

# Agenda

| No. | Agenda Item   | Responsibility       |
|-----|---|----------------------|
| 1.  | <b>Welcome &amp; Introductions</b>  | <b>Anchor</b>        |
| 2.  | <b>Present &amp; Apologies</b>  | <b>Anchor</b>        |
| 3.  | <b>Presentation</b><br>a) Project background<br>b) Basic Assessment process and stakeholder consultation<br>c) Project description<br>d) Identification of potential ADZ sites<br>e) Precincts under consideration and alternatives<br>f) Impacts associated with the proposed development<br>g) Time line of the project and stakeholder involvement |                      |
| 4.  | <b>Question and Answer session</b>  | <b>All attendees</b> |
| 5.  | <b>Closure</b>  | <b>Anchor</b>        |

# Basic Assessment Process Algoa Bay Sea-Based Aquaculture Development Zone

Kenneth Hutchings, Vera Massie  
& Songezo Mtsokoba

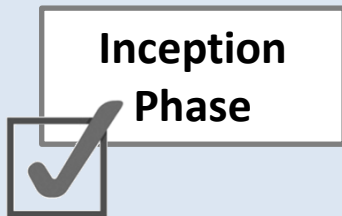
Presentation for the pre-application process public meeting  
6 March 2019



# Objectives of this meeting

- Anchor was appointed as the Environmental Assessment Practitioner (EAP) to assist the DAFF with the application for Environmental Authorisation
- **Process:** Basic Assessment Process
- **Competent Authority:** National DEA
- **Objectives of this meeting:**
  1. To inform the public about the Basic Assessment process and public participation
  2. To introduce the proposed project to the public
  3. To present and discuss the pre-application Basic Assessment Report

# BA Process Timeline



## Pre-application Phase (Not statutory)

- Pre-application meeting with Competent Authority
- Pre-application BAR
- Engage with I&APs early in the process – meetings, commenting period **30 days**

## Application Phase (Statutory)

- Draft BAR and submit application
- Engage with I&APs – meetings, commenting period **30 days**
- Final BAR submitted to Competent Authority (90 days from submission of application)

Decision-making period = **107 days**

# BA Process Timeline continued...

## Appeal process (NEMA National Appeal Regulations)

### Applicant:

- Inform I&APs of the decision within **14 days**
- Can appeal within **20 days** of receiving the decision

### I&APs:

- Can appeal within **20 days** of receiving the notification of the decision

Take note of the appeal procedure as per regulations

# Participation Process: What does it entail?

NEMA EIA Regulations Chapter 6 prescribe **minimum** requirements:

- Written consent of landowner
- Notice board
- Written notice (registered letters) 
  - Transnet
  - Adjacent land owners/occupiers/person in control
  - Municipal councillor/s
  - Municipality
  - Relevant Organs of State

## NOTICE FOR PUBLIC PARTICIPATION PROCESS Proposed Sea-Based Aquaculture Development Zone in Algoa Bay, Eastern Cape

**Project Proposal:** The Department of Agriculture, Forestry and Fisheries (DAFF), as the lead agent for aquaculture management and development, intends to establish and manage a sea-based Aquaculture Development Zone (ADZ) in Algoa Bay located in the Eastern Cape. The ADZ would facilitate individual operators to culture bivalve and finfish in designated precincts within Algoa Bay. Aquaculture is one of the sectors which forms part of Operation Phakisa under the Ocean's Economy in South Africa.

The proposed development triggers a number of Listed Activities of the Environmental Impact Assessment (EIA) Regulations, 2014 (as amended by Government Notice No. 40772 of 7 April 2017), promulgated in terms of the National Environmental Management Act (Act No. 107 of 1998) (NEMA). DAFF is therefore required to apply for Environmental Authorisation to the National Department of Environmental Affairs. DAFF appointed Anchor Research and Monitoring (Pty) Ltd (Anchor) to undertake the Basic Assessment process required in terms of NEMA and the EIA Regulations, 2014.

Notice is hereby given of the public participation process. The Basic Assessment Process will be applied to the application for Environmental Authorisation.

**Opportunity to participate:** Interested and affected parties (I&APs) are invited to register and provide comment on the proposed development. I&APs must provide their comments together with their name, contact details (preferred method of notification, e.g. e-mail address or fax number) and an indication of any direct business, financial, personal or other interest which they have in the application to the contact person indicated below.

For more information contact:  
Vera Massie

Anchor Environmental Consultants (Pty) Ltd  
8 Steenberg House  
Silverwood Close, Tokai, 7945  
Telephone: 021 701 3420  
Fax: 021 7015280  
e-mail: [info@anchorenvironmental.co.za](mailto:info@anchorenvironmental.co.za)  
Web address:  
<https://anchorenvironmental.co.za/>



Posted in December 2018



# Participation Process: What does it entail?

NEMA EIA Regulations Chapter 6 prescribe **minimum** requirements:

- Advertisement - 5 December 2018 in the PE Express
- Compile and maintain stakeholder database
- Make documents available
- 30 day statutory commenting period (email communication)

The collage consists of numerous small advertisements. At the top, there's a 'Classifieds' header with contact numbers for Lovetia and Riana. Below this, there are several 'GENERAL NOTICE' sections, many of which are social worker notices regarding missing children and family reunions. Other ads include 'PERSONAL SERVICES', 'CHILDREN'S ENTERTAINMENT', 'BUYING SELLING EXCHANGES', 'MISCELLANEOUS', 'KILIAN PLUMBERS', 'VEHICLES', 'VEHICLES WANTED TO BUY', 'EMPLOYMENT', 'REPAIRS', 'WANTED TO BUY', 'FOR SALE', and 'APPLIANCE ASSISTANCE'. A prominent red-bordered advertisement for 'STOP DEBT NOW!' is located in the middle-right section, featuring the text 'Consolidate your debt into one affordable monthly payment' and 'NATIONWIDE CREDIT'. At the bottom of the collage, there is a 'NETWORK 24' logo.

