

VENTERSTAD FIRE PROTECTION ASSOCIATION

VELDFIRE MANAGEMENT STRATEGY

1. Introduction

- The Venterstad Fire Protection Association (VFPA) was started in 2006 in accordance with the National Veld and Forest Fire Act of 1998. The formation, duties and functions of all FPA's are prescribed in Chapter 2 of the National Veld and Forest Act (NVFFA) 1998.
- The area of the VFPA lies within the Walter Sisulu Local Municipality Area within the Joe Gqabi District Municipality area.
- Venterstad area primarily has a rural economy with
 - Stockfarming
 - Irrigation farming
 - Eco tourism
- As such veldfires can lead to human + stock injuries, Damage to grazing pastures and damage to infrastructure.
- The town area of Venterstad has 94% of the inhabitants in the area divided into:

Venterstad CBD	6%
Noziswe township	54%
Lyciumville township	24%
Oviston township	10%
- The balance of 6% of the inhabitants are staying on farms.
- The FPA tend to make a contribution to the development and sustainability of the area by the prevention and fighting of veldfires in utilising available equipment, manpower and knowhow.
- **This document is the strategy for the management of mentioned risks.**

2. Venterstad FPA Objectives

- Minimising the losses caused by unwanted veldfires
- Reduce fire hazards and risks
- Careful utilization of controlled burning and defining the benefits of it.
- Proper fire management practices and regimes in ecological sensitive areas
- Integration of fire management into programs to control alien invasives
- Readiness of all role-players, as well as public awareness for fire management practices.

3. Legal Framework

- It is important to consider the impact the legal framework has on the ability of the VFPA to motivate successful integrated fire management in the area.
- The VFPA is formed as a result of the NVFFA, 1998

“Chapter 2, Section3: Formation of Fire Protection Associations”

- (1) *Owners may form an association to predict, prevent, manage and exringuish veldfires and apply for its registration as a Fire Protection Association in terms of this Chapter.*
- (2) *A Fire Protection Association may be formed by owners who wish to co-operate for the purpose referred to in subsection(1) in respect of an area that has:*
 - (a) *Regular veldfires; or*
 - (b) *A relative uniform risk of veldfires; or*
 - (c) *Relatively uniform climatic conditions; or*
 - (d) *Reletavily uniform types of vegetation.*

