



U.S. Performance Indicator Data Collection

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NOAA FISHERIES

U.S. Data

❖ NOAA Fisheries Data Collection

- Fisheries of the U.S. (FUS)
- Fisheries Economics of the U.S. (FEUS)
- Community Profiles
- SAFE Reports
- Economic Performance of U.S. Catch Share Programs

❖ University of Washington

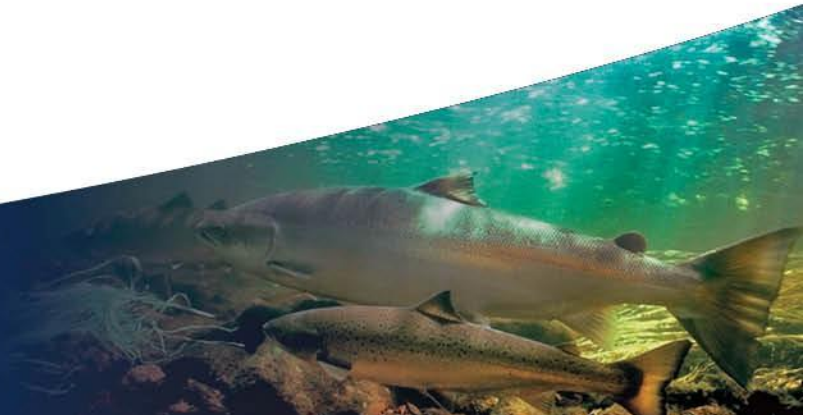


Fisheries of the U.S. (FUS)

<http://www.st.nmfs.noaa.gov/commercial-fisheries/fus/fus11/index>

- ❖ Commercial fishery landings
 - Species
 - Disposition
 - Regions and States
 - Ports
 - Catch by species and distance from shore
 - U.S. Landings for Territorial Possessions
 - U.S. Aquaculture Estimated Production
 - Top Recreational and Commercial Species

- ❖ Marine recreational fisheries
 - Harvest information
 - ◆ By species group
 - ◆ By distance-from-shore
 - ◆ Finfish harvest and releases by state
 - Number of anglers and trips by state



Fisheries of the U.S. (FUS)

<http://www.st.nmfs.noaa.gov/commercial-fisheries/fus/fus11/index>

- ❖ World Fisheries
 - World Aquaculture & Commercial Catches
 - Countries, Continents & Oceans
 - Species groups & Disposition
 - Imports and exports, by leading countries

- ❖ U.S. Production of processed fishery products
 - Value
 - Fish sticks, fish portions, and breaded shrimp
 - Fillets and steaks
 - Canned
 - Industrial



Fisheries of the U.S. (FUS)

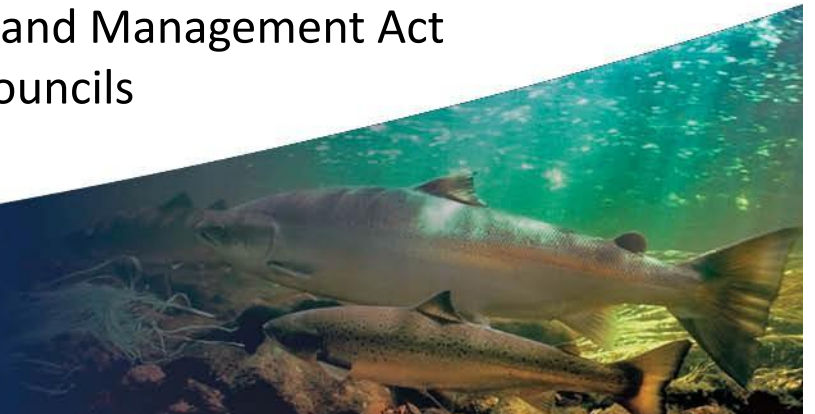
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❖ Foreign trade

- Trade balance (addition)
- U.S. Imports: Principal items
- U.S. EXPORTS: Principal items
- U.S. per capita consumption
- Value added
- Industry information
 - ◆ Index of ex-vessel prices
 - ◆ Processors and wholesalers
 - ◆ Fishery products inspection

❖ General Information

- Magnuson-Stevens Fishery Conservation and Management Act
- General Regional Fishery Management Councils
- General administrative information



Fisheries Economics of the U.S. (FEUS)

https://www.st.nmfs.noaa.gov/economics/publications/feus/fisheries_economics_201

- ❖ Descriptive statistics over a 10-year¹ period

- ❖ Commercial fisheries
 - landings, revenue, and price trends

- ❖ Recreational fishing
 - effort, participation rates, and expenditure information;
 - employer and non-employer establishment, payroll, and annual receipt information for fishing-related industries.

