

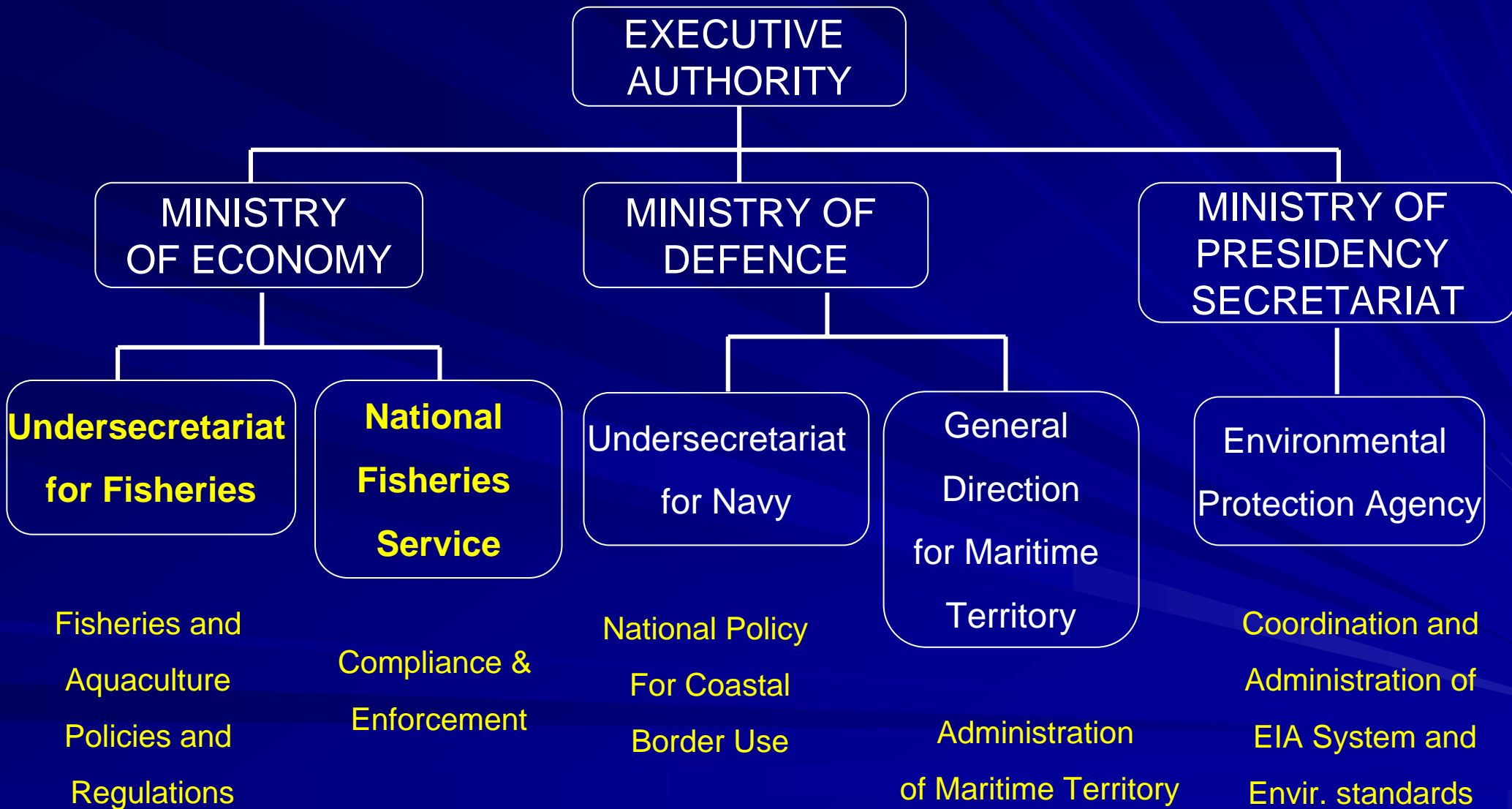


ENVIRONMENTAL REGULATIONS IN CHILE

JESSICA FUENTES
UNDERSECRETARIAT FOR FISHERIES

MANAGEMENT FRAMEWORK

MANAGEMENT FRAMEWORK



REGULATORY FRAMEWORK



- General Law for Fisheries and Aquaculture
 - ✓ Use of territory regulation
 - ✓ Fish Health Regulation
 - ✓ Environmental Regulation for Aquaculture
 - Environmental Protocols
- General Environmental Law
 - ✓ System for Environmental Impact Assessment Regulation