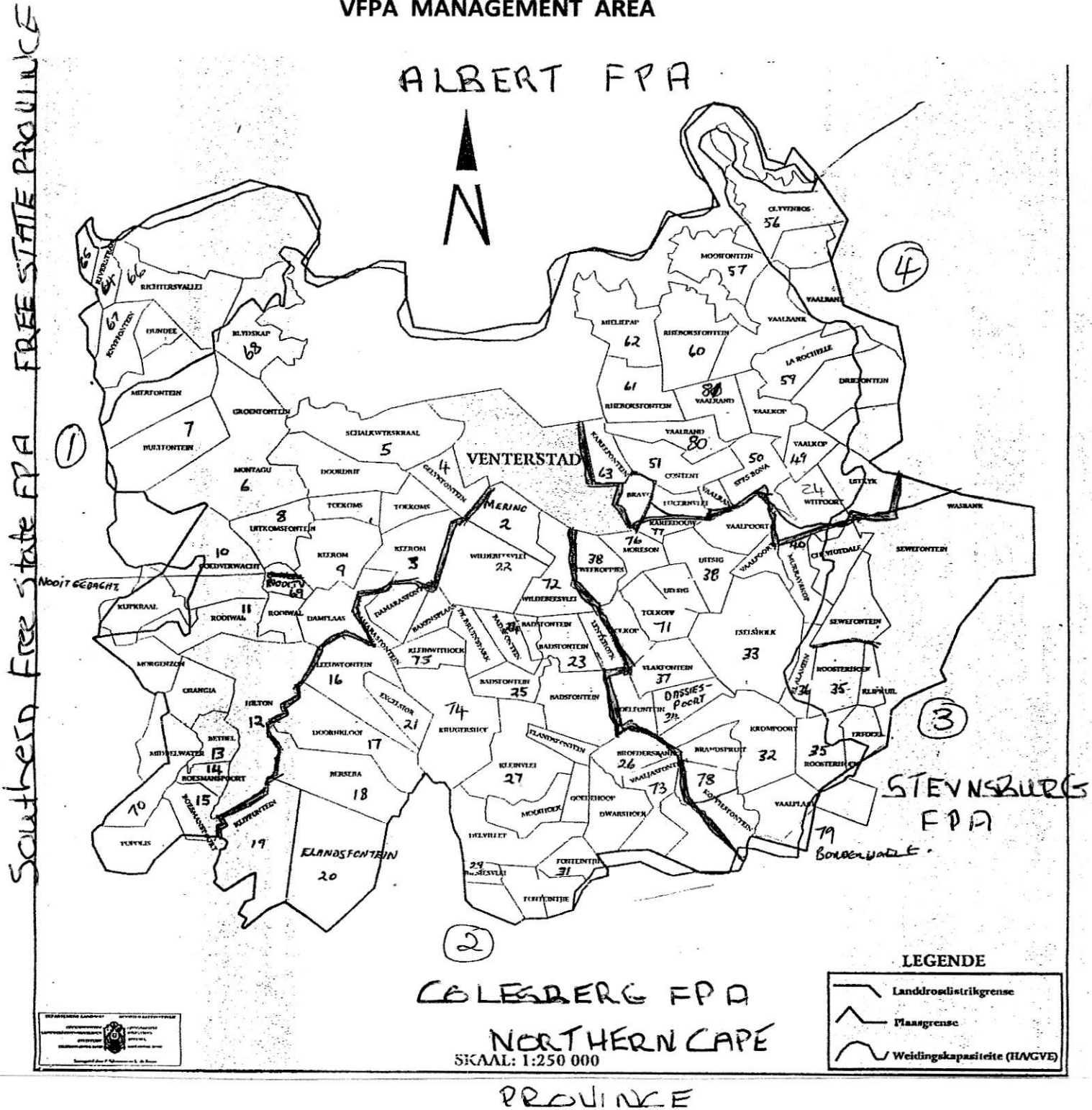
- As mentioned in the introduction above, VFPA functions across Local and District municipalities, it is important to nurture an integrated approach to fire management across all institutions. It is however, not to say that this comes without challenges, and although It is mandated that Municipalities must be members of the FPA in their area where there is a designated fire service, it is a continuous challenge to obtain membership from Municipalities.
- In addition to the NFVVA, the following pieces of legislation have been identified to have a direct impact on IFM in South Africa.
 - a. The Constitution of the Republic of South Africa, 1996.
 - b. Local Government Municipal Systems Act (Act 32 of 2000)
 - c. Local Government: Municipal Structures Act (Act 117 of 1998)
 - d. Disaster Management Act (Act 57 of 2002)
 - e. Fire Brigade Services Act (Act 99 of 1987)
 - f. Conservation of Agricultural Resources Act (Act 43 of 1983)
 - g. Environmental Conservation Act (“ECA”) (Act 73 of 1989)
 - h. National Environmental Management Act (“ NEMA ”) (Act 107 of 1998)
 - i. National Environmental Management: Air Quality Management Act(Act39 of 2004)
 - j. National Environmental Management: Biodiversity Act (Act 10 of 2004)
 - k. National Environmental Management: Protected Areas Act (Act 57 of 2003)

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- l. National Environmental Management: Protected Areas Amendment Act (Act 15 of 2009)
- m. Pollution Prevention Act (Act 45 of 1965)
- n. National Forests Act (Act 84 of 1998)
- o. National Heritage Resources Act (Act 25 of 1999)
- p. National Water Act (Act 36 of 1998)

VFPA MANAGEMENT AREA

ALBERT FPA



4. Land Management

- **Role Players**
- Private Landowners
- Oviston Nature Reserve (Cape Nature)
- Parastatal land : SANRAL, Eskom
- Venterstad Communal land
- Walter Sisulu LMA
- Joe Gqabi District Municipality

Land management in the area can be differentiated into 3 main categories

- Privately owned land
- Large Landowners (Oviston Nature Reserve)
- Government / state-owned land

For the purpose of this document we refer back to the NVFFA, Chapter 1 which defines what may be considered a landowner.

