

Glossary

Management entities

PFMC – Pacific Fisheries Management Council. One of the eight Regional Fisheries Councils, PFMC has jurisdiction for the US EEZ (exclusive economic zone) which extends from 3 to 200 miles offshore of Washington, Oregon and California. The Council is comprised of 14 voting members from Washington, Oregon, California and Idaho. Council members are appointed by the Governor for each State. The Council manages 119 species, including salmon, ground fish and tuna. Crabs are managed by the States through an exemption in the Federal Law. PFMC has numerous advisory bodies whose members represent commercial, charter, recreational and gillnet fishermen, fish processors, and the public at large. Most applicable to our fisheries are the Salmon Advisory Subpanel (SAS) and the Groundfish Advisory Panel (GAP). These groups advise the Council on seasons and bag limits. Funded by the US Government via the Department of Commerce (NOAA). Headquarters are in Portland.

IPHC – International Pacific Halibut Commission. Established through an international convention between the United States and Canada for the purpose of coordinating management and research involving Pacific halibut. The commission consists of 3 members from each country appointed by the President of the United States and the Canadian Government. The IPHC has numerous advisory groups and provides stock status information and harvest recommendations to each government for implementation. Actual seasons and quotas are approved by PFMC, the North Pacific Management Council (Alaska) and the British Columbia Provincial government. Funded by both governments. Headquarters are in Seattle.

PSMFC – Pacific States Marine Fisheries Commission. Established by a congressionally approved interstate compact, PSMFC is an interstate compact agency, governed by Federal rules. The compact States are Alaska, Washington, Oregon, Idaho and California. Each State has three Commissioners. The agency is primarily involved in grant administration and research. Their mission is to coordinate fisheries activities among the States. Their funding comes from Federal grants, special contracts and dues from each State. PSMFC maintains several of the important database sites important to fishery management, including the coded wire tag data used heavily in salmon management. They also conduct fisher research to improve stock assessments for the species like rockfish and lingcod.

NFMS – National Marine Fisheries Service. Now known as NOAA Fisheries. This is an office of OAA (National Oceanic and Atmospheric Administration) and is a Federal organization. NOAA fisheries is responsible for the implementation of Federal policy and statutes, including the Marine Mammal Protection Act, the Magnusson-Stevens Act and the Endangered Species Act as they apply to Federal waters and federally managed species. They have two west coast science centers that house research staff involved in a multitude of studies centered on the health of the nearshore ocean waters, fish stock assessments and population modeling. There is one NOAA Fisheries Region for the west coast based in Seattle.

ODFW – Oregon Department of Fish and Wildlife. Funded by license dollars, Federal excise tax shares and the State general fund. The agency is responsible for managing in state, no-migratory fish and wildlife. Primary duties include survey and inventory of fish and wildlife species, population estimates used in harvest management, fish hatcheries, wildlife management areas, license sales, document production, education, and administration. The State is divided into Watershed Districts and Regions.

We are in the Lower Rogue District. The headquarters are in Salem and ODFW employs around 1000 people.

OFWC – Oregon Fish and Wildlife Commission. Comprised of seven members appointed by the Governor, the Commission sets policy for the ODFW, appoints the Director and has regulatory authority over fishing and hunting activities, including setting seasons, establishing bag limits and prescribing the manner and means of take. Their jurisdiction includes Oregon’s Territorial Sea, which runs from the shore out to three miles. They can be more restrictive than the Federal rules in adjoining Federal waters, but never less restrictive. Regulations that involve the take of ESA listed stocks require Federal oversight and approval from NOAA fisheries or the U.S. Fish and Wildlife Service.

