Similarities and Differences in Fisheries Regulatory Frameworks Across the PICES Region

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Abstract

Fisheries are governed by a complex interplay of national regulations and international agreements. These regulations and agreements directly influence the magnitude and distribution of benefits from fisheries. Members of S-HD have shared summaries of their national regulations. This presentation highlights similarities and differences among these national frameworks.
Success or failure in fisheries is woven in the fabric of rules and governance mechanisms that determine who is allowed to fish and the conditions under which they are allowed to participate.

The unique legal foundations, culture, and traditions of each nation or state affect the range of viable alternative fishery governance structures.
Attributes and Consequences of the US Regulatory Framework for Fisheries

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At the heart of discussions over the consequences of alternative governance structures in fisheries is an ageless tension between the relative supremacy of the rights of individuals and their obligation to society: to what extent are the rights to fish and to dispose of catches circumscribed by the collective rights of society?

This tension has been sharpened by the widespread adoption of governance regimes that limit entry and even more so by the emergence of governance regimes that create individual or collective rights to options to harvest dedicated shares of a fish stock.

The design of governance structures affects the balance between individual liberties and social contracts and in turn affects the magnitude and distribution of benefits and the resilience of fisheries social ecological systems.
In the U.S.A., the exercise of federal and state authority occurs through the interplay of: statutes passed by state and federal legislatures; regulations promulgated by federal, state, and local executive bodies; common law precedents as they have evolved through state and federal judiciary processes; treaties ratified by Congress; and, state and federal constitutions.
Property Law

Defines how entitlements and liabilities are distributed between individuals, groups, and government.

Basis for fisheries governance regimes: open-access, regulated access, State property, common property, territorial use rights, limited access privileges, cooperative and sector allocations, corporate and individual shares, sole ownership, etc.

Fishing, like all other economic activities, is “rights-based”; fisheries governance structures differ in who holds what entitlements and obligations.
Resource Entitlements and Obligations are Multidimensional

- Right to possess
- Right to use
- Right to manage
- Right to income
- Right to capital
- Right to security
- Right to alienate
- Right to succession
- Term of duration
- Prohibition of harmful use
- Liability to execution

Entitlements and obligations can be attenuated in any combination of dimensions

Honoré (1961)
Whose Fish?

- Common law
- Inalienable rights
- Federal constitution, statutes, and regulations
- Tribal laws and ordinances
- International treaties
- Multi-state compacts
- State constitutions, statutes, and regulations
Whose Fish?

- AL, AK, CA, CT, FL, GA, MD, MS, NJ, NY, NC, OR, RI, SC, WA
- Privately Owned
  - Uplands
- Privately Owned
  - HI, LA, TX
- State Owned
  - Tidelands
- Privately Owned
  - DE, MA, ME, NH, PA, VA
- State Owned
  - State Submerged Lands
- US EEZ
- Exclusive Economic Zone
  - Contiguous Zone
- Outer Continental Shelf
- High Seas
  - 200 n. mi.
  - 24 n. mi.
  - 12 n. mi.
  - 3 n. mi.*
  - MLLW
  - Chart Datum
Public Trust Doctrine

Limits a government’s ability to alienate public trust resources

A public trust interest is:

a title held in trust for the people of the States that they may enjoy the navigation of the waters, carry on commerce over them, and have liberty of fishing therein freed from the obstruction or interference of private parties. …

The State can no more abdicate its trust over property in which the whole people are interested, like navigable waters and the soils under them, so as to leave them entirely under the use and control of private parties than it can abdicate its police powers in the administration of government and the preservation of the peace.

(Illinois Central R.R. Co. v. Illinois 1892)
Public Trust Doctrine

Does not prohibit alienation of navigable waterways, submerged lands, or living aquatic resources; it suggests that alienation is permissible when the public interest or public use is improved thereby or when alienation does not substantially impair the public interest or the use of remaining resources.

(NRC 1999, Simmons 2007)

When the right to harvest fishery resources is conveyed to individuals, the government typically retains a trust responsibility for safeguarding the sustainability of those resources.

(McCay 1998, NRC 1999)
Federal Constitution

Authority to control the use of federal lands and associated resources, including fugitive resources. *Article 4, Section 3*

Authority over activities that could affect interstate commerce, e.g., transport of fish across state boundaries or from federal waters. *Article 1, Section 8*

Authority to enact treaties. *Article 2, Section 2*
State authority to control the use of state lands and associated resources, including fugitive resources on private lands.

Interstate compacts delegate state authority. Compacts can be formed from bottom-up (e.g., ASMFC) or from top down (e.g., regional FMCs).

