

## BACKGROUND INFORMATION DOCUMENT:

# Project Definition and BA Process for a Proposed Atlantic Salmon land-based Aquaculture farm in Betty's Bay

Nature Works Project Number: NW01102018

## 1 INTRODUCTION

West Coast Salmon (WCS) proposes to develop a land-based Atlantic Salmon aquaculture farm based on RAS2020 technology. The new aquaculture facility will be located on the coast of Betty's Bay (Figure 1) in the Western Cape and will be the first of its kind on the African continent. Salmon products are generally imported to supply the country's rapid growing demand. The development proposes to reduce South Africa's import requirements and facilitate job creation within the local community.

Nature Works (Pty) Ltd has been appointed as the independent consultant to undertake the Environmental Impact Assessment (EIA) process required in terms of the National Environmental Management Act 107 of 1998, as amended (NEMA) and the EIA Regulations, 2014.

This Background Information Document aims to:

- Provide a brief motivation and description of the project;
- Briefly describe the affected environment;
- Describe what is involved in the study and the EIA process; and
- Provide information on how stakeholders can participate.



## 2 PROJECT DESCRIPTION AND MOTIVATION

Operation Phakisa was launched in 2014 to unlock the economic potential of South Africa's oceans through innovative programmes that bring together many stakeholders to plan major economic projects. Aquaculture was identified as a key priority of Operation Phakisa, as it is considered a sustainable strategy to contribute to job creation and South African Gross Domestic Product.

Aquaculture is the fastest growing agricultural sector in the world today. Global population growth and an emerging middle class in developing economies are fuelling increased demand for seafood, yet sustainable supplies of wild-caught sources are limited. Land-Based RAS (Recirculating Aquaculture System) technology is a well-established method for producing a wide range of salt and freshwater fish species worldwide. Economics and production parameter control provide the rationale for the development and adoption of this technology.

The production of Atlantic Salmon in land-based facilities is at a relatively mid-life stage of development in North America, Europe, Australia, China, Chile, and New Zealand but very new to Africa. All the aspects of technical feasibility have been demonstrated in these countries.

WCS proposes to establish and obtain Environmental Authorisation (EA) for Atlantic Salmon land-based aquaculture farm, incorporating:

- Land-based support activities, such as processing, holding facilities, hatcheries and smolt unit, marine intake and outflow system, reverse osmosis seawater desalination system and wastewater treatment plant.

### 3 THE AFFECTED ENVIRONMENT

Betty's Bay is a small holiday town situated on the Overberg coast of South Africa's Western Cape province. It is located 100 km from Cape Town beneath the Kogelberg Mountains on the scenic R44 ocean drive between Pringle Bay and Kleinmond. This village stretches over 13 km along the coast. Tourism plays a large role in the town's economy due to its popularity with holiday makers from across the Western Cape and Cape Town in particular.

Betty's Bay forms part of the Overstrand local municipality with the leading sectors including wholesale & retail trade, catering and accommodation (20,9%); business services (16,9%); construction (10,2%); general government services (7,3%); and transport (6,3%). Tourism sits primarily in the category for wholesale & retail, catering and accommodation. A thriving aquaculture sector can be found in nearby towns of Hermanus and Gansbaai.

Because of the rugged, varied topography and underlying geology, the Municipal Area has a varied range of landscapes, distinguished by their landform and micro-climates, which support both productive farmland and a diversity of fynbos-dominated natural habitats, rivers and estuaries, and a productive marine environment (fisheries).

Outstanding features of the coast include Cape Hangklip at Rooiels; the mountainous Kogelberg Biosphere Reserve, which is recognised as the heart of the Cape Floristic Kingdom; the Betty's Bay African Penguin Colony at Stony Point; the Fernkloof, Walker Bay, Grootbos and Quoin Point Nature Reserves; the Agulhas plain; the Betty's Bay Marine Protected Area; and the Walker Bay Whale Sanctuary Marine Protected Area. The coastal areas are contrasted by spectacular, imposing mountain ranges, running nearly parallel to the coastline, and rising very steeply from sea level. At  $\pm 964\text{m}$ .

