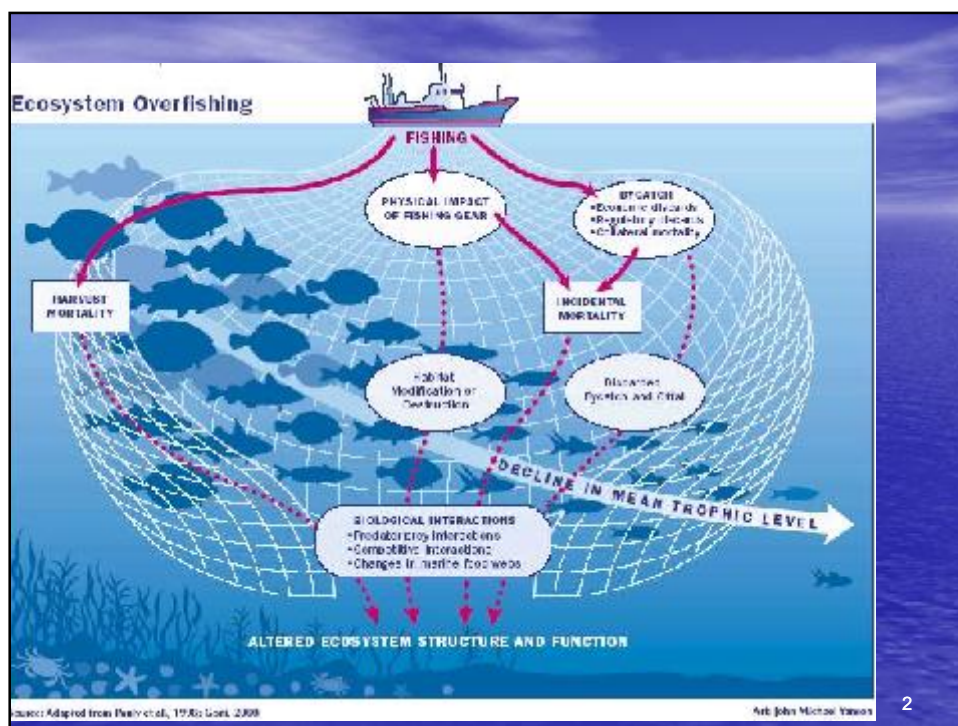
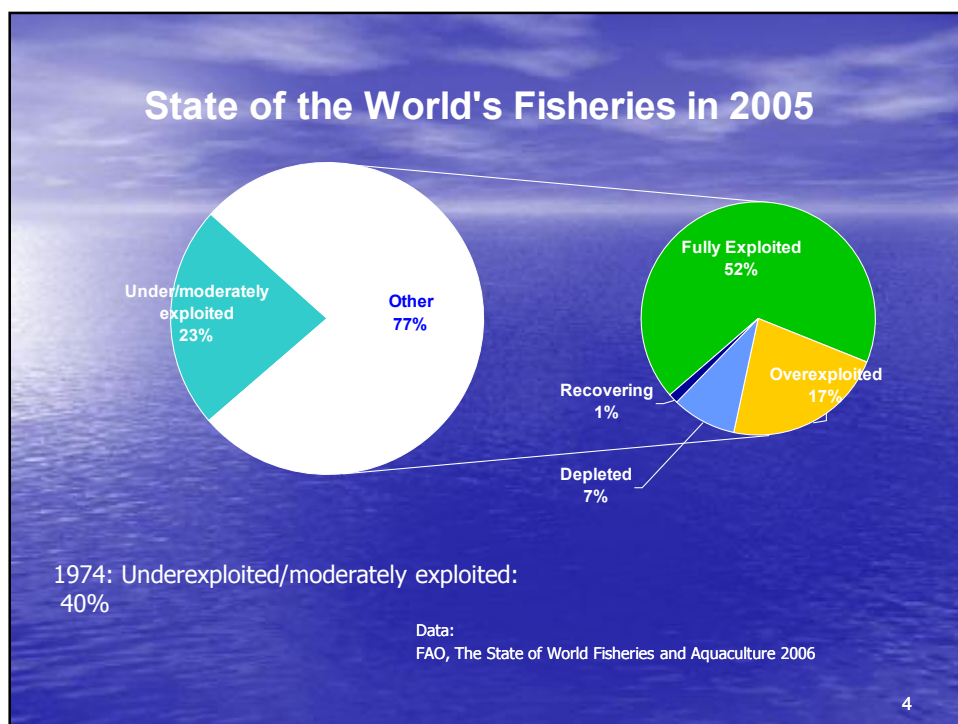
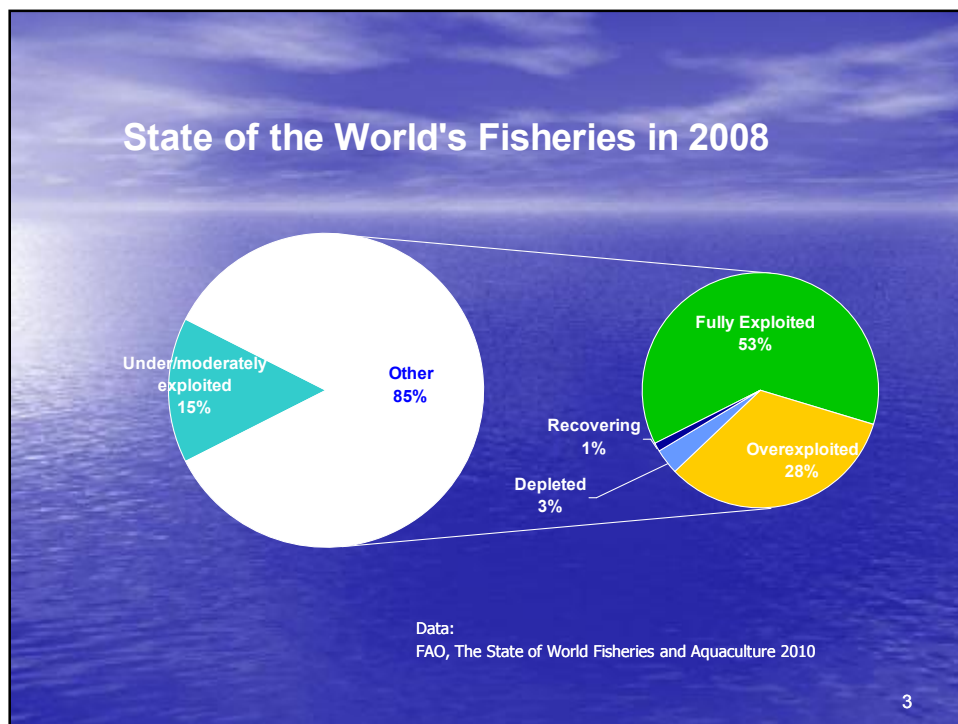


ECO Conference 2011

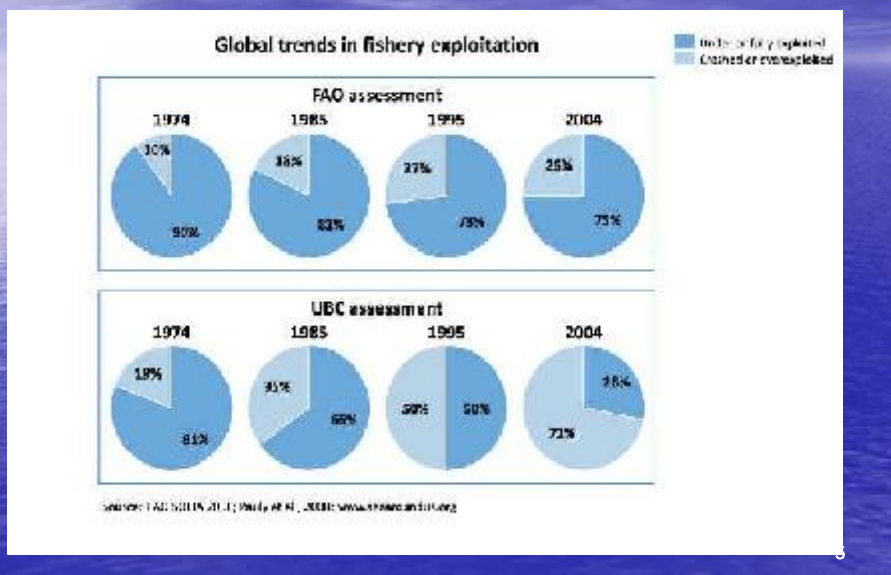
Resilient Governance for the High Seas

Duncan Currie
July 2 2011

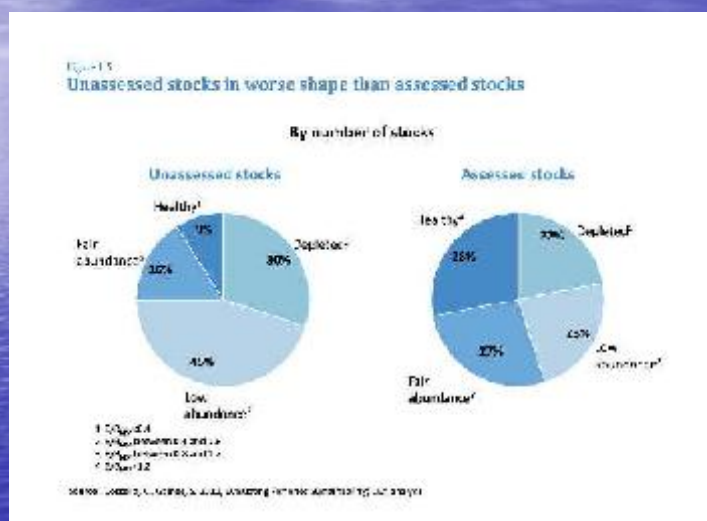




But...

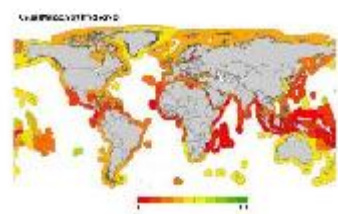


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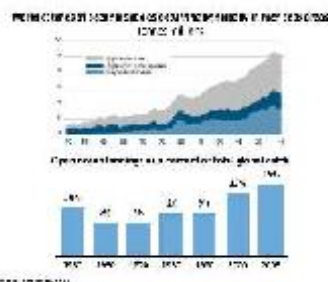
Management isn't working – especially in the high seas

Global distribution of marine fisheries and aquaculture production



Source: FAO, 2006

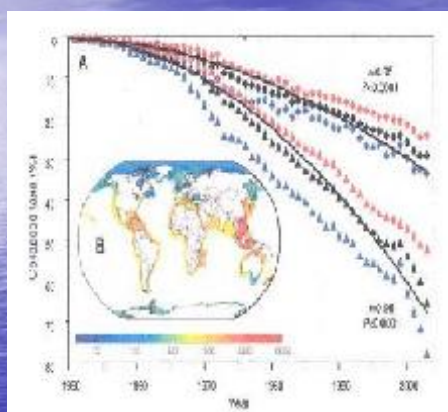
The share of global landings in the high seas increased from 7% in 1970 to 19% in 2006



Source: FAO, 2006

7

Decline in fish stocks



Worm 2006

- Collapse of diversity is accelerating
- Projected total fisheries collapse c. 2048
- Consequences for ecosystem services

8

Gaps: Key Oceans Promises Not Met

- **Implementation action on IUU fishing by 2004**
- **Implementation of fishery capacity management measures by 2005**
- **Maintenance or restoration of depleted fish stocks to MSY levels by 2015**
- **Elimination of subsidies**
- **Development of networks of MPAs by 2012**
- **Reduce biodiversity loss, achieving, by 2010, a significant reduction in the rate of loss**
- **Strengthen Monitoring, Control, Surveillance, Compliance and Enforcement**

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Governance gaps

- Creating multi-sector marine protected areas
- Co-ordinating environmental assessments and
- Management of impacts, including cumulative impacts, across sectors
- Transparency, accountability

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Transparency: Aarhus Convention: Objective...

In order to contribute to the protection of the right of every person of present and future generations ...

... to live in an environment adequate to his or her health and wellbeing ...

... the government shall guarantee to the public:

- access to environmental information,
- public participation in decision-making
- access to justice in environmental matters

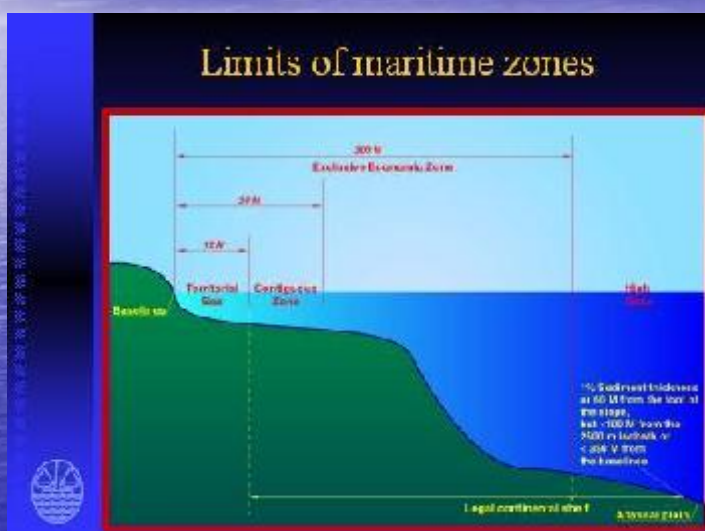
Some general principles...

- Clear and transparent national framework
- Appropriate recognition of and support to associations, organizations or groups promoting environmental protection
- Persons exercising their rights under the Convention shall not be penalized, persecuted or harassed
- No discrimination on basis of citizenship, nationality or domicile

Promoting implementation and compliance...

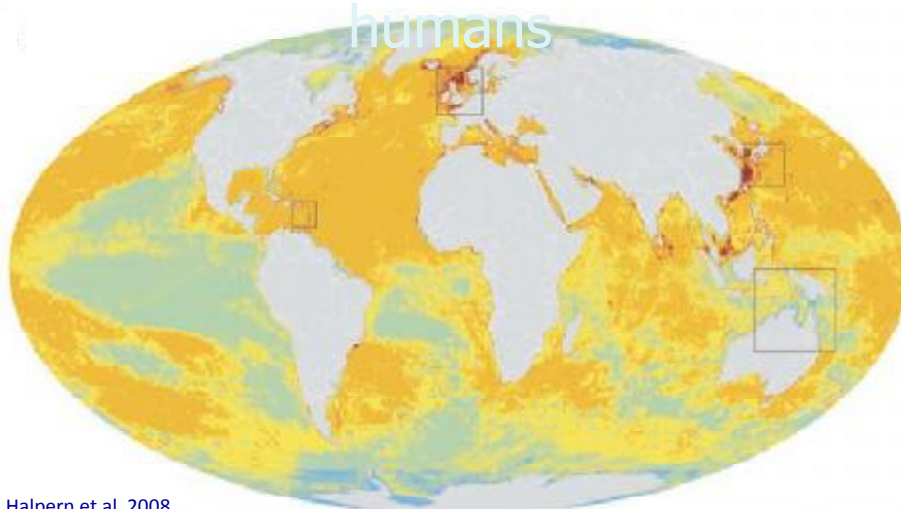
- National implementation reports
 - Every three years
 - To be prepared in consultation with public
- Compliance Committee
 - Can be triggered by public

Governance gaps



14

40% ocean heavily affected by humans



(c) Halpern et al. 2008.

'Scientists found that almost no areas have been left pristine and that more than 40% of the world's oceans have been heavily affected.'

15 FEBRUARY 2008 VOL 359 SCIENCE www.sciencemag.org

CRUCIAL ROLE OF HEALTHY OCEANS IN CLIMATE CHANGE

- **Main buffer to climate change**
 - Absorbed 95% of sun's radiation
 - Removed 33% of CO₂
- **Likely to bear greatest burden of impacts**
- Ocean health influences the capacity of oceans to absorb carbon



FAO, CBD, UNEP, UNDP, World Bank et al., 2009, Fisheries and Aquaculture in our Changing Climate
ftp://ftp.fao.org/FT/brochure/climate_change/policy_brief.pdf hanging Climate

50 % of the planet
64% of the ocean
is beyond national jurisdiction



IMPACTS RELATED TO FISHERIES



Oceans at the UN

- Regular Process
- ICP
- Fish Stocks Agreement
- BBNJ
- Omnibus oceans and sustainable fisheries resolutions

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Regular Process

- WSSD agreed to establish a regular process under the UN for global reporting and assessment of the state of the marine environment, including socio-economic aspects.
- Workshops the key mechanism for first global marine assessment
- Group of Experts to assess the assessments
- Other processes: Census of Marine Life reported October 2010
- IpBes-link between science and policy

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CBD



- Nagoya Protocol
- Process for Identification of EBSAs/regional workshops
- Protect 10% by 2020

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BBNJ

Ad Hoc Open-ended Informal Working Group to study issues relating to the conservation and sustainable use of marine biological diversity beyond areas of national jurisdiction



- Agreed on a process including benefit sharing of MGRs, possible development of a multilateral agreement under UNCLOS

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ICP - 12

- 20-24 June
- Focus on Rio+20:

“progress to date and the remaining gaps in the implementation of the outcomes of the major summits on sustainable development and addressing new and emerging challenges”.

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Objective: Options for Rio+20



1992 Earth Summit

- Resulted in the Rio Declaration, Agenda 21, the CBD, the UNFCCC, and the Forest Principles

2002 Earth Summit

- 22,000 participants, 100 world leaders,
- Resulted in Johannesburg Declaration and JPOI
 - Reaffirmed MDGs, Agenda 21
 - Undertook to significantly reduce biodiversity loss by 2010, reverse trend in natural resource degradation, restore fisheries to MSY by 2015, prevent IUU fishing by 2004, establish representative network of MPAs by 2012,

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Rio+20 - Earth Summit 3

- **The objective:**
 - renewed political commitment for sustainable development
 - assessing progress to date and remaining gaps in the implementation of the outcomes of major summits on sustainable development and
 - addressing new and emerging challenges.
- **Twin foci:**
 - a green economy in the context of sustainable development and poverty eradication (GESDPE)
 - the institutional framework for sustainable development (IFSD).

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Rio+20 - Earth Summit 3 Specific Imperatives for the Ocean

- **MPAs**
 - Identify, establish, and effectively manage protected areas in the ocean
- **Overfishing**
 - overcapacity, subsidies, IUU fishing, assessing sustainable catches allocating catches equitably and effectively
- **Destructive fishing practices,**
 - VMEs/bottom trawling, shark finning, deep sea gillnets
- **Equity, Capacity Building/technology transfer for developing States**
 - capacity building, technology transfer and financial assistance, and fair, equitable and sustainable fisheries access agreements
- **Prior EIAs, strategic environmental assessments**

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Rio+20 - Earth Summit 3 Specific Imperatives for the Ocean

- **Effective conservation measures**
 - effective measures regionally and globally, including climate change and ocean acidification, when undertaking management activities, for all marine species.
- **Effective and comprehensive monitoring, control, surveillance, compliance and enforcement (MCSCE)**
 - including through effective flag State, port State, national and market measures, and capacity building
- **Address climate change**
 - Mitigate greenhouse gas emissions and reduce carbon dioxide emissions
 - implement measures to build resilience and ensure adaptation in the face of climate impacts that are unavoidable.
 - E.g. MPAs, fisheries management, protect mangroves, reefs, seagrasses

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Marine Genetic Resources



- Antioxidant, antiviral, anti-inflammatory, anti-fungal, antibiotic, specific activity against HIV, some forms of cancer, tuberculosis and malaria.
- Carrageenan (from seaweed) in ice cream , Agar (seaweed) in yogurt, algin (seaweed) in salad dressing, kelp in shampoos and cake mixes
- Sea whip coral - anti-inflammatory in allergy medication.

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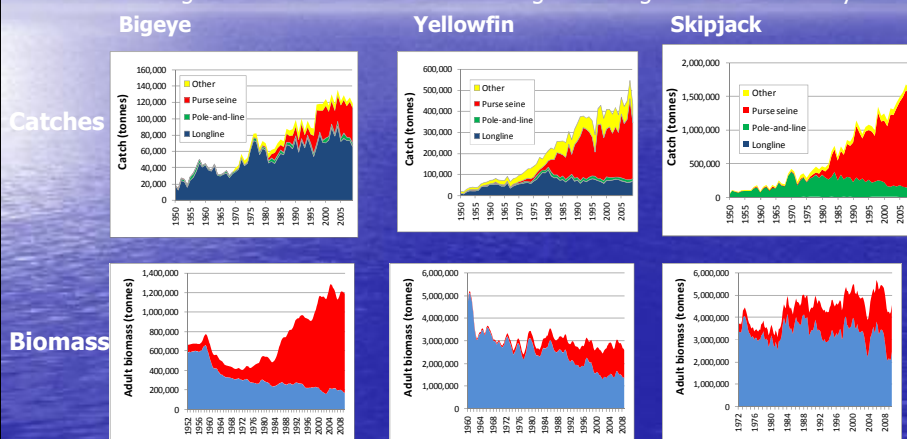
Rio+20 - Earth Summit 3 Possible Strategic Outcomes

- In 1992, Agenda 21 agreed that to convene an intergovernmental conference under implementation of UNCLOS on straddling fish stocks and highly migratory fish stocks.
(Chapter 17.50)
- Led to Fish Stocks Agreement in 1995
- Suggest similar outcome for Earth Summit 3, for oceans governance, marine protected areas and marine genetic resources, UN review of RFMOs

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State of marine environment: Pacific Tuna: Stocks

The current governance structure not ensuring tuna long-term sustainability.



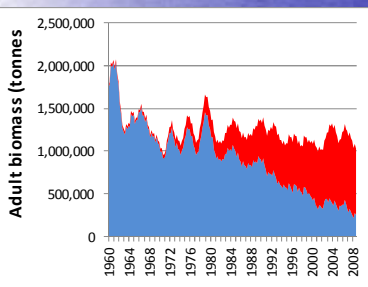
2010 WCPFC Scientific Committee

30

Yellowfin in West Equatorial zone (90% of the catch)

Bigeye

- 50% reduction in longline catches from 2007
- 80% reduction in FAD effort from 2007
- 50% reduction in effort from domestic fisheries in Indonesia and the Philippines from 2007



necessary to reduce fishing mortality to near FMSY levels and ensure that in the long term that spawning biomass is around the level capable of supporting MSY

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Jack Mackerel

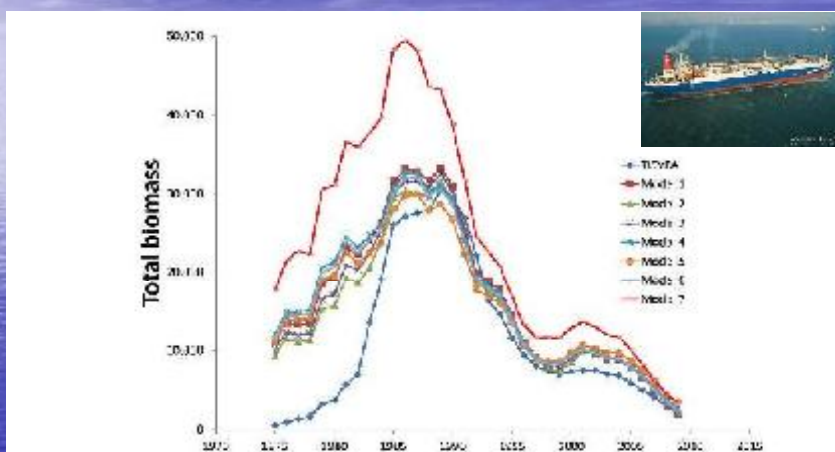


Figure 5. Total biomass estimates comparing the TISVPA model to that of the seven JIM models

State of the marine environment: Coral Reefs and Mangroves

- Coral disease, predators, climate change, nutrient pollution, overfishing, destructive fishing practices, sediment run-off, ocean acidification
- 19% are destroyed; 15% are under imminent threat (10-20 years) 20% threatened (20-40) years.– but not taking climate change into account.
- Projections suggest that during the 2030s, roughly half of reefs globally will experience stress sufficient to induce severe bleaching in most years. During the 2050s -- more than 95%
- Recommendations:
 - Combat climate change
 - Maximise reef resilience by reducing human pressure
 - MPAs: Scale up management of protected areas, include more reefs in MPAs, protect remote reefs, enforce, monitor MPAs. Marine reserves enhance the recovery of corals, build resilience

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State of the marine environment: coral reefs and mangroves

- **Papahānaumokuākea Marine National Monument** covering the North-west Hawaiian Islands and the Phoenix Islands Protected Area (PIPA):356,000 & 410,000 km²
- **Coral Triangle Initiative** -Southeast Asia
- **Micronesia Challenge** commitments to conserve 20% of the land and 30% of the waters as protected areas in linked networks

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Pacific Oceanscape

- **Strategic priority 1 – Jurisdictional Rights and Responsibilities**
 - Establishing jurisdictional rights and responsibilities over maritime zones.
- **Strategic priority 2 – Good Ocean Governance**
 - Setting policies and plans of action that promote the sustainable management and development of our ocean and its resources
- **Strategic priority 3 – Sustainable development, management and conservation**
 - reclaim stewardship of the ocean as core to our Island livelihoods in a rapidly changing world.

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Strategy for Recovery

1. Protect Tuna

What?

Increase sustainability, reduce capacity, increase investment, revenue from tuna. Increase Pacific market premium

Why?

- Bigeye, yellowfin depleted; skipjack under pressure, PICS receive insufficient returns, inadequate fish industry development
- WCPFC failed to agree meaningful conservation measures since Busan, Asian DWFNs block reforms
- Capacity, effort reduction very difficult without WCPFC
- PNA being forced to fill the gap
- RFMOs limited in mandate. Can't address climate change, new and emerging activities, EIAs

How?

- Implementing agreement could reform RFMOs, put into place institutional mechanisms for review of RFMOs so have broader mandate, UN oversight, more transparency, accountability
- So within WCPFC or similar governance, effort can be reduced, measures implemented, address all effects
- Collaborate closely regionally and subregionally

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Strategy for Recovery

2. Protect Coral

What?

Build reef resilience (ability to recover after a stressors such as bleaching)

Why?

- 75% of coral is in the Indo-Pacific region
- Coral reefs = crucial sources of food for Pacific Islanders, important places of enjoyment and recreation, basic materials for the foundations of homes; provide protection against storms

How?

- Pacific Oceanscape accepted by PIF 2010
- Build on CTI, PIPA, Micronesian Challenge
- Protect deep sea corals through implementation of 61/15 and 64/72 through SPRFMO (UNGA review Sept 11)

© Bruno and E. Selig 2007

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3. Increase MPAs

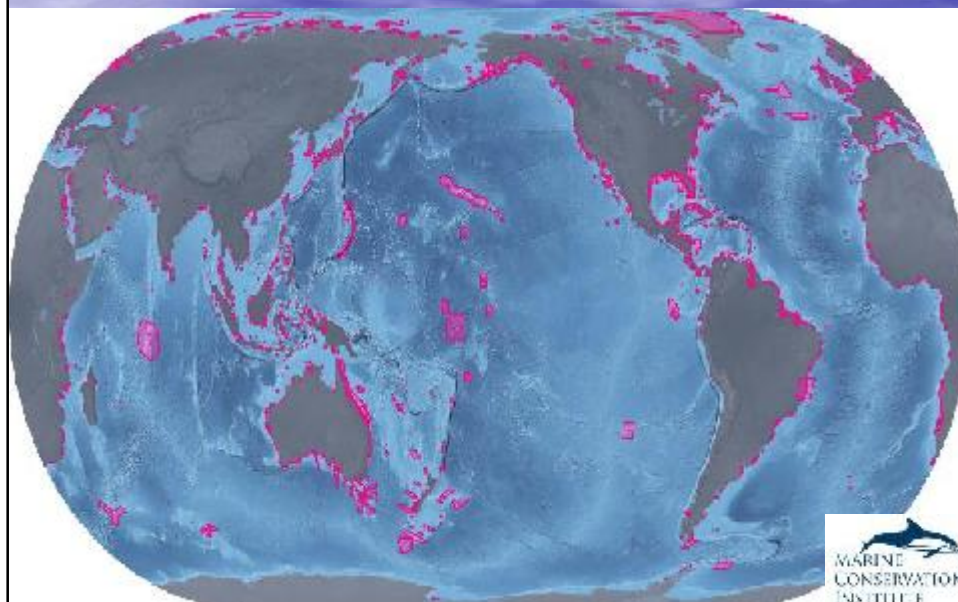


ARC COE for Coral Reef Studies/Marine Photobank

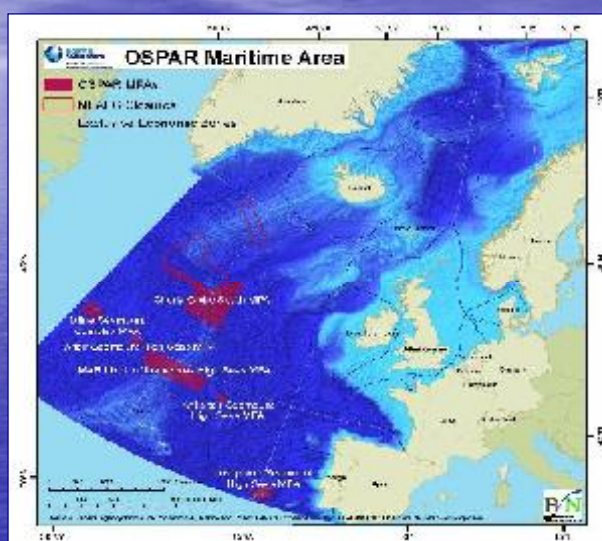
- Protected areas in EEZs, high seas
- Increase species diversity
- CBD Nagoya strategic Target 11 – 10% by 2020
- Increase resilience
- Huge increase in fisheries productivity (4x)
- Pacific Oceanscape
- Implementing Agreement under UNCLOS/Diplomatic conference following Rio+20

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Distribution of MPAs worldwide



OSPAR MPA Network, 2010



Credit: OSPAR Secretariat

High Seas Enclaves (Donut Holes)



1, 2 and 3 and 4 = high seas enclaves.

1 and 2 closed to fishing from 1 Jan 2010 under PNA 3IA and purse seine fishing from WCPFC 2008.

PNA April 2010 agreed to close larger orange areas to purse seine fishing through licence agts as of 1 Jan.

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The Ross Sea



(c)John Weller john@lastocean.com

Strategy for Recovery

4. EIAs, Measures



- Environmental impact assessments, strategic environmental assessments
- Ability to put in place measures to control effects



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Strategy for recovery

5. Capacity reduction and investment in Pacific fishing industry

What?

- Reduction of fleet size & investment in Pacific fishing industry

Why?

- economics would improve
- Need to protect sustainability, Pacific industry and its future development

How?

- Pacific solidarity
- Ensure greater regional strength in governance reforms
- Ensure compulsory Pacific fish landings, compulsory crew levels and preferential market access in multilateral access agreements

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Strategy for Recovery

6. Governance reform

- RFMO reform
- Transparency, accountability
- UN oversight
- Change fisheries paradigm: no management, no fish

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Strategy for recovery

7. Climate Change and the Oceans

What?

- UNCSD should link climate change, MDGs and the sustainable development agenda.

Why?

- *Climate change*

How?

- RFMOs must ensure climate change is taken into account when managing fisheries
- Stressors such as overfishing, pollution and invasive species reduced to increase resilience to the impacts of climate change and increased levels of CO₂.
- Financing and adaptation mechanisms should be established to protect and restore important carbon sinks such as mangroves, salt marshes and seagrass.

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Conclusion

- Governance reform is essential
- Pacific needs to regain control of its tuna – capacity reductions, increased revenue, industry
- MPAs, RFMO reform, EIAs, coral protection
- Climate change

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Any questions?



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