(xiii) "owner" has its common law meaning and includes-

- a) A lessee or other person who controls the land in question in terms of a contract, testamentary document, law, or order of a high court.*
- b) In relation to land controlled by a community, the executive body of the community in terms of its constitution or any law or customs;*
- c) In relation to state owned land not controlled by a person contemplated in paragraph (a) or a community.*
 - The Minister of the Government Department or the member of the executive council of the provincial administration exercising control over that state land; or*
 - A person authorised by him or her; and*
- d) In relation to local authority, the chief executive officer of the local authority or a person authorised by him/her.*

There are many roleplayers when considering IFM in an area. Ideally, all role-player must work together towards a common goal.

a. Private Landowners

- Private landowners and the farming community form the most significant single grouping of landowners in the VFPA area.
- These landowners are organised via the Venterstad Agricultural Association.

b. Large Landowners : Oviston Nature Reserve

- This is a grouping of large properties managed for conservation.
- This landowner is organised via a structured organisation, Cape Nature.
- They have a definitive impact on the spatial, environmental and Integrated Fire Management principles and practices.

c. Government / State owned land

- This state land is spread over the entire VFPA area and are significant for Integrated Fire Management .
- These properties are utilised for a large variety of purposes.
- These properties are also used for the communities and communal grazing areas.

d. Municipal Fire Services

- The function of Veld and Forest Fires is currently with the District Municipality.
- This is according to the division of functions and powers between the District and Local Municipalities as per section 84(1)(j) of the Municipal Structures Act.

e. Working on Fire Programme

- The Working on Fire Programme is a valuable asset to FPA's and landowners.
- The programme is funded by the Department of Forestry, Fisheries and Environment.
- VFPA nearest WoF teams are based in Molteno.
- VFPA will get a Memorandum of Agreement in place whereby the fire fighting teams of WoF will be able to assist the landowners in the VFPA area when requested.

5. Neighbouring Provinces

- Free State
- Northern Cape

6. Neighbouring FPA's

- Steynsburg FPA
- Albert FPA
- Southern Free State FPA
- Colesberg FPA

7. National Veldfire Risk Assessment

- Veldfires are an important natural hazard in South Africa. To plan for fire incidences, one must understand the VFPA area's fire risk, frequency and distribution.
- In compiling this section, information was used from CSIR report:

"National Veldfire Risk Assessment: analysis of Exposure of Social, Economic and Environmental Assets to Veldfire Hazards in south Africa"

a. Fire Regime and Fire-Ecology types

- The "fire regime" is the history of fire in a particular vegetation type of area, including the frequency, intensity and season of burning.
- It is the combination of elements that typifies fires in a given region under the assumed natural conditions.

b. Fire Regions in the Eastern cape

- Grassveld Areas/ **summer** rainfall region
- Fynbos Area / winter or all-year rainfall region

The VFPA management area encompasses only the Grassveld Area

8. Weather and Climate

- Lightning is the only natural cause of veldfires in the VFPA area.
- Lightning fires normally occurs in the winter and early spring.
- This is the time after the first frost starts until the first Spring rains.

During this time the weather pattern are influenced by;

- High pressure cells that cause deep atmospheric inversions.
- *These conditions last for days on end resulting in very little airflow, thus creating a **low to moderate fire risk index**.*
- During these periods of inversions veldfires start slowly but increases in intensity if not extinguished in time.
- In between these weather spells, are normally periods of one or two days when cold fronts move south and east of the country.
- These conditions cause strong westerly winds with a very low atmospheric humidity. This creates a **high fire risk index**.

9. Risks

9.1 The human element

Human negligence and ignorance may lead to veldfires.

- This includes starting fires in the wrong conditions.
- **Warming fires** that have not been properly extinguished are often a source of wildfire ignitions.
- There are various **cultures and religions** amongst the indigenous inhabitants where fire has always been an integral part of human development and cultural beliefs.
- Veldfires can then also affect these communities adversely.
- **Hunting**. Fire is used as a tool to flush animals out of hiding into open spaces. These fires are normally unmanaged and lead to wildfires.
- The smoking out of wild **beehives** can cause the spread of veldfires
- The use of **power tools** like grinders in the open can lead to veldfires.