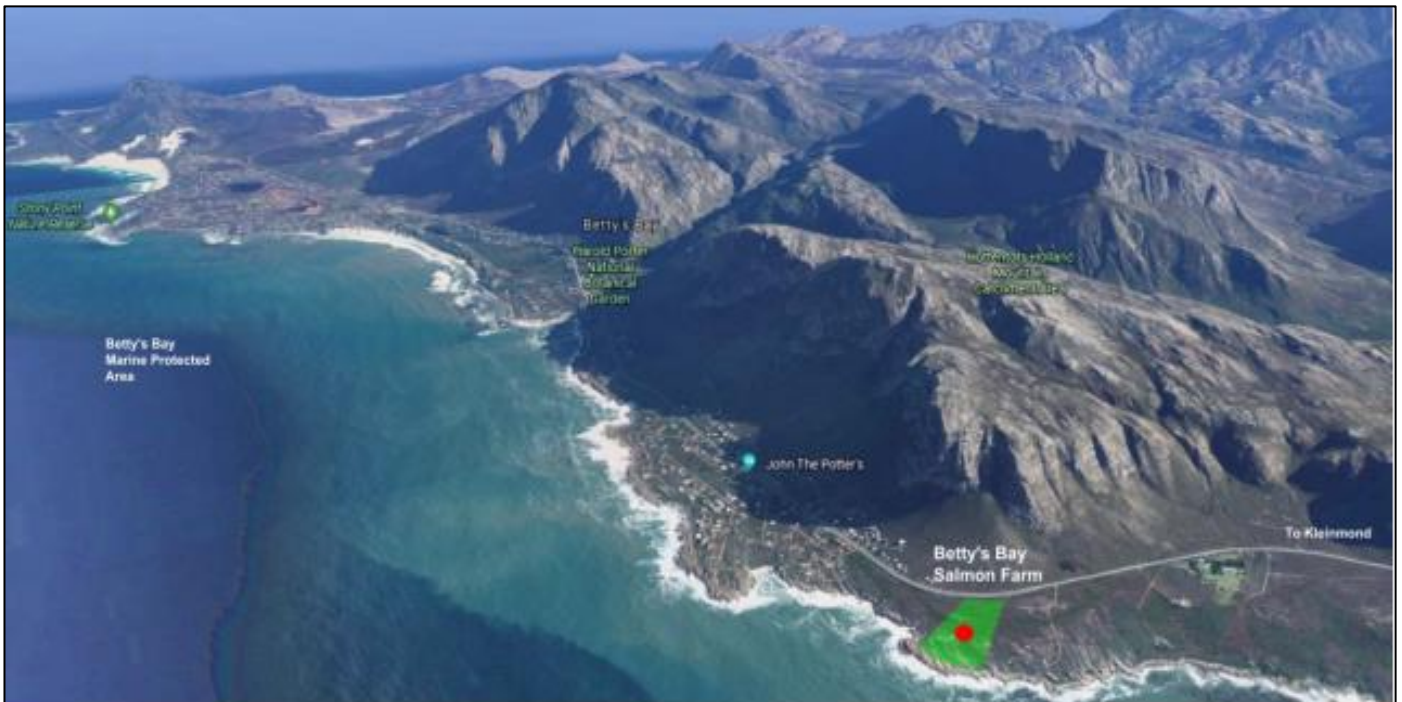


Figure 1: Overview of the proposed location of the Aquaculture Plant.

## 4 BASIC ASSESSMENT PROCESS

In terms of Section 24 of NEMA, an application for EA must be submitted to the competent authority for activities listed in the EIA Regulations, 2014, promulgated in terms of Section 24(5) of NEMA, and authorisation obtained prior to the commencement of those activities. Listing Notices (LN) 1-3 in terms of NEMA list activities that require EA (“NEMA listed activities”).

Activities listed in LN 1 and 3 require a BA process, while activities listed in LN 2 require Scoping and Environmental Impact Reporting (S&EIR, also referred to as a “full” EIA).

The proposed development of a land-based aquaculture farm in Betty’s Bay will trigger some or all the listed activities presented in Table 1, requiring a BA process.

Aquaculture is excluded from LN 2 activity 14, relating to the development of any structure or infrastructure on, below or along the sea bed.

