WESTERN CAPE PROVINCIAL GOVERNMENT
VELD FIRE PLAN 2017/2018

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1 Revision Log

Date	Revision
14 November 2012	Draft 1
11 December 2012	Adopted
20 September 2013	Updated and submitted
8 November 2013	Adopted
1 October 2014	Updated
27 November 2014	Adopted
20 September 2015	Updated
29 September 2015	Adopted
3 October 2016	Updated
2 November 2016	Adopted
6 October 2017	Updated
6 November 2017	Adopted

2 Letter from the Deputy Director Fire & Rescue Services

The 2017/2018 veld fire hazard season will start shortly in the Western Cape. Partnerships between the City of Cape Town, Table Mountain National Park, Cape Winelands DM, Overberg DM, Eden DM, West Coast DM, Provincial Government: Western Cape, Working on Fire, MTO, Cape Nature and the Fire Prevention Associations has been strengthened over the past couple of years and will again result in fires being secured in their incipient stages or the spread and impact of larger fires being reduced.

The Provincial Government of the Western Cape through its Chief Directorate: Disaster Management and Fire & Rescue Services have embarked on a proactive approach to managing veld fires, which occur in certain parts of the Province mainly between the months of December and April each year. The aforesaid proactive approach to managing these fires includes the rapid response of aerial fixed wing aircraft and helicopters which can be deployed to rapidly respond to fires in their incipient stages and commence an early fire attack with the objective of preventing extended attack operations and major fire spread. The Department further strengthen the rapid response by having a specialized ground team on standby throughout the season.

The rapid deployment of aerial assistance proved to be successful in 98% of the cases the previous season. An urgent call is again made for all to ensure a rapid response to control fires in its incipient stages to curb unnecessary time spent at fires and reduce costs. The aerial fire fighting capacity is available and helicopters and fixed wing aircraft can be used as first response aircraft with the first response fire fighting vehicles and crews. Please again note that fire suppression is only one part of veld fire management. Fire prevention is the most important component of fire services and combined with this is the safety of all our personnel during fire fighting operations. Let us never forget the latter. Ensure that your fire fighters remain aware of the Fire Fighting Safety Rules.

The Provincial Government Department Local Government – Chief Directorate: Disaster Management and Fire & Rescue Services have also embarked on a project to provide Incident Command Systems training. The Province adopted the Incident Command system as proven method to manage incidents efficient and effectively. The ICS workgroup have identified persons trained in Incident Command that can be made available to assist Chief Fire Officers or other managers in the control and fighting of veld fires to supplement incident command structures. The Western Cape Disaster Management Centre will be activated as a Multi-Agency Command Centre according to the predetermined protocols to assist with coordination and the allocations of critical resources.

Looking forward to yet another successful and safe fire season.

E.P. du Toit
Deputy Director: Fire & Rescue Services
Directorate: Disaster Management and Fire & Rescue Services
Department of Local Government, Western Cape Government

3 Introduction

3.1 Purpose

The Western Cape veld fire plan provides the various responsible fire authorities and agencies with an overview of the current arrangements that are in place for the management of veld and forest fires in the province. The purpose of the document is also to provide fire and rescue services, fire prevention associations, volunteer organizations and landowners with a convenient reference to the key structures and systems available and required to undertake effective and safe fire fighting operations at veld and forest fires in the Western Cape.

The Plan contains an overview of veld fire preparedness, prevention and response arrangements. It also reflects an integrated approach and shared responsibility for veld, forest and fire management between government, agencies, communities, landowners and individuals.

3.2 Scope

The provincial veld fire plan provides the Western Cape Provincial Government and fire management agencies with a consolidated overview of the current arrangements for the management of veld fire and its consequences. The Plan contains an overview of veld and forest fire awareness, planning, prevention and response arrangements.

The Plan uses the following definitions:

- Awareness is the education and spread of messages through various media to make people and communities at risk aware of the consequences of fires and safe practises.
- Prevention is the elimination or reduction of the incidence or severity of emergencies and the mitigation of their effects;
- Response is the combating of fires, emergencies and the provision of rescue and immediate relief services;
- Recovery is the assistance to people and communities affected by veld fires and other emergencies, to achieve a proper and effective level of functioning;
- Veld fire is an unplanned fire primarily in vegetation such as grass, forests, mountains, fynbos and natural scrub; and
- Veld fire consequences are the impact of the fire on people, critical infrastructure, the economy and the natural environment.

4 Responsibility for veld fire management

The management of emergencies is a shared responsibility involving many organisations and people. Although some organisations have specialist roles, veld fire management is not something done by one single organisation.

An integrated organisational approach is the only way to ensure timely action to veld fires and provides a mechanism for achieving better outcomes by allowing the fire & rescue services, fire prevention associations and landowners to effectively work together before, during and after a fire. Interoperability maximises the capability of the agencies to work effectively and efficiently together to deliver seamless information, communications, and technology.

To achieve a cooperative response to fires, each agency must have an understanding of the systems, structure, resources, capabilities and statutory obligations of the other agencies.

4.1 Legislation

The following legislation, while not exhaustive, is the principal legislation for veld fire management in the Western Cape:

- Fire Brigade Services Act, Act 99 of 1987
- Veld and Forest Fire Act, Act101 of 1998
- The Constitution of the Republic of South Africa, 1996
- Disaster Management Act, Act 57 of 2002
- Conservation of Agricultural Resources Act, Act 43 of 1983
- Environment Conservation Act (ECA), Act 73 of 1989
- Municipal Systems Act, Act 32 of 2000
- National Environmental Management Act ("NEMA"), Act 107 of 1998
- National Environmental Management: Air Quality Management Act, Act 39 of 2004
- National Environmental Management: Biodiversity Act, Act 10 of 2004
- National Environmental Management: Protected Areas Act, Act 57 of 2003
- National Environmental Management: Protected Areas Amendment Act, Act 15 of 2009
- Pollution Prevention Act, Act 45 of 1965
- National Forests Act, Act 84 of 1998
- National Heritage Resources Act, Act 25 of 1999
- National Parks Act, Act 57 of 1976
- National Water Act, Act 36 of 1998
- Western Cape Environmental Implementation Plan – November 2002
- Western Cape Planning and Development Act, Act 7 of 1999

4.2 Fire Services

The primary agencies with the responsibility for veld fire management are the fire services. The Chief Fire Officer of each fire service is a statutory officer accountable for their respective service.

The fire services have standards and protocols for providing their communities with a seamless and effective fire service across jurisdictional boundaries through mutual aid agreements. District Fire Services can only achieve integrated fire management in their area of jurisdiction by working and planning with their local municipalities, fire prevention associations and other agencies such as Cape Nature, MTO Cape, Sanparks etc.

4.3 Fire Protection Associations

Fire Protection associations aim to contribute to community safety by eliminating loss of life, human injury, economic and environmental losses by veld fires and by progressively reducing impacts while promoting the useful role of controlled fires.

The National Veld and Forest Fire Act make provision for the establishment of Fire Protection associations (FPA's) as a means of implementing integrated fire management by involving private landowners and local government and other role-players. FPA's makes rules for their members to ensure a lower risk to veld fires and develop and coordinate strategies with their respective fire services to prevent the unnecessary loss of life, property and the environment due to veld fires.

4.4 Other Agencies

Many agencies have roles in veld fire prevention, response and recovery. The veld and Forest Fire Act specifically places the responsibility of dealing with veld fires on the landowner.