# Participation Process: What does it entail?

## Additional efforts:

- Additional 30 days to provide comment
- 16 Radio announcements in isiXhosa on Nkqubela FM during drive time for both processes (1-6 March 2019, ~June 2019)
- Two public meetings (6 March 2019 and application phase)
- Additional posters at shops, pharmacies and libraries



X2

**NOTICE FOR PUBLIC PARTICIPATION PROCESS**  
**Proposed Sea-Based Aquaculture Development Zone in Algoa Bay, Eastern Cape**

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agriculture, forestry & fisheries  
RESEARCH & MONITORING  
**ANCHOR**  
RESEARCH & MONITORING  
Posted in December 2018



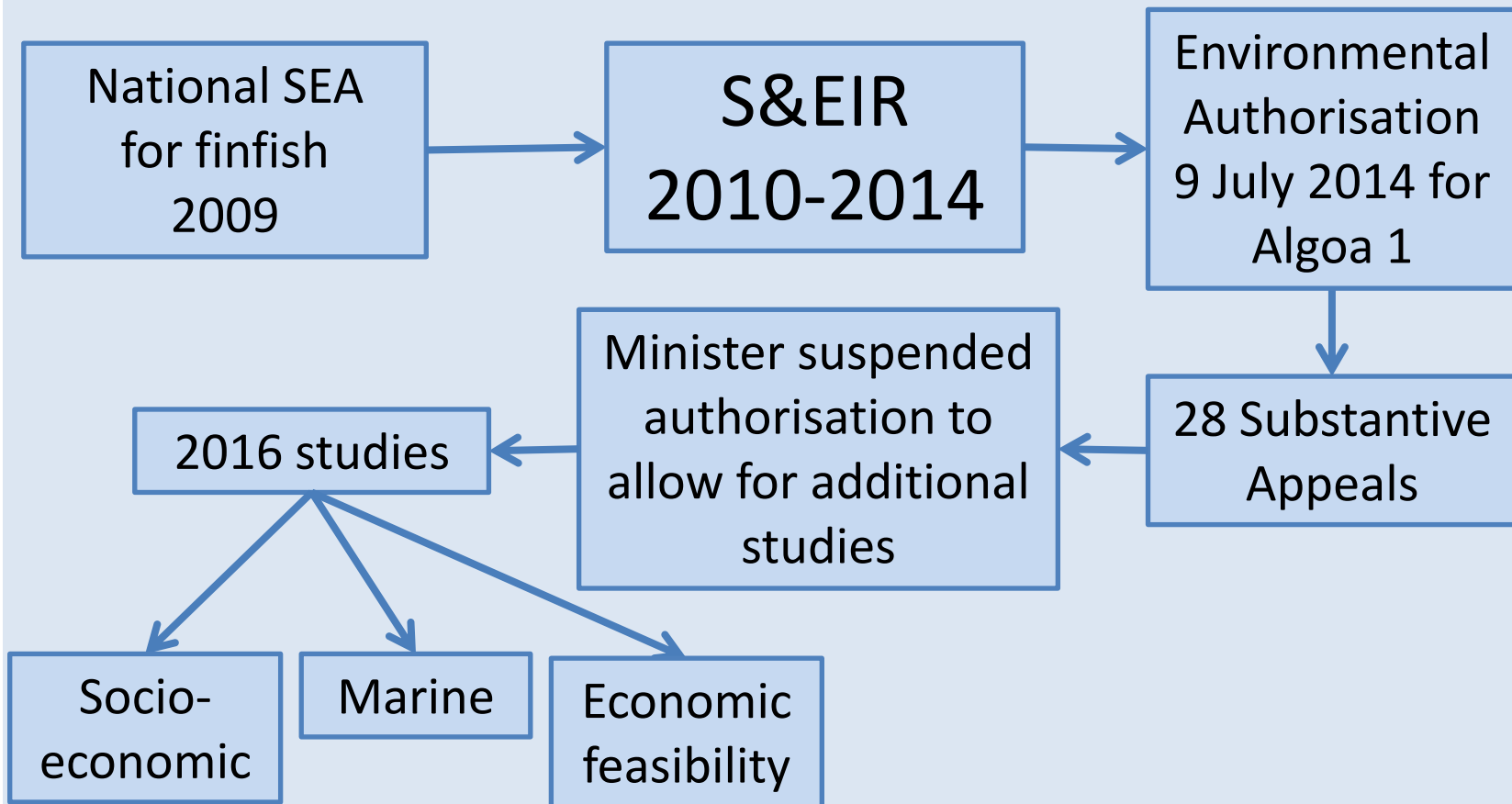
# Public Participation Process: Improvements for the next round

## Additional efforts:

- Initiate radio announcements further in advance.
- Challenge:
  - Meeting should be accessible to all communities in the area
  - Should be after working hours but also allow for safe commute home



# Project Background



# Project Background

- **2018/2019:** DAFF has identified two new sites to be included in the EIA process and intends to submit a new application for Environmental Authorisation in terms of the 2017 NEMA EIA Regulations.

**NEW** *application* >

# Project Description

- ADZs provide ‘investment ready’ platforms
- Operation Phakisa project – Ocean’s Economy
- Aquaculture definition:

*The propagation, improvement, trade or rearing of aquatic organisms (plant and animal) in controlled or selected aquatic environments (fresh, sea or brackish waters, on land or at sea)*

- Marine aquaculture or mariculture definition:

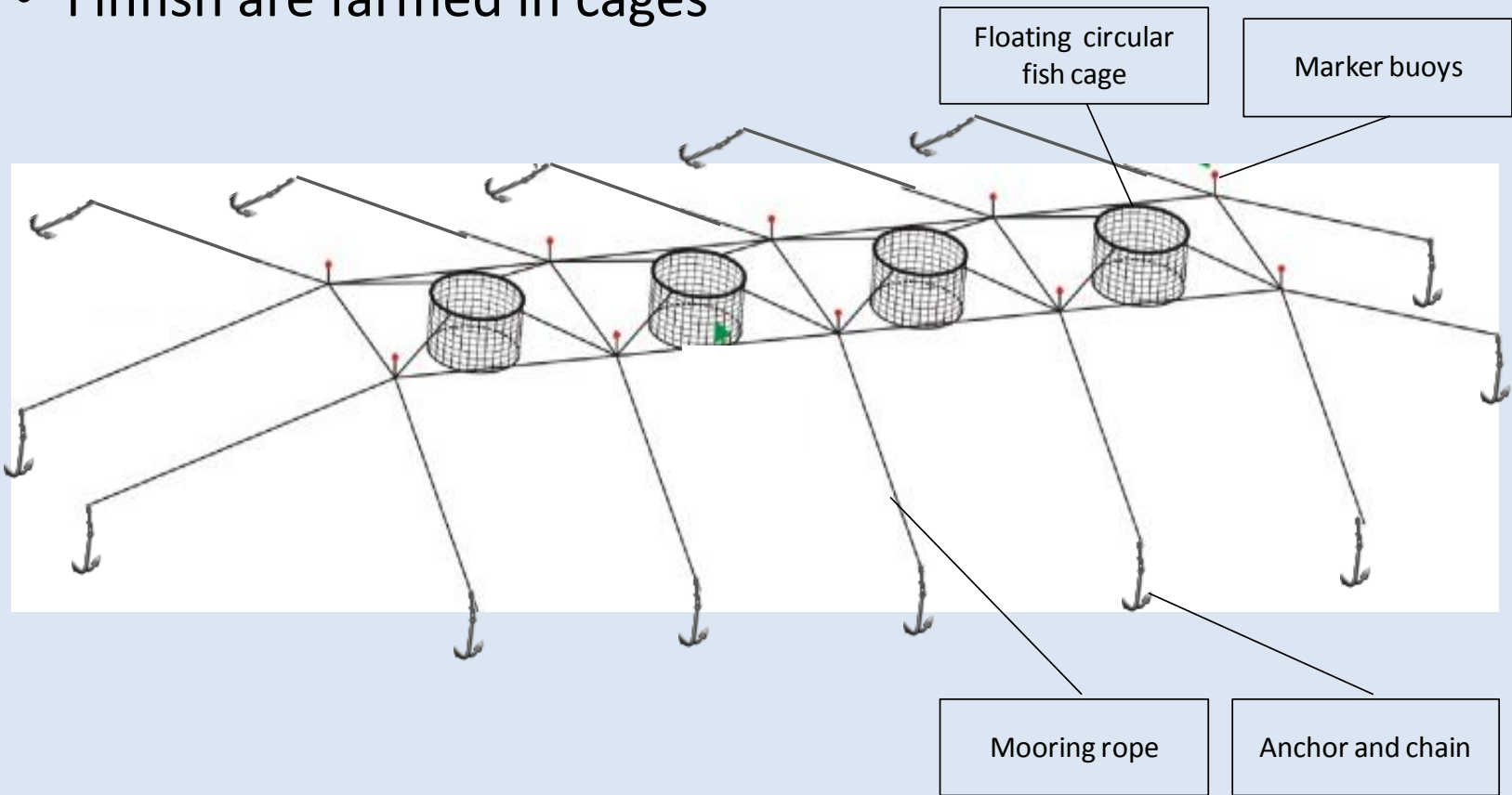
*Farming of marine organisms such as finfish, shellfish (e.g.. abalone, mussels), crustaceans (e.g. prawns) and seaweed*

**HUMAN INTERVENTION**

**EXCLUDES RANCHING**

# Project Description

- DAFF intends to declare an ADZ for farming finfish and bivalves (e.g. mussels and oysters)
- Finfish are farmed in cages





# Project Description



(Source: Shutterstock)

# Potential finfish species to be considered

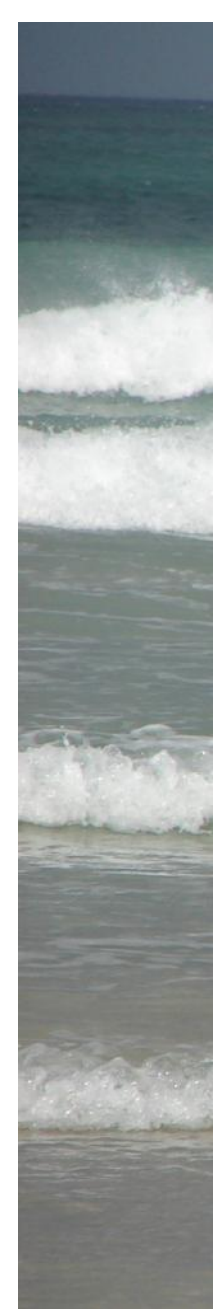
## Indigenous species only:

- Yellowtail
- Dusky kob
- Silver kob
- Yellowfin tuna
- Sole
- Geelbek
- Spotted grunter
- White steenbras
- White stumpnose
- Red roman



