



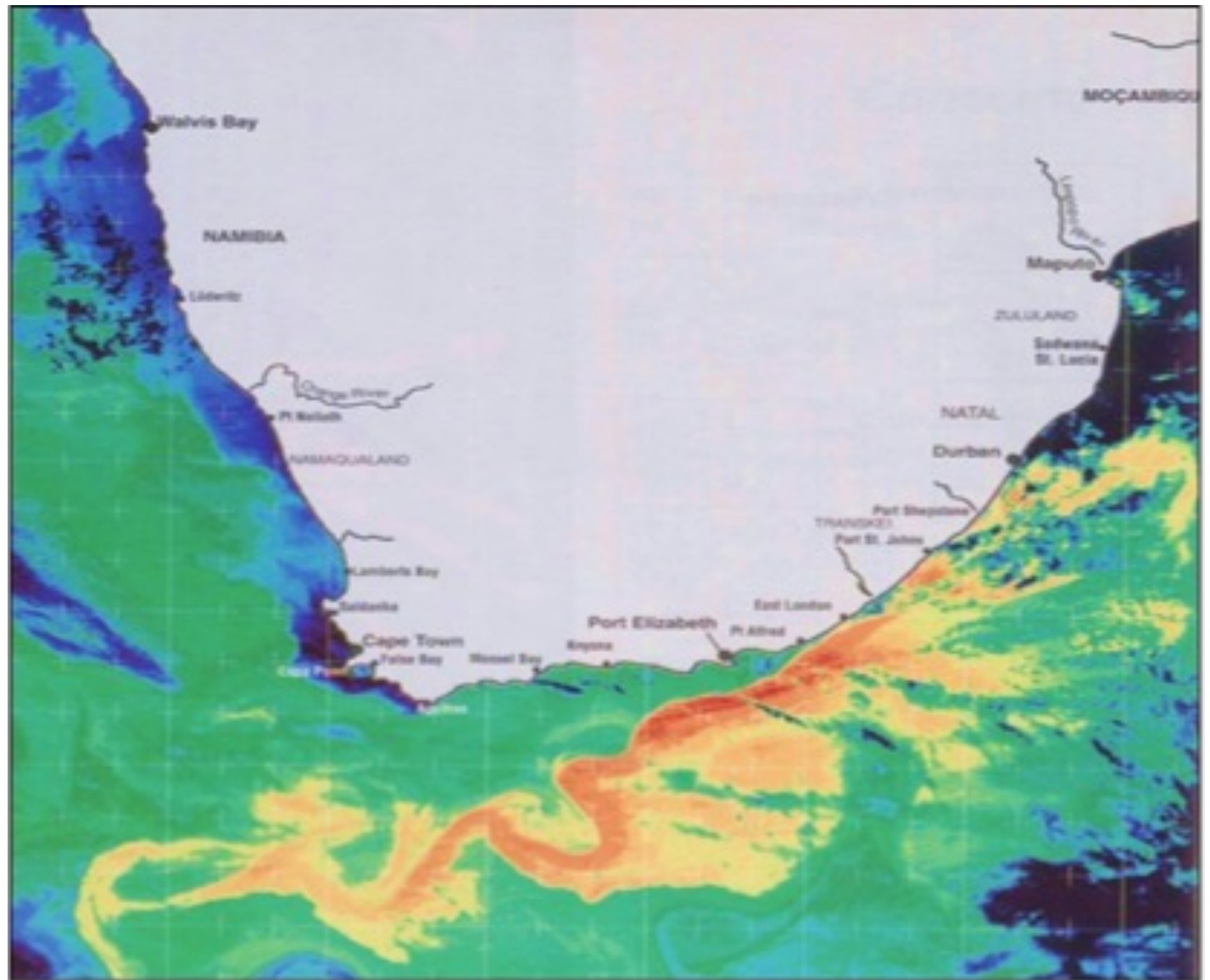
Sustainable Fisheries: Bridging the Gap between Legislation and Implementation

Danai J. Tembo

NELSON MANDELA
UNIVERSITY



Satellite image of South Africa illustrating the major ocean currents and associated water temperatures (<https://capeinfo.com/>).