In the Western Cape we are privileged to have well organized agencies and landowners able to assist with veld fires and their consequences. The Provincial veld fire plan is based on involvement of all tiers of the community and expects:

- Individuals to take responsibility for their own safety and actively plan and prepare for veld fires;
- Local government and communities to conduct local fire prevention and preparedness programs;
- Industry, including critical infrastructure providers, tourism and agriculture, to recognise the potential risk of veld fire on their businesses and to plan for continued service provision throughout and after a major disruption;
- Non-government and community organisations, to which the community may turn for support or advice, to prepare for major events; and
- Government agencies to:
    - Provide information to the community during veld fires
    - Ensuring an effective, well-coordinated veld fire response;
    - Apply risk-based land management and planning principles;
    - Create organisational partnerships to build community capacity and capability;
    - Support individuals and communities to prepare to respond to and recover from veld fires;

5 Objectives and principles of veld fire management

5.1 Objectives

The objective of the Provincial Veld fire management plan is to guide activities in the Western Cape to reduce the impact of veld fire on human life, essential infrastructure, industry, the economy and the environment.

5.2 Principles

The following principles guide veld fire management in the Western Cape:

- Protection of human life: Human life, which includes both the community and emergency services personnel, takes priority above all other obligations in veld fire management.
- Responsibility for building resilience: Veld fires are inevitable and cannot always be prevented. All levels and sectors of society share responsibility, within their

sphere of influence, for building a more resilient community and environment that can prevent, respond to and recover from veld fires.

- Community and landowner involvement: Community involvement is essential to ensure veld fire management approaches are inclusive, integrated and comprehensive across diverse societies and landscapes.
- A seamless approach: All agencies will work together, using resources efficiently and effectively, to present the community with a seamless approach to all aspects of veld fire management.
- Risk-driven: Policy and program priorities for veld fire management should be based on the measurable reduction of risk from the impact of bushfire.
- Learning and knowledge: The incorporation of local knowledge, experience, and operational and scientific evidence is integral to the on-going improvement of veld fire management policy and practice.

6 Planning

6.1 Integrated fire management planning

Integrated fire management planning committees operate within the existing legislative work groups. Membership of district and Provincial fire work groups comprises of representatives of the key stakeholder agencies.

The Provincial Fire Work Group oversees fire management planning in the Western Cape to ensure it is consistent, sustainable and integrated. The Work group is responsible for providing leadership and also to develop tools and processes for consistent and continuous improvement in veld fire management planning.

6.2 Regional planning

District Joint Fire Services Work Groups provide a forum to build and sustain organisational partnerships, generate a common understanding and shared purpose with regard to veld fire management across a district. The work groups must meet at least every quarter as well as pre-season. The district work groups must ensure that municipal and individual agency plans are linked to the provincial strategic direction and also ensure that planning are consistent across district boundaries.

A guide to develop a Fire management plan is attached as **Annexure A**.

6.3 Municipal planning

Municipal Fire Planning Committees provide a municipal level forum to build and sustain organisational partnerships, generate a common understanding and ensure shared purpose with regard to veld fire risk management in the municipality.

6.4 Landowner planning

Fire prevention associations in collaboration with municipalities build and sustain relationships with landowners. Groups of landowners are organized in fire management units and develop fire management plans that are consistent with the provincial strategy, ensure implementation of the actions detailed in the plans and continuously monitor the effectiveness of those actions.

An example of a fire management unit action plan is attached as **Annexure B**. The unit action plan must be audited annually by the Fire Prevention Officer.

6.5 Current risk in the Western Cape

The Western Cape Government, in collaboration with AFIS completed a veld fire risk assessment based on an analysis of exposure of social, economic and environmental assets. A 2010 CSIR report on veld fire risk in South Africa included a map of the distribution of fire ecology types based on the type of vegetation, which is closely related to the veld fire risk.

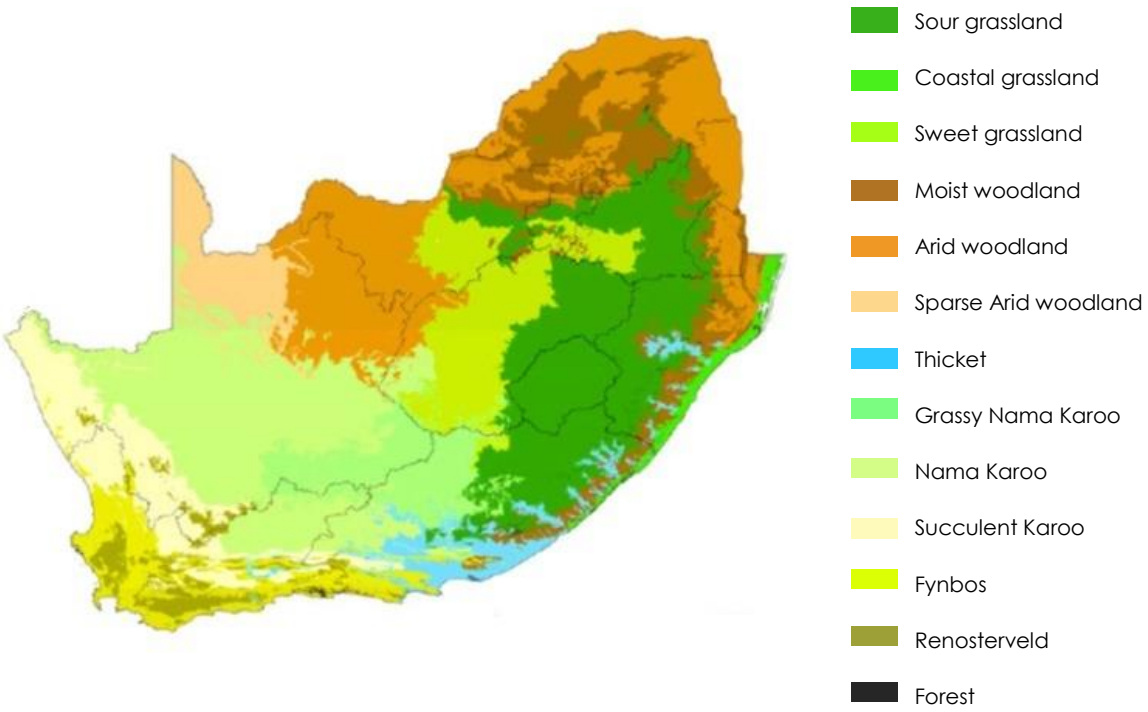

Figure 1: The distribution of the different fire-ecology types(CSIR report 2010)

The Western Cape predominantly has a high veld fire risk with an extreme risk in parts of the Eden District. The areas with a low risk to veld fires correspond with the areas where Succulent Karoo fire ecology type is found.

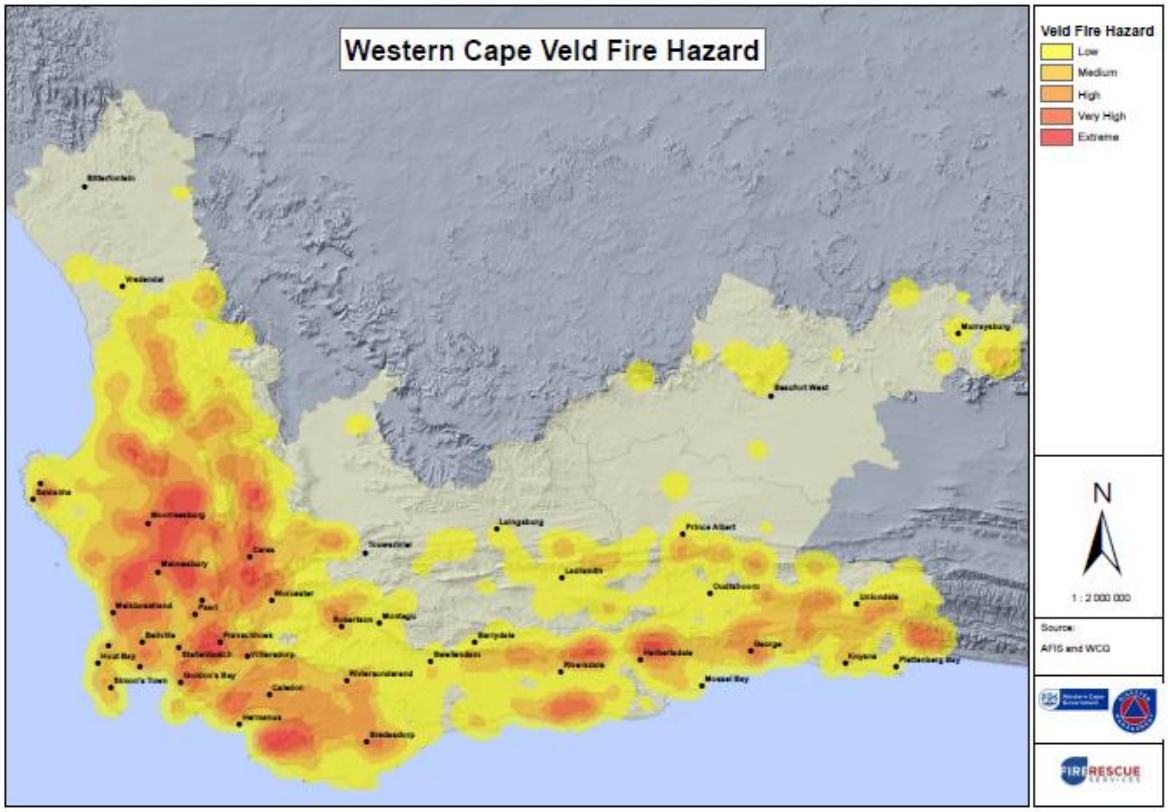

Figure 2: Overall Veld Fire Risk (WCG Risk Register 2017)

6.6 Previous fires

The CSIR provide a very useful tool to report incidences of fire. The AFIS (Advanced Fire Information system) makes use of the MODIS satellite to record incidences of fire as well as burn scar information.

