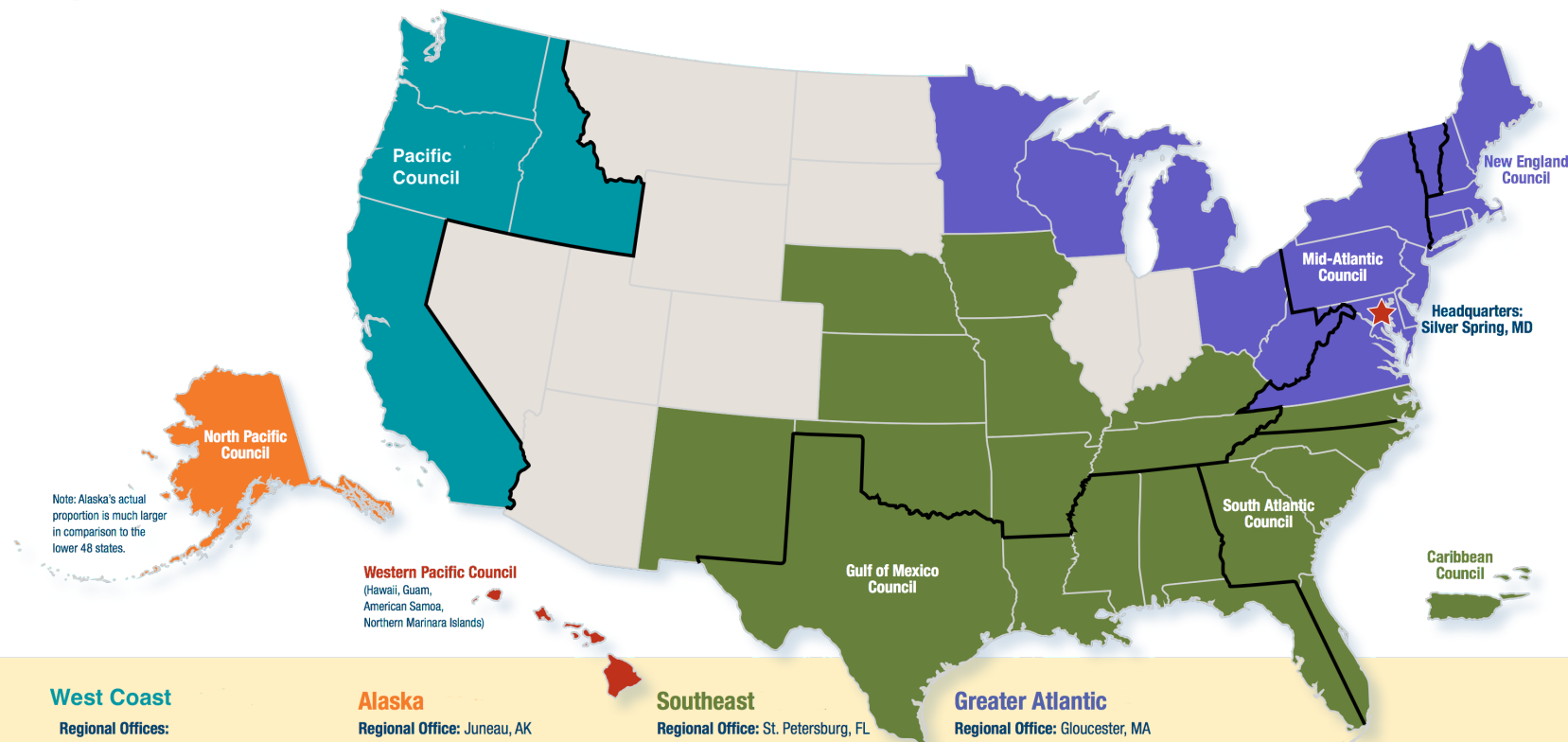


# U.S. Fisheries Data Collection – What, How, and Cost?

U.S.-Japan  
Second  
Data  
Symposium

Kristen Koch  
Director, Southwest Fisheries Science Center  
National Marine Fisheries Service (NMFS)  
(also known as “NOAA Fisheries”)



Note: Alaska's actual proportion is much larger in comparison to the lower 48 states.

