

BACKGROUND INFORMATION DOCUMENT

Strategic Environmental Assessment for Aquaculture Development in South Africa

September 2016



Vision for aquaculture development in South Africa

Aquaculture includes the breeding, rearing and harvesting of plants and animals in salt or fresh water. It is the fastest growing food production sector in the world, with the global aquaculture industry producing approximately 67 million tonnes per annum (mtpa) of fish from freshwater (42 mtpa) and marine (25 mtpa) sources (FAO, 2014). An additional 50 million tonnes of fish is required to feed the world population by 2030 and it is anticipated that worldwide this production will come mainly from aquaculture.

In South Africa, aquaculture is still in the developmental stage and has the potential to grow and contribute towards job creation, food security and improving the inclusivity of the sector. Aquaculture has the potential of reducing the fishing

pressure on wild fisheries stocks.

Operation Phakisa was launched by the South African national government in 2014, with the aim of implementing priority economic and social programmes and projects better, faster and more effectively. One of the key sectors within Operation Phakisa is the promotion of the Oceans Economy. Oil and Gas, Marine Manufacturing and Transport, Marine Protection and Governance, and Aquaculture were chosen as initial focal areas for the Oceans Economy.

South Africa's aquaculture industry currently consists of a limited range of marine and freshwater species of plants and animals. The industry provides approximately 6000 tonnes per annum (2012, including seaweed), which is less than 1% of South Africa's total marine wild catch which is in the order of 700 000 tonnes per annum.



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It is the vision of the South African government to promote and grow the domestic aquaculture sector in a manner that contributes to food and nutritional security, creates sustainable jobs, fosters economic development, stimulates rural development and supports livelihoods, attracts investment, safeguards the environment and creates opportunities for SMMEs and wealth-generation (Operation Phakisa and DAFF National Aquaculture Strategic Framework).

Current challenges facing aquaculture

The aquaculture sector in South Africa is in its infancy with an estimated 200 marine and freshwater facilities in operation, most of which produce less than 50 tonnes per annum.

One of the challenges facing aquaculture is the over regulation of the sector. There are over 13 different licences required by a potential developer before being able to operate. These permits and licenses are required from a number of different government departments and are currently issued in a cascading manner which extends the permitting period unnecessarily. In this complicated and uncertain regulatory environment, potential aquaculture developers find it difficult to attract investment.

Other challenges include that production is focused on a few high-value species, scarcity of freshwater and a harsh marine environment, difficulty in accessing project funding, limited pool of skills and support services, unpredictability associated with climate change, vast difference between winter and summer temperatures, challenges with access to land and sea space, and perceived competition with the tourism and conservation sectors.

As the growth in aquaculture is desirable for a number of reasons, these challenges where possible must be addressed. In particular, the environmental legislative framework is one of the areas in need of improvement. A Strategic Environmental Assessment (SEA) was therefore identified to assist streamline and integrate the current regulatory framework and thereby facilitate the sustainable growth of the industry.

This led to the national Department of Environmental Affairs (DEA) in collaboration with the Department of Agriculture, Forestry and Fisheries (DAFF) commissioning the Council for Scientific and Industrial Research (CSIR) to undertake an SEA for the development of aquaculture in South Africa. The SEA

commenced in 2016 and is being conducted over approximately 18 months to be completed towards the end of 2017.

Purpose of the SEA

The purpose of the SEA is to promote and support the growth of the aquaculture industry in South Africa through:

- (i) identifying suitable areas where environmentally sustainable aquaculture development can be prioritised and incentivised; and
- (ii) providing a streamlined and integrated management and regulatory framework to reduce compliance complexities and improve decision-making processes.

Scope of the SEA

The SEA is being conducted at a national scale and includes all nine provinces. The SEA will assess the identified environmental attributes, specific siting criteria and key impacts associated with both marine (salt water) and freshwater related activities of aquaculture planning, development and operations. The assessment will consider natural (offshore, inshore and inland) and "artificial" or land-based systems operating in cold/temperate and warm waters. Candidate species that will be considered during the assessment include abalone, mussels, oysters, prawns, seaweed, tilapia, trout and marine finfish (e.g. cob and salmon). The SEA process will also review existing legislation, including licensing/permitting and authorisational procedures currently governing marine and freshwater aquaculture on a national and provincial scale.