**Table 1: Listed activities potentially triggered**

No	Description ( <i>abbreviated</i> )
Listing Notice 1 (requiring BA)	
3	The development and related operation of facilities or infrastructure for the slaughter of animals with a product throughput of- (iii) fish, crustaceans and amphibians with a wet weight product throughput of 20 000 kg per annum.
6	The development and related operation of facilities, infrastructure or structures for aquaculture of - (i) finfish, crustaceans, reptiles or amphibians, where such facility, infrastructure or structures will have a production output exceeding 20 000 kg per annum (wet weight);
8	The development and related operation of hatcheries or Agri-industrial facilities outside industrial complexes where the development footprint covers an area of 2 000 square metres or more.
10	The development and related operation of infrastructure exceeding 1000 metres in length for the bulk transportation of sewage, effluent, process water, waste water, return water, industrial discharge or slimes. (i) with an internal diameter of 0,36 metres or more; or (ii) with a peak throughput of 120 litres per second or more;
15	The development of structures in the coastal public property where the development footprint is bigger than 50 square metres.
17	Development- (i) in the sea; (ii) in an estuary; (iii) within the littoral active zone; (iv) in front of a development setback; or (v) if no development setback exists, within a

distance of 100 metres inland of the high water mark of the sea or an estuary, whichever is the greater;  
in respect of-  
(c) embankments;  
(d) rock revetments or stabilising structures including stabilising walls;  
(e) infrastructure or structures with a development footprint of 50 square metres or more.

- 19 The infilling or depositing of any material of more than 5 cubic metres into, or the dredging, excavation, removal or moving of soil, sand, shells, shell grit, pebbles or rock of more than 5 cubic metres from -  
(i) the seashore;  
(iii) the littoral active zone, an estuary or a distance of 100 metres inland of the high-water mark of the sea or an estuary, whichever distance is the greater.  
(iv) the sea;
- 25 The development and related operation of facilities or infrastructure for the treatment of effluent, wastewater or sewage with a daily throughput capacity of more than 2000 cubic metres but less than 15000 cubic metres.
- 27 The clearance of an area of 1 hectare or more, but less than 20 hectares of indigenous vegetation.

### Listing Notice 3 (requiring BA)

- 2 The development of reservoirs for bulk water supply with a capacity of more than 250 cubic metres.  
(f) In Western Cape:  
ii. In areas containing indigenous vegetation;
- 4 The development of a road wider than 4 metres with a reserve less than 13,5 metres.  
(f) In Western Cape:  
i. Areas outside urban areas;  
(aa) Areas containing indigenous vegetation;
- 12 The clearance of an area of 300 square metres or more of indigenous vegetation.  
(a) In Eastern Cape, Free State, Gauteng, Limpopo, North West and Western Cape provinces:  
i. Within any critically endangered or endangered ecosystem listed in terms of section 52 of the NEMBA or prior to the publication of such a list, within an area that has been identified as critically endangered in the National Spatial Biodiversity Assessment 2004;  
ii. Within critical biodiversity areas identified in bioregional plans;  
iii. Within the littoral active zone or 100 metres inland from high water mark of the sea or an estuarine functional zone, whichever distance is the greater, excluding where such removal will occur behind the development setback line on erven in urban areas.
- 13 The development and related operation of facilities of any size for any form of aquaculture.  
(d) In Western Cape:  
iii. In an aquatic critical biodiversity area.



Before commencing with the project, the proponent West Coast Salmon (Pty) Ltd. is thus required to appoint an independent Environmental Assessment Practitioner (EAP) to undertake a BA process and to obtain authorisation in terms of NEMA from the competent authority. The competent authority for projects where the applicant is a state department is the Department of Environmental Affairs (DEA).

An overview of the BA process proposed for this project is shown in Figure 2.

**The aims of the BA process are to:**

- Notify stakeholders of the proposed development (and BA process);
- Provide stakeholders with the opportunity to participate effectively in the process and identify relevant issues and concerns;
- Ensure that stakeholders’ issues and concerns are addressed in the assessment and are accurately recorded and reflected in the BAR;
- Assess the potential positive and negative environmental impacts associated with the proposed activity; and
- Make recommendations as to how the potential negative impacts can be effectively mitigated and the benefits enhanced.

