2010 TRAINING MANUAL

CATCH MONITOR PROGRAM

National Marine Fisheries Service | Pacific Whiting Shoreside Fishery

Catch Monitor name _____

CONTENTS

1. FISHERY BACKGROUND

Pacific Coast Groundfish Fishery Management

The Pacific Coast Groundfish Fishery Management Plan contains the rules for managing the groundfish fishery. It outlines the areas, species, regulations, and methods that the Council and the federal government must follow to make changes to the fishery. Groundfish are managed through a number of measures, including harvest guidelines, quotas, trip and landing limits, area restrictions, seasonal closures, and gear restrictions (such as minimum mesh size for nets and small trawl footrope requirements for landing shelf rockfish). All sectors of the groundfish fishery are constrained by the need to rebuild groundfish species that have been declared overfished. The aim of the Council's Groundfish Fishery Strategic Plan is to ensure that West Coast groundfish resources are fished sustainably while making the groundfish fleet more economically stable.

Pacific Whiting Fishery Management

Harvest Specifications and Allocations

In November 2003, the United States and Canada signed an agreement regarding the conservation, research, and catch sharing of Pacific whiting. The Pacific whiting catch-sharing arrangement that was agreed upon provides 73.88 percent of the coastwide total catch optimum yield (OY) to the U.S. fisheries and 26.12 percent to the Canadian fisheries. The Pacific Whiting Act of 2006, enacted January 12, 2007 (Pub. Law 109-479), provides authority to implement the agreement.

Annual harvest levels or OYs are established for each of the groundfish species or species groups (Appendix A contains a complete list of groundfish species). The Pacific Coast Indian treaty fishing rights, described at 50 CFR 660.385, allow for the allocation of fish to the tribes through the specification and management measures process. The commercial OY (non-tribal) for Pacific whiting is calculated by deducting the tribal allocation and estimated amounts for research and incidental catch in non-groundfish fisheries.

Sectors

Regulations at 50 CFR 660.323(a)(4) divide the commercial OY into separate allocations for the nontribal catcher/processor, mothership, and shore-based sectors of the Pacific whiting fishery. The catcher/processor sector comprises vessels that harvest and process Pacific whiting. The mothership sector comprises catcher vessels that harvest Pacific whiting for delivery to mothership processors. Motherships are vessels that process, but do not harvest Pacific whiting. The shoreside sector comