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## Informal Glossary of Terms IPHC – NMFS/NPFMC/PFMC – DFO

## Introduction

There are a variety of fisheries management terms used by the International Pacific Halibut Commission (IPHC), National Marine Fisheries Service (NMFS), the North Pacific Fishery Management Council (NPFMC), the Pacific Fishery Management Council (PFMC), and Fisheries and Oceans Canada (DFO). Some of these terms have the same definition in all three institutional processes, while others differ due to the regulatory framework and/or common usage. Some terms exist in only one or more process, and there may or may not even be clear analogs across processes. This complexity can lead to confusion regarding the interpretation of data, analyses, and management actions.

This table is intended to serve as an informal guide to commonly encountered terms and acronyms. It is annotated <u>from the perspective of the IPHC</u>, with additional description of terms and concepts not widely used outside the IPHC's process. However, key management terms from all processes are included, and are defined based on origin. Italicized entries are included for other processes to provide information for comparison and interpretation.

We thank the IPHC Science Advisors from the U.S. and Canada, as well as other contributors at NMFS and DFO for assisting with many of the individual entries.

Term	ІРНС	NMFS/NPFMC/PFMC	DFO
Acceptable Biological Catch (ABC)	There is no direct analog in the IPHC's current harvest policy.	The upper limit of the annual TAC. It is based on the harvest rate that is estimated to produce the current maximum biological yield, with a reduction to account for scientific uncertainty in the probability that overfishing may occur (P* for the PFMC).	Roughly equivalent to the catch that corresponds to the application of the HCR for a specific fishery.
Accountability Measures (AM)	There is no direct analog.	Actions taken to reduce the risk that overfishing will occur.	There is no direct analog.

## List of terms

Term	ІРНС	NMFS/NPFMC/PFMC	DFO
Advisory Panel (AP)	The IPHC Commissioners similarly receive recommendations from the PAG and CB during the annual meeting.	Stakeholder panel comprised of industry and user community representatives that provides fisheries management recommendations to the NPFMC process.	DFO has various "advisory boards" or "advisory committees" serving a similar role.
Annual Catch Limit (ACL)	There is no direct analog in the IPHC's current harvest policy.	May be equal to or less than the ABC due to including accountability measures to avoid overfishing. Also called the TAC in the NPFMC process.	<i>This is roughly equivalent</i> <i>to the TAC</i> .
Annual Catch Target (ACT)	<i>This is roughly equivalent to the IPHC's Blue Line.</i>	May be equal to or less than the ACL to account for management uncertainty.	
Apportionment	Estimates of the stock distribution by IPHC regulatory area (for halibut greater than 32 inches in length) based on the catch rates observed in the IPHC's setline survey, adjusted for regional catchability differences, and bottom area from 0- 400 fathoms.	An analogous process is used to subdivide the TAC (or OY, and sometimes ABC) for species in the North Pacific and U.S. West Coast based on the geographical distribution of the species, inferred via the distribution of survey catch-rates or biomass estimates. Examples include sablefish, Pacific Ocean Perch, Pollock, and others.	An analogous process is used to subdivide the TAC for some species off British Columbia based on survey catch-rates or area-based assessment results.
Bering Sea and Aleutian Islands (BSAI)	This region is mismatched with IPHC regulatory areas, including a portion of 4A and all of 4B, and 4CDE (which includes the Closed area).	The U.S. EEZ of the Bering Sea and Aleutian Islands region that is managed by the NPFMC (including an FMP defining groundfish catch and PSC limits).	
Biomass Blue Line	A measure of population weight (in net pounds) A row in the Decision Table, highlighted in blue, which provides the removals consistent with the Commission's current harvest policy.	A measure of population weight (in <b>round</b> weight). Roughly equivalent to the ACT(or ACL where no ACT is used)	A measure of population weight (in <b>round</b> weight). Roughly equivalent to the TAC.

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Bycatch	Halibut incidentally caught by fisheries targeting other species and that cannot legally be retained. Bycatch mortality, or bycatch removals, refers only to those halibut that subsequently die due to capture.	PSC refers to bycatch removals of halibut that cannot be legally retained.	Used more generally to describe the incidental catch of species or life stages for which the harvester was not licensed for, but is required or permitted to retain, as well as all non-retained catch.
Catch-Per- Unit-Effort (CPUE)	See WPUE and NPUE.	Basic measures of catch- rate for surveys and fisheries	Basic measures of catch- rate for surveys and fisheries
Catch Sharing Plan (CSP)	Management procedures in the U.S. and Canada which allocate some portions of the available yield among specific user groups or management areas. Allocations are often described as percentages of the Regulatory Area catch limits.	CSPs in the U.S. are implemented by the NPFMC (in Areas 2C and 3A) and the PFMC (in Area 2A).	These represent the allocation agreements in place in Canada.
Catch tables	Summary tables reporting detailed observed or projected removals by source and specific regulatory area.	The catch tables corresponding to potential management decisions are roughly analogous to the annual "Specs" (specifications) tables in the Council systems.	Similar to tables describing TACs or removals by region.
Cautious Zone	This is analogous to the halibut spawning biomass being less than $SB_{30\%}$ but more than $SB_{20\%}$ . Over this range of biomass the target harvest rate is reduced linearly to zero.	A similar approach is used for most species managed by the U.S. Fisheries Management Councils. The specific SB reference points used to define this zone depend on the species and Council system.	The stock is considered to be in the Cautious Zone if the spawning biomass is less than the USR but greater than the LRP. Provisional values of 80% of $B_{MSY}$ and 40% of $B_{MSY}$ are recommended. However, alternative metrics may be used in species-specific contexts.
The Closed Area	A Region in the Eastern Bering Sea closed to the directed halibut fishery by the IPHC.	This area is not closed to fisheries targeting species other than halibut.	

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Commission (IPHC)	Formed in 1923, the Commission is responsible for conducting research on and management of the stocks of Pacific halibut within the Convention waters of both nations.	Similar organizations interacting with the U.S. Fisheries Management Councils include the Inter- American Tropical Tuna Commission and the Pacific Salmon Commission.	Similar organizations interacting with DFO include the Inter-American Tropical Tuna Commission and the Pacific Salmon Commission.
Conference Board (CB)	An advisory body to IPHC composed of representatives of the directed halibut fisheries – commercial, recreational, and personal use.	The AP (or GAP) in the Council processes operates similarly to the CB and the PAG combined.	DFO has various "advisory boards" or "advisory committees" serving a similar role.
Constant Exploitation Yield (CEY)	A specific concept from the IPHC's harvest policy: the Total CEY (TCEY) is the amount of yield of halibut greater than 26 inches in length, and Fishery CEY (FCEY), is the amount of yield for the directed halibut fisheries where applicable.	Although ACLs or TACs, appear to be similar to CEYs, they are not equivalent because CEYs do not contain all sizes and sources of removals.	These are not equivalent to TACs, because CEYs do not contain all sizes and sources of removals.
Critical Zone	This is equivalent to a stock size less than SB <sub>20%</sub> for halibut.	This is equivalent to a stock size less than the MSST defined for that species.	The stock is considered to be in the Critical Zone if the spawning biomass is less than or equal to the LRP. A provisional value of 40% of $B_{MSY}$ is recommended. However, alternative metrics may be used in species-specific contexts.
Centre for Science Advice Pacific Region (CSAP)	The IPHC's Scientific Review Board (SRB) provides independent peer-review in the same role.	Represents an analog to the SSCs and independent reviews supporting Council science.	The regional body responsible for review and evaluation of scientific information on the status of living aquatic resources, their ecosystems and the biological aspects of stock management.

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Decision Table	A table reporting the estimated probabilities of future stock and fishery risk metrics for a range of coastwide harvest levels. Since 2013, this has served as the primary basis for IPHC decision-making.	There is no clear analog in the decision-making process, although decision tables that reflect scientific uncertainty and stock trends associated with alternative states of nature are sometimes produced in the annual SAFE documents.	Similar decision tables corresponding to potential management actions are included as a component of some stock assessment documents.
Depletion	See SBxx%.	A term used to describe the level of female spawning biomass in a particular year relative to the average female spawning biomass in the absence of fishing.	A term used to describe the level of female spawning biomass in a particular year relative to the average female spawning biomass in the absence of fishing $(B_0)$ .
Discard Mortality Rate (DMR)	The fraction of the halibut that are released/discarded and are estimated to subsequently die. This is the product of the estimated condition(s) or injury type(s) of those fish and the discard mortality probability associated with each condition or injury.	Identical definition. Calculation and application of DMRs for halibut varies by fishery, and type of observer coverage. The NPFMC uses average values over a period of years. The PFMC uses estimates by vessel based on observers for the integrated trawl fishery. Historically, the IPHC has provided some or all parts of these estimates to the Council processes.	Identical definition. Calculation and application of DMRs for halibut varies by fishery, and type of observer coverage.
Discard mortality probability	The estimated probability that a halibut with a particular injury type or condition category will die due to injuries sustained during capture.	Identical definition.	Identical definition.
Exclusive Economic Zone (EEZ)	The IPHC's jurisdiction includes the EEZs of both the United States and Canada in the eastern Pacific Ocean.	The waters for which the U.S. exercises legal jurisdiction of fisheries, extending to 200 miles from the coastline.	The waters for which Canada exercises legal jurisdiction of fisheries, extending to 200 miles from the coastline.

