



**Western Cape
Government**

Environmental Affairs and
Development Planning

BETTER TOGETHER.

WC ECOLOGICAL INFRASTRUCTURE INVESTMENT FRAMEWORK

DEDAT Green Economy Reference Group

Cape Town Lodge

F Balayer

12 March 2020

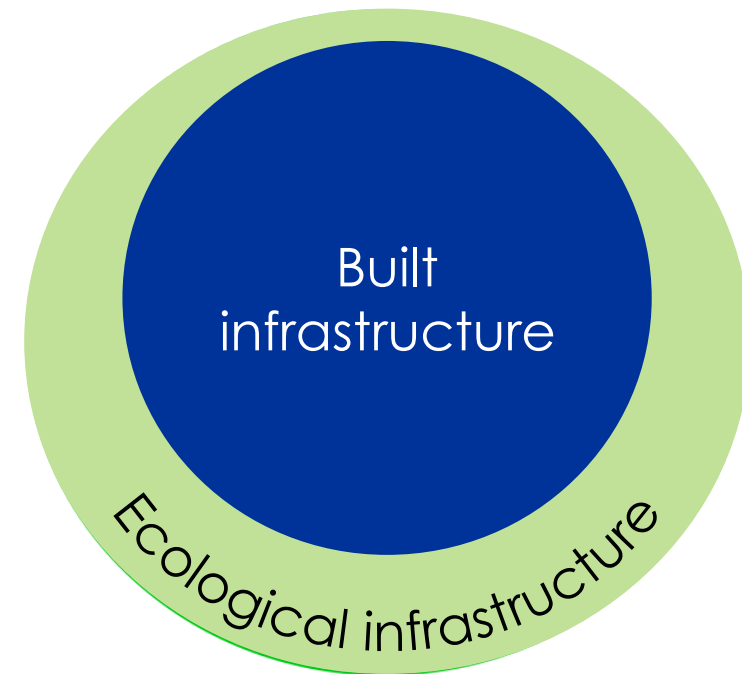
Ecological Infrastructure (EI)

“Naturally functioning ecosystems that generate valuable services to people. It is the nature based equivalent of built infrastructure and is just as important for providing services and underpinning economic development” (SANBI, 2016)

Examples of EI:

- healthy mountain catchments
- rivers
- wetlands
- coastal dunes
- nodes and corridors of natural habitat

...which together form a network of interconnected structural elements in the landscape.



EI & the Green Economy

“An inclusive green economy is one that improves human well-being and builds social equity while reducing environmental risks and scarcities” (UN Environment)

Healthy intact EI provides:

- Products (e.g. agricultural produce, medicines)
- Regulatory functions (e.g. flood reduction, clean air/water, stabilisation of soils)
- Life-fulfilling functions (e.g. identity based on a sense of place, recreational activities, psychological well-being)

Investment into EI is a basic requirement to establish a Green Economy

Threats to EI in the Western Cape

- Unsustainable use
- Transformation
 - inappropriately sited and unlawful agriculture practices
 - Urban development and infrastructure
- Lack of coordination in management and investment within the landscape
- Land degradation
- Threats from fires
- Invasive alien species (AIS)



Photo: Odette Curtis-Scott



Photo: Henry Cunningham

Ecological Infrastructure Investment Framework (EIIF)

Purpose of the EIIF

- To **guide decision-makers** from the public and private sector in making choices around **where – and how – to invest in order to promote the resilience of the Western Cape’s EI.**
 - Provides a point of departure for further exploration and planning by investors in the context relevant to their proposal (e.g. time, spatial and institutional context of the investor, as well as the proposed investment).
- Analysed the following risks & vulnerabilities:
 - Water supply (surface & ground water)
 - Fire
 - Flooding
 - Erosion / Rangeland degradation

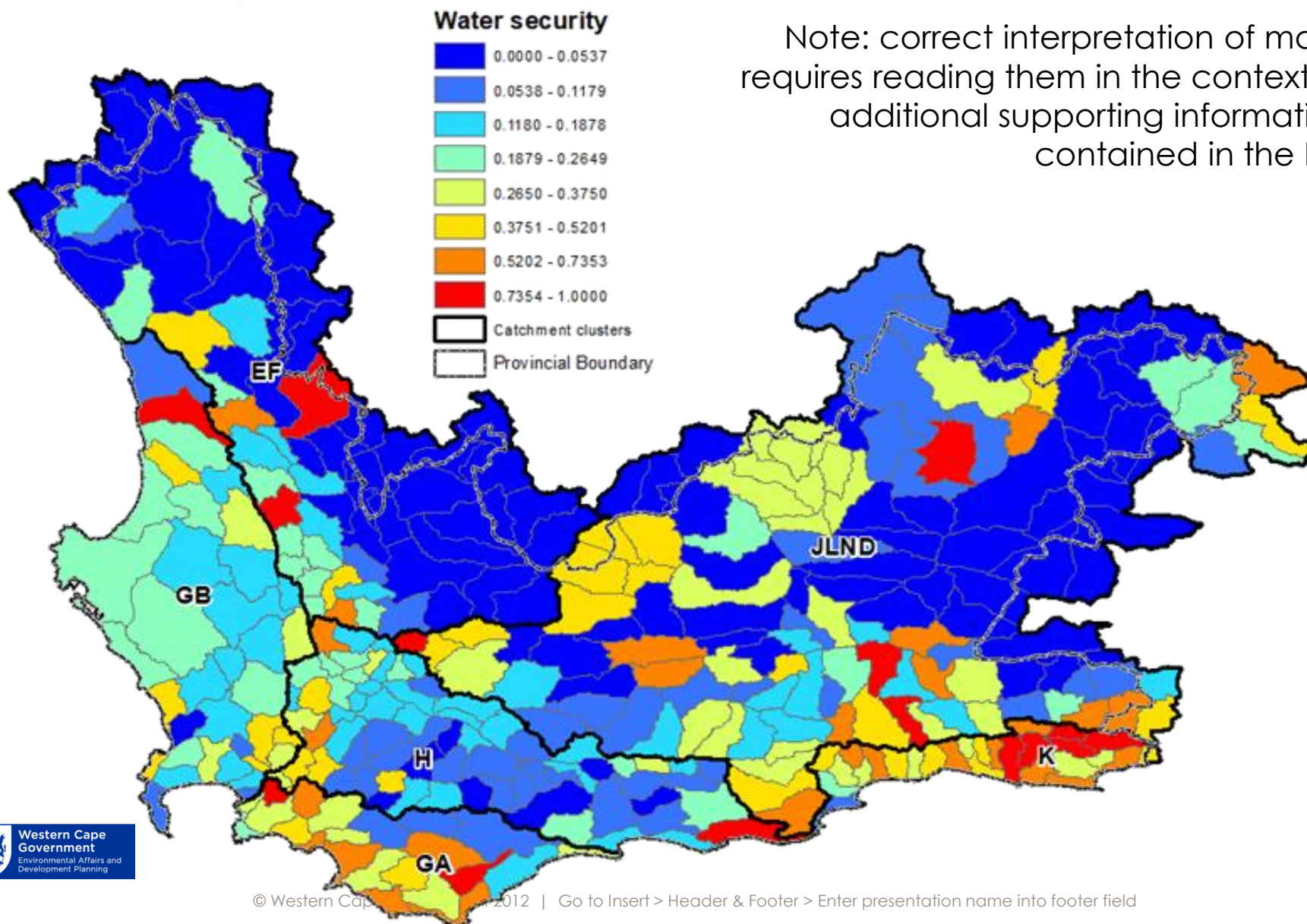
Ecological investment

Opportunities for EI restoration through investment strategies which focus on collaborative funded interventions:

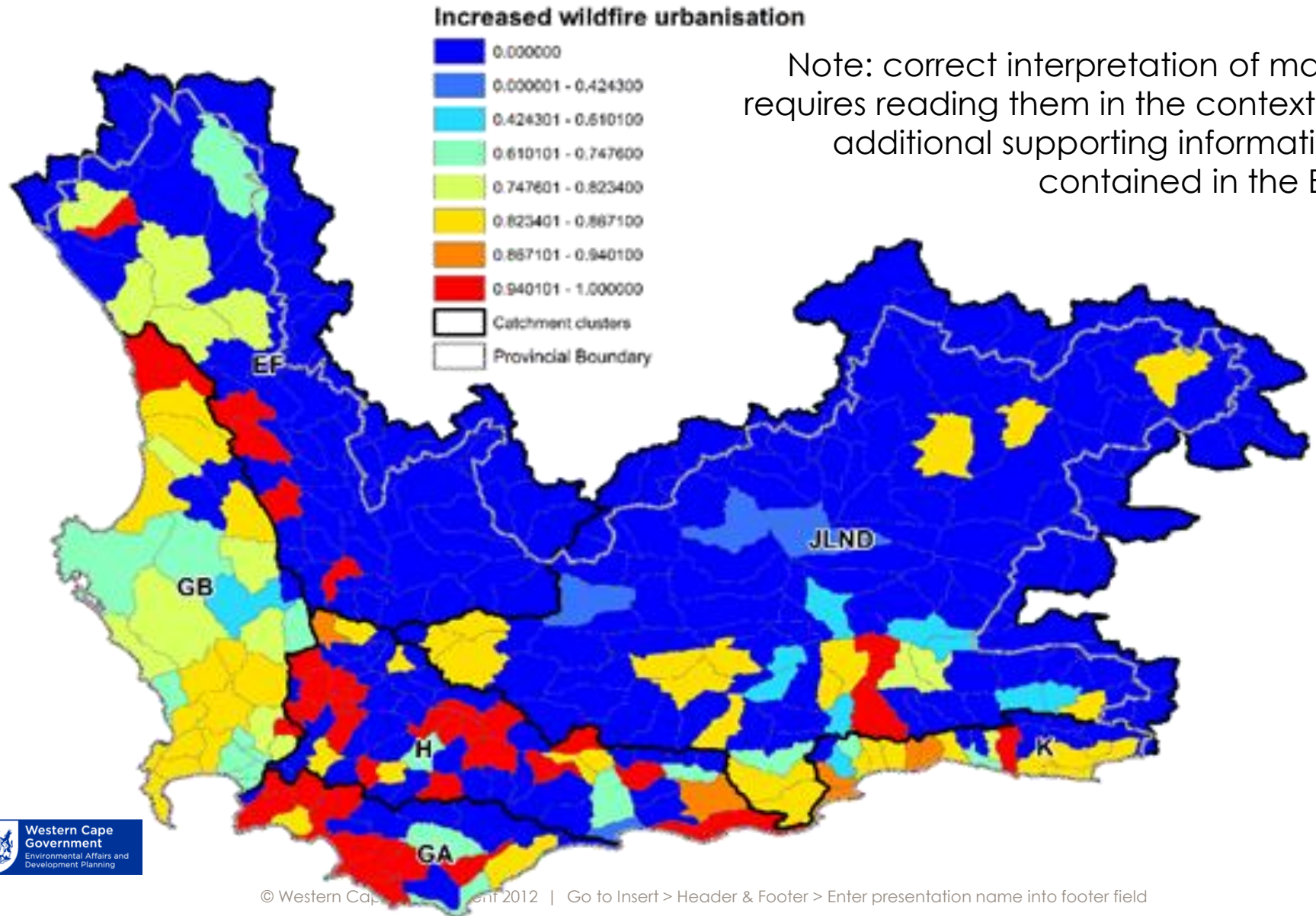
- Control of AIS (Alien Invasive Species Strategy) & fuel load reduction
 - Via Management Unit Control Plans (MUCPs)
- General ecosystem rehabilitation
- Protection and rehab of rivers, wetlands & estuaries
- Conservation Agriculture
- Integrated Fire management
- Indirect mechanisms:
 - Improved awareness; better M&E; better planning, etc.

Spatial catchment prioritisation – water security

Note: correct interpretation of maps requires reading them in the context of additional supporting information contained in the EIF

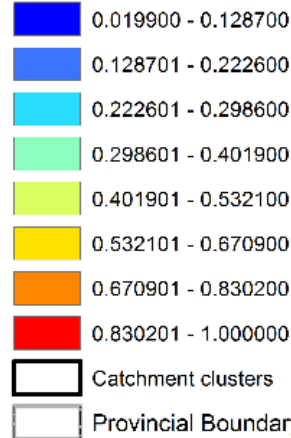


Spatial catchment prioritisation– wildfire hazard

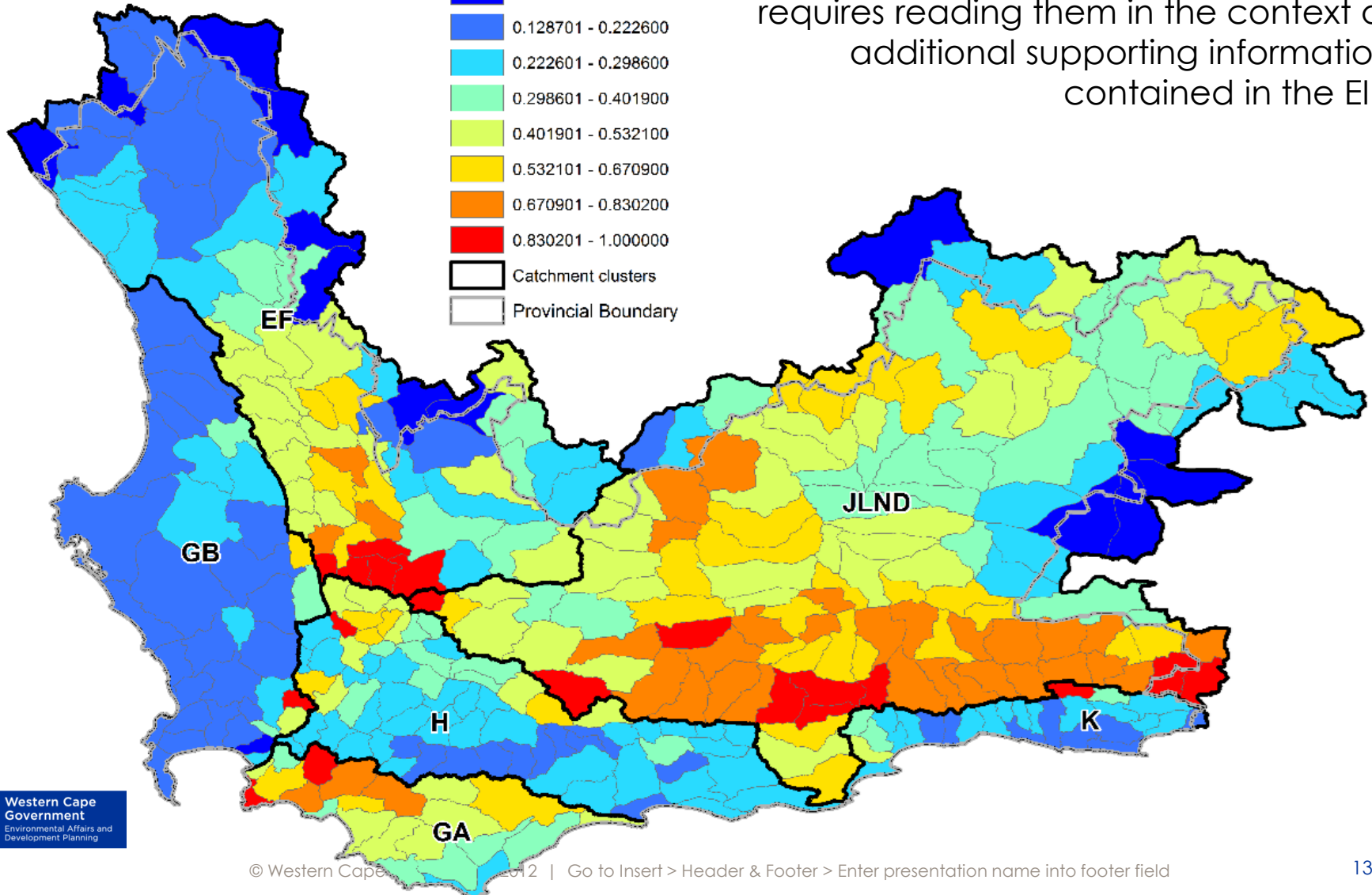


Spatial catchment prioritisation– rangeland degradation

Rangeland degradation

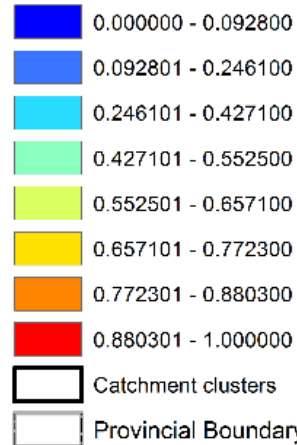


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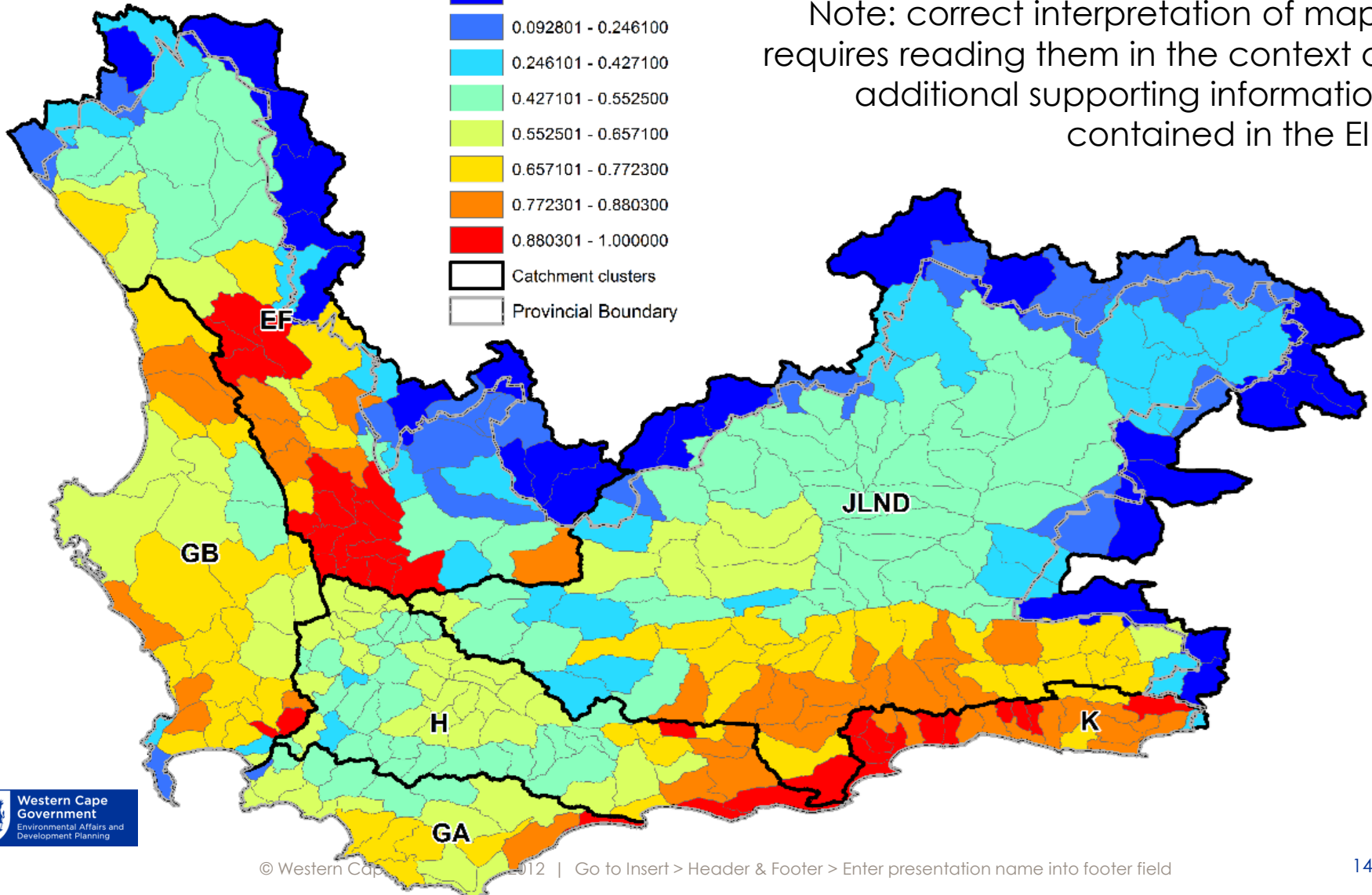


Spatial catchment prioritisation– flood degradation

Increased flood degradation



Note: correct interpretation of maps requires reading them in the context of additional supporting information contained in the EIF



Financial mechanisms

Government mechanisms

- Government appropriation for Provincial EI programme (e.g. LandCare)
- Water tariffs and charges
- Government Financial and Regulatory Incentives and Disincentives

Supporting mechanisms

- Philanthropic and donor mechanisms for investment in EI
- Encouraging markets for EI
- Encouraging markets for products from EI rehabilitation activities (e.g. biomass)

Markets for Ecological Infrastructure

Move to define EI as part of the built environment and infrastructure asset class

- Municipal Infrastructure Grants and Urban Sustainable Development Grants could be used to restore/maintain EI
- Green bonds [e.g. City of Johannesburg (R1.5b) & CoCT (R1b)]
 - Revenue generated by the EI or disaster cost avoided used to service the debt



Next steps

Currently developing:

- Alien Invasive Species Strategy
- Management Unit Clearing Plans for key catchments
- Investment Implementation & Monitoring Plan

Related project:

- Keurbooms catchment Payment for Ecosystem Services arrangement

Link to EIFF overview video [06:23]: <https://youtu.be/ivR7zKs1Jqk>

Thank you

Contact Us



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