



**forestry, fisheries  
& the environment**

Department:  
Forestry, Fisheries and the Environment  
REPUBLIC OF SOUTH AFRICA

## **SCHEDULE**

# **DRAFT NATIONAL FIRE PROTECTION ASSOCIATION SUPPORT STRATEGY**

Developed by

**DEPARTMENT OF FORESTRY FISHERIES AND THE ENVIRONMENT**

**(Forestry Management Branch)**

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## 1 EXECUTIVE SUMMARY

Veldfire is an unplanned, uncontrolled, and unpredictable fire in an area of combustible vegetation in rural areas, that is outside a city, town, its adjoining industrial and residential areas. Communities outside the urban areas face serious threat of veldfires and these veldfires destroy their economies, livelihoods, and environment. To that extent, a significant number of these communities have formed organisations called Fire Protection Associations (FPAs) that will help them manage this risk.

FPAs are statutory organisations that are established and registered under the National Veld and Forest Fire Act, 1998 (Act No. 101 of 1998) (NVFFA) (hereinafter referred to as the Act). FPAs consists of rural communities and landowners that have volunteered and grouped themselves to prevent, predict, manage and fight veldfires that threaten their lives, property, the environment, and source of their livelihoods like livestock, grazing and crops in their farms.

The annual cost of veldfires to the rural economy is estimated at R743 million per year. This includes losses in downstream timber processing, livestock, and grazing land. Each year an average of 3.5 million ha is destroyed by veldfire. This is because more than 60% of the entire South Africa is situated in high to extremely high veldfire risk zones.

Veldfire risk is related to the likelihood of a fire occurring, and the consequences of such an occurrence. It is linked to the risk classification information on the prevailing natural vegetation in any part of the country. For each kind of vegetation, the likelihood of veldfires occurring, and the consequences that arise in modern times when such veldfires are likely to occur were established. This combination of likelihood and consequence allowed the risk to be rated in four classes:

- Extreme : Fires are highly likely and have major or catastrophic consequences,
- High : Fires are possible or even likely, and have moderate or major consequences,
- Moderate : Fires possible but unlikely, and have moderate to minor consequences, and
- Low : Fires unlikely or rare, with minor or insignificant consequences.

Each metropolitan, district and local municipality management area(s) has been assigned a risk class according to its level of vulnerability to veldfires and this risk must be communicated to its communities so that they can learn scientific methods to reduce it and mitigate its impact. Since the establishment of the first FPA in the country in 2004, the Department of Forestry, Fisheries and the Environment (DFFE) has assessed on annual basis a total of over 217 FPAs to determine whether their resource capacity matches the risk that they are mandated to manage and mitigate. The overall outcome of these assessment result has been that most of the FPAs are trying and are willing to manage the types of risks they are faced with, but they are struggling due to lack of resources.

Although FPA's boundaries cover large areas, the number of members is limited due to lack of resources to pay the annual levies and other charges and resources to run the FPA and prevent or combat veldfires. There are however also landowners who are ignorant about the NVFFA and FPAs and do not comply with the compulsory provisions of the NVFFA. The Minister may in terms of Section 7 (b) of this Act provide a loan, grant or other assistance to:(i) any FPA for any of its activities; and (ii) any landowner who prepares a fire break in terms of Section 14 and in doing so incurs expenses in excess of what he or she would reasonably be expected to incur if the boundary of his or her land did not coincide with that of the Republic.

Government is already providing support to FPA, Municipalities and Environmental agencies through the Working on Fire program (WoF). This support is however not equitable, and many rural communities do not benefit from this support due to WoF requirements and lack of resources within the communities. The NVFFA is currently being amended to inter alia improve the administration of the Act and new FPAs may formed by either Municipalities or Traditional Leaders and this may require support. There is an urgent need from the DFFE as the custodian of the National Veld and Forest Fire Act, 1998 to relook at providing equitable support, especially to marginalized communities. This strategy will outline why and how this support to FPAs, and landowners on international borders can be provided by DFFE to mitigate the risks of veldfires.