- ❖ Economic impact of commercial and recreational fishing activities
 - employment, sales, and value-added impacts



Community Profiles

<https://www.st.nmfs.noaa.gov/humandimensions/community-profiles/index>

- ❖ Required to examine the social and economic impacts of policies and regulations at the community level.
 - Under the Magnuson-Stevens Fishery Conservation and Management Act, the National Environmental Policy Act, and Executive Order 12898 (Environmental Justice)
- ❖ National Community Profile Series
 - Portray past and current engagement in fisheries
 - Contain basic information on the social and economic characteristics of these communities
 - ◆ North Pacific, Pacific, Western Pacific
 - ◆ Northeast, Mid-Atlantic, South Atlantic
 - ◆ Gulf of Mexico
 - ◆ Caribbean

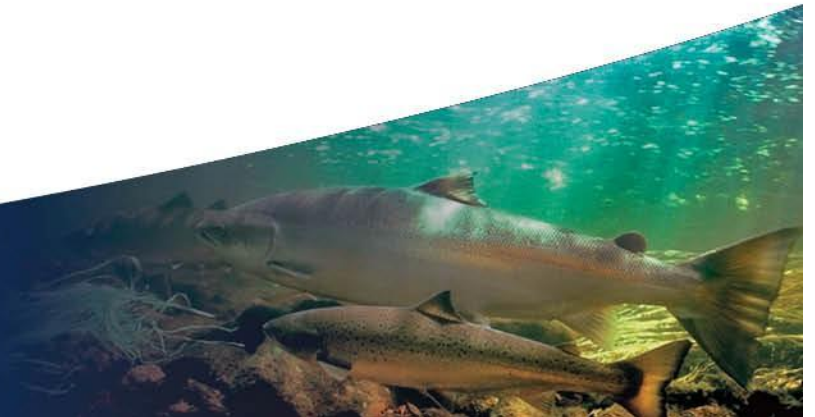


Stock Assessment and Fishery Evaluation (SAFE) Reports

- ❖ Most recent biological condition of stocks and the marine ecosystems in the Fishery Management Unit (FMU)
- ❖ Social and economic condition of recreational and commercial fishing interests, fishing communities, and processing industries
- ❖ Summarizes, the best available scientific information concerning the past, present and possible future condition of the stocks, marine ecosystems, and fisheries being managed under Federal regulation.
- ❖ Used to determine annual harvest levels from each stock,
- ❖ Documents significant trends or changes in the resource, marine ecosystems, and fishery over time
- ❖ Assesses the relative success of existing state and federal fishery management programs
- ❖ Bycatch and safety information also summarized.

SAFE Reports by Region

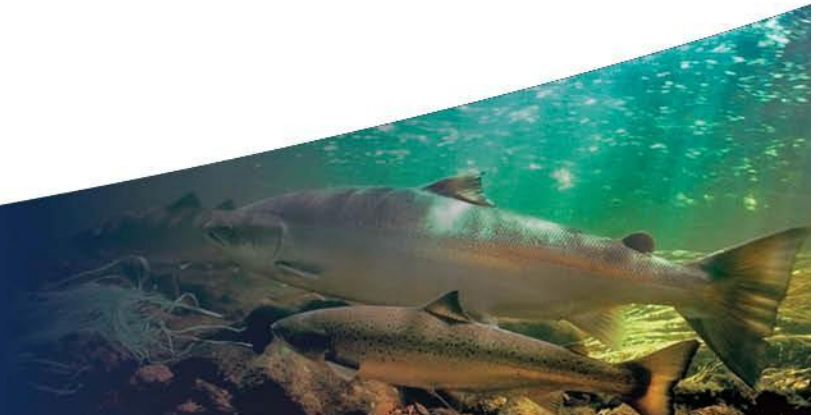
- ❖ North Pacific
 - <http://www.fakr.noaa.gov/npfmc/resources-publications/safe-reports.html>
- ❖ Pacific Coast
 - Available by Fishery Management Plan www.pcouncil.org
- ❖ South Atlantic and Gulf of Mexico
 - <http://sero.nmfs.noaa.gov/sf/safereports/safe.htm>
- ❖ North Atlantic and Mid-Atlantic
 - SAFE reports available by Fishery Management Plan
 - www.nefmc.org or www.mafmc.org
 - Atlantic Highly Migratory Species - http://www.nmfs.noaa.gov/sfa/hms/hmsdocument_files/SAFEreports.htm