DSL – Oregon Department of State Lands. This is the administrative agency of the State Land Board. Among other duties, DSL is responsible for the management of submersible state lands, those on the bed and banks of navigable streams. In order to do work on submersible land, including habitat improvement, a permit from DSL must be obtained

SMB – State Marine Board. The State Marine Board is the boating agency for Oregon. It handles titling and registration of boats, contracts with Sheriff’s Offices and the Oregon State Police for boating law enforcement and safety patrols, develops and maintains boating facilities (ramps, docks, bathrooms, parking lots used by boaters) and registers guides and outfitters and licenses charter boats. There is a five-member governing Board that sets policy for the agency and develops regulations dealing with boats and boating activities. Governing Board members are appointed by the Governor. The agency is funded by boat title and registration fees and a share of the Federal motorboat fuel tax fund.

OSP – Oregon State Police. OSP has a wildlife unit dedicated to the enforcement of Fish and Wildlife statutes and regulations and boating safety. The wildlife unit contracts with ODFW and SMB for enforcement activities and is paid out of the budgets of those two agencies. OSP Wildlife officers also provide support for the local agencies and perform road enforcement work as well.

Important Fish Programs

STEP – Salmon and Trout Enhancement Program. ODFW runs the STEP program for the purpose of enlisting and utilizing volunteers to aid in various fish programs. There are 10 STEP biologists, one for each Watershed District. STEP is a legislatively established program and funding comes from fishing license dollars matched on a three to one basis with Federal excise tax funds, specifically Wallop-Breaux. Many sportsmen groups associate with the STEP program, including OSCF. Most of the “STEP groups” are located on the coast and most are involved with building, maintaining and running hatcheries that raise salmon. A few, like OSCF, are more involved with survey and inventory activities, collection of data, and angler education. STEP is overseen by STAC (Salmon and Trout Enhancement Program Advisory Committee) consisting of 13 members representing the various STEP Districts. STAC duties include the review of STEP activities, reviews fish propagation permits for the STEP hatcheries, advises ODFW on STEP related issues and provides an annual report to OFWC. STAC also reviews mini-grants of up to \$2,000 for specified fishery projects that benefit or relate to STEP programs or activities. STAC members are appointed by the Governor.

R&E – Restoration and Enhancement Program. The program administers grants awarded by OFWC based on the recommendations of the R&E board. The Board consists of seven members appointed by the OFWC to represent sport fishermen, commercial fishermen, gillnetters, fish processors and the public at

large. The purpose of the program is to restore state-owned fish hatcheries, enhance natural fish production, expand hatchery production and to provide additional public access to fishing waters. R&E is funded by a surcharge on all recreational fishing licenses, gillnet permit fees, troll permit fees and a five cent per pound landing fee on all commercial salmon and steelhead landings. R&E also provides money to fund the STAC mini-grant program.

SPORT FISH ADVISORY COMMITTEE – This advisory committee is appointed by the ODFW Marine Resources Program in Newport. Representatives from many coastal communities are asked to advise ODFW program managers on issues related to ground fish and halibut angling and management.

Commonly used terms and acronyms

ESA – Endangered Species Act. A federal law passed in 1973. The ESA defines an “endangered species” as any species in danger of extinction throughout all or a significant portion of its range. A “threatened” species is one likely to become endangered within the foreseeable future throughout all or a significant portion of its range. The law requires Federal consultation, commonly referred to as a section 7 consultation, on any Federal action that could affect a listed species. Examples of section 7 consultations in fisheries management include: the review of proposed salmon fishing seasons to ensure that standards set for the multitude of listed salmon populations are not exceeded; limitation on ocean Coho harvest in the SONCC (see ocean fishing management units); requirements for barbless hooks in the ocean recreational salmon fishery.

NET PEN – A large (30’ x 30”) rectangular device consisting of a frame work of connected HDPE pipe sections (usually 12” in diameter) topped with a wooden walkway, from which is suspended a small mesh net usually 12’ in depth. Net pens are used to hold fish for the growth or to acclimate anadromous fish to a specific water environment to imprint that location for eventual return.