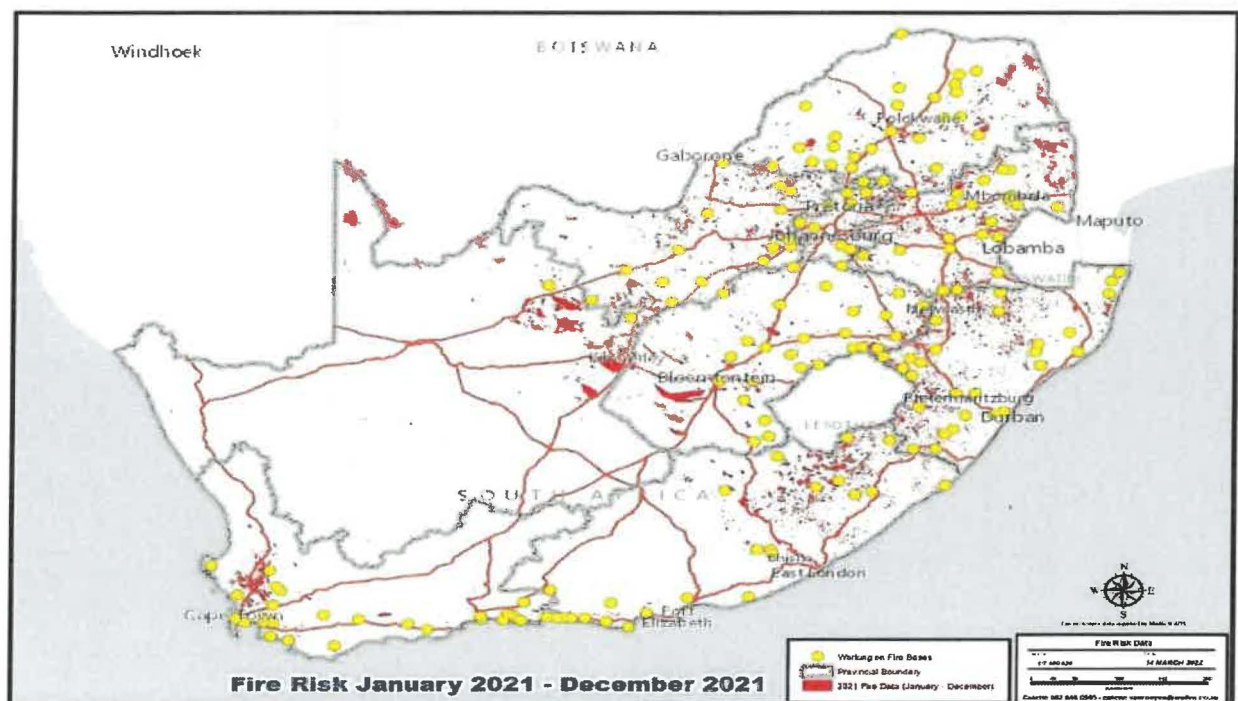
## **ACCRONOMYS**

<b>CARA</b>	- Conservation of Agricultural Resources Act, 1983 (Act No. 43 of 1983)
<b>DFFE</b>	-The Department of Forestry Fisheries and the Environment
<b>DMA</b>	- Disaster Management Act, 2002 (Act No.57 of 2002)
<b>EWS</b>	- Early Warning System
<b>FDI</b>	- Fire Danger Rating Index
<b>FDR</b>	- Fire Danger Rating
<b>FPA's</b>	- Fire Protection Associations
<b>FPS Regs</b>	- Fire Protection Association Regulations 2003 made under the NVFF Act
<b>ICS</b>	- Incident Command System
<b>IFM</b>	- Integrated Fire Management
<b>MSA</b>	- Municipal Structures Act, 1998 (Act No. 117 of 1998)
<b>NDMC</b>	- National Disaster Management Centre
<b>NEM: BA</b>	- The National Environmental Management: Biodiversity Act, 2004 (Act No. 10 of 2004)
<b>NEMA</b>	- The National Environmental Management, 1998 (Act No. 107 of 1998)
<b>NFDRS</b>	- the National Fire Danger Rating System
<b>PG</b>	-Page
<b>SAWS</b>	- South African Weather Services
<b>The NVFF Act</b>	- The National Veld and Forest Fire Act, 1998 (Act No.101 of 1998)
<b>UNISDR</b>	- United Nations International Strategy for Disaster Risk
<b>WoF</b>	- Working on Fire

## **2 BACKGROUND AND INTRODUCTION**

- 2.1 Veldfire is a common and natural feature of South Africa's landscape. It is necessary for the maintenance of healthy ecosystems and for biodiversity. However, if not properly managed, veldfires can kill people and animals; destroy crops, grazing land, plantations, the environment, infrastructure and homes. The occurrence of veldfire depends on the simultaneous existence of at least three conditions, namely, sufficient fuel to burn: warm, dry weather and a source of ignition. The frequency at which this happens differs across Southern Africa, resulting in different probabilities of fire occurrences.
- 2.2 South Africa has a long history in the administration of veldfire management; a history that reflects the growing risk constituted by veldfires. The National Veld and Forest Fire Act, 1998 (Act No.101 of 1998) (the NVFF Act) was promulgated with the purpose to prevent and combat veld, forest and mountain fires throughout the Republic and provide for a variety of institutions, methods and practices for achieving the purpose.
- 2.3 Chapter 2 of the NVFF Act, which came into force in 2003 is enabling, providing for the regulation of the establishment, registration, duties and functioning of Fire Protection Associations (FPAs) as one of the variety of institutions for achieving the purpose of the NVFF Act. It should be noted therefore that in terms of the NVFF Act, formation of a FPA is not mandatory.
- 2.4 To give effect to the provisions of Chapter 2, the Minister gazetted the Fire Protection Association Regulations, 2003 (the FPA Regulations) in terms of section 20 of the NVFF Act, which provides the Minister with discretionary powers to make regulations for, amongst other things, the procedures relating to the registration of FPAs.
- 2.5 The enabling provisions in Chapter 2 of the NVFF Act also give the Minister discretionary powers to give assistance to and co-operate with owners in forming a FPA where none has been registered, within one (1) year after the NVFF Act came into effect in an area where the Minister is of the opinion that a FPA should be formed. Currently there are 217 FPA registered.
- 2.6 The Minister may in terms of section 7(b) of the NVFF Act provide a loan, grant or other assistance to:  
(i) any FPA for any of its activities; and (ii) any landowner who prepares a fire break in terms of section 14 and in doing so incurs expenses in excess of what he or she would reasonably be expected to incur if the boundary of his or her land did not coincide with that of the Republic.

- 2.7 Registered FPAs must report to the Minister annually on fire statistics in its area as per section 5(1)(i) of the NVFF Act and also submit an annual report to the Minister in terms of regulation 17(1) of the FPA Regulations.
- 2.8 Integrated Fire Management (IFM) is a plan carried out to mitigate and prevent veldfire risks the activities include fire awareness, fire prevention, prescribed burning, resource sharing and coordination, fire detection, fire suppression, fire damage rehabilitation and research at a local, provincial, and national level to create a sustainable and well-balanced environment, reduce veld fire damage and promote the beneficial use of fire.
- 2.9 Working on Fire (WoF) is a government-funded, job-creation programme focusing on Integrated Fire Management in South Africa. WoF has 204 bases in South Africa of which 76 are located within FPAs. The support is however not equitable and numerous rural communities do not adequately benefit from this program (WoF).
- 2.10 WoF bases plus the fire data for 2021 is shown in map below:



- 2.11 In summary, the draft National Fire Protection Association Support Strategy (the draft Strategy) is aimed at providing equitable support to FPAs and landowners on international boundaries of the Republic of South Africa in terms of sections 3(3) and 7 of the NVFF Act.

### **3 VISION AND OBJECTIVES**

- 3.1 The vision of this draft Strategy is to ensure that all FPAs and landowners on international borders receive equitable support to be resilient towards veldfires and to protect themselves, their assets, the environment, animals, and their livelihoods.
- 3.2 The objective of this draft Strategy is to outline how and what assistance FPAs and landowners on international borders will receive and define the oversight role the Department of Forestry Fisheries and the Environment (DFFE) will play in this regard.

