GREATER KNYSNA MUNICIPAL
DISASTER RISK MANAGEMENT PLAN 2019

DIRECTORATE COMMUNITY SERVICES
### AMENDMENTS AND UPDATES LISTING

<table>
<thead>
<tr>
<th>Rev no</th>
<th>Date of issue</th>
<th>Details of page(s) amended or replaced</th>
<th>Sign off (Name and signature)</th>
</tr>
</thead>
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<tr>
<td>1</td>
<td>21-12-2018</td>
<td>Total revision of previous version. (Draft 1) Submitting of Draft plan to Western Cape Disaster Management Centre and Garden Route District Disaster Management Centre by end of December 2018; Engage with internal and external role players, January/February 2019; Incorporate input from role-players end of March 2019 and finalize; and Submit to Council for approval by end of April 2019.</td>
<td>Richard Meyer</td>
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**Compiled / Reviewed by:**

Richard Meyer  
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**Approved By:**

Director: Community Services  
Directorate Community Services  
Knysna Municipality  

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Municipal Manager  

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Acting Municipal manager

Director Community Services
ABBREVIATIONS & ACRONYMS

ACRONYM / EXPLANATION

DMA – Disaster Management Act, 2002 (Act no 57 of 2002)
DOC – Disaster Operations Centre
DVI – Disaster Victim Identification
EMS – Emergency Medical Services (PG: WC) – also known as METRO-EMS
FCP – Forward Command Post (at Incident Site)
GIS – Geographical Information System
GPS – Global Positioning System
IMT – Incident Management Team (On-site)
JMC – Joint Media Centre
JOC – Joint Operations Centre (usually located off-site)
KLM – Knysna Local Municipality
MDMP – Municipal Disaster Management Plan
MLE – Municipal Law Enforcement
NGO – Non-Governmental Organization
NIA – National Intelligence Agency
NSRI – National Sea Rescue Institute
PG: WC – Provincial Government of the Western Cape
ProvJOC – Safety & Security Joint Operations Committee at Provincial level
SANDF – South African National Defense Force
SAPS – South African Police Service
SCP – Service Command Post (at the Incident Site)
SOP – Standard Operating Procedure
DEFINITIONS AND TERMINOLOGY

The following words and expressions will, unless the context otherwise requires or the Disaster Management Act, 2002 (Act no 57 of 2002) or national Disaster Management Framework, 2005 otherwise provides, have the meanings thereby assigned to them namely –

“DISASTER” – A progressive or sudden, widespread or localized, natural phenomena or human caused occurrence which-

a] causes or threatens to cause:
   - i) death, injury or disease; ii) damage to property, infrastructure or the environment; or iii) disruption of a community; and
b] is of a magnitude that exceeds the ability of those affected by the disaster to cope with its effects using only their own resources.

“DISASTER MANAGEMENT” - means a continuous and integrated multi-sectoral, multi-disciplinary process of planning and implementation of measures aimed at-

a] preventing or reducing the risk of disasters;
b] mitigating the severity or consequences of disasters;
c] emergency preparedness;
d] a rapid and effective response to disasters, and
e] post-disaster recovery and rehabilitation.

“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.

“EMERGENCY” - a local event, actual or imminent, which endangers or threatens to endanger life, property or the environment, and which is beyond the resources of a single organization or community or which requires the co-ordination of a number of significant emergency management activities.

“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 mobilize, organize and provide relief measures to deal with an impending or current disaster or the effects if a disaster; and
b] the knowledge and capacities developed by governments, professional response and recovery organizations, communities and individuals to effectively anticipate, respond to and recover from the impacts of likely, imminent or current hazard events or conditions
“EVACUATION” - The controlled, rapid and directed withdrawal of a population, during an emergency, from a place of danger to a place of safety in order to avoid acute exposure to any incident.

“HAZARD” - A dangerous phenomenon, substance, human activity or condition that may cause loss of life, injury or other health impacts, property damage, loss of livelihood and services, social and economic disruption, or environmental damage. Hazards can include latent conditions that may represent future threats and can have different origins; natural (geological, hydro meteorological and biological) or induced by human processes (environmental degradation and technological hazards). Hazards can be single, sequential or combined in their origin and effects. Each hazard is characterized by its location, intensity, frequency and probability. There are two types of hazards with regards to their timescale;

- **Slow onset hazards**: this type of hazard is normally preceded by a number of early signs and indicators i.e. droughts, landslides due to heavy rains and environmental degradation.
- **Rapid onset hazards**: this type of hazard strikes without any or very little prior warning. Despite these hazards being mostly unpredictable, proper planning and preparedness can mitigate the effects of such disasters. Examples include flash floods and pest infestations.

“HAZARDOUS MATERIAL” - Any substance or material in a quantity or form which may be harmful or injurious to humans, animals, economical crops, or property when released into the environment. There are 4 traditional classes: chemical, biological, radiological and explosive (CBRE).

“INCIDENT” - the difference between an incident and a disaster is that an incident is a significant event which impacts upon the localized community or geographical area. An incident only becomes a disaster once the affected population is unable to manage or cope or resist its consequences and when coordination and multiagency emergency management assistance is required.

“INTEGRATED DEVELOPMENT PLAN (IDP)” - This term is used in relation to a Municipality and means a plan envisaged in Section 25 of the Local Government: Municipal Systems Act of 2000 (Act no 32 of 2000).

“JOINT OPERATION CENTRE (JOC)” - it is a fully equipped, dedicated facility which is pro-actively established to enable all relevant role-players to jointly manage all safety and security-related aspects of any planned event or major incident which has occurred or is threatening to occur, especially in the response and recovery operations phase.

“JOINT MEDIA CENTRE” - A Centre established to receive first hand and updated information on the situation with input from all the stakeholders and to co-ordinate all liaison with the media.
“LOCAL DISASTER” - means a disaster classified as a local disaster in terms of Section 23;

“LOCAL MUNICIPALITY” - means a Municipality that shares municipal executive and legislative authority in its area with a district municipality within whose area it falls, and which is described in section 155(1) of the Constitution as a category B municipality.

“MAJOR INCIDENT” - An emergency which impacts upon a localized community or geographical area requiring the coordination and significant multi-agency emergency management activities at a local or State level (see also the EMERGENCY and DISASTER definitions).

“MUNICIPALITY” - means a municipality as contemplated in section 2 of the Local Government; Municipal Systems Act, 2000 (Act no 32 of 2000).

“MUNICIPAL ENTITY” - means a municipal entity defined in section 1 of the Local Government; Municipal Systems Act, 2000;

“MUNICIPAL DISASTER MANAGEMENT PLAN” - Means a plan developed by an organ of state in terms of Section 25, 38, 39, 52 or 53 of the Disaster Management Act, 2002 (Act no 57 of 2002).

“MUNICIPAL MANAGER” - means a person appointed as such in terms of section 82 of the Local Government: Municipal Structures Act, 1998 (Act no 117 of 1998).

“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;

“MUNICIPAL DISASTER MANAGEMENT CENTRE” - Means a Centre established in the administration of a Municipality in terms of Section 43.

“POST-DISASTER RECOVERY AND REHABILITATION” - means efforts, including development, aimed at creating a situation where-

a] 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;
b] the effects of a disaster are mitigated; or

b] circumstances are created that will reduce the risk of a similar disaster occurring.
“NATURAL PHENOMENA” - Natural phenomena are extreme weather, water or geological (earth) processes that do not pose a threat to people or properties. When they occur in a deserted place, they are merely natural phenomena and nothing else. However once they affect human beings, due to location or poor planning by the human beings, they are a potential hazard and could become a disaster.

“PLACE OF SAFETY” - Place away/outside of danger

“PREVENTION” - in relation to a disaster, means measures aimed at stopping a disaster from occurring or preventing an occurrence from becoming a disaster;

“RECOVERY” - the restoration, and improvement where appropriate, of facilities, livelihoods and living conditions of disaster-affected communities; including efforts to reduce disaster risk factors.

“RESILIENCE” - the capacity of a system, community or society potentially exposed to hazards to adapt by resisting or changing in order to reach and maintain an acceptable level of functioning and structure. This is determined by the degree to which the social system is capable of organizing itself to increase this capacity for learning from past disasters for better future protection and to improve disaster risk reduction measures.