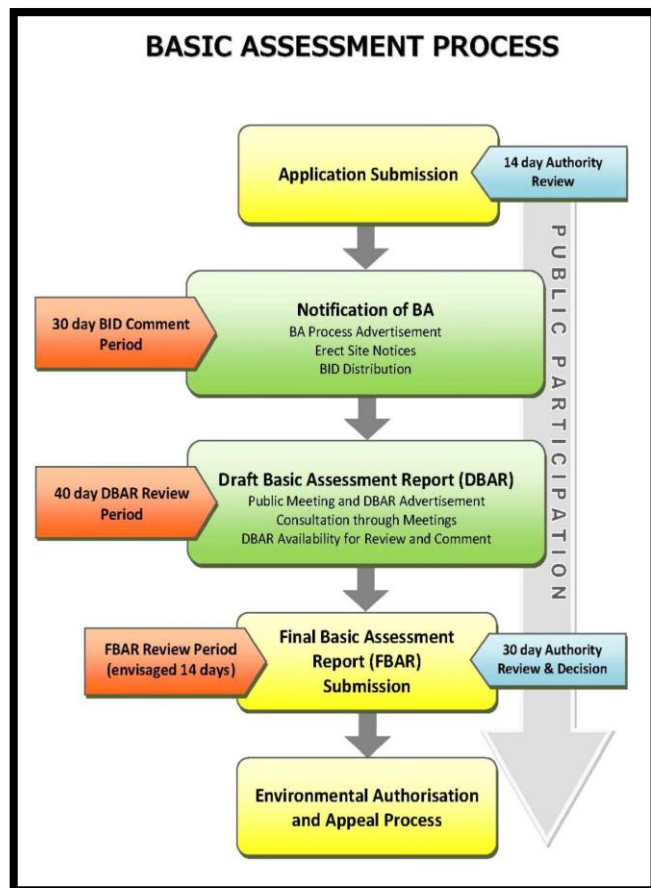


Figure 2: Basic Assessment process.



Specialist input on the following aspects is currently envisaged to inform the BA Report:

- Marine Ecology;
- Botanical;
- Heritage;
- Fresh Water.

Consultation with the public and authorities forms a critical part of the BA process and is intended to provide all stakeholders with opportunities to raise issues and concerns that should be addressed in the BA process and to comment on the documentation submitted to DEA.

Nature Works plans to conduct a thorough consultation process that makes provision for public meetings as well as focus group meetings, if required. As part of such consultation, the BA Report will be released for public comment (in ~February 2019).

# HOW YOU CAN YOU PARTICIPATE IN THE BA PROCESS

If you consider yourself an I&AP for the proposed project, we encourage you to make use of the opportunities created by the Public Participation Process to become involved in the process and raise the issues and concerns which affect and/or interest you, and about which you require more information. By completing and submitting the accompanying registration form, we will ensure that you are registered as an I&AP for the project, and that your concerns or queries regarding the project are attended to. We value your input into the BA process. Stakeholders are invited to register on the project database and/or submit initial comments. Please note that only registered stakeholders will be notified when the documents are made available for comment as part of the BA process.

REGISTRATION AND COMMENT FORM	
KINDLY COMPLETE THIS FORM IN DETAIL AND RETURN IT TO:	
<b>Jacques van Rensburg</b> <b>Nature Works Environmental Consultancy</b> <b>8 Vergenoegd Street</b> <b>Somerset West</b> <b>7130</b>	<b>Tel: 082 748 6623</b> <b>Email: <a href="mailto:jacques@natureworks.co.za">jacques@natureworks.co.za</a></b>
<b>Personal Details</b>	
Title: _____	First Name: _____
Surname: _____	
Email: _____	Fax: _____
Telephone: _____	
Organisation (If Applicable): _____	
Capacity (e.g. Chairperson, member, etc): _____	
Physical Address: _____	
Town: _____	
Postal Address: _____	
Town: _____	Code: _____
1. What is your main interest with regards to the proposed project?	
_____	
_____	
_____	
_____	
2. Do you have any points of concern or support regarding the proposed project? If "yes", please briefly list these in point form:	
_____	
_____	
_____	
_____	
3. Are there any additional stakeholders who you feel should be consulted with regards to the proposed projects? If yes please list their names and contact details below:	
_____	
_____	
_____	
_____	