### **4 PROBLEM STATEMENT**

- 4.1 Over the recent years, South Africa has experienced devastating veldfires which resulted in people and animals losing their lives. Properties, the environment, veld and forests were destroyed, spanning across a large majority of the provinces. In the recent past, all provinces in the country were in one way or another affected by a spate of veldfires which caused devastation to the communities as well as the forestry and agriculture industry and vulnerable rural communities. These provinces have varying fire seasons that are in line with their geographic location. The northern provinces falling within the summer rainfall areas experience most of their fire season in winter while the western province experiences rainfall in winter and its fire season is in summer. Most of the areas in these provinces fall within the category of high to extremely high risk in terms of the veldfire risk classification for the country.
- 4.2 Since the promulgation of Chapter 2 of the NVFF Act and its associated regulations, the DFFE has so far registered two hundred and seventeen (217) FPAs. An analysis from the reports submitted by FPAs indicate that most of these registered FPAs struggle to implement their integrated veldfire management activities due to lack of resources.
- 4.3 Government support Integrated Fire Management through the WoF program. WoF has 240 bases of which only 76 are located within FPAs.
- 4.4 The DFFE has also noted that Fire Services in the country are not able to reach many veldfires; as a result, most landowners and communities in rural areas are bound to carry the costs of protecting their own properties. In this way, the cost of organizing for veldfire protection through membership of a FPA may be seen by landowners as extra costs and as such, they choose not to form or belong to an FPA.

This problem is further exacerbated by the fact that rural / urban interface (areas where human habitation borders and mixes with open veld) is increasing.

- 4.5 Landowners on international boundaries do not always prepare firebreak due to resource constraints, which results in run-away veldfires, endangering livelihoods, destroyed properties and other infrastructure both in South Africa and its neighbouring countries.
- 4.6 The lack of resources, whether it is funding, equipment and skills, lead to run away veldfires with devastating socio and economic consequences. These negative consequences can be mitigated through appropriate support to FPAs and landowners residing on the boundaries of South Africa.
- 4.7 Government provides a framework for FPA to perform IFM and provide support via WoF and Municipalities, however this support is not equitable and may be insufficient considering the major negative impacts of veldfires.

## **5 STRATEGY JUSTIFICATION**

- 5.1 Historically firefighting agencies in municipalities focussed on fire suppression in urban areas. In the instance where a municipality has a designated service, section 4(7) of the NVFF Act, the municipality must join the local FPA. Furthermore, should the municipality have a Chief Fire Officer, as per section 6(2) of the NVFF Act, the Chief Fire Officer is the fire protection officer of the FPA.
- 5.2 FPAs are registered by the Minister in terms of section 4 of the NVFF Act. All landowners in the area where the FPA is registered have a right to join the FPA, provided they undertake to abide by the constitution and rules of the FPA. In terms of the FPA Regulations, regulation 4 (3) (b), the FPA must set out the rights, duties, and liabilities of members, including payment of fees, charges, and interest. The payment of fees and charges are one of the main reasons many rural communities and landowners are not joining FPAs.
- 5.3 FPA's duties are reflected in section 5 of the NVFF Act and includes the development and implementation of veldfire managing strategy for the area; identify ecological conditions that affect fires, regularly communicate fire danger rating to its member; organise and train its members in firefighting, management, and prevention; inform its members of equipment and technology available in preventing and fighting fires. This is what the fees covered. However, without payment of fees rural communities are deprived from the expertise offered by FPAs and are they at greater risk to veldfires than the FPA members.

- 5.4 Landowners residing on the boundaries with neighbouring countries can either join a FPA, however if not, these landowners are still compelled by the NVFF Act to prepare and maintain fire breaks; adhere to the requirements of a fire break; be ready to act if he or she believe that the fire on the owner's land or adjoining land may endanger life, property, or the environment. Firebreak preparation may result in additional cost to the landowner on boundaries with neighbouring countries, and should these funds be not available, the risk if spread of veldfire is increased with severe negative socio and economic consequence to both South Africa and the neighbouring countries.
- 5.5 At this stage, the DFFE has no strategy to provide financial and other support to FPAs, and landowners who prepare firebreaks on international borders and incur additional cost over and above that would have cost that would have normally incurred. This is despite section 7 of the NVFF Act that stipulates that the Minister may give a loan, grant or other assistance to: (i) any FPA for any of its activities; and (ii) any landowner who prepares a fire break in terms of section 14 and in doing so incurs expenses in excess of what he or she would reasonably be expected to incur if the boundary of his or her land did not coincide with that of the Republic.
- 5.6 In addition to the NVFF Act, section 15 (h) of the Disaster Management Act, 2002 (Act No.57 of 2002) (DMA) also emphasise the promotion of disaster management capacity building, training, and education throughout the Republic of South Africa about all hazards including veldfires.
- 5.7 There is an urgent need to implement the above provisions and the draft Strategy will guide and assist the DFFE to ensure that support is provided in a transparent and equitable manner.
- 5.8 Integrated Fire Management must be based on principles of sustainable development. In this context, the DFFE's initiative to consider and provide support to FPAs and landowners residing on boundaries that coincide with the Republic will have, amongst others, the following benefits:

#### 5.8.1 *SOCIAL BENEFITS*

- (i) Protection of current jobs and infrastructure at community level;
- (ii) Job creation to local communities through the creation of firebreaks;
- (iii) Increase community resilience and cohesion through the reduction of losses because of fires;
- (iv) Reduction in mortality and injuries due to veldfires; and
- (v) Improvements in human health, security, and livelihoods. This will include, amongst others, increased availability of grasses and thatch, fruits from woodlands and availability of livestock.

### 5.8.2 *ECONOMIC BENEFITS*

- (i) Increased income generated from sales of livestock and agricultural products;
- (ii) Increased availability of building materials;
- (iii) Improved protection of assets;
- (iv) Increased firefighting capabilities of FPAs will ensure livelihoods are protected in communities;
- (v) Complement existing resources of FPAs in achieving integrated fire management;
- (vi) Incentivise landowners situated along international boundaries while enhancing compliance with the provisions of the NVFF Act and ensure livelihoods are protected;
- (vii) More FPAs may adhere to their duties resulting in reduced veldfire risks area within the Republic, hence promoting socio-economic development policies of the Government; and
- (viii) Landowners, particularly emerging farmers may realize reduced veldfire insurance premiums once they have established or belong to an FPA.

### 5.8.3 *ENVIRONMENTAL BENEFITS*

- (i) Reduction in smoke pollution, which is a major environmental health risk;
- (ii) Minimise loss of biodiversity (plants and animals);
- (iii) Reduction in site degradation at the landscape level;
- (iv) Decrease in soil erosion;
- (v) Decrease in desertification;
- (vi) Reduction in invasion of ecosystem by non-native plants which can result in significant change in fire regimes often with negative results; and
- (vii) Healthier trees and plants.