Tribes are dependent sovereigns with authority to regulate resources on tribal lands and to consult with the federal government regarding resource uses off tribal lands.
Individual rights include:

States are prohibited from discriminating against citizens of other states. While nonresidents may be charged higher fees for access to resources, fee differentials must reflect real differences in costs. *Article 4, Section 2*

Private ownership interests are protected from uncompensated takings once those interests have been established, for example, through capture. *Amendment V*
International Fisheries Agreements

• Global Organizations & Instruments
  – UN General Assembly
  – UN FAO

• Regional Fisheries Management Organizations (RFMO)

• Bilateral Agreements
International Fisheries Agreements

- UN Convention on Law of the Sea (UNCLOS)
- Agreement to Promote Compliance with International Conservation and Management Measures By Fishing Vessels on the High Seas
- Code of Conduct For Responsible Fisheries
- Conservation and Management of Straddling Fish Stocks and Highly Migratory Fish Stocks Agreement
- International Plans of Action
- UNGA Resolution on High Seas Driftnet Fishing
State Law and Regulation

Applies from 0-3nm

Use of fishery resources within states is governed under state constitutions, statutes, regulations, and common law precedents. These laws differ widely among the states. For example, Virginia law allows for submerged lands to be leased for oyster culture while Maryland law does not.
Alaska Constitution

Wherever occurring in their natural state, fish, wildlife, and waters are reserved to the people for common use.

Article VIII, Section 3

Fish, forests, wildlife, grasslands, and all other replenishable resources belonging to the State shall be utilized, developed, and maintained on the sustained yield principle, subject to preferences among beneficial uses.

Article VIII, Section 4

No exclusive right or special privilege of fishery shall be created or authorized in the natural waters of the State. This section does not restrict the power of the State to limit entry into any fishery for purposes of resource conservation, to prevent economic distress among fishermen and those dependent upon them for a livelihood and to promote the efficient development of aquaculture in the State.

Article VIII, Section 15
Federal Statutes and Regulations

Apply from 3-200nm

- FCMA (MSFCMA)—1976
- NEPA—1969
- ESA—1966
- MMPA—1972
- EO 12291—1981
- EO 12866—1993
- Miscellaneous
  - APA (1946); RFA (1980); DQA (2001); CZMA (1972); EO 13175 (2000); EO 12898 (1994); AFA (1998)
Although most of Alaska’s fisheries have been successful from a biological perspective, at one time or another, nearly all of Alaska’s fisheries have courted economic disaster.

In some Alaskan fisheries, the structure of governance mechanisms has evolved to support economic success. In other fisheries, governance structures have failed to evolve and the risk of economic failure persists.
Commercial salmon fisheries were controlled by regional monopsonies (canneries) throughout the first half of the 20th century.

Concern about the power of the canneries led the state of Alaska to ban efficient technologies (traps and weirs) in favor of fleets of small fishing boats racing one another for catch shares.
Salmon in Alaska

A rush of new entrants led to congestion on the fishing grounds and made it difficult for fishery managers to control catches.

In 1972, Alaska passed the Limited Entry Act.

Limited entry capped the number of boats, but failed to prevent continued escalation of fishing power and associated pathologies of the race-for-fish.
Buoyed by strong prices caused by declines in salmon production in other regions, Alaskan salmon fishery exvessel revenues and the price of limited entry permits soared through the mid-1980s.

World production of Chinook, coho, sockeye, and steelhead.
By the early 1990s, high volumes of salmon from Norway, Chile, the UK, and Canada began to depress Alaskan exvessel prices and revenues.
Salmon Import Prices in Japan

Mean trend = -21.7 ¥ /kg/year
Aquaculture production increased because technological innovation caused production costs to decline more rapidly than the production-induced decreases in product prices.

![Graph showing FOB Chilean export prices for Atlantic, Coho, and Steelhead salmon. The trend line has a slope of $-0.205/\text{kg/year}$.]
Salmon Exvessel Prices in Alaska

Mean trend = $-0.035/lb/year
Salmon in Alaska

The collapse of exvessel prices created social and economic turmoil in salmon fishing communities because it reduced annual revenues by 80% and reduced the asset value of limited entry permits to well below outstanding loan balances, bankrupting many salmon fishermen.
Salmon in Alaska

These effects were particularly pronounced in rural communities that went from controlling 50% of the limited entry permits in the late 1970s to controlling 44% in 2005.
Salmon in Alaska

The race-for-fish resulted in individually sensible but collectively irrational excess investment in harvesting and processing capacity.
Salmon in Alaska

The overcapitalized Alaskan salmon fishery has been unable to successfully compete against aquaculture suppliers who do not face a common-pool dilemma and operate under economic incentives that reward adoption of cost minimizing technologies.
Adoption of harvest and management strategies that foster a race-for-fish led to unsustainable investment in processing capacity and infrastructure in remote communities.

Contraction of revenues resulted in closure of processing facilities in communities adjacent to small or highly variable runs, or runs of low-value species.

The loss of wage income and tax receipts has compromised the economic viability of these communities.
Salmon in Alaska

While Alaska’s salmon management has been a biological success, it has failed to realize potential economic benefits and is at risk of periodic financial collapse.

Nascent development of producer cooperatives in Chignik Lagoon failed legal challenges.

Spendthrift incentives of the race-for-fish lead to the dissipation of potential profits such that Alaska’s salmon fisheries fail to generate rents comparable to those generated in salmon aquaculture.
While limited entry is credited with engendering increased resilience of biological production and governance systems (under modest variations in stock abundance), it may have decreased the resilience of social and economic systems (under market forcing). Alternative governance systems that might be more resilient are inadmissible under the Alaska State Constitution.
Voila, “une des plus parfaites machines construites par les dieux infernaux pour l'anéantissement mathématique d'un mortel”
model. Jean Cocteau