### West Coast

#### Regional Offices:

- Arcata, CA
- Long Beach, CA
- Sacramento, CA
- Portland, OR
- Seattle, WA

#### Science Center Headquarters:

- La Jolla, CA - Southwest
- Seattle, WA - Northwest

#### Science Center Laboratories:

- Monterey, CA
- Santa Cruz, CA
- Newport, OR
- Pt. Hammond, OR
- Manchester, WA
- Mukilteo, WA
- Pasco, WA

### Alaska

#### Regional Office:

- Juneau, AK
- Science Center Headquarters:**
  - Seattle, WA (Sand Point)

#### Science Center Laboratories:

- Auke Bay, AK
- Kodiak, AK
- Lena Point, AK

### Pacific Islands

#### Regional Office:

- Honolulu, HI
- Science Center:**
  - Honolulu, HI

### Southeast

#### Regional Office:

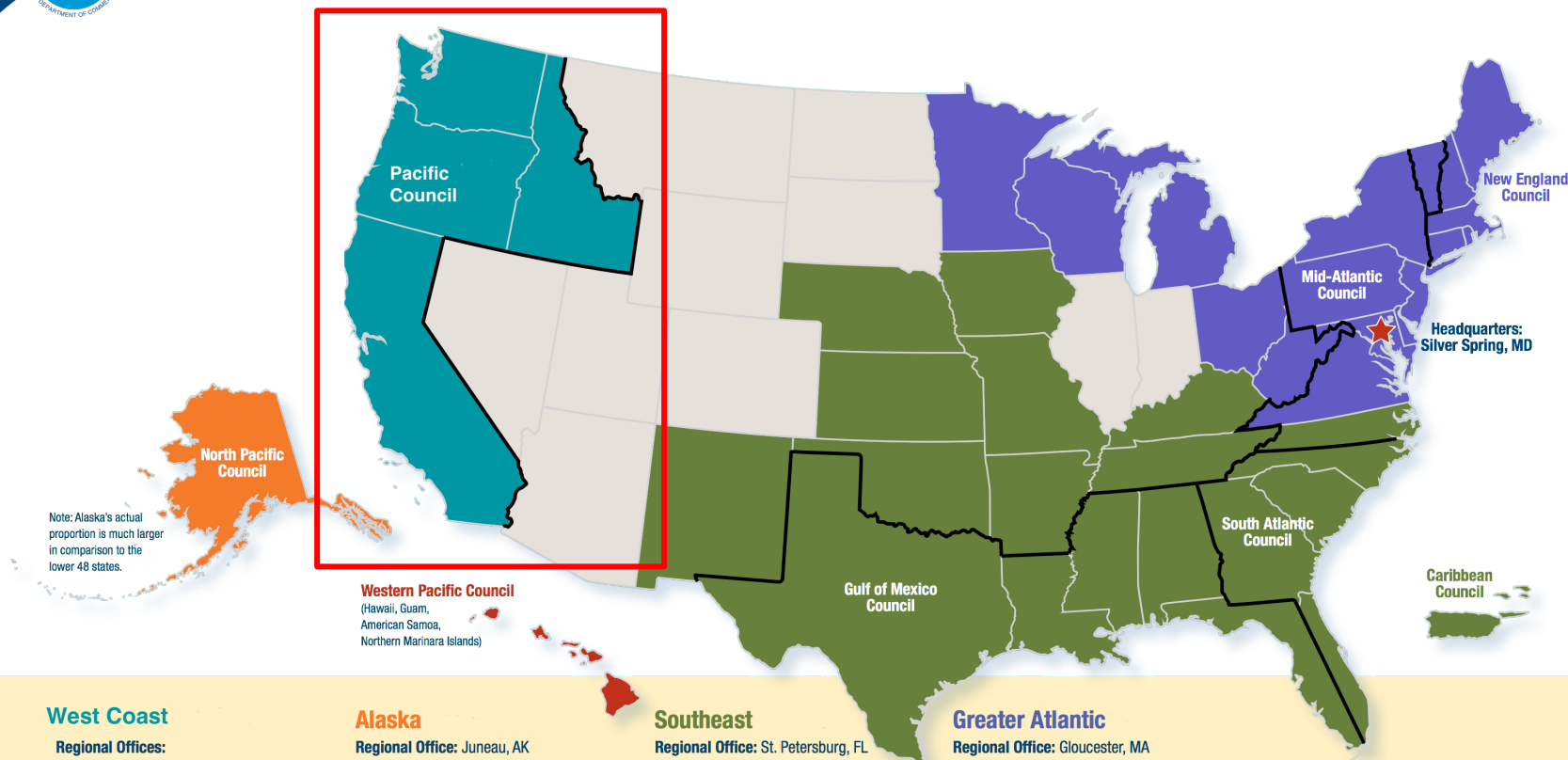
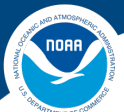
- St. Petersburg, FL
- Science Center Headquarters:**
  - Miami, FL
- Science Center Laboratories:**
  - Panama City, FL
  - Pascagoula, MS
  - Beaufort, NC (shared with NOS)
  - Galveston, TX

### Greater Atlantic

#### Regional Office:

- Gloucester, MA
- Science Center Headquarters:**
  - Woods Hole, MA
- Science Center Laboratories:**
  - Milford, CT
  - Washington, DC
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  - Sandy Hook, NJ
  - Narragansett, RI

— Fishery Management Council coastal water jurisdictions



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NMFS West Coast  
Regional Office

NMFS Southwest and  
Northwest Fisheries  
Science Centers

Pacific States Marine  
Fisheries Commission

States – CA, OR, WA

Industry

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lower 48 states.

North Pacific  
Council

Pacific  
Council

Western Pacific Council  
(Hawaii, Guam,  
American Samoa,  
Northern Mariana Islands)

New England  
Council

Mid-Atlantic  
Council

Headquarters:  
Silver Spring, MD

South Atlantic  
Council

Caribbean  
Council

Gulf of Mexico  
Council

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— Fishery Management Council  
coastal water jurisdictions

# U.S. Federal Fisheries Data

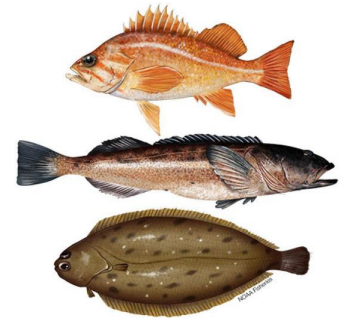
# Fisheries data collection starts with:

- type of fishery
- individual stocks or stock complexes
- the goals of the fishery and fishery management

Agreement on the goals is critical.

These drive what data is needed to manage the fishery.

# U.S. West Coast Groundfish Case Study



Example goals of groundfish fishery management in 2001 (as agreed to by participants within the Pacific Fishery Management Council):



Goal: Harvest removals are consistent with long-term sustainability

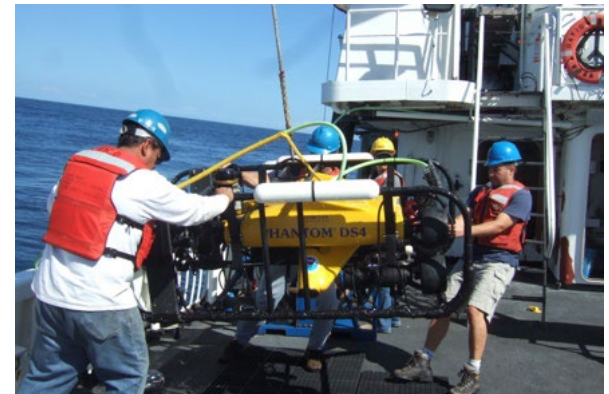
Goal: Capacity aligned with economic value of the available resource