Source: raggycharters.co.za



Source: raggycharters.co.za



Source: Mark Addison



Source: raggycharters.co.za

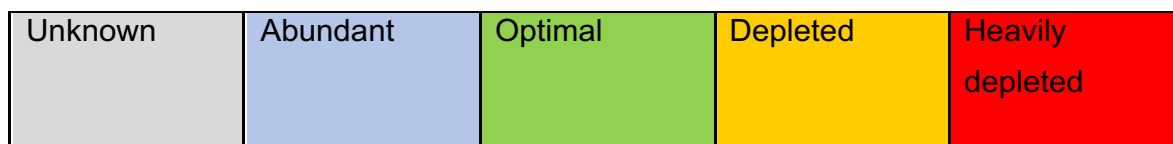


Source: Mark Addison



Source: luximer.com

Fishery	Stock Status					
	2010	2012	2014	2016	2020	2023
Abalone	Heavily depleted					
Agulhas sole	Unknown					
Cape hakes	Abundant	Optimal	Depleted	Depleted	Depleted	Depleted
Cape horse mackerel	Optimal					
Kingklip	Not reported	Not Reported	Not reported	Optimal		
Linefish	Heavily depleted	Optimal	Depleted	Depleted	Depleted	Depleted
Netfish	Heavily depleted	Optimal	Depleted	Depleted	Heavily depleted	
Oysters	Unknown					
Patagonian toothfish	Optimal					
Prawns	Optimal	Depleted	Depleted	Depleted	Depleted	Not reported
Seaweeds	Depleted	Depleted	Depleted	Depleted	Depleted	Depleted
Sharks	Heavily depleted	Depleted	Depleted	Depleted	Depleted	Depleted
Small invertebrates and new fisheries	Unknown					
Small pelagic fishes	Optimal	Depleted	Depleted	Depleted	Depleted	Depleted
South Coast rock lobster	Optimal	Depleted	Depleted	Depleted	Depleted	Depleted
Squid	Optimal					
Tuna and swordfish	Depleted	Depleted	Depleted	Depleted	Depleted	Depleted
West Coast rock lobster	Heavily depleted					



Summary of stock status for 17 recognised fisheries
(Adapted from DAFF, 2010 – 2016 & DFFE, 2020, 2023)

