Effective coordination should be implemented where there is lack of capacity to ensure optimal use of resources between departments, organs of state in other spheres of government and by entering into partnerships with the private sector, non-governmental organizations and community-based organizations.
- co-ordinating preparedness, response and mutual aid agreements with adjacent Municipalities in the Free State,
- consider the initiation of the declaration of a local state of disaster process, as per the Disaster Management Act, 57 of 2002, if/when this is deemed necessary and in consultation with all the relevant role-players,
- ensure effective media liaison and public early-warning regarding the emergency situation,
- provide situation reports to all internal and external role-players on a regular basis,
- co-ordinate response with CBO'S, NGO'S and business entities as appropriate,
- establish and maintain the required telecommunications links with all the relevant departments and entities,
- identify available resources to be utilised for disaster risk management purposes and as requested by the City,
- maintaining a central registry of evacuees,
- initiate emergency area rehabilitation and reconstruction efforts with the identified role-players,
- identify persons/organisations to contribute to post-emergency debriefs and reports.

4.6.5 The MMM Internal Disaster Risk Management Committee (IDRMC)

The Head of the Disaster Management Centre (General Manager DRM) together with the heads of each sub directorate (General Managers) in Council's organizational structure, as well as key personnel with specific technical expertise who have disaster risk management responsibilities, must serve as the assigned disaster risk management focal points for the department and shall constitute the MMM Internal Disaster Risk Management Committee (IDRMC).

4.6.5.1 Purpose of the IDRMC

The Head of the Centre is responsible to sustain an Internal Disaster Risk Management Committee (IDRMC) to:

- promote interdepartmental relations;
- achieve a coordinated, integrated and common approach to disaster risk management by the departments and other internal units in the administration of the municipality (Section 44(1)(b)(i) of the Act);
- ensure development and implementation of appropriate disaster risk reduction methodologies; and
- ensure emergency preparedness and rapid and effective disaster response and recovery capabilities.

The committee is chaired by the Head of the MMM DRMC and shall meet at least once a quarter but is not precluded from meeting more frequently should circumstances so dictate.

4.6.5.2 Responsibilities of the IDRMC

Sections 47 and 48 of the Disaster Management Act prescribe responsibilities to the MMM IDRMC which include:

(a) Disaster Risk Reduction Planning and Operations:

- monitoring, assessing, and coordinating council's disaster risk management planning and implementation, with particular emphasis on risk reduction policies, practices and strategies;
- collaborating, coordinating and monitoring progress on joint projects and programmes and their integration as part of the IDP process;
- annually reviewing the Council's disaster risk management framework;
- annually reviewing disaster risk management plans to ensure that the plans are integrated, current, and consistent with the disaster risk management framework;
- promoting joint standard operational procedures within and among the departments and other entities within council;
- monitoring progress on the implementation of priority projects aimed at risk reduction; and
- participating in simulation exercises annually to remain current on roles and responsibilities in the activation and operation of the Disaster Operations Centre to ensure rapid and efficient response and recovery in the event of a disaster occurring or threatening to occur in council's area.

(b) Contingency Planning, Disaster Response and Recovery:

- when a disastrous event occurs, or is threatening to occur in the area of the municipality, on receipt of an activation alert from the Head of the DRMC (or designate), reporting immediately to the Disaster risk management Centre -Disaster Operations Centre (DOC);
- conducting initial and specialist post disaster assessments ensuring that sub directorates respond rapidly to disasters;
- ensuring efficient and coordinated disaster response and recovery operations;
- monitoring progress with, and ensuring that, post disaster reconstruction and rehabilitation projects include measures to reduce risk to similar events in the future;
- ensuring that regular reports on progress with disaster recovery are continuously submitted to council as well as to the DRMC of the Province and NDMC; and
- ensuring that all documentation and records relating to the disaster are retained and placed in safe-keeping for the purposes of post disaster investigation, inquiry or review.

(c) Project Teams and Planning Clusters

The IDRMC may convene project teams to address specific joint risk reduction priorities including post disaster projects. Teams so convened will act as sub-committees of the IDRMC for the duration of their task and will determine their terms of reference and outcomes in consultation with the Head of the Centre and the IDRMC; will plan and manage such multi-disciplinary projects; and will report back to the IDRMC.

In the context of emergency preparedness and planning clusters, will also be convened to address contingency plans for specific priority risks posed by hazards such as storms, floods, drought, fires, epidemics, transportation accidents, oil spills, hazardous material spills, Xenophobic attacks crowd related events. These contingency plans will include strategies and procedures to ensure the implementation of an incident management system, which will establish joint standards of practice and inter-disciplinary co-operation for rapid and effective disaster response capabilities. Such plans will also be subject to consultation within the MMM IDRMC.

4.6.6 Municipal Disaster Management Advisory Forum

Objectives

To ensure coordination and cooperation of role players, including stakeholders, technical experts from the community and private sector to promote their participation in disaster risk management planning and operations in the municipality.

Composition of the MMM DMAF

The forum is convened and chaired by the Head of the Disaster Management Centre and comprises the following members:

- All the members of the IDRMC
- Disaster Management functionaries of the Mangaung Metropolitan Municipality Disaster Management Centre (MMMDMC)
- Head of Disaster Management Centre of the Province of the Free State
- Experts in disaster management designated by the Executive Mayor
- Representatives of emergency and essential services, government departments and organized business:

Medical:

- Ambulance Services – Public and Private
- Hospitals Public and Private

SA National Defence Force:

- SA Air Force
- SA Military Health Services
- Logistics and Supply services
- Engineering Services

Department Water and Sanitation

Department of Health

Department of Social Development

Department of Education

Department of Economic, Small Business Development, Tourism and Environmental Affairs

Department Human Settlement

Department Police, Roads and Transport

Department Agriculture and Rural Development

Department Public Works and Infrastructure

Relevant Parastatals:

- SA Weather Service
- ESKOM
- TELKOM
- SAFCOL
- **ACSA**
- **House of Traditional Leaders**
- **SALGA**
- **SASSA**
- **Transnet**
- **Working on Fire (WoF)**

NGOs, CBOs and other relevant role players such as:

- SA Red Cross Society
- St John Ambulance
- Noodhulpliga
- Salvation Army
- South African Council of Churches
- Agricultural and Farm Workers Associations
- ADRA
- World Vision
- Gift of the Givers
- **Meals on Wheels**
- **Alimdaad Foundation**

The Media:

- SABC
- Local and Regional Radio Stations
- Print Media
- Community Representation
- Community Volunteers (HAMRAD)
- The Volunteer Reserve
- General Volunteers

4.6.7 Communication with the National Disaster Management Centre (NDMC) and the Disaster Management Centre of the Province (PDMC) of the Free State.

In terms of the legislation communication must always be maintained among Municipal Disaster Management Centre, the National Disaster Management Centre and the Provincial Disaster Management Centre in order to:

- assist the National and Provincial Centre to identify and establish communication links with disaster management role players in the municipal area and develop and maintain an electronic database;
- develop guidelines for the preparation and regular review of disaster management plans and strategies including contingency plans and emergency procedures and the integration of the concepts and principles of disaster management with integrated development plans and programmes;
- Submit a copy of the Disaster Plan and any amendment thereto and reports to the Provincial Disaster Management Centre (PDMC) for submission to National Disaster Management Centre (NDMC) as prescribed in Section 50 of the Act;
- Immediately inform the PDMC of any disaster which occurs or threatens to occur in Council's area; provide information regarding the assessment of the disaster and make recommendations regarding the classification of the disaster as may be appropriate

CHAPTER 5

RESPONSIBILITIES OF THE CITY'S DIRECTORATES

5.1 CITY MANAGER ASSISTED BY THE DIRECTORATES

The City Manager, together with the following City's Directorates:

- Directorate Corporate Service
- Directorate Economic & Rural Development
- Directorate Engineering Services
- Directorate Finance
- Directorate Fleet & Waste Management
- Directorate Human Settlements
- Directorate Metro Police
- Directorate Planning
- Directorate Social Services and
- CENTLEC,

supported by the Disaster Risk Management Centre (DRMC), are to support disaster risk management activities such as hazard identification, disaster risk and vulnerability assessments, disaster prevention, disaster risk reduction/mitigation, as well as response, relief and rehabilitation. Due to all the different hazards identified disaster risk management will also fall within the mandates of nearly all the Directorates within the municipal structure.

The **CITY MANAGER** must provide strategic guidance and management for his office which consists of Legal Services, Internal Audit, Performance Management, Institutional Governance and Intergovernmental Relations and the functions and responsibilities relates to the following:

- Compile and issue appropriate administrative instruction to the Disaster Management Centre to exercises its powers and perform its duties,
- monitoring compliance with relevant legislation, regulations, licenses and by-laws,
- documenting information for potential legal actions, documenting information for potential compensation claims,
- auditing and informing the relevant Disaster Risk Management Plans of Council Installations to ensure pro-active disaster risk reduction, preparedness and compliance with relevant legislation, codes and regulations,
- audit compliance of City Services with the stipulations of the Municipal Disaster Risk Management Plan,
- authorize any extraordinary expenditures (access to disaster funding and/or any alternative emergency funding sources),
- ensure that the Municipal Disaster Risk Management Plan form an integral part of the City's Integrated Development Plan (IDP),
- ensure that hazard identification, disaster risk assessment and that risk prevention and/or risk reduction/mitigation principles are applied for all development projects which are being undertaken.
- monitoring internal compliance by all Directorates with relevant risk management legislation and regulations,
- on request from the DRMC constitute an emergency Executive Team meeting to be briefed on eminent disaster or post disaster issues,
- report on emergency impact and response to the Executive Mayor,
- assist with the mechanisms for the possible declaration of a local state of disaster, and
- report, liaise and consult with councillors and provincial and national government departments.