“RESPONSE (DISASTER RESPONSE)” - Response is the provision of emergency services and public assistance during/or immediately after a disaster in order to save lives, reduce health impacts, ensure public safety and meet the basic subsistence needs of the people affected. These measures can be of immediate, short-term or long-term duration.

“RELIEF” - means the provision of assistance or intervention during or immediately after a disaster in order to bring relief to people and communities effected by a disaster.

“RISK” - Means used to describe the livelihood of harmful consequences arising from the interaction of hazards and vulnerable elements.

“RISK ASSESSMENT” - A methodology to determine the nature and extent of risk by analyzing the potential harm to people, property, services, livelihoods and the environments on which they depend are exposed to. Risk assessments measure the technical characteristics of hazards such as their location, intensity, frequency and probability; the analysis of exposure and vulnerability including the physical social, health, economic and environmental dimensions; and the evaluation of the effectiveness of prevailing and alternative coping capacities in respect to likely risk scenarios.

“RISK REDUCTION” – means measures taken to reduce long-term risks associated with human activity or natural events.
“ROLE PLAYER” – means an individual or group in society that can contribute meaningfully to the implementation of disaster management.

“SECONDARY ROLE PLAYERS” - means an additional function that is performed by an identified role player in support of a primary role player.

“TRAFFIC CONTROL POINTS” - Places along access or egress routes to/from the incident site and primarily used by emergency vehicles and/or places along evacuation routes that are manned by law enforcement officials to direct and control to and from the area being evacuated.

“UNIFIED COMMAND” - The system of managing an incident on site so that joint decision-making and co-ordination is established between the responding services/organizations, while retaining that services/organizations internal command structure.

“VULNERABILITY” - The characteristics and circumstances of a community, system or asset that make it susceptible to the damaging effects of a hazard. Conditions of vulnerability and susceptibility to the impact of hazards are determined by physical, social, economic and environmental factors or processes that make them susceptible to injury, loss of life, damage, disruption, exploitation or incapacitation by all hazards.
1. INTRODUCTION

The Knysna Municipal Disaster Management Plan serves to confirm the organizational and institutional arrangements within the Greater Knysna to effectively prevent disasters from occurring and to lessen the impact of those hazards that cannot be avoided. The Disaster Management Act states that “Disaster Management is a continuous and integrated, multi-sectoral and multi-disciplinary process of planning and implementation of measures aimed at disaster prevention, mitigation, preparedness, response, recovery, and rehabilitation.”

Disaster Management is defined as “a continuous and integrated multi-sectoral and multi-disciplinary process of planning and implementation of measures aimed at disaster prevention, mitigation, preparedness, response, recovery, and rehabilitation” – as per Section 1 of the Disaster Management Act, 57 of 2002.

The slogan to best describe this initiative is: “Disaster Risk Management is everybody’s business”

2. PURPOSE

The National Disaster Management Centre (NDMC) provided a set of guidelines; developed in terms of section 19(a) of the Disaster Management Act (DMA) and section 3.6 of the National Disaster Management Framework, 2005 (NDMF) provides a uniform structure and checklist to organs of state to develop a Disaster Management Plan.

This plan confirm the arrangements for managing disaster risks and for preparing for – and responding to disasters within the Knysna Local Municipality (KLM) as required by the Disaster Management Act.

The Disaster Management Act requires Knysna Municipality to take the following actions:

- to prepare a Municipal Disaster Management Plan for its area according to the circumstances prevailing in the area and incorporating all municipal entities as well as external role-players;
- to co-ordinate and align the implementation of its Municipal Disaster Management Plan with those of other organs of state, institutional and any other relevant role-players; and
- to regularly review and update its Municipal Disaster Management Plan (refer to Disaster Management Act, 57 of 2002, as amended – Section 48)

The Disaster Management Plan is to be seen as an information guide to the relevant role players. It shall advise the role-players how to lead in case of a disaster to prevent or at least mitigate negative effects on the Knysna Local Municipality (KLM).
2. BACKGROUND

- Geography

Knysna Municipality is located on the Southern coast of the Western Cape Province and forms part of the Eden District Municipality. The municipality is approximately 500 kilometres east of Cape Town and 267 kilometres west of Port Elizabeth. Knysna Municipality is renowned for its appealing natural resources such as the estuary, mountains, farm land, forests, valleys, lakes and beaches which attract scores of domestic and international tourists to the area. The Greater Knysna Municipal Area (GKMA) covers a total of 1 059 km² that stretches from Swartvlei in Sedgefield in the West to Harkerville in the east. The municipal area is bordered by the Outeniqua Mountains in the North and the Indian Ocean in the south. Geographically, the N2 highway forms the spinal cord of Knysna town and is strategically located around the estuary. The area enjoys a mild climate with an average annual rainfall of approximately 750mm and the temperature ranges from 8°C in winter to 28°C in summer making it a favourite holiday and retirement destination throughout the year. The demarcation of the Knysna municipal area is illustrated on the map below:
Demographic and Economic profile

Introduction

The following section analyses the economic and social dynamics of the Knysna local municipal area which is situated in the Eden District. The objective of this profile is to assist Knysna Municipality in acquiring credible data to inform planning, budgeting and the accompanied prioritization with respect to policy options. The indicators identified include demographics, socio-economics, labour, economy, service delivery and governance. The indicators captured in the profile provide a reflection of the socio-economic challenges of the municipality and provide valuable insight into the developmental challenges faced by communities residing within the specific geographical area.

In the context of this IDP review, regional analysis forms the central component of the development perspective phase of the integrated development planning process and analyses the current situation, identifies the needs and key development issues and the formulates a realistic vision for the development of the Greater Knysna. This chapter discusses the basic demographic profile of households in the Knysna Municipality, the economic profile of the area with regards to Gross Geographic Product (GGP) and sector contributions, as well as the constraints that may affect socio and economic development.

Demographic & Economic Fact Sheet

The following sub-section will provide a fact file on the demographic characteristics of the Knysna municipal area. The characteristics mentioned below include population information such as population and household totals and growth rates; gender and age profiles, education levels, household income snapshot; employment figures including employment and unemployment status and skills levels amongst the employed workforce. This will be followed by a fact file that reports on the economic characteristics of the national economy followed by the performance indicators of the local economy. The aim of this section is to identify to what extent key drivers of the national economy have an impact on the local economy of Knysna Municipal area. This will allow the municipality to align its funding requirements according to the various strategic objectives that will support local economic development in the future. The macro economic outlook also allows the municipality to focus on the key drivers that will impact local growth and future employment opportunities. The section reports on GGP totals and growth rates, as well as the contributions of the various industries located in the municipal region to both employment and total GGP. The graphs and tables below displays the Knysna Local Municipal area’s most recent economic and demographic indicators.
The total population of the Knysna Municipal area was estimated at 73,835 in 2017. The average growth rate of the population from 2007-2016 was 1.9%.

The total number of households in the Greater Knysna Municipal Area was 25,877 in 2017. The average growth rate of households from 2007 – 2016 was 3.1%.

Knysna’s population gender breakdown is relatively evenly split between male 36,523, (49%) and female 37,312, (51%).

The Coloured population is the largest race group in the municipal area contributing 37.7%. The second most well represented race group is the African population contributing 37.7% to the total population followed by the white population contributing 19.5% to the total population. The Indian/Asian population is the smallest group contributing 0.1% to the total population.

(Source: Stats SA Community Survey Data, 2017)
AGE PROFILE:

- The majority of the population of Knysna Municipality can be considered to be youth as 51% of the population are below the age of 30 years and 25% of the population is younger than the age of 15 indicating a high number of school going individuals.
- 67% of the population are of an economically active age (15-65 years) and 8% of the population can be considered to be retired (over the age of 65).
- These figures reveal a dependency ratio of 47%, therefore two thirds of the population support one third of their household dependants (children and aged individuals).

- Knysna has a relatively young population although the youth profile (younger than 15) has declined from 26% in 2001 to 25% in 2016. This is mainly due to the number of births which is slightly less per household.
- This trend resulted in average household sizes declining from 3.4 in 2001 to 3.1 in 2016

(Source: Stats SA Community Survey, 2017)

EDUCATION & EMPLOYMENT PROFILE

- The education profile highlights the highest level of education achieved by the population in 2016 throughout the Greater Knysna Area.
- The highest level of education reached by the majority of the population is secondary schooling (54% for the Greater Knysna overall).
EMPLOYMENT FACTS:
- 19% of the economically active segment of the population are unemployed.
- The economically active segment of the population decreased from 85% in 2011 to 81% in 2016. The economically active segment of the population is employed in either the formal or informal markets. This excludes individuals older than 65 and younger than 15.
The Knysna Local municipality consists of 11 wards:

<table>
<thead>
<tr>
<th>WARD</th>
<th>VOTING DISTRICT</th>
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<tbody>
<tr>
<td>Ward 1</td>
<td>Sizamile-Smutsville; Rondevlei; Myoli Beach; Cola Beach; The Island; Hoogekraal</td>
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<tr>
<td>Ward 2</td>
<td>Sedgefield Town; Karatara; Farleigh; Kraaibosch; Fairview; Barrington</td>
</tr>
<tr>
<td>Ward 3</td>
<td>Bracken Hill; Buffelsnek; Dam se Bos; Portion of Nekkies; Sanlam; Oupad(portion); KNoetzie</td>
</tr>
<tr>
<td>Ward 4</td>
<td>Witlokasie, Greenfields, Qolweni, Brackenhill, Rhobololo</td>
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<tr>
<td>Ward 5</td>
<td>Belvidere, Brenton-on-Sea, Brenton-on-Lake, Rheenendal Central, Buffalo Bay, Bibbieshoek</td>
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<tr>
<td>Ward 6</td>
<td>Fraaisig, Rykmanshoogte Stroebel, Protea, Heatherdale, South of Park, Cawood and Shamrock Streets South of Wing-West of Harker – East of Protea-East of Fontein Street, Knoetzie</td>
</tr>
<tr>
<td>Ward 7</td>
<td>Portion of Rhobololo; portion of Bongani; portion of Dam se Bos; Portion of Flenters; Portion of Khayalethu-Ngalo Street; Chungwa and Edameni; Khayalethu Valley; Emsobomvu including Ngalo Street</td>
</tr>
<tr>
<td>Ward 8</td>
<td>Fraaisig; Ethembeni; Joodsekamp; Concordia and Kanonkop; Rykmanshoogte; portion of Bongani;</td>
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<tr>
<td>Ward 9</td>
<td>Pezula, Sparrebosch, the Heads, Hunters Home, Leisure Isle, Thesen Island, Eastford</td>
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<tr>
<td>Ward 10</td>
<td>Eastford, Simola, Knysna Heights, Paradise, West of Long Street, Costa Sarda, East of Long-North of Fitchat Str, Old Place;</td>
</tr>
<tr>
<td>Ward 11</td>
<td>Swarthout, Rose and Rooi Els Streets North of Sunridge, Hlalani, Donkerhoek, North of Wing (Hornlee), South of Akker-North of Botha-East of Alexander-West of Botha South of Sunridge-West of Oliphant Str- North of Geelhout Str-East of Stanford</td>
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4. LEGAL MANDATE

1 Legislative requirements

The Knysna Municipality is legally obliged to prepare a disaster management plan for its area according to the circumstances prevailing in the area; to co-ordinate and align the implementation of its plan with those of other organs of state and institutional role players; and to regularly review and update its plan. The municipality must also consult the Garden Route District Municipality on the preparation or amendment of its plan.

In accordance with Section 53(2) of the Disaster Management Act, 2002 (Act 57 of 2002) the disaster management plan for a municipality must form an integral part of the municipality integrated development plan. (IDP)

The national Policy Framework of 2005 as well as the Provincial Policy Framework of 2010 also provide for the importance of disaster management planning and state that plans are to be revised at least bi-annually.

The Knysna Municipality must submit a copy of its Disaster Management (DM) plan, and of any amendment to the plan, to the Garden Route District Municipality, Disaster Management.

Linkage with the integrated development plan (IDP) of Knysna Municipality

Both the Municipal Systems Act and the Disaster Management Act requires the inclusion of this plan into the IDP of the Knysna Municipality. It is however impractical to include the complete Disaster Management Plan with all its annexures and risk assessment within the IDP. Therefore the complete plan can be considered as an annexure to the IDP, while the core document without annexures will be submitted for inclusion within the IDP document.

Disaster Management and Emergency services need to ensure that they comply with the relevant Legal Acts, frameworks and the South African National Standards code (SANC).

The Disaster Management Act is the legislative backbone, the Disaster Management Framework (National, Provincial and District Frameworks) is the approach and vision, the Disaster Management Plan and Chapter is how to get there (strategies/projects/objectives):

In order to ensure continuous linkages with the IDP, all departments and role players submitting input to the content of the current and future IDP of the Municipality are required to ensure the inclusion and integration of disaster risk management into their strategies, operational planning and project implementation.
This will ensure the integration of disaster risk management into the IDP and will ensure that all plans and projects are focused on contributing to disaster risk reduction and disaster preparedness – thus reducing the impacts of disasters on lives, property, community activities, the economy and the environment.

Knysna Municipality Risk reduction Strategies linked to the IDP,

Refer to table below:
5. INSTITUTIONAL ARRANGEMENTS

The organizational establishment is attached as Annexure “A”

In terms of a management structure for Disaster Management, the principle of functioning within the established structure of the Knysna Municipality as far as possible will be adhered to.

Although the municipal department: Community Services, within the Knysna Municipality assigned with the Disaster Management function should direct and facilitate the disaster risk management process, it cannot perform the entire spectrum of disaster risk management activities on its own. Disaster risk management is everybody’s business. The disaster management activities to be performed within departments include participation in disaster risk reduction as well as preparedness and response.

It is advised where a department has primary responsibility for a specific hazard; the department’s role in disaster risk management for that specific hazard will be more than mere participation. It will have to lead risk reduction as well as preparedness activities due to its expertise in the field.

Departments that are responsible for specific services in normal conditions will remain responsible for such services during disasters. The declaration of a state of disaster and the tighter coordination instituted during disasters does not absolve any agency of its assigned responsibilities. Coordination will take place by the nodal point.

Legislation assigns responsibility for most disaster risks to specific departments or functions. There are risks that require more than one stakeholder therefore, it is required that each stakeholder involved is aware of their roles and responsibilities.

Knysna Municipality is attending the Provincial Disaster Management Advisory Forum as the Disaster Management Act, indicates that Municipalities may establish a Municipal Disaster Management Advisory Forum.

Currently Knysna Local Municipality only have Chief Disaster Management officer. Vacant post in the new organogram- Disaster Management.

Knysna Municipality does not have a Disaster Management Centre for the coordination of incidents/disaster, it depends on the magnitude of incidents. The Fire Department is used as a Joint Operational Centre in small and medium incidents. In the 2017 fires, we used the Finance Building which is equipped with the necessary infrastructure to manage such incidents.
Role-players within the Municipal structure
The following role players within the Municipal structure must be involved with disaster management:

CONTACT DETAILS.

<table>
<thead>
<tr>
<th>Role players</th>
<th>Contact details</th>
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<tr>
<td>Municipal Manager</td>
<td></td>
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<tr>
<td>Director Community Services</td>
<td>060 988 7156</td>
</tr>
<tr>
<td>Director Technical Services</td>
<td>060 998 7069</td>
</tr>
<tr>
<td>Director Town Planning and Development</td>
<td>082 466 1011</td>
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<td>Director Finance</td>
<td>060 988 7100</td>
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<td>Director Corporate</td>
<td>060 998 7155</td>
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<tr>
<td>Disaster Management</td>
<td>082 9228605</td>
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<td>Fire and Rescue Services</td>
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Organisations external to the Municipality
The following organisations external to the Municipality must be involved when needed:

- South African Police Service;
- South African National Defence Force (supporting role);
- Community Services and Poverty relief;
- Department of Social Development;
- Nature Conservation;
- Department Water Affairs;
- Department Agriculture;
- Disaster Management: Provincial Administration: Western Cape;
- Health Services: Provincial Administration: Western Cape;
- Civil Aviation;
- Eden District Municipality (Disaster Management);
- Provincial Hospital;
- Medical Emergency Services;
- Defence Force;
• Provincial Traffic Services;
• Provincial Roads;
• Environmental Health (Eden DM);
• Organised Agriculture;
• Eskom;
• Telkom;
• SA Red Cross;
• Animal Welfare Societies;
• schools;
• churches;
• Business Community (businesses);
• Media;
• Weather Bureau;
• transport contractors (passengers and goods); and
• Councillors and Ward Committees.