Vulnerability and Resilience Index

- ❖ Demographic information from U.S. Census
 - Population
 - Age structure
 - Income
 - Employment
 - Poverty and government assistance
 - Educational levels

- ❖ Fishery data
 - Commercial fisheries permits
 - Recreational fishing permits
 - Vessels
 - Ex-vessel revenue
 - Landings



Economic performance of U.S. Catch Share Programs

<https://www.st.nmfs.noaa.gov/economics/fisheries/commercial/catch-share-program/index>

- ❖ Descriptive statistics over history of catch share program
 - Includes a Baseline Period – average of 3 years prior to implementation of catch share program

- ❖ Pragmatic Approach
 - Tier 1 – readily available data for all programs
 - Tier 2 – data available in some regions
 - Tier 3 – require substantial research and development



Economic performance of U.S. Catch Share Programs

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- ❖ Descriptive statistics over history of catch share program
 - Includes a Baseline Period – average of 3 years prior to implementation of catch share program
- ❖ **Catch and landings**
 - Quota allocated
 - Landings
 - Catch limits exceeded
- ❖ **Effort**
 - Number of entities holding shares
 - Number of active vessels
 - Season length
 - Number of trips per year
 - Number of days at sea
- ❖ **Revenue**
 - Catch share trips
 - ◆ Revenue from catch share species
 - ◆ Revenue from non-catch share species
 - Non-catch share trips
- ❖ **Other**
 - Gini coefficient – measure of equality of distribution of revenues
 - Cost recovery fees collected

Current U.S. Catch Share Programs

Program Name	Implementation Date
Mid-Atlantic Surfclam and Ocean Quahog ITQ	1990
<i>South Atlantic Wreckfish ITQ</i>	1992
<i>Western Alaska Community Development Quota</i>	1992
Alaska Halibut and Sablefish IFQ	1995
American Fisheries Act (AFA) Pollock Cooperatives	1999
Pacific Coast Sablefish Permit Stacking	2001
Bering Sea and Aleutian Islands (BSAI) Crab Rationalization Program	2005
Gulf of Mexico Red Snapper IFQ	2007
Non-Pollock Trawl Catcher/Processor Groundfish Cooperatives (Amendment 80)	2008
Mid-Atlantic Golden Tilefish IFQ	2009
General Category Atlantic Sea Scallop IFQ	2010
Northeast Multispecies Sectors	2010
Gulf of Mexico Grouper-Tilefish IFQ	2010
Pacific Groundfish Trawl Rationalization	2011
Central Gulf of Alaska Rockfish Cooperatives	2012



University of Washington Performance Indicators (Hilborn & Melnychuk)

- ❖ Quantify the variability in management systems; evaluate attributes that lead to more successful outcomes for fish & fisheries.
- ❖ Construct attributes for biological, economic, and social dimensions of fisheries.
- ❖ Socio-economic indicator categories:
landed value of fish, research and management budgets, fishing expenses, revenues, overcapacity and employment.



University of Washington Performance Indicators (Hilborn & Melnychuk)

- ❖ Fishery attributes database compiled through interviews with fishery scientists, managers and fishing industry representatives.
 - ❖ Also extracting information from fishery management plans, published papers, stock assessment reports, and public databases.
- ❖ Currently creating fishery attributes database for the west coast of North America
 - ❖ Efforts would expand to a global scale under the proposed research program.

World Bank Fishery Performance Indicators (Anderson and Anderson)

- ❖ Rapid assessment instrument for benchmarking and tracking wealth generation and accumulation
 - Industry experts are surveyed on indicator values
 - Identify who gets wealth and whether positive factors believed to affect wealth accumulation are present.
- ❖ Monitor changes across time and identify economic effects of management changes or development project investment.