SCREW TRAP – A 6’ diameter cone shaped cylinder supported by two aluminum pontoons. The trap is anchored in a flowing stream, the current turns the cylinder and vanes direct the water and fish to the small cone opening where they enter a holding box. Screw traps are used to capture out migrating salmon and steelhead smolts (juvenile anadromous fish) for the purpose of assessing numbers, condition and species composition.

CODED WIRE TAGS (CWT) – hair like stainless steel wires that have a unique code chemically etched on them. These are inserted into the nasal cartilage of juvenile fish to note their origin and release site. CWT stay in the fish for life and are recovered using a metal detector wand. The snout of the fish is removed and sent to a lab for processing. The CWT is recovered and read using a microscope. CWT are commonly used to determine movement patterns of salmon.

ANADROMOUS FISH – fish that are born in fresh water, migrate to the ocean to mature and return to fresh water to spawn. Salmon, steelhead, smelt, striped bass and sturgeon are the most common examples.

CATADROMOUS FISH – fish that spend the majority of their life cycle in fresh water and return to the ocean to spawn. Some forms of eels are catadromous. However, our locally common eel, the Pacific lamprey are anadromous.

ROGUE SMU – Rogues Species Management Unit. This is for fall Chinook and includes Euchre Creek, Rogue River, Hunter Creek, Pistol River, Chetco River and the Winchuck River. Fall Chinook from this SMU all exhibit similar characteristics: they are south migrating and mature in the ocean off of Central California; they spawn primarily at age four, but have some genetic markers for later maturing fish and at least a portion of adults spawn at age five and six. Run timing depends primarily on the river length and fall rain. Historically, most of these systems were bar bound (not flowing to the ocean) during the late summer and early fall. The Rogue has sufficient flow to remain open the Chetco is now dredged allowing fish to enter prior to fall flow increases.

ESCAPEMENT – Escapement is the number of spawning adult fish estimated to be returning to their natal stream *after* all fishing removals have occurred.

HARVEST RATE – Each fishing removal sector (ocean, bubble, estuary/in-river) harvests fish as a percentage of the total harvest. For example (using hypothetical numbers), the ocean has a harvest rate of around 50%, the bubble 7% and the in-river 24%. These numbers are used to arrive at escapement.

STRAY RATE – This denotes the number of hatchery origin fish that mix with naturally produced fish on the spawning areas, generally expressed as a percentage. Salmon plans specify the allowable stray rate for each stream, for example $\leq 10\%$ for the Winchuck, $\leq 20\%$ for the Chetco, $\leq 5\%$ for Hunter Creek and Pistol River. ODFW policy guidance specifies $\leq 10\%$ for all streams unless specified in a management plan. Straying generally refers to Coho salmon which tend to return to non-natal streams at a much higher proportion than Chinook.

RECRUITMENT – The number of juvenile fish that survive to adulthood. In the case of fall Chinook, usually from 1-3%. Recruitment depends largely on natal stream survival of juveniles to migration in the ocean and on ocean conditions. During periods of favorable ocean conditions (cold water and high populations of macro organisms) juveniles survive at a fairly high rate.

DESIRED STATUS – The desired escapement described in a management plan. This is the management target and helps determine appropriate harvest levels, particularly in fresh water.

CONSERVATION STATUS – The minimum escapement level necessary to allow fishing on a particular stock of fish. This is sometimes referred to as the “floor” when talking about the Sacramento and Klamath Fall Chinook population estimates. Generally, fishing is not allowed if populations are projected to be at or below conservation status.

MSY – Maximum sustained yield. The largest catch that can be taken from a species stock over an indefinite period. As a general concept this is somewhere around 30% of the unexploited population level. This is usually somewhere between desired status and conservation status. Many plan documents do not use “desired status”, opting instead to use MSY as the management target.

MIXED STOCK FISHERIES – Mixed stock fisheries are generally ocean areas that have stocks from many river systems co-mingling over large areas. For example, fall Chinook off of the Oregon Coast are primarily from the Central Valley of California (Sacramento, American, Feather, Yuba and San Joaquin), along with smaller numbers from the Klamath River, Columbia River basin fish and the coastal streams in northern California and southern Oregon.