**Communication Plan (Internal)**

- Every role player will make use of his/her own communication equipment.
- Two-way portable radios, radios of vehicles and cell phones can be used.
- Incidents are reported directly to the control room, who will inform other role player(s) involved.
- A Joint Operation Centre (JOC) or Multi Agency Coordination (MAC) will be established to co-ordinate disaster operations.

**Disaster Response/ Incident Management process.**

See Annexure “B”

**Climate change.**

One of the key findings, the Disaster Risk Assessment. Climate change is increasingly elevated as a boiling point and big focus on the global agenda. The reason for this is that the world is very quickly experiencing the effect of this phenomenon on fundamental socio-economic indicators such as water, sanitation, food security, health, energy, industrial developments and human settlements. GKLM is no exception and it presents serious threats to the future of the town and its environs because of the sensitivity of the estuary to rising sea levels and the risk to development in low lying areas. Furthermore, changing rainfall patterns and extreme weather events have already had an impact on the town and environs in the past.

Climate change is a significant and lasting change in the statistical distribution of weather patterns over periods ranging from decades to millions of years. It may be a change in average weather conditions, or in the distribution of weather
around the average conditions (i.e., more or fewer extreme weather events). Due to its physical location, topography and the climatic conditions of the district the GKMA is particularly vulnerable to the impact of climate change. The implications for the GKMA are that, with the shift in seasonal periods, there will be more unseasonal floods. It will be extremely difficult to predict “flooding periods”. This phenomenon has already been experienced in the area where flooding occurred out of “rain season”.

**Vulnerable groups.**

It is clear that during emergencies/ Disasters vulnerable groups will have special needs and require particular attention and often disregarded. In the context of emergencies, vulnerable communities include a large spectrum of groups: individuals with physical and mental impairments, elderly persons, those with language barriers, children, pregnant women, the impoverished, certain ethnic minorities, undocumented persons, and prisoners.
RISK ASSESSMENT

Type of Disasters

It often happens that disasters do not occur in isolation and that one disaster occurs as a result of another. Therefore, it is important to be aware of all possible disasters that may affect your region.

### DISASTER CATEGORIES

<table>
<thead>
<tr>
<th>Broad Category</th>
<th>Hazard</th>
<th>Specific Disaster Risk Category</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hydro meteorological</td>
<td>Climate-Related</td>
<td>Extreme weather, Meteorological drought</td>
</tr>
<tr>
<td></td>
<td>Hydrological</td>
<td>Riverine flooding, Estuarine flooding, Coastal flooding/storm surges, Urban flooding, Hydrological drought, Agricultural drought</td>
</tr>
<tr>
<td>Geological</td>
<td></td>
<td>Seismic risks and earthquakes, Rock falls and landslides</td>
</tr>
<tr>
<td>Biological</td>
<td>Fires</td>
<td>Urban fringe fires, Veld fires</td>
</tr>
<tr>
<td></td>
<td>Epidemics</td>
<td>Humans, Livestock</td>
</tr>
<tr>
<td>Environmental</td>
<td></td>
<td>Air pollution, Water pollution, Soil erosion/land degradation</td>
</tr>
<tr>
<td>Technological</td>
<td>Risks associated with installations</td>
<td>Power plants, Bridges, Dams, Petrochemical installations</td>
</tr>
<tr>
<td></td>
<td>Risks associated with transport</td>
<td>Roads, Air, Sea Rail</td>
</tr>
<tr>
<td></td>
<td>Hazmat</td>
<td>Marine oil spills, Toxic cargo spills, Radioactivity emissions</td>
</tr>
<tr>
<td></td>
<td>Risks associated with flammable surfaces</td>
<td>Urban format fire, Urban informal fire</td>
</tr>
</tbody>
</table>

KNYSNA RISK ASSESSMENT
See below and attached Knysna Municipality risk register which speak to the top highest risks and the development of contingency plans by the primary responsible department.

<table>
<thead>
<tr>
<th>Risk Category</th>
<th>Probability</th>
<th>Impact</th>
<th>Likelihood</th>
<th>Mitigation</th>
<th>Control</th>
<th>基调</th>
</tr>
</thead>
<tbody>
<tr>
<td>Floods</td>
<td>High</td>
<td>Medium</td>
<td>Medium</td>
<td>Medium</td>
<td>Low</td>
<td>Low</td>
</tr>
<tr>
<td>Financial</td>
<td>Low</td>
<td>High</td>
<td>High</td>
<td>High</td>
<td>Medium</td>
<td>Medium</td>
</tr>
<tr>
<td>Infrastructure</td>
<td>Medium</td>
<td>Low</td>
<td>Low</td>
<td>Low</td>
<td>High</td>
<td>High</td>
</tr>
</tbody>
</table>

The table above outlines the top risks and their mitigation strategies. For further details, please refer to the attached risk register.
HAZARDS

The following hazards were assessed:

- Climate change (as a meta-disaster);
- Fires (both wildfires and urban fires);
- Animal diseases;
- Human diseases;
- Alien invasive species;
- Drought (hydrological, agricultural, etc.);
- Floods;
- Regional sea-level rise;
- Strong winds;
- Thunderstorms and lighting;
- Seismic activity;
- Oil spill at sea;
- Air pollution;
- Water supply disruptions;
- Sewage and waste removal disruption;
- Electrical supply disruption;
- Dam failure;
- Road/Rail Incidents;
- Hazmat (road/rail);
- Civil unrest;
- Loss of biodiversity;
- Coastal erosion;
- Landslides (Rock falls, debris flows, etc)

Each of these specific hazard was analyzed in detail according to Western Cape’s standardized methodology and is covered in the Hazard Analysis Section, 2017 Risk Assessment.

THE TOP 10 RISKS IDENTIFIED:

- Drought
- Fire (wildfires)
- Floods
- Alien Invasive species
- Water supply disruption
- Estuary pollution
- Sewerage disruption
- Hazardous material (Hazmat) Road Accident Risk
- Road Accidents (General)
- Severe Weather (Gale Force Winds & Thunderstorms included)

**DISASTER RISK REDUCTION STRATEGY**

Within this chapter of the MDMP the KLM develop risk reduction strategies that were aligned with the DM continuum. The Risk Reduction strategies were further integrated within the different departments of the Km assigning key responsible stakeholders in order to ensure that these strategies are accounted for during the implementation process.

**PREPAREDNESS PLANNING**

Disaster preparedness is the first phase of the Disaster Management Cycle. Within this phase of the Cycle (pre-disaster) all activities are focused on planning and preparing for possible risks, capacitating immediate vulnerable communities to risks identified, and implementing all efforts/measures in reducing disaster impacts.

In the table below all hazards identified in the Knysna Local Municipality were listed accompanied by possible mitigation and preparedness measures for each hazard. Responsible parties were also identified and assigned to relevant strategy.