USE OF TERRITORY REGULATION

AUTHORIZED AREAS FOR AQUACULTURE

Areas which have been authorized to make aquaculture

- Consultation to governmental agencies and to the community (publication of proposal)
- Technical report of Under Secretariat for Fisheries.
- Decree of Ministry of National Defense - Marine Under-Secretariat

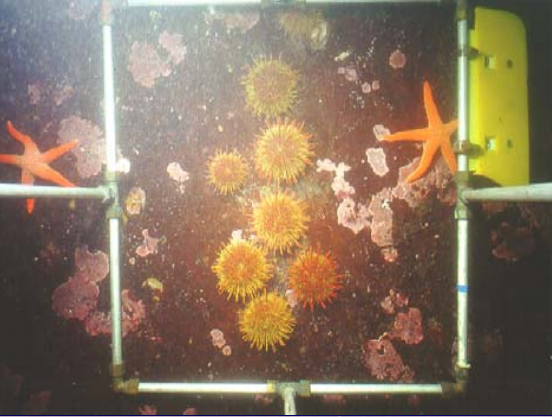


AUTHORIZED AREAS FOR AQUACULTURE



- They were created to promote the activity.
- They don't exclude other activities.
- Today, they have not been established on rivers and lakes.
- The activity growing will demand to extend the marine areas and to declare new areas on rivers and lakes for aquaculture.

POLICY FOR THE USE OF COASTAL BORDER



- Supreme Decree N° 475 (1995) creates the Policy for the Use of Coastal Border and the National Commission for the Use of Coastal Border.
- Marine Under-Secretariat: convokes regions to start zoning processes of coastal border.
- Regional Commissions for the use of coastal border are created.

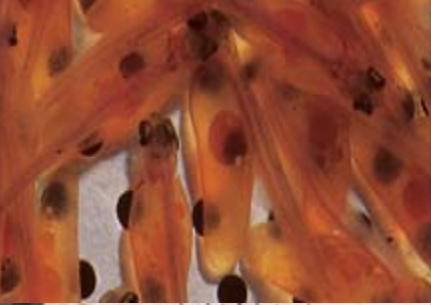
ZONING



- There is no legal regulation that determines it.
- Conflict is generated among regulated activities (aquaculture) and non regulated ones (tourism).
- Regional progress has occurred with the support of international agencies.
- First zoning took place in Aysen, XI Region.

ELEMENTS TO CONSIDER

- Participation of governmental agencies.
- Citizenship participation.
- Technical information.
- Economic and social information.
- Negotiation among interested sectors.



FISH HEALTH REGULATION

FISH HEALTH REGULATION

Main contents

- Classification of diseases
- Emergency measures
- Development of health programs
- Certification for importation
- Zoning of diseases
- Drugs control
- Diagnostic laboratories certification
- Mandatory health registers

*Carried out by National Fisheries Service



FISH HEALTH REGULATION

Health Programs



General Health Programs (by activity):

- About health management practices

Specific Health Programs (by disease):

- Epidemiological Surveillance
- Disease Control
- Disease Eradication



ENVIRONMENTAL REGULATION

ENVIRONMENTAL REGULATION

Main contents



- Distances between tenures
 - Finfish-finfish: **2,778 m**
 - Finfish-shellfish: **400 m**
 - Shellfish-shellfish: **200 m**
- Mandatory: **AEROBIC CONDITIONS IN SEDIMENTS**
 - Mandatory reduction of production levels for a farm that is operating if anoxic conditions are detected during monitoring
- Companies are required to submit environmental baseline data and monitoring to the government (as per regulation which sets out parameters, requirements and frequency)