5.2 HEAD: CORPORATE SERVICES

The Head: Corporate Services must provide strategic guidance and management for the Sub Directorates Communication & Technology, Corporate Secretariat, Communications Unit, Facilities Management, Human Resource Development, Human Resource Management, Labour Relations and Occupational Health & Wellness and the functions and responsibilities relates to the following:

- Develop the directorate's Disaster Risk Management Plan,
- compilation of pro-active departmental Disaster Risk Management programmes to support disaster risk reduction or elimination and disaster preparedness,
- ensure qualified and well skilled employees are employed and regard emergency personnel as critical and essential staff complement,
- ensure proper recordkeeping of information for remuneration of municipal employees involved in emergency response,
- assist and or facilitate employee wellness/assistance, including staff involved in any traumatic incidents during major emergencies and disasters,
- control and manage the operations of a Service Complaints Call Centre for normal day-to-day service related complaints and assist with emergency information dissemination, as required.
- rendering and providing effective ICT infrastructure to support Disaster Risk Management
- facilitate integrated GIS and other ICT systems which can assist in the overall disaster risk management,
- ensure continued effective and reliable operation of the City's emergency radio communication system,
- ensure radio staff are on 24/7 standby for maintenance and support,
- rendering ICT support and advice to all emergency related functionaries,
- compiling and implementing a Contingency Plan and Maintenance Plan to ensure adequate disaster recovery procedures for ICT infrastructure and information management
- update and review the City's Communications plan,
- providing information to City employees and their families who are affected by emergencies/ disasters,
- Administration of injuries on duty (IOD claims), compensation.
- Coordinate rehabilitation of municipal employees according to the wellness programmes
- support the Disaster Risk Management Centre (DRMC) in communicating status reports, public safety notices and early warning announcements,
- monitor compliance with Occupational Health and Safety legislation in all municipal premises,
- supporting the DRMC in public education and awareness programmes focussing on risk prevention and risk reduction,
- availing of temporary shelter (municipal halls and stadiums) for displaced citizens during disasters,

5.3 HEAD: ECONOMIC & RURAL DEVELOPMENT

The Head: Economic & Rural Development must provide strategic guidance and management for the Sub Directorates Local Economic Development and Rural Development and the functions and responsibilities relates to the following;

- Develop the directorate's Disaster Risk Management Plan,
- compilation of Departmental Disaster Risk Management Plans to ensure service continuation during emergency / disaster situations,
- identifying and prioritising essential services that may require restoration as the result of an emergency or disaster,
- Assist in drafting of appropriate development measure when development is located in medium to high disaster risk areas.
- Ensure that risk reduction and mitigation principles are applied in all development projects

- Participate in optimal, effective and sustainable land use planning to reduce community's vulnerability to disaster events
- Identify suitable area for development in conjunction with Disaster Management to ensure safe and sustainable development
- Manage and control proper animal keeping during disaster incidents
- Develop a municipal animal pound.
- supporting the DRMC in public education and awareness programmes focussing on risk prevention and risk reduction

5.4 HEAD: ENGINEERING SERVICES

The Head: Engineering Services provide strategic guidance and management for the Sub Directorates Water & Sanitation and Roads & Stormwater and the functions and responsibilities relates to the following:

- Implementing of pro-active Departmental Disaster Risk Management programmes to support disaster risk reduction or elimination and disaster preparedness,
- compiling and implementing a Maintenance Plan and Contingency Plan to ensure and support adequate infrastructural disaster risk management preparedness,
- identify appropriate integrated development projects for incorporation into the City's IDP to target the highest hazard risk areas and the most vulnerable communities to assist with disaster risk reduction efforts,
- compilation of re-active Departmental Disaster Risk Management Plans to ensure service continuation and functional performance during emergency/disaster situations,
- link all roads and storm water infrastructure network with disaster risk profile maps,
- confining and containing flood water where possible,
- assist in the identification of appropriate and significant risk reduction projects for related infrastructure at risk,
- providing technical advice in preventing or reducing the effects of flooding and storm-damage,
- incorporate all roads and storm water infrastructure projects with identified disaster risk reduction projects related to roads and storm water,
- liaison with the Department of Water Affairs as required,
- removal of debris and other obstacles from transportation routes, water canals, rivers, streams and other sites as required,
- Assist in the planning of reconstruction works of damaged roads and storm water systems after disasters,
- repairing any damaged or dysfunctional road infrastructure to restore optimal functioning of the transport network in the shortest possible time,
- taking appropriate measures to accommodate traffic on the transport network in the most expedient manner under the prevailing circumstances,
- liaison with the Provincial Roads Department and SA National Roads Agency (SANRAL), as required,
- assist on HazMat clean-up and decontamination of infrastructure and the environment,
- identifying and prioritising essential services that may require restoration as the result of an emergency or disaster,
- co-ordinating response with businesses and industries affected by the emergency,
- controlling consumption of public water supply,
- monitoring of water reservoir [and dam levels](#).
- providing alternate water supplies (potable, industrial and for fire-fighting usage),
- provide a supply of water to assembly/reception areas,
- compilation of community guidelines during prolonged disruption of waste water services,
- link water network with SDF,
- co-ordinate and facilitate the implementation of engineering works in a sustainable way,
- supplying resources for Disaster Risk Management purposes as and when requested and
- establishing and maintaining a resources database that can be integrated with the DRMC's Information Management System.

5.5 HEAD: FINANCE

The Head: Finance must provide strategic guidance and management for the Sub Directorates Revenue Management, Budget & Treasury, Supply Chain Management and Asset Management and the functions and responsibilities relates to the following

- Allocation of sufficient funds for disaster risk reduction plans according to the IDP,
- assist in the compilation and drafting of MOU's with financial implications,
- authorisation / Monitoring of additional expenditure due to an unforeseen disaster/s,
- **reprioritise funds in terms with National directives during emergencies and disasters,**
- ensure approved service providers are on SCM database for emergency procurement,
- documenting information for potential municipal insurance claims,
- assist and management of procurement process for all purchases during disasters,
- initiating and facilitating efforts to make funds available for pro-active and re-active disaster management within the municipal area,
- identify resource, suppliers, procedures for payments for items, manpower, equipment utilized / acquired; after a disaster has been attended to,
- motivation and provision of sufficient funds for recovery and rehabilitation works,
- management of donations (cash, goods) received as a result of a disaster,
- ensure a proper asset register is in place,
- compilation of re-active Departmental Disaster Risk Management Plans to ensure service continuation and functional performance during emergency/disaster situations and
- ensure an approved and updated Indigent Register for the City is kept.

5.6 HEAD: FLEET & WASTE MANAGEMENT

The Head: Fleet & Waste Management must provide strategic guidance and management for the Sub Directorates Fleet and Waste Management and the functions and responsibilities relates to the following:

- ensure appropriate staff have been placed on standby to cater for any emergency situation / occurrence (supervisors, drivers, operators and labourers),
- appropriate vehicles are available for timeous emergency response,
- establish a mutual aid agreement with Department Public Works and Private Sector for use of vehicles during disaster related incidents as part of supplementary resources,
- the provision of heavy construction plant equipment or heavy-duty vehicles e.g. excavators, tipper trucks etc. and transportation using lowbed trailers,
- technical mechanical support to maintain operational and response vehicles, plant and equipment on scene,
- ensure supply of fuel for vehicles, plant and equipment,
- hiring of specialize equipment if need be,
- provision of transport for mass evacuation,
- procedural guide and lists of internal and external contacts are available for standby teams,
- compilation of re-active Departmental Disaster Risk Management Plans to ensure service continuation and functional performance during emergency/disaster situations,
- compiling and implementing a Contingency Plan and Maintenance Plan to ensure adequate fleet are at all times in functional mode,
- establish record keeping system for all possible fleet management activities during a disaster event,
- disposing of non-hazardous waste and refuse when and where required,
- ensure that no hazardous waste (high risk care waste) are dispose-of at the landfill sites,
- Implement additional removal measures of debris as a result of a disaster event,
- provision of refuse bags and/or skips for the collection of debris and waste from affected area,

- maintain a schedule for waste removal from assembly points and temporary shelter settlements,
- effectively manage and control landfill sites to eliminate and or minimise disaster risks,
- ensure legal compliance in respect of Landfill site authorisations (permits),
- supplying resources for Disaster Risk Management purposes as requested by the Disaster Centre and
- establishing and maintaining a resources database that can be integrated with the DRMC's Information Management System.

5.7 HEAD: HUMAN SETTLEMENTS

The Head: Human Settlements must provide strategic guidance and management for the Sub Directorates Mixed Development, Land & Property, Informal Settlements and Project Management and the functions and responsibilities relates to the following:

- Compile the directorate's disaster management plan to deal with disasters in the MMM area of jurisdiction (as recommended by MMM Disaster Management).
- compilation of pro-active departmental Disaster Risk Management programmes to support disaster risk reduction or elimination and disaster preparedness, especially i.r.o. the high-risk informal settlements and other vulnerable Communities,
- make available all settlement and land-use data to disaster management and assist in hazard, vulnerability and risk assessments,
- participate in all disaster risk reduction planning,
- Identify all settlements in the municipal area of jurisdiction to ensure it has been captured on GIS,
- plot, update and maintain land-use on GIS in cooperation with Directorate Planning,
- assist in pro-active disaster management planning to ensure community resilience to cope with disasters,
- identify settlements (including informal settlements) and land-use at risk.
- identify and make available alternative land and emergency housing/shelter for persons displaced by an emergency/disaster,
- Identify suitable shelter to be utilised to accommodate displaced persons,
- ensure the relocation of communities out of risk areas (e.g. floodplains),
- ensure that all human settlements projects promote disaster risk reduction,
- **liaise with Provincial Human Settlement office for intervention when necessary,**
- develop an Emergency Housing Policy for the City and
- supplying resources for Disaster Risk Management purposes as requested by the Disaster Centre.

