



NSIP-KBG-015220#P1-13

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## CHAPTER 5 ADJACENT SEA-USAGE

### 5.1. INTRODUCTION (*Reference 4*)

This chapter describes the general nature of sea-usage in the coastal area between Lamberts Bay and Hout Bay. The focus is mainly on the economic exploitation of the sea while only a brief description of recreational angling is included. Sea-usage is described with reference to the different fishery sectors as defined by the Department of Sea Fisheries. **Drawing No. 20** illustrates the sea-usage within the defined area, classified in the following fishery sectors:

Rock lobster

Pelagic fish

Demersal fish

Linefish

Abalone

Oysters

Mussels

Seaweed

There is currently (1997) no guano collection taking place on South African islands.

There are no major fishing activities within a 15 nautical mile (27 km) radius from KNPS. The closest commercial activity is found at Robben Island, approximately 15 km SSW of KNPS, where abalone is harvested and along the coast, north of KNPS, where white mussels are collected. According to information available at present the fishing activities closest to the KNPS have not been negatively affected by its presence.

The scenario described in this chapter confirms that the area within a 15 nautical mile radius of Koeberg does not form part of the major important fishing areas of the West Coast. The sea area around KNPS is nevertheless rich in plankton and remains a relatively important area, especially with regard to the control of the quality of the sea around KNPS.

The two most important products of the West Coast are pelagic fish (seaward, of the 15 nautical mile line) and rock lobster. Dassen Island, 25 km to the north, is the nearest location where rock lobster is



exploited. The coastal area south of KNPS forms part of a rock lobster reserve.

## 5.2. FISHERY SECTORS

### 5.2.1 Rock Lobster

Rock lobster is found in the rocky areas within 20 nautical miles from the coast. The resource is protected by the creation of reserves for the safeguarding of the stock and to build up a reserve population. The different reserves are shown on **Drawing No. 20**. The beach at Duynfontein is not included in any reserve because the extensive rocky areas associated with rock lobster are not found along this section of the coast.

The most important rock lobster areas occur in the following zones:

Lamberts Bay - Elands Bay

St. Helena Bay - Saldanha Bay

Dassen Island

Other areas of importance are Cape Point and Lamberts Bay.

Rock lobster catches are controlled by annual quotas with the most recent quotas as follows (1996 - 1997):

Lamberts Bay - Elands Bay: 26 Quota holders

St. Helena Bay - Saldanha Bay: 36 Quota holders

Dassen Island : 55 Quota holders

The catches between Vondeling Island (Saldanha) and Hout Bay is given in the table below.

### ROCK LOBSTER CATCHES BETWEEN VONDELING ISLAND AND HOUT BAY

Year	Tons (nominal weight)
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1992/93	378
1993/94	342
1994/95	315
1995/96	267

There has been a decline in the average somatic growth rate in recent years as a result of an unknown environmental anomaly which has led to a decreasing catch rate.

Rock lobster catches in the Dassen Island area represent approximately 20 % of the annual total allowable catch (TAC). This area remains an important source of rock lobster catches and this places a heavy responsibility on the control of the quality of the sea around KNPS.

### 5.2.2 Pelagic Fish

Pelagic fish are found around the entire western coastline, inshore to the edge of the continental shelf. It is the second largest contributor to the fishing industry in terms of volume landed. Annual catches vary, but are seldom lower than 300 000 tons. The majority of the catch is caught on the west and south western coast between Lamberts Bay and Gansbaai. Sardine, anchovy and round herring are the important species, but lesser amounts of mackerel, maasbanker and lantern fish are also caught.

Anchovy and other pelagic species migrate past the KNPS area. Fish are caught in this area during their migration. However, there are no landing sites in the KNPS area and the power station therefore does not affect fishing operations in any way. The closest pelagic fishing ports are at Hout Bay and Saldanha Bay.

Pelagic catches for 1995 were considered to be typical with a total catch of 368 000 tons. The area between 33° and 34° south (Saldanha to north of Hout Bay) yielded 25.9 % of the catch.