Approach to the SEA

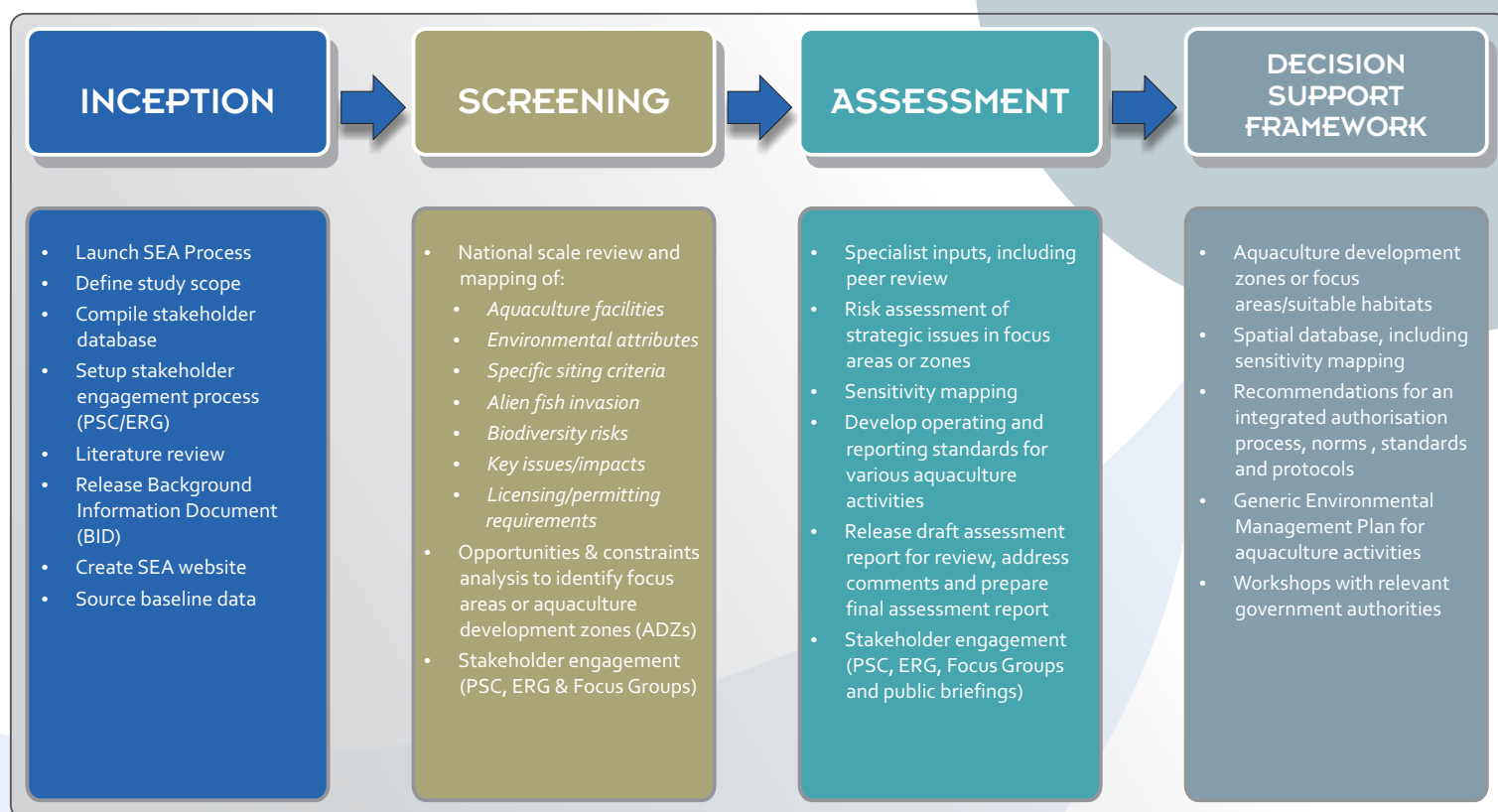
The approach to the SEA is underpinned by three key principles, namely:

- **Saliency:** It must identify and incorporate the important issues and key concerns/impacts;
- **Legitimacy:** It must be grounded in a transparent and participatory process and be mandated by the authorities responsible for decision-making on this topic;
- **Credibility:** It must be based on a recognised assessment methodology and include reputable experts and a peer review process.