5.8 HEAD: METRO POLICE

The Chief of Metro Police must provide strategic guidance and management for the Directorate and the functions and responsibilities relates to the following:

- **Develop the directorate's disaster risk management plan,**
- **assist with early warning to communities at risk,**
- **protecting the safety of emergency responders, evacuated areas, affected communities and damaged or threatened property,**
- **controlling and dispersing of crowds in and around emergency areas, as required,**
- **control of access to and egress from the incident/emergency area(s),**
- **managing and controlling traffic in and around emergency area(s), on evacuation routes and on emergency vehicles access and egress routes,**
- **assist with rescue activities,**
- **protecting private and public property, as required,**
- **evacuation of designated area(s) which are threatened by any emergency of both persons and animals,**
- **protecting essential service facilities and infrastructure, as required,**

- assist with, the management of emergency shelter and mass care facilities, as well as for any designated assembly points, for persons displaced by emergencies or disasters,
- assist with the management of mass mortality after any emergency/disaster occurrence,
- co-ordinating Incident response with the South African Police Service and the other responding Emergency and Essential Services,
- compilation of re-active Departmental Disaster Risk Management Plans to ensure service continuation and functional performance during emergency/disaster situations and
- assist with the seize and disposal of food that poses a health hazard.

5.9 HEAD: PLANNING

The Head: Planning must provide strategic guidance and management for the Sub Directorates Town & Regional Planning, Land Use Control, GIS, Environmental Management and Architectural Services and the functions and responsibilities relates to the following:

- Develop the directorate's disaster risk management plan,
- compilation of pro-active Departmental Disaster Risk Management programmes to support disaster risk reduction or elimination and disaster preparedness,
- participate in optimal, effective and sustainable land use planning to reduce community's vulnerability to disaster events,
- align all land use planning with disaster hazard, vulnerability and risk profile maps,
- identify suitable area for development in conjunction with Disaster Management to ensure safe and sustainable development,
- create up to date land use - and cover data on stand level to be used to identify vulnerable people: i.e. old age homes and day care centres,
- make available all GIS data and assist in analysis and printing of disaster risk profile maps,
- rendering GIS support and advice to all role-players throughout all phases of Disaster Risk Management planning and preparedness processes,
- support disaster risk reduction or elimination and disaster preparedness, through the long term spatial development framework to ensure integrated, pro-active and decisive decision making on major infrastructure,
- supplying resources for Disaster Risk Management purposes as requested by the Disaster Centre,
- ensure that risk reduction and mitigation principles are applied as part of the environmental input into all development projects, including the identification of possible environmental disasters,
- identify appropriate integrated development projects for incorporation into the City's IDP to target the highest hazard risk areas and the most vulnerable communities to assist with disaster risk reduction efforts,
- include the reduction of natural disasters as an element in environmental education programmes,
- monitoring the environment (ground, air, water and the ecosystem) for contamination and degradation,
- assist and advise on Hazzmat clean-up and decontamination of the environment,
- identification of land for mass burials if required,
- regularly update the Environmental Management Legal Compliance Register and
- develop and review the City's Climate Change Strategy.

5.10 HEAD: SOCIAL SERVICES

The Head: Social Services must provide strategic guidance and management for the Sub Directorates Disaster Risk Management, Fire & Rescue Services, Social Development and Parks & Cemeteries and the functions and responsibilities relates to the following:

- establish and ensure the effective functioning of the Municipal Disaster Risk Management Advisory Forum,
- compilation of re-active departmental Disaster Risk Management Plans to ensure service continuation during emergency/disaster situations,
- ensure a functional Disaster Control Centre with a sufficient staff complement,
- conduct incident assessment and disaster risk assessments,
- when necessary submit reports containing recommendations for changes to the Municipal Disaster Risk Management Plan to Council,
- emergency/contingency planning together with all role-players for Council amenities and facilities that are used for mass events,
- responsible for the co-ordination of disaster risk reduction plans, projects and programmes,
- responsible for appropriate Standing Operating Procedures (SOP's) for Disaster Risk Management operations,
- provision of 24/7 communications centre,
- co-ordinate and facilitate disaster management activities of line functionaries in coordination with the Head of Disaster Management,
- assist with early warning to communities at risk,
- co-ordinate and facilitate the implementation of recovery and rehabilitation to ensure disaster risk reduction,
- make available Council amenities and facilities for emergency assembly and/or shelter and mass care of persons displaced by emergencies or disasters,
- plan for, and assist with, the management of emergency shelter and mass care facilities, as well as for any designated assembly points, for persons displaced by emergencies or disasters,
- **make available immediate relief (e.g. blankets, mattresses, temporary shelter (shacks) , food and etc.) to households affected by incidents, or facilitate support thereof from registered NGOs or businesses**
- undertake facility management preparations in terms of the emergency evacuation plans for each amenities and facility,
- assist with the removal of vegetation proving to be hazardous, both pro-actively and re-actively after any Incident,
- assist with the identification of mass burial sites, as may be required by any emergency/disaster occurrence,
- assist with the management of mass mortality after any emergency/disaster occurrence,
- plan and co-ordinate appropriate risk reduction projects according to the disaster risk profile of the municipality,
- responsible for fire prevention through public education, awareness and fire safety programmes,
- provide basic training in fire fighting for employees, identified volunteers and community based organisation members,
- responsible for public safety activities through fire safety activities (inspections etc.), awareness and education programs and evaluation of building plans and developments in line with relevant legislations, regulations, codes, the disaster risk profile and SDF,
- preventing the outbreak or the spread of fires,
- fighting and the extinguishing of fires,
- protecting life and property from fire or other threatening danger, rescuing of life or property from fire or other danger,
- responsible for rescue activities,
- management and control of hazardous material spillages,
- assist and manage hazardous material decontamination facilities and operations,
- co-ordinating Incident response with the South African Police Service and the other responding Emergency and Essential Services,

- evacuation of designated area(s) which are threatened by any emergency of both persons and animals,
- take steps to eliminate disaster risks presented by communicable diseases,
- isolate person(s) in order to decrease or eliminate disaster risk presented by a communicable disease,
- monitor large groups of people for contamination and/or health effects,
- preventative issues around communicable diseases for disrupted populations (may be general population or limited to vulnerable populations and essential service operators),
- assist with the management of emergency shelter, evacuation assembly points and mass care facilities for persons displaced by emergencies or disasters,
- seize and dispose of food that poses a health hazard,
- ensure the burial of all unidentified and unclaimed bodies found,
- represent the City in the Provincial Disease Outbreak Response Team,
- manage and control the City's Clothes **and Food Bank**,
- monitor the environment (air, water, and ecosystem) for contamination,
- identify victims, responders or affected persons who may require medical follow-up and/or who may require psychosocial support and to facilitate this support which may be provided by the appropriate governmental and non-governmental agencies as applicable,
- identify persons/organisations to contribute to post-emergency reports/debriefs regarding health matters,
- ensure resources are available during disaster response, recovery and rehabilitation,
- liaise with the Provincial Department of Health and Private Hospitals for the provision of curative and operative interventions during any major incident,
- establishing and maintaining a resources database that can be integrated with the DRMC's Information Management System.

5.11 CENTLEC

The Chief Executive Officer of CENTLEC must provide strategic guidance and management for CENTLEC and the functions and responsibilities relates to the following:

- compilation of pro-active departmental Disaster Risk Management programmes to support disaster risk reduction or elimination and disaster preparedness,
- identify appropriate integrated development projects for incorporation into the City's IDP to target the highest hazard risk areas and the most vulnerable communities to assist with disaster risk reduction efforts,
- compilation of re-active departmental Disaster Risk Management Plans to ensure service continuation during emergency/disaster situations,
- co-ordinating response with businesses and industries affected by an emergency,
- co-ordinating response with National and Provincial Public Works Departments,
- co-ordinating response with Eskom regarding electricity supply to the City and regarding the City's distribution areas,
- allocating available electricity supply,
- planning for alternate electricity distribution and supply,
- arranging for an alternate telephone or communication service, if required,
- controlling telecommunications system load,
- identifying buildings which are electrically unsafe,
- identifying and prioritising essential services that may require restoration as the result of an emergency or disaster,
- supplying resources for Disaster Risk Management purposes as requested by the DRMC,
- establishing and maintaining a resources database that can be integrated with the DRMC's Information Management System and
- **liaise with ESKOM for assistance or interventions in their respective service delivery areas.**

CHAPTER 6 DISASTER RISK ASSESSMENT

6.1 Hazard identification

The following hazards have been identified:

- Drought
- Extreme cold
- Heat wave
- Hail
- Windstorm
- Tornado
- Floods
- Structural fires
- Veldfires
- Earthquake
- Human epidemic
- Animal epidemic
- Hazmat transportation
- Hazmat fixed facility
- Hazmat biological (Anthrax)
- Hazmat radioactive
- Fire and explosion
- Transport motor vehicles
- Transport rail
- Transport aircraft
- Dam failure
- Hostage/ hijack incidents
- Reservoir break
- Water contamination

6.2 Hazard Seasonal Calendar

A hazard seasonal calendar is a calendar that indicates the possible occurrence of hazards in a specific season. This enables Disaster Management to focus on certain hazards during specific time of the year enhancing disaster management planning.

Figure below shows the hazard calendar for Mangaung with the hazard and the time of year when to expect the occurrence of such an event.