Goal: Maintain product throughout the year for coastal markets

# U.S. West Coast Groundfish Case Study

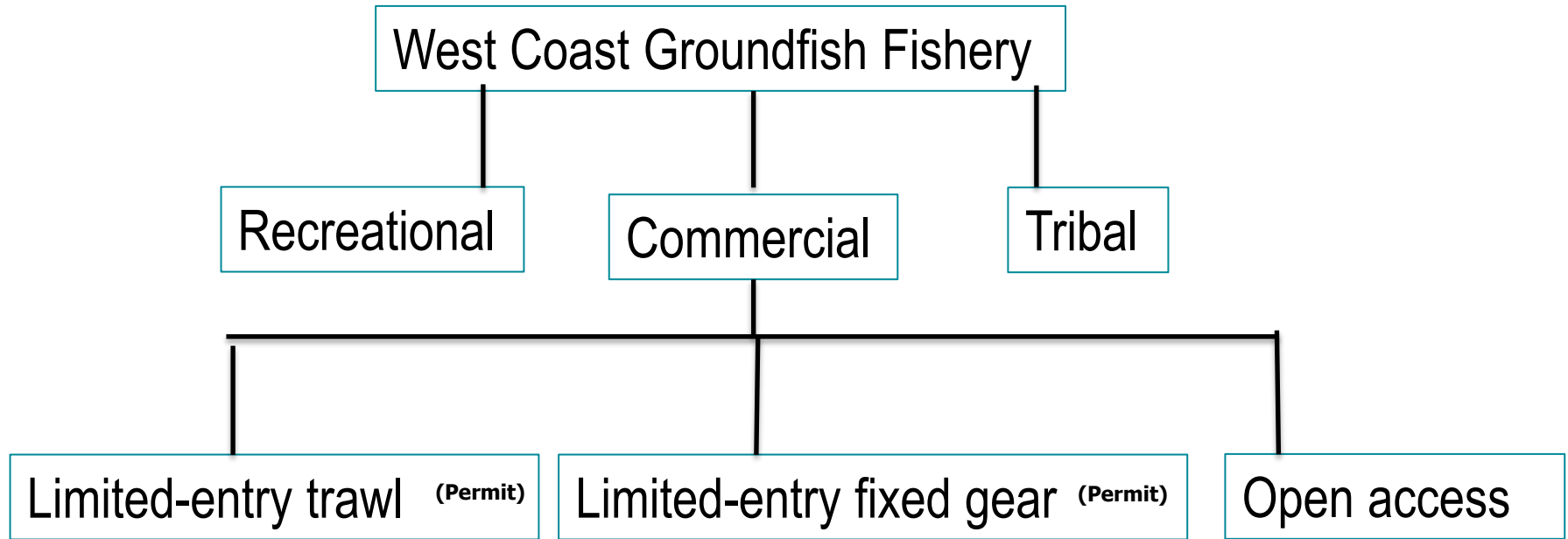
Data collection depends on the **scale of fishing** and the **resources available** for management, monitoring and enforcement.

Fishery monitoring is expensive and involves trade-off decisions



# U.S. West Coast Groundfish Case Study

First, the fishery structure:



# U.S. West Coast Groundfish Case Study

## Fishery Dependent Data

Shoreside sampling

Recreational

At-Sea sampling

Commercial

Creel Sampling

Observer measurement &  
sampling of retained and  
discarded catch

Fish Tickets

Effort Surveys

Trawl logbooks

Species composition  
sampling of assemblages

Fishery-Dependent: derived from the commercial or recreational fisheries

## Fishery Independent Data

NMFS Bottom Trawl Survey

NMFS Pacific Hake Survey

NMFS Hook & Line Survey

NMFS Juvenile Survey

Evolving/emerging State  
agency nearshore surveys

Oceanic and other data

Fishery-Independent: collected directly by scientists, i.e., derived from activities that do not involve the commercial or recreational fisheries.