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Exploitable biomass	A specific concept from the IPHC's harvest policy: the portion of the total stock biomass included in the current harvest policy calculations.	There are no analogs frequently used for management, although vulnerable biomass is sometimes defined where there is only a single fishery and/or selectivity of all fisheries is similar.	There are no analogs frequently used for management, although vulnerable biomass is sometimes defined where there is only a single fishery and/or selectivity of all fisheries is similar.
Fxx%	The level of fishing intensity that reduces the SPR to XX%.	<i>This is a common notation for describing fishing intensity.</i>	Identical definition; not in common use.
F <sub>MSY</sub>	There is currently no analog in the IPHC's harvest policy.	The level of long-term constant fishing intensity estimated to produce MSY; this level may not represent a specific annual goal as stock status and trend may vary.	The level of long-term constant fishing intensity estimated to produce MSY; this level may not represent a specific annual goal as stock status and trend may vary.
Fishery Management Plan (FMP)	The IPHC's current harvest policy serves in a similar, but not legally binding manner as FMPs.	A formal plan that contains specific guidelines and measures for conserving and managing specific fisheries and fish stocks.	Roughly analogous to Integrated Fishery Management Plans, which outline fishery objectives and the basic rules of the fishery and fishing season.
Groundfish Advisory Panel (GAP)	The IPHC Commissioners similarly receive recommendations from the PAG and CB during the annual meeting.	Stakeholder panel that provides recommendations to the PFMC process.	DFO has various "advisory boards" or "advisory committees" serving a similar role.
Groundfish Management Team (GMT)	There is no analog of managers directly advising the Commission.	Managers and scientists from State, Federal, Academic and other organizations who are appointed by the Councils to provide analyses and recommendations to the decision making process.	There is no clear analog.
Guideline Harvest Level (GHL)	A precursor to the current CSP. Part of a program used by the North Pacific Fishery Management Council from 2003 to 2013 to manage the harvest by the sport charter halibut fishery in Areas 2C and 3A.	Identical definition.	There is no clear analog.

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Gulf of Alaska (GOA)	This region is mismatched with IPHC regulatory areas, including a portion of 4A and all of 2C, 3A, and 3B.	The U.S. EEZ of the GOA region that is managed by the NPFMC (including an FMP defining groundfish catch and PSC limits).	
Harvest Control Rule (HCR)	A common element in harvest policies, the HCR is a method for determining a catch or fishing intensity target. The IPHC's current harvest policy does not contain an explicit limit for fishing intensity.	This is a common approach for management of most stocks, representing an explicit method for determining a catch or fishing intensity target or limit.	This is a common approach for management of most stocks, representing an explicit method for determining a catch or fishing intensity target or limit.
Harvest policy	A documented set of methods for fishery management.	Identical definition.	
Healthy Zone	This is analogous to a halibut spawning biomass greater than $SB_{30\%}$ . Over this range of biomass the target harvest rate is applied in the HCR.	A similar approach is used for most species managed by the U.S. Councils. The specific SB reference points used to define this zone depend on the species and Council system but generally correspond to SBMSY or a proxy.	The stock is considered to be in the Healthy Zone if the spawning biomass is higher than the USR. A provisional value of 80% of $B_{MSY}$ is recommended. However, alternative metrics may be used in species-specific contexts.
Limit Reference Point (LRP)	This is analogous to a halibut spawning biomass equal to $SB_{20\%}$ .	The specific SB reference points used to define this zone depend on the species and Council system.	The stock size at the boundary between the Critical and Cautious Zones.
Magnuson- Stevens Fishery Conservation and Management Act (MSFCMA, MSA, "Magnuson- Stevens Act")	The Treaty provides the analogous legal authority for the IPHC to manage the Pacific halibut stock.	This is the basic U.S. law for management of the EEZ. This law establishes the legal authority for the regional fishery management council system, and other provisions of U.S. marine fishery law for the 200- mile fishery conservation zone. It was first implemented in 1977, and has been modified in subsequent years.	The Fisheries Act, the Oceans Act, and the Species at Risk Act create an analogous legal and policy framework covering the management of Canadian fisheries.