<table>
<thead>
<tr>
<th>Hazard</th>
<th>Mitigation and Preparedness - measures</th>
<th>Responsible stakeholders/Partners</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Drought</td>
<td>Community Education/awareness</td>
<td>Technical services Disaster Management Communication</td>
</tr>
<tr>
<td></td>
<td>Monitor drought conditions</td>
<td>Disaster Management Technical services</td>
</tr>
<tr>
<td></td>
<td>Monitor water supply</td>
<td>Disaster Management Technical services Cape Nature Health</td>
</tr>
<tr>
<td></td>
<td>Plan for drought</td>
<td>Disaster Management Technical services Cape Nature Farmers Knysna Fire Department</td>
</tr>
<tr>
<td>Requirement</td>
<td>Responsible Parties</td>
<td></td>
</tr>
<tr>
<td>----------------------------------------------------------------------------</td>
<td>---------------------------------------------------------------------------------------</td>
<td></td>
</tr>
<tr>
<td>Require water conservation during drought conditions</td>
<td>Technical service&lt;br&gt;Cape Nature&lt;br&gt;Communication&lt;br&gt;Farmers&lt;br&gt;Agriculture&lt;br&gt;Disaster Management</td>
<td></td>
</tr>
<tr>
<td>Prevent overgrazing</td>
<td>Farmers&lt;br&gt;Agriculture</td>
<td></td>
</tr>
<tr>
<td>Retrofit water supply systems</td>
<td>Technical Services&lt;br&gt;Disaster Management&lt;br&gt;Garden Route District Municipality</td>
<td></td>
</tr>
<tr>
<td>Enhance landscaping and design measure</td>
<td>Environmental department&lt;br&gt;Town Planning&lt;br&gt;Disaster management&lt;br&gt;Housing</td>
<td></td>
</tr>
<tr>
<td>Educate residence on water saving techniques</td>
<td>Technical services&lt;br&gt;Disaster management&lt;br&gt;Communication</td>
<td></td>
</tr>
<tr>
<td>Educate farmers on soil and water conservation practices</td>
<td>Department of Agriculture&lt;br&gt;Communication</td>
<td></td>
</tr>
<tr>
<td>Identifying secondary water sources</td>
<td>Technical services&lt;br&gt;Department of agriculture&lt;br&gt;Financial IDP</td>
<td></td>
</tr>
<tr>
<td>Clearing of catchment areas</td>
<td>EPWWP&lt;br&gt;Environmental departments&lt;br&gt;Parks and recreational&lt;br&gt;Technical services&lt;br&gt;Cleansing services</td>
<td></td>
</tr>
<tr>
<td>2. Veld fires</td>
<td>Implementing a fuel management plan&lt;br&gt;Fire Department&lt;br&gt;Disaster management&lt;br&gt;Garden Route Fire Department&lt;br&gt;Cape Nature&lt;br&gt;SCFPA/farmer’s association (FMU’s)&lt;br&gt;WOF&lt;br&gt;EPWP&lt;br&gt;Environmental Control&lt;br&gt;SAN Parks&lt;br&gt;PG Bison&lt;br&gt;MTO&lt;br&gt;Private Landowners&lt;br&gt;Working for Water Programme</td>
<td></td>
</tr>
</tbody>
</table>
| **Education and awareness campaigns** | **Disaster Management**  
Fire Department  
Garden route Fire  
SCFPA  
WOF  
**Environmental control** |
|--------------------------------------|-----------------------------------------------------------------------------------|
| **Creation of fire breaks (buffer zones around infrastructure)** | **Fire Department**  
Garden Route Fire department  
SCFPA  
Cape Nature  
WOF  
SANParks  
PG Bison  
MTO  
Private landowners  
Provincial Traffic (N2)  
Local Traffic (All others roads if affecting traffic) |
| **Incorporating integrated veld fire management** | **Fire Department**  
Garden Route Fire Department  
Cape Nature  
SCFPA/farmer's association (FMU'S)  
WOF  
EPWWP  
Private Landowners  
**Environmental Control** |
| **Mitigation and Preparedness - measures** | **Responsible stakeholders/Partners** |
| **Implementing a fuel management plan** | **Disaster management**  
Fire Department  
Garden Route Fire Department  
Cape Nature  
SCFPA/farmers association  
WOF  
EPWWP  |
| **3. Floods** | **Technical Services**  
Disaster Management  |
| **Incorporate flood mitigation in local planning** | **Environmental Department**  
Cape Nature  
SANParks  
Disaster Management  |
| **Form partnerships to support flood plain management** | **Town planning and Development**  
IDP  
Disaster Management  |
| **Limit or restrict development in flood plain areas** | **Environmental Department**  
Cape Nature  
SANParks  
Disaster Management  |
<table>
<thead>
<tr>
<th><strong>Area</strong></th>
<th><strong>Department</strong></th>
<th><strong>Responsibilities</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Environmental Department</strong></td>
<td><strong>Technical services</strong></td>
<td>Improve storm water management planning</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Monitoring rainfall, for possibility of flash flooding and have early warning devices in high situated areas and catchment areas.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Education and awareness campaigns on correct procedures to follow in case of flooding.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Flood proof residential and non-residential structures</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Protect and restore natural flood mitigation futures</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Education and awareness campaigns</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Compliance monitoring</td>
</tr>
<tr>
<td><strong>5. Water Supply Disruptions</strong></td>
<td><strong>Stock for repairs</strong></td>
<td>Water and Sewerage department Procurement</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Human resources</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Effective communication</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Fire Department Garden Route Fire Transport operators Law Enforcement Traffic Department SAPS (Explosives, Radioactive) SANR SAL Provincial Traffic Department SAWS</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Knysna Fire Department Disaster Management Law Enforcement Communication</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Community member Disaster management Town Planning and development</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Environmental Department Town planning and Development</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Environmental Management Fire Department South African National Parks</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Environmental Management Parks and Recreation National Department of Environmental Affairs</td>
</tr>
<tr>
<td>6. Estuary Pollution</td>
<td>The Waste Water Treatment works needs to be fully operational with daily monitoring of final effluent before it is discharged into the estuary.</td>
<td>Technical Services: Water and Sewer</td>
</tr>
<tr>
<td>-----------------------</td>
<td>-------------------------------------------------------------------------------------------------</td>
<td>----------------------------------</td>
</tr>
<tr>
<td></td>
<td>14 point sampling protocol to continue so that ecoli hotspots can be monitored and appropriate response plans implemented</td>
<td>Garden Route District Municipality: Municipal Health Department Environmental Management</td>
</tr>
<tr>
<td></td>
<td>Deep water sampling</td>
<td>South African National Parks</td>
</tr>
<tr>
<td></td>
<td>Appropriate telemetry systems installed at spillage hotspots, on identified sewerage lines that have a history of blockages and concomitant spills that directly impact the estuary.</td>
<td>Technical Services: Water and Sewer.</td>
</tr>
<tr>
<td>7. Sewerage Disruption</td>
<td>Stock for repairs</td>
<td>Water and Sewerage department Procurement section</td>
</tr>
<tr>
<td></td>
<td>Human resources</td>
<td>Water and Sewerage department</td>
</tr>
<tr>
<td></td>
<td>Effective communication</td>
<td>Water and Sewerage department Communication Public Participation</td>
</tr>
<tr>
<td>8. Hazardous Material (Hazmat) Road Accident Risk</td>
<td>Ensure compliance with legislation for all industry and transport owners. Ensure compliance with all municipal by laws with regards to hazardous substances.</td>
<td>Fire Department Garden Route Fire Department Environmental Control Law Enforcement Traffic Department Provincial Traffic Department Disaster Management</td>
</tr>
<tr>
<td></td>
<td>Education and awareness campaigns on correct</td>
<td>Disaster Management Fire Department Garden Route Fire</td>
</tr>
<tr>
<td>Task</td>
<td>Relevant Agencies</td>
<td></td>
</tr>
<tr>
<td>------</td>
<td>-------------------</td>
<td></td>
</tr>
<tr>
<td>Storage, transport and safe handling of hazardous substances.</td>
<td>Environmental Control Traffic Department Provincial Traffic Department</td>
<td></td>
</tr>
<tr>
<td>Monitoring industry and transport of hazardous substances</td>
<td>Fire Department Garden Route Fire Department Transport operators Law Enforcement Traffic Department SAPS (Explosives, Radioactive) SANRAL Provincial Traffic Department</td>
<td></td>
</tr>
<tr>
<td>Combat and Support agency agreements (establishing an advisory forum?)</td>
<td>Transnet Petrol SA Knysna Fire Department Garden Route Fire Department Disaster management SAPS EMS Traffic</td>
<td></td>
</tr>
<tr>
<td>Establish adequate communication structures with relevant stakeholders (information purposes of transport schedules)</td>
<td>Transnet Petrol SA Knysna Fire Department Garden Route Fire Department Disaster management</td>
<td></td>
</tr>
<tr>
<td>Conduct vehicle inspections</td>
<td>Local traffic Provincial traffic Knysna Fire Department</td>
<td></td>
</tr>
<tr>
<td>Ensure all relevant agencies involved know their roles and responsibilities</td>
<td>Transnet Petrol SA Knysna Fire Department Garden Route Fire Department Disaster management SAPS EMS Traffic</td>
<td></td>
</tr>
<tr>
<td>Disseminate information regarding Hazard</td>
<td>Local and Provincial Traffic</td>
<td></td>
</tr>
<tr>
<td>Fire department to develop SOP</td>
<td>Garden Route Fire Department</td>
<td></td>
</tr>
</tbody>
</table>

