Presentation to Public Hearing on

the Efficacy of South Africa's EIA Regime:

Building on four decades of continuous improvement

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STARTING POINT: A CONTEXT FOR EA

- EA based on interventionist theory of the state, to protect rights of individuals & environment, from activities of others
- EA MUST NOT JUST **BE DONE**,
  SOMETHING MUST **BE DONE BY IT**

EA regulates public & private sector proposals, goal is to "find ways to improve environmental sustainability … by consideration of feasible **alternatives**, appropriate **mitigation** of adverse impacts **and enhancement** of benefits, the **equitable distribution of** these **impacts and benefits**"

(EAPASA Constitution, Definition of EA, section 2.11)

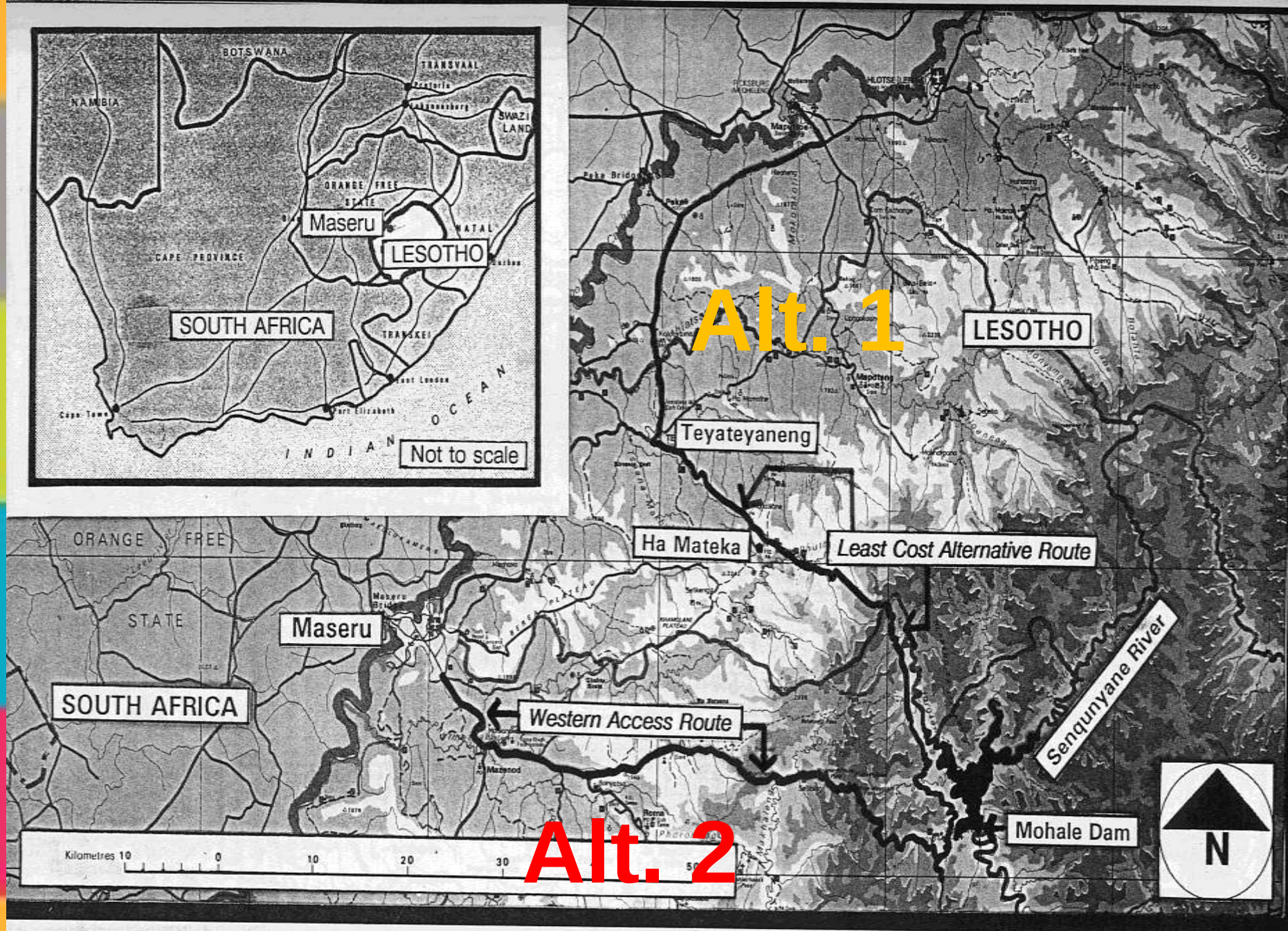
STAGES IN EA PROCESS

- *Screening and scoping*: early on, decide if EIA required; if significant issues, shift EA from ***cautionary to corrective*** approach, in formulating alternatives to proposal
- *Assessment (more knowledge based)*:
  Information for a decision
- *Evaluation (more value based)*:
  Weigh information, in light of people's values and preferences, to make a decision
- *Management of implementation (more technical)*:
  Mitigation; inspection; monitoring & auditing