Planned burning of vegetation that get out of control is a big cause of veldfires.

Arson.

9.2 Lightning

- Lightning is the only natural cause of veldfires in the VFPA area.
- *Lightning fires are most likely during the winter and early spring in the VFPA area.*
- The combination of lightning and dry fuels lead to easy fire ignition.

9.3 Power Lines

- Power lines in an area can ignite wildfires through a variety of mechanisms.
- Multiple fires in the VFPA area have started as a result of downed lines, often caused by the combination of strong winds and a lack of maintenance.
- Downed power lines also have an adverse effect on communication channels such as cell phones and radio networks.

10. Challenges

Every FPA is faced with unique challenges in its management area. These challenges either affect the operational functionality of the FPA or affect the environmental considerations in the area.

10.1. Climate change

Climate change affects the fire regime in the following ways:

- Fire frequency. Fires are becoming more frequent due to longer and drier fire seasons.
- Heat. Increased temperatures create favourable conditions for easy ignition.
- Fuel. Higher temperatures result in dryer fuel loads which ignite easier.
- Fire Intensity. It has been noted that the constant heating of the vegetation and with lower levels of precipitation, fires burn with greater intensity and spread faster.
- The combination of warm dry air and strong winds together with less moisture results in fires spreading rapidly and more difficult to contain.

10.2. Policy Implementation

South Africa is very proactive in their legislation regarding veldfires.

- The National Veld and Forest Fire act, 1998, applies to all landowners at risk of having veldfires on their properties.
- As part of this Act, it encourages the formation of effective FPA's as means of coordination and awareness of veldfires.
- There are however many registered FPA's that are not effective.

10.3. Social Behaviour

- A major challenge is altering the thought process behind fire mitigation and management.
- WoF teams currently assist FPA's in community outreach programmes, where possible.
- There needs to be a paradigm shift when realising the serious implications of the threat of unmanaged veldfires.

10.4. Government Involvement

- Most FPA's have involvement with government organisations at either local or district municipal level.
- When applying integrated fire management in an area, this needs the support of the municipalities in the area.
- Most of these municipalities do not pay their membership fees and are ill-equipped and understaffed to deal with the fire risk in their areas.

11. Benefits of Good Fire Management

- The sporadic occurrence of fire helps maintain and improve the habitat of animals and plants by reducing competition.
- This is attained by the removal of heavy and useless brush, leaving room for new grasses and plants which in turn will provide nutrient-rich food and habitat for wildlife species.
- With fewer plants absorbing water, there is more water available in streams and rivers benefitting other animals and plants.
- Farmers make use of fires by implementing prescribed burns that reduce the annual fuel accumulation in veld, thus reducing fire intensity and creating an ecosystem that is less susceptible to devastating veldfires.
- Landowners will often allow veldfires to continue out of season, as long as it is confined to the desired area which will then also act as a fire break for future fires.

12.VFPA Veldfire Management Strategy

As listed in the National Veld and Forest Act, Act 101 of 1998, as amended:

Section "5. (1) A Fire Protection association must at least:

- (a) Develop and apply a veldfire management strategy for its area.*
- (b) Provide in the strategy for the agreed mechanisms for the coordination of actions with adjoining Fire Protection Associations in the event of a fire crossing boundaries."*

12.1 VFPA will utilize strategic fire breaks as the primary protection measure against fires.

- the area is divided in four sectors, each with a sector leader to liaise with the FPO.
- See Map on page 3 for sector division and all available roads
- Strategic fire breaks will be used as a point of attack and to pinch fires that have jumped across the fire breaks.
- This strategic firebreaks will also be utilised to as a cold starting point for making firebreaks. (" voorbrande")
- Regular meetings are held with landowners to review the strategic fire breaks and add any addendums to to the fire management plans