Although KNPS is situated next to the spawning and nursery ground of some pelagic species, its effect on stocks and its environment is considered insignificant because of the relatively small area it is likely to influence.

### PELAGIC CATCHES BETWEEN SALDANHA AND HOUT BAY - 1995 (TONS)

CATCH	Anchovy	Sardine	Maasbanker	Mackerel	Redeye	Lantern	Total
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Saldanha to Hout Bay	36 727	26 403	15	591	31 823	536	96 096
Total pelagic catch for 1995 (SA)	170 270	115 100	1980	2 660	76 600	1 000	367 610
West Coast Percentage of total catch	21.6	22.9	0.8	22.2	41.5	53.6	26.1

### 5.2.3 Demersal Fish

This is South Africa's most valuable commercial fishery and is dominated by deep-sea trawling involving the Cape Hakes between depths of 200 and

1 000 metres. Hake catches have been controlled since the 1970's through company allocated quotas based on total allowable catch (TAC). Over-exploitation in the past has led to decreasing catches in the 1980's, but by the mid 1990's catches had returned to the levels of the mid 1960's. Control is exercised by means of limitations on the number of vessels and closed areas. Few foreign vessels are allowed to participate in this fishery sector.

The midwater trawl fishery is relatively small and inshore and midwater catches are negligible in relation to offshore catches. The KNPS thus has no effect on this activity.

### DEMERSAL TRAWL CATCH FOR THE YEARS 1994 - 1996 (TONS):

Year	Inshore		Midwater		Offshore	
	Hake	Total species	Hake	Total species	Hake	Total species
1994	0	0	0	0	101 264	117 903
1995	31	42	29	36	92 679	109 766
1996	44	174	44	253	88 802	105 182

### 5.2.4 Linefish

Line fishing is practised within 11 nautical miles (20 km) from the coast.

The line fishery sector on the West Coast is dominated by commercial and semi-commercial fishing. The main activity involves catches by drift-net and beach-seine operators. Drift nets contribute a major proportion of the linefish landed on the West Coast. Snoek catches make up a large proportion of the linefish sector as illustrated in **Table**



**T-5.4.** Generally snoek catches take place closer to the coast than other linefish (within 10 nautical miles from the coast).

South Africa's commercial interest in tuna fishing was until recently focused on the West Coast pole fishery for albacore (longfin tuna), which in 1996 contributed 90 % of the annual tuna catch. Other species, particularly yellow fin tuna and southern bluefin only contribute a by-catch of a few hundred tons per year to the West Coast pole fishery.

The catch rate continues to decline as the numbers of fishers (commercial and recreational) rise annually. The table below reflects the total landings of the main linefish species for the area Hout Bay to Lamberts Bay over the period 1992 - 1996.

### TOTAL REPORTED LANDINGS (TONS) OF LINEFISH SPECIES BY REGISTERED BOATS HOUT BAY TO LAMBERTS BAY

Fish Species	1992	1993	1994	1995	1996
Snoek	4 511	2 161	6 471	7 381	5 030
Tuna	1 695	1 728	732	1 688	827
Hottentot	226	374	614	135	171
White stumpnose	38	77	70	86	131
Yellowtail	10	27	102	22	64
<b>Total</b>	<b>6 480</b>	<b>4 367</b>	<b>7 989</b>	<b>9 312</b>	<b>6 223</b>

#### 5.2.5 Abalone

Abalone is commercially collected on a quota basis by concession holders at Robben Island. The local contribution of 15 tons represents  $\pm 3$  % of the total RSA catches of 550 tons and has a wholesale value of R750 000. The recreational take of abalone is  $\pm 80$  tons per season. A future potential of 20 tons total allowable catch (TAC) is a possibility along the west coast.

#### 5.2.6 Oysters

The only area of significance is Saldanha Bay which produced 364 995 oysters in 1993. This increased to 847 930 in 1994, and 887 789 in 1995. The latter represents 18.5 % of the total RSA production. The farm at Langebaan (Churchaven) has been closed due to the area being proclaimed a nature reserve.