## **6 STRATEGY PURPOSE**

- 6.1 The purpose of this draft Strategy is to provide criteria, guidelines, administrative process, and oversight by DFFE in providing support, financial and non-financial, to FPAs.
- 6.2 To compensate landowners residing on international borders and in preparation of firebreaks that incur expense in excess what would have reasonably expected to incur to ensure Government meets its international obligation and protect assets and livelihoods on both sides of the international borders; and

- 6.3 To have sustainable FPAs and ensure that landowners residing on bordering neighbouring countries prepare and maintain fire breaks to achieve the purpose of the NVFF Act.

## **7 LEGISLATIVE MANDATE**

### **7.1 NATIONAL VELD AND FOREST FIRE ACT, 1998 (ACT NO. 101 OF 1998)**

7.1.1 The NVFF Act is the principal legislation that explicitly makes provision for veldfires, that is fires outside the urban interface. The NVFF Act also makes provision for the establishment of FPAs. FPAs are established and registered in terms of Chapter 2 of the NVFF Act. Section 5(5) further outlines the duties and responsibilities of FPAs. These include, amongst others, the following:

- (i) develop and apply a veldfire management strategy for its area;
- (ii) provide in the strategy for agreed mechanisms for the coordination of actions with adjoining fire protections in the event of a fire crossing boundaries;
- (iii) make rules which bind its members;
- (iv) regularly communicate the fire danger rating referred to in Section 9 and 10 to its members;
- (v) organise and train its members in the firefighting, management, and prevention;
- (vi) provide management services, training, and support for communities in their efforts to manage and control veldfires;
- (vii) supply the Minister at least once every 12 months with statistics about veldfires in its area;
- (viii) furnish any information requested by the Minister to prepare and maintain the fire danger rating system; and
- (ix) exercise the powers and perform the duties delegated to it by the Minister.

7.1.2 Section 14 of the NVFF Act compels owners whose land is subject to risk of veldfire and whose land or any part of it coincides with the border of the Republic to prepare and maintain firebreaks on his or her land as close to the border as possible.

7.1.3 Section 7 of the NVFF Act provides that “the Minister may give a loan, grant or provide other assistance” to the following:

- (i) any fire protection association for any of its activities, and
- (ii) any owner who prepares a fire break in terms of section 14 and in doing so incurs expenses more than what he or she would reasonably be expected to incur if the boundary of his or her land did not coincide with that of the Republic.

7.1.4 The above support is to enable FPAs to fulfil their obligations in terms of the sections 5(5) above and to achieve aims and objectives of the NVFF Act, specifically to prevent and combat veld, forest, and mountain fires throughout South Africa. It is important to note that other stakeholders and government Departments are also supporting FPAs and landowners whenever the activities and work of these institutions and individuals are complementing their management objectives about disaster risk reduction and developmental aspirations.

## 7.2 DISASTER MANAGEMENT ACT, 2002 (ACT NO. 57 OF 2002) (DMA)

7.2.1 The DMA establishes the National Disaster Management Centre (NDMC), with the objective of promoting an integrated and co-ordinated system of disaster management, with special emphasis on prevention and mitigation, by organs of State in different spheres, statutory functionaries and other role-players involved in disaster management, and communities. Other relevant duties and requirements are that it:

- (i) must operate within the national disaster management framework;
- (ii) guide disaster management plans and strategies; and
- (iii) manage the co-ordination and management of national disasters.

7.2.2 The DMA requires sectoral departments to develop strategies and plans for disaster management within their spheres of competence.

7.2.3 It further establishes provincial and local disaster management centres, (the latter in districts), whose purpose and function are like those of the NDMC, but with the obvious difference of geographical scope. They are to develop disaster management frameworks, as well as strategies and plans, on the same lines as those of the national centre, and consistent with the national disaster management framework.

7.2.4 The DMA defines 'disaster management' to mean a continuous and integrated multi-sectoral, multi-disciplinary process of planning and implementation of measures aimed at:

- (i) preventing or reducing the risk of disasters;
- (ii) mitigating the severity or consequence of disasters;
- (iii) emergency preparedness;

(iv) a rapid and effective response to disasters; and

(v) post-disaster recovery and rehabilitation.

7.2.5 This means that disaster management is the integrated management of the whole emergency cycle, from prevention to recovery.

7.2.6 The national disaster management framework, in which the Minister prescribe a set of regulations, is a key instrument relevant to veldfire management, in that it, amongst other things:

(i) provide a transparent, coherent, and inclusive policy on disaster management appropriate for the Republic as a whole; and

(ii) set out an overall approach to measures that reduce the vulnerability of disaster-prone areas, communities, and households, that is, a risk assessment and management framework.

7.2.7 Key co-operative government arrangements in the provisions of the DMA include:

(i) the Intergovernmental Committee on Disaster Management, which is accountable and must report to Cabinet on the co-ordination of disaster management among the spheres of government; and must advise and make recommendations to Cabinet on issues relating to disaster management and on the establishment of a national framework for disaster management;

(ii) the National Disaster Management Advisory Forum, which must make recommendations concerning the national disaster management framework to the Intergovernmental Committee on Disaster Management; and

(iii) equivalent structures in the provincial and local spheres.

7.2.8 The DFFE fulfils its role in the disaster management system through representation on these structures and by contribution to the national disaster management framework, as well as the preparation of the strategy and plan for veldfires.

7.2.9 Disaster Management Centres are required to assess and to invoke the contingency and emergency plans in the local disaster management plan if any emergency becomes or threatens to become disaster. Disaster management plans can and often must take effect before a disaster happens, that

is, when the authorities judge that there is a threat of one. Veldfire management strategies and plans will need to contain these contingency and emergency plans for veldfires.

- 7.2.10 It should be noted that Disaster Management Centre will not fight veldfires. Its job is to be sure that disaster management plans are in place, to set the plans in motion, and to see to coordination. It however remains the responsibility to stop the spread of veldfire from his or her land.