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Maximum Sustainable Yield (MSY)	There is currently no analog in the IPHC's harvest policy.	An estimate of the largest average long-term annual catch under prevailing ecological and environmental conditions. This quantity represents the limit or target (depending on stock size) for most U.S. federally managed fisheries, depending on the specific dynamics of each stock.	An estimate of the largest average long-term annual catch under prevailing ecological and environmental conditions.
Mt, t	Used by the IPHC only for comparison with PSC limits. See Mlb and net weight.	Metric tons, this is reported in round weight	Metric tons, this is reported in round weight
Millions of pounds (Mlb)	Measure of stock weight (almost always net ).	Often confused with metric tons round weight (almost never in net weight).	Often confused with metric tons round weight (almost never in net weight)
Minimum Stock Size Threshold (MSST)	This is analogous to a halibut spawning biomass equal to SB <sub>20%</sub> .	Defines the lower limit of the HCR in many fisheries; the specific value depends on the species and FMP.	This is the LRP in the Canadian management system.
Management Strategy Advisory Board (MSAB)	An advisory group appointed by the Commission, whose purpose is to define fishery management objectives and to provide technical input on the development of a Management Strategy Evaluation for the Pacific halibut fishery.	There is no analog in these processes.	Management Strategy Evaluations in process for some BC fisheries have advisory boards with roles similar to the MSAB.
Net weight	The weight of a halibut without gills and entrails, head-off, washed and without ice and slime. Interestingly, for management and modelling purposes all halibut exist in this state.	Almost never used, and often confused with round weight.	Almost never used, and often confused with round weight.

Term	ІРНС	NMFS/NPFMC/PFMC	DFO
Numbers-Per- Unit-Effort (NPUE)	The catch (in numbers) of halibut per standardized skate of longline gear. This metric is used to measure temporal trends in catch-rates for the IPHC's setline survey within and among regulatory areas.	See CPUE.	See CPUE.
O26	Halibut greater than or equal to 26 inches in length. See U26.	There are no analogous cut-offs for most U.S. managed fisheries, although some biomass estimates are reported based on age categories.	There are no analogous cut-offs for most Canadian fisheries.
032	Halibut greater than or equal to 32 inches in length. See U32.	There are no analogous cut-offs for most U.S. managed fisheries, although some biomass estimates are reported based on age categories.	There are no analogous cut-offs for most Canadian fisheries, although some species are managed with size limits.
Overfished	This condition is roughly analogous to the halibut stock dropping below SB <sub>20%</sub>	The status that a fish stock's SB is below the defined LRP of MSST. This status determination is independent of the current level of fishing intensity.	This condition is roughly analogous to the stock dropping below the LRP, but the term is not specifically used in Canada.
Overfishing	There is currently no analog in the IPHC's harvest policy.	The status that a fish stock's level of fishing intensity is above the level estimated to produce MSY. This status determination is independent of the current level of biomass.	Not defined in Canada.
Overfishing Level/Limit (OFL)	There is currently no analog in the IPHC's harvest policy.	Maximum amount of removals that can be taken without creating a level of fishing intensity that would be considered overfishing.	Not defined in Canada.

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Optimum Yield (OY)	Roughly equivalent to the IPHC's Blue Line, as adjusted during the annual process.	The amount of fish that will provide the greatest overall biological social and economic benefit (with respect to food production, recreational opportunities, and taking into account the protection of marine ecosystems). The OY is modified from the ABC, taking into account relevant economic, social, and ecological factors. Also called the TAC depending on the process.	Roughly equivalent to the TAC.
P* ("P star")	There is currently no analog in the IPHC's harvest policy; however, the estimated probabilities of multiple risk metrics are presented annually in the Decision Table.	Probability of overfishing.	There is no clear analog in the Canadian process.
Processor Advisory Group (PAG)	An advisory body to IPHC composed of representatives from halibut processors.	Along with the CB, this group serves a similar role as the AP or GAP for the NPFMC and PFMC processes.	
Prohibited Species Catch (PSC)	The IPHC refers to halibut catch in fisheries that cannot legally retain halibut as bycatch.	The mortality of species that cannot legally be retained by a target fishery.	For a few Canadian fisheries (such as groundfish trawl), "prohibited species" are defined in license conditions as species for which retention is not permitted.
Plan Team (PT)	There is no analog of managers directly advising the Commission, although the MSAB serves some similar functions with regard to harvest policy.	A group of scientific, management, and other advisors appointed by the NPFMC to review stock assessments and fishery controls including OFLs, and ABCs. The duties of this group are similar in some respects to those of the GMT for the PFMC.	