Hazard	Jan	Febr	Mch	Apr	May	Jun	Jul	Aug.	Sept	Oct	Nov	Dec
Fire												
Veldt fire												
Floods												
Severe_storms												
Extreme Colds												
Extreme Heat												
Air pollution												
Drought												
Human_disease												
Animal_disease												

Figure 3: Hazard seasonal calendar for the City

6.3 Climate change

The gradual changes in atmospheric conditions that accompany global warming are affecting ecosystems and natural events. As a result, events that are potentially hazardous to humans, such as floods, storms, extreme temperatures and droughts will become more frequent and more intense in various parts of the world.⁵

According to the IPCC⁶: Africa is particularly vulnerable to the effects of climate change because of multiple stresses and low adaptive capacities, arising from endemic poverty, weak institutions, and complex disasters and associated conflicts. Drought will continue to be a primary concern for many African populations. The frequency of weather- and climate-related disasters has increased since the 1970s, and the Sahel and Southern Africa have become drier during the twentieth century. Water supplies, and agricultural production will become even more severely diminished. By 2020, in some African countries agricultural yields could be reduced by as much as 50%. By the 2080s, the area of arid and semiarid land in Africa will likely increase by 5-8%.

Climate change is a cross-boundary scientific reality that threatens the global community's shared carbon space. It poses a serious risk to ecosystems, food security, economic development, disaster management and the realisation of sustainable development. The City is thus responsible for incorporating mandates that deliver on both climate change adaptation and mitigation measures into their respective policy frameworks, and to develop appropriate strategies for which they are legislatively responsible.

Climate change brings with it long-term shifts in mean weather conditions and the possibility of increasing frequency and severity of extreme weather events. Hence there should be a mounting concern about the impacts of disasters related to climate change. The focus of disaster management is to reduce the risk posed by actual and potential Hazards. Climate change is a multifaceted (from drought to flood) and multidimensional (from local to global) hazard. It is intensifying the hazards that affect human livelihoods, settlements and infrastructure and weakens the resilience of livelihood systems in the face of increasing uncertainty and frequent disasters.

Climate-related disasters have increased in frequency and/or intensity as a result of climate change. The trend is already noticeable, with a dramatic and continuing rise in the number of small and medium-scale climate-related disasters; since the 1980s, the average number of people reported as affected by climate-related disasters has doubled from 121 to 243 million a year. As a result, Disaster Risk Reduction (DRR) needs to incorporate climate change analysis and is an important component of adapting to climate change.⁷

There is a strong interrelationship between climate change adaptation and disaster risk reduction. One of the fundamental linkages between the two areas of activity is their shared objective to address vulnerability in communities affected by climate risk. The difference is that while disaster risk reduction has traditionally looked at risks that communities know and are familiar with, climate change adaptation focuses more on future scenarios as projected by climate science. Climate change has a slow-onset consequence and needs a long-term, gradual and progressive adaptation whilst Natural hazards have sudden consequences which need a short -term to medium -term approached for risk reduction. The ultimate result is human lives are protected; social, economic and environmental damage is permanently prevented or reduced.

Climate change risks identified in the City's Draft Climate Change Strategy⁸ relates to excessive rainfall and flooding, droughts, strong winds, fires, thunderstorms, lightning and severe thunderstorms which may lead to:

- Loss of livelihoods (rural and urban) and income, water insecurity, reduced agricultural productivity as a result of reduced rainfall and increased temperature,
- Loss of grassland ecological infrastructure goods and services that support livelihoods,
- Potential increase in disease and disruption of livelihoods due to floods especially for people residing in flood line zones,

⁵ IPCC, 2014: Intergovernmental Panel on Climate Change, 5th Assessment report- Mitigation of Climate Change 2014.

⁶ IPCC, 2012: Intergovernmental Panel on Climate Change Fourth Assessment Report, Working Group II Report

⁷ Oxfam International Research Report, April 2010: Climate Change Adaptation

⁸ Mangaung Metropolitan Municipality Draft Climate Change Strategy, 2015.

*Proposed amended DMP: January 2022
Draft working document*

- Serious damage and collapse of infrastructure networks and critical services such as water supply as well as access and provision of emergency services,
- Potential loss of life, discomfort and disease resulting from extreme heat as well as increase in the number of hot days. Persons at risk include vulnerable urban populations and those who work outside, e.g. in the farms and road maintenance in both rural and urban areas,
- Increased food insecurity and the breakdown of food production and supply systems due to increased temperatures, drought, flooding, rainfall variability and other extreme weather events.

Climate change adaptation can be implemented at any stage of the disaster continuum. Even immediately after a disaster strikes, measures such as providing a protected and safe water supply can prevent the situation worsening.

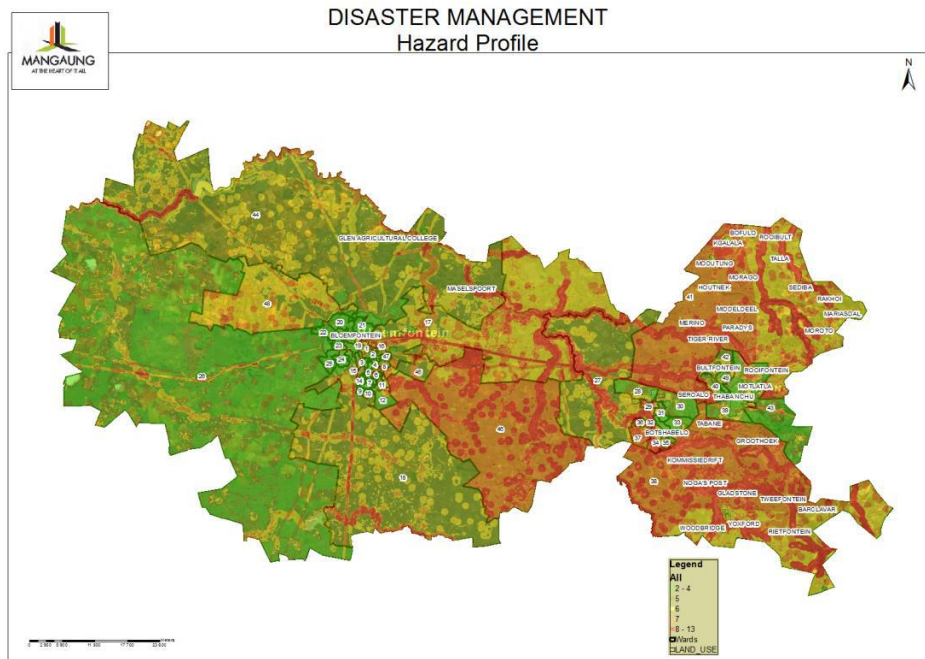
During the recovery phase, infrastructure can be repaired or rebuilt better and more able to withstand future climate related events. In anticipation of climate change, drought-tolerant plants and water harvesting can be introduced to reduce the impact of declining rainfall.

6.4 Risk Analysis

6.4.1 List of Major Hazards

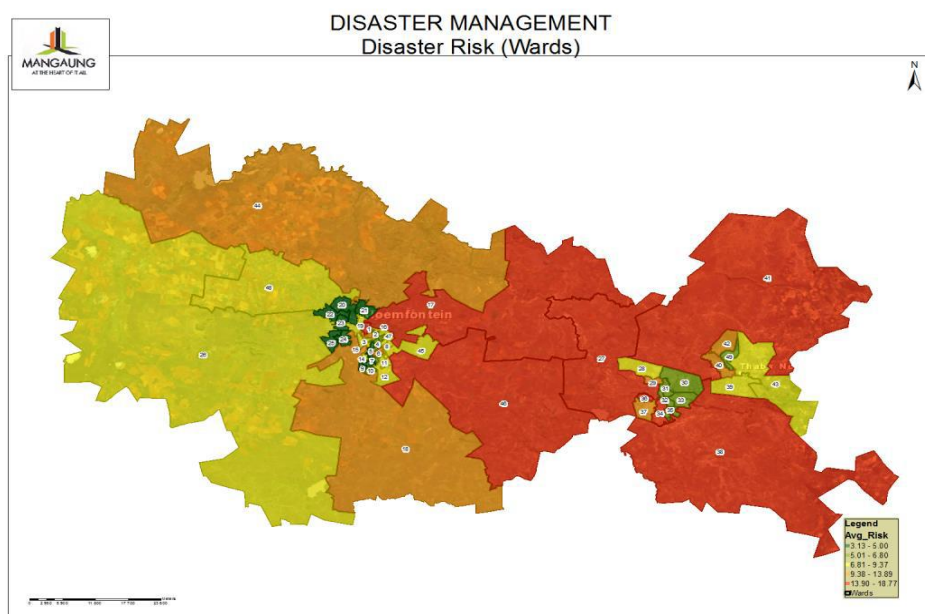
Hazard	Potential Consequences
Animal Disease	Most animal disease emergencies present little direct threat to human health, however the cost in purely economic terms may be particularly significant. Many rural residents rely on their animals for subsistence, and there are a number of larger animal-based industries in the Province.
Fire (Veld/ Structural)	Loss of life, (loss of breadwinner), severe injury, loss of homes, loss of crops, stock losses, of grazing land, loss of income, disruption of economy. Stretching of the emergency response capability.
Flood/Severe Storm, Rainfall, Dam failure and Landslides	Loss of life, (loss of breadwinner), severe injury, loss of homes, loss of stock loss of income, increased risk of disease. Infrastructural damages or collapsed
Hazardous Material	Loss of life, (loss of breadwinner), severe injury, evacuation of large areas, fires, explosions, ground and air pollution. Road and rail transport travelling through the province carrying dangerous chemicals and corrosive substances poses the threat of a significantly dangerous accident.
Human Epidemic	Loss of life, (loss of breadwinner), extended illness, loss of employment because of absenteeism, over-taxing of the medical response capability.
Major Infrastructure Failure	Loss of electrical power, causing: lack of heating; lack of refrigeration; limited fuel supplies; loss of employment through closures of industry. Loss of communications, leading to severe impact on the municipal and provincial disaster co-ordination ability. Loss of telephone, fax, computer (internet), automated teller machines, electronic sales.
Major Transportation	Loss of life, (loss of breadwinner), severe injury, loss of income, stretching of response and medical capability. Transport could involve aircraft, trains, tour coaches, school buses, taxis or heavy transport vehicles.
Terrorist Activity	Loss of life, (loss of breadwinner), severe injury, loss of income. Combination of the consequences from all other hazards, dependent upon the type of terrorist activity employed.
Water Contamination	Increased disease, loss of life, loss of stock, pressure on health facilities.
Heat wave	Excessive drought, loss of crops, diseases, loss of life
Extreme cold	Loss of livestock, loss of crops, diseases,
Hostage/ hijack incidents	Loss of human life, economic loss
Snow	Economic loss, loss of human life, livestock and infrastructure.

