Evolution of Cooperative Fishery Management in the Great Lakes

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Running Summary

• Early fisheries
  • Abundant resources
  • Low intensity exploitation
  • State authority to manage GL fish - 1787
Early Fisheries Management

- States/provinces principle guardians
- Local management of transboundary stocks
  - Proliferation of regulations
- Laissez-faire approach
- Free access to Great Lakes fisheries
Fig. 3. Commercial production of blue pike and sauger from Lake Erie, 1915–73.
Exirpated Species
(*Now Extinct)

1998 Cudmore and Crossman, Royal Ontario Museum
Running Summary

• Early fisheries
  • Abundant resources
  • Low intensity exploitation

• Deforestation and transportation
  • Impacts of dams, poor stream quality
  • Alewife and sea lamprey impacts
  • Technology increases fish harvests
  • Many species extirpated or extinct
1883-1942: Improvised conferences, false starts, and attempts at agreement
Great Lakes Fishery Commission

Established in 1955 by treaty: Convention on Great Lakes Fisheries
- Make recommendations to government
- Coordinate Fisheries Research
- Conduct Sea Lamprey Control
- Coordinate Fisheries Management
Great Lakes Fishery Commission Structure

CONVENTION ON GREAT LAKES FISHERIES (1954)

Great Lakes Fishery Convention Act

Great Lakes Fisheries Act

Canadian advisors

U.S. advisors

GLFC-appointed boards

Advise

Great Lakes Fishery Commission

CANADIAN SECTION

U.S. SECTION

Secretariat

Programs:
- Sea lamprey control
- Science
- Communications

Fishery management
- Program management

Commission Duty

Sea Lamprey Control

Commission Duty

Science

Maintain “Working Arrangements” (Joint Strategic Plan)
- Council of Great Lakes Fishery Agencies
- Council of Lake Committees
- Lake Committees
- Law Enforcement Committee
- Fish Health Committee

Mutual Cooperation
GLFC DUTY: CONTROL SEA LAMPREY
THE GREAT LAKES

TRIBUTARIES IN WHICH

SEA LAMPREY ARE FOUND
Great Lakes Fishery Commission Structure

CONVENTION ON GREAT LAKES FISHERIES (1954)
Great Lakes Fishery Convention Act
Great Lakes Fisheries Act

Canadian advisors → Advise
U.S. advisors → Advise
GLFC-appointed boards → Advise

Great Lakes Fishery Commission
CANADIAN SECTION
- Programs:
  - Sea lamprey control
  - Science
- Communications

SECRETARIAT
- U.S. SECTION
  - Fishery management
  - Program management

Commission Duty
Sea Lamprey Control
Science

Maintain "Working Arrangements" (Joint Strategic Plan)
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Mutual Cooperation
A JOINT STRATEGIC PLAN FOR MANAGEMENT OF GREAT LAKES FISHERIES

- Plan signed in 1981; revised in 1997
  - Voluntary, non-binding

- Many jurisdictions on the lakes
  - Provincial, state, tribal, federal, binational
  - Need to work together

- Complex issues
  - Need to understand the resource
  - Need to translate science into management
  - Need to balance competing interests

- Participants work together
  - Under the Joint Strategic Plan
  - Through “lake committee” meetings

- Great Lakes Fishery Commission facilitates

- Highly successful agreement!
A Joint Strategic Plan for Management of Great Lakes Fisheries

Great Lakes Fishery Commission
Strategies for Great Lakes Fishery Management Under the Plan

• Consensus
  • Consensus must be achieved when management will significantly influence the interests of more than one jurisdiction.

• Accountability
  • Fishery management agencies must be openly accountable for their performance

• Information Sharing
  • Fishery agencies must cooperatively develop means of measuring and predicting the effects of fishery- and environmental-management decisions.

• Ecosystem Management
  • The parties must exercise their full authority and influence… to meet the biological, chemical, and physical needs of desired fish communities.
All lake committee members

Council of Great Lakes Fishery Agencies

Law Enforcement Committee

Council of Lake Committees

Great Lakes Fish Health Committee

Lake Superior Committee

Lake Michigan Committee

Lake Huron Committee

Lake Erie Committee

Lake Ontario Committee

Senior “lake managers”

States, province, tribes

“Field-level” biologists

Joint Strategic Plan signatories

Feds and invited experts

“Fish Chiefs”

States, province, tribes, feds

Observers

Technical Committee(s) for each Lake Committee
Why Has Joint Strategic Plan Approach Worked?

• Shared issues
• Cooperation recognized at high levels
• Reliance on partnerships
• Accountability and responsibilities clear
• Commitment by the parties
• Long-standing community of experts
• Third party facilitator (GLFC)
Lake Erie Committee Accomplishments

- Influenced water quality considerations
- Common assessment strategy
- Involve stakeholders (LEPMAG)
- Wise harvest policies for yellow perch and walleye
- Addressing the grass carp threat