ENVIRONMENTAL REGULATION

Main contents



- Release of species or culture of transgenic species only with special authorization
- Solid and liquid wastes must be managed to comply with national emission standards
- Contingency plan for massive mortalities and escapes
- Net maintenance can only be conducted in approved facilities

ENVIRONMENTAL PROTOCOLS



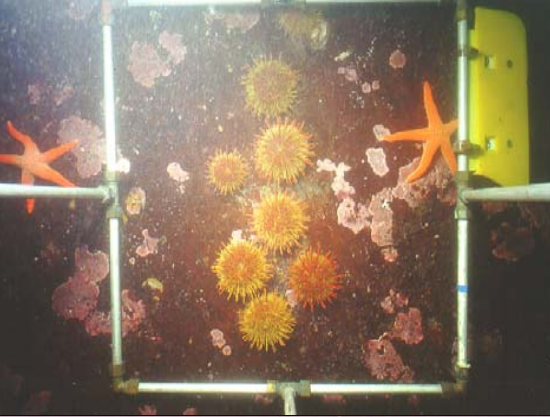
- Establishes information requirements and methodologies for collection of baseline data and required samples for the Annual Environmental Report (monitoring)
- The information must be collected by a qualified professional with expertise in marine and environmental sciences (quality control)

ENVIRONMENTAL PROTOCOLS



- Site classification based on:
 - ✓ Production level
 - ✓ Production system
 - Extensive (shellfish & seaweed)
 - Intensive (finfish & abalone)
 - ✓ Bathymetry of the area (60 m)
 - ✓ Nature of substrate (hard or soft)

ENVIRONMENTAL PROTOCOLS



CATEGORIES

1	a) Extensive culture on seabed b) Suspended extensive culture < 300 t/y and ≤ 60 m
2	a) Suspended extensive culture 301-750 t/y and ≤ 60 m b) Intensive culture < 50 t/y and ≤ 60 m
3	a) Inland water aquaculture and ≤ 60 m b) Suspended extensive culture > 750 t/y and ≤ 60 m c) Intensive culture > 50 t/y and ≤ 60 m
4	Hard substrate and ≤ 60 m
5	> 60 m

REQUERIMENTS ACCORDING TO CATEGORY

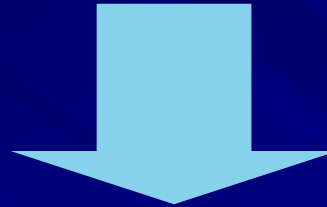


PARAMETERS	CATEGORIES				
	1	2	3	4	5
Bathymetry	X	X	X	X	X
Organic matter	X	X	X		
Grain size		X	X		
Benthic macrofauna		X	X		
Eulerian current			X	X	X
pH & redox potential			X		
Dissolved Oxygen			X		X
Sub tidal Video				X	