# U.S. West Coast Groundfish Case Study

## Fishery-Dependent Data

### Commercial

Shoreside  
Fishery sampling

Observer measurement  
& sampling of  
discarded catch

Fish Tickets

Trawl logbooks

Biological sampling &  
species-composition  
sampling of  
assemblages

At-Sea Fishery  
sampling

Observer  
measurement &  
sampling of  
retained and  
discarded catch

### Recreational

Creel Sampling:  
species composition

Effort  
Surveys

Biological sampling  
of retained catch

NMFS-funded; NMFS-executed

NMFS-funded; state-executed

State-funded; state-executed

Combination NMFS/State funds and/or execution

Combination NMFS/Industry funds and/or execution

# U.S. West Coast Groundfish Case Study

## Fishery-Independent Data

**NMFS Bottom Trawl Survey**

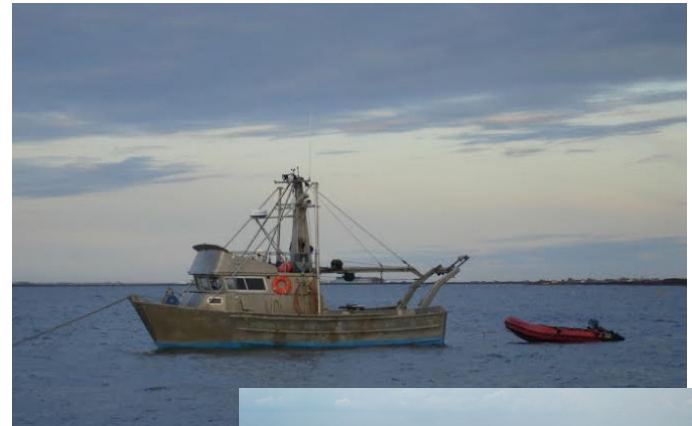
**NMFS Pacific Hake Survey**

**NMFS Hook & Line Survey**

**NMFS Juvenile Survey**

**Evolving/emerging  
State agency  
nearshore surveys**

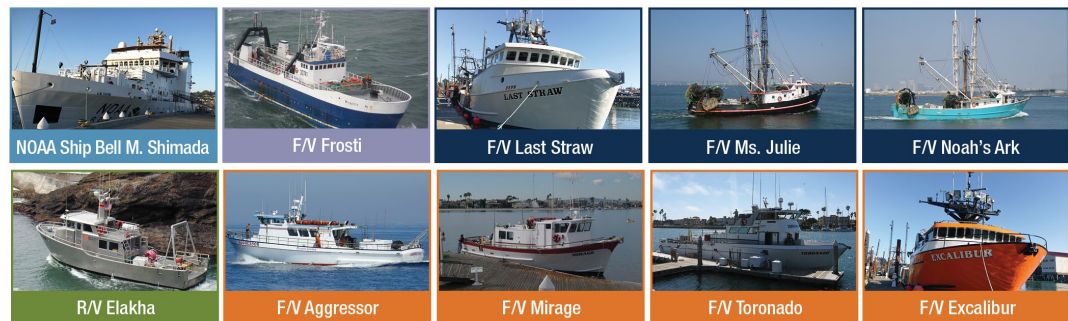
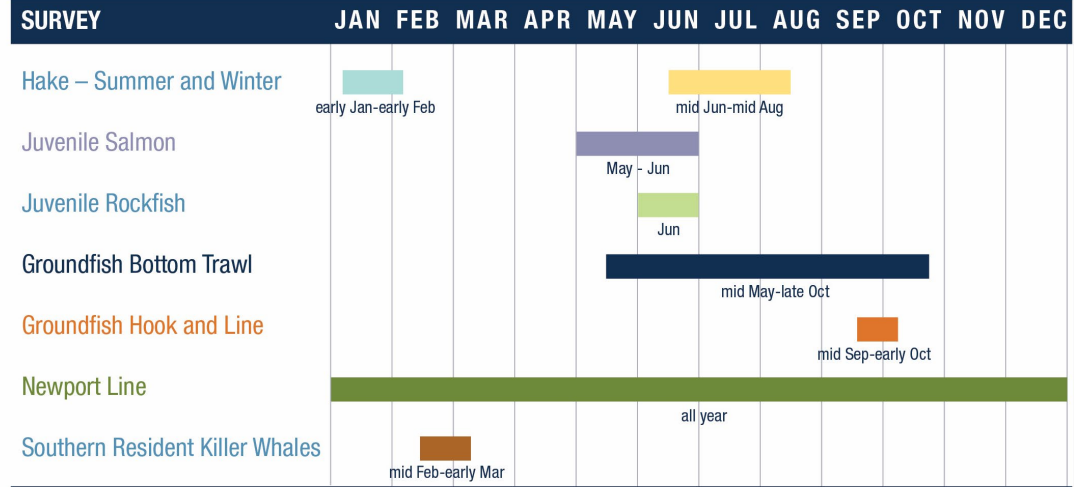
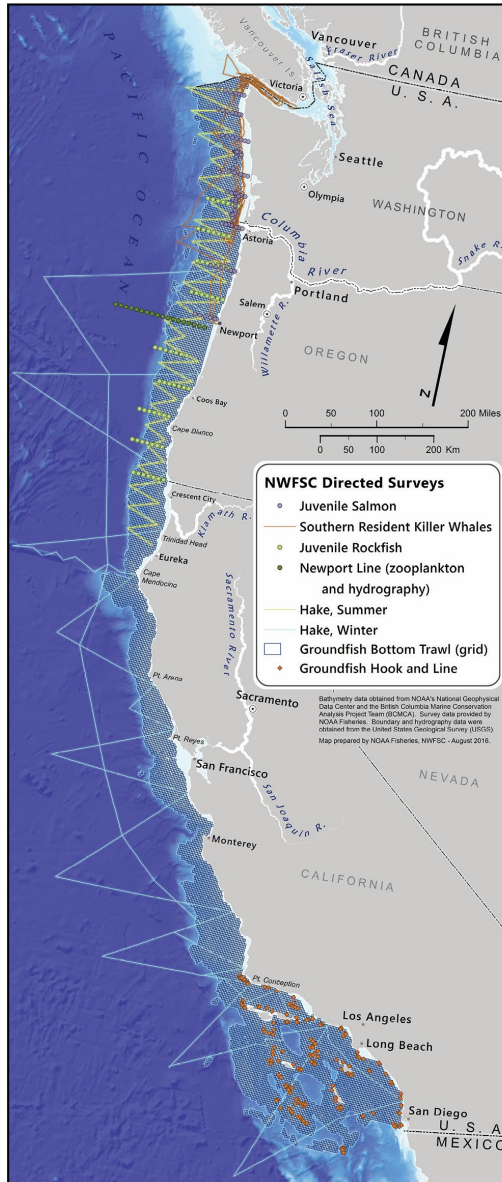
**Oceanic and other  
data**



