

Glossary of Terms and Acronyms

ADF&G – Alaska Department of Fish & Game

AFSC – Alaska Fisheries Science Center

AKFIN – Alaska Fisheries Information Network

AKR – NMFS Alaska Regional Office

AKT LLC – Aldrich, Killbride, and Tattone LLC

AP – Advisory Panel; standing advisory panel to a Fishery Management Council, composed of representatives of major segments of the fishing industry; catching and processing, subsistence and commercial fishermen, observers, consumers, environmental/conservation, sport fishermen, and other stakeholders.

BSAI King and Tanner Crab Fisheries – The assemblage fisheries exploiting crab stocks in the BSAI managed under the BSAI Crab FMP; eight of these stocks are managed under the BSAI Crab Rationalization program, including Bering Sea Tanner crab, Bristol Bay red king crab, Bering Sea snow crab, Aleutian Islands golden king crab, and others. Note that Tanner crab is an informal designation for crab species of the genus *Chionoecetes*, including Tanner (*C. bairdi*) and snow (*C. opilio*) crab species of the BSAI.

BSAI – Bering Sea and Aleutian Islands

Bycatch (syn. Incidental catch, Non-target catch/species) – Fish other than the primary target species that are caught incidental to the harvest of the primary species. Bycatch may be retained or discarded. Discards may occur for regulatory or economic reasons (National Research Council [NRC], 1999). For shellfish, bycatch also includes sub-legal size or females of the target species.

Catch share – General term used to describe fishery management programs that dedicate a secure privilege to harvest a specific area or percentage of a fishery's total allowable catch (TAC) to individuals, communities, or associations.

CDQ – Community Development Quota – Harvest quota in federally managed fisheries in Alaska allocated to eligible communities in Western Alaska. A percentage of the TAC for certain BSAI crab fisheries is allocated to CDQ communities.

CFEC – Alaska Commercial Fisheries Entry Commission

CIE – Center for Independent Experts

COTR – Contracting Officer's Technical Representative

Council – North Pacific Fishery Management Council

CP (syn. C/P) – Catcher processor - In the context of the crab EDR data collection, refers to vessels that both harvest crab and process crab on board.

CR – Crab rationalization – Refers generally to Amendments 18 and 19 to the Fishery Management Plan for Bering Sea/Aleutian Islands (BSAI) King and Tanner Crabs. These amendments implemented a rationalized management regime with allocations of harvest and processing quota structured to protect the interests of harvesters, processors, and defined regions and communities that historically participated in the program fisheries.

CV – Catcher vessel - In the context of the crab EDR data collection, vessels that harvest crab but do not process crab on board. Crab harvested by catcher vessels is sold live and unprocessed dockside or delivered to processors.

Data element (syn. Variable, data object, database field) - In the context of the EDR data collection, a discrete item of information elicited in one or more of the EDR form questionnaires.

Deadloss – In a crab fishery context, crab that is harvested live but die prior to delivery for processing or dockside sales. Deadloss crab is considered an extraction from the resource and is counted against IFQ, but is typically discarded at the landing and is not purchased.

Derby-Style Fishery (syn. Race for fish) – A fishery in which catch volume is regulated in-season by adjusting season length, closing the fishery when TAC limit is reached; the resulting competition among licensed harvesters to maximize catch before season closure produces perverse economic incentives, including capital stuffing.

EDR – Economic Data Report

EEZ – Exclusive Economic Zone – Ocean territory extending from three to 200 miles offshore and within which the U.S. maintains jurisdiction over economic and resource management, including sovereign rights for the purpose of exploring, exploiting, conserving, and managing natural resources.

EIS – Environmental Impact Statement – Assesses the environmental effects of a proposed regulatory action, as required under the National Environmental Policy Act.

eLandings – Electronic, web-based reporting system managed by ADF&G, NOAA Fisheries, and the International Pacific Halibut Commission for reporting commercial fishery landings and/or production in Alaska, including landings in the rationalized BSAI crab fisheries.

ESSRP – AFSC Economics and Social Science Research Program

Establishment survey – A survey in which the unit of analysis is a business or organization, rather than an individual or household.

Ex-vessel value (syn. Dockside value, Landed value, Gross landed value) – A measure of the gross dollar worth of commercial landings, usually calculated as the price per pound for the first purchase of commercial harvest multiplied by the total pounds harvested. Ex-vessel value typically includes post-season adjustments to the amount initially paid for fish upon landing, and excludes value of added value processing. In Alaskan commercial fisheries, this represents harvest sector revenues, in contrast to processing sector (first wholesale) revenues.

First wholesale value – The value from the first sale of fish from a processor to a buyer.

Fish ticket – A record of purchase and documentation of harvest; often records the species landed, the weight of each species, the gear used to catch the fish, catch dates, the fishery, the processor, the price paid for the fish, and the area fished.

Fishery – The combination of fish and fishermen in a region, the latter fishing for similar or the same species with similar or the same gear types.

Fishing mortality (syn. Mortality) – A measurement of the rate of removal from a population by fishing. Fishing mortality can be reported as either annual or instantaneous. Annual mortality is the

percentage of fish dying in one year. Instantaneous mortality is that percentage of fish dying at any one time.

Fixed costs – production expenses that do not change as a function of the level of output of a production enterprise, relative to a time period, e.g., salaries for salaried employees.

FMP – Fishery Management Plan – Document developed by the regional fishery management councils overseeing management of U.S. fisheries. The NPFMC has developed and implemented five FMPs for fisheries off Alaska, including the Fishery Management Plan for the Bering Sea and Aleutian Islands King and Tanner Fisheries. FMP provisions are developed and approved through the Council process and codified in regulations issued by NMFS.

Harvesters (syn. harvesting participants) – In the context of the BSAI crab fisheries, refers to individuals and entities that fish for crab.

IFQ – Individual Fishing Quota – Annual allocation of catch for a harvester holding QS; denominated in pounds as determined by QS and the annual TAC

In-season management – The set of fishery management activities that support monitoring, industry compliance, and enforcement of quotas while a fishery is open and being prosecuted.

IPQ – Individual Processor Quota – Annual allocation of harvested crab that a processor holding PQS holds exclusive, transferrable rights to receive; denominated in pounds as determined by PQS and the TAC.

IQ – Individual Quota – A type of catch share program in which shares are allocated to individuals or individual entities. Recipients are generally fishermen and shares are not transferable.

IRFA – Initial Regulatory Flexibility Analysis; decision analysis document required for federal agency rulemaking actions under the federal Regulatory Flexibility Act.

ITQ – Individual Transferable Quota – A type of catch share program in which shares are allocated to individuals or individual entities. Recipients are generally fishermen and shares are transferable.

IVQ – Individual Vessel Quota – A type of catch share in which shares are allocated to an individual vessel. Shares are attached to the vessel rather than the vessel owner and shares may or may not be transferable. This has been used most commonly in Canada.

Landings – Fishery resources caught by harvesters and brought on shore.

Magnuson-Stevens Fishery Conservation and Management Reauthorization Act – The primary law governing marine fisheries management in U.S. federal waters (16 U.S.C. 1801 et seq).

MEY – Maximum Economic Yield – The catch level that corresponds to the highest amount of profit that could be earned from a fisher.

Mortality – A measurement of the rate of death of fish, resulting from several factors but mainly predation and fishing.

MSA – Magnuson-Stevens Fishery Conservation and Management Act

MSY - Maximum Sustainable Yield – The largest average catch that can be taken continuously (sustained) from a stock under average environmental conditions.

NMFS (syn. NOAA Fisheries) – National Marine Fisheries Service

NOAA – National Oceanic and Atmospheric Administration

NPFMC – North Pacific Fisheries Management Council

OST – NMFS Office of Science and Technology

PNCIAC – Pacific Northwest Crab Industry Advisory Committee; industry advisory committee to the NPFMC

PQS – Processor Quota Share – Exclusive, transferrable privilege held by a processor to receive deliveries of a specific portion of the annual TAC from a crab fishery. PQS results in annual allocation of IPQ.

Processors (syn. processing participants) - In the context of the Alaska commercial fisheries, refers collectively, or to individual members, of the fishing industry sector that receives fish/shellfish catch from harvesters and processes the resource for the wholesale market.

PSMFC – Pacific States Marine Fisheries Commission; industry advisory committee to the NPFMC

QA/QC – Quality Assurance and Quality Control

QS – Quota Share; represents a long-term dedicated privilege to harvest a percentage share of TAC in a fishery in which a QS holder is licensed to harvest. In the rationalized crab fisheries, QS is applied to the TAC to generate annual allocations of IFQ.

RAM – AKR Restricted Access Management

Rationalization – the general-use term for a rationalized management regime.

Rationalized Management Regime – A quota-based system for allocating natural resources; replaces the “derby-style” allocation regime

RIR – Regulatory Impact Review; assessment of benefits and costs of regulatory decision-making required of federal agencies under Executive Order 12866; typically combined with IRFA in decision analyses for fishery rulemaking.

SAFE – Stock Assessment and Fishery Evaluation; annual assessment required under FMP

Sector – A specific division of a fishery defined by unique characteristics, such as management regulations, gear types, fishing locations, purpose of activity, or vessel size. In the context of the crab EDR, this term is used interchangeably to refer to general industry sectors (processors and harvesters) or specific subsectors (catcher processors, catcher vessels, shoreside processors, and stationary floating processors).

Shoreside processor - Any land-based person, company or vessel that receives unprocessed or limited-processed fish or shellfish, except catcher/processors, motherships, buying stations, restaurants, or persons receiving fish for personal consumption or bait.

SSC – Scientific and Statistical Committee; technical advisory committee to a Fishery Management Council required under MSA to “assist it in the development, collection, evaluation, and peer review of such statistical, biological, economic, social, and other scientific information as is relevant to such Council’s development and amendment of any fishery management plan.”

Stationary floating processor (syn. Floating processor) – Vessel operating as a processor that remains anchored or stationary in a single geographic location while receiving or processing crab.

Stock – A part of a fish population usually with a particular migration pattern, specific spawning grounds, and subject to a distinct fishery. A fish stock may be treated as a total or a spawning stock. Total stock refers to both juveniles and adults, either in numbers or by weight, while spawning stock refers to the numbers or weight of individuals that are old enough to reproduce.

Submitter – An individual required to complete and submit an EDR; e.g., a catcher vessel owner or operator, or processing plant owner or operator actively participating in the CR fisheries.

TAC – Total Allowable Catch (syn. Catch limit, Guideline harvest level, GHL) – The annual recommended or specified regulated catch for a species or species group, typically given in biomass (weight).

ToR – Terms of Reference

Variable costs – Costs associated with factor inputs that change in proportion to output of a production process or activity of a business, e.g., the cost of raw crab purchased by a processor as an input to the production of finished product.

Relevant Statutes & Codes

Magnuson-Stevens Fishery Conservation and Management Reauthorization Act – The primary law governing marine fisheries management in U.S. federal waters (16 U.S.C. 1801 et seq).

Amendments 18 and 19 (to the Fishery Management Plan for Bering Sea/Aleutian Islands (BSAI) King and Tanner Crabs) – Amendments 18 and 19 implemented a rationalized management regime for certain BSAI crab fisheries, with allocations of harvesting and processing quota structured to protect the interests of harvesters, processors, and defined regions and communities with historical participation in program fisheries.

50 CFR § 680.6 – Crab economic data report (EDR). Persons participating in the CR crab fisheries are required to submit the EDRs described in this section for various permit applications to be considered complete. URL: <http://www.fakr.noaa.gov/regs/680/680a6.pdf>.

Amendment 80 (to the Fishery Management Plan for Groundfish of the BSAI) – 50 CFR §§679.90–679.94 - This action implements a rationalized management regime in the non-American Fisheries Act (non-AFA) trawl catcher/processor sector by allocating QS in several Bering Sea and Aleutian Islands (BSAI) non-pollock trawl groundfish species among trawl fishery sectors and facilitating the formation of harvesting cooperatives. Amendment 80 was adopted by the North Pacific Fishery Management Council (Council) in June 2006 and was implemented starting with the 2008 fishing year by the National Marine Fisheries Service (NMFS), under regulations promulgated by the Secretary of Commerce. .

Amendment 91 (to the Fishery Management Plan for Groundfish of the BSAI) – In April 2009, the North Pacific Fishery Management Council voted unanimously to recommend Amendment 91. The amendment provides an innovative approach to rationalized management of Chinook salmon bycatch in the Bering Sea pollock fishery that combines a limit on the amount of Chinook salmon that may be caught incidentally with incentive plan agreements and performance standard. The program was designed to minimize bycatch to the extent practicable in all years, and prevent bycatch from reaching the limit in most years, while providing the pollock fleet with the flexibility to harvest the total allowable catch. On May 14, 2010, NMFS approved Amendment 91. NMFS is implementing this program for the 2011 Bering Sea pollock fishery.

Key Players in Crab EDR Program

AFSC Economics and Social Science Research Program (ESSRP): Conducts economic and social science research on Alaska fisheries to assist NMFS in meeting its stewardship responsibilities. Tasked by NPFMC with leading development and implementation of the EDR program for BSAI crab fisheries.

Aldrich, Killbride, and Tattone LLC (AKT LLC): Auditor contracted by PSMFC to conduct annual validation audits on crab EDR data.

Alaska Fisheries Information Network (AKFIN): PSMFC program that consolidates the collection, processing, analysis, and reporting of fisheries statistics for North Pacific and Alaskan Fisheries. With respect to the EDR program, AKFIN provides data warehousing, database administration, and other technical services in support of data collection and analysis.

North Pacific Fishery Management Council (NPFMC, Council): One of eight regional councils established by the Magnuson–Steven Fishery Conservation and Management Act to oversee management of U.S. fisheries, the NPFMC maintains jurisdiction over the Exclusive Economic Zone off Alaska. Defines purposes and needs for EDR data collection. Currently reviewing the crab EDR data collection for potential revisions to address changing analytical objectives, data quality limitations, and excessive submitter burden.

Pacific Northwest Crab Industry Advisory Committee (PNCIAC): Industry advisory committee to the NPFMC and Alaska Board of Fisheries. Has provided feedback on data quality and reporting burden in the EDR, as well as on protocols for data use and confidentiality.

Pacific States Marine Fisheries Commission (PSMFC): Interstate commission providing support to resource agencies and the fishing industry in sustainable management of fishery resources in California, Washington, Oregon, Idaho, and Alaska. Contracted by AFSC to serve as the data collection agent for the BSAI Crab EDR and other EDR programs.

Resource Data, Inc (RDI): contractor to AKFIN providing IT services, including database programming support for EDR programs.

Other Agencies and Organizations Involved in BSAI Crab Fisheries

AKR Restricted Access Management (RAM): NMFS Alaska Regional office division; manages monitoring and recordkeeping and fishery permit programs including the BSAI Crab Rationalization Program.

Alaska Commercial Fisheries Entry Commission (CFEC): Conserves and maintains Alaska's commercial fisheries by limiting fishers, issues permits and vessel licenses, provides hearings and appeals.

Alaska Department of Fish and Game (ADF&G): State of Alaska agency responsible for managing use and development of Alaska fish, game, and aquatic plant resources.

Alaska Fisheries Science Center (AFSC): One of six NMFS regional science centers, AFSC generates the scientific information and analysis necessary for the conservation, management, and utilization of the Alaska region's living marine resources.

National Marine Fisheries Service (NMFS): division of NOAA that develops and defines the rules regulating commercial fisheries in the US Exclusive Economic Zone (EEZ) under principal

statutory authority set forth in the Magnuson-Stevens Conservation and Management Act (MSA)

National Oceanic and Atmospheric Administration (NOAA): Federal agency within U.S. Department of commerce focusing on the condition of the oceans and the atmosphere.

NMFS Alaska Regional Office (AKR): Issues regulations and carries out management directives for commercial fisheries and other marine resources in Alaska under federal jurisdiction, with substantial advisory input from NPFMC. Alaska crab fisheries in the BSAI EEZ of are jointly managed by AKR and the State of Alaska under the federal Fishery Management Plan for the Bering Sea and Aleutian Islands King and Tanner Fisheries.

NMFS Office of Science and Technology (OST): Serves as the primary interface between NMFS scientific activity and NOAA, other agencies, and international organizations; and maintains oversight of NMFS scientific research and technology development activities.

NOAA General Counsel: Provides legal advice and counsel for NOAA.

NPFMC Scientific and Statistical Committee (SSC): Committee of biological, economic, statistical, and social scientists that advises the North Pacific Fishery Management Council on scientific and other technical matters

Parties involved in the CIE Review

Panel Meeting Chairman

Dr. Christopher Anderson,
Associate Professor, Department o Environmental and Natural Resource Economics
University of Rhode Island, Kingston, RI

Panelists Selected by CIE for this Review

Dr. Susan Hanna
Professor Emeritus of Marine Economics
Oregon State University Corvallis, OR

Dr. Dana L. Moore
Associate Director
Social & Exconomic Science Research Center
Washington State University, Pullman, WA

Dr. Richard Wang
Director, MIT Information Quality Program
Massachusetts Institute of Technology, Cambridge MA

Key Personnel

William Michaels, Contracting Officer's Technical Representative (COTR)
NMFS Office of Science and Technology
1315 East West Hwy, SSMC3, F/ST4, Silver Spring, MD 20910

William.Michaels@noaa.gov

Phone: 301-427-8155

Manoj Shivlani, CIE Lead Coordinator
Northern Taiga Ventures, Inc.
10600 SW 131st Court, Miami, FL 33186

shivlanim@bellsouth.net

Phone: 305-383-4229

NMFS Project Contacts

Ron Felthoven

National Marine Fisheries Service
Alaska Fisheries Science Center – F/AKC2
7600 Sand Point Way NE, Seattle, WA 98115

Ron.Felthoven@noaa.gov

Phone: 206-526-4114

Brian Garber-Yonts

National Marine Fisheries Service
Alaska Fisheries Science Center – F/AKC2
7600 Sand Point Way NE, Seattle, WA 98115

Brian.Garber-Yonts@noaa.gov

Phone: 206-526-6301

Additional References

Additional glossaries of fishery-related terms are available at the URLs below:

- <http://www.edf.org/page.cfm?tagID=59411>
- <http://www.fao.org/fi/glossary/>
- <https://elandings.alaska.gov/confluence/display/doc/Glossary>
- <http://www.st.nmfs.noaa.gov/st4/documents/FishGlossary.pdf>

For an overview of the North Pacific Fishery Management Council process:

- http://www.fakr.noaa.gov/npfmc/misc_pub/Navigating_NPFMC.pdf