6.4.2 Hazard and Risk profile maps⁹



Map 2: Hazard profile for Bloemfontein, Thaba Nchu and Botshabelo

The map shows the number of hazards for a specific geographical area. For example, the red areas indicate that there are between 8 and 13 hazards for that area. Therefore, the more red the area, the more hazards are present.



Map 3: Risk profile for Bloemfontein, Thaba Nchu and Botshabelo

The map shows the average disaster risk for all the wards and the result indicates that the eastern wards of the municipality have a higher disaster risk.

Floods, severe storms, surface water pollution, veld fires, land degradation and drought are the highest ranked disaster risks for the municipality and therefore the priorities.

⁹ Dr Herman Booysen, Mangaung Metropolitan Municipality Risk and Vulnerability Assessment report 2013
Proposed amended DMP: January 2022
Draft working document



Map:4. Hazard profile for Ward 50 (Van Stadensrus, Wepener and De Wetsdorp)

The map indicates the number of hazards for the specific areas, the red areas shows where more than 8 hazards are identified (e.g. Infrastructural [dam failures], water contamination, human and animal epidemics, floods, fires)

Due to the vast open spaces and being a predominate farming (rural-type) area, it should be noted that veld fires, animal diseases and drought can have a major impact on the communities.

Ward 50 is situated 75kms south-east of Bloemfontein and with no emergency functionary resources available increases the risk level, meaning the community is highly vulnerable with a no coping capabilities. Education on risk reduction to enhance community resilience and sustainable infrastructural maintenance becomes of utmost importance.

6.5. RISK REDUCTION STRATEGIES

HAZARD	POTENTIAL RISK	RISK REDUCTION STRATEGIES
Human epidemic	Substantial loss of life.	<ul style="list-style-type: none"> Awareness programmes: on different types of diseases. Disease surveillance, health programmes, Social Welfare programmes Ensure that service providers have contingency plans in place
	Low immunization rates in the province/municipality will increase the likelihood of an epidemic occurring	<ul style="list-style-type: none"> Health awareness, medical effects of non-immunization e.g. polio, measles Ensure that department of health has contingency plans in place.
	Psychological effects on the community	<ul style="list-style-type: none"> Awareness programme: Sensitize communities on the effects of epidemics, counseling and rehabilitation.
	Loss of income within the province/municipality	<ul style="list-style-type: none"> Identify potential industry risk Awareness programmes: address economic impact, train replacement employees. Promote good health practices Effects and treatment of epidemic outbreaks. Contingency planning e.g. Streamlining services to meet budgetary constraints.
	Vector/vermin contact will spread the epidemic throughout the	<ul style="list-style-type: none"> Awareness programmes: identification of diseases, Monitoring and

	municipal area and beyond.	surveillance. Preventing measures in respect of vermin, pest control and good housekeeping: clear breeding sites etc.
	Stigma being attached to the municipality accompanied by a tourist and visitor downturn.	<ul style="list-style-type: none"> • Awareness: Good public relations and marketing programmes to be promoted.
Major infrastructure failure	Water supply pumping facilities will be rendered inoperable.	<ul style="list-style-type: none"> • Awareness: Maximum use of available recourses, water sanitation, personal hygiene and health awareness • Identify alternative safe water supplies e.g. bore holes, Farms dams, rivers and springs and ensure service providers have contingency plans in place. • Encourage installation of backup power.
	Disaster communication facilities will be rendered inoperable.	<ul style="list-style-type: none"> • Awareness programmes: Identify alternative means of communication • Disaster Management and service providers to ensure that contingency plans are in place. (TELKOM, ESKOM, CENTLEC, etc) • Encourage installation of backup power • Identify vulnerable sectors high risk flood plain
	Fuel supply facilities will be rendered inoperable	<ul style="list-style-type: none"> • Awareness programme: Maximize use of available fuel resources e.g. rationing, Encourage the use of public transport, rail etc. • Identify alternative suppliers • Encourage strategic suppliers to provide emergency backup systems
	Telephone land-line and cell communication will be rendered inoperable.	<ul style="list-style-type: none"> • Service providers to have contingency plans in place for e.g. radio, satellite phones.
	Base radio transmitter stations relying on power will be rendered inoperable	<ul style="list-style-type: none"> • Awareness programmes: Identify alternative means of communication e.g. telephone and cell communication • Service provider to have contingency plans.
	Electronic banking facilities will be rendered inoperable	<ul style="list-style-type: none"> • Service provider to have contingency plans in place
	Business and industry refrigeration and cooling facilities will be rendered inoperable	<ul style="list-style-type: none"> • Awareness programmes: contamination of foodstuffs • Identify high risk areas e.g. meat storage, mortuaries. • Identify alternative refrigeration facilities e.g. mobile refrigeration • Maintain and upgrading of infrastructure
Major Transportation Incident	Accidents involving aircraft, trains, coaches or taxi vehicles will result in death or serious injury to a large number of people.	<ul style="list-style-type: none"> • Awareness/law enforcement e.g. regular safe inspections. Road and vehicle safety principles to be adopted by drivers and passengers. • MMM and service providers to have contingency plans in place. • Regular interaction between role players to identify risks. • Identify hospitals with the capacity and expertise to cope with such major incidents.

	The bad mechanical condition of vehicles traversing Municipality roads will cause road accidents.	<ul style="list-style-type: none"> • Awareness programmes: Road and vehicle safety principles to be adopted by drivers and passengers. • Co-ordination /Implementation of law enforcement. • Road and vehicle safety principles to be adopted by drivers and passengers.
	Inappropriate driver behavior will cause road accidents	<ul style="list-style-type: none"> • Awareness programmes: Road and vehicle safety principles to be adopted by drivers and passengers. • Co-ordination /Implementation of law enforcement.
	Deteriorating road conditions will cause road accidents	<ul style="list-style-type: none"> • Awareness e.g. Signage • Law enforcement to combat e.g. overloading • Planned Maintenance
Water Contamination	Contaminated water supplies will cause disease such as cholera and dysentery	<ul style="list-style-type: none"> • Awareness programmes: Proper industrial and commercial water management procedures, good hygiene and sanitation practices, household water treatment options e.g. bleach • Responsible agencies to have contingency plans in place. • Regular monitoring and surveillance.
	Shortage of potable water supplies will aggravate the situation	<ul style="list-style-type: none"> • Awareness e.g. purification of alternatives water resources. Encourage rain water harvesting. • Departments to have contingency plans in place. • Identify alternative potential water resources e.g. boreholes, dams (database) spring protection.
	Resultant epidemics will place a great strain on the District's health facilities	<ul style="list-style-type: none"> • Department of Health to have contingency plans in place e.g. identify district health facilities and call support from other agencies
Animal Disease	Loss of export capability.	<ul style="list-style-type: none"> • Awareness programmes e.g. State controlled diseases, symptoms of animal disease • Ensure that Veterinary services have contingency plans in place. • Identify disposal sites and guard disposal sites
	Cross contamination with indigenous wildlife will spread disease.	<ul style="list-style-type: none"> • Awareness programmes e.g. Proper fencing, quarantine procedure • Ensure that Veterinary services have contingency plans in place. • Monitoring/Surveillance (SAPS Agriculture etc.)
	Loss of production (income) will have a severe impact on the economic viability of the rural population	<ul style="list-style-type: none"> • Awareness programmes e.g. Type of service available. • Knowledge of symptoms
	Impact on the reputation of the area.	<ul style="list-style-type: none"> • Awareness programmes e.g. Facts and Effects of the disease, Avoid panic, Refer tourists to alternative resorts • Positive marketing
	Loss of production (income) will have severe impact on the food	<ul style="list-style-type: none"> • Ensure that Department of Agriculture to have contingency plans in place

	supply of the rural population.	<p>(Recruitment of Veterinary personnel)</p> <ul style="list-style-type: none"> • Support from Department of Welfare/Veterinary services • Awareness Programmes: Encourage insurance • Ensure proper staffing provision of Recruitment of enough staff • Mutual assistance agreements with other provinces.
Drought	Reduction or loss of natural or reticulated water for human and stock consumption	<ul style="list-style-type: none"> • Awareness programmes e.g. Do not cultivate or drain wetlands. Control of alien vegetation i.e. bug weed, wattle, lantana and paraffin weed. Protect springs. Encourage rainwater harvesting and investment in water tanks • Planning (IDP) for alternative reliable water sources e.g. Dams, covered reservoirs, boreholes and springs • Continuous maintenance of natural and reticulated water sources • Departments of Agriculture and DWAF to have contingency plans in place
	Loss of crops	<ul style="list-style-type: none"> • Awareness programmes: Good farming practices, contour plowing, minimum tillage, crop rotation. Encourage planting drought resistant varieties. • Identify responsible agency and ensure to have contingency plans in place
	Loss of grazing	<ul style="list-style-type: none"> • Awareness programmes: Good farming practices e.g. back burning, fire breaks, crop rotation and prevention of soil erosion. Identify alternative grazing. • Proper clearing of encroaching alien vegetation e.g. Back burning
	Loss of livestock	<ul style="list-style-type: none"> • Awareness programmes: e.g. Fire breaks, Good grazing practice e.g. Designated areas for grazing • Make provision in IDP for designated communal holding areas to supplement feed and water
Fire	Informal settlements have an increased vulnerability to fire because of the close quarters and lack of access.	<ul style="list-style-type: none"> • Establish fire services. • Awareness programmes: Good House Keeping. Proper clearing of encroaching vegetation and disposal of refuse. Encourage specialized institution to present safety audits. Provide firefighting training for volunteers and basic equipment • Proper policing to avoid further influx • Plan alternative accommodation e.g. include development of housing as priority in the IDP
	Loss of stock and game	<ul style="list-style-type: none"> • Awareness programmes: e.g. on fire breaks, Good grazing practice e.g. Designated areas for grazing • Training of firefighting volunteers