**MARINE LIVING RESOURCES ACT
NO. 18 OF 1998**

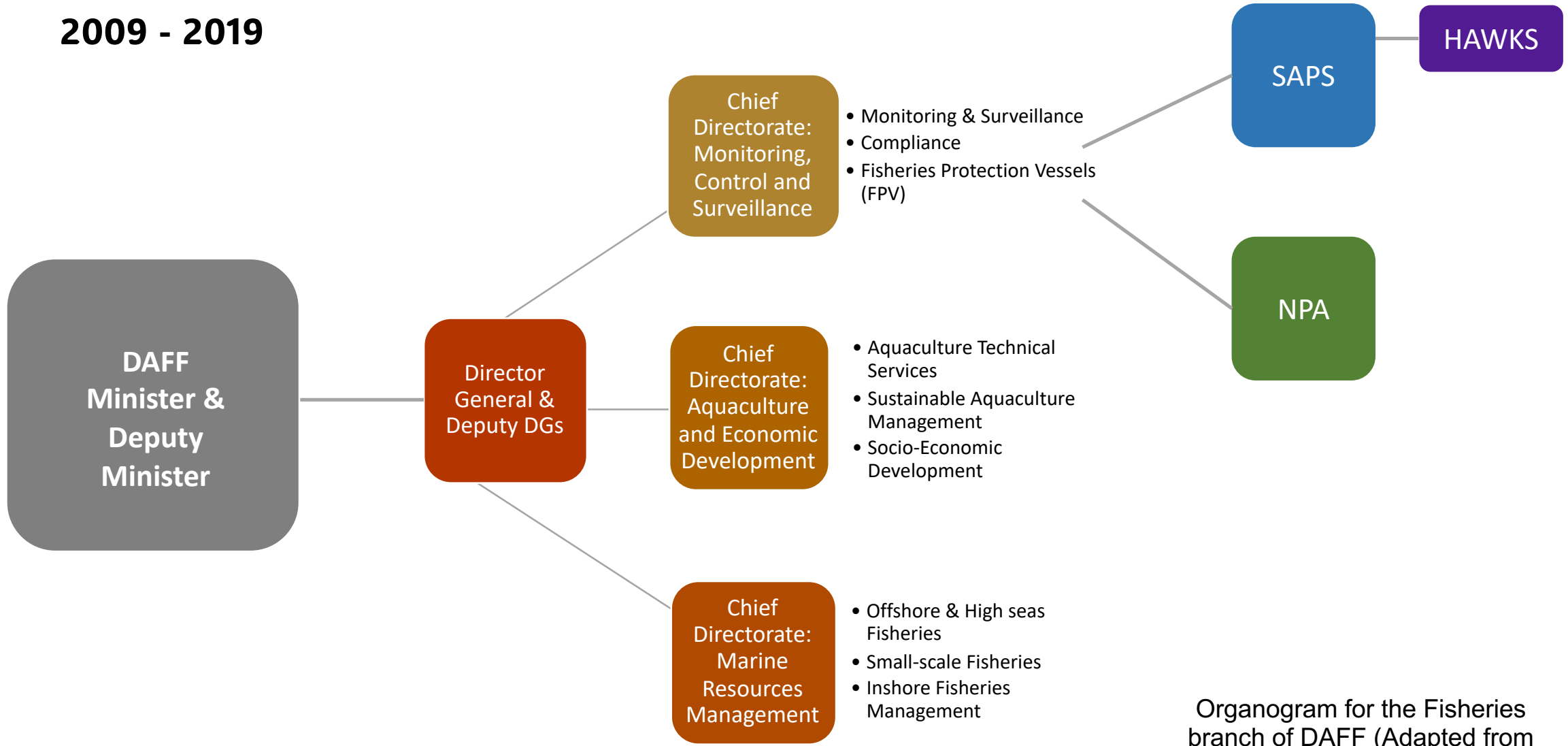
Assented to: 21 May 1998

Date of commencement: 1 September 1998

ACT

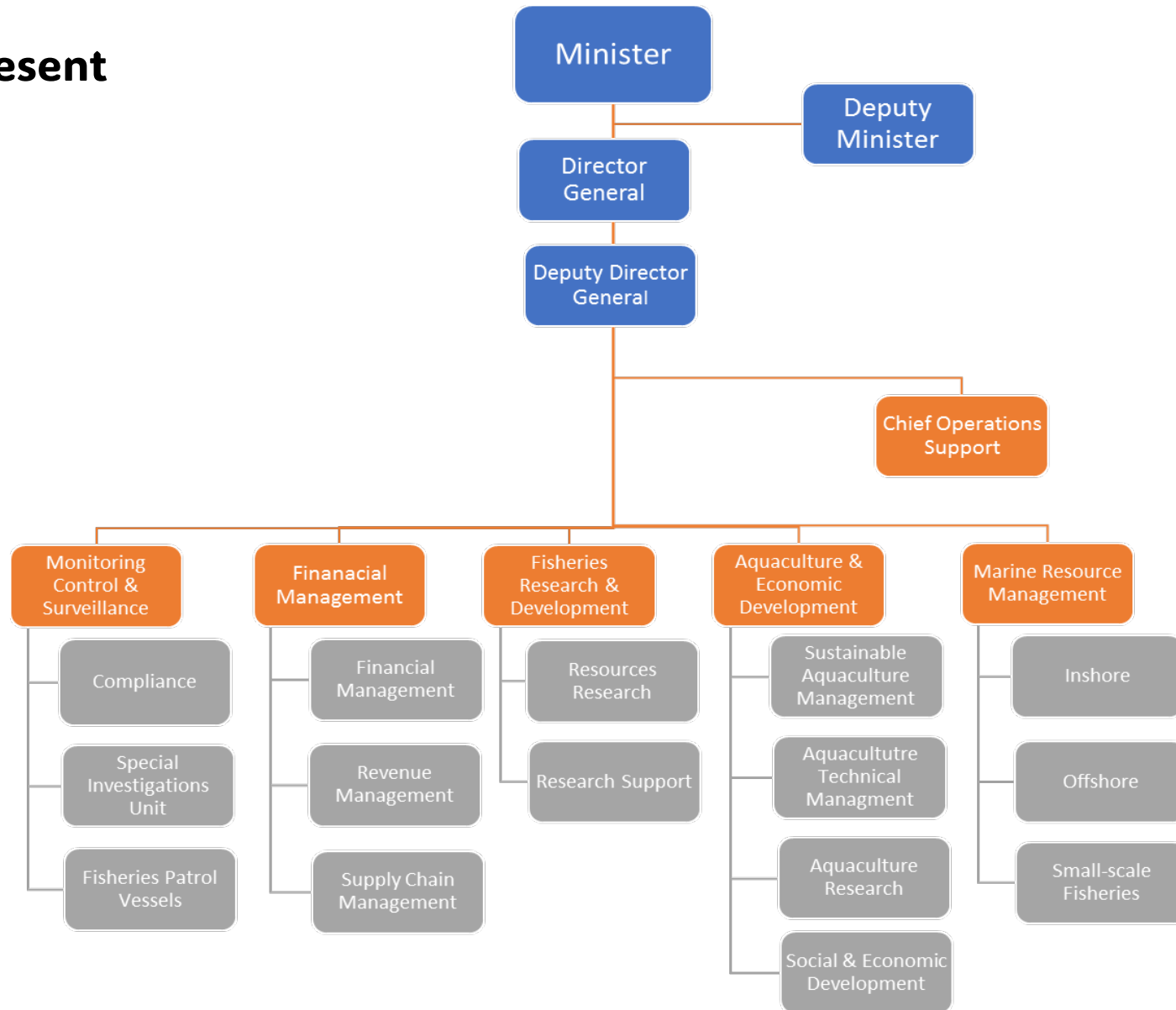
To provide for the conservation of the marine ecosystem, the long-term sustainable utilisation of marine living resources and the orderly access to exploitation, utilisation and protection of certain marine living resources; and for these purposes to provide for the exercise of control over marine living resources in a fair and equitable manner to the benefit of all the citizens of South Africa; and to provide for matters connected therewith.

