

Phase 3:

Designing the agreement

What are they key
things to keep in
mind

Key elements of an agreement

Conservation
Actions

Eliminate or
reduce the
threat

Benefits

Offset the
opportunity cost
of doing
conservation

Sanctions

Gradual
Agreed with the
steward
Serious and
applicable

Who
monitors?

3 types of
monitoring:
Biodiversity
(scientists)
**Socio-
economic
changes**
(scientists)
Compliance
(independent
3rd party)

Key elements of an agreement

Conservation
Actions



Stop fishing
Use specific
gear
Fish only in
restricted areas

Benefits



Analyze the
opportunity cost
and negotiate a
benefit package

Sanctions



Gradual
Agreed with the
steward
Serious and
applicable

Who
monitors?

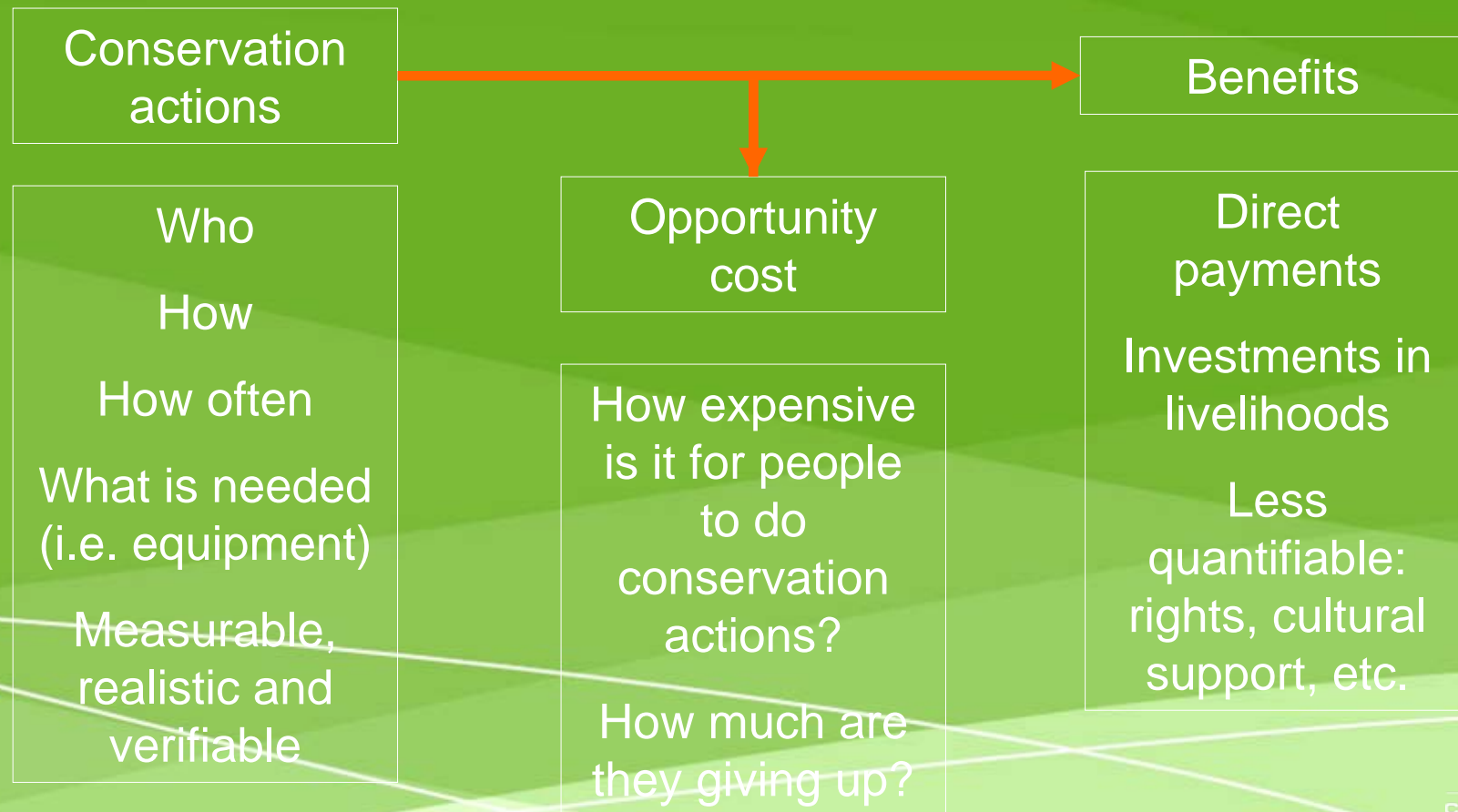


3 types of
monitoring:
Biodiversity
(scientists)
**Socio-
economic
changes**
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Compliance
(independent
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Assessing opportunity cost

The true cost of something is what you give up to get it.

The Economist





Saving the Vaquita Marina in the Gulf of Mexico



Background

- 150 vaquitas left
- ~ 50 drown in gillnets per year
- Reproduction rate is 4% per year
- ~ 700 legal fishermen
- ~ 500 illegal fishermen??