	Loss of roofing., thatch, rendering housing uninhabitable	<ul style="list-style-type: none"> • Awareness programmes: Encourage good building practices e.g. use of proper roofing materials • Proper clearing encroaching vegetation e.g. Back burning.
	Pregnant women, young children the elderly and the disable unable to evacuate in time.	<ul style="list-style-type: none"> • Awareness programmes: Fire behaviour e.g. Reading wind direction and evacuation procedures. • Early warning systems e.g. Media broadcast, pamphlets and load halers • Identification of places of safety. • Identify alternative access routes
	Loss of crops	<ul style="list-style-type: none"> • Awareness programmes: Good farming practices e.g. Back burning, fire breaks and crop rotation
	Loss of grazing land	<ul style="list-style-type: none"> • Awareness programmes: Good farming practice e.g.
	Destruction of industrial areas, industrial job losses, economic losses	<ul style="list-style-type: none"> • Establishment of FPAS (Fire Protection Associations) • Maintenance of gas pipes, Awareness campaigns fire protection systems contingencies plans for industries
Flood, Storm, Severe Rainfall, Dam failure and Landslide	People will not be able to evacuate the area	<ul style="list-style-type: none"> • Identify vulnerable sectors informal/formal • Awareness programmes: Pre-identified high ground shelter, leave unnecessary item. Take food etc. • Consider relocation of informal temporary shelter • Pro-active measures of mitigation (gabion baskets) • Early warning systems Pre-identify alternative accommodation • Include in IDP for future development
	Areas will be cut off by washed out roads, bridges etc., preventing access by response agencies.	<ul style="list-style-type: none"> • Identify vulnerable sectors informal/formal • Awareness programmes (proper drainage) • Identify alternative routes • Planning, positioning and quality of roads • Pre-identify alternative resources in terms of access (Rubber duck) for floods only • Include IMS protocol in conjunction with department of transport
	Building (Public and Private) and informal settlements will be destroyed, leaving large number of people homeless.	<ul style="list-style-type: none"> • Awareness in terms of building codes in rural areas. (Quality of homes) and (management of household possessions) • Pre-identify alternative accommodation / Maintain database of resources.
	Sanitation and health problems.	<ul style="list-style-type: none"> • Awareness programmes: Promote the treatment of available water resources and good personal hygiene practices. Prevention of water born disease. e.g. (Malaria, Cholera and diarrhea) • Identify responsible and ensure contingency plans in place

	Women left to care extended families with no means of transportation out of the affected area	<ul style="list-style-type: none"> Identify vulnerable sectors informal/formal Identify alternative routes Resources in terms of access
Hazmat Incidents Snow	Pollution of the water table	<ul style="list-style-type: none"> Awareness programmes: the effect of various chemical and precautionary measures, identify specialized and alternative treatment facilities and places of safety MMM Municipal Health, DWAF to have contingency plans in place. Identify Hazmat Task Team
	Pollution of the soil	<ul style="list-style-type: none"> Awareness programmes: the effect of various chemical and precautionary measures, identify specialized and alternative treatment facilities and places of safety MMM Municipal Health, DWAF to have contingency plans in place. Identify Hazmat Task Team
	Human exposure to toxic chemical resulting in serious harm or death.	<ul style="list-style-type: none"> Awareness programmes: the effect of various chemical and precautionary measures, identify specialized and alternative treatment facilities and places of safety MMM Emergency Services & Municipal Health, DWAF to have contingency plans in place. Identify Hazmat Task Team
	Pollution of the atmosphere will occur from the release of hazardous material.	<ul style="list-style-type: none"> Awareness programmes: the effect of various chemical and precautionary measures, identify specialized and alternative treatment facilities and places of safety MMM Municipal Health, DWAF to have contingency plans in place. Identify Hazmat Task Team
	People will not be able to evacuate the area	<ul style="list-style-type: none"> Identify vulnerable sectors informal/formal Awareness programmes: Pre-identified high ground shelter, leave unnecessary item. Take food etc. Consider relocation of informal temporary shelter Pro-active measures of mitigation (gabion baskets) Early warning systems Pre-identify alternative accommodation Include in IDP for future development
	Areas will be cut off by washed out roads, bridges etc., preventing access by response agencies.	<ul style="list-style-type: none"> Identify vulnerable sectors informal/formal Awareness programmes Identify alternative routes Planning, positioning and quality of roads Pre-identify alternative resources in terms of access Include IMS protocol in conjunction with department of transport Include IDP

Chapter 7

RESPONSE AND RECOVERY

7.1 Objective

To ensure effective and appropriate disaster response and recovery by:

- Implementing a uniform approach to the dissemination of early warnings;
- Averting or reducing the potential impact in respect of personal injury, health, loss of life, property, infrastructure, environment and government services;
- Implementing immediate integrated and appropriate response and relief measures when significant events or disasters occur or are threatening to occur;
- Implementing all rehabilitation and reconstruction strategies following a disaster in an integrated and developmental manner.

The operational plans and guidelines of the various response agencies that contribute to field operations must be considered when allocating responsibilities for response and recovery. Primary and secondary responsibilities will be allocated for each of the operational activities associated with disaster response e.g. evacuation, shelter, search and rescue, emergency medical services and fire fighting.

The Disaster Management Centre will activate the Disaster Operations Centre and when necessary , for urgent reprioritising of resources, request the City Manager to activate the Disaster Executive Team.

Liaising with Sector departments becomes critical to respond effectively in a coordinate manner.

Following response plans need to be annually updated or as and when necessary;

- **Floods response plan**
- **Drought response plan**
- **Water interruption response plan**
- **Electricity interruption / failure response plan**
- **ICT infrastructure collapsed / failure response plan**
- **Structural Fires response plan**
- **Disease outbreak response plan**
- **Xenophobia / public unrest response plan**
- **Earthquake response plan**

7.2 Process for the classification and declaration of state of disaster

In terms with Sect 55 (1) & (2) of the Act the City Council may by notice in the provincial gazette declare a local state of disaster and may further make by-laws or issue directions to ensure effective control and management of such local disaster. The flowchart below describes the process for the declaration of such a disaster.

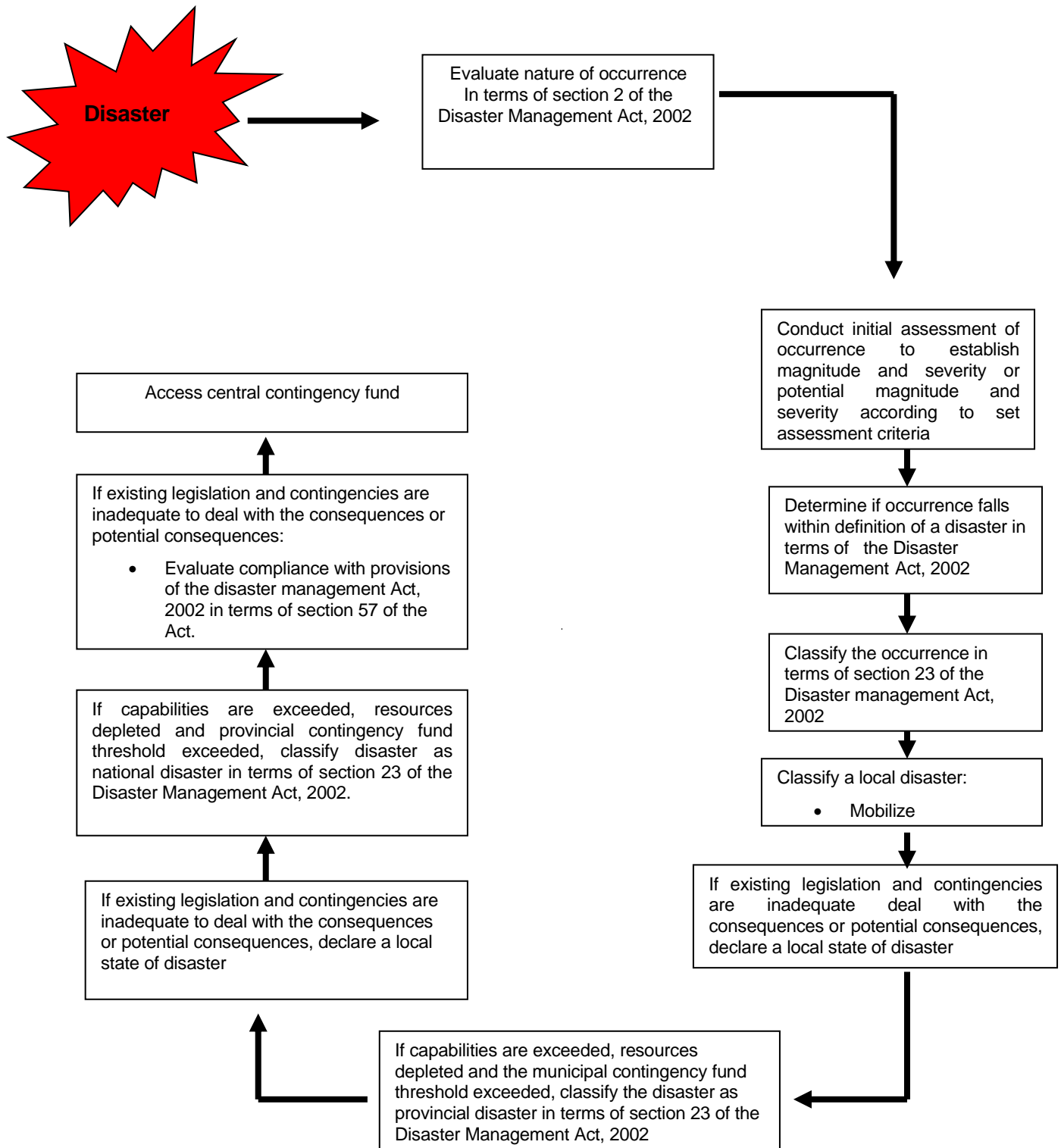


Figure 4: Process for declaration of a state of disaster

Proposed amended DMP: January 2022
Draft working document

7.3 DISASTER OPERATIONS CENTRE (DOC)

7.3.1 ROLE OF THE DISASTER OPERATIONS CENTRE (DOC)

Section 54 (1) (a) of the Disaster Management Act stipulates that the Council of the metropolitan municipality is primary responsible for the co-ordination and management of local disasters that occur in its area.