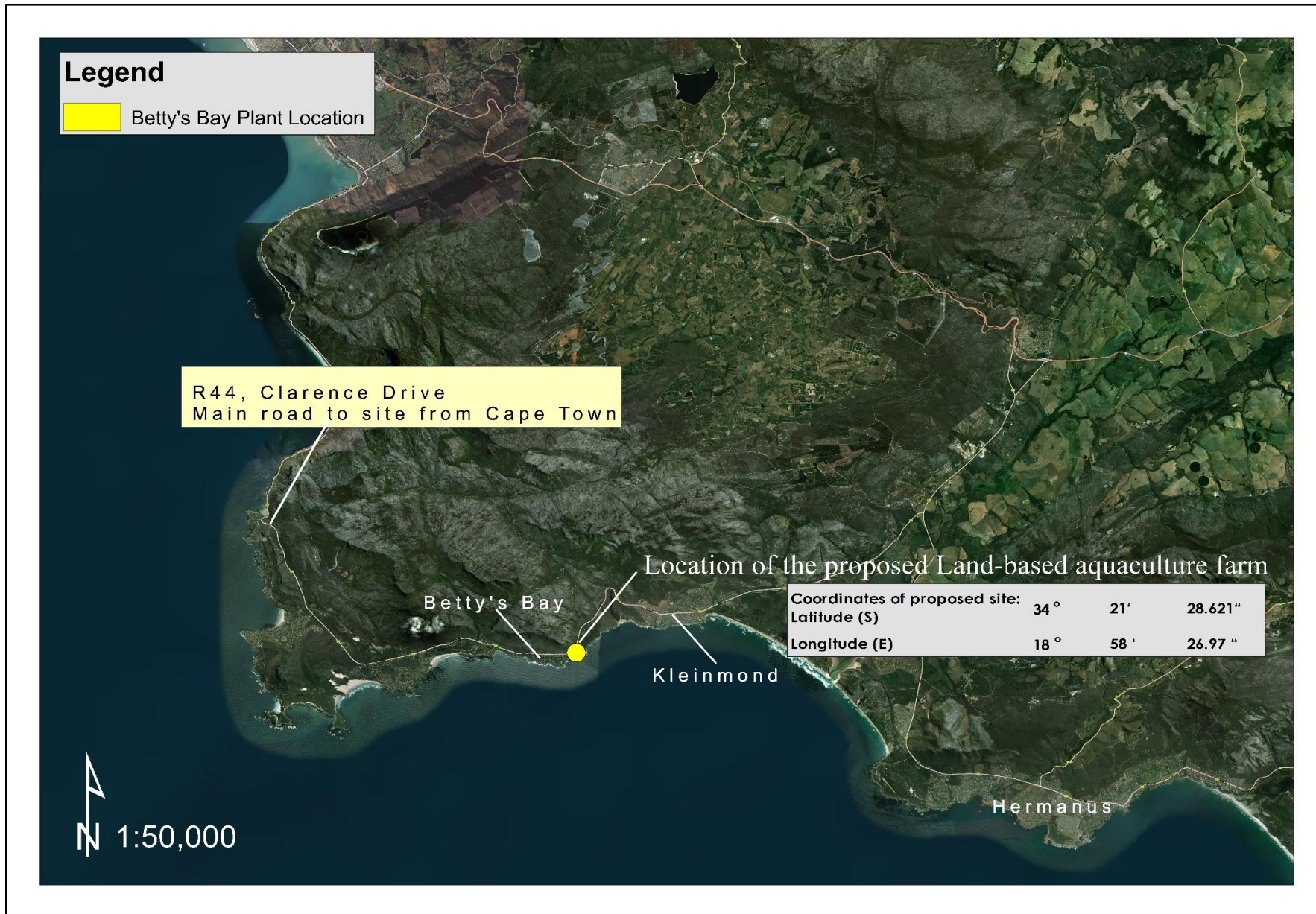


Figure 3: Location of the Proposed Land-Based Aquaculture Farm.