Answering the key questions

Conservation Actions



Reduce the number of fishing permits

Stop fishing in the area of the vaquita

Use gear that won't harm the vaquita in specific zones

Control the illegal fishing

Benefits



Buyout

Compensation for using permitted gear

Support in development of micro-enterprises

Sanctions



Greater enforcement

Laws are in place

Announcement of zero tolerance

Who monitors?

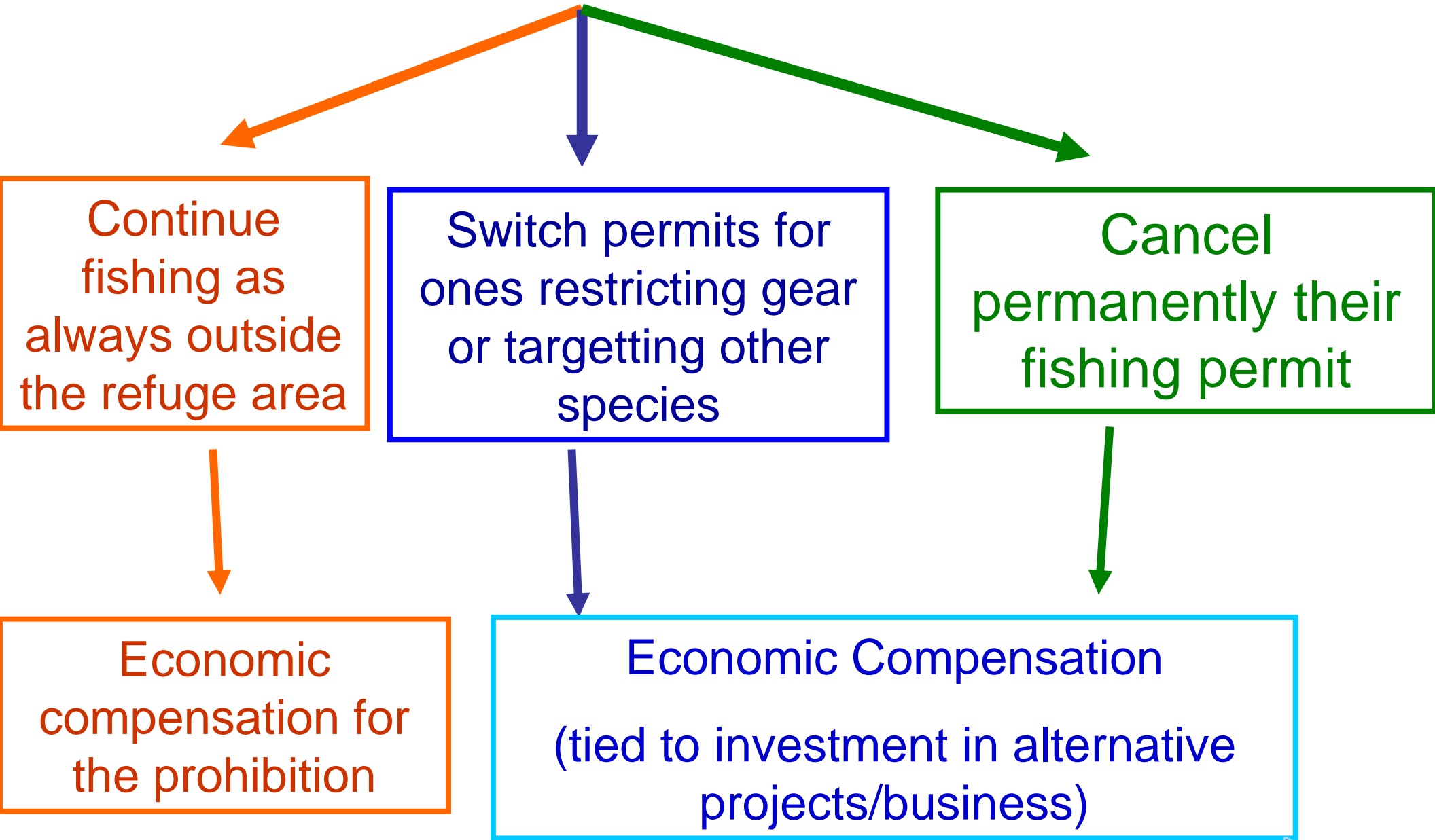


Mexican Navy
Fisheries Commission
Environmental Attorney General

WWF- TNC?

INE

Options for fishers in 2008



Continue fishing as always outside the refuge area

Switch permits for ones restricting gear or targetting other species

Cancel permanently their fishing permit

Economic compensation for the prohibition

Economic Compensation (tied to investment in alternative projects/business)

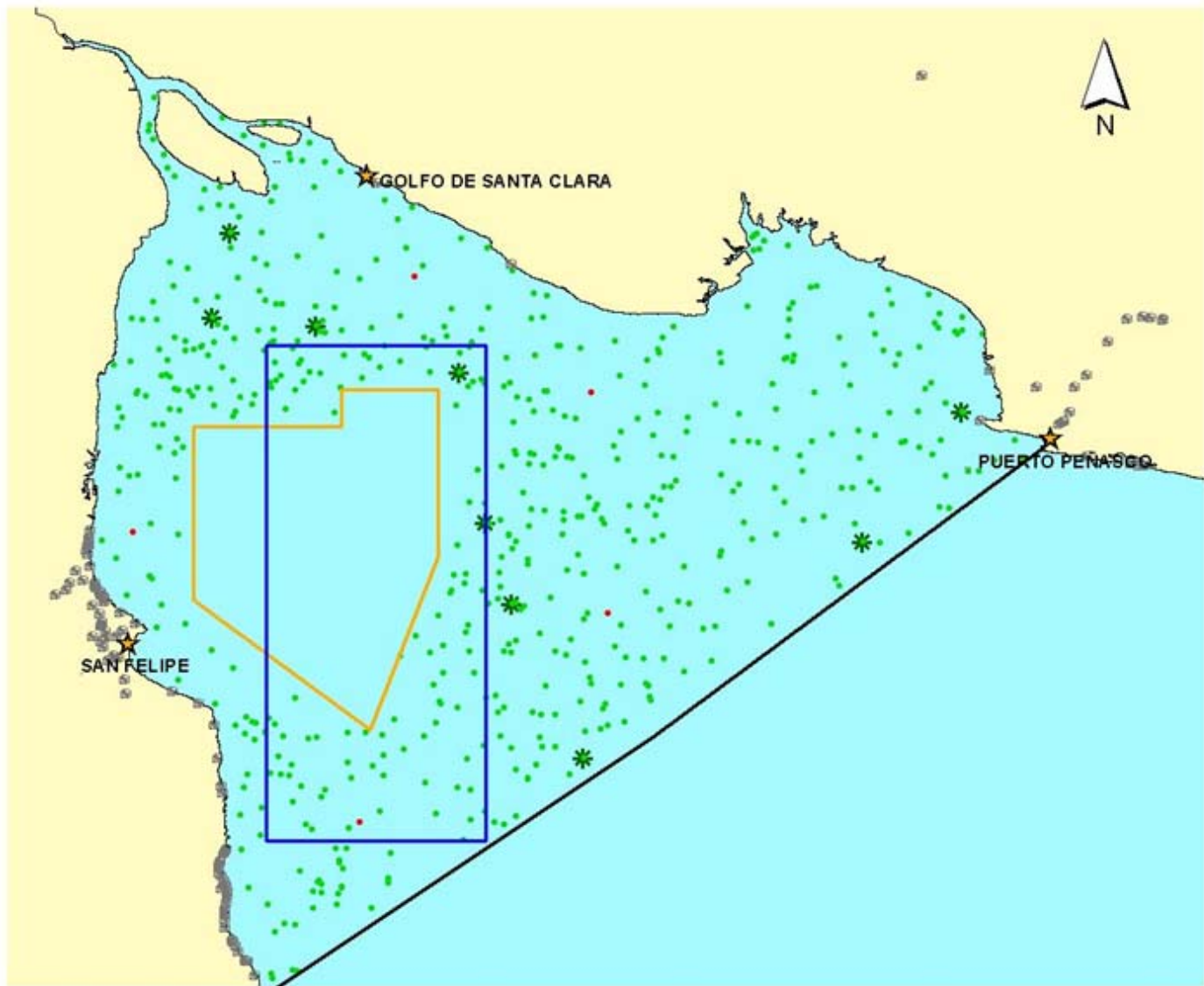




How much does a fisher obtain

- Blue shrimp fishery: high value export, gourmet market in the US.
- First approximation: average profits through key informants

	Sn Felipe	Sta Clara	P.Peñasco
Total shrimp landings per season-year (tons)	342	280	100
Number of legal pangas (with permits) fishing shrimp in 2007 ¹	321	243	69
Number of pangas illegally fishing shrimp (mid 2000s) –approximation- ²	150-190	180-220	60-80
Average shrimp landings per season per panga (tons)	0.70	0.63	0.76
Regional total Gross Income per season from shrimp captured by all pangas (million \$) ³	\$4.7	\$4.0	\$1.4



Simbología

- Límite área de distribución
- Puertos principales
- Localidades
- Polígono CIRVA
- Área de refugio

Camarón segundo semestre 2008

- Legal, Total de esfuerzo de redes agalleras y de enmalle retiradas del Área de Distribución de la Vaquita
- Solicitudes de Reconversión Tecnológica autorizadas
- Ilegal

Ubicación área de distribución

SHRIMP FISHERY

Couple of considerations

- Assessing opportunity cost is a guiding process to identify benefits
- Depending on the willingness to receive/ willingness to give up, it can be more or less helpful
- It helps to build up a negotiation position
- While negotiating and designing the agreement keep in mind that:
 - Negotiation is an active process
 - Requires time and trust to achieve a fair deal
 - Trial agreements are important to build this trust and test how they can really work

Building the agreements

Break out

- What are the opportunity costs?
- What is the benefit package?
- What is the sanctioning system?
- Who will monitor?