The objective is to ensure effective and appropriate disaster response and recovery by:

- Implementing a uniform approach to the dissemination of early warnings
- Averting or reducing the potential impact in respect of personal injury, health, loss of life, property, infrastructure, environments and government services
- Implementing immediate integrated and appropriate response and relief measures when significant events or disasters occur or are threatening to occur
- Implementing all rehabilitation and reconstruction strategies following a disaster in an integrated and developmental manner

The Head of the Disaster Risk Management Centre shall be the focal point in the command and control for disaster response in accordance with all relevant policies and or guidelines. Depending on the nature of disaster and response he will be the Incident Commander of the Disaster Operations Centre (DOC) himself or delegate the responsibility to some other officer as he may deem fit.

All the relevant Heads of Sub Directorates (General Managers) involved in response and relief will report to the DRMCC and work in accordance with their respective Standard Operating Procedures (SOPs).

The DOC's main operational role is to establish a platform to manage incident related information in support of the Executive Management Team of the City, established to direct a multi-disciplinary response to a major emergency/disaster.

7.3.2 PROCEDURE TO ACTIVATE THE DISASTER OPERATIONS CENTRE (DOC)

When a disastrous event occurs, or is threatening to occur in the area of the municipality, on receipt of an activation alert from the Head of the DRMCC (or designate), the following procedure (trigger mechanism) will be followed depending on the two scenarios:

- Where Early Warning alerts / signals are available
- Where Disaster occurs without any early warning

Early warnings are designed to alert areas, communities, households and individuals to an impending or imminent significant event or disaster so that they can take the necessary steps to avoid or reduce the risk and prepare for an effective response

7.3.2.1 Where Early Warning alerts / signals are available

- The National and Provincial Disaster Centres have been designated for generating / forecasting of events of natural disasters. Onset of disaster shall be indicated through forecasting by these Centres in respect of their respective hazards to the City's DRMCC.
- SAWS and the Council of Geoscience based on their forecasts shall be responsible to issue Alerts and Warnings to DRMCC.
- Industrial and business sector shall be responsible to issue their alerts and warnings to the DRMCC.
- As soon as the Watch/Alerts/warning has been issued to the DRMCC the IDRMCC shall immediately be activated and depending on the seriousness of the eminent occurrence dispatch the necessary emergency related functionaries. Immediate message will be sent to the Executive Management Team.

- First and foremost, task shall be informing the community likely to be affected by the disaster through a warning system and if necessary undertake evacuation. There shall be only one responsible agency/officer designated and authorized to issue the warning in respect of a disaster to avoid miscommunication.
- Dissemination of warnings to people may range from alarms (fires), sirens (industrial disaster), to public announcement system like radio, television, and loud speakers
- Once the warning is issued it shall be followed-up by subsequent warnings and de-warning in order to keep the people informed of the latest situation.
- Warning messages shall be user friendly. The warning protocols shall be designed in simple and local languages easily understandable by the public.
- DOC shall activate available manpower and resources of relevant emergency functionaries.
- The DOC may order pro-active measures of evacuation. A comprehensive Standing Order, listing all necessary pro-active measures based on the warning, will be prepared by the DOC.

7.3.2.2 Where Disaster occurs without early warning

In disaster situations where no early warning signals are available, the primary objective from the DRMCC shall be to dispatch immediate rescue and relief operations and set the process in as quickly as possible. The following procedure shall be followed in such situations:

- The first field functionary at the scene shall inform the DRMCC of the incident.
- An Emergency Operating Centre (EOC) in close proximity of the scene shall be fully activated for managing the incident.
- Information, warnings to the community will be executed by the Communications unit within the ambit of the Communications plan.
- The EOC shall inform the DRMCC on the severity, impact of the occurrence and seeks assistance if required.
- Depending on the OEC information relating to possible coping constraints the DRMCC will activate the DOC and may activate measures for evacuation.
- DOC shall activate and deploy other response teams (Public Works, SANDF, SAPS, NGO's and private entities)
- Team for rapid assessment of damage shall be deployed,
- DOC shall inform the Executive Management and Provincial DMC
- **The Executive Management Team may activate the Disaster Executive Team**
- The OEC will be the only communication centre to the DOC on issues relating to the incident.
- Depending on the severity and impact the PDMC shall inform the NDMC
- DOC shall review the situation and activate coordination, command and control. Shall ensure proper and efficient recovery and rehabilitation processes are implemented.
- The DOC will, depending on the severity and impact of the disaster incident motivate to the EMT the declaration of a local state of disaster. EMT after consideration will recommend the declaration to the Executive Mayor or will decline the motivation.

7.3.2.4 Major Role Players in integrated early warning:

- South African Weather Services - climate forecast, satellite information;
- Department of Water Affairs & Forestry - flood warnings, dam and river levels, water supplies;
- Department of Agriculture - crop forecasts, staple food quality, forage availability, water irrigation and livestock;
- Department of Health – epidemics and diseases.
- Council of Geoscience - earthquakes

7.3.3 Disaster Executive Team

During a disaster occurrence the City will activate the Disaster Executive Team, to deal with the disaster response on a strategic level, relating to:

- associated legal, policy, financial and political matters,
- reprioritising of resources to ensure effective response, relief , recovery and rehabilitation,
- immediate reporting on disaster occurrences to the Council, Provincial and National structures,
- involvement of Councillors.

The Disaster Executive Team comprises of:

- The City Manager, as chairperson
- All Heads of Directorates, including CEO of CENTLEC
- Official from the Office of Executive Mayor
- Official from the Office of the Speaker

7.4 Disaster Assessment

On-site assessment includes establishing what resources are necessary to ensure the delivery of immediate, effective and appropriate response and relief measures to affected areas and communities and to facilitate business continuity.

7.5 Relief Measures

Relief operations following significant **incidents** and/or events classified as disasters will be coordinated. Relief assistance **by the City or facilitated through NGOs** and donations will be equitably distributed.

7.6 Rehabilitation and Reconstruction

The organ of state tasked with primary responsibility for known hazard will facilitate the establishment of project teams.

7.6.1 Key Performance Indicators

- Post disaster project teams for rehabilitation and reconstruction have been established and operate effectively.
- Mechanisms for the monitoring of rehabilitation and reconstruction projects have been established and regular progress reports are submitted to the PDMC and NDMC.
- The disaster management centres have established and documented clear procedures for accessing, interpreting and disseminating early warnings of both rapid and slow onset hazards.

CHAPTER 8

EDUCATION, TRAINING, PUBLIC AWARENESS & RESEARCH

8.1 Objective

To promote a culture of risk avoidance among stakeholders by capacitating role players through integrated education, training and public awareness programmes informed by scientific research.

8.2 Education and training

8.2.1 School Programmes

The DRMC will seek to establish links with existing awareness creation programmes in schools for disseminating of information on disaster risk management and risk avoidance.

8.2.2 Dissemination and Use of Indigenous Knowledge

It is imperative that traditional leaders, as custodians of indigenous knowledge, play an active role at the local level. The indigenous knowledge is an integral part of disaster risk management.

8.2.3 Training programmes for municipal officials and policy makers

Training programmes for municipal officials and policy makers will embrace the multidisciplinary and interdisciplinary dimensions of disaster risk reduction, which will include the following:

- Development planning
- Hazard identification and assessment
- Communicable diseases
- Dry land agriculture
- Participatory rural appraisal
- Applied climate science and GIS

8.2.4 Community training programmes

Training programmes for communities will focus on disaster risk awareness, disaster risk reduction, volunteerism and preparedness. Communities will be given the opportunity to modify and enhance training programmes through the inclusion of indigenous knowledge, practices and values, and the incorporation of local experience of disasters and disaster risk management.