### 5.2.7 Mussels

White mussels are collected on the west coast for bait purposes. Concession holders are active in the Melkbosstrand, Bokbaai and Groot Springfontein areas. The total collection in these areas is given in *Table T-5.5*.

#### WHITE MUSSELS COLLECTED AT MELKBOSSTRAND, BOKBAAI AND GROOT SPRINGFONTEIN

Year	Kg
1994	19 651
1995	17 200
1996	10 950

Red bait is harvested at Saldanha Bay as a by-product of mussel-farming and sold to fishermen. A total of 11 950 kg was harvested in 1994. The harvest for 1995 and 1996 decreased to 6 257 kg and 715 kg respectively.

Permits for the cultivation of black mussel have been issued to concerns at Saldanha Bay and Stompneus Bay.

### 5.2.8 Seaweed

The collection of seaweed takes place on a concession basis which is renewed every five years. Permits allow for the collection of beach cast and/or the harvesting of particular species from natural populations in a specified area.

The area from Hout Bay to Lamberts Bay includes the following five concession areas:

Part of Concession Area 9:

Simonstown, Rocklands Point to Klein Koeëlbaai near Bakoven;

Concession Area 10:

South of Blouberg to South Head, Saldanha Bay;




**Concession Area 17:**

South Head to North Head (Schooner Rock) of Saldanha Bay, excluding Langebaan;

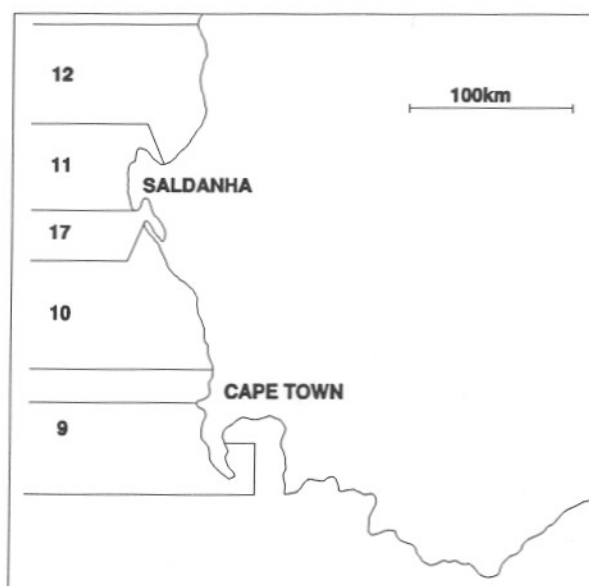
**Concession Area 11:**

North Head (Schooner Rock), Saldanha to the southern bank of the Berg River;

**Concession Area 12:**

North Bank of the Berg River to the southern border of Lamberts Bay.

**FIGURE F-5-1  
SEAWEED CONCESSION AREAS**



Four concession holders hold the rights to these concessions:

Kelp products - Area 9

Kelpco - Area 10

Taurus - Area 17

Klestern Kelp - Areas 11 and 12.

Kelp is mainly collected in Areas 9, 10, 11 and 12. Harvesting takes



place in Area 9 (Kommetjie); mainly for the production of an agricultural growth stimulant. Limited harvesting also occurs in Area 11 (near Jacobsbaai).

Red seaweed is collected in economic quantities as beach cast in concession Area 17, where limited kelp collection takes place.

**Table T-5.6** shows seaweed collection in the area Hout Bay to Lamberts Bay (Areas 9, 10, 11, 17 and 12). Fluctuations in yields can be contributed to environmental parameters as well as changes in the demand for a particular species on the world market.

### SEAWEED COLLECTIONS IN CONCESSION AREAS (1992 - 1996)

Year	Area 9	Area 10	Area 17	Area 11	Area 11	Area 12
	Kelp	Kelp	Gracilaria	Kelp	Gracilaria	Kelp
	kg wet wt*	kg dry wt	kg dry wt	kg dry wt	kg dry wt	kg dry wt
1992	267 760	0	191 305	0		0
1993	268 005	0	377 939	20 000	60 000	0
1994	364 768	0	272 467	0		0
1995	315 695	0	439 326	23 783		0
1996	405 300	0	189 650	0		0

\*kilogram wet weight.