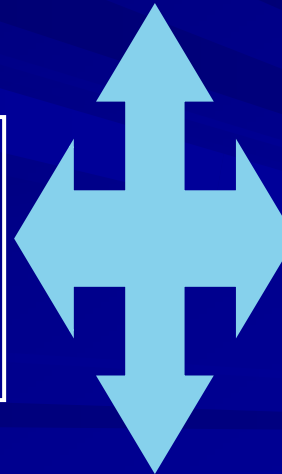
ENVIRONMENTAL IMPACT ASSESSMENT



GENERAL ENVIRONMENTAL LAW



Environmental Impact Assessment



Kelp >500 t/y or >100,000 m²

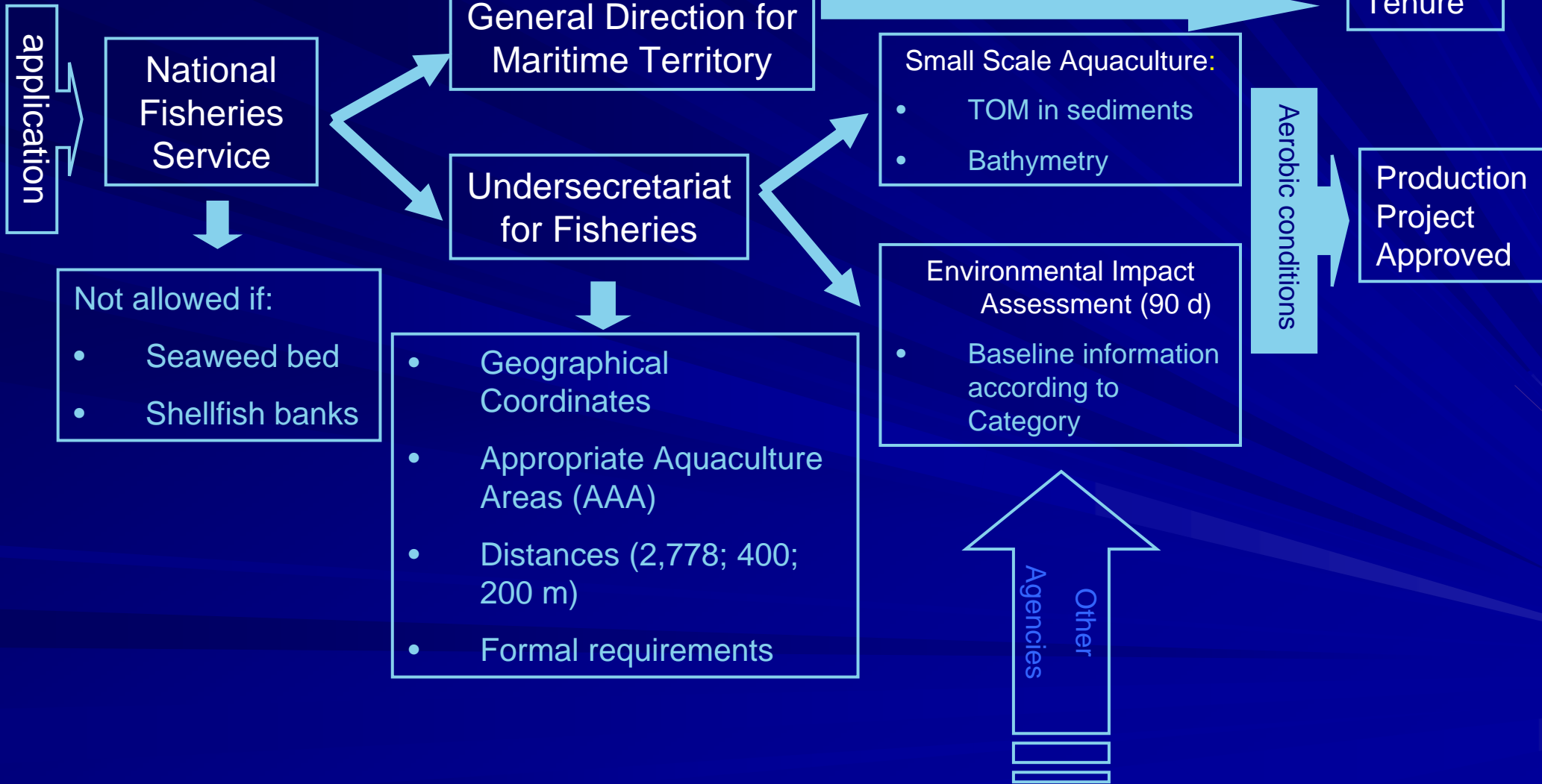
Other algae >250 t/y or >50,000 m²

Finfish, sea urchin and abalone

> 35 t/y

Shellfish >300 t/y or >60,000 m²

TENURE PROCESS



RESPONSIBILITIES OF FARMER

GENERAL LAW FOR FISHERIES AND AQUACULTURE

Operation

- Aquatic species imports (certification)
- Specific and periodic reporting
- Protection, control and eradication measures for aquatic animal high risk diseases
- Environmental Monitoring Report (annual)
- Fee payment