### 7.3 CONSERVATION OF AGRICULTURAL RESOURCES ACT, 1983 (ACT NO. 43 OF 1983) (CARA)

- 7.3.1 The CARA is the principal piece of legislation regulating the conservation and use of soil, vegetation and to some extent, water, outside declared mountain catchment areas and urban areas. It provides for control over the utilisation of natural agricultural resources to promote the conservation of the soil, water resources and vegetation and the combating of weeds and invader plants. The 2001 regulations on weeds and invader plants, that is, invasive alien plants, are stringent and affect veldfire management.
- 7.3.2 The CARA contains provisions dealing specifically with the prevention and control of veldfires. Land users are prohibited from burning veld or grazing burnt veld without the written authorisation of the executive officer, as defined in the regulations. An application for such permission must set out the burning or grazing motivation and be accompanied by an acceptable management plan.
- 7.3.3 The agriculture authorities have issued guidelines for the burning of veld for each of several different regions within each province, which agriculture officers follow when issuing burning permits.
- 7.3.4 Section 12 of the CARA provides for prevention and control of fires through the issuing of permits to land users by an executive authority.

### 7.4 THE NATIONAL ENVIRONMENTAL MANAGEMENT, 1998 (ACT NO. 107 OF 1998) (NEMA)

- 7.4.1 The National Environmental Management Act, 1998 (NEMA) lays down twenty (20) principles and eight (8) constituents of the principle of sustainable development which must be considered by an organ of State (and therefore any official) when making any decision concerning the protection of the environment and must guide the interpretation, administration and implementation of any law concerned with the protection and management of the environment (section 2 of NEMA) which includes the NVFF Act.
- 7.4.2 Of these principles, those requiring special attention in veldfire management include those that:

- (i) require avoiding, minimising, or remedying:
  - disturbance to ecosystems or loss of biodiversity;
  - pollution or degradation of the environment;
  - disturbance of landscapes and sites that constitute the nation's cultural heritage; and
  - require caution when negative impacts on the environment and on people's environmental rights are possible.
- (ii) require integrated management of the environment;
- (iii) require responsibility for the environmental health and safety consequences of a policy, programme, or project;
- (iv) require participation by stakeholders in environmental governance; and
- (v) require special attention to sensitive, vulnerable highly dynamic or stressed ecosystems.

7.4.3 Section 30 of the NEMA deals with emergency incidents, which are defined as "an unexpected sudden occurrence...including a fire... leading to serious danger to the public..." The Act imposes certain obligations on the person responsible for an incident and he/she is strictly liable for taking measures to contain or minimise the effects of the incident, undertaking clean-up procedures and remedying the effects of the incident.

7.4.4 It requires public authorities to authorise or oblige the taking of specific measures to reduce, minimise or rehabilitate harm caused. It provides for a hierarchy of persons who can act to respond to an emergency. The Director-General of a national Department may only take steps if the Director-General of the DFFE and/or the relevant municipal authority or provincial government has not taken them. Therefore, NEMA charges the municipality with jurisdiction as the principal public agency responsible for directing measures to remedy the effects of an emergency incident, such as a fire. To avoid jurisdictional conflict, this is subject to two provisions, namely:

- 1) that the local authority has jurisdiction over that area; and
- 2) if it is necessary to do so in the circumstances and no other public agency has yet taken such steps.

7.4.5 However, the relevant authority may remedy the effects of the incident only under certain circumstances. These include the failure of the responsible person to comply with a directive ordering

him or her to do so. If there is uncertainty as to who the responsible person is or if any immediate risk of danger to the public or of potentially serious detriment to the environment arises because of the incident. In these circumstances, the relevant authority is entitled to claim reimbursement of all reasonable costs incurred. Relevant authorities are also required to prepare comprehensive reports on the incident, and these must be made available to several role-players, including the relevant fire prevention service and the provincial head of the department or municipality.

7.4.6 NEMA gives effect to the environmental right in the Constitution. It codifies principles of sustainable development, which must be considered in any official decision; the Minister must apply these principles when applying the NVFF Act.

7.4.7 The National Environmental Management: Biodiversity Act, 2004 (Act No. 10 of 2004) (NEM: BA), is key in determining the way the NVFF Act is implemented. The DFFE will need to ensure that biodiversity planning (Chapter 3 of NEM: BA) takes account of veldfire management requirements, and that the veldfire management strategies of FPAs and the veldfire management elements of disaster management frameworks, strategies and plans comply with biodiversity planning.

## 7.5 LOCAL AUTHORITY LEGISLATION / BY-LAWS

7.5.1 There are many by-laws and statutes administered by local authorities that have a bearing on veldfire management which include the Local Government: Municipal Structures Act, 1998 (Act No. 117 of 1998) (MSA).

## 8 KEY FOCAL AREAS OF THE STRATEGY

### 8.1 INTEGRATED FIRE MANAGEMENT (IFM)

8.1.1 IFM is a plan carried out to mitigate and prevent veldfire risks as provided for in terms of section 20 of the DMA and the activities include fire awareness, fire prevention, prescribed burning, resource sharing and coordination, fire detection, fire suppression, fire damage rehabilitation and research at a local, provincial, and national level to create a sustainable and well-balanced environment, reduce veld fire damage and promote the beneficial use of fire.

8.1.2 IFM solutions can be adapted to suit the requirements, including country-specific legislation of clients, as well as large-scale commercial forestry operations, governments, various land users and FPAs.

### 8.1.3 IFM is subdivided into four categories:

- (i) Preparedness / Readiness: these include resource capacity; early warning and detection systems; training; and risk profiling;
- (ii) Reduction: education and awareness; firebreak preparation and maintenance; legislation (compliance and enforcement); fuel load management;
- (iii) Response: dispatch and coordination, fire suppression; and
- (iv) Recovery: rehabilitation.

## 8.2 PREPAREDNESS

8.2.1 Preparedness, as defined by United Nations International Strategy for Disaster Risk (UNISDR), consist of “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.”

8.2.2 In Integrated Fire Management and as provided for in terms of chapter 3 of NVFF Act, the National Fire Danger Rating System (NFDRS) provides for early warning system as a component of readiness.

8.2.3 Veldfire risk assessment corresponds with the procedure set out in the National Disaster Management Framework and addresses all measures required to qualify Phase 1 of Integrated Fire Management Plan.

## 8.3 EARLY WARNING SYSTEM (EWS)

8.3.1 Early Warning is defined as the issuing of accurate and timely information from an identified and trusted source that is aimed at alerting the individuals at risk to avoid or minimise the impact of disaster.

8.3.2 The objective of people-centred early warning systems is to empower individuals and communities threatened by hazards to act in sufficient time and in an appropriate manner to reduce the possibility of personal injury, loss of life and damage to property and the environment.