Seaweed resources are controlled by the Department of Environment Affairs and Tourism according to the results of research carried out by the Sea Fisheries Institute. Commercial activities in the seaweed industry have had negligible ecological effects.

#### 5.2. RECREATIONAL ANGLING

The importance of the West Coast for recreational angling is indisputable. This sector, however, is largely unmonitored and there is no data available in respect of quantities caught. Most place names along the coast represent angling spots. The closest angling spots to the KNPS are at Melkbosstrand and to the north at Springfontein and Bokbaai. It is expected that growth along the West Coast corridor will further stimulate the use of the coastal area for recreational angling.

#### 5.3. REGIONAL IMPORTANCE OF THE FISHING INDUSTRY

Although the consumption of fish products in South Africa is relatively low in comparison with other fishing nations, the industry contributes significantly to the country's foreign exchange. Importantly though, the fishing industry employs a significant number of people along the west



and south-western coastal areas. Apart from the direct employment opportunities, there are also spin-off support industries with significant employment figures. The importance of recreational angling in the defined area also contributes to the significance of the fishing industry along the West Coast.

Current research as reported by the Sea Fisheries Research Institute shows no evidence that any of the fishery sectors described in this chapter has been negatively affected by the presence of the KNPS. The importance of the area closer to the KNPS lies more in the maintenance of the quality of the sea than actual fishing activities in the area.

#### 5.4. PROCESSING FACTORIES AND DISTRIBUTION OF SEA PRODUCTS

The processing factories listed in *Table T-5-7* are the major collecting and distribution points for all sea products mentioned. The factories are listed per harbour.

#### LIST OF FACTORIES PER HARBOUR (1997)



<p><b><u>Hout Bay</u></b></p> <p>Sea Products</p> <p>Chapman's Peak Fisheries</p> <p>Live Rock Lobster Corp.</p> <p>SA Sea Products</p> <p>Snoekies Smokeries</p> <p>Wimar Fishing</p> <p>Independent Fisherman Corp.</p> <p>Mariner's Wharf (smokery)</p> <p><b><u>Saldanha Bay</u></b></p> <p>Atlantis Lobster Pty. Ltd.</p> <p>Cape Reef Products</p> <p>Drommedaris Visserye Bpk.</p> <p>Lusitania Sea Products</p> <p>S.A. Lobster Exporters Pty. Ltd.</p> <p>Sea Harvest Corp.</p> <p>South Sea Fishing Enterprises</p> <p><b><u>Laaiplek</u></b></p> <p>Marine Products</p> <p>Môreson Visserye cc</p> <p>Eigelaars AJF &amp; Sons (Pty) Ltd.</p> <p>Waso Vishandelaars</p> <p><b><u>Elandsbaai</u></b></p> <p>W. Engelbrecht</p> <p>Elandia Visserye</p> <p>De Seede Seeproducte</p> <p>Lamberts Bay Fishing Company</p>	<p><b><u>Victoria and Alfred Docks, Cape Town</u></b></p> <p>Bridger and Angelico</p> <p>Atlantic Trawling</p> <p>Good Hope Fisheries</p> <p>Lusitania Fishing</p> <p>Irvin and Johnson Ltd.</p> <p>Viking Fisheries</p> <p>Hout Bay Fishing</p> <p>Marine Products</p> <p>Concentra</p> <p><b><u>St. Helena Bay</u></b></p> <p>St. Helena Bay Fishing Industries</p> <p>Suid Oranje Visserye</p> <p>Westpoint Fishing Corp.</p> <p>Drommedaris Visserye</p> <p>Marine Products</p> <p>Sandy Point Fishing</p> <p><b><u>Paternoster</u></b></p> <p>Paternoster Visserye</p> <p>Sparkor Pty. Ltd.</p> <p>Langklip Seeproducte</p> <p>Buccaneer Sea Products (factory not in use - Sept. 1997)</p> <p>Wesco Visserye (factory not in use - Sept. 1997)</p> <p><b><u>Lamberts Bay</u></b></p> <p>Lamberts Bay Fishing Company</p>
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