The four overlapping phases and associated tasks in the SEA are shown in the figure below:



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Key outputs of the SEA

The key outputs will be refined during the course of the SEA and are expected to include:

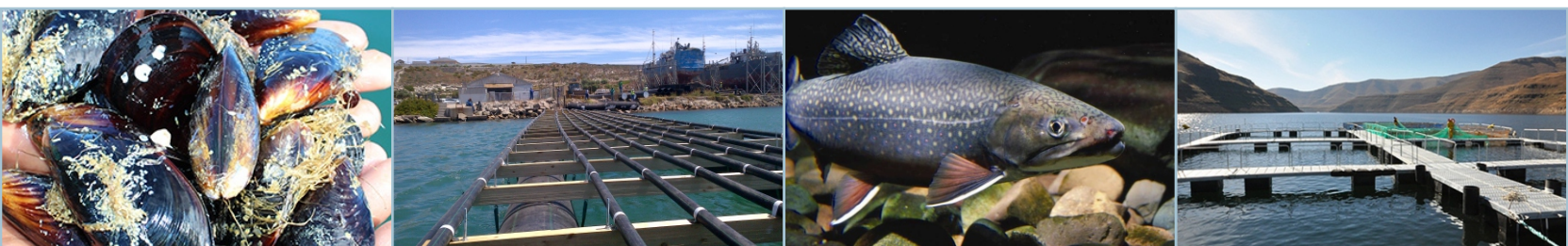
- National scale mapping of existing aquaculture facilities and of the sensitivity of the receiving environment, in order to identify proposed focus areas or aquaculture development zones;
- Risk and benefit assessment for aquaculture species/types within the focus areas/zones, that provides associated management protocols for aquaculture development;
- Environmental compliance framework enabling a streamlined and integrated decision-making process to reduce (or limit) the need for permitting & authorisations, for example, through the application of norms, standards, reporting requirements and monitoring protocols; and
- Development of a generic Environmental Management Plan (EMP) for the management of aquaculture activities in South Africa.

Stakeholder engagement

The stakeholder engagement process includes a breadth of consultation mechanisms, from the Project Steering Committee (PSC), to the Expert Reference Group (ERG), focus group meetings and public briefings, as summarised below.

A **Project Steering Committee (PSC)** comprising of authorities with a legislated decision-making mandate for aquaculture development in SA has been convened. This group will act as a project management structure, ensuring that the assessment remains on scope, within timelines and budget; and to collaborate with the SEA team to ensure that the outcomes are effective in addressing the decision-making and regulatory needs identified.

PSC members include the Department of Environmental Affairs (DEA), the Department of Agriculture, Forestry and Fisheries (DAFF), the Department of Mineral Resources (DMR), the Department of Planning, Monitoring and



Evaluation (DPME), the Department of Public Enterprises (DPE), the Department of Public Works (DPW), the Department of Rural Development and Land Reform (DRDLR), the Department of Science and Technology (DST), the Department of Trade and Industry (DTI), the Department of Water and Sanitation (DWS), the Transnet National Port Authority (TNPA), and representatives from the nine Provincial Governments.

An **Expert Reference Group** (ERG) has also been convened. This group consists of active NGOs, the aquaculture industry associations, spheres of government i.e. from national to local representation and experts from research institutions. The ERG will verify that the process proposed at the outset has been implemented in a fair and unbiased manner in that suitably experienced experts have been involved in the process, review structures have been designed and implemented in a credible manner, and queries/comments from the public have been adequately addressed.

Focus Group meetings are planned at centres around the country in order to engage with local stakeholders. These are planned at three stages of the SEA: initially in the inception phase to source information, verify mapping of existing facilities and check all relevant issues are identified; then in the screening phase to review the proposed focus areas/zones; and thirdly in the assessment phase to present the draft results.

Public briefing sessions are planned over five days in the main centres across the country where aquaculture occurs, to present the draft assessment report.

How can you be involved in this SEA?

- Register your interest as a stakeholder at <http://aquasea.csir.co.za/>
- Follow the progress of the SEA on the website and comment on draft findings
- Participate in public briefing sessions and through focus group meetings.

How to contact the SEA management team?

To register as a Stakeholder, please fill out the online registration form on the SEA Project Website at <http://aquasea.csir.co.za/stakeholder-portal/>

For enquiries please contact us via the Contact Us page on the SEA Project Website (<http://aquasea.csir.co.za/contact-us-2/>)

or contact us via

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