8.3.3 A complete and effective early warning system comprises four inter-related elements, spanning knowledge of hazards and vulnerabilities through to preparedness and capacity to respond. Best

practice of early warning systems also has strong inter-linkages and effective communication channels between all the elements.

- 8.3.4 The four elements are the following: Risk Knowledge or mapped risk, Monitoring and Warning Service, Dissemination and Communication, and Response Capability.

#### 8.4 RISK MAPPING

- 8.4.1 Risks arise from the combination of hazards and vulnerabilities at a particular location.

- 8.4.2 Assessments of risks require systematic collection and analysis of data and should consider the dynamic nature of hazards and vulnerabilities that arise from processes such as urbanization, rural land-use change, environmental degradation, and climate change.

- 8.4.3 Risk assessments and maps help to motivate people, prioritise early warning system needs and guide preparations for disaster prevention and responses.

#### 8.5 REDUCTION

- 8.5.1 Reduction seeks to address community resilience through providing the capacity development and training requirements, education and awareness, firebreak preparation and maintenance, fuel load management, amongst others.

##### 8.5.2 Capacity Development and Training:

- (i) Capacity development is the process through which individuals, organizations and societies obtain, strengthen, and maintain the capabilities to set and achieve their own development objectives in a sustainable manner.
- (ii) Capacity development can also be seen as the process through which individuals, organizations and societies obtain, strengthen, and maintain the capabilities to set and achieve their own development objectives in a sustainable manner.
- (iii) Training provides resilience through promoting a culture of risk reduction and avoidance amongst stakeholders by capacitating stakeholders through integrated education, training and public awareness programmes informed by scientific research.
- (iv) Awareness campaigns on the other hand are comprehensive efforts that include multiple components such as communication, grassroots outreach, and media relations, to help reach a specific goal. Awareness campaigns, while striving to raise key issues and induce a desired

positive behavioural change, will stimulate, and promote behaviour change in communities and/or societies. This includes amongst others, public communications campaigns, public information campaigns, media campaigns and public education campaigns.

## 8.6 RESPONSE

- 8.6.1 Based on the preparedness, the response process begins as soon as it becomes apparent that a disastrous event is imminent and lasts until the disaster is declared to be over. The response process is conducted during periods of high stress in highly time-constrained situations with limited information and resources.
- 8.6.2 The response process is considered as the most visible phase amongst various phases of disaster management. Response includes not only those activities that directly address the immediate needs, such as search and rescue, first aid and temporary shelters, but also rapid mobilization of various systems necessary to coordinate and support the efforts.
- 8.6.3 For effective response, all the stakeholders need to have a clear vision about hazards, its consequences, clarity on plans of action and must be well versed with their roles and responsibilities.
- 8.6.4 Any emergency requires a quick response to save lives, contain the damage and prevent any secondary disasters. In most cases, first responders such as municipalities at a local level. With veldfire, FPAs and landowners also get involved.
- 8.6.5 If an emergency escalates beyond their capabilities, the local administration must seek assistance from the district administration or the national government. If Provincial government considers it necessary, it can seek central assistance or national government.

## 8.7 RECOVERY AND REHABILITATION

- 8.7.1 Preparedness and response, if planned and implemented effectively, determine the impact of risk in each area. Therefore, recovery and rehabilitation activities take place after the occurrence of a disaster and this is the most expensive phase, considering that most events are irreversible and non-recoverable.
- 8.7.2 This phase as outlined in terms of the National Disaster Management Framework include the following:

- (i) Disaster recovery activities;
- (ii) Monitoring of disaster recovery activities;
- (iii) Documentation of disaster occurrences and actions taken;
- (iv) "Post-mortem" analysis to improve systems, plans and methods;
- (v) Identification of recovery projects;
- (vi) Implementation of identified projects; and
- (vii) Reporting.

## **9 SUPPORT CRITERIA**

9.1 The criteria used for support, general and financial, will be based on the veldfire risk a given area is exposed to, the functionality of an FPA as well as the financial status of an FPA. Support will also be based on achievement of the purpose of the NVFF Act and the principles of IFM. Support required will also be informed by need assessment and effective governance structure of the FPAs. Support will either be financial and/or non-financial.

### **9.1.1 Risk Assessment**

Support criteria will be guided by the Veldfire Risk Map (see below) as well as the number of risk and the number of days per annum a given area are exposed to high to extremely high Fire Danger Rating Index (FDI).

### **9.1.2 Registered FPAs**

The FPA must be registered as an FPA in terms of section 4 (4) of the NVFF Act and such must also be the only FPA in respect of an area to comply with section 4(5) of the NVFF Act.

### **9.1.3 Functional and non-functional FPA**

Functional FPAs are those who comply with section 5 of the NVFF Act which also requires FPAs to report once every 12 months and section 5(1)(j) which requires FPAs to report about fire statistics in their area. Compliance with regulation 17(1) of the FPA Regulations, which requires FPAs to submit an annual report to the Minister by 30 June of every year.

Where an FPA is not functional and is in a high veldfire risk area, the FPA will be eligible for support. However, this will be subject to an audit/assessment by the DFFE and development of a corrective actions plan to return FPA to functionality. The audit result plus corrective action plan will then be used to establish the nature of support required to return the FPA to full functionality.

## 9.2 CURRENT SUPPORT

- 9.2.1 Current support can be in the form of other Government departments or through the WoF. Preference will be given to FPA where no Government and/or WoF support is provided. FPAs with Government and/or WoF support will be considered after an audit by the DFFE to establish the support required.

## 9.3 LANDOWNERS ON INTERNATIONAL BORDERS

- 9.3.1 Landowners residing on international boundaries are compelled to prepare and maintain firebreaks. In certain instances, the costs incurred are more than the costs the landowner would have reasonably incurred. The DFFE will establish the access expense incurred by landowners on an international border for compensation. The DFFE will also consider using WoF resources to mitigate the excess cost where possible. In consultation with the local FPA, the DFFE will determine the normal cost of a firebreak for given terrain and compare it to the actual cost incurred by landowner(s).

## 9.4 DURATION

- 9.4.1 Support can be for a year up to a maximum 3 years and will be subject to terms and conditions. Should FPA be in breach of such terms and conditions, the FPA will be requested to rectify its failure, and should the failure persist, the DFFE will withdraw the support. The same will also apply to landowners residing on international borders.