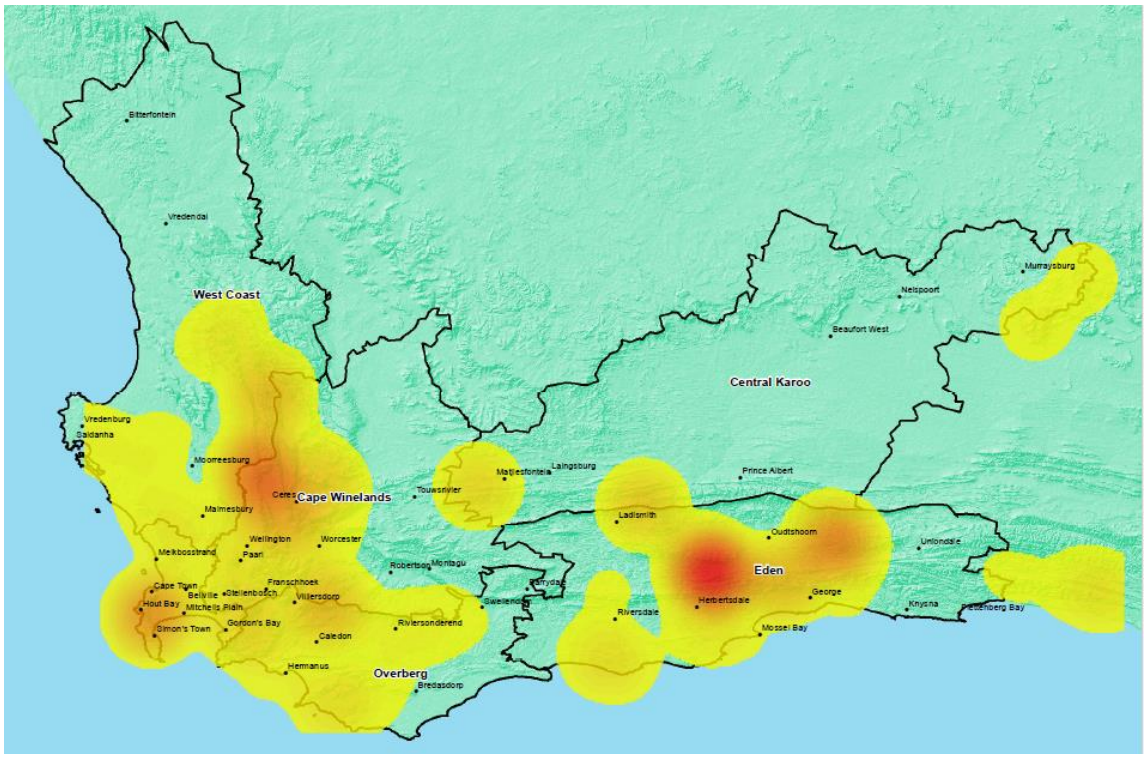

Figure 3: Fires 2014/2015

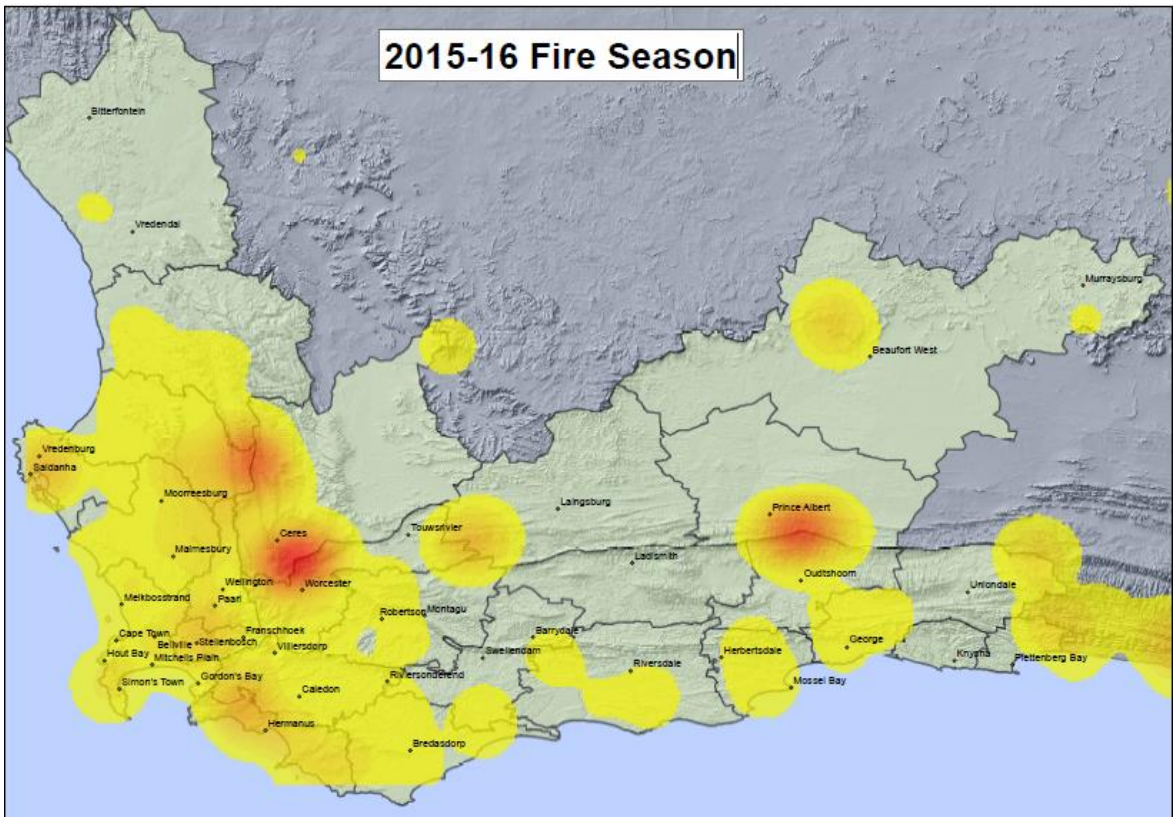

Figure 4: Fires 2015/2016

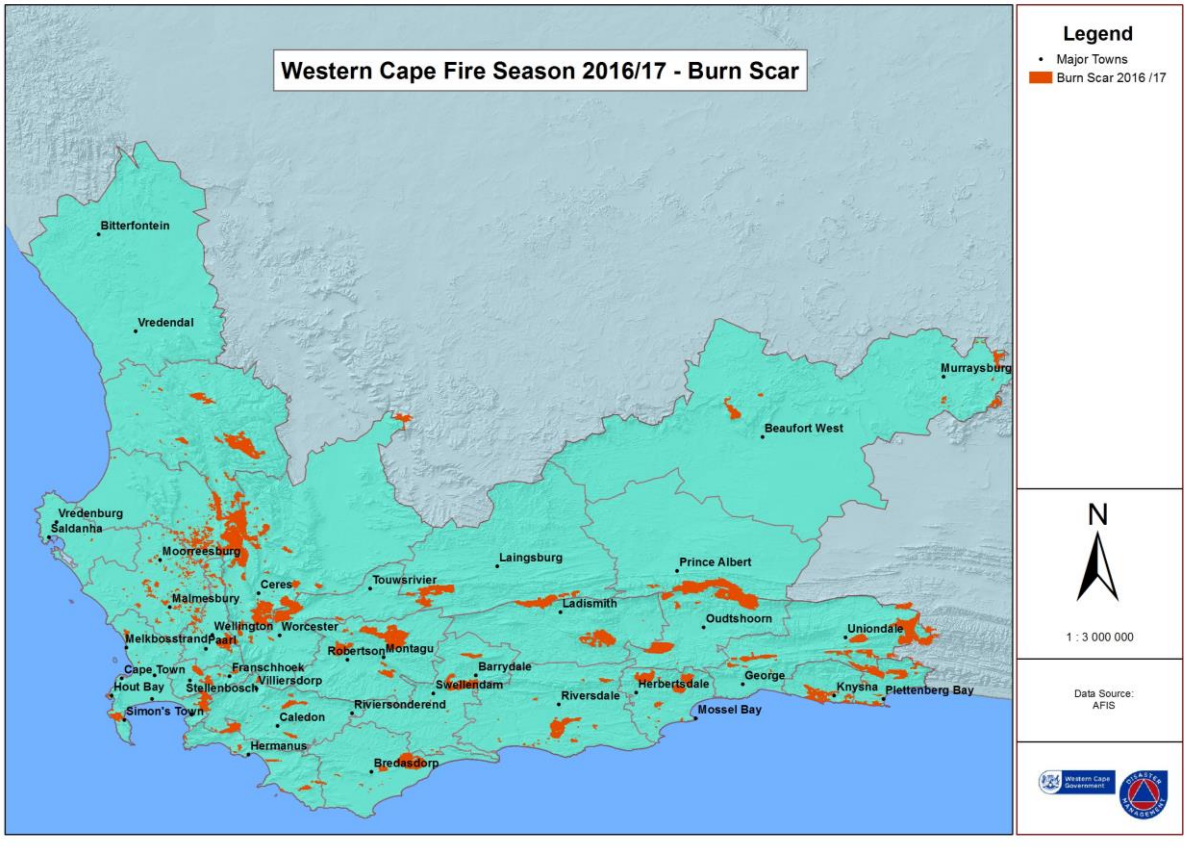

Figure 5: Fires 2016/2017

7 Awareness and Prevention

Awareness campaigns and Prevention strategies are seen as ways to eliminate or reduce the incidence or severity of veld fires in the Western Cape as a whole. Veld fire prevention is the responsibility of all and can only be achieved through a concerted effort to reduce the occurrence of and to minimise the effect of unplanned veld fires on life, property and the environment.

The Provincial Fire Work group has a responsibility to develop veld fire prevention policies and programs that mitigate the risk, minimise harm and support response to and recovery from veld fires. District work groups are responsible for identifying the risks and common causes of ignitions within their areas of jurisdiction and to implement prevention programs. Owners and occupiers of land have a responsibility to manage their properties to reduce the risk of veld fires.

Figure 6: Awareness material

8 Preparedness

Activities within the Province are guided by fire management plans that include planned contributions for interagency-shared resources, training, prevention and response to veld fires.

8.1 Fire Services

The fire services depend on a suite of arrangements in preparation for the response to veld fires. These include:

- Ensuring sufficient resource capacity for a sustained response, including a sufficient number and distribution of trained and experienced personnel as well as fire fighting equipment and vehicles specifically designed for veld fires.
- Mutual aid agreements or individual arrangements are in place to ensure aerial support for fire fighters.
- Mutual aid agreements or individual arrangements are in place to ensure support from landowners with an inherent risk, neighbouring municipalities and other government departments.
- Ensuring that there is a logistical system in place to support fire fighters during extended periods of fire fighting.
- Arrangements for the readiness of resources, including readiness plans and pre-positioning of resources.
- Procedures for response initiation, including detection systems; and call-taking and dispatch arrangements.

8.2 Fire danger ratings

The interaction of fuel, weather and topography determines veld fire behaviour; topography is fixed and fuel can be managed to some extent. However, the weather cannot be controlled and the fire services and landowners must monitor weather conditions in order to understand the fire risk at any point in time.

8.2.1 Fire danger ratings are classified as follow:

Classification	*Description of Classification*
Insignificant	The fire danger is so low that no precaution is needed
Low	Fires including prescribed burns may be allowed in the open air on the condition that persons making fires take reasonable precautions against fires spreading
Moderate	The fire danger is such that no fires may be allowed in the open air except those that are authorised by the Chief Fire Officer of the local fire service and those in designated fireplaces; authorised fires may include prescribed burns
High	The fire danger is such that no fires may be allowed under any circumstances in the open air
Extremely High	The fire danger is such that no fires may be allowed under any circumstances in the open air, and special emergency fire preparedness measures must be invoked

Table 1: Fire Danger Rating Classification

8.2.2 Five fire danger rating classes proposed to by the Department of Water Affairs and Forestry to meet the requirements of Chapter 3 of the National Veld and Forest Fire Act, Section 9(4)(c) and 9(4)(d).

INDICATIVE COLOUR	**BLUE**	**GREEN**	**YELLOW**	**ORANGE**	**RED**
DANGER RATING	**Insignificant**	**Low**	**Moderate**	**High**	**High - Extreme**
FIRE PREVENTION AND PREPAREDNESS MEASURES	No precaution is needed	Fires including prescribed burns may be lit, used or maintained in the open air on the condition that persons making fires take reasonable precautions against the fires' spreading.	No fires may be allowed in the open air except those that are authorised by the Fire Protection Officer where a Fire Protection Association exists, or elsewhere, the Chief Fire Officer of the local fire service, or fires in designated fireplaces.	No fires may be allowed under any circumstances in the open air.	No fires may be allowed under any circumstances in the open air and Fire Protection Associations and municipal Disaster Management Centres must invoke contingency fire emergency and disaster management plans including extraordinary readiness and response plans. All operations likely to ignite fires halted. Householders placed on alert.
APPLICATION OF THE ACT			Above precautionary measure to be prescribed and made applicable nationally on days rated moderate.	Section 10(1)(b) applies: no person may light, use or maintain a fire in the open air.	Section 10(1)(b) applies: no person may light, use or maintain a fire in the open air.
RELATIONSHIP WITH DISASTER MANAGEMENT				The threat of disastrous wildfires exists at municipal level under these conditions. Municipal Disaster Management Centres must invoke contingency plans and inform National and Provincial Disaster Management Centres. (Section 49 of the Disaster Management Bill).	The threat of disastrous wildfires at provincial level exists under these conditions. Municipal Disaster Management Centres must invoke contingency plans and inform National and Provincial Disaster Management Centres. (Section 49 of the Disaster Management Bill).
FIRE BEHAVIOUR	Fires are not likely to ignite. If they do, they are likely to go out without suppression action. There is little flaming combustion. Flame lengths in	Fires likely to ignite readily but spread slowly. Flame lengths in grassland and plantation forest litter lower than 1.0 m and rates of forward	Fires ignite readily and spread rapidly, burning in the surface layers below trees. Flame lengths in grasslands and plantation forests between 1	Fires ignited readily and spread very rapidly, with local crowning and short-range spotting. Flame lengths between 2 and 5 m, and rates of forward spread between 1.5 and 2.0 kilometres per hour.	Conflagrations are likely in plantation forests, stands of alien invasive trees and shrubs, sugar cane plantations, and fynbos. Long range fire spotting is likely in these fuel types. Rates of forward spread of head fires can exceed 4.0

INDICATIVE COLOUR	BLUE	GREEN	YELLOW	ORANGE	RED
	grassland and plantation forest litter lower than 0.5 m and rates of forward spread less than 0.15 kilometres per hour.	spread less than 0.3 kilometres per hour.	and 2m, and rates of forward spread between 0.3 and 1.5 kilometres per hour.		kilometres per hour and flame lengths will be in the order of 5 – 15 m or more.
FIRE SUPPRESSION DIFFICULTY	Direct attack feasible: one or a few field crew with basic fire fighting tools easily suppresses any fire that may occur.	Direct attack feasible: fires safely approached on foot. Suppression is readily achieved by direct manual attack methods.	Direct attack constrained: fires not safe to approach on foot for more than very short periods. Best forms of control should combine water tankers and back burning from fire control lines.	Direct attack not feasible: fires cannot be approached at all and back burning, combined with aerial support are the only effective means to combat fires. Equipment such as water tankers should concentrate efforts on the protection of houses.	Any form of fire control is likely to be precluded until the weather changes. Back burning dangerous and best avoided.

Table 2: Fire Danger Rating class significance

8.3 Medium term forecast

The medium term weather outlook for the Province provide expected temperature and rainfall patterns for a period of three to four months. This is intended to guide pre-planning as it influences the veld fire hazard. The current medium term forecast is attached as **Annexure C** and updates will be sent to District municipalities as it become available.

9 Response

9.1 Fire services and landowners

The fire services and landowners respond to the notification of a veld fire according to their own internal agency arrangements. Safety of responders is the top priority. It is therefore necessary to observe and never break the 10 Standard Fire fighting Orders.

1.	Keep informed on fire weather conditions and forecasts
2.	Know what your fire is doing at all times
3.	Base all actions on current and expected fire behaviour
4.	Identify escape routes and safety zones, and make them known.
5.	Post lookouts when there is possible danger
6.	Be alert. Keep calm. Think clearly. Act decisively
7.	Maintain prompt communication with your forces, your supervisor and adjoining forces.
8.	Give clear instructions and be sure they are understood
9.	Maintain control of your forces at all times

IF YOU CONSIDER 1-9, THEN	
10.	Fight fire aggressively, having provided for safety first

Table 3: Ten standard Fire Fighting orders

Watch-out situations are those developing that require fire fighters to be alert and on the Watch-Out to ensure safety. The situations to watch out for are tabled below:

1.	Fire not scouted and sized up
2.	In country not seen in daylight
3.	Safety zones and escape routes not identified
4.	Unfamiliar with weather and local factors influencing fire behaviour
5.	Uninformed on strategy, tactics and hazards
6.	Instructions and assignments not clear
7.	No communication link with crew members or supervisor
8.	Constructing line without a safe anchor point
9.	Building fire line downhill with fire below
10.	Attempting frontal assault on fire
11.	Unburned fuel between you and the fire
12.	Cannot see the main fire; not in contact with someone who can
13.	On a hillside where rolling material can ignite fuel below
14.	Weather becoming hotter and drier
15.	Wind increases and/or changes direction
16.	Getting frequent spot fires across the fire line
17.	Terrain and fuels make escape to safety zones difficult
18.	Taking a nap near the fire line

9.2 Support agencies

The Incident Commander is responsible for the request, use of and release of resources at an incident. Support agency resources are sought through a process that must be outlined in the municipal response plan and each local authority must source common and specialized support like services, personnel or material beforehand. It is important to request the correct type of ground team and vehicles according to the Ground crew and Vehicle resource typing. (**Annexure D and E**)

A key support agency for ground crew and mopping-up teams is teams from the Working on Fire program. The Department of Local Government, through its Chief Directorate Disaster Management and Fire & Rescue Services embarked on a project whereby specialised ground teams are made available to agencies. There are various teams in the Western Cape available to provide support. Teams are dispatched through the local Working on Fire dispatch centre. Dispatch centre contact details and team placement are respectively attached as **Annexure F and G**. It is important to follow the best operating procedures attached as **Annexure H_1** and specific call-out procedures for Provincial teams, attached as **Annexure N**.

The fire services are key support agencies to each other in terms of mutual aid agreements and within a district or local municipality there are a variety of support services available. Fire services arrangements include the automatic activation of key support agencies in certain circumstances, for example Cape Nature or MTO Cape will automatically turn out to a fire on private land where the fire could threaten a nearby nature reserve or commercial forest.

Command of resources remains within agencies and is exercised by the nominated incident commander unless an arrangement has been made to transfer the command to another agency or agency representative.

Please peruse the accepted mopping up guidelines attached as **Annexure H_2** to minimise flare-ups.

9.3 Aircraft

The Provincial Government of the Western Cape, Department of Local Government has an agreement with Kishugu Pty (Ltd) through the Directorate Disaster Management and Fire & Rescue Services for the provision of aerial resources to support fire fighting. The aircraft placement is attached as **Annexure I** and the aerial request flowchart are attached as **Annexure J_1**.

Aerial resources must be dispatch to all veld fires occurring in high risk areas as identified per district. The intension of Aerial assistance is to have a big impact in the shortest time possible and thereby preventing the possibility of fires that burn active for extended periods. For all areas the request to use the fixed wing bombers, spotters and helicopters must go through the City of Cape Town's or District Municipality's Chief Fire Officer. The City or District Municipality must obtain a reference number from the responsible provincial official (Provincial Fire & Rescue Services official).

The ferry time and first operational hour will be for the cost of the Provincial Government, limited to the budget available. After the first operational hour the City of Cape Town or District Municipality's Incident Commander must evaluate whether the continued use of the aerial resources are required. If the need for continued operations is identified, the City of Cape Town or District Municipality's IC can make the decision to continue their use. The City of Cape Town or District Municipality's IC must inform the Provincial official responsible for Fire & Rescue services that the use of the aerial resources will be continued for the account of the respective municipality or landowner.

The WoF provincial co-ordinator must inform PGWC whenever aerial resources are mobilised. This is to co-ordinate planning, and for "information" to senior PGWC officials. Where more than one request for aircraft is received at the same time from the City or District Municipalities, and sufficient aircraft is not available, WoF Dispatch Centre must contact PGWC who will liaise with the respective parties and decide where the higher priority is.

The use of South African Air Force resources may also be called upon. Cognisance must be taken of the triggers for a call of assistance from the SAAF. The requesting authority must fax the Aerial Fire Fighting Request form attached as **Annexure K** (completed in full), to the Provincial Fire & Rescue Services official and follow the call-out procedure attached as **Annexure J_2**.

9.4 Reports

The National Fire report form (**Annexure L**) must be completed in the event of all veld fires and faxed to the nearest DAFF office.

9.5 Briefings

The incident commander is responsible for briefing stakeholders at the incident. It is critical to provide regular, accurate and understandable instructions to subordinates and crew from assisting agencies.

All briefings must be in the SMEACS format and must allow time for questions at the conclusion of the briefing.

Situation	• Current situation. • Details of incident. • Life and property at risk, including the location of places of shelter. • Location. • Weather. • Resource deployment.
Mission	• What are we trying to achieve? • Incident objectives.
Execution	• How do we plan to achieve objectives? • Sectors. • Strategies. • Tactics. • Tasking. • Resource movement details. • Timing.
Administration	• Logistics of operation
Command/ Communications	• Incident management structure. • Communications plan. • Radio channels. • Strategic telephone numbers.
Safety	• Weather. • Known/anticipated hazards. • Watch-out scenarios. • Dress standards. • Tasking suited to personnel.
Questions	

Table 4: Briefing format

The Incident Commander must ensure that all incident personnel are provided with appropriate briefings regarding safety-related matters, the incident situation, incident objective(s), and relevant resource information and tasking and ensure that appropriate information is efficiently communicated through the incident structure to incident personnel.

As the situation changes and new information becomes available, updated briefings must be provided throughout the incident structure as practicable and appropriate. All incident personnel have a responsibility to ensure they are briefed before they commence their task.

10 Incident Command

The Provincial Fire Work group have adopted a standard Incident Command System (ICS) approach to managing incidents. ICS sets out a framework for the effective management of incidents that:

- is adaptable and scalable to any type or size of incident
- is suitable for use regardless of jurisdictions or agencies involved
- employs a common organisation structure
- utilises common command structures and consolidated action planning
- utilises common terminology.

It is expected that incident command will always be established regardless of the incident size. While many Local Fire Authorities are able to manage small to medium sized incidents successfully, experience has shown that local resources are often quickly exhausted by large, multiple and/or on-going veld fire incidents. In such situations districts must plan with the stakeholders in their area to fill incident command positions.

10.1 Incident typing

Incident types are based on the following five levels of complexity. Each level requires certain actions and documents to be completed.

Type 5	• The incident can be handled with one or two single resources with up to six personnel. • Command and General Staff positions (other than the Incident Commander) are not activated. • No written Incident Action Plan (IAP) is required. • The incident is contained within the first operational period and often within an hour to a few hours after resources arrive on scene. • Examples include a vehicle fire, an injured person, or a police traffic stop. • Incident Commanders are responsible for ensuring verbal IAP information is communicated to responders, safety is maintained, and incident status is tracked (using status boards, logs, recorded radio communications, incident reports, etc.).
Type 4	• Command staff and general staff functions are activated only if needed. • Several resources are required to mitigate the incident. • The incident is usually limited to one operational period in the control phase. • No written Incident Action Plan (IAP) is required but an Incident Organiser will be filled in. • Incident Commanders are responsible for ensuring verbal IAP information is communicated to responders, that safety is maintained and to ensure that the incident status is tracked (using status boards, logs, recorded radio communications, incident reports, etc.).

Type 3	• When capabilities exceed initial attack, the appropriate ICS positions should be added to match the complexity of the incident. • Some or all of the Command and General Staff positions may be activated, as well as Division/Group Supervisor and/or Unit Leader level positions. • A Type 3 Incident Management Team (IMT) or incident command organization manages initial action incidents with a significant number of resources, an extended attack incident until containment/control is achieved, or an expanding incident until transition to a Type 1 or 2 -team. • The incident may extend into multiple operational periods. • A written IAP is required for each operational period.
Type 2	• This type of incident extends beyond the capabilities for local control and is expected to go into multiple operational periods. • A Type 2 incident may require the response of resources out of area, including provincial and/or national resources, to effectively manage the operations, command, and general staffing. • Most or all of the Command and General Staff positions are filled. • A written IAP is required for each operational period. • Many of the functional units are needed and staffed. • Operations personnel normally do not exceed 200 per operational period and total incident personnel do not exceed 500 (guidelines only).
Type 1	• This type of incident is the most complex, requiring national resources to safely and effectively manage and operate. • All Command and General Staff positions are activated. • Operations personnel often exceed 500 per operational period and total personnel will usually exceed 1,000. • Branches need to be established. • Use of resource advisors at the incident base is recommended. • There is a high impact on the local jurisdiction, requiring additional staff for office administrative and support functions.

Table 5: Incident Typing

10.2 ICS Structure

The incident command organization structure is flexible and allow for expansion and contraction according to incident complexity.

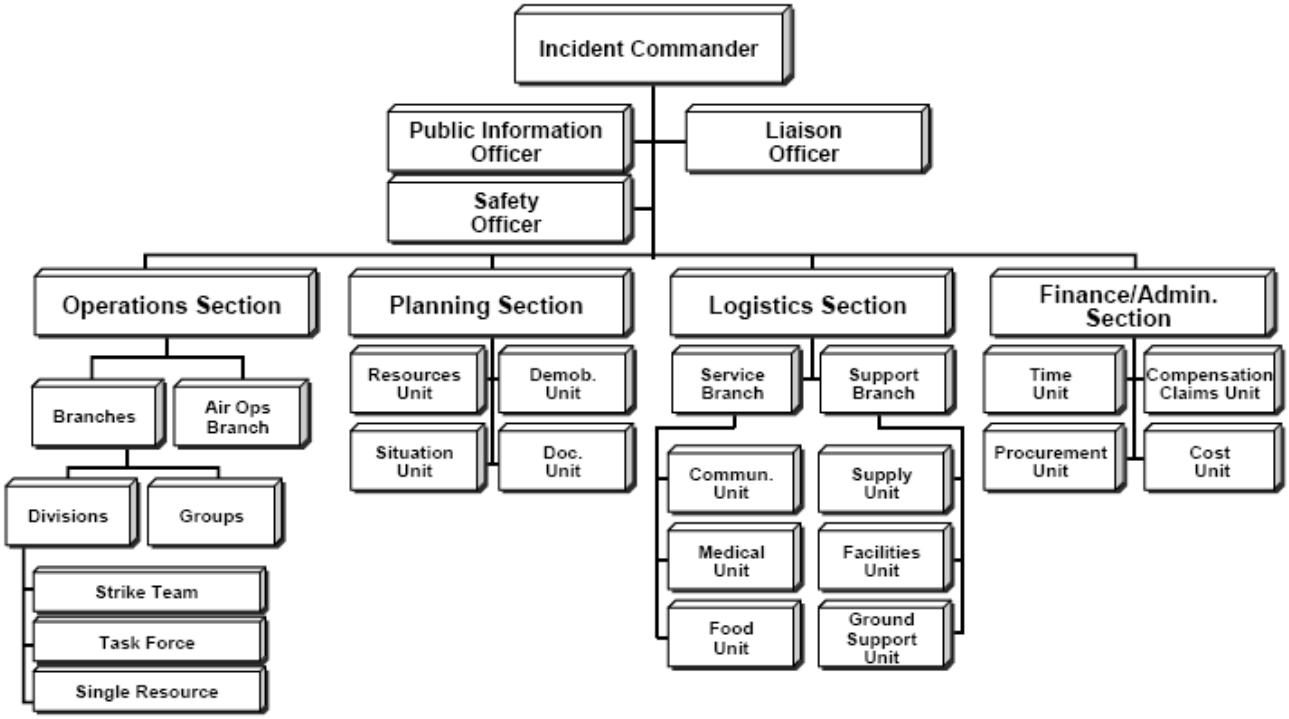

Figure 7: ICS Structure (example)

10.3 On-scene Command responsibilities

Incident Commander
The Incident Commander (IC) is responsible for all aspects of the response, including developing incident objectives and managing all incident operations. Responsibilities include: • Establish immediate priorities especially the safety of responders, other emergency workers, bystanders, and people involved in the incident. • Stabilize the incident by ensuring life safety and managing resources efficiently and cost effectively. • Determine incident objectives and strategy to achieve the objectives. • Establish and monitor incident organization. • Approve the implementation of the written or oral Incident Action Plan.
Command Staff
The Command Staff is responsible for public affairs, health and safety, and liaison activities within the incident command structure. The IC remains responsible for these activities or may assign individuals to carry out these responsibilities and report directly to the IC. The Public Information Officer's role is to develop and release information about the incident to the news media, incident personnel, and other appropriate agencies and organizations. The Liaison Officer's role is to serve as the point of contact for assisting and coordinating activities between the IC and various agencies and groups.

The Safety Officer's role is to develop and recommend measures to the IC for assuring personnel health and safety and to assess and/or anticipate hazardous and unsafe situations. The Safety Officer also develops the Site Safety Plan, reviews the Incident Action Plan for safety implications, and provides timely, complete, specific, and accurate assessment of hazards and required controls.
General Staff The General Staff includes Operations, Planning, Logistics, and Finance/Administrative responsibilities. These responsibilities remain with the IC until they are assigned to another individual. When the Operations, Planning, Logistics or Finance/Administrative responsibilities are established as separate functions under the IC, they are managed by a section chief and can be supported by other functional units. The Operations Staff is responsible for all operations directly applicable to the primary mission of the response. The Planning Staff is responsible for collecting, evaluating, and disseminating the tactical information related to the incident, and for preparing and documenting Incident Action Plans (IAP's). The Logistics Staff is responsible for providing facilities, services, and materials for the incident response. The Finance and Administrative Staff is responsible for all financial, administrative, and cost analysis aspects of the incident.

Table 6: ICS Roles

10.4 On-scene command operating cycle

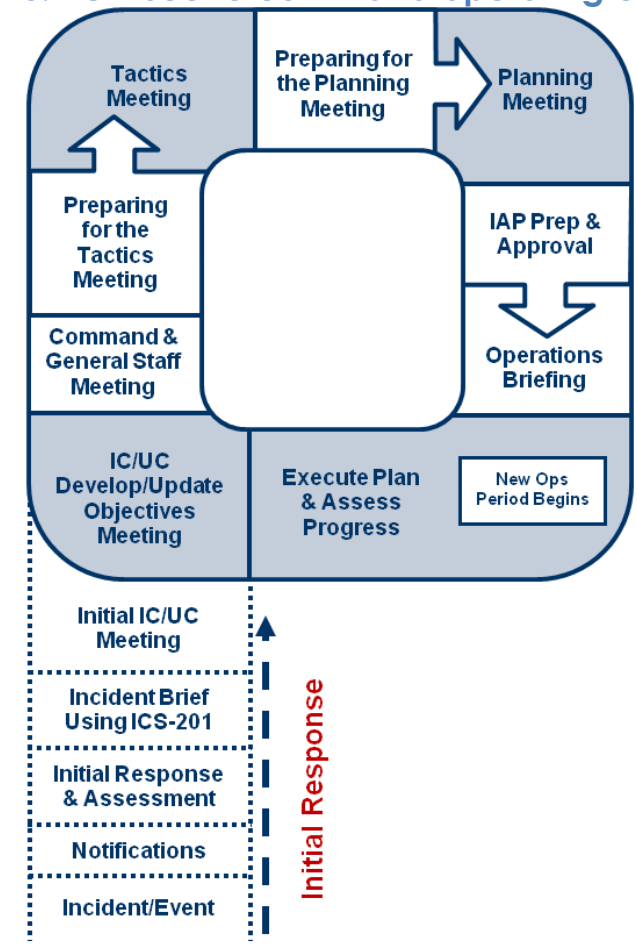

Figure 8: Planning Cycle

10.5 Incident Action Plan

An incident action plan (IAP) formally documents incident goals, operational period objectives, and the response strategy defined by incident command during response planning. It contains general tactics to achieve goals and objectives within the overall strategy, while providing important information on event and response parameters. Equally important, the IAP facilitates dissemination of critical information about the status of response assets themselves. Because incident parameters evolve, action plans must be revised on a regular basis (at least once per operational period) to maintain consistent, up-to-date guidance across the system.

The standard Incident Command documents are published as a separate document on the Western Cape Provincial Government website. A written Incident Action Plan must be completed for type 1, 2, and 3 incidents.

10.6 Incident Organizer

The Incident Organizer is designed to aid Incident Commanders in organizing the fire and ensuring that all necessary procedures and checks have been made. The incident organizer is attached as **Annexure M**.

10.7 Situational reports

Those in leadership positions must provide frequent, concise situation reports up the reporting chain. Section leaders and Crew Leaders from supporting agencies must recognise that this is an important part of their role.
SITREPS are the tool to pass information on through the chain of command. The following information should be included as appropriate when providing situation reports:

- Incident name;
- Sector call sign;
- Location of incident;
- Potential of fire/incident;
- Advice regarding any warnings that should be provided to the community;
- Fire status (type/size);
- Damage and loss;
- Fire behaviour (e.g. flame height and estimated forward rate of spread);
- Current control objective; and
- Additional help required.

11 Provincial Multi-Agency Coordination Centre

(Overview of Area command:Fresh Water Spills Symposium, 2009)

Provincial Multi-Agency Coordination Centre (MACS) is the Provincial organizational structure that will be established and used to supplement and support the on-scene command structures. The Western Cape Disaster management centre will be activated and Provincial MACS will be established as soon as possible when:

- There are several active incidents in close proximity and the Chief fire officer request assistance.
- Incidents are reported that involves National key points, critical life-saving operations or when critical property is at risk.
- Incidents use similar and limited resources.
- Difficulties are encountered with inter-incident resource allocation and coordination.
- There are two or more type 3 incidents active in the Province.