NMFS-funded; NMFS-executed  
Combination NMFS/State funds and/or execution  
NMFS-funded; NMFS/industry execution

# Fishery Independent Surveys

## Annual Fishery Independent Surveys for West Coast Groundfish




# U.S. West Coast Groundfish Case Study

## Data Collection to Manage Trawl Catch Share Program

Two parts:

- Individual Fishing Quota (IFQ) Program for the shore-based trawl fleet
- Cooperative programs for the at-sea mothership and catcher/processor trawl fleets





**NOAA**  
PACIFIC COAST GROUNDFISH  
INDIVIDUAL FISHING QUOTA  
NATIONAL MARINE FISHERIES SERVICE

NoticesHelpLog In

HomeAll MessagesQuota Share Account BalanceVessel Account BalanceQuota Share CalculatorQuota Pound Price Data

Welcome to the Individual Fishing Quota (IFQ) Program for Pacific Coast Groundfish

Important Messages - Please Read Before Logging Into Your IFQ Account By Clicking On The Message

June 10, 2022 - NMFS allocated additional (top-off) Pacific whiting pounds into Quota Share (QS) accounts. The final allocation (total QP for 2022) for the shorebased IFQ sector is 306,887,877 pounds. Log in to your QS account, and click on QP Transfer Summary under the Account Details tab for more information. Please see the public notice on our website for more information on this final allocation: <https://www.fisheries.noaa.gov/action/2022-harvest-specifications-pacific-whiting-and-2022-pacific-whiting-tribal-allocation>

Quota Year2022

Current Vessel LimitsVessel Limits All Years

Shorebased IFQ Sector Balances (round weight) 6/17/2022 8:25:07

Download Data

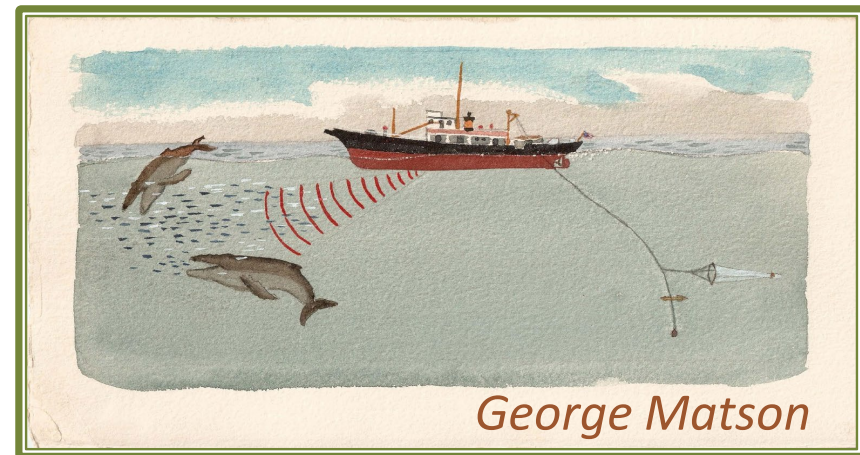
Quota Year	IFQ Species	Sector Quota Pounds (A)	Carryover Quota Pounds (B)	Catch To Date (C)	Quota Pounds Remaining (A+B-C)
2022	Arrowtooth flounder	13,172,113	0	802,716	12,369,397
2022	Bocaccio rockfish South of 40°10' N.	1,442,660	0	327,646	1,115,014
2022	Canary rockfish	1,892,800	0	342,638	1,550,162
2022	Chillipepper rockfish South of 40°10' N.	3,573,693	0	774,668	2,799,025

NMFS-funded;  
NMFS/Industry  
executed

# Data Acquisition Planning

# New NMFS Data Acquisition Plan (DAP) 2022/2023

- NMFS' data needs are evolving rapidly
- New plan will describe current and future data, platforms, and data collection methodology needs, laying the framework for acquisition of traditional, as well as new and expanded data sets, technologies, and approaches.
- New DAP will guide data acquisition within NMFS for the next 10-15 years.



# Questions?