9. Road Accidents (General) | Arrive Alive campaigns (Education and awareness campaigns) | Local and Provincial Traffic Communications Public participation SAPS Disaster management SANRAL |
9.1 Response Strategies

The second phase of the disaster management cycle is disaster response. Which occurs during the disaster. This entails activities such as: providing warning/evacuating people at risk; providing humanitarian assistance; search and rescue; assessing damage; and restoring immediate basic services to maintain life, improve health and support morale of the affected population. Other emergency response activities that may also range from providing specific assistance like assisting displaced people (affected by a disaster) with transport, temporary shelters and food, and repairing of damaged or diversion of infrastructure.

Knysna Municipality has also adopted a response/incident management procedure that is followed during a disaster/event.

The KLM response strategies in the table below are identified and clustered according to each Hazard specification or requirements as well as assigning responsible parties.

<table>
<thead>
<tr>
<th>Hazard</th>
<th>Response – measures</th>
<th>Responsible stakeholders/Partners</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Drought.</td>
<td>Human and animal relief supplies – escorts and regulation of traffic</td>
<td>Traffic and Law Enforcement</td>
</tr>
<tr>
<td><strong>See attached annexure “C”, drought strategy and contingency plan</strong></td>
<td><strong>Human and animal relief supplies – escorts and regulation of traffic</strong></td>
<td><strong>Traffic and Law Enforcement</strong></td>
</tr>
<tr>
<td>---</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>Incident command post/JOC to be activated- if need be</td>
<td>Department technical services- water and sanitation</td>
<td>Disaster Management Agriculture Environmental health SPCA Communications</td>
</tr>
</tbody>
</table>

**Triggering criteria and stages of action**

| Level 1 - normal (storage>60 %) | Level 2 - stage 1 drought (storage < 60%) | Level 3- stage 2 drought (storage < 40%) |
|Level 4- Stage 3 drought (storage < 30%) | Level 5- Day Zero |

<table>
<thead>
<tr>
<th>2. Fire, veld Fires</th>
<th>Alerting all emergency services immediately</th>
<th>Fire Department Garden Route Fire department Neighbouring towns Fire Departments if required</th>
</tr>
</thead>
<tbody>
<tr>
<td>Evacuating public in high risk areas</td>
<td>Disaster management Fire Department Garden Route Fire Department SAPS Traffic Department Law Enforcement Department Provincial Ambulance (Metro) SANDF- if needed</td>
<td></td>
</tr>
<tr>
<td>Incident command post/JOC to be activated- if need be</td>
<td>Disaster management Fire Department</td>
<td></td>
</tr>
</tbody>
</table>

<p>| Suppressed fires should be monitored for re-ignition | Fire Department Garden Route Fire Department Cape Nature SCFPA/farmers association WOF Land owners SANParks PG Bison MTO |</p>
<table>
<thead>
<tr>
<th>Avoid interruption to basic services (water and electricity)</th>
<th>Technical Services Eskom</th>
</tr>
</thead>
<tbody>
<tr>
<td>Early warning communication</td>
<td>Disaster management Knysna Fire Department Garden Route Fire Department Garden Route District Municipality Communication Department Public participation</td>
</tr>
<tr>
<td>3. Floods</td>
<td>Incident command post/JOC to be activated</td>
</tr>
<tr>
<td>Alerting all emergency services</td>
<td>Disaster management Fire Department Garden Route Fire Department Technical services Environmental Control Law Enforcement Traffic Department Provincial Traffic Department SAPS SANDF NGO’s NSRI Provincial Ambulance (Metro) ER 24 Private Ambulance SAN Parks SANParks</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>---</td>
<td>---</td>
</tr>
</tbody>
</table>
| **SANRAL**  
Red Cross | **Provide safe water supply, food, shelter and medical care** | **Disaster management**  
Department of Social development  
NGO’s  
Churches  
SASSA |
| **Evacuation of public in high risk areas** | Traffic and Law Enforcement  
Provincial traffic  
Knysna Fire department  
SAPS  
Public Participation NGO’s  
Provincial Ambulance (Metro) and Private | **Early warning communication** |
| **4. Alien Invasive Species** | Invasive plants don’t require an immediate response after a fire because there is nothing to pull/cut/spray or treat, it’s all burnt. Only 6 – 12 months later when the seeds have germinated and it’s possible to start assessing the scale of the problem can we actually respond which means we’re actually in the recovery stage. Prevention (get rid of the plants before a fire comes through) mitigation (get rid of young plants before they become old and expensive to remove) and Recovery (systematic removal of invasive plants in burnt areas). | **5. Water Supply Disruption**  
Communicate disruptions and regular updates to effected area | **Water and sewerage department Communication** |
| **5. Water Supply Disruption**  
Communication:  
Water and sewerage department  
Communication  
Local Traffic Department  
Provincial Traffic  
Law Enforcement  
Communication  
Technical services | **Closing affected roads, and or diverting traffic** | **Dispatch water tankers**  
Water and sewerage department | **6. Estuary Pollution**  
When the telemetry equipment indicates a blockage that could cause a spill in one of the catchments draining into | **Technical Services:**  
Water and Sewer |
the estuary there should be a minimum turnaround time for unblocking and cleaning up.

When final effluent indicates unacceptably high levels of ecoli SANParks and GRD Municipality should be notified immediately so that signage can be erected to prevent bathers from contamination. Final effluent should not be discharged if it contravenes minimum safety levels.

<table>
<thead>
<tr>
<th>7. Sewerage Disruption</th>
<th>Communicate disruptions and regular updates to effected area</th>
<th>Water and sewerage department Communication</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Closing affected roads, and or diverting traffic</td>
<td>Local Traffic Department Public Works Provincial Traffic</td>
</tr>
<tr>
<td></td>
<td>Stabilize of system</td>
<td>Water and sewerage department Communication</td>
</tr>
<tr>
<td></td>
<td>Clean up process (if needed)</td>
<td>Water and sewerage department Communication</td>
</tr>
</tbody>
</table>

8. Hazardous material (Hazmat) road accident risk

Alerting all emergency services immediately

<table>
<thead>
<tr>
<th></th>
<th>Fire Department Garden Route Fire Neighboring towns Fire Departments if required SAPS Law Enforcement Traffic Department Provincial Traffic Department Private Hazardous Materials Specialists and Clean up Contractors SANRAL (N2)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Closing affected roads, and or diverting traffic</td>
</tr>
<tr>
<td></td>
<td>Evacuating public in high risk areas</td>
</tr>
<tr>
<td>Incident</td>
<td>Responding Agencies</td>
</tr>
<tr>
<td>----------</td>
<td>---------------------</td>
</tr>
<tr>
<td>Incident command post/JOC to be activated</td>
<td>Disaster management Fire Department, SAPS, Traffic, Garden Route Fire Department, Garden Route District Disaster Management, Provincial Traffic Department, SANRAL (N2), SANDF</td>
</tr>
<tr>
<td>Containment and Mitigation of Hazardous Materials Incident</td>
<td>Fire Department, Garden Route Fire Department, Hazmat Contractors, Industry Specialists, Traffic Department, Provincial Traffic Departments, SAPS, SANDF</td>
</tr>
<tr>
<td>Avoid interruption to basic services (water and electricity)</td>
<td>Technical Services, Eskom</td>
</tr>
<tr>
<td>Early warning communication</td>
<td>Disaster management Fire Department, Garden Route Fire Department, Garden Route District Municipality Communication Department, Traffic Department, Provincial Traffic Department, SAPS, Regional Radio Stations</td>
</tr>
<tr>
<td>9. Road Accidents (General)</td>
<td>Notify relevant first responders</td>
</tr>
<tr>
<td>----------------------------</td>
<td>---------------------------------</td>
</tr>
<tr>
<td>Early warning communication of road traffic incidents</td>
<td>Communication Department Disaster management Fire Department Garden Route Fire Department Garden Route District Municipality Traffic Department Provincial Traffic Department SAPS</td>
</tr>
<tr>
<td>Closing affected roads, and or diverting traffic</td>
<td>Local Traffic Department Law Enforcement Fire department Provincial Traffic SAPS SANRAL (N2)</td>
</tr>
<tr>
<td>Securing of scene, treatment of injured victims and safe removal to medical facilities</td>
<td>Disaster management Fire Department Garden Route Fire Department Law Enforcement Traffic Department Provincial Traffic Department SAPS Provincial Ambulance (Metro) ER 24 Private Ambulance SANRAL</td>
</tr>
<tr>
<td>Incident command post/JOC to be activated</td>
<td>Disaster management Fire Department Garden Route Fire Department Environmental Control Law Enforcement Traffic Department Provincial Traffic Department</td>
</tr>
</tbody>
</table>
9.2 Recovery Strategies

