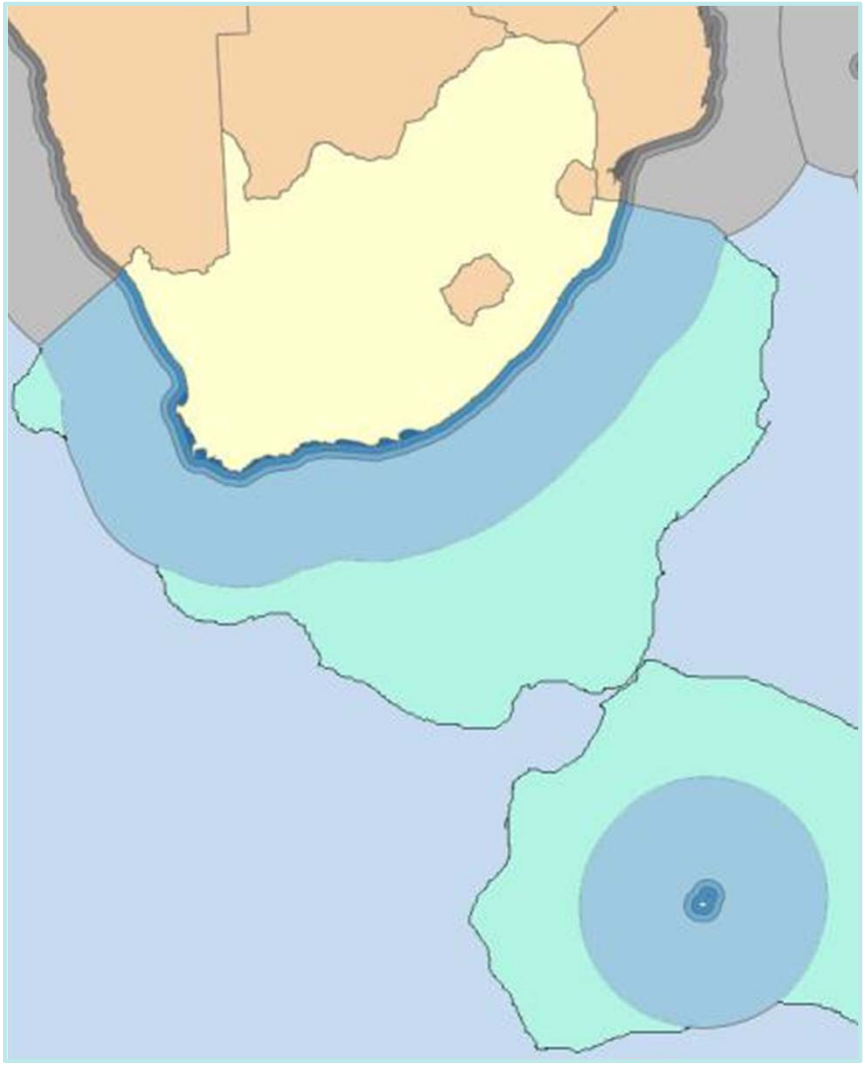
South Africa has more ocean space than land, and our ocean will increase should the extended continental shelf claim be successful

Legend Land Mass EEZ Extended Continental Shelf Claim



Land Size:

1.2 mil km²

Exclusive Economic Zone (EEZ) Size:

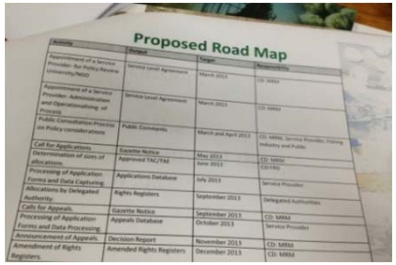
1.5 mil km²

- South Africa is responsible for managing an **oceans space** that is **greater** than the **land territory**
- Extended continental shelf claim will **double** the size of the **ocean geographic extent**

With such a large ocean jurisdiction, effective governance is critical but will be challenging given the size and complexity of our oceans

~3,900 kilometres of coastline (including the Prince Edward Islands)

~20 Key departments and institutions in the marine environment with distinct roles and maritime policies



~50 National Acts regulating marine governance

4 Coastal provinces with their own socio-economic context and development goals

SOURCE: DEA, Defence Web

OPERATION PHAKISA

To achieve the Lab's overall objective, specific targets were identified for each focus area

Integrated Ocean Governance and Protection

To implement an overarching, integrated ocean governance framework for sustainable growth of the ocean economy to maximise socio-economic benefits whilst ensuring adequate ocean environmental protection within the next 5 years

Integrated Framework and Governance

Development of **an overarching governance plan** by **March 2016**

- Single overarching **policy framework**
- **Institutional framework** for ocean governance
- **Tools** to decide on **trade-offs**
- Ocean governance **capacity building**

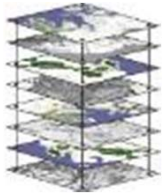
Ocean Protection

To **protect the Ocean environment** from **all illegal activities** and promote its multiple **socio-economic benefits** by:

- Improving the **Marine Protected Area (MPA) network** and expanding it from **0.42%** to a representative network
- **Reducing** illegal and unregulated activities in the ocean space
- **Reducing human health and environmental risks** to pollution

with results by **2017**

Marine Spatial Planning



To deliver a **National Marine Spatial Planning Framework** by **Dec 2015** and thereafter deliver a Regional (Sub-National) Marine Spatial Planning Framework and lastly the more detailed **small scale Marine Spatial Management Plan** that enable a sustainable ocean economy

The Lab proposes the implementation of 10 key initiatives to achieve these targets

Integrated Ocean Governance and Protection

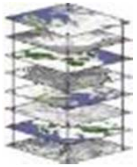
Integrated Framework and Governance

1. Ministerial Committee and Secretariat to Govern Activities
2. Enhancement of Legislation into the Integrated Coastal and Oceans Management Act or Oceans Act
3. Review of ocean-related legislation and international instruments
4. Accelerated Capacity Building Intervention in Ocean Governance

Ocean Protection

5. Enhanced and Coordinated Enforcement Programme
6. National Ocean and Coastal Information System and Extending Earth Observation Capacity
7. National Ocean and Coastal Water Quality Monitoring Programme
8. Creation of a Marine Protected Area Representative Network
9. Marine Protected Area / Marine Spatial Planning Discovery, Research & Monitoring Programme

Marine Spatial Planning

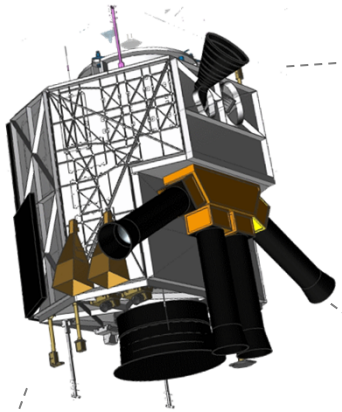


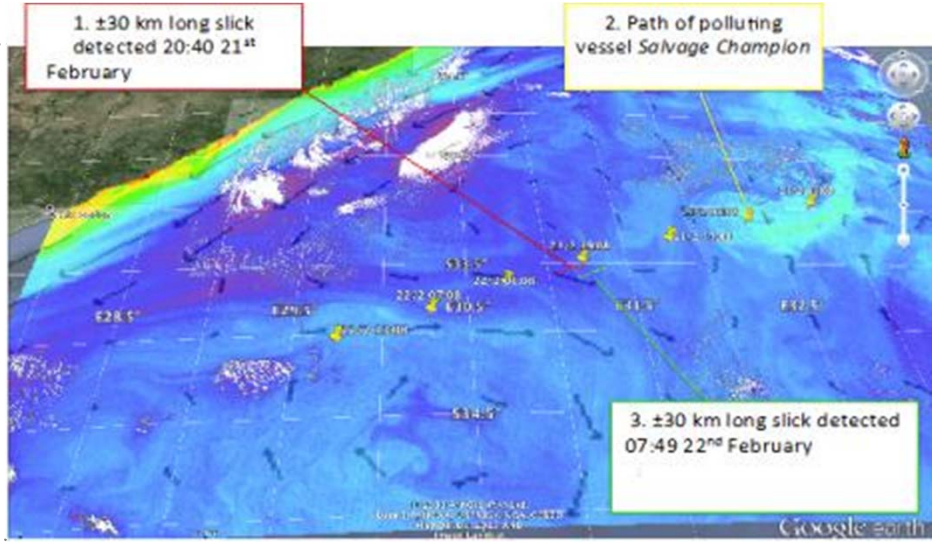
10. Marine Spatial Planning Process

Quick Win: First Results by **March 2016**

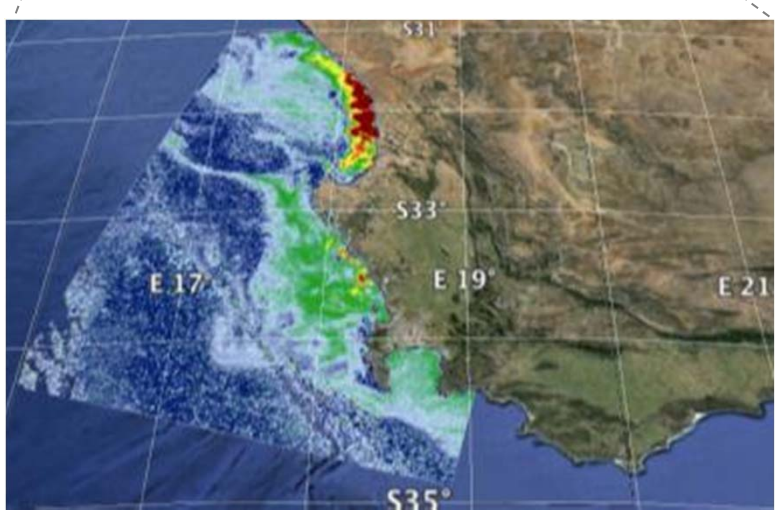
OPERATION PHAKISA

Deep dive: As part of the Coastal Surveillance initiatives, we want to leverage on existing technologies owned by CSIR, SANSA and SAMSA





Oil Slick Detection and Monitoring



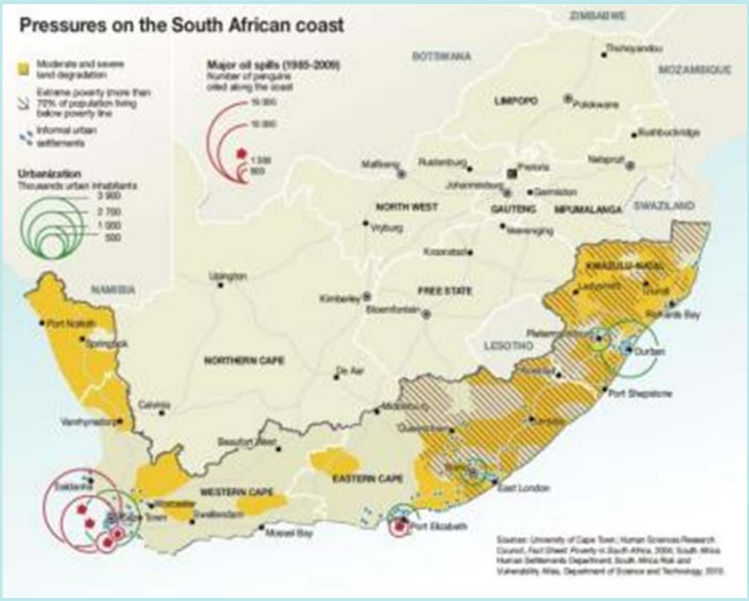
Harmful algae bloom detection which may affect human health

- Current SA technologies can potentially determine source of pollution by combining SAMSA's ship tracking technologies and also determine if necessary interventions will be required based on ocean current monitoring via CSIR and SANSA technologies
- Effective monitoring may potentially save on expensive deployments if the situation does not require them

CSIR – Council for Scientific & Industrial Research;
SANSA – South African National Space Agency;
SAMSA – South African Maritime Safety Authority

OPERATION PHAKISA

Deep dive: A National Ocean & Coastal Water Quality Monitoring Programme will become increasingly important to cope with the pressures



- With the increase in oceans & coasts industrial activity all around the coast, South Africa will need to determine if dangerous pollution is accumulating along the coasts or in the ocean.
- South Africa has a large & growing percentage of people living & visiting the coast

DEA 29 Implementation teams assembled along the coastline implementing the National Ocean and Coastal Water Quality Monitoring Programme.

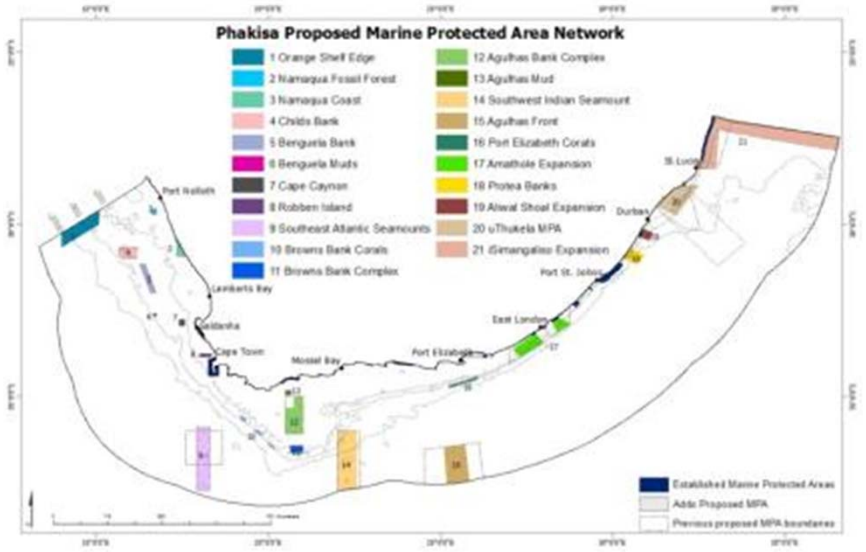
Leverage on existing environmental programmes

National Water Quality Lab by end 2015

OPERATION PHAKISA

Deep dive: To achieve sustainability, we will embark on a Marine Protected Area (MPA) representative network

Fast track protection of known sensitive and unique habitats



Discovery of new areas and monitoring for evaluation

- To identify important areas for protection in the next 5 years, recognizing that more research is needed to support the development of a representative MPA network.
- To conduct research in poorly studied areas to provide spatial data for Marine Spatial Planning and assess these areas for possible inclusion in a representative MPA Network.
- To develop monitoring systems to assess effectiveness of the MPA Network.

Lab has designed the following additional Outputs:

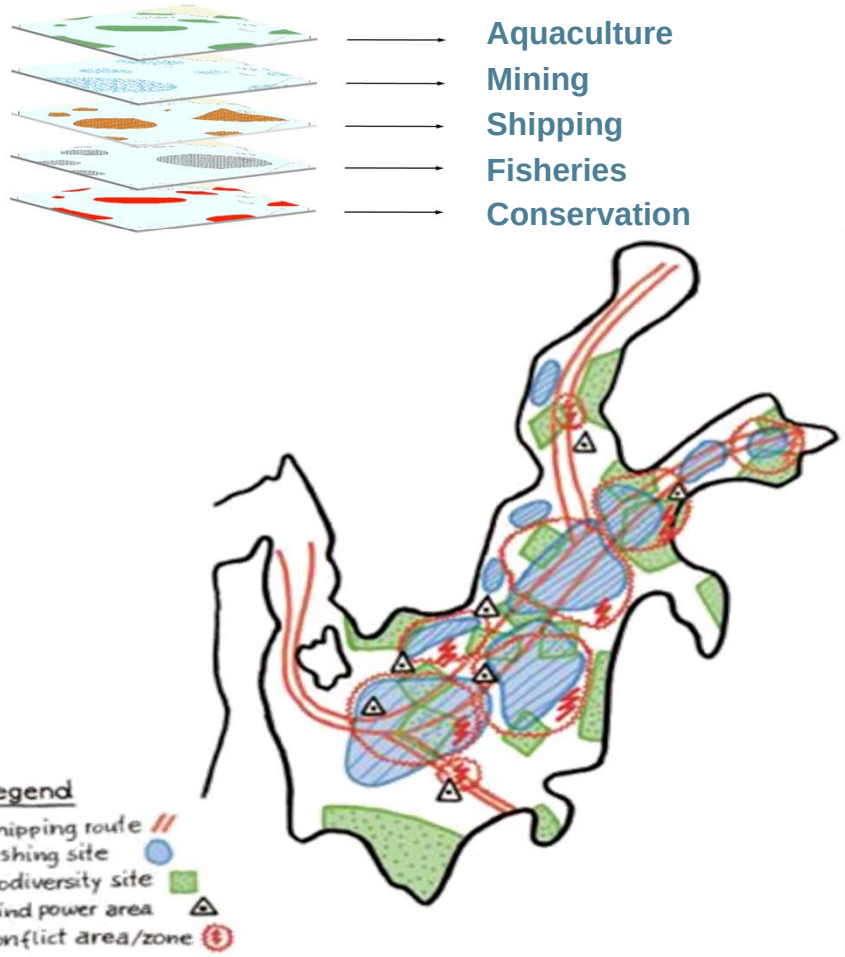
✓ Technical Report on MPAs, including latest detailed maps

✓ Compilation of stakeholder consultation notes

✓ Pre-consultations in-labs include with DAFF, DMR, PetroSA, MPA Specialists, Marine Scientists, WWF, Coastwatch, Trawl Fishery Association, Charter Fishermen, Divers, and several Eastern Cape Stakeholders

Deep dive: By identifying Conflict Zones, the Marine Spatial Planning (MSP) process will then be able to determine the appropriate zoning and usages

Sample Conflict Map



Sample Zoning Plan

SOURCE: WWF Germany, MSP in the Baltic Sea

The Marine Spatial Planning process is a consultative and adaptive process