# LANDWORKS

Working with people in the landscape

# What can we learn about forest fire prevention from community work in South Africa?

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### **LESSON 1. NEVER WASTE A GOOD DISASTER!**





#### **BORN TO BURN**

North and coastal east – dry Winters
Southwest – dry Summers
Southern coastal ecotone – all year
SE and Berg winds

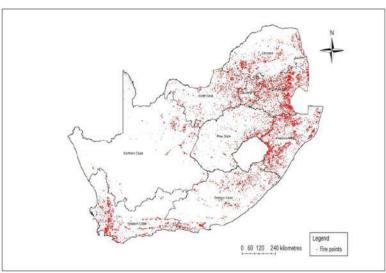
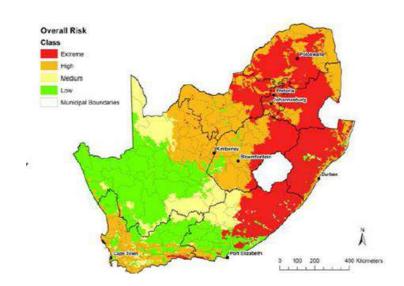


Figure 1: Fire distribution in South Africa between 2003 and 2013.

Most ecosystems are fire – prone and fire—dependent. 1,219,090Sq Km's Population 57 million



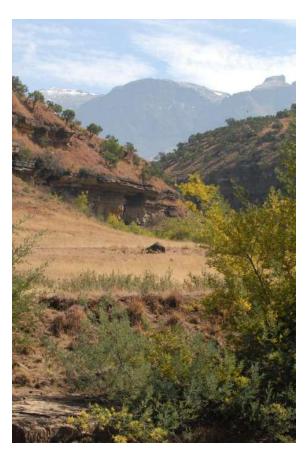


### **DEFINITION OF FOREST?**



Bush Veld Grassland Shrubland







### What are the components of a forest fire resilient landscape?

Ecological pattern and process is maintained without affecting/impacting communities and economies.

- Land use
- Social values
- Ecosystem health
- Economic health
- Acceptable risk





# What political and technical actions are needed to create resilient landscapes?

#### Are current legislative frameworks fit for purpose?

- Synchronisation land use planning/ biodiversity/ protected areas/commercial farming/ urbanization
- Incentives/disincentives /insurance/taxes
- Tiered Regional/National/ Provincial/ Municipal

Co-operative governance





### National Veld and Forest Fire Act (Act 101of 1998)

- LANDUSERS on whose land a fire may start or spread are held responsible, NOT THE STATE.
- Promotes Integrated Fire Management
- Act provides for Fire Protection Associations (FPA's)
- Organisation formed by landowners/users to predict, prevent, manage and help fight wildfires in an area, to protect lives, livilihoods, property and the environment.
- FPA's are registered with Minister responsible for administration of the Act. Delegation of authority to FPO



### **Section 34 – Presumption of negligence clause**

In the event of a civil claim against a landowner:

The landowner is presumed to have acted negligently .....UNLESS

....the landowner is a **member** of an FPA, in which case the person bringing the claim must prove that the landowner was negligent.





# National government contribution to Integrated Fire Management

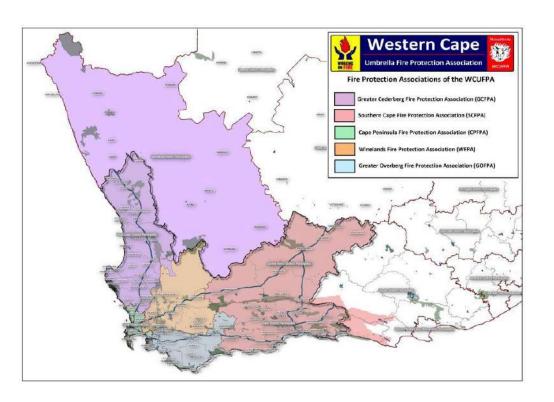
- Ground and air support.
- Uses Extended Public Works funds to recruit and train unemployed youth as firefighters
- Supports and aligns to FPA functioning and sustainability

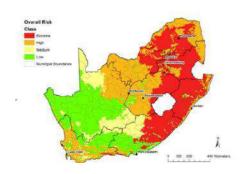






# FPA's provide the enabling environment for landowners and landusers to work collectively and take responsibility for their ignition potential