EIA makes better, more cost effective developments

Environmental design – route layout:

EIA for Bramlin – Markman Arterial Road, NMBM (PE)



MAP 1. LOCALITY MAP

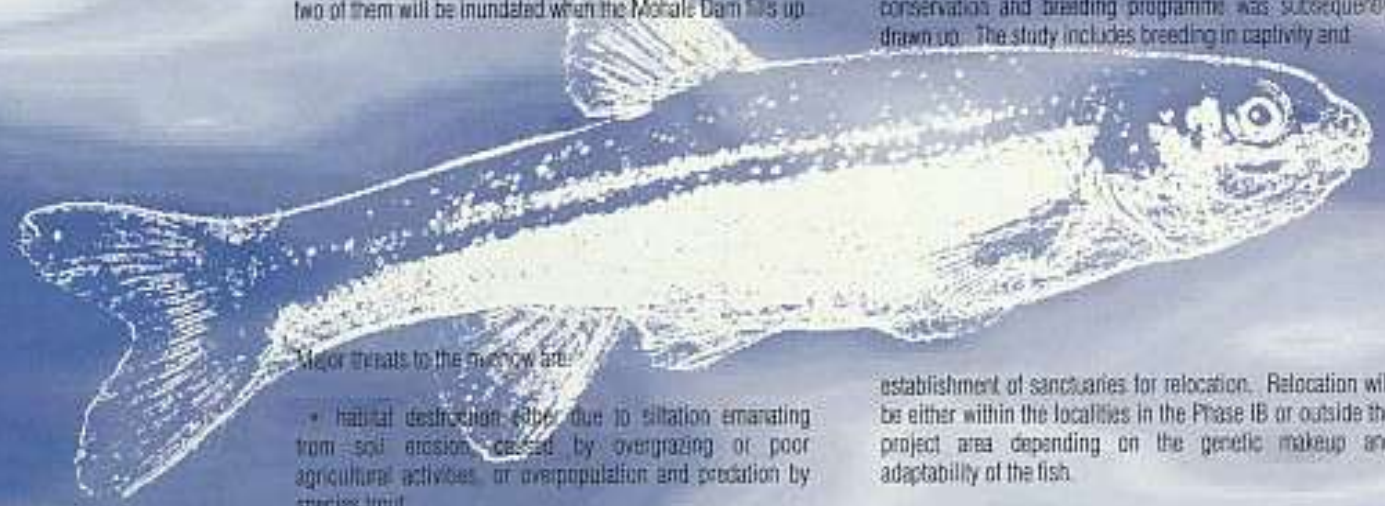
EIA: alt. routes to Mohale Dam, Lesotho

Scale 1:500000

Maloti Minnow
'Pseudobarbus Quathlambae'

The Maloti Minnow is endemic to Lesotho, and it is classified as endangered (International Union for Conservation of Nature and Natural Resources, 1987).

The fish is found in eight known localities in the world, all within the boundaries of Lesotho. Four of these localities fall within the catchment area of Phase IB of the LHWP, and two of them will be inundated when the Mohale Dam fills up.



Major threats to the minnow are:

- habitat destruction either due to siltation emanating from soil erosion caused by overgrazing or poor agricultural activities, or overpopulation and predation by species trout.
- development projects such as the LHWP with construction activities.
- probable pressure to increase trout population for angling.

An ecological study was undertaken from January 1991 into 1992 to establish the existence of the minnow in the LHWP area. A proposal to study the minnow and establish a conservation and breeding programme was subsequently drawn up. The study includes breeding in captivity and establishment of sanctuaries for relocation. Relocation will be either within the localities in the Phase IB or outside the project area depending on the genetic makeup and adaptability of the fish.

The work on the conservation programme has started, and this includes artificial breeding to ensure species survival.

Environmental evaluation of proposed alternative roads to the Mohale Dam

Prepared by:
Reuben Heydenrych

Alt. 1 **Alt. 2**

Framework Table 2. Decision Framework

Shading indicates preferred alternative for specific impact.