CARRYING CAPACITY – The maximum number of individuals that a given environment can support without detrimental effects. Carrying capacity is not static, but changes as it is affected by all the variables present in nature. For example: water flow, water temperature and turbidity can all effect the carrying capacity for juvenile salmonids in the Chetco River.

LIMITING FACTOR – the growth and well-being of an organism is ultimately limited by that essential resource that is in its lowest supply relative to what is required. The most deficient resource is, therefore, called the limiting factor. In terms of salmon locally, a limiting factor for Chinook in the Winchuck River is lack of estuary complexity and size. In streams that have been splash dammed, the chief limiting factor is usually the lack of spawning gravels. With current management methods in place, fishing is seldom a limiting factor for salmon.

BY-CATCH – The non-targeted take of fish incidental to targeted fishing. Examples include: the take of juvenile Chinook salmon by mid-water trawl nets targeting whiting; the take of halibut by bottom trawl nets targeting sole; the take of Coho salmon by troll boats targeting Chinook.

FECUNDITY – The actual reproductive rate of an organism as measured by the number of eggs produced. In one study of Chinook salmon, fecundity rates differed based on the age of the female. Three-year-old fish produced 8,500 eggs, four-year olds 9,100 eggs and five-year olds 11,900 eggs. With halibut, newly sexually mature females of approximately 50 pounds produce around 500,000 eggs. Older age females of 200 pounds will produce around 2 million eggs. In the management context, insuring that a proportion of breeding females reach older ages generally results in better recruitment.

PELAGIC FISH – Fish that live in the pelagic zone of the ocean, neither near the bottom nor near the shore structure. Examples include tuna, sharks, herring, anchovies and most billfish.

AGE STRUCTURE – Age structure is a biological concept that divides populations into pre-productive (juvenile, non-sexually mature) productive and post productive individuals. In the management context, age structure is an important measure of the harvest pressure on a species or population. Within the limits imposed by carrying capacity, a healthy population would have good representation of all age classes. Too few older (post-productive) individuals could be a symptom of over harvest, too few juveniles could signal a significant limiting factor where juveniles are born and/or reared. Too few productive individuals signal a potential for population collapse, possibly caused by over harvest or lack of recruitment.

Ocean salmon fishing management units

SOUTH OF FALCON – The area between Cape Falcon (a prominent landmark just north of Manzanita on the northern Oregon coast) and Humbug Mountain (a prominent landmark just south of Port Orford). This is the general Oregon fishing zone for both recreational and commercial salmon fishing.

KLAMATH MANAGEMENT ZONE – The area between Humbug Mountain and Horse Mountain (a prominent landmark south of Eureka, California). Commonly referred to as the KMZ or “the zone”. This area harvests the highest number of Klamath River fall Chinook and is frequently managed more restrictively than areas to the north or south.

OCEAN TERMINAL – The area immediately adjacent to a river mouth, usually a three-mile arc. Also known as the “bubble” as in the “Bubble Season”. ODFW has established a few Ocean Terminal Seasons

to allow fishermen access to returning stocks of fall Chinook that can sustain additional fishing pressure and to provide additional opportunity in areas where other restrictions may shorten or eliminate general mixed stock ocean fisheries, i.e. the KMZ. Most ocean terminal fishing areas are now described specifically rather than a “three-mile radius” from the river mouth.

SONCC – Southern Oregon Norther California Coastal, essentially the Klamath Management Zone plus a few streams south of Horse Mountain that have or had Coho populations. This unity exists to manage listed California stocks of Coho. Section 7 consultation with NOAA fisheries established a maximum allowable exploitation level for Coho in the SONCC. Chinook fisheries exploit Coho through release mortality and without an allowable level of the “take” we could not fish for Chinook.