Disaster recovery (including rehabilitation and reconstruction) focuses on the decisions and actions in the aftermath of a disaster to restore lives and livelihoods, services, infrastructure and the natural environment to the pre-disaster living conditions of the stricken community. In addition, by developing and applying risk reduction measures at the same time, the likelihood of a repeated disaster event should be reduced or mitigated.

Disaster recovery includes:
- Rehabilitation of the affected areas, communities and households;
- Reconstruction of damaged and destroyed infrastructure; and
- Recovery of losses sustained (including humanitarian support) during the disaster event, combined with the development of increased resistance and resilience to similar occurrences in the future. Recovery plans must include risk reduction initiatives which if required must be included in the IDP linked with a budget.
<table>
<thead>
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<td>Road Accidents (general)</td>
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<td>Severe Weather (gale force winds &amp; thunderstorms included)</td>
<td>Build back better (Incorporating risk reduction strategies)</td>
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PRIMARY AND SECONDARY RESPONSIBILITIES

Internal to the Municipality:

Financial Services

Duties and responsibilities

The Financial Services must budget annually for disaster situations.

Procedure during a disaster

- The Financial Services must assign a person to do the necessary funding proposals for disasters.
- The person assigned must work closely with the disaster official and non-governmental organisations.

Fire and Rescue Services

Duties and responsibilities

- The primary task of this discipline is to extinguish fires as early and effectively as possible in order to safe human and animal life and property.
- The fire brigade is primarily responsible for firefighting, rescue and evacuation.
- The fire brigade will be involved in all the risks as identified.
- The fire brigade must ensure that fire risks are reduced or minimised.
- The fire brigade must make a survey of all fire hydrants marking them clearly visible and also ensure that they are in working condition.
- Fire brigade volunteers must be trained in the combating of fires, rescue and evacuation.
- Lectures and demonstrations must be provided to the public in order that they may be informed regarding the preventative measures to be taken and the purchase of firefighting apparatus must be encouraged.
- Existing firefighting equipment must be inspected regularly.
- Where external resources are identified, it must be resolved with the institution(s) in question.
- Surveys must be made of the different types of hazardous materials transported in the greater Knysna area to mitigate the possible spill of the materials.
Procedure during a disaster

- On receipt of an emergency call, the fire brigade chief will activate his/her disciplines and they will visit the site immediately.
- The head of the fire brigade reports to the disaster control official.
- Fire brigade staff will undertake fire combating, rescue and evacuation.
- The head fire brigade will report fully to the disaster control official.
- Nobody leaves the disaster site without the permission of the disaster control official.

Streets and Storm water Services

Duties and responsibilities

- The primary task of this discipline is to provide alternative routes and to repair roads as early as possible.
- Streets must also be contained properly on a continuous basis and where problems are identified, such problems must be addressed.
- The storm-water system must be maintained on a continuous basis.
- Provision must be made for emergency stock such as storm-water pipes, the necessary requirements and road signs.
- To maintain a record of external sources with a view to assistance during a disaster.

Procedure during a disaster

- The head of the discipline must summon the available personnel to the disaster site when an emergency call is received.
- The disciplinary head must report at the disaster control official.
- The discipline, in co-operation with the traffic department, is responsible for the closing of streets and the indication of alternative routes.
- The disciplinary head must report fully to the disaster control official.
- Nobody leaves the disaster site without the permission of the disaster control official.

Sewerage: Purification Services

Duties and responsibilities
It is the primary task of this discipline to repair the sewer network and everything associated therewith as early as possible.

To plan timeously how the sewerage can be discharged/removed in the case of a break of pipelines.

To make surveys of the availability of equipment in the area used in a disaster situation.

To make surveys of qualified specialists who could be involved in the functions of the discipline.

To maintain a record of external resources with a view to assistance during a disaster.

**Procedure during a disaster**

- The head of the discipline must summon the available personnel to the disaster site when an emergency call is received.
- The disciplinary head must report at the disaster control official.
- The discipline, in co-operation with the traffic department, is responsible for the closing of streets and the indication of alternative routes.
- The disciplinary head must report fully to the disaster control official.
- Nobody leaves the disaster site without the permission of the disaster official.

**Storm water Drainage Services**

**Duties and responsibilities**

- The primary task of these disciplines is to repair water supply networks as early as possible.
- To determine and to record on charts the position of water pipes, storage dams and their capacities.
- To take surveys of other water storage places, such as boreholes, farm dams, etc. in the area and to maintain a proper record thereof.
- To determine how drinking water could be provided along other methods for consumers cut off from existing water resources.
- To make surveys of qualified experts who could be involved in the activities of this discipline.
- To plan how water can be provided to consumers when disruptions or breaks in pipelines occur.

- To encourage the public to provide rainwater tanks at their homes as a possible water source in the case of emergency.

- To maintain a record of external resources with the view to assistance during a disaster.

**Procedure during a disaster**

- The head of the discipline must summon the available personnel to the disaster site when an emergency call is received.

- The disciplinary head must report at the disaster control official.

- The discipline, in co-operation with the traffic department, is responsible for the closing of streets and the indication of alternative routes.

- The disciplinary head must report fully to the disaster control official.

- Nobody leaves the disaster site without the permission of the disaster official.

**Traffic and Law Enforcement Services**

**Duties and responsibilities**

- The primary task of this discipline is to arrange traffic and to lead vehicles along alternative routes, as well as to limit collisions and traffic congestions to an absolute minimum.

- The discipline must be prepared to handle any emergency or disaster situation which may occur in the area.

- Traffic reservists must be trained to handle traffic situations.

- External resources must be identified with a view to assistance during a disaster.

**Procedure during a disaster**

- The head of the discipline must summon the available personnel to the disaster site when an emergency call is received.

- The disciplinary head must report at the disaster control official.

- The discipline, in co-operation with the traffic department, is responsible for the closing of streets and the indication of alternative routes.
The disciplinary head must report fully to the disaster control official.

Nobody leaves the disaster site without the permission of the disaster official.

**Electro-technical Services**

**Duties and responsibilities**

- The task of this department is to repair power disruptions as early as possible.

- The discipline must be kept continuously prepared to handle any emergency or disaster situation which may occur in the area.

- The establishing of all cables, wires, substations, etcetera, and the indication on a diagram.

- To undertake investigation regarding the best method upon which electricity could be connected during power disruptions along other methods and other routes in order to provide electricity to consumers.

- To make surveys of qualified experts as well as private contractors in the area with a view to assistance during a disaster.

- To ensure that there is adequate electricity supply provision at all times.

- To test equipment on a regular basis to ensure that it is in a good working condition.

- To make a survey of all power generators in the area with a view to use thereof during a disaster.

**Procedure during a disaster**

- The head of the discipline must summon the available personnel to the disaster site when an emergency call is received.

- The disciplinary head must report at the disaster control official.

- The discipline, in co-operation with the traffic department, is responsible for the closing of streets and the indication of alternative routes.

