

Map your path to success *Your journey begins here*



INTEGRATED FIRE MANAGEMENT

TIAAN POOL

“Whilst it is not possible to eliminate the risk of wild fires, targeted efforts can reduce wildfire occurrence and impacts”

John Hargreaves

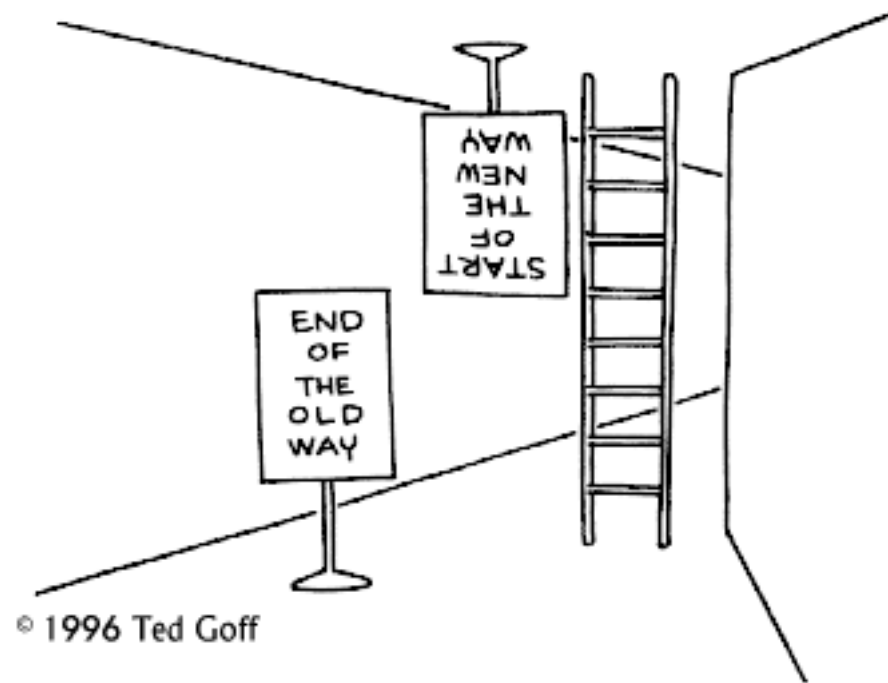
January 2005

ACT Minister for Emergency Services

LAND USERS - COMMON PROBLEMS

- Fuel accumulation/Increased fire hazard (Weeds & poor burning practices)
- Inadequate fire prevention and expensive fire protection and suppression
- Global warming and climate change (Droughts, floods)
- Fire losses & economical pressure
- Difficulty to maintain sustainability in fire management
- Conservation pressures (Water, biodiversity)
- Increased population pressure on natural resources.

Integrated Fire Management is a regional and not an individual option



Current Status of IFM

- FPA's → vehicle for implementing IFM
- Mixed successes and sustainability is questionable
 - Lack of capacity
 - Lack of commitment/buy in
 - Lack of competency/training**
 - Lack of infrastructure
 - “Big brother” effect → little ownership

Integrated Fire Management (IFM)

- IFM is defined as a series of actions at local, provincial and national levels addressing the impacts of both damaging and beneficial fires within natural and socio-economic environments.
- These actions includes fire awareness activities, fire prevention activities, prescribed burning, resource sharing and co-ordination, fire detection, fire suppression and fire damage rehabilitation.
- IFM strives to create a sustainable and well balanced environment, reduce unwanted wildfire damage and promote the beneficial use of fire by evaluating and balancing the relative risks posed by fire.

Components of IFM

- Assessment and analysis of situations and issues
- Determining of fire management goals, desired ecosystem condition and setting priorities.
- Knowing the laws that regulate veld fires and understanding institutional frameworks and policies.
- Prevention of fires by awareness and education
- Correct use of fire to maintain ecosystems.
- Preparedness for and response to fires.
- Adaptive management, research and information transfer

**Fire Management:
Fire protection, prevention &
suppression**

**Fire Cultures:
Socio-economical impacts**

Integrated

Fire Management

**Fire Ecology:
Key ecological requirements of
natural systems**

Whose Responsibility is it?

- The key element of Integrated Fire Management Planning (IFMP) is bringing together a range of agencies and organisations to discuss and plan for fire in the community.
- IFMP aims to accommodate community's needs and should involve extensive community engagement at all stages throughout its development and implementation.

PHASES OF IFM

- **REGIONAL PHASE**
- **EVALUATION PHASE**
- **APPLICATION PHASE**

Regional Phase

- Determine the present and future financial, social and environmental challenges wrt veld fires, .
- Set objectives that will address the above.
- Prioritise objectives

Evaluation Phase

- Consider the existing infrastructure
- Determine resource availability
- Fire fighting capability
- Human resource competencies
- Do a risk analyses
- Do a gap analyses
- Draw up a fire management plan

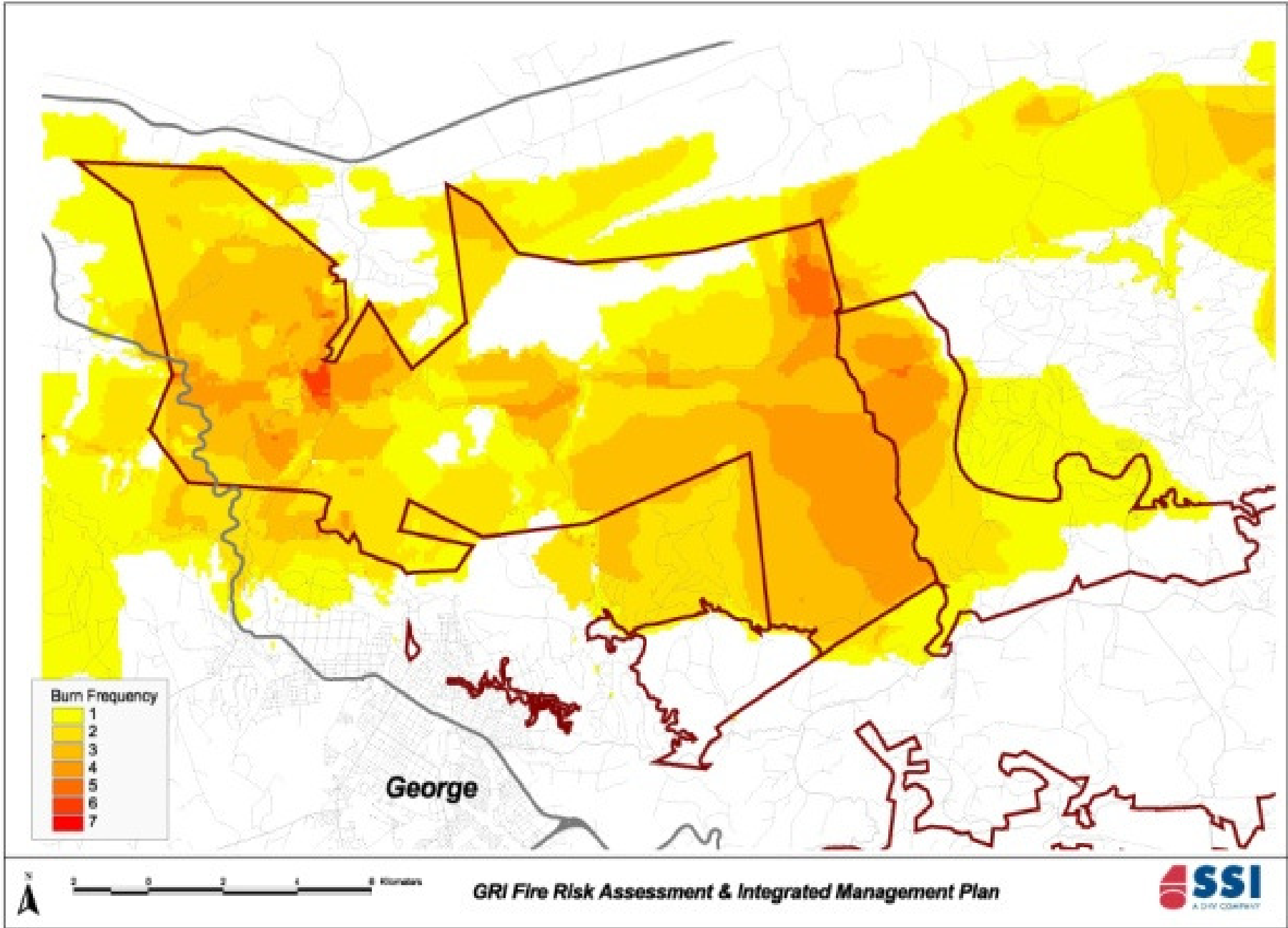
APPLICATION PHASE

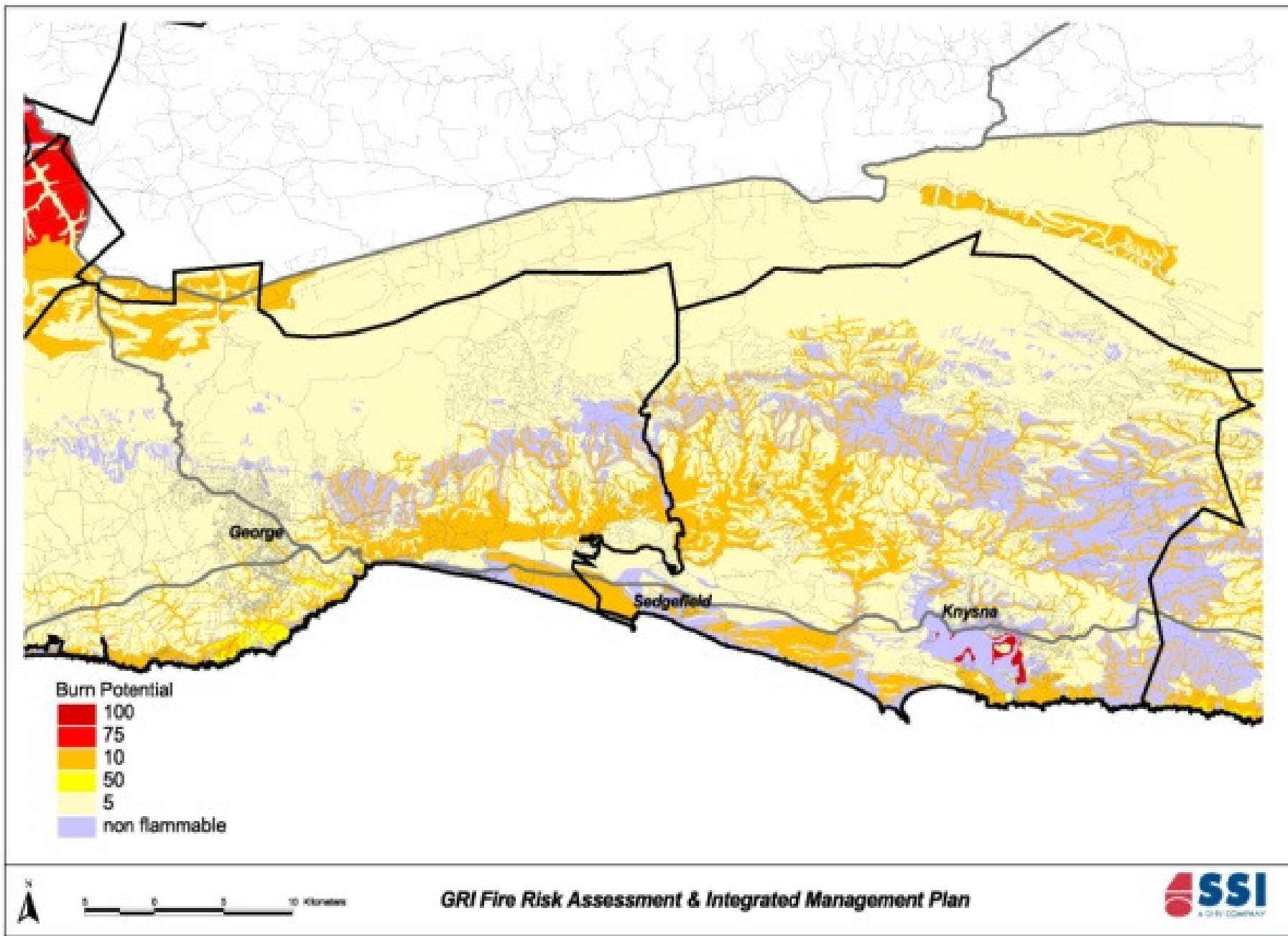
- Implement the fire management plan (FMP)
 - Set up management structures
 - Get buy in from all land owners
 - Spell out responsibilities of land owners and authorities
 - Source financial shortcomings
 - Develop fire management infrastructure (Including fire breaks, buffer zones, tools & equipment, communication systems, etc.
 - Design control measures
 - Schedule maintenance of the FMP

IFM is a Way of Life

- Update the FMP and fire protection maps after major fire events
- Yearly re-assessment of the fire protection plans, and adjusting where necessary, particularly after the experience of major wildfires.

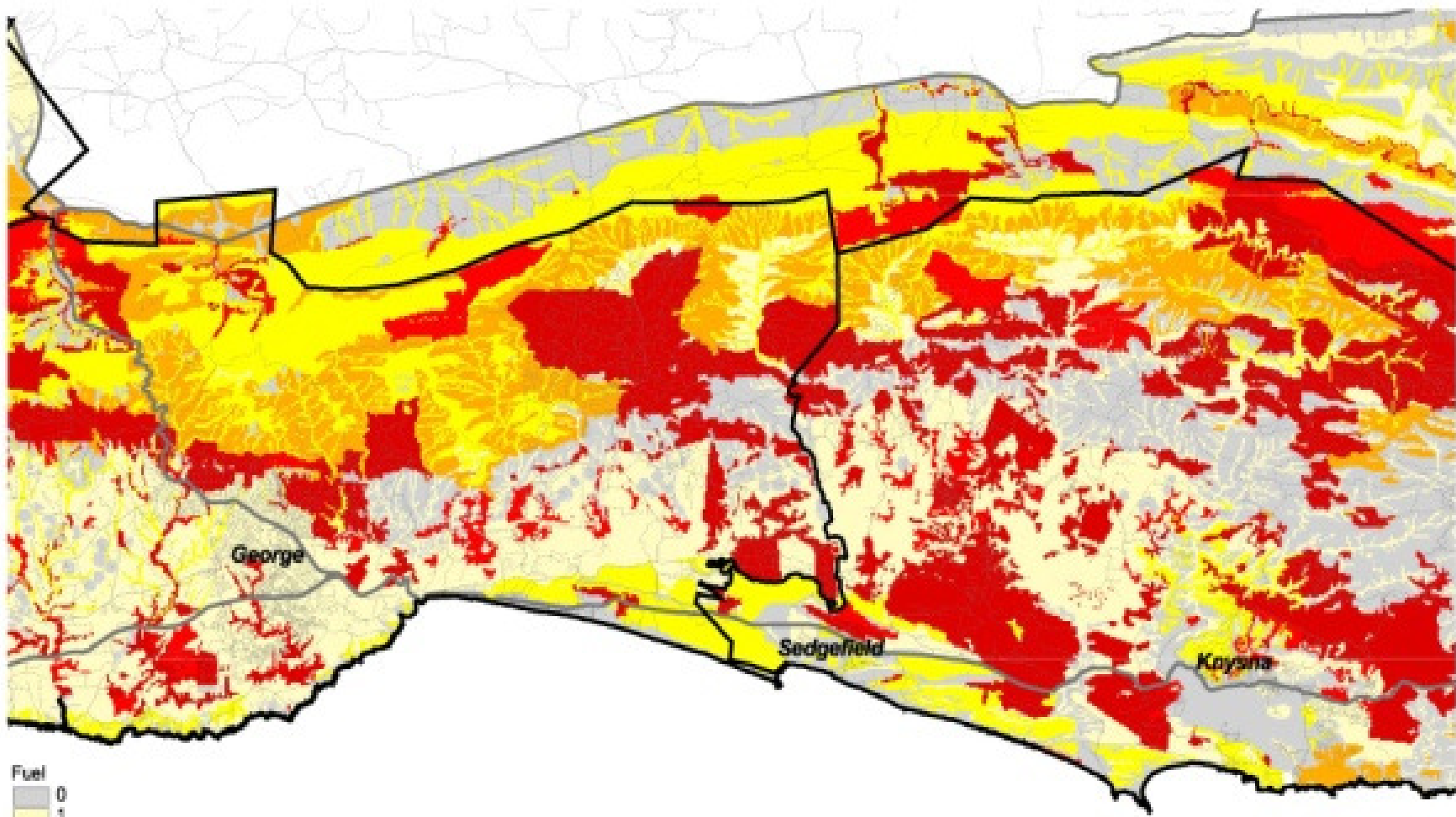
**Research:
Towards a Risk and Gap
Analyses**





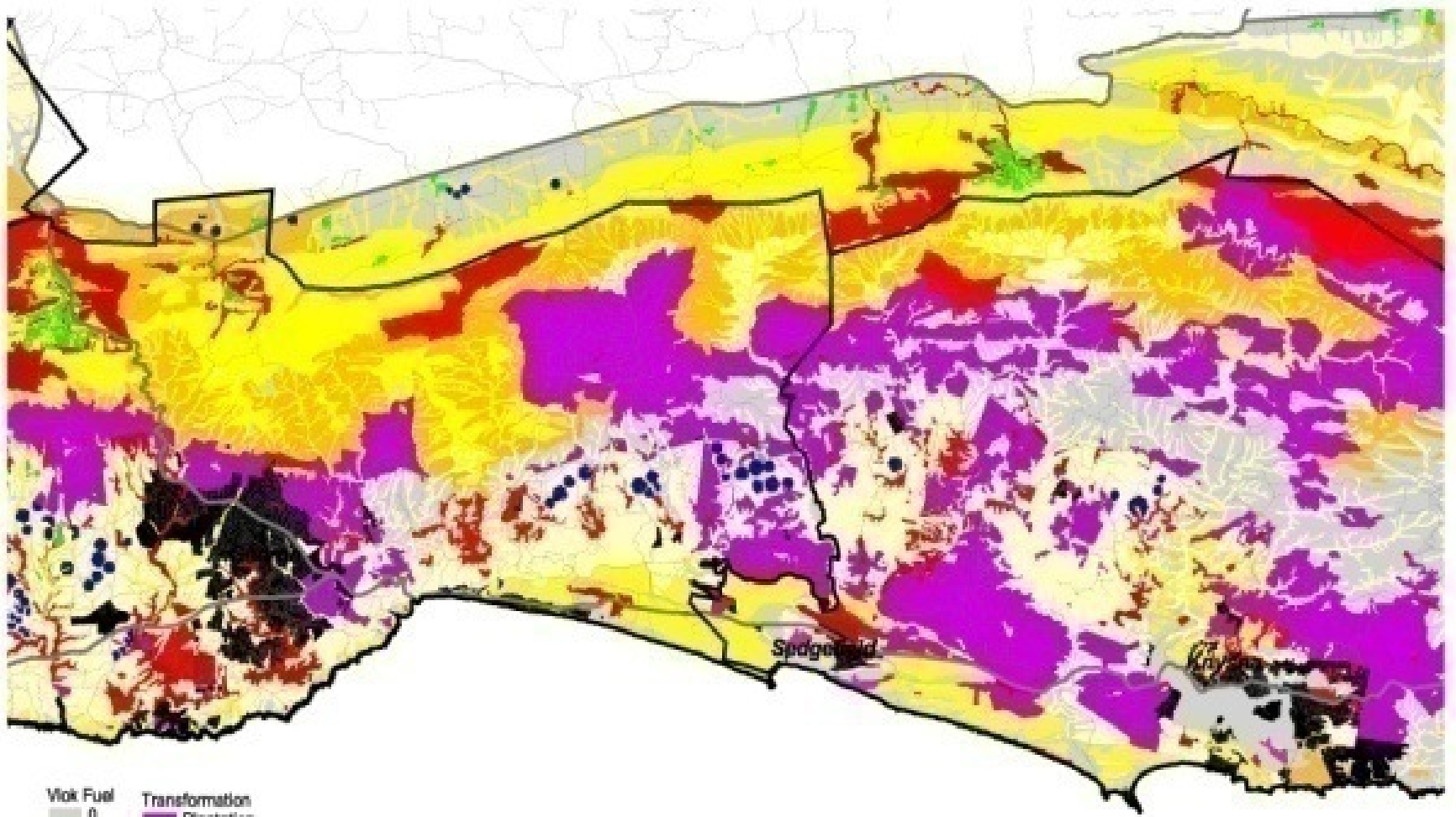
GRI Fire Risk Assessment & Integrated Management Plan





GRI Fire Risk Assessment & Integrated Management Plan

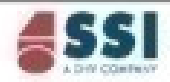


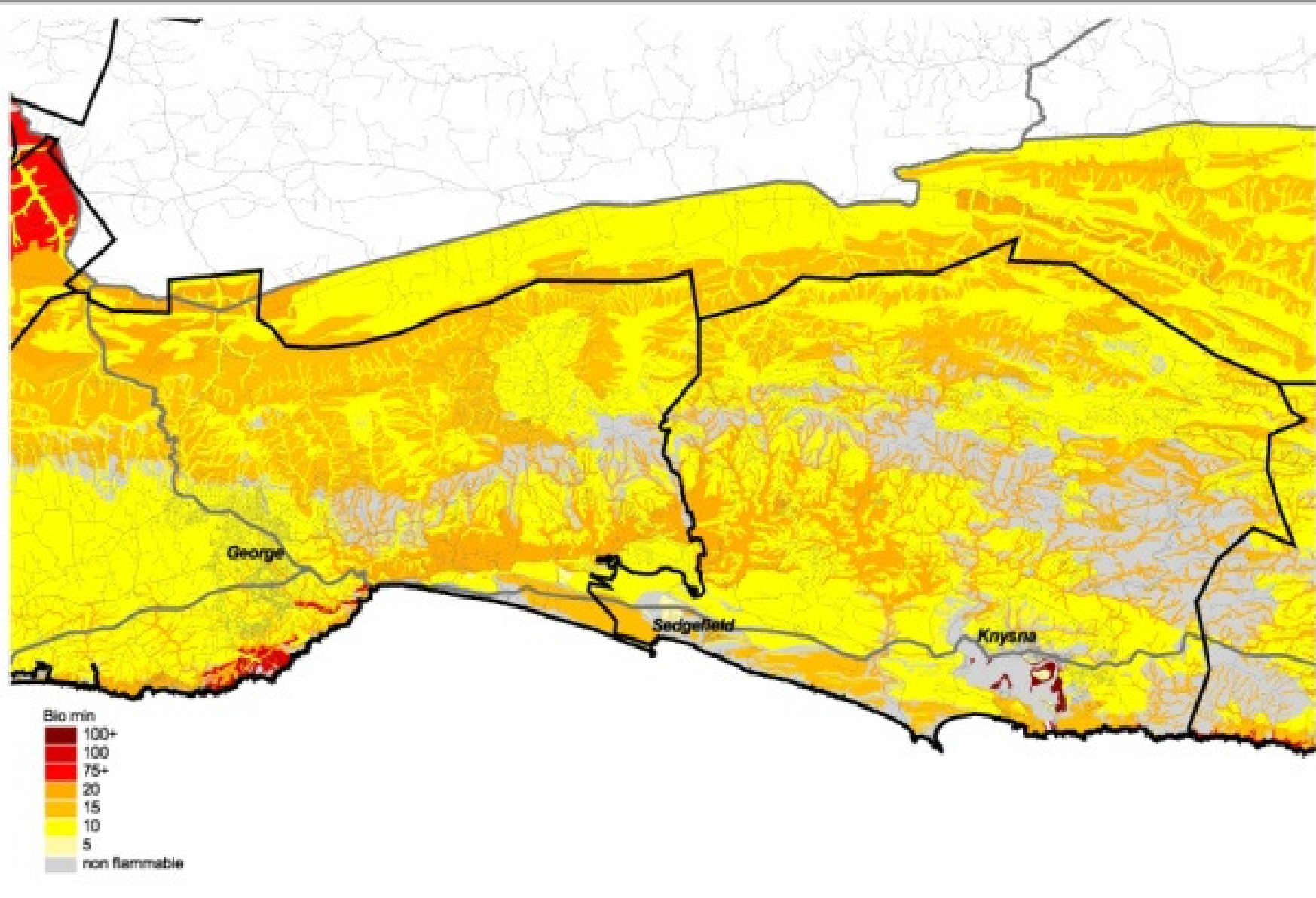


- | | |
|-----------|----------------|
| Wick Fuel | Transformation |
| 0 | Plantation |
| 1 | Urban |
| 2 | |
| 3 | Hort/Vit |
| 4 | |
| 5 | Pivots |



GRI Fire Risk Assessment & Integrated Management Plan

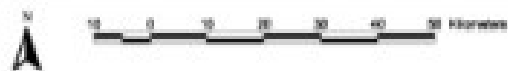
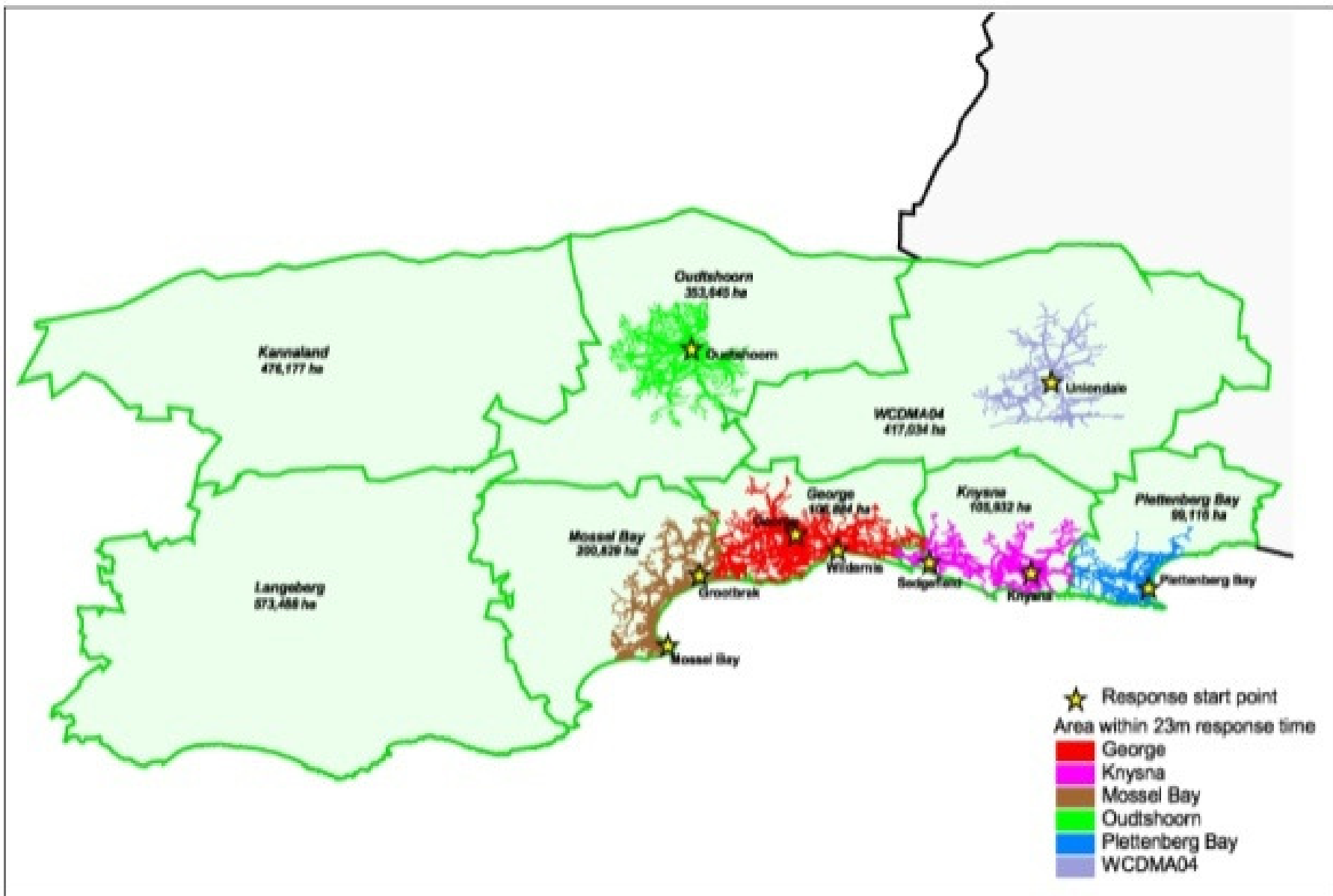




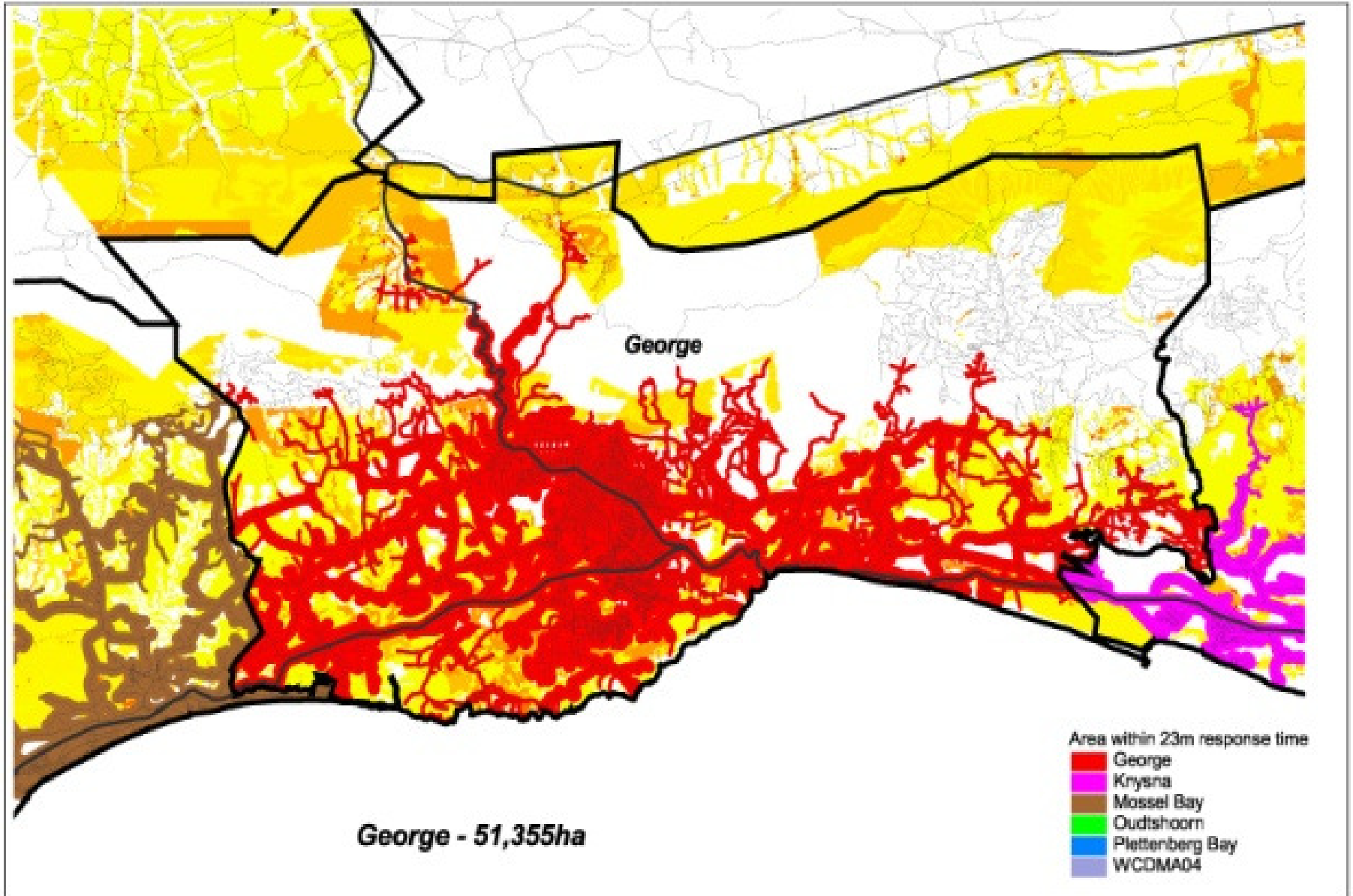
0 5 10 kilometers

GRI Fire Risk Assessment & Integrated Management Plan





GRI Fire Risk Assessment & Integrated Management Plan



Interesting Thoughts



Interesting thoughts

- 70% of SA is subject to fire risk
- 57% is subject to high or extreme fire risk and land degradation if not managed
- To do integrated management one needs to understand how ecosystems work and how fire influence them
- Some vegetation is fire dependant and some climate dependant
- Fire is natural and should be used as a tool to manage land
- Invading weeds has changed the way we used to experience fire
- Poor communities are hit hardest by bad fires
- Once natural areas are changed by human, it needs to be managed – this includes applying fire.

CONCLUSIONS

- Integrated fire management works, and where it is applied, wildfire damage is significantly reduced.
- It addresses internal as well as external wildfire threat.
- It is conservation friendly.
- It is cost-effective.
- Catastrophic fires can not be prevented with good fire fighting – fire prone areas need to be managed scientifically

- Integrated fire management consider the needs of all role players in an area
- Integrated fire management assist role players to work together and pool resources
- Integrated fire management will save the community money and prevent losses

Thank you

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