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Regulatory Areas	Eight management units for which the IPHC sets annual catch limits: 2A, 2B, 2C, 3A, 3B, 4A, 4B, and 4CDE (which includes the Closed Area).	Mismatched with BSAI and GOA regulatory areas under the management of the NPFMC. Area 2A corresponds to the waters under the management of the PFMC.	Area 2B corresponds to the waters under the management of DFO.
Report of Assessment and Research Activities (RARA)	This annual document provides a summary of research as well as the most recent stock assessment and harvest policy estimates.	Similar to the SAFE documents describing annual analyses and results.	Similar to Canadian Science Advisory Secretariat (CSAS) research documents reporting stock assessments for individual groundfish stocks.
Rebuilding Plan	There is no analog in the IPHC's current harvest policy which does not have separate procedures or an overfished determination.	A document that describes policy measures that will be used to rebuild a fish stock that has been declared overfished.	A document that describes rebuilding objectives, timelines, and management procedures that will be used to rebuild a fish stock that has been determined to be in the Critical Zone.
Removals	All fish that die due to capture either through retention or discarding. Synonymous with mortality.	Identical definition.	Identical definition.
Removal reference	There is no analog in the IPHC's current harvest policy which does not have an overfishing determination.	This is analogous to the OFL.	The maximum removal rate (in fishing mortality, or some metric of fishing intensity) defined in the HCR for the stock including all mortality from all types of fishing. This value should be less than or equal to the removal rate associated with MSY.
Research Advisory Board (RAB)	An advisory body to the Commission staff, comprised of halibut fishing and processing industry representatives. The RAB provides input on research topics and direction.	There is no formal analog to the RAB in these processes.	Similar in some respects to the Halibut Advisory Board (HAB).

Term	ІРНС	NMFS/NPFMC/PFMC	DFO
Round weight	Used by the IPHC only to provide comparison to PSC calculations. See net weight.	The standard metric for reporting; often confused with net weight.	The standard metric for reporting; often confused with net weight.
Female Spawning Biomass (SB)	Female spawning biomass expected to contribute to reproductive output in a particular year.	Also sometimes Spawning Stock Biomass (SSB) or mature biomass.	Also sometimes Spawning Stock Biomass (SSB) or mature biomass.
SBxx <sub>%</sub> (also relative spawning biomass)	The level of female spawning biomass corresponding to XX% of the average female spawning biomass in the absence of fishing.	Also sometimes referred to as depletion.	Also sometimes referred to as depletion.
SB <sub>100%</sub>	female spawning biomass in the absence of fishing.	Equivalent to $SB_{zero}$ , $SB_0$ or $B_0$ .	Equivalent to $SB_0$ or $B_0$ .
SB <sub>MSY</sub>	This reference point is not explicitly included in the IPHC's current harvest policy. Instead, the target harvest level is less than MSY, based on a historical simulation analysis of both the long term yield and variability.	The level of female spawning biomass estimated to produce MSY. This is often based on a proxy when the value is unknown for a particular species.	Also $B_{MSY}$ ; the level of female spawning biomass estimated to produce MSY.
Spawning Potential Ratio (SPR)	A commonly used metric of fishing intensity. SPR is the ratio of the equilibrium spawning biomass per recruit given some level of fishing and the equilibrium spawning biomass per recruit in the absence of fishing. Sometimes referred to as SBR, relative Spawning Biomass per Recruit.	This metric is frequently used to describe fishing intensity and fishing intensity-based reference points.	Not commonly used in Canadian management, but consistent with DFO's Decision Making Framework.
Scientific Review Board (SRB)	A group of independent scientists appointed by the Commission to provide ongoing independent review of the halibut stock assessment, harvest policy, and staff research.	Represents an analog to the SSCs and independent reviews supporting Council science.	Represents an analog to the CSAP review committee.

