



The Center for SeaChange

[www.seachangecenter.org](http://www.seachangecenter.org)

# SeaChange

Leadership for Ocean Policy Reform

Christophe A. G. Tulou President





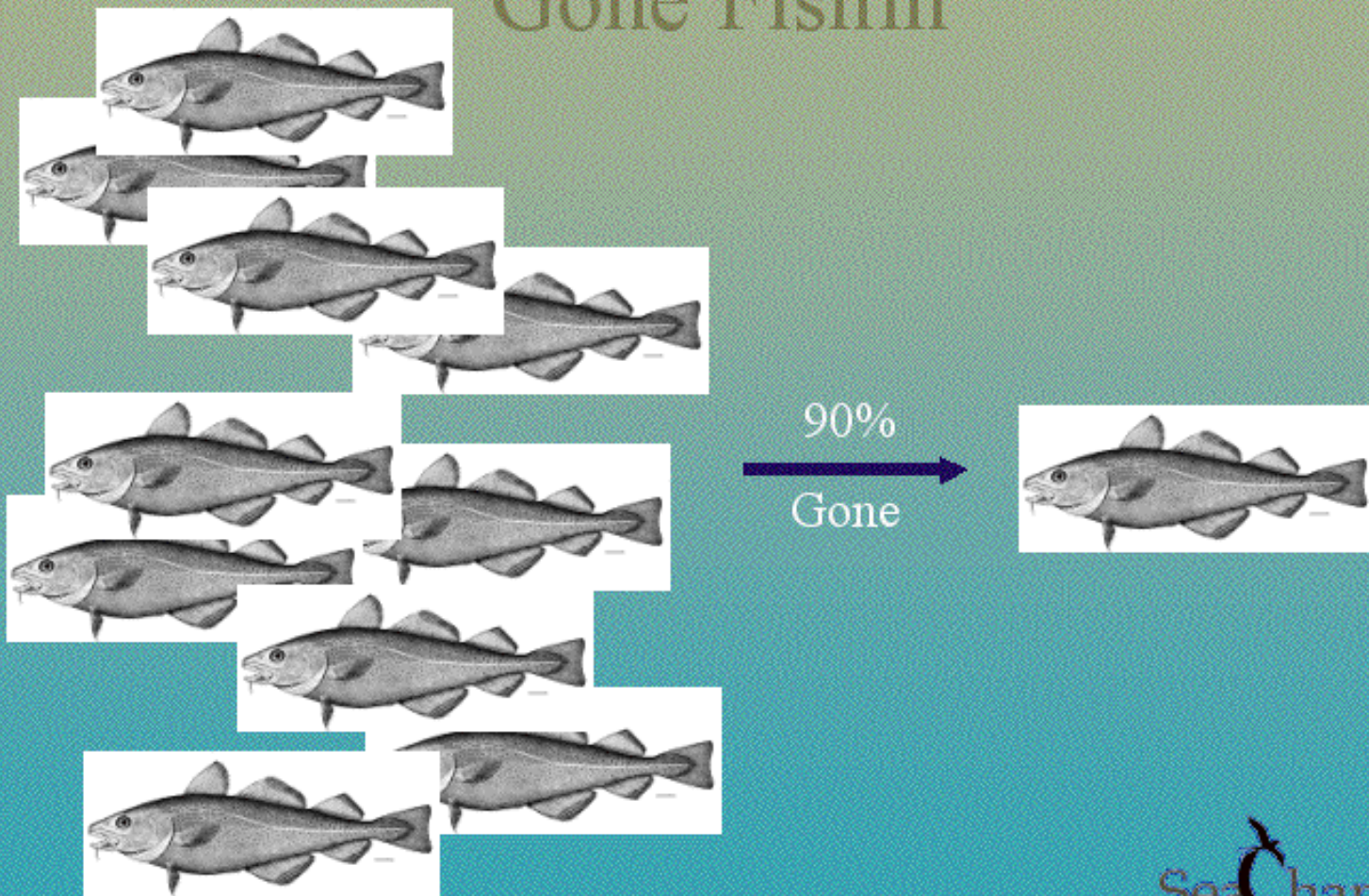
RNRF Congress on Building Capacity for Coastal Solutions  
Washington, D.C.  
December 6-7, 2004

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# Gone Fishin'





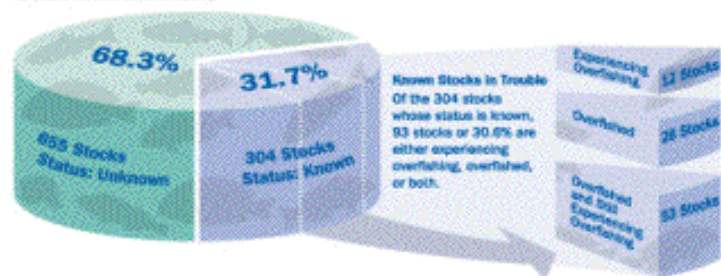
# What We Don't Know...