# Potential finfish species to be considered

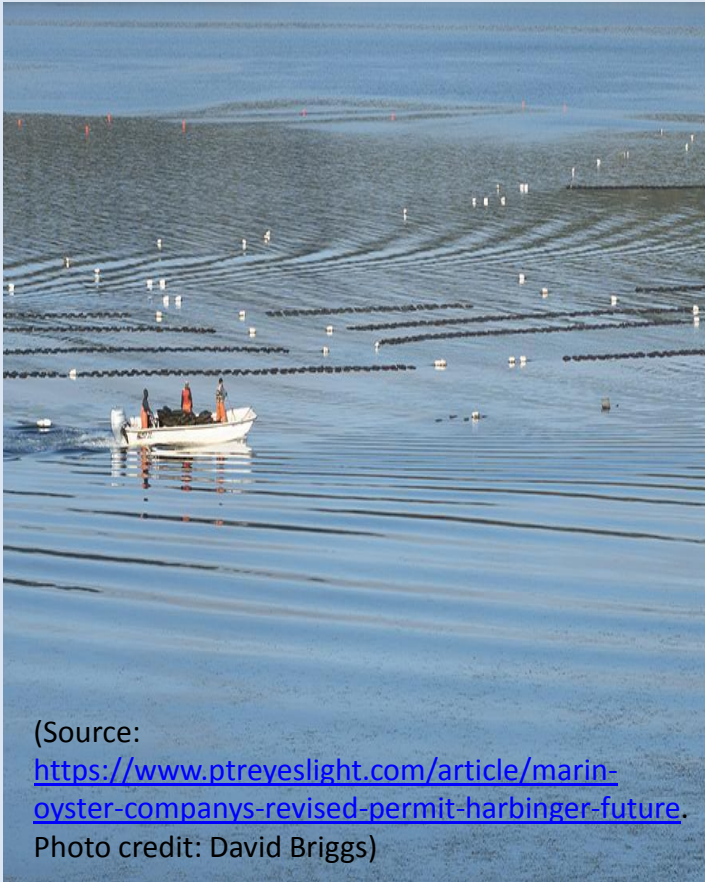
- Environmental conditions mostly suitable.
- Suitability for cage farming must be established through research.
- Carrying capacity modelling for finfish culture completed by Anchor for indigenous Yellowtail and Meagre (similar to kob).
- No alien finfish species in this BA process.
- Should alien species be farmed at a later stage, operators must ensure compliance with National NEMBA Alien Invasive Species Regulations.





# Project Description

- Oysters are farmed on long-lines



# Project Description

- Mussels are farmed on long-lines or rafts



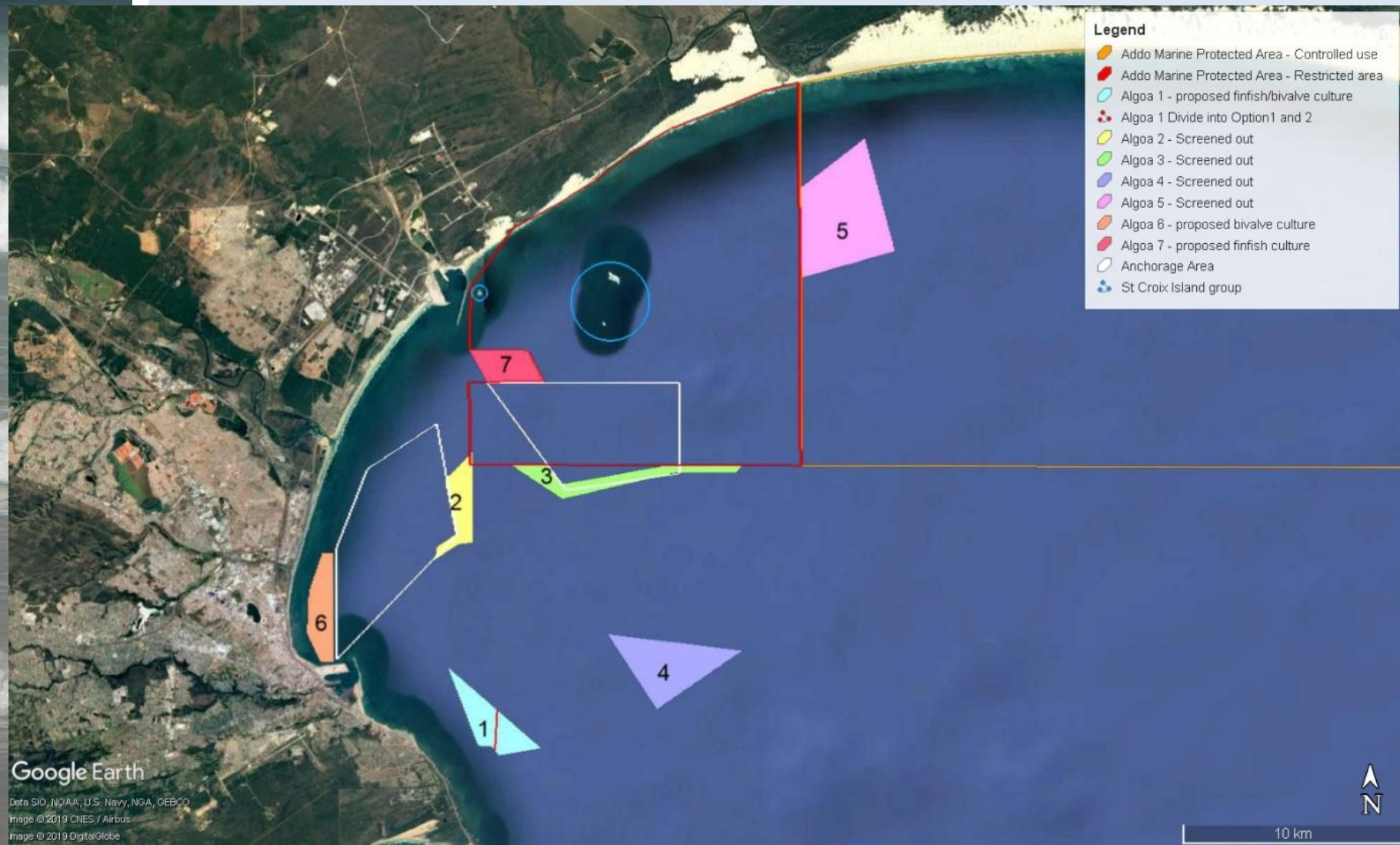


# Potential bivalve species to be considered

- Indigenous shellfish species
  - Cape Rock Oyster
  - Black mussel
  - Brown mussel
- Alien shellfish species
  - Pacific oyster
  - Mediterranean /green mussel