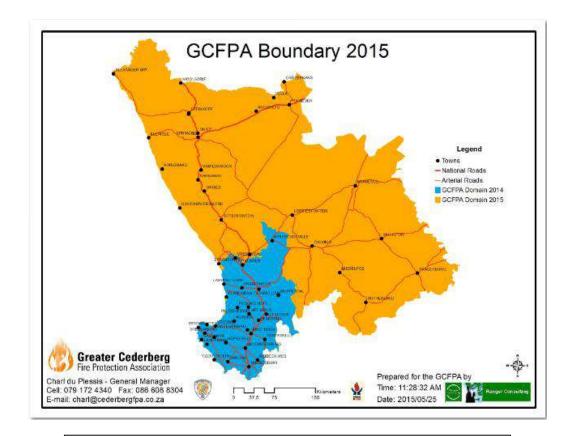


#### **Provincial boundaries**

**District Municipalities** 

Management units



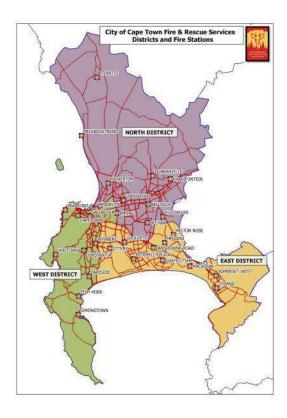


Boundaries adjoin.

Daily FDI is sent to all FPA members

All prepare a Fire Management Plan







#### What is the WUI?

- Wildland urban interface where development meets wildlands
- Wildland urban intermix where development is interspersed with wildlands







#### What is the WUI?

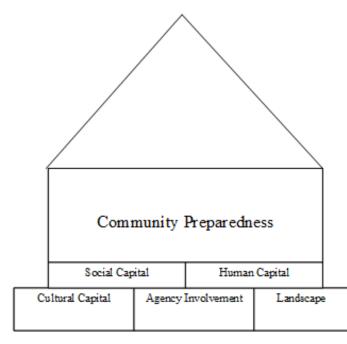
- WUI A set of conditions that affect resources and how they can be managed, rather than a geographic place.
- Natural Resource definition: where increased human influence and land-use conversion are changing natural resource goods, services, and management techniques (University of Florida)







## The Community



**Social Capital** community characteristics that contribute to collective social action-Leadership, networks, the ability to mobilise resources..

**Human Capital** Training and education

**Cultural Capital** knowledge and skills people possess because of their heritage, experience and place attachment.

Agency Involvement gives the local community access to public programmes, funding and resources as well as skills and expert knowledge

Landscape Vegetation and topography, but also social aspects such as land ownership



# 2005: Review of national fire awareness, prevention and education

- Very little focus no community engagement
- "No Fires!" policy unrealistic and not culturally acceptable.
- Suppression oriented response
- Yet "....most fires caused by people...."

First time there was a national budget for Fire Awareness.





# Introducing Firewise Community concepts into South Africa

- Genuine bottom-up approach
- Modular
- Replicable
- Scale-able
- Flexible
- Adaptable for demographics, socio-economic and landscape dynamics





13 year collaborative relationship with Firewise USA Never looked back!





#### **Fire Adapted Communities**

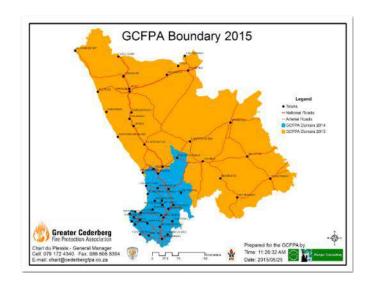
solutions for wildfire challenges by involving homeowners, community leaders, planners, developers, firefighters and businesses in practical action that will reduce risks to the community and in the landscape.

Disaster
Risk
Resilience
\*
Communities

and Landscapes

#### **Fire Protection Association**

#### **Integrated Fire Management**



**LOCAL** 

VALUES

POLICIES

**DISTRICT** 





## **FireWise Community Models**

Proudly implemented by LANDWORKS"

#### Voluntary FireWise Community

Voluntary participation by community members

Funded train-the-trainer days and mentoring support only

- Community fire management plan
- Risk assessment of a community committee
- Initial Scoping Report
- Interim Report
- Final Evaluation Report to client

2-year project

#### Semi-Voluntary FireWise Community

#### Committee employed

EPWP committee members only

Daily wage

Part-time

- Community fire management plan
- Risk assessment
- Fuel reduction work

Minimum 2-year project

#### FireWise Community Works

#### **EPWP** participants

Daily wage, 3x per week, 10 months of the year Funded train-the-trainer days and mentoring support only

- Invasive alien plant control
- Fire awareness
- Fuel reduction
- Slashing firebreaks and mop-up
- Fire pits
- Cleaning environment
- Road maintenance
- Vegetable gardens

Minimum 2-year project Preferably 3-years

#### LANDWORKS™ Eco-Village

EPWP participants exit into small businesses

Green' local economic development

Profit-driven:

Value add chain

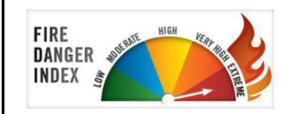
- Reponsive to community and ecosystem needs
- · Beekeeping
- Carpentry
- Early childhood development (ECD)
- Woodlands

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Public education with an emphasis on weather



Firewise Communities















# **Introductory Community Meeting**

- Discuss fire risk and risk reduction
- Engage community members about causes of fire – good and bad.
- Explore community values, conflicts
- Identify leaders
- Offer training to volunteers
- Ask for formation of a Firewise Committee







#### **Simple Objectives**

- Teaches people how to adapt to living with good and bad fire
- Encourages neighbours to work together
- Encourage people to take action now to prevent losses later
- Creates a paradigm shift from fearing fire to living with fire in a safe way.



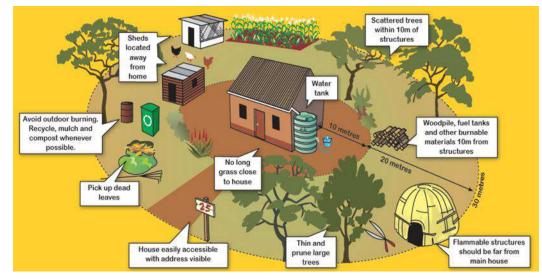


### **Training**

- Adapted the USA course to fit South Africa and Chile
- 2-3 days for about 25 volunteers
- Classroom and practical
- How to facilitate and engage with their community
- Risk assessment and mitigation











# **Developing the Community Fire Management Plan**

- Planning tool
- Achievable by community
- Builds confidence to engage stakeholders
- Includes risks and mitigation
- Includes local telephone numbers and contacts
- Evacuation and refuge zones
- Firewise Day
- Provides baseline for evaluation











**Knowledge transfer** 





# The Firewise Committee becomes a source of knowledge for the community









### **Firewise Day**

- Organised by the Firewise Committee
- Open to the community
- Often linked to a cultural day
- Handover of Recognition plaques











## South African Firewise Community Works – the power of a stipend!

- Uses government funds set aside for job creation and skills development
- Focus on Natural Resources and Ecological Infrastructure
- Employs people for a daily stipend
- Focus on women and youth







- Cutting fire belts/ fuel reduction
- Preparing schools as evacuation areas – walking distance
- Growing vegetables
- Clearing riparian zones
- Beekeeping
- SETTING AN EXAMPLE
- REDUCTION IN CRIME.

### **Community Works Activities**







# Integrates well with the Firewise model

- Fuel reduction, rehabilitation and restoration
- Healthier ecosystems and communities
- Builds knowledge and skills
- Planned production and task –based work goals







**Reducing fire fuels** 







# Tasks can include anything that the community buys into in the Community Fire Management Plan:



- Digging fire pits for burning refuse
- Clearing firebreaks along roads.
- Defendable space around homesteads





### **Food security**

Food gardens make good firebreaks!







# **Ecological infrastructure** rehabilitation

- Removal of Invasive Alien Plants
- Restoration of grasslands and arable lands
- Improved grazing and biodiversity
- Improved water security
- Reduction of erosion and downstream siltation
- Reduced fire severity and risk

Rural communities depend on ecological infrastructure for their livelihoods



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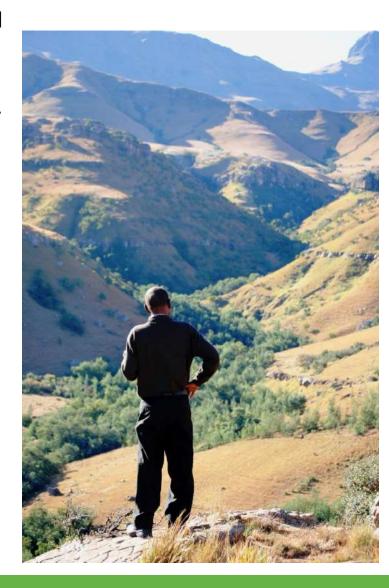






#### Some lessons learned...

- People are not the problem, but the solution. Shared responsibility of acceptable risk is the goal.
- Social ecology capacity—building is absolutely critical.
   Train-the-trainer, community facilitation, genuine commitment to community work it's messy!
- Recognition of community effort is essential
- Stipends encourage community commitment
- There must be a tangible benefit to a community for behaviour shifts to be sustained. Eg – improved grazing as well as reduced fire risk. Biodiversity protection, insurance incentives, tax rebates.
- Tap into community values
- Listen!
- This is a journey... we still have a long way to go.







**THANK YOU!**