**Figure Three**

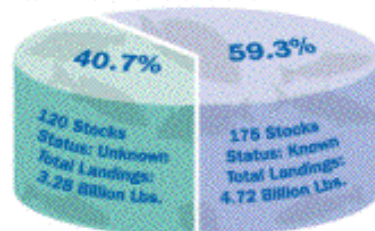
## Status of Marine Fish Stocks

The U.S. Department of Commerce listed 959 stocks in its 2001 Annual Report to Congress on the Status of U.S. Fisheries. The data in the pie charts below are drawn from information in the annual report.

**A. Status for 959 Stocks in 2001**



**B. Status for 295 Major Stocks\* in 2001**



**C. Status for 664 Minor Stocks in 2001**



Lucy Anderson Beak, LLC

\*Major stocks are those with landings of at least 200,000 pounds. In 2001, 295 major stocks produced the majority of landings, totaling more than 8 billion pounds, compared with 9 million pounds from 664 minor stocks.



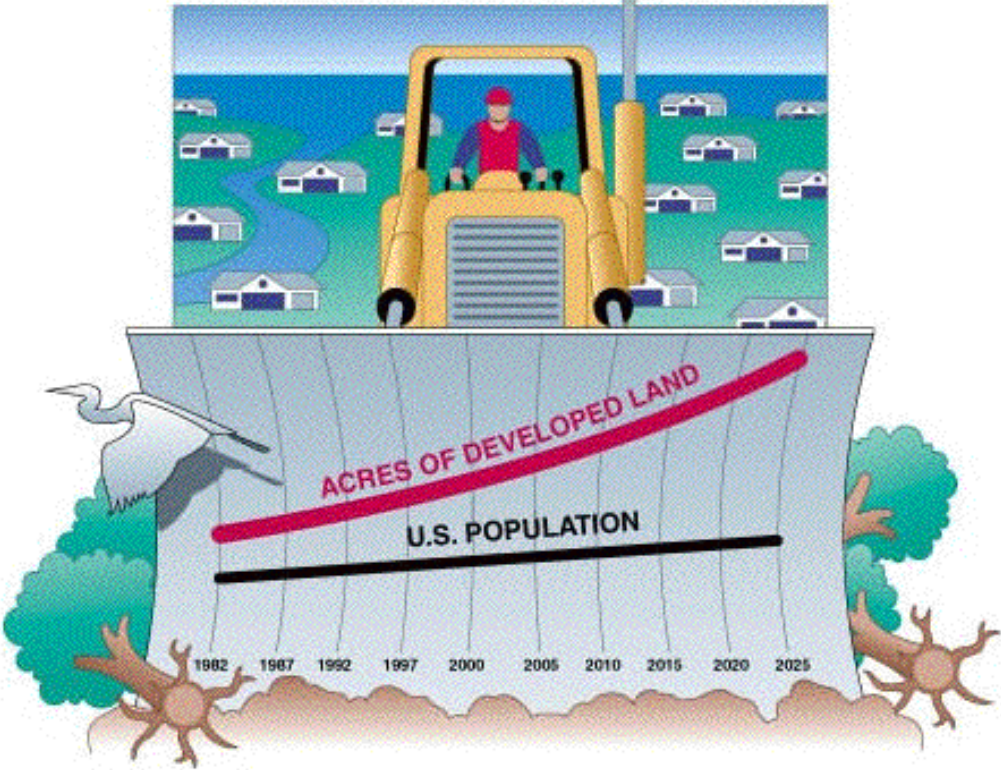
# Waste Not, Want Not



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# Land Development and Population Growth