# Identification of potential ADZ sites



## Identification of potential ADZ sites cont...

- Algoa 2,3,4 and 6: Eliminated during the 2013 EIA.  
Reasons:
  - 2 and 3 – Environmentally favourable but within area of very high risk for shipping traffic
  - 4 – Environmentally not favourable (too exposed)
  - 6 – Insufficient depth for waste dispersion for *finfish*
- Algoa 1 and 5: Assessed as part of the S&EIR process 2013/14, EA granted for preferred alternative
  - **Alternative 1 (preferred)**: Algoa 1
  - Alternative 2: Algoa 5 (not authorised)



# Identification of potential ADZ sites cont...

Findings of comparative study 2016

## Algoa 1:

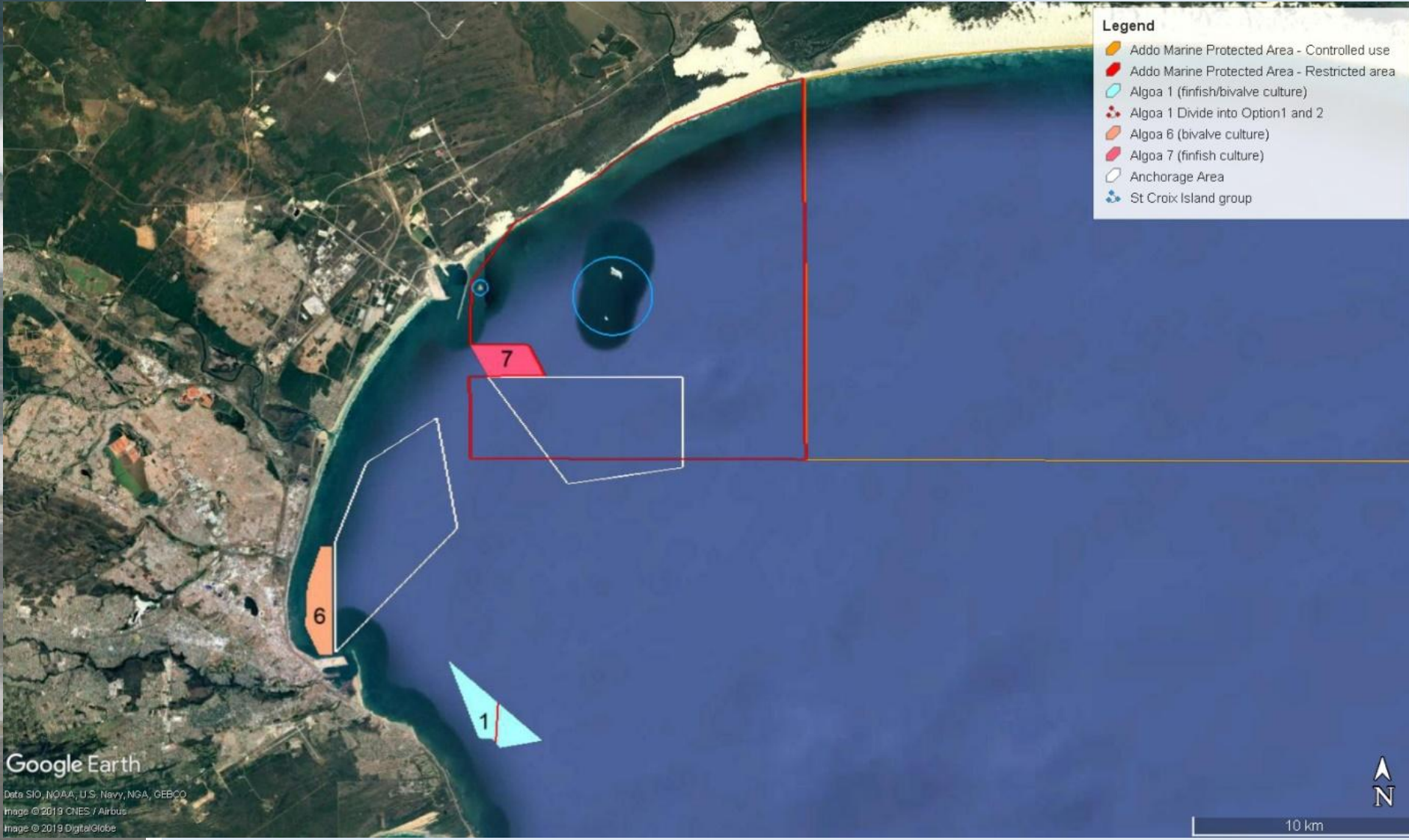
- **Low** economic feasibility
- Socio-economic impacts are significant (tourism and recreation indicator ranked as 'very low feasibility')
- Otherwise moderately feasible for other socio-economic indicators
- Ecologically feasible with appropriate mitigation measures

## Algoa 5:

- **Very low** economic feasibility
- Socio-economic feasibility 'moderately feasible' for most indicators
- Ecologically feasible with appropriate mitigation measures

# Precincts under consideration

- Legend**
- Addo Marine Protected Area - Controlled use
  - Addo Marine Protected Area - Restricted area
  - Algoa 1 (finfish/bivalve culture)
  - Algoa 1 Divide into Option1 and 2
  - Algoa 6 (bivalve culture)
  - Algoa 7 (finfish culture)
  - Anchorage Area
  - St Croix Island group



Google Earth

Data SIO, NOAA, U.S. Navy, NGA, GEBCO  
Image © 2019 CNES / Airbus  
Image © 2019 DigitalGlobe



10 km



# Alternative Options

- Combinations of precincts as alternative options are being considered – varying scale of development.

| Option | Algoa 1<br>(Summerstrand) | Algoa 6<br>(PE harbour) | Algoa 7<br>(Coega) |
|--------|---------------------------|-------------------------|--------------------|
| A      | Finfish & Bivalve         | Bivalve                 | Finfish            |
| B      | Bivalve                   | Bivalve                 | Finfish            |
| C      | X                         | Bivalve                 | Finfish            |
| D      | X                         | X                       | X                  |