Interest Group	Impact	Alternative: Least Cost Alternative Route	Alternative: Western Access Route
Transport, development and economic policies	National Planning Objectives	Impact: Positive • Supports the national planning objectives • Provides temporary jobs on the road. No upgrading of Maseru railhead or construction of Maseru bypass. Provides less jobs than WAR. Significance: Moderate	Impact: Positive • Supports the national planning objectives • Provides temporary jobs on WAR and Maseru bypass and also permanent jobs associated with the upgraded Maseru railhead facility. Provides more jobs than LCAR. Significance: High
	Lesotho Road Network	Impact: Negative • LCAR is not in accordance with existing road plans. • LCAR is completely new road - places additional burden of M 154 000 per year on road maintenance budget after LHDA responsibility for maintenance is over. Significance: High	Impact: Positive • WAR accords with existing plans for upgrading of road from St. Michael's to Thaba-tseka. • WAR results in saving of M10 million for upgrading. • M179 000 per year maintenance saving over five years while LHDA maintains road. Significance: High
Travellers	Traffic flow in Maseru	Impact: Neutral • Maseru bypass will not be constructed - LCAR will have no effect on traffic flow in Maseru. Significance: Not applicable since impact is neutral	Impact: Positive • Maseru bypass will be constructed. Bypass will alleviate traffic congestion in Maseru city centre. Significance: High
Occupiers	Agricultural resources	Impact: Negative Losses: • 151 920 m² of cultivated land • 87 fruit trees • 20 non-fruit trees • 6 winnowing areas • 9 kraals • 4 stables Significance: Moderate	Impact: Negative Losses: • 6 655 m² of cultivated land • 73 fruit trees • 104 non-fruit trees • 1 winnowing area • 4 kraals • 1 stock pen • 1 dip tank Significance: Moderate
	Local dagga-based economy	Impact: Negative • Loss of income to 65% of households (about 800 people) • Loss of income to Jordanne Valley population between M200 000 and M500 000 per year. Significance: High	Impact: Neutral • No impact - dagga-based economy will not be affected because no dagga is grown along the WAR. Significance: Not applicable since impact is neutral
Occupiers & users of facilities	Houses, businesses and facilities	Impact: Negative • 19 residences • 2 businesses • 3 toilets Significance: Moderate	Impact: Negative • 27 residences • 4 businesses • 2 shacks and other structures • 9 toilets Significance: High
	Access to facilities, goods and services	Impact: Positive • LCAR provides road access where none existed before. • Improved access to: Clinics, mortuaries, friends & family, agricultural requirements, livestock facilities, regional markets and schools. • Improved access for: migrant workers, emergency services. • facilitates easier transport of large items. Significance: High	Impact: Positive • WAR is an existing road, so it does not provide access to facilities, goods and services which were inaccessible by road before. • Improved (faster) access to clinics is major benefit. Significance: Moderate
Policies for conserving and enhancing the area	Wetlands	Impact: Negative • 3860 m² of wetland lost. Significance: High	Impact: Negative • 978 m² of wetland lost. Significance: Moderate
	Aquatic fauna	Impact: Negative • Local extinction of two possibly genetically unique populations of rare & endangered species: Maluti minnow (*Pseudobarbus quathlambae*) and Aquatic River frog (*Rana vertebralis*). • Greater magnitude of siltation than WAR during and after construction. • Possible increased impact due to borrow pits and quarries. Significance: High	Impact: Negative • No rare or endangered species known to occur in any streams or rivers affected by the WAR. • Smaller magnitude of siltation than LCAR during and after construction. Significance: Low
	Spiral aloes	Impact: Negative • Large magnitude of impact because aloe populations have not been affected by collection in the past. • Large undisturbed population at Soosa village and many other smaller populations near route. Significance: High	Impact: Negative • Small magnitude of impact since most aloe populations have already been reduced in size due to collection. Significance: Moderate
Financial implications		Capital Cost: M120 361 000 Upgrading Cost: M 5 004 770 Compensation Cost: M 654 775 Transportation Cost: M 98 517 000 Maintenance Cost: M 511 290 Total Cost: M225 048 835	Capital Cost: M 92 035 108 Upgrading Cost: M 7 584 970 Compensation Cost: M 1 572 935 Transportation Cost: M 76 645 000 Maintenance Cost: M 391 230 Total Cost: M178 229 243

For each factor, best alternative shaded

Tranport, development and economic policies

Policies for conserving and enhancing the area

Financial implications

PHASES IN EVOLUTION OF EIA IN SA

- *1970 to 1989*:
  Voluntary practice, few guidelines
- *1989 to 1997*:
  Formalising voluntary practice, under IEM Guidelines
- *1997 to 2006*:
  Compulsory practice under first EIA Regulations
- *In 2006 and 2010*:
  Compulsory practice under revised EIA Regulations

BUSINESS REPORT
www.businessreport.co.za
SOUTH AFRICA'S NATIONAL FINANCIAL DAILY
THURSDAY, APRIL 20 2006

HIGH TRADE HOPES

New rules to speed up EIA applications

QUENTIN WRAY

Johannesburg – Years of effort by developers and some bureaucrats to have South Africa's stringent environmental impact assessment (EIA) regulations streamlined have paid off.

The new rules, which will be gazetted tomorrow and come into effect on July 1, give the government 60 to 105 days to review and make decisions on EIAs for large infrastructure projects such as major dams and roads, and 45 days to decide on minor projects such as small stadiums.

Under the current system, half the EIA applications are finalised within six months but 6.5 percent take more than two years, with some taking more than three.

Joanne Yawitch, the deputy director-general in charge of environmental quality and protection in the department of environmental affairs and tourism, said the old regulations, in place since 1997, "were cumbersome and didn't distinguish between different kinds of developments".

Apart from the stipulation of time frames, the new rules divide EIAs into nine themes, including property development, energy generation and industrial activities.