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Scientific and Statistical Committee (SSC)	The IPHC's Scientific Review Board (SRB) provides independent peer-review in the same role.	A group of independent scientists and experts appointed by the Councils to provide review of scientific products.	Represents an analog to the PSARC.
Stock	The population unit defined for management purposes. For Pacific halibut this includes all fish in the territorial waters of the United States and Canada.	Identical definition. Often used to define the portion of a population residing only in United States territorial waters.	Identical definition. Often used to define the portion of a population, or to indicate a population unit that is managed separately from other units of the same species residing in Canadian territorial waters.
Stock Assessment and Fishery Evaluation (SAFE)	The IPHC's RARA provides an equivalent documentation of annual research.	Provides a summary of stock assessment and research products for use in the Council processes.	Similar to Canadian Science Advisory Secretariat (CSAS) research documents reporting stock assessments for individual groundfish stocks.
Total Allowable Catch (TAC)	This is equivalent to the Catch Limits set by the IPHC.	The target annual removals for a particular fishery. Also called the OY.	This is a catch limit for a particular species, sometimes defined for a particular fishery, or for all fisheries that catch that species.
Total mortality accounting	Reporting all sources and sizes of removals from the stock in the same framework (i.e., including the removals of U26 halibut). This was introduced in 2014 to make the IPHC's process more transparent and comprehensive.	This is the standard approach for most fisheries.	This is the standard approach for most fisheries.
The IPHC Treaty	Formally, the Convention Between Canada and the United States for the Preservation of the Halibut Fishery of the Northern Pacific Ocean and the Bering Sea. As an international convention, it supersedes domestic legislation.	The U.S. legal analog is the Magnuson-Stevens Fishery Conservation and Management Act, creating the regulatory structure and authority for U.S. managed fisheries.	The Canadian analog is the combination of the Fisheries Act, the Oceans Act, and the Species at Risk Act which create a legal and policy framework covering the management of Canada's fisheries.

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U26	Halibut less than 26 inches in length. Removals of these fish are not explicitly included in annual harvest policy calculations.	There are no analogous cut-offs for most U.S. managed fisheries, although some biomass estimates are reported based on age categories.	There are no analogous cut-offs for most Canadian fisheries.
U32	Halibut less than 32 inches in length. This corresponds to the current minimum size limit imposed by the IPHC on the directed commercial fishery.	There are no analogous cut-offs for most U.S. managed fisheries, although some biomass estimates are reported based on age categories.	There are no analogous cut-offs for most Canadian fisheries, although some species are managed with size limits.
Upper Stock Reference Point (USR)	This is analogous to a halibut spawning biomass equal to SB <sub>30%</sub> .	The specific SB reference points used to define this zone depend on the species and Council system.	The stock size at the boundary between the Cautious and Healthy Zones.
Wastage	The incidental mortality (net pounds) from the directed halibut fisheries due to regulatory discards, mandatory or voluntary release of halibut, and from lost or abandoned fishing gear (particularly important during the derby fisheries prior to ITQ implementation).	Discards, as estimated by observer programs, represent a portion of the wastage calculation. Mortality associated with lost gear is not generally included in such estimates.	Discards, as estimated by observer programs, represent a portion of the wastage calculation. Mortality associated with lost gear is not generally included in such estimates.
Weight-Per- Unit-Effort (WPUE)	The catch (in net pounds) of halibut per standardized skate of longline gear (1,800-foot skate of gear, with 100 hooks at an 18- foot spacing). This metric is used to compare catch- rates between the IPHC's setline survey and the directed commercial halibut fishery and temporal trends in each.	See CPUE.	See CPUE.

## For more information

Fisheries and Oceans Canada. 2009. A Fishery Decision-Making Framework Incorporating the Precautionary Approach. Online document: <u>http://www.dfo-mpo.gc.ca/fm-gp/peches-fisheries/fish-ren-peche/sff-cpd/precaution-eng.htm</u>.

International Pacific Halibut Commission. Halibut Terminology. http://www.iphc.int/meetings/2014am/handout3Terminology2014.pdf.

Kronlund, A.R., K.R. Holt, P.A. Shelton and J.C. Rice. 2014. Current Approaches for the Provision of Scientific Advice on the Precautionary Approach for Canadian Fish Stocks: Harvest Decision Rules. DFO Can. Sci. Advis. Sec. Res. Doc. 2013/080. vi + 29 p.

North Pacific Fishery Management Council. 2015. Fishery Management Plan for Groundfish of the Bering Sea and Aleutian Islands Management Area: Acronyms and Abbreviations used in the FMP. http://www.npfmc.org/wp-content/PDFdocuments/fmp/BSAI/BSAI\_FMP\_APR\_2015.pdf.

Pacific Fishery Management Council. 2013. Acronyms and Definitions. <u>http://www.pcouncil.org/wp-content/uploads/Acronyms-Word-Dec-2013.pdf</u>.