11.1 Organizational structure

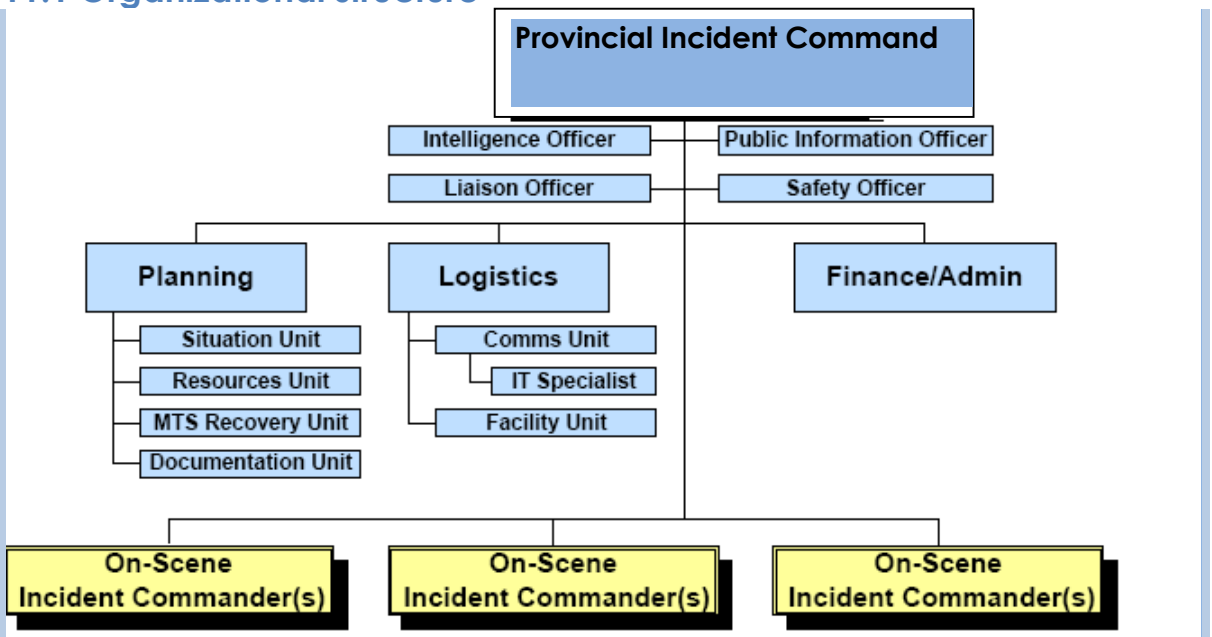

Figure 9: Typical organisational structure

11.2 Position responsibilities

Incident Commander	• Set overall objectives. • Ensure incident objectives are met and do not conflict with each other. • Establish incident-related priorities. • Allocate/reallocate critical resources.
Public Information Officer	• Provides public information coordination between incidents. • Serves as the contact point for media requests.
Liaison Officer	• Maintains off-incident interagency contacts and coordination.
Planning Section Chief	• Assembles information on individual incident objectives. • Recommends resource allocation priorities. • Maintains critical resources status. • Ensures advance planning is accomplished. • Prepares MAC briefings. • Reviews Incident Action Plans and completed ICS 209 forms from assigned incidents.
Logistics Section Chief	• Provides facilities, services, and materials for the multi-agency coordination centre. • Designates and coordinates ordering process.

	• Ensures communications are coordinated. • Assists in Area Command decision making.

11.3 Operating cycle

The operating cycle works very similar to the on-scene incident command planning cycle.

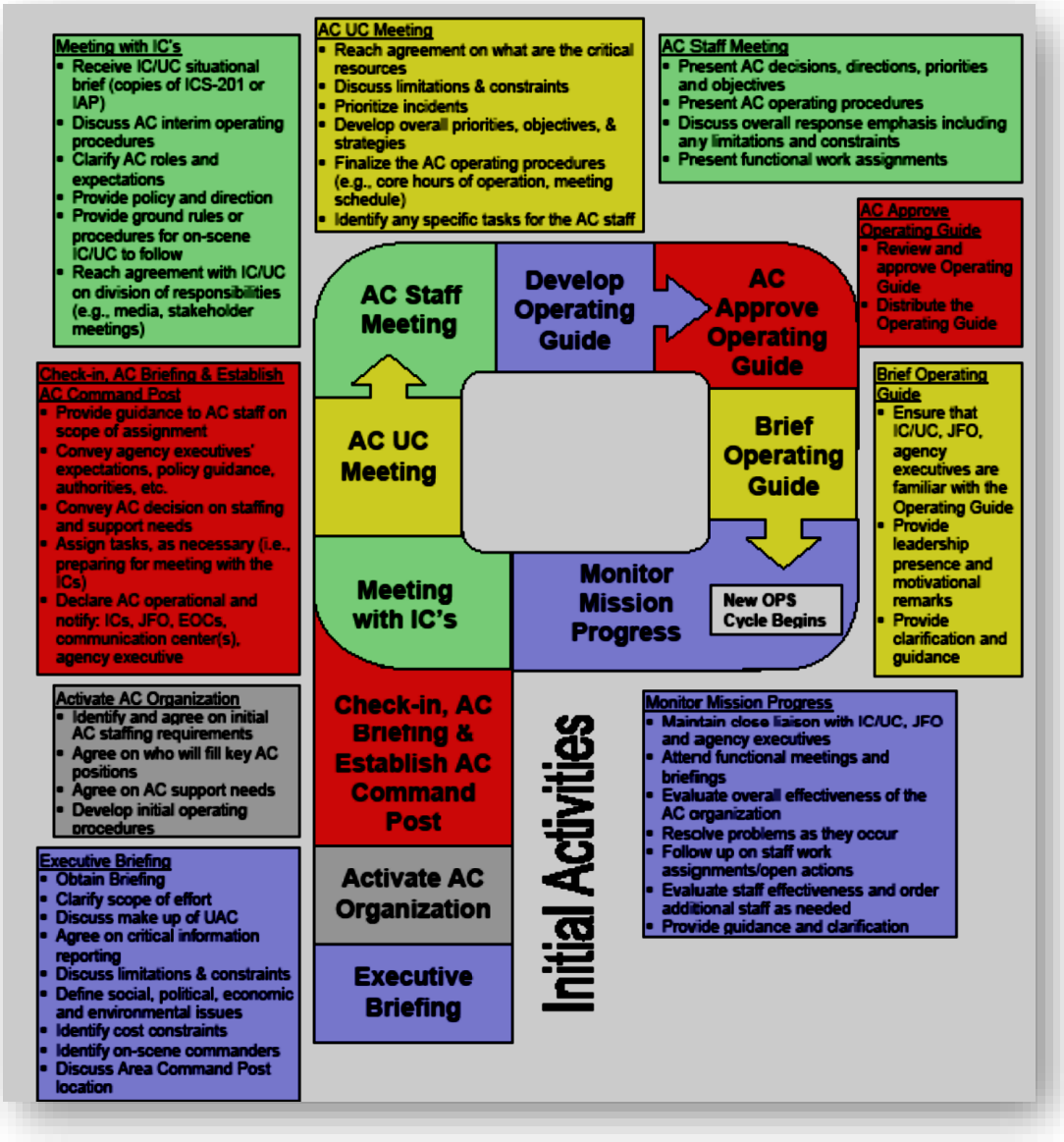

Figure 10: Multi-agency coordination planning

12 Recovery

Recovery processes for affected communities from a veld fire should commence as early as possible and usually runs concurrently with the response process.

The Department of Social Services is responsible for coordinating recovery at Provincial and District levels when people lost housing or were evacuated. They are also responsible to provide advice, information and assistance to affected individuals and communities, and detailing loss and damage.

13 Debrief

The intent of the debrief process is to learn from the incident and improve systems and processes where possible.

13.1 After action review

Resources deployed to assist with veld fire should have a local debrief at either the end of the shift or fire in order to identify and address issues as soon as possible.

An after action review agenda include:

I. What was planned?
   - What were the goals and objectives?
   - Incident action plan;
   - Crew incident roles;

II. What really happened?

III. Why did it happen?

IV. What can we do better next time?

13.2 Multi-agency debrief

Following a veld fire, the District Municipality is responsible for conducting a multi-agency debrief within seven working days. Inputs from all participating agencies are needed to identify lessons learned and to ensure continuous improvement. All participating agencies are responsible for conducting their own operational debriefs beforehand.