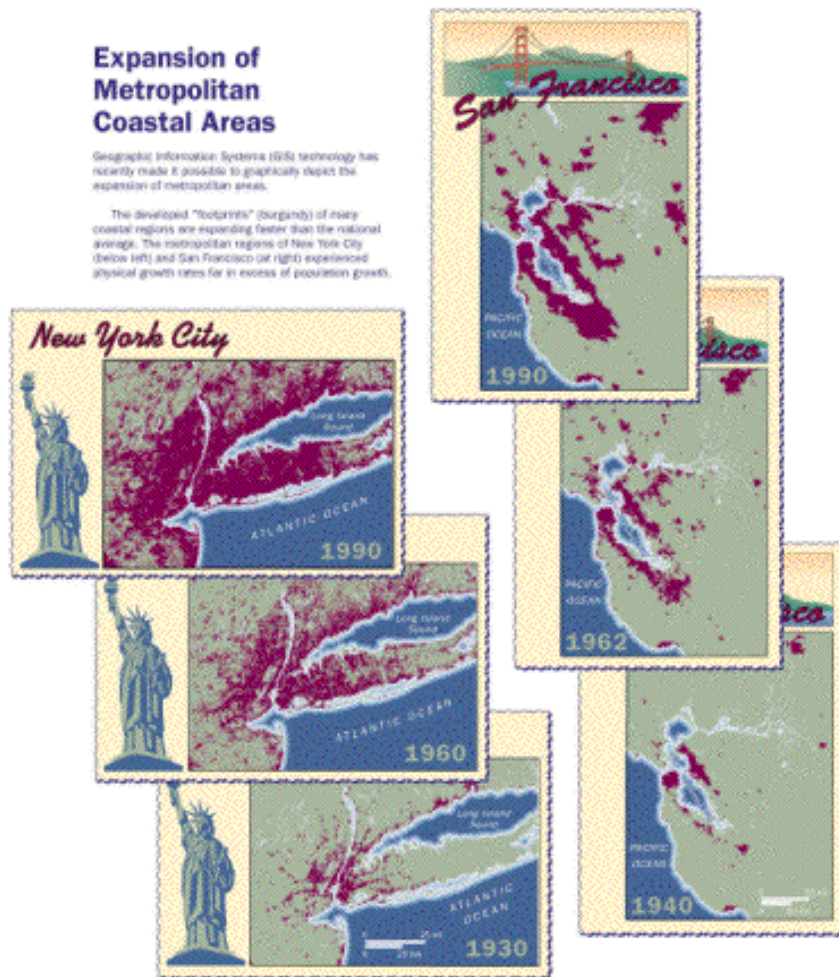




## Expansion of Metropolitan Coastal Areas

Geographic Information Systems (GIS) technology has recently made it possible to graphically depict the expansion of metropolitan areas.

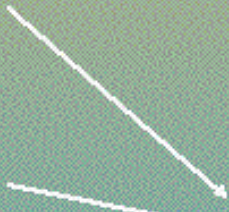
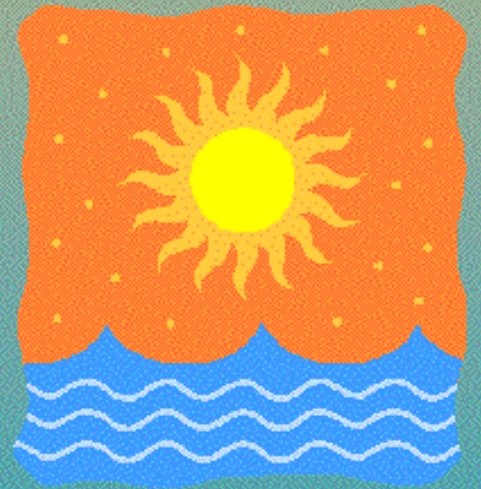
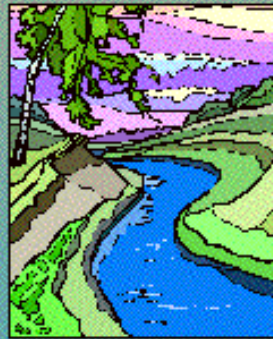
The developed "footprints" (burgandy) of many coastal regions are expanding faster than the national average. The metropolitan regions of New York City (below left) and San Francisco (at right) experienced physical growth rates far in excess of population growth.



Sources: NOAA, 2002; Map images for New York created by Craig Campbell, using data provided by a partnership of Regional Plan Association, the United States Geological Survey, and Cornell University.  
Sources for San Francisco map images: United States Geological Survey.  
Artwork: John Hanson  
Maps: Jerome Coulton



# Nutrient Overload





# Dead Zone Proliferation









# Why is the System Not Working?



- ◆ Take more out... put more in
- ◆ Crisis-driven policy-making... ad hoc law



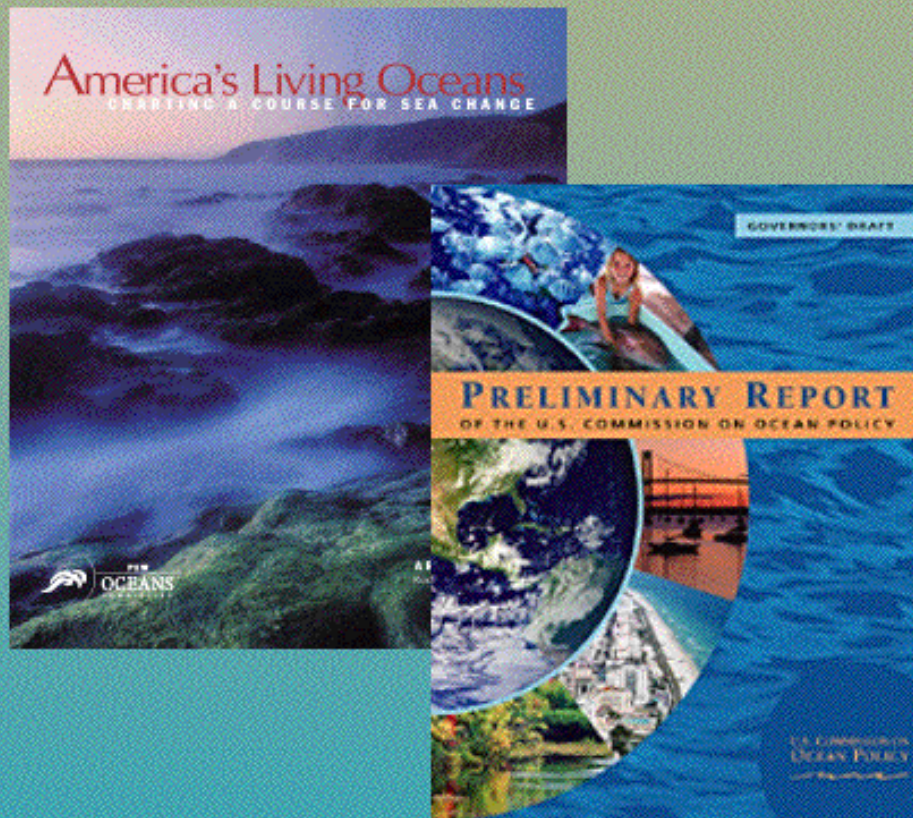
## Statutes, Statutes Everywhere...

- ◆ Submerged Lands Act
- ◆ Coastal Zone Management Act
- ◆ [Oceans Act of 2000](#)
- ◆ National Marine Sanctuaries Act
- ◆ Clean Water Act
- ◆ Ocean Dumping Act
- ◆ Oil Pollution Act of 1990
- ◆ Magnuson-Stevens Fishery Conservation and Management Act
- ◆ Endangered Species Act
- ◆ Marine Mammal Protection Act
- ◆ Outer Continental Shelf Lands Act
- ◆ National Sea Grant College Program Act of 1966
- ◆ **AND about 130 others**

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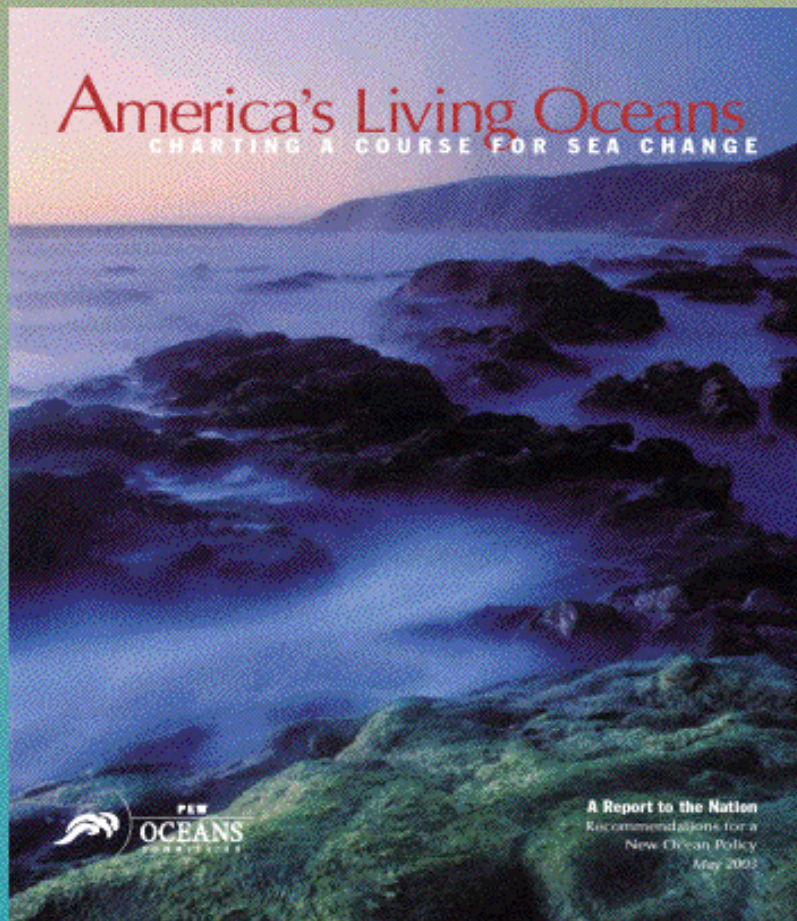
# Call to Arms



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# The Pew Oceans Commission



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# Charting a Course for Sea Change



## **Establish a National Ocean Policy**

Realign Ocean Institutions

Manage on an ecosystem basis

Address the Land-Sea  
Connection

Restore America's Fisheries

Increase Funding for Research  
and Education

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# National Ocean Policy

**Enact federal legislation establishing a national policy to protect, maintain and restore the health of marine ecosystems.**

**Could function like NEPA but require the course of action that fulfills the national policy**

**Federal agencies required to consult with National Oceans Agency regarding compliance with the national policy**

**Implemented primarily through comprehensive regional plans**



A yellow CAT excavator is shown in the foreground, working on a construction site. The excavator's arm is raised, and it is positioned on a large pile of dirt. In the background, the U.S. Capitol building is visible under a cloudy sky. The scene suggests a major construction or renovation project.

## Realign Institutions

Institutional restructuring to carry out national ocean policy


Make NOAA an independent agency

Consolidate ocean programs within NOAA

Establish a National Oceans Council in the EOP



# Ecosystem-based Management

A large whale breaching the ocean surface, creating a massive splash of water. The whale's dark, sleek body is visible as it rises from the water, with its head and part of its back above the surface. The water is splashing around the whale, creating white foam and ripples. The background shows the ocean extending to the horizon under a clear sky.

**Implementation requires:**

***A mandate* to identify threats and set goals for ecosystem restoration**

***A forum* to bring relevant authorities to the table (feds, states, tribes)**

***A process* to develop and agree to comprehensive plans**

***A mechanism* for ensuring compliance**





# The Land-Sea Connection

Our activities on land strongly affect the health of marine ecosystems

Reduce land-based sources of pollution, particularly non-point sources

Protect important habitat and manage growth to maintain open space

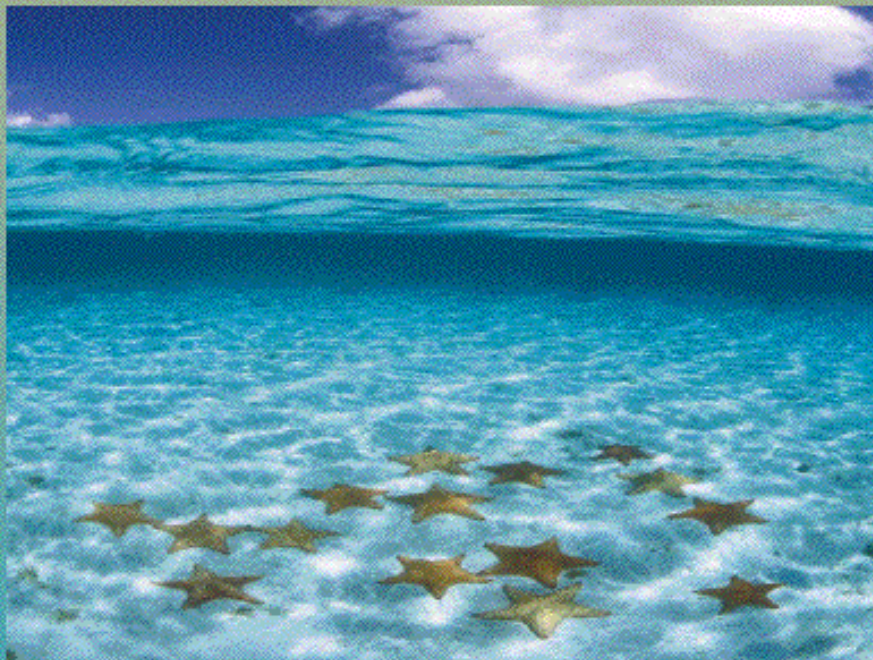
Integrate pollution control and land-use planning to protect watersheds

CDAV-00204 1.800.955.0006 (toll-free) or 223.856.2021

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