12.2 The VFPA Rules, Policies and Recommendations will be binding on all landowners in the VFPA management area

- The VFPA Rules, Policies and Recommendations have been distributed to every landowner and stakeholder in the area and are also available from the Venterstad Farmers Association and displayed at the Venterstad Municipal offices.
- The VFPA Rules, Policies and Recommendations will be enforced by the EXCO of the VFPA, while remaining cognisant of any applicable by-laws in the area

12.3 The conditions of Section 12(4) of the NVFFA will apply to all burning operations within the VFPA area.

- This implies that all vegetation-related burns, conservation burns and high intensity burns like burning rubbish heaps will be managed under Section 12(4).
- The VFPA Rules, Policies and Recommendations will apply for **ALL** burning operations within the VFPA area. Any operation that causes smoke.

12.4 The VFPA will implement a Fire Prohibition Period as and when required.

- Dates and times for the fire prohibition period will be communicated to all landowners ahead of the Fire Prohibition Period.
- VFPA encourage smoke reporting at all times as a way of gaining information about uncontrolled fires in and around the management area.
- The VFPA may grant special permission for burning during the Fire Prohibition period as per the VPA Rules, Policies and Recommendations.

12.5 VFPA will ensure that reasonable efforts are made to put agreements in place with neighbouring FPA's in the event of a fire crossing boundaries.

- Include a plan of basic communication with neighbouring FPA's in the event of a fire crossing VFPA boundaries.

2.6 The VFPA will make use of the principles of Incident Command Systems (ICS) for wildfire response.

- Core principles of ICS will be followed in wildfire incidents.
- Endeavour to keep records for all large wildfire events.
- Strive to ensure that debriefing are undertaken with all stakeholders after large wildfire events.

12.7 The VFPA will enforce and maintain a Burning Permit System

- VFP will issue permits according to FPA Rules, Policies and recommendations.
- The VFPA will acknowledge that its jurisdiction is within various District and Local municipality policies and bylaws.
- In each of these areas the VFPA will work closely with and notify the relevant officials.
- The VFPA permitting system will be cognisant of existing municipal permitting systems.
- Investigate and review available technologies for the implementation of a permitting system for VFPA.

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12.8 Promote awareness and enforcement of the National Veld and Forest Fire Act, 1998

- Engage landowners and advise them on their compliance with the NVFFA, 1998.
- Compile and distribute regular information feedbacks to all members and stakeholders.
- Attend community meetings where relevant
- Liaise on a regular base with relevant officials of the Local and District Municipalities

12.9 Develop and implement tools for effective veldfire management and compliance within the VFPA area.

- Ensure at all times access to VFPA Rules, Policies and Recommendations for landowners within the registered area of VFPA.
- Always strive to work towards compliance with the FPA Rules, Policies and recommendations for landowners within the registered area of the VFPA.
- Implement the VFPA compliance questionnaire with all members.
- Distribute the VFPA compliance questionnaire ahead of each fire season.

12.10 Ensure the ongoing compliance of the VFPA with the NVFFA

- VFPA will measure itself against the Act and the regulations thereto, the VFP Constitution and the KPAS's as per this Strategic Veldfire Management Strategy.
- VFPA will endeavour to distribute the weather forecast and predicted FDR to members and non-members during the fire season.
- VFPA will send out FDI warnings to members on days with a very high forecasted FDI.
- Ensure that the FPA have a legally appointed FPO.

12.11 Maintain a high level of communication on and across various platforms

- Utilise a wide variety of communication methods like Written, Verbal, Whatsapp groups, Radios and Cellphones.
- Ensure that all landowners have some method of communication with each other during Veldfire operations.

12.12 Promote Environmental compliance and awareness within VFPA

- Ensure that the Rules, Policies and recommendations of the VFPA are not intentionally *in contravention of prescribed or applicable environmental legislation*.
- Advise landowners of any well-known environmental considerations that could affect their burning regimes.
- Encourage members to consider environmental impacts when undertaking burning and clearing. Clearing too much vegetation promotes soil erosion.

12.13 Conclusion

- **The VFPA must do proactive fire management in its designated area.**
- **The VFPA must provide best practice solutions for prescribed burning vegetation and grazing management by planned burning practices.**
- **Implement a synergistic approach to Fire Management in the VFPA area.**