## Setting the Stage Rebuilding Sustainable Fisheries for the Future

#### CHALLENGES AND OPPORTUNITIES FOR FISHERIES MANAGERS AND DECISION-MAKERS

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#### Outline

- 1) Why Fisheries Rebuilding is Critical
- 2) Challenges in Managing, Rebuilding Fisheries
- 3) International Context
- 4) What Works and What Does Not?
- 5) Where to from Here?- Role of Fisheries Economists and Managers

#### Why Fisheries Rebuilding is Critical-Need to take Action

- Last 50 yrs.- 366 Fisheries Collapses- ¼ of FAO world databases;
- Rate of collapse has not slowed- no overall improvement over 50 yrs;
- 6.3 billion humans, increasing to 8.9 by 2050;
- Global climate change will exacerbate global food crisis and pressure on fish stocks.

#### Managing, Rebuilding Fisheries

- A) <u>COMPETING FISHERIES INTERESTS</u> ADD COMPLEXITY:
- <u>Commercial</u>- employment, income, licence and vessel values, access, historic shares, allocation, subsidies and benefits, processing, economic spin-offs;
- <u>Recreational</u>- access, entitlement, economic impacts-boats, gear, tourism, hotels, etc.;
- <u>Aboriginal</u>- rights, treaty entitlements, legal precedents, social and economic benefits
- <u>Non-Consumptive Interests-</u>resource conservation, preservation, tourism and non-consumptive values.

### Managing, Rebuilding Fisheries

- B) MANAGEMENT TOOLS:
- Good Science Needed for Decision-Making; Precautionary Approach in absence of information; risk assessment
- In Managing Fisheries, <u>we Actually Manage People</u>:
  - access, time and area closures, allocation, quotas, TAC's, vessel and gear restrictions, capacity reduction, consultation, legislation, regulations, enforcement;
- Natural, Man-made Environmental Changes add Complexity

# Managing, Rebuilding Fisheries C) GOVERNACE AND POLITICAL CONTEXT:

- Annual fishing plans, catch limits, quotas, conditions, administered by management authority or body authorize /deny access;
- Competing interests challenge the process, its' basis in Science, may influence decisions;
- Tendency to trade off short term interests, protection of status quo against long term benefits of rebuilding, conservation, economic benefits of longer-term approach.

#### International Considerations

- Challenges are similar to domestic situation- national self-interest and fisheries agenda of nations;
- Sovereignty-based competition;
- "Distant-water Fishing Nations" vs. developing economies;
- Challenge of effective international rules, regulations, enforcement, governance mechanisms in international waters;
- Lack of a global vision and commitment to protect and rebuild world fish stocks

#### SAD STORIES- NORTHERN COD

- --" BEING IN LATITUDE 54 DEGREES 30--- WE FOUND GREAT ABUNDANCE OF COD, SO THAT THE HOOKE WAS NO LONGER OVERBOARD, BUT PRESENTLY A FISH WAS TAKEN. IT WAS THE LARGEST AND BEST FED FISH THAT I EVER SAW"—
  - Captain John Davis off Labrador, 1586
  - JULY 2, 1992, MINISTER CROSBIE ANNOUNCES CLOSURE OF NORTHERN COD, GRAND BANKS COD FISHERY

#### What works? What does not?

- Spectacular fisheries collapses have been linked to science, overcapacity, overfishing, data limitations, environmental change, - e.g.- Northern Cod in Canada
- Successes:
- <u>Pacific Halibut Commission</u>-originated in 1920's due to declines, fishers concerns; excellent process with meaningful involvement of key players
- <u>Northern coho salmon rebuilding-</u> British Columbiaexample of long-term decision-making and political support for rebuilding.

#### What tools, approaches help?

- Real involvement of people in decision-making, future direction; open, transparent processes;
- Perception of fairness and equity;
- Habitat protection and restoration to preserve ecosystems; Sustainable aquaculture;
- Shift from single species to multi-species/ecosystem approach (challenging); climate change impacts;
- Marine protected areas and refuges; Certification;
- Broad public support for rebuilding, conservation, sustainability; global vision and objectives.

#### Where to From Here?

- RESISTANCE TO CHANGE:
- People oppose change because:
  - change risk seen as greater than risk of status quo
  - fear of loss of self-interest, status, role, influence
  - they believe proposed change is a bad idea
  - people identify with those that embrace "old way"
  - fear of hidden agendas
  - skepticism of new ideas; lack of role models or examples of new activity.

#### Agents of Change- Participants!

- FISHERIES MANAGERS, ECONOMIST'S ROLES:
- Economists need to make a convincing case of the longer term benefits of re-building in the face of global food supply challenges;
- Climate change, food supply problems may be a catalyst, "tipping point" for societal awareness;
- Processes that work stress involvement, inclusivity, wider long-term vision, "Aquatic Stewardship";
- Challenge is all about people and a new vision for fisheries rebuilding; Think global- act local!

#### THOUGHTS TO PONDER

- "THE QUESTION OF QUESTIONS FOR MANKIND------IS THE ASCERTAINMENT OF THE PLACE WHICH MAN OCCUPIES IN NATURE AND HIS RELATIONS TO THE UNIVERSE OF THINGS"
- (Huxley, H.T.H.- Man's Place in Nature- From Kurlansky (1977) "Cod- A Biography of the Fish That Changed the World", Random House)

#### THE ESSENCE OF THE CHALLENGE

- "SO THE FIRST BIOLOGICAL LESSON OF HISTORY IS THAT LIFE IS COMPETITION. COMPETITION IS NOT ONLY THE LIFE OF TRADE, IT IS THE TRADE OF LIFE- PEACEFUL WHEN FOOD ABOUNDS, VIOLENT WHEN THE MOUTHS OUTRUN THE FOOD. ANIMALS EAT ONE ANOTHER WITHOUT QUALM; CIVILIZED MEN CONSUME ONE ANOTHER BY DUE PROCESS OF LAW."
- W. & A. Durant , "The Lessons of History"