# 2019 Impact Assessment Studies incorporated

- Marine specialist study 2019 (Algoa 1, 6 & 7)
- Dispersion modelling and habitat mapping 2019 (Algoa 1, 6 & 7)
- Maritime and Underwater Cultural Heritage Impact Assessment 2019 (Algoa 1, 6 & 7) (ACO Associates)
- Comparative Assessments (Rhodes University 2016) (Algoa 1)
  - Socio-economic Report
  - Ecological Report
  - Feasibility study
- Marine specialist study 2013 (Algoa 1)
- Visual specialist study 2013 (Algoa 1)
- Socio-economic specialist study 2013 (Algoa 1)

# Impact Assessment Method

In two steps:

1. Each precinct is assessed individually
  - a. Each impact type
  - b. Where applicable finfish and bivalve impacts are assessed separately
2. Alternative options assessment:  
Sum impacts (+ve and –ve separately) for each alternative option A, B, C, D

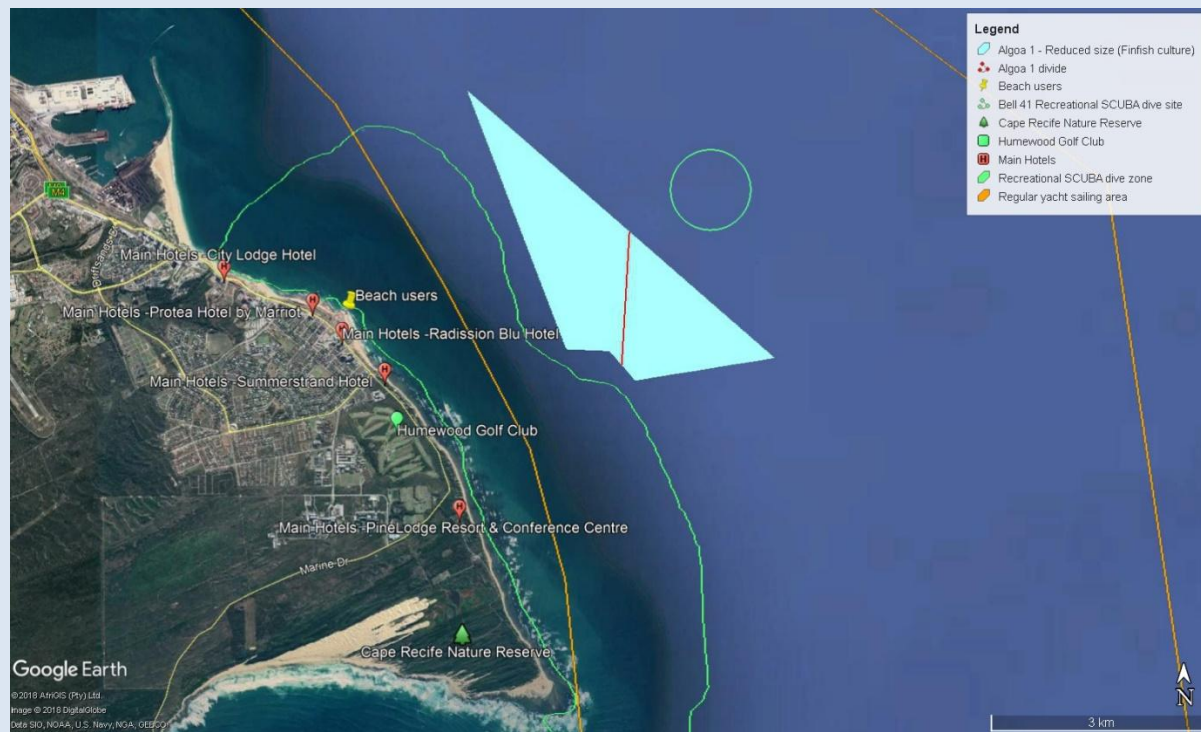
# Impact Assessment: Marine (negative)

- Disturbance of subtidal habitat
- Introduction of alien organisms into the wild
- Disease and parasite transmission to wild stocks
- Organic waste discharge impacting on water quality and benthic environment
- Genetic contamination of wild stocks
- Pollution from chemical therapeutants and antifoulants
- Accidental entanglement of cetaceans and alterations in habitat use
- Piscivorous marine animal interactions
- Impacts on Addo MPA
- Effects on fish populations and habitat use



# Visual aesthetic impacts

Negative impact on seascape character during



**Example:**  
Identification of  
visual receptors  
for Algoa 1



# Socio-economic impacts

- Investment in the local, regional and national economy (+ve)
- Increased employment, income and skills development for Algoa Bay (+ve)
- Economic impact on specialist tourism and recreational businesses (i.e. loss of jobs and income) (-ve)
- Impacts on water sport recreational activities (-ve)
- Impacts on SCUBA diving activities (-ve)
- Risk of collision between vessels and aquaculture farms (-ve)
- Impact on vessel navigation routes (-ve)

# Socio-economic impacts

Impacts assessed continued:

- Impacts on existing mariculture activities (+ve)
- Impact on local fisheries (-ve)
- Pressure on existing land-based infrastructure (-ve)
- Impact on coastal real estate due to aesthetic nature of views and sense of place (-ve)
- Impact on local community development (+ve)
- Impact of income leakage on local economic development of the area (-ve)
- Impact on small businesses, individual and informal sector development (+ve)