- The disciplinary head must report fully to the disaster control official.

- Nobody leaves the disaster site without the permission of the disaster official.
Parks and Recreation Services

Duties and responsibilities

- The primary task of this discipline is to undertake clearing work as early and effectively as possible.
- To plant ground covers as far as possible in order to limit soil erosion to a minimum.
- To lop and remove tree branches, trees and shrubs presenting a danger.
- To examine the working of all equipment continuously to establish that it is in a good working condition.
- To clean the rivers flowing through the greater Knysna on a regular basis.
- The removal of trees, shrubs and driftwood.
- Transportation of displaced persons.

Procedure during a disaster

- The head of the discipline must summon the available personnel to the disaster site when an emergency call is received.
- The disciplinary head must report at the disaster control official.
- The discipline, in co-operation with the traffic department, is responsible for the closing of streets and the indication of alternative routes.
- The disciplinary head must report fully to the disaster control official.
- Nobody leaves the disaster site without the permission of the disaster official.

Sewerage: Purification Services

Duties and responsibilities

- The primary task of this discipline is to undertake clearing work.
- The discipline head must ensure that all equipment is inspected regularly to ensure that it is in a good working condition.

Procedure during a disaster

- The head of the discipline must summon all available personnel to the disaster site when an emergency call is received.
The disciplinary head must report at the disaster control official.

The discipline, in co-operation with the traffic department, is responsible for the closing of streets and the indication of alternative routes.

The disciplinary head must report fully to the disaster control official.

Nobody leaves the disaster site without the permission of the disaster official.

Corporate Services
Duties and responsibilities

• The discipline is primarily responsible for the maintenance of municipal property.

• The discipline head must therefore ensure that municipal buildings are maintained in an excellent condition and not present a danger for the general public.

• The discipline head must make a survey of all municipal halls as well as particulars of the people in charge of such halls.

DAMAGE ASSESSMENT

During and/or after the occurrence of a disaster/event preliminary rapid assessments should be undertaken by the affected Municipalities and/or national/Provincial departments depending on the specific plan, to determine the severity and magnitude of the event, as well as the likely losses and damage that could be suffered. Each affected organ of state should conduct its own assessment in accordance with their line and core functions.

BUDGET

The Budget of Disaster Management must be part of the integrated development planning process to ensure that the necessary capacity to serve the needs of the Local Municipal area is addressed.

LINES OF COMMUNICATIONS (General)

The Knysna Municipality Disaster Management Section liaises with the Eden District Disaster Management Centre, which in turn liaises with the Western Cape Disaster Management Centre.
The JOC Media spokesperson will be responsible for all communication. All incoming calls shall be logged and channeled to the relevant office for prioritization and action. As far as possible all logging and response should be captured electronically. Every role player will make use of his own communication equipment.

The line function must in turn provide the Head of Communication with regular updates on progress and this information will then be fed to the JOC and the Call Centre.

Regular line function briefings should be held to ensure continuity of effort, together with an overall assessment of progress.

The Media Officer will send out information to the media and community, thus avoiding unnecessary pressures on those coordinating the emergency response, and also in an attempt to reduce the spread of rumors which otherwise could cause harm and unnecessary alarm. The use of the local media should be sought to achieve this.

CONTINGENCY PLANS AND EMERGENCY PROCEDURES (Section 53 (2) (k) of the ACT)

The purpose of Contingency Plans is to forecast, prepare for incidents and to identify roles and responsibilities of the departments within the Municipality. It enhances the Municipality’s capabilities to effectively and efficiently manage and mitigate any situation that could pose a threat to life, property and the environment.

CLASSIFICATION OF DISASTERS

When an event of disaster proportions occurs or is threatening to occur in any part of the Knysna Municipality, the Head of the Disaster Management Centre will determine whether the event can be classified as a Local State of Disaster in terms of the Disaster Management Act 57 of 2002 and, if so, the DM will immediately:

- Initiate efforts to assess the magnitude and severity or potential magnitude and severity of the disaster;
- Alert all the disaster management role-players in the municipal area that may be of assistance in the circumstances;
- Initiate the implementation the disaster response plan or any contingency plans and emergency procedures that may be applicable under the circumstances of the threat; and
- Inform the Eden District Disaster Management Centre and Western Cape Provincial and National Disaster Management Centres of the disaster and the initial assessment of the magnitude and severity or potential magnitude and severity of the disaster.

When informing Garden Route District the Western Cape Provincial and Disaster Management Centre, the Head of the DRM Centre may make recommendations
regarding the classification of the disaster as may be appropriate in terms of Section 49 of the Disaster Management Act 57 of 2002.

DECLARATION OF A LOCAL DISASTER

In the event of a local disaster, the council of a municipality, having primary responsibility for the co-ordination and management of the disaster, may, by notice in the Provincial Gazette, declare a local state of disaster in terms of section 55 (1) of the Act. If a local state of disaster has been declared, the municipal council may make by-laws or issue directions to prevent an escalation of the disaster, or to alleviate, contain and minimise the effects of the disaster amongst others. A municipal state of disaster that has been duly declared lapses three months after it has so been declared, together with any by-laws attached thereto. It may also be extended one month at a time by notice in the Provincial Gazette.

In the event of a provincial disaster (more than one district affected), the Premier of a province, after consultation with Cabinet, may declare a provincial state of disaster by notice in the Provincial Gazette in terms of section 41 (1) of the Act. If a provincial state of disaster has been declared, the Premier may make regulations or authorise the issue of directions concerning the release of resources or other steps that may be necessary to prevent an escalation of the disaster, or to alleviate, contain and minimise the effects of the disaster amongst others. A provincial state of disaster that has been duly declared lapses three months after it has so been declared, together with all regulations or directions attached thereto. It may also be extended one month at a time, by notice in the Provincial Gazette.

Irrespective of whether a local state of disaster has been declared or not, the Knysna Municipality is primarily responsible for the co-ordination and management of local disasters that occur in its area, in terms of Section 55 (1) of the Disaster Management Act 57 of 2002.

Whether or not an emergency situation is determined to exist, municipal and other agencies may take such actions under this plan as may be necessary to protect the lives and property of the inhabitants within the Greater Knysna.

Declaration of a local state of disaster: - In terms of Section 55 of the Disaster Management Act 57 of 2002, in the event of a local disaster, the Council may, by notice in the Provincial Gazette declare a local state of disaster if existing legislation and contingency arrangements do not adequately provide for the municipality to deal effectively with the disaster, or if there are any other prevailing or special circumstances that warrant the declaration of a local state of disaster.

If a local state of disaster has been declared, the Council may make by-laws or issue directions, or authorize the issue of directions to:

- Assist and protect the public;
- Provide relief to the public;
- Prevent or combat disruption; or
- Deal with the destructive and other effects of the disaster.
MONITORING/EVALUATION (Section 21 (a) of the ACT)

The successful implementation and execution of any plan is very dependent on sustained and effective monitoring and evaluation of its effectiveness. This must be ensured by observing the following principles:

- to constantly evaluate and receive feedback reports from line departments;
- to regularly direct requests and ask questions;
- to take note of and observe status changes;
- to analyse actions and anticipate problems/changes (be flexible);
- to regularly re-assess the situation and the effectiveness of actions and adapt strategies as circumstances dictate. Repeat processes – schedule meetings at specific agreed regular times.

REGULAR REVIEWING AND UPDATING OF THE MUNICIPAL DISASTER MANAGEMENT PLAN

The municipality will regularly review and update this plan as required by Section 52 of the Disaster Management Act. The Knysna Disaster Management Advisory Forum shall be responsible for the review of this plan on an annual basis. All updates to the plan must be submitted to the Garden Route District Municipality Disaster Management Centre and the Provincial Disaster Management Centre.

COMMITMENT BY HEAD OF DEPARTMENT/DIRECTOR / MUNICIPAL MANAGER

The Disaster Management Services, The Director of Community Services, and the Municipal Manager, are committed to see this area improve and that funding into the field of disaster management is essential to planning not only for incidents and putting plans in place to mitigate or control the impact or effect as tolerable or not as essential, but also that awareness and public education at all levels is critical for communities as well as municipal officials in all sections.