2009 - 2019



Organogram for the Fisheries branch of DAFF (Adapted from <https://www.gov.za>)

2019 - Present



Organogram for the Fisheries Management Branch of DEFF (Adapted from PMG, 2020).



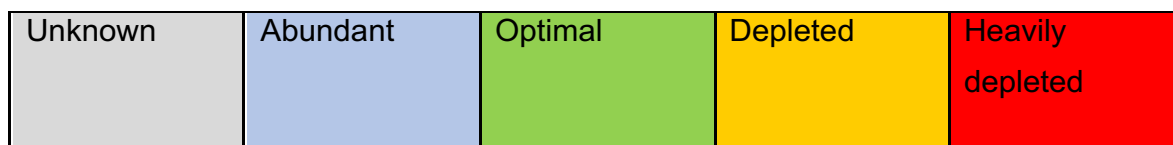
ALTERNATIVE?





Source: Dark Water Ops (2018)

Fishery	Stock Status					
	2010	2012	2014	2016	2020	2023
Abalone	[Red]					
Agulhas sole	[Grey]					
Cape hakes	[Yellow]	[Green][Yellow]	[Blue][Green]	[Blue][Yellow]	[Blue][Green]	[Blue][Green]
Cape horse mackerel	[Green]					
Kingklip	Not reported	Not Reported	Not reported	[Green]		
Linefish	[Red]	[Green][Yellow][Red]	[Blue][Green][Red]	[Blue][Green][Yellow][Red]	[Blue][Green][Yellow][Red]	[Blue][Green][Yellow][Red]
Netfish	[Red]	[Green][Yellow][Red]	[Green][Yellow][Red]	[Blue][Green][Yellow][Red]	[Red]	
Oysters	[Yellow]	[Green]		[Grey]		[Grey]
Patagonian toothfish	[Grey]		[Grey]	[Green]		
Prawns	[Green]	[Green][Yellow]	[Green][Yellow]	[Green][Yellow]	[Green][Yellow]	Not reported
Seaweeds	[Blue]	[Blue][Green]	[Blue][Green]	[Blue][Green]	[Green][Blue]	[Blue][Green]
Sharks	[Red]	[Green][Yellow][Red]	[Green][Yellow][Red]	[Grey][Blue][Green][Yellow][Red]	[Grey][Blue][Green][Yellow][Red]	[Grey][Blue][Green][Yellow][Red]
Small invertebrates and new fisheries	[Grey]		[Grey]	[Grey][Blue][Green][Yellow][Red]	[Grey]	
Small pelagic fishes	[Green]	[Blue][Green]	[Blue][Green]	[Blue][Yellow]	[Blue][Green][Yellow]	[Blue][Green][Yellow]
South Coast rock lobster	[Green]	[Green][Yellow]	[Green][Yellow]	[Green][Yellow]	[Green][Yellow]	[Green][Yellow]
Squid	[Green]					
Tuna and swordfish	[Blue][Green][Yellow]	[Blue][Green][Yellow][Red]	[Blue][Green][Yellow][Red]	[Green][Yellow][Red]	[Green][Yellow][Red]	[Green][Yellow][Red]
West Coast rock lobster	[Red]					



Summary of stock status for 17 recognised fisheries
 (Adapted from DAFF, 2010 – 2016 & DFFE, 2020, 2023)



How do we do this?



So, we can avoid this?



Fishery	Stock Status
	Future Date
Abalone	
Agulhas sole	
Cape hakes	
Cape horse mackerel	
Kingklip	
Linefish	
Netfish	
Oysters	
Patagonian toothfish	
Prawns	
Seaweeds	
Sharks	
Small invertebrates and new fisheries	
Small pelagic fishes	
South Coast rock lobster	
Squid	
Tuna and swordfish	
West Coast rock lobster	

And work toward this?

THANK YOU



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MSEAS 2024
June 3 – 7, 2024
Yokohama, Japan



2021-2030 United Nations Decade of Ocean Science for Sustainable Development
A UN Ocean Decade Event
#MSEAS2024

Marine Socio-Ecological Systems Symposium

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