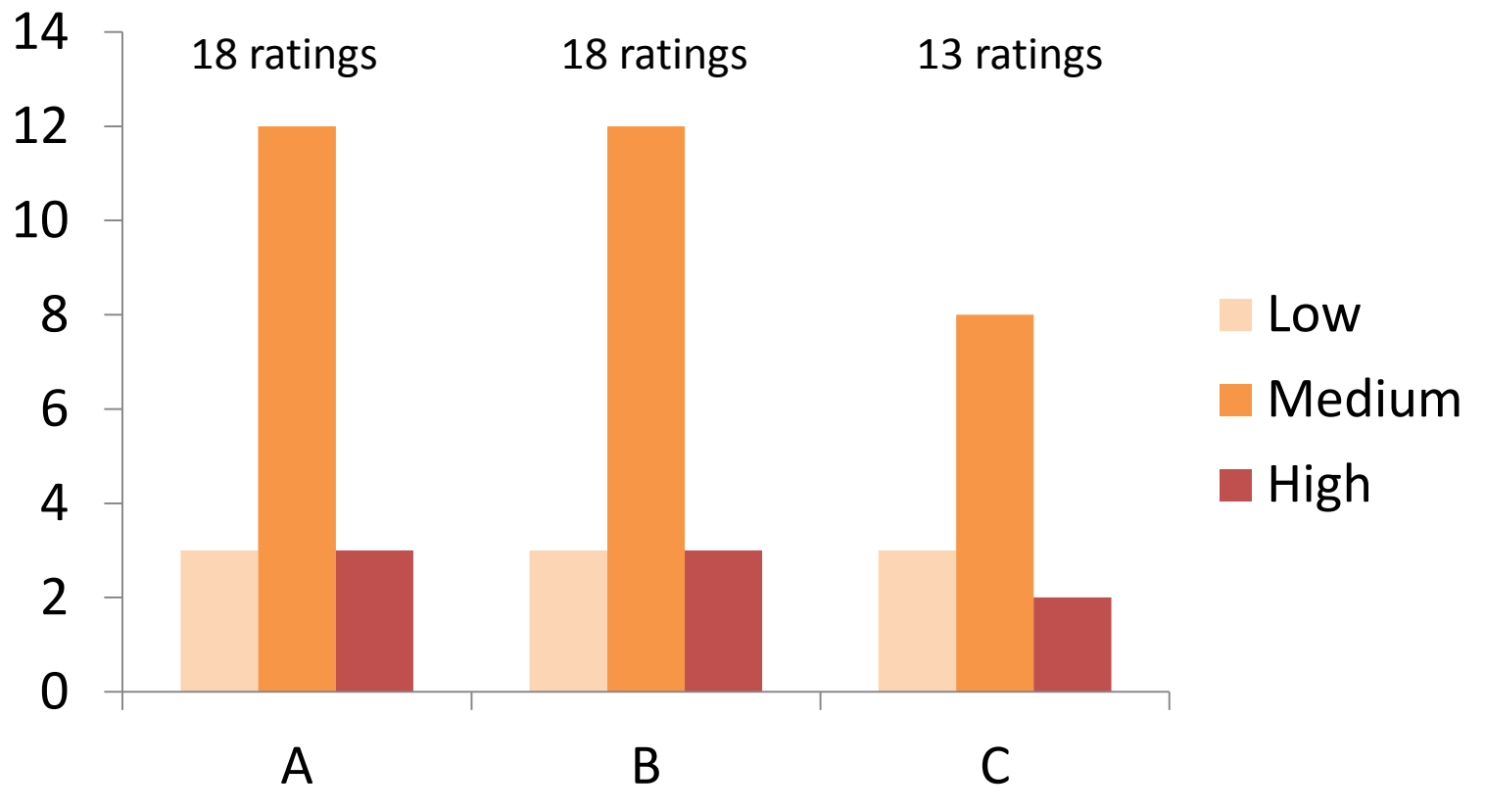
# Maritime and Underwater Cultural Heritage

- Submerged prehistory
- Maritime archaeology - shipwrecks



# Summary of significance ratings – Positive

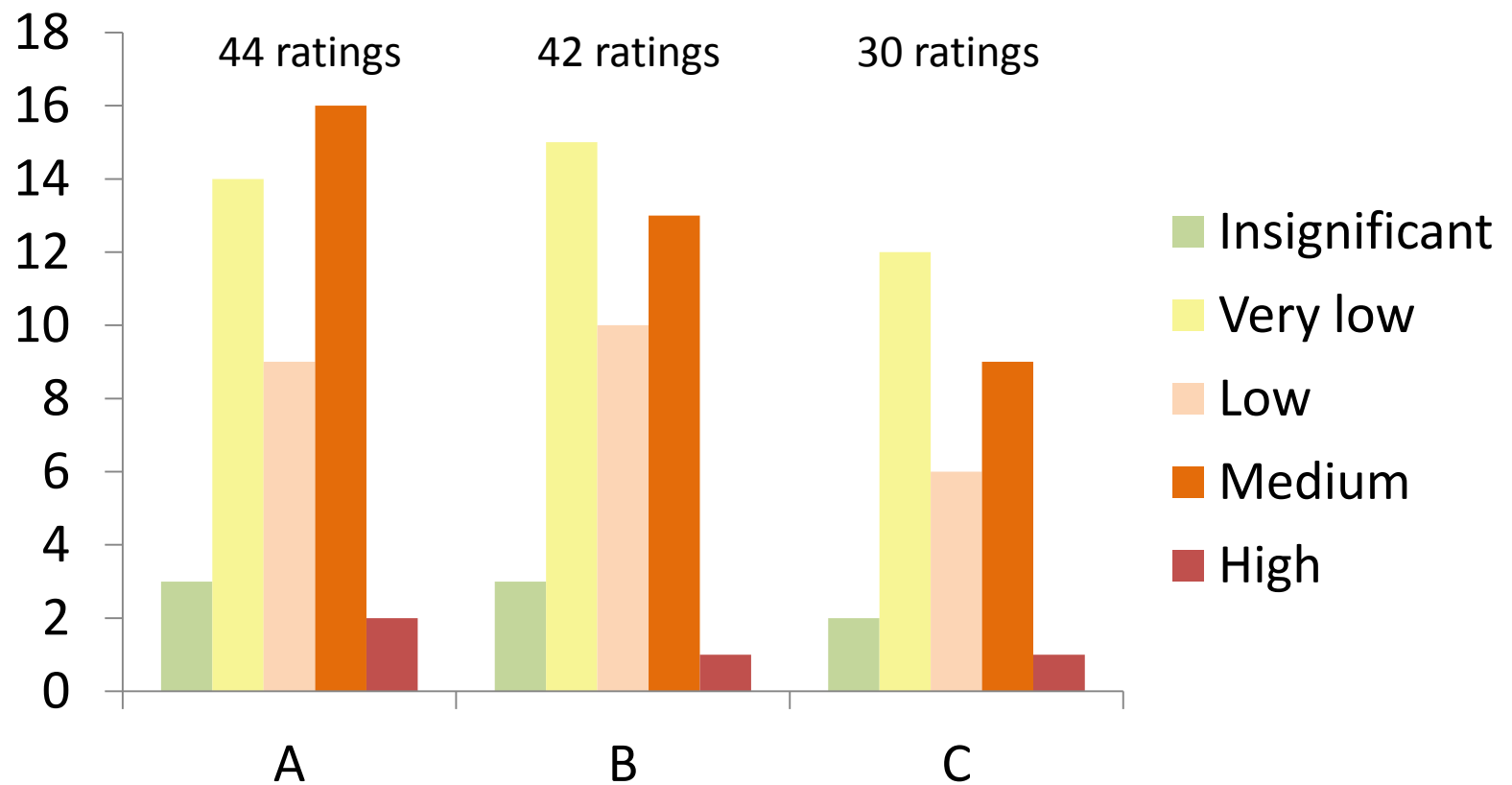
Number of positive significance ratings for each impact category after implementation of benefit enhancing measures for alternative options A, B and C