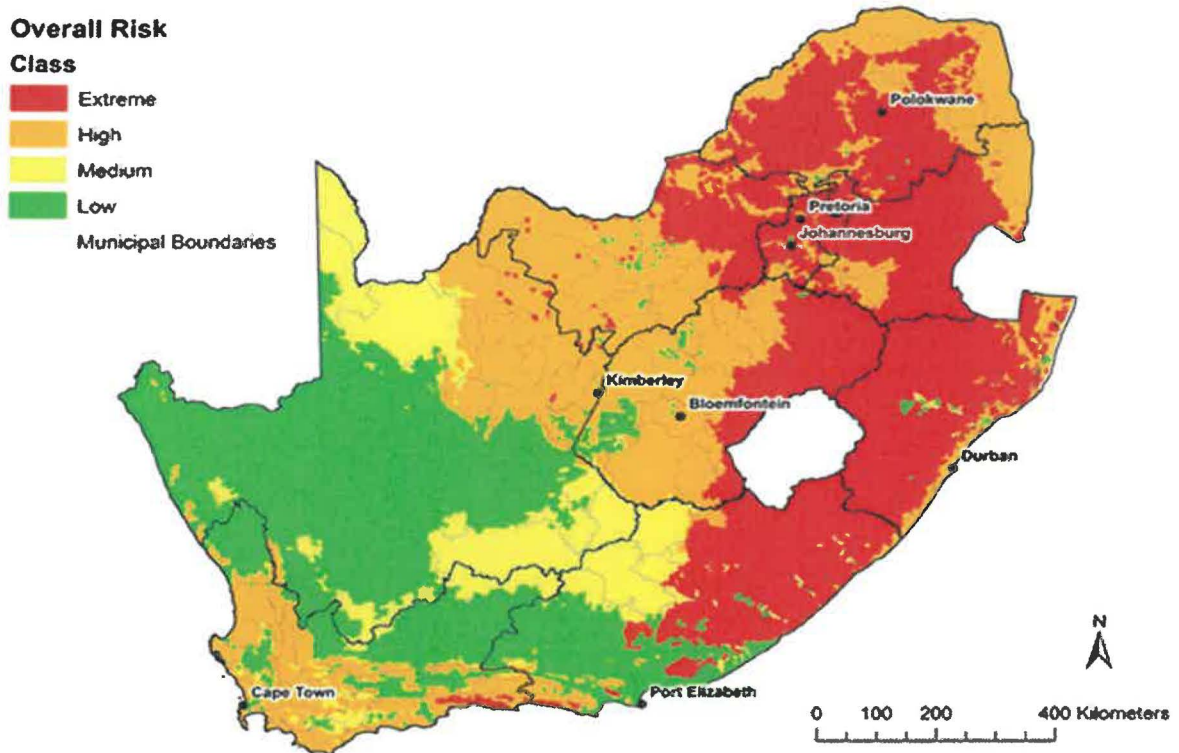


Figure 1: Map showing the veldfire risk profile on the country.

COLOR CODE	FDI	FIRE DANGER	RATING
BLUE	0-20	Low	Insignificant
GREEN	21-45	Moderate	Low
YELLOW	46-60	Dangerous	Medium
ORANGE	61-75	Very dangerous	High
RED	76-100	Extremely dangerous	Extremely high

Table 1: Fire Danger Rating Index

## 9.5 GENERAL SUPPORT TO FPAs

9.5.1 General support can also be classified as non- financial support. This type of support will be driven by the purpose of the NVFF Act, namely, to prevent and combat veldfires in South Africa. Support must be equitable. The principles of IFM will guide the decision on type of support provided. Support to FPAs will be provide to new FPAs and to existing FPA.

- 9.5.2 FPA's footprint is currently small in their respective areas and the DFFE will assist FPA's to increase their footprint to include rural communities. This will be done via awareness campaigns and engagement with Government departments and other entities.
- 9.5.3 The DFFE will also provide awareness material to FPAs plus develop the capacity in FPA's where required to ensure the purpose of the NVFF Act is achieved.
- 9.5.4 The DFFE will also provide support to FPAs with intergovernmental governance issues, to ensure all Government role players play active part in FPA's as per their respective mandates in terms of preparedness, fire suppression and recovery after a disaster.

## 9.6 PREPAREDNESS

- 9.6.1 Preparedness support will include awareness and training by the DFFE, dissemination of Veld Fire Risk Maps and Fire Danger Rating (FDR) information via South African Weather Services (SAWS) during high and extreme fire days. Currently FPA's are paying for this service and information is not rural based FPA. DFFE will also assist FPA to obtain FDR at municipal level.
- 9.6.2 DFFE will communicate the Veldfire Risk Assessment Map to FPA's to ensure that FPAs can update veldfire management strategy for the respective areas and make information available to their members. The Veldfire Risk Assessment Map will be updated every five years.
- 9.6.3 FPAs are obligated to inform their members of equipment and technology available for prevention and control fires. In instances where FPA's are not able to acquire equipment such as fire beaters, rake-hoes, shovel etc, the DFFE will provide support to FPA to source such equipment. Such request will be based on a need analysis.
- 9.6.4 As part of intergovernmental support, the DFFE will liaise prior and during the fire season, with local municipalities, district municipalities and provincial disaster management centres to ensure these entities are prepared and ready to respond to veldfires, especially those rural veldfire. Annually fire protocols will be developed and circulated to the respective FPAs.

## 9.7 REDUCTION

- 9.7.1 The main areas where support will be focussed will be with fuel load reduction, block burns and preparation and maintenance firebreaks.

- 9.7.2 WoF is currently actively focusing on fuel load reduction strategies through its engagement with FPA. Support to FPAs with WoF bases, will focus increasingly on support to rural communities. Veldfire reduction activities to vulnerable communities will be expanded and may include setting up new bases and/or moving bases to vulnerable communities.
- 9.7.3 DFFE co-operation with FPA's will identify strategic fire breaks for vulnerable communities in rural areas and mobilise resources, such as WoF to establish these strategic fire breaks. WoF can also assist with the preparation and maintenance of fire breaks for landowners residing on international border, should there be a base in close proximity of said landowner(s). Where such assistance is offered, landowners will not be entitled to financial support for cost incurred more than normal cost associated with firebreak preparation.
- 9.7.4 With assistance of the FPA, the DFFE will pursue exemption of duty to prepare and maintain fire breaks (section 15(1)) of the NVFF Act) where applicable. The DFFE will also pursue the allocation of strategic fire breaks in rural communities to reduce the risk of veldfires to these communities.

## 9.8 RESPONSE

- 9.8.1 The response will be based on the protocols developed with the local municipalities, district municipalities and provincial disaster management centres.
- 9.8.2 The FPA and communities will activate initial response with resources available before arrival of local municipalities or district municipalities services. Initial response can also include the activation of WoF team(s) if available. The DFFE will activate aerial response should there be a need for such resources.

## 9.9 RECOVERY

- 9.9.1 The DFFE will assist FPA's as part of its intergovernmental support to activate rehabilitation and compensation where required.

## 10 FINANCIAL SUPPORT TO FPA

- 10.1 Financial support will be based on the criteria as outlined in paragraph 9. Preference will be given to FPAs in rural areas and proving assistance to vulnerable communities.

- 10.2 The DFFE, subject to availability of funds, shall grant funding and prioritise such depending on vulnerability of the applicant, urgency of application, impact of funding on achievement of the purpose of the NVFF Act.
- 10.3 When considering funding support the DFFE will also establish what is the current support the FPAs receive from Government, including WoF.
- 10.4 For funding support, the DFFE will perform an audit to do a need analysis and ensure appropriate governance structures are in place. Such an audit will consider the current financial sustainability of the FPA and a financial status. To determine the financial status of an FPA, the said FPA will have to submit audited financial statement to the DFFE. The following matrix will serve as a guide in determining funding requirements. Category 3 are the vulnerable FPAs in rural communities and will be prioritised.

Category 1	<p><i>Highly functional and well-resourced Fire Protection Associations. These FPAs have a constitution and meet on regular basis. They have adequate resources to enable them to predict, prevent, manage, and fight fires.</i></p> <p><i>Mostly found in the Commercial Forestry areas where private companies contribute to ensure the functionality of the FPA.</i></p> <p><i>FPA is financially independent and sustainable</i></p>
Category 2	<p><i>These are Fire Protection Associations that are functional to medium resourced. They have a constitution and meet on regular basis. Also have resources to enable them to predict, prevent, manage, and fight fires.</i></p> <p><i>Mostly found in agriculture areas.</i></p> <p><i>FPA is not fully financially independent and sustainable and will require assistance</i></p>
Category 3	<p><i>Least functional and in certain instances exist on paper only because they were registered by the Department. They could have a constitution but is not implemented. They do not meet on regular basis. They have no resources to enable them to predict, prevent, manage and fight fires.</i></p> <p><i>Mostly found in rural areas.</i></p> <p><i>FPA is not financially independent and sustainable and will require considerable assistance</i></p>

- 10.5 The DFFE will not be the sole provider for funding FPAs. The FPA should increase funding base from members with special emphasis on owners of state land, State Owned Enterprises and municipalities.
- 10.6 Funding will be considered for:

- 10.6.1 Strategic firebreaks for rural communities and international boundaries;
  - 10.6.2 Fuel load management;
  - 10.6.3 Training of FPA members in basic firefighting, first aid and Incident Command System (ICS);
  - 10.6.4 Training of FPA management in basic computer literacy, management, administration and ICS;
  - 10.6.5 Small tools such as fire beaters, rake-hoes, shovel etc; and
  - 10.6.6 Awareness campaigns within rural communities.
- 10.7 Landowners residing on international borders who prepares fire breaks and incur cost more than cost what the landowner would reasonably would have incurred, will also qualify for funding. This will be instances where there is no WoF support in proximity. DFFE in consultation with the local FPA will determine the normal cost of a fire break for given terrain and compare it to the actual cost incurred by landowner(s).
- 10.8 Due to Treasury Regulations, the DFFE will not be able to provide support to FPAs to acquire assets.

## **11 APPLICATION PROCEDURE**

- Step 1: An applicant prepares a proposal for submission to the DFFE Regional Office indicating at least the following: Business plan, current support received from Government (either via the DFFE, WoF or Municipality), funding proposal indicating own contribution in cash or in kind, indicate whether the applicant is an entity or individual, proof of registration if a FPA is applying, economic viability and impact of project, number of beneficiaries, current or previous financier, banking details and contact details.
- Step 2: The DFFE Regional Office considers the application, performs an audit, and makes a recommendation to the National Office.
- Step 3: The National Office moderates and makes a recommendation for approval by the Deputy Director-General: Forestry Management.
- Step 4: The National Office will communicate the decision of the application to the DFFE Regional Office in writing.

## **12 INSTITUTIONAL OVERSIGHT**

- 12.1 The DFFE, subject to availability of funds, shall make financial support available based on vulnerability of the applicant, urgency of application, impact of communities if support is granted.
- 12.2 Terms and conditions will be attached to any support given.
- 12.3 Over and above the annual reports to the DFFE as per regulation 17 (1) the FPA must submit to the Minister.
- 12.4 FPA will also report and provide proof of expenditure or how non-financial support has benefited the FPA every 6 months. The DFFE will audit such performances.
- 12.5 Owners of land situated along international boundaries will audit prior to and after financial support has been given. The DFFE may also verify such fire breaks via satellite images or infield inspection.
- 12.6 Upon completion of the project a report shall be submitted by the respective FPA and landowner on border to Regional Office, outlining activities that the applicant has managed to embark on and how these have impacted on Integrated Fire Management.
- 12.7 The DFFE will annually provide a report to the Director General on support provided to FPA's and landowners on international border and outcomes of such support in achieving the purpose of the NVFF Act.

## **13 MONITORING, EVALUATION AND REVIEW**

- 13.1 The Strategy is premised on the notion of pre-disaster cycle informed by the modern science and concepts of disaster management which concentrate more on disaster risk reduction than the historical approach of suppression and firefighting. This important concept of pre-disaster cycle is centred on capacitating local communities to be in the forefront of reducing disasters by understanding the behaviour of the hazard and taking appropriate action to prevent it and mitigate its impact.
- 13.2 The Strategy is a living document; therefore, it will be subject to continuing refinement based on the experiences and lessons learned through the operations of the FPAs and owners of land who prepare firebreaks on the borders of the Republic as well as changing circumstances. Key areas that may be developed and/or further refined either directly in the strategy or through operational mechanisms as appropriate, include the following: Application procedures and guidelines on financing of FPAs and

landowners preparing firebreaks on international boundaries, constitution of evaluation panel, and determination of allocation and thresholds. The Strategy will be reviewed every five(5) years.