8.3 Public awareness

8.3.1 Public awareness strategy

To inculcate risk avoidance behaviour by all stake holders, public awareness campaigns aimed at raising consciousness about disaster risks will provide information on how to reduce vulnerability and exposure to hazards. These campaigns will include:

- Organized and planned awareness programmes
- Imbizo meetings
- Annual recognition and celebration of World Disaster Risk Reduction Day
- Rewards, incentives, competitions and recognition schemes to enhance awareness of and participation in risk reduction activities
- Dissemination of information to all role players

8.3.2. Communication through the media (Communication Unit)

The role of the media during disasters must be defined and managed through a consultative process involving the media, role players involved in response and recovery efforts, and communities routinely affected by disasters or impending disasters. The [Communications unit](#) will establish and manage ongoing relations with relevant local and national media. [Communication will be done in terms with the City's Communication Plan.](#)

CHAPTER 9

9.1 FUNDING ARRANGEMENTS FOR DISASTER RISK MANAGEMENT

In terms of Section 10A of the Municipal Systems Act¹⁰ the disaster risk management function imposes constitutional obligations on the City. The City thus must take appropriate steps to ensure sufficient funding for the performance of this assigned function. Provision must be made for;

- Ongoing operations (functionality of the Disaster Control Centre)
- Disaster risk reduction
- Response, [relief](#), recovery and rehabilitation activities
- Training and capacity building programmes (including public awareness programmes)

Each directorate in the execution of obligations and duties as outlined in this Plan must make provision in its own budget (e.g. routine operations, maintenance plans and public awareness programmes)

In terms of table 7.2 of the National Disaster Framework, 2005 the City should allocate at least 0,5 per cent of its own revenues for disaster response and recover activities.¹¹

Chapter 6 of the Act sets the guiding principles for funding of post-disaster recovery and rehabilitation. Under certain circumstances the City may access additional funding from the national government within the prescribed threshold set by the Minister. The financial assistance to be provided by National Government may take into account what planning, prevention and mitigation measures were taken pro-actively and whether the situation could have been avoided or minimised had the City implemented the aforementioned actions.¹²

This implies that the amount set as a threshold will have to be spent by the City on disaster response and relief before financial assistance may be considered by National Government.

9.2 FUNDING SUPPORT FROM THE NATIONAL DISASTER MANAGEMENT CENTRE: MUNICIPAL DISASTER GRANT¹³

Disaster risk management is a national priority, but it is institutionalised at the local sphere of government hence, conditional grants must be disbursed to the City.

- Currently the National Government (NDMC) makes provision of emergency funding namely Municipal Disaster Grant.
- The main objective of the grant is to pro-actively respond to the immediate needs after a disaster has occurred in order to deal with its consequences.
- The Municipal Disaster Grant focuses **ONLY** on municipal infrastructure damages.
- The grant is allocated solely for the purposes of responding to the immediate needs after a disaster has occurred and with the aim to alleviate the immediate consequences of disasters.

The grant can be accessed by Municipalities upon the submission of the following:

- Business plan which must contain the following details:
 - Copy of the classification letter in terms of the Disaster Management act 57 of 2002
 - Copy of the declaration in terms of the Disaster Management Act 57 of 2002

¹⁰ Municipal Systems Act, 2000; Chapter 3, Section 10 A: Funding and Capacity building

¹¹ National Disaster Management Framework, 2005, Table 7.2: Proposed threshold percentages for provincial and local government budgets.

¹² Disaster Management Act No 57 of 2002, Chapter 6: Funding for post-disaster recovery and rehabilitation.

¹³ DORA, 2018, Schedule 7 Part B: Municipal Disaster Relief Grant, CoGTA Vote 4: Unallocated provision for municipalities for disaster response.

- An initial assessment which includes the number of people affected and details of infrastructure damaged.
- A cost cash flow indicating the items to be purchased for the purposes of immediate relief and their estimated costs.
- Support that has been received from NGOs and businesses
- **Conditions of the Municipal Disaster Grant**
 - Both copies of the declaration of disaster and classification letter in terms of the Disaster Management act 57 of 2002 (as amended)
 - This grant may only be used to fund the expenditure in the event that the City is unable to deal with the effects of the disaster utilising own legislation/ guidelines and resources.

Examples of expenditure that may be funded from the grant:

- Provision of temporary shelters if Human Settlements is unable to provide
- Provision of temporary access roads and bridges if the City is unable to provide.
- Provision of mobile classrooms if Department of Education is unable.
- Provide assistance to the agricultural sector such as livestock feed.
- Funds from the grant must be utilised within 3 calendar months following the date of the transfer.
- Emergency procurement system as guided by MFMA should be invoked to ensure immediate assistance to the affected communities
- The criteria for allocation will be on a case by case basis.
- proof must be submitted that the sector cannot fund the occurrence based on reasons stated before application can be finalized.

9.3 HUMAN SETTLEMENTS` EMERGENCY HOUSING GRANT¹⁴

Purpose of Grant:

To provide funding to Municipal administrations for provision of temporary shelter assistance to households affected by disasters.

This grant relates to emergency and short-term assistance to households affected and impacted by and/or disasters, through:

- Provision of temporary shelter
- Temporary relocation of households to safer accommodation and/ or shelter

This grant funding is intended to address the housing needs of households who for reasons beyond their control, find themselves in an emergency housing need such as:

- the fact that their existing shelter has been destroyed or damaged by a disaster
- the fact that they are displaced from their existing houses due to disaster
- relocation due to the fact that prevailing material (i.e. physical) and conditions pose an immediate threat to the adequacy and safety of their existing housing as a result of a disaster

Applications for funding from this grant use the Emergency Housing Grant (EHG) application form which includes the following:

- Details of the disaster, the impact thereof and number of temporary shelters required and the number of households affected
- Total funds required for disaster response
- Implementation plan

¹⁴ DORA, 2018, Schedule 7 Part B, Municipal Emergency Housing Grant: Human Settlement Vote 38; Unallocated provision for Human Settlement
Proposed amended DMP: January 2022
Draft working document

- Summary of the projects
- Consolidated project cash flow over a two months period as an annexure to the Implementation Plan
- A copy of the Municipality's emergency procurement policy

The City must submit an application to the NDHS within 14 days of the agreement by the Mayor that a housing emergency exists in terms of section 2.3.1 (a) and (b) of the Emergency Housing Programme.

9.4 MUNICIPAL SUPPORT: UNFORESEEABLE AND UNAVOIDABLE EXPENDITURE¹⁵

The Municipal Finance Management Act No. 56 of 2003, (MFMA). Section 29 allows the Mayor of a municipality to authorise unforeseeable and unavoidable expenditure in emergency situations (which in this instance can mean disasters). Such expenditure must be appropriated in the adjustment budget within sixty (60) days, otherwise the spending becomes unauthorised. Again, the amount of funds available to respond to emergencies is restricted to a prescribed percentage of the budget.

The Council may, due to poverty levels and other socio-economic situations, develop and implement a policy on how to deal with individual incident humanitarian support to households affected by an occurrence which is not a disaster, but the occurrence is of such a nature that the family cannot cope by themselves.

CHAPTER 10: REVIEWING THE DISASTER PLAN

Review of Council's Disaster Plan must take place at least annually and any amendments thereto must be submitted to both the Provincial Disaster Centre and the National Disaster Management Centre.

¹⁵ Municipal Finance Management Act No. 56 of 2003, (MFMA). Section 29: Unforeseeable and Unavoidable Expenditure

ABBREVIATIONS AND ACRONYMS

CBO	Community based organization
DMA	Disaster Management Act (Act No. 57 of 2002)
DMIS	Disaster Management Information System
DOC	Disaster Operations Centre
DRMAF	Disaster Risk Management Advisory Forum
DRMC	Disaster Risk Management Centre
DRMCC	Disaster Risk Management Control Centre
DRMP	Disaster Risk Management Plan
DWAF	Department Water Affairs and Forestry
EMT	Executive Management Team
EOC	Emergency Operating Centre
GIS	Geographical Information Systems
ICT	Information and Communications Technology
IDP	Integrated Development Plan
IDRMC	Internal Disaster Risk Management Committee
JOC	Joint Operations Centre
MFMA	Municipal Financial Management Act No. 56 of 2003
MOU	Memorandum of Understanding
NDHS	National Department Human Settlements
NDMC	National Disaster Management Centre
NDMF	National Disaster Management Framework
NGO	Non-governmental organization
PDRMC	Provincial Disaster Risk Management Centre
PDRMF	Provincial Disaster Risk Management Framework
PFMA	Public Financial Management Act No. 1 of 1999
SAPS	South African Police Services
SAWS	South African Weather Services
SCM	Supply Chain Management
SDF	Spatial Development Framework
MMM	Mangaung Metropolitan Municipality

References

Disaster Management Act, No 57 of 2002, Chapter 5, Section 53, Disaster management plans for municipal areas

Disaster Management Act, No 57 of 2002, Chapter 5, Section 54(1)(a)

Disaster Management Act No 57 of 2002, Chapter 6: Funding for post-disaster recovery and rehabilitation

DORA, 2018, Schedule 7 Part B: Municipal Disaster Relief Grant, CoGTA Vote 4: Unallocated provision for municipalities for disaster response

DORA, 2018, Schedule 7 Part B, Municipal Emergency Housing Grant: Human Settlement Vote 38; Unallocated provision for Human Settlement

Dr Herman Booysen, Mangaung Metropolitan Municipality Risk and Vulnerability Assessment report 2013

IPCC, 2012: Intergovernmental Panel on Climate Change Fourth Assessment Report, Working Group II Report

IPCC, 2014: International Panel on Climate Change, 5th Assessment Report- Mitigation of Climate Change 2014(Geneva, 2014),

Mangaung Metropolitan Municipality Draft Climate Change Strategy, 2015.

Municipal Finance Management Act No. 56 of 2003, (MFMA). Section 29: Unforeseeable and Unavoidable Expenditure

Municipal Systems Act, 2000; Chapter 3, Section 10 A: Funding and Capacity building

Municipal Systems Act, No.32 of 2000, Section 26(g) read with Section 53 (2) (a) of the Disaster Management Act, No 57 of 2002

National Disaster Management Framework, 2005, Table 7.2: Proposed threshold percentages for provincial and local government budgets

Oxfam International Research Report, April 2010: Climate Change Adaptation

South Africa: SA Stats, Census 2011

South Africa, Community Survey, 2016

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