They also allow for class applications for multiple activities under one process, the use of environmental management frameworks for geographic areas, and the need for environment assessment consultants and reviewers to be certified.

The new rules have been welcomed, although questions remain about whether the government has the capacity to administer them.

Mike van Blommestein, an independent town planner, said EIAs were a "hindrance in getting things done" and created a major time problem. He said the government needed more capacity to apply the new rules and asked what recourse there would be if the time frames were not adhered to.

Standard Bank chief economist Goolam Ballim welcomed the move, saying it would cut the hassle factor of doing business in the country. But he did not see it as a catalyst for new investment as environmental approvals were a minor hindrance compared with things such as high telecommunications and logistics costs.

Tony Twine, an economist at Econometrix, disagreed. "Anything that complicates the movement along the investment decision path ultimately has to be a deterrent to investment."

How appeals were handled was also important and these would be exploited by all sides, Twine said.

Cathy Kay of the Save the Wild Coast Campaign, which is objecting to a variety of large infrastructure projects in the Eastern Cape on environmental grounds, said the new regulations were a step in the right direction.

But she was worried that small, environmentally sensitive areas could be irreversibly damaged because of less stringent EIA requirements for small projects.

Even though politicians can proclaim areas as unsuitable for development, Kay said enforcement was weak and there was a lack of capacity within the government to make these decisions without the extensive public input that was now part of all EIAs.

Maitland Seaman, who chairs the Interim Certification Board for Environmental Assessment Practitioners, welcomed the requirement that everybody who carries out EIAs be certified.

He guessed that there were more than 1 000 EIA practitioners operating but that anybody could do it irrespective of qualifications. "Certification will deal with this."

Since EIA regulations were introduced in 1997, provincial and national governments have received more than 43 600 applications.

Double-edged swords, Page 2

20 April 2006

Received 43 600 EIA applications between 1997 and 2006

Basic Assessment Process

(Source: DEA&T, 2006)

- Activities contained in Listing Notice 1 are subject to a basic assessment process
- **Smaller scale activities**
- Predicted **impacts** are generally known and can be **easily managed**
- Will be further limited through exclusions

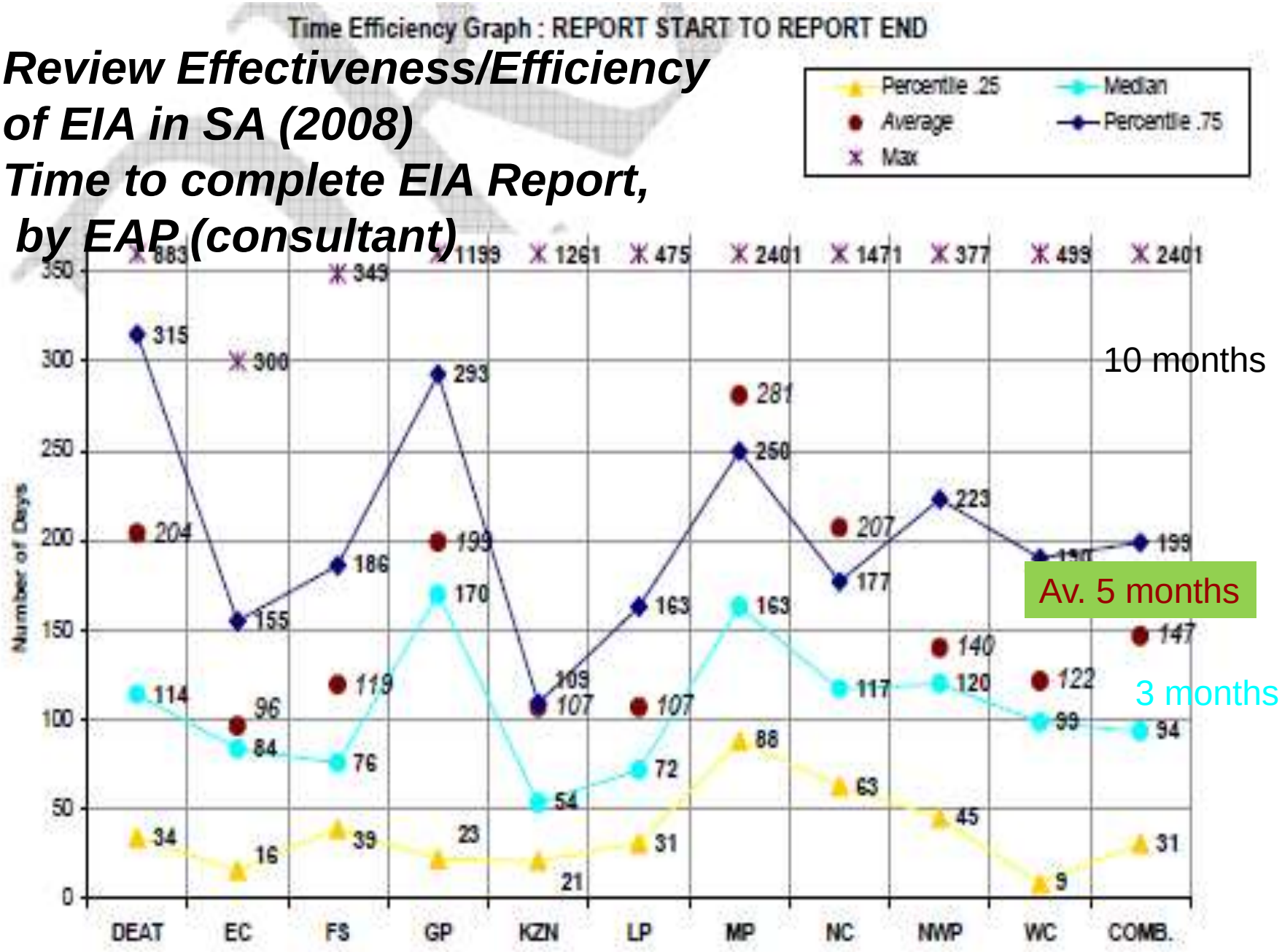
NEMA EIA regs of 2006 (and 2010): Timelines for authority to decide on EIA

- ***Acknowledge receipt*: 14 days**

- ***Decide on BA*: 30 days**
- ***Decide on EIA*: 60 days**
- ***If specialist review*: plus 45 days, total of 105 days**

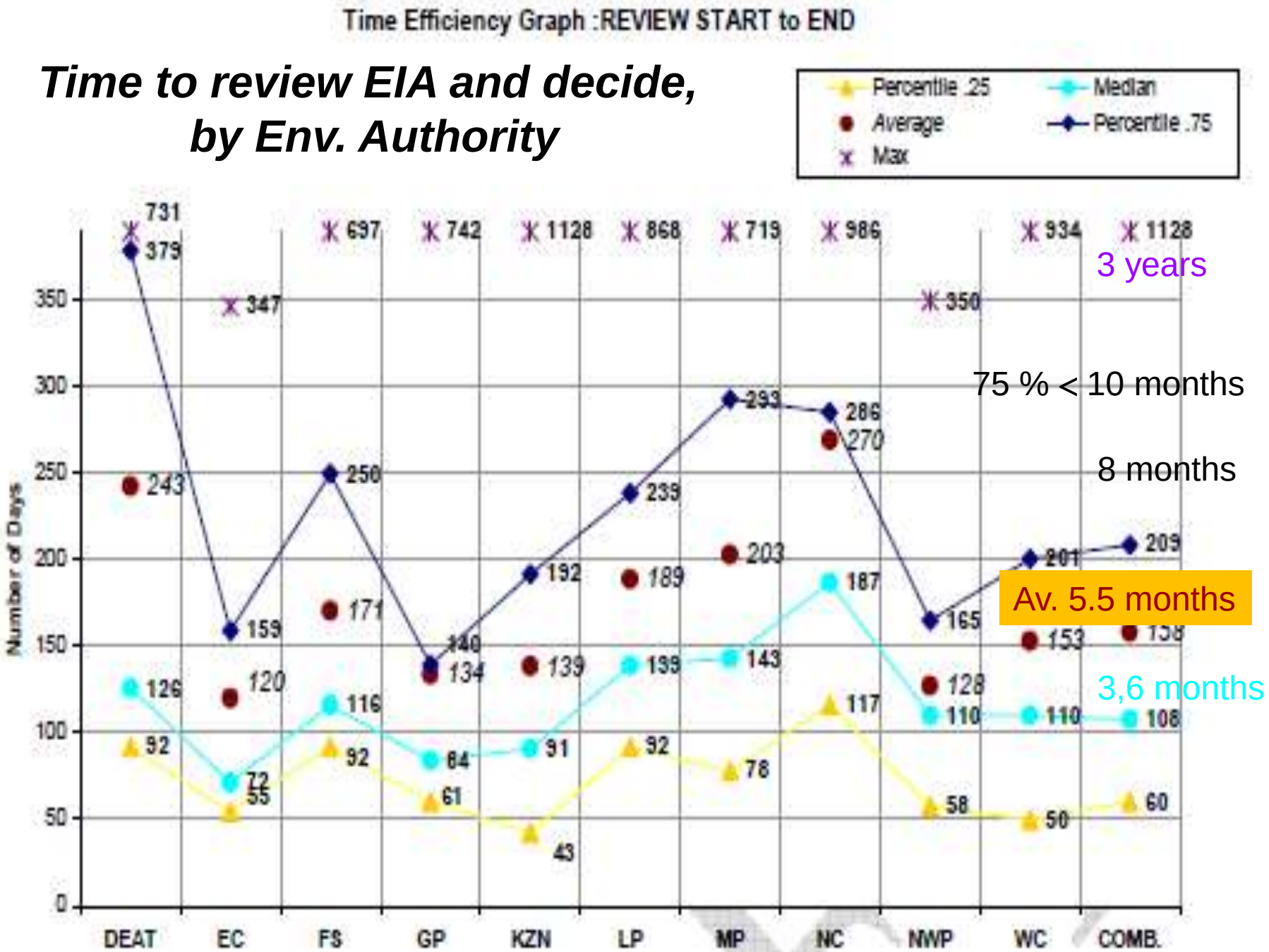
- **End 2008: 70% applic. processed in timeframes**

Review Effectiveness/Efficiency of EIA in SA (2008)
Time to complete EIA Report, by EAP (consultant)



***Sample**: 354 EIAs 1997-2006; 148 EIAs 2006-2008 = TOTAL 502 cases*

Time to review EIA and decide, by Env. Authority



DEA's EIA&M Strategy process

Project Steering Committee meeting, 15 - 16 August 2013, to agree on Platforms 1-8

1. All IEM processes guided by sustainability vision/intent
2. There is effective integration between spheres of government and between government departments regarding IEM
3. Technical tools effectively contribute to enabling the principles of NEMA
4. Adaptive management is informed by monitoring and evaluation of systems and processes
5. The desired outcome is to establish a professional (as opposed to a merely independent) and transformed environmental sector

DEA's EIA&M Strategy process

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6. The establishment of environmental information management systems that are up-to-date, available and accessible to all role players in IEM
7. A situation where all role players are capacitated in terms of environmental awareness and environmental management instruments
8. Facilitating an understanding of the role of public participation in an appropriate public participation process

Please give serious consideration
to outcomes of EIA&M strategy!

MY MAIN RECOMMENDATIONS

- Incrementally improve the functioning of existing systems of environmental assessment and management
- South Africa's environmental authorization requirements need to evolve into '*more strategically and proactively geared and streamlined approaches*' (EAPASA, 2012), which requires that we do more SEAs, EMFs and fewer project level EIAs
- Minister of Water and Environmental Affairs, Ms Molewa, to appoint EAPASA as a Registration Authority for EAPs

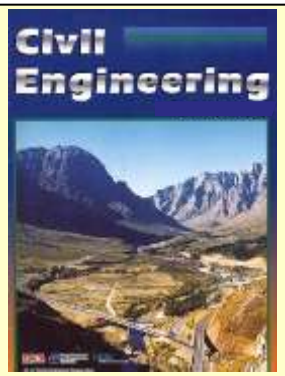
SPECTRUM OF ENVIRONMENTAL MANAGEMENT TOOLS

Strategic Environmental Assessment (SEA)

PRE-FEASIBILITY PHASE

Environmental Impact Assessment (EIA)

FEASIBILITY & DESIGN PHASE



Environmental Management Plan (EMP)

CONSTRUCTION PHASE

Environmental Management System (EMS)

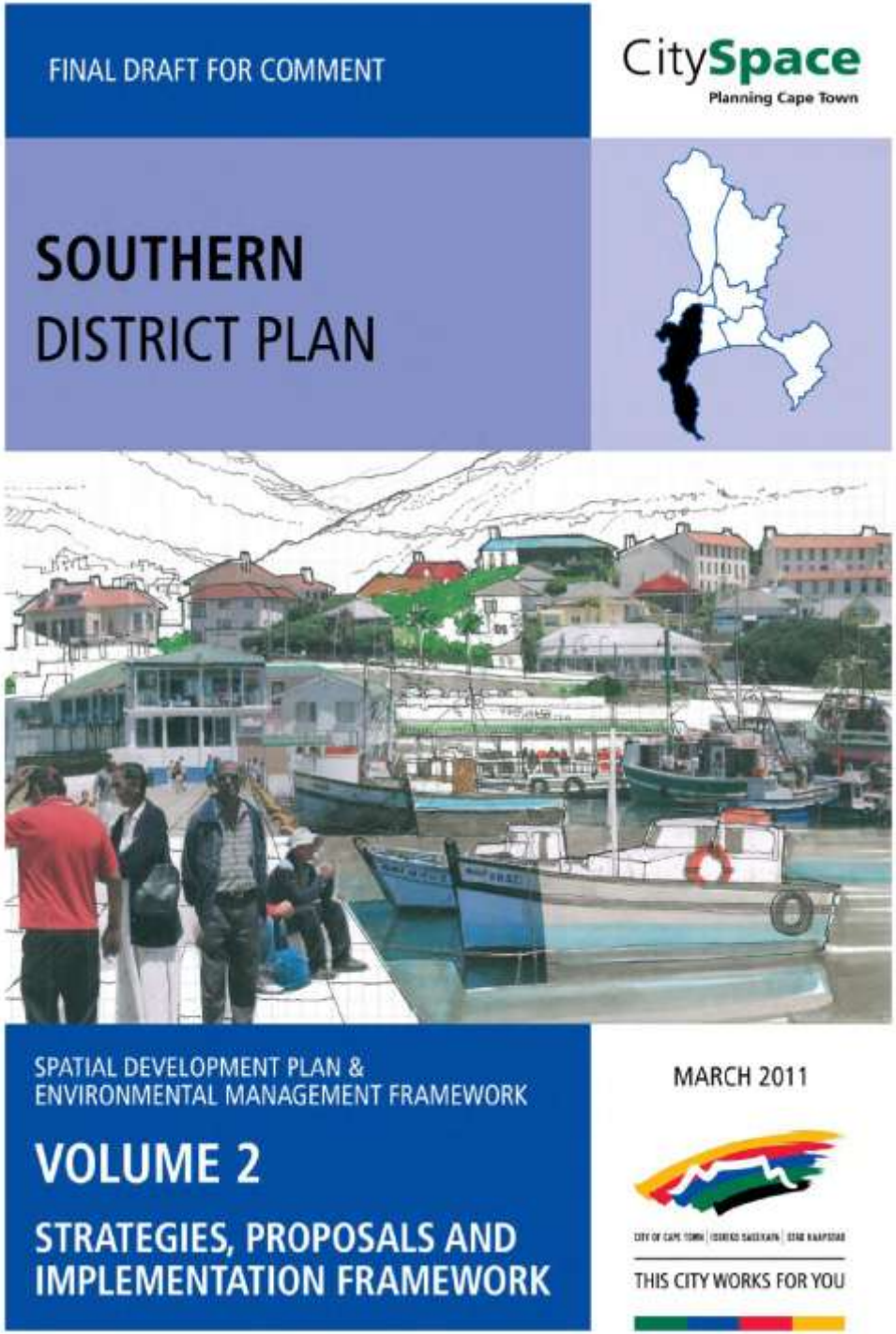
OPERATION PHASE

Rehabilitation & Closure Plan / Due Diligence Audit

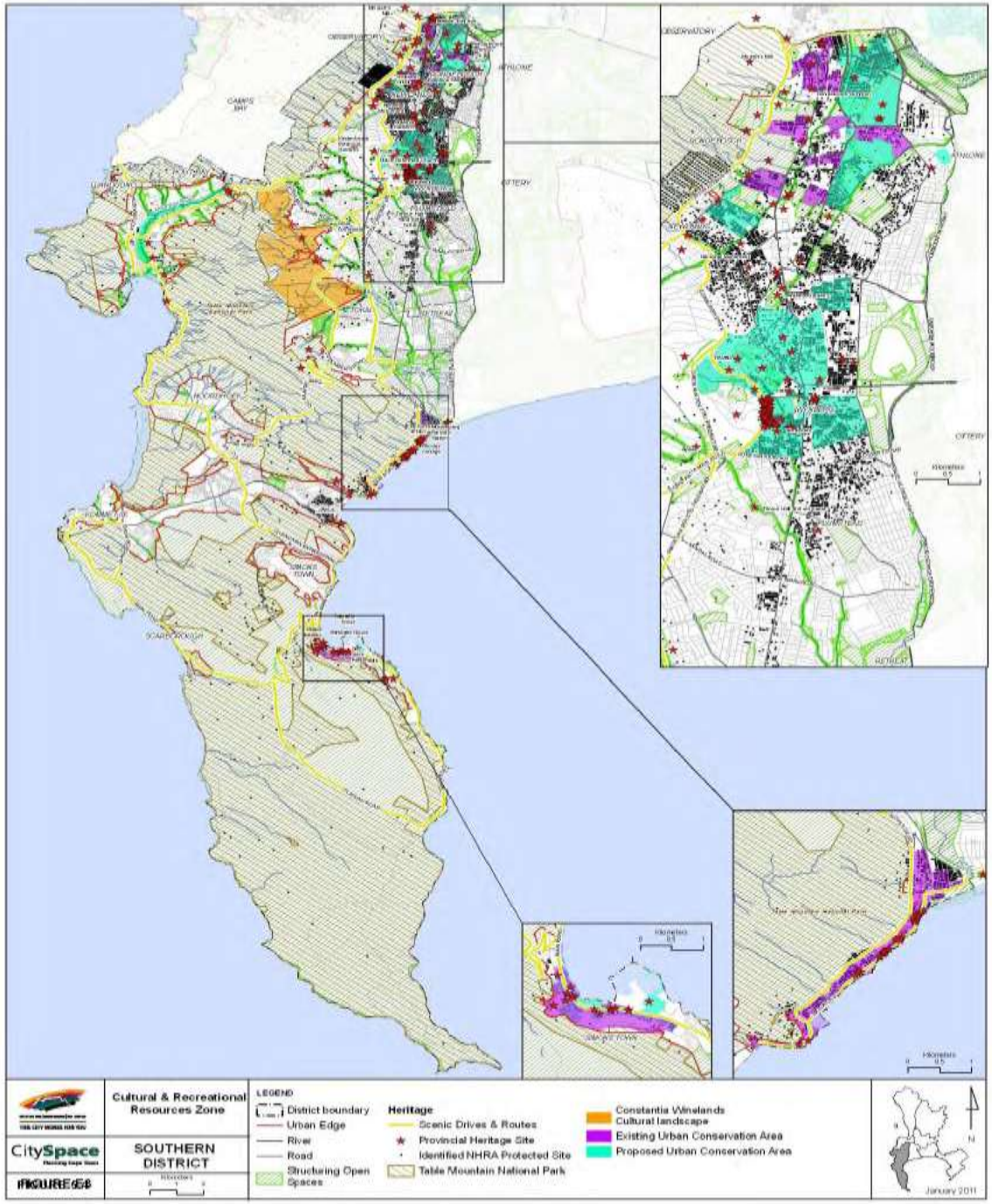
CLOSURE/ SALE PHASE

PROJECT LIFE CYCLE

Exemplar of more strategic and proactive approach, City of Cape Town



Map 5.4: Cultural and Recreational Resources Zone



ENVIRONMENTAL IMPACT MANAGEMENT TABLE: CULTURAL AND HERITAGE AREAS: Refer to Figure 5.4

Table 5.4: Cultural and Heritage Areas and Public Open Spaces

Environmental attributes[3]	Kinds of developments, land uses or activities that would be undesirable of activities	Kinds of developments, land uses or activities that may have a significant impact	Kinds of developments, land uses or activities that may not have a significant impact	Relevant policy and guideline documents for environmental management
Table Mountain National Park *The park contains (UNESCO natural) heritage and archaeological sites.*	• Comply with the SANParks' Table Mountain National Park Conservation Development Framework and South African Heritage Resources and City's Heritage Resources Section Requirements.			• D:EA&DP's Guideline for Involving Heritage Specialists in EIA Processes (2005) • D:EAD&DP's Guideline for Involving Visual Specialists in EIA Processes (2005) • D:EA&DP's EIA Guideline Series: Guideline for the Management of Development on Mountains, Hills and Ridges of the Western Cape (2002) • City Of Cape Town Scenic Routes Management Plan • City Of Cape Town Heritage Resources Strategy • City of Cape Town Heritage Resources Section series of guidelines for development • SANPark's Table Mountain National
Constantia Winelands Cultural Landscape *This is characterised by the rural viticultural landscape of the upper Constantia Valley set against the mountainous backdrop, historical avenues and trees, and vineyards associated with historical homesteads and associated elements remaining from the early development of the region.*	• Mining related activities and infrastructure. • Industrial activities. • Sub-division and densification. • High density residential or commercial. • Any alterations, additions or new structures unsympathetic to protected buildings or the general character of area. • Inappropriate outdoor advertising	• Institutional facilities. • Agri-tourism. • Tourism and hospitality facilities. • Hiking and horse trails. • Transmission towers and base stations. • Establishment of cemeteries. • Agriculture infrastructure	• Agricultural activities, especially vineyards, excluding associated new infrastructure such as bottling plants, depots and cellars. • Appropriate residential units as permitted in terms of the applicable zoning scheme and agricultural legislation.	
Urban Conservation / Heritage areas *This zone includes existing and proposed urban conservation / heritage areas.*	• Any alterations, additions, new structures or landscaping unsympathetic to protected buildings or the general character of area. Mining related activities and infrastructure. • Transmission towers and base stations • Inappropriate roadworks – including changes of surface, widening and edge treatments. • In appropriate outdoor advertising • In appropriate street furniture and	• Dependent on specific area. Suitable activities should be congruent and sympathetic to landscape / townscape. Institutional facilities (education, museums). • Tourism and hospitality facilities. Engineering and utility services. • Essential road, rail, pipelines and cables.	• Residential and commercial activities provided that are in keeping with the character of the area. • Sub-division and densification that is not materially changing the character of the area. • Appropriately scaled, sited and designed engineering and utility services, road, rail and pipeline cables. • Restoration and conservation of historical buildings and infrastructure. • Public open space.	

[3] Please note that cultural landscapes, potential archeological areas and other heritage areas have been mapped based on the best available data and have not been refined, peer-reviewed or ground-truthed.

Environmental Assessment Practitioners Association of South Africa
Advancing environmental assessment practice in South Africa
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EAPASA Standards and Criteria Committee

- An Environmental Assessment Qualification, with six outcomes, has been registered by the South African Qualifications Authority (SAQA)
- The Board is liaising with the Council on Higher Education (CHE) to set in place procedures that will allow tertiary institutions to get accreditation for their programmes
- Programmes in a range of disciplines can be accredited, eg **Masters** in City & Regional Planning; in Landscape Architecture; and in Environmental Management; similarly a **BA or BSc Hons** in Environmental and Geographical Science could be accredited, as could a Civil Engineering degree, **provided they meet the exit-level outcomes**

Board Members: Ms. Sebusisiwe Hlela (Chair); Mr. Gerrie van Schalkwyk (Vice Chair); Mr. Danie Neumann (Treasurer); Ms Snowy Mothiba (Secretary); Mr. Garth Barnes; Ms. Amanda Britz; Ms. Carmen du Toit; Mr. Paul Hardcastle; Dr. Richard Hill; Mr. Sibonelo Mbanjwa; Mr. Khangwelo Musetsho; Ms. Karen Shippey; Ms. Chumisa Thengwa.

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