# Summary of significance ratings – Negative

Number of negative significance ratings for each impact category after implementation of mitigation measures for alternative options A, B and C



# Summary of significance ratings: Negative impacts after mitigation

- No **'very high'** ratings
- **'High'** rating - marine ecological impact (disease and parasite transmission to wild stocks)
- **'Medium'** ratings: socio-economic and marine ecological impacts.
- **'Insignificant'** ratings: Maritime & Underwater Heritage

# No-Go option (Alternative Option D)

- Environmental status quo is maintained:
  - No additional job opportunities and skills development in the aquaculture sector
  - No negative impacts on visual aesthetics, maritime heritage resources, or the socio-economic and marine ecological environment



# Conclusions

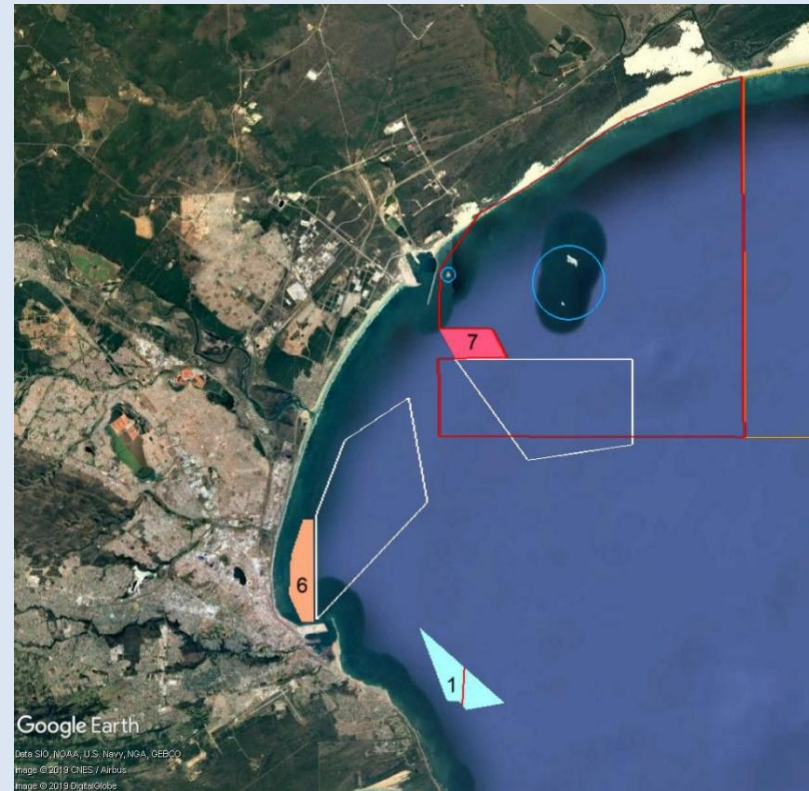
**DAFF intends to apply for Option A:**

Algoa 1: Finfish & Bivalve

Algoa 6: Bivalve

Algoa 7: Finfish

**Phased approach**





# Phased approach and EMPr

- Phased approach - only expand to commercial scale if pre-determined environmental quality standards are met (biophysically and socio-economically)
- Implementation of Environmental Management Programme (EMPr) critical
- Overseen/coordinated by ADZ Management Committee (AMC)
  - DAFF
  - DEA: Oceans and Coasts
  - DEDEAT
  - Municipality
  - Transnet National Port Authority
- Consultative Forum (CF) to review environmental monitoring data and advise on management measures

# Conclusions

## Based on current impact assessment:

**Option C** – Bivalve at Algoa 6 and Finfish at Algoa 7 has smallest environmental footprint.

+ve socio-economic: partly realised

-ve socio-economic: minimised

-ve visual: minimised

-ve marine ecological: reduced


-ve heritage resources: reduced

EAP likely to recommend Option B or C - Lower negative impacts, while positive impacts are still realised.

DEA to make decision

# Timeline of the project and stakeholder involvement





## Timeline of the project and stakeholder involvement

- **NOW:** First commenting round opens within the next two weeks
- Pre-application BAR will be revised → **Draft BAR**
- Submit application and Draft BAR to competent authority  
~ end of May 2019
- Application-phase public participation: ~ June 2019
- BAR will be revised → **Final BAR**
- Final BAR submitted to Competent Authority: ~ end August 2019
- Decision-making = 107 days ~ end January 2020
- Appeal phase ~ February 2020



# Report availability and contact details

**Reports will be made available within the next two weeks  
and can be obtained here:**

Anchor website:

<https://anchorenvironmental.co.za/node/344>

Telephonic requests:

Office Phone: 021 701 3420

Direct Cell: 081 576 3870

Email requests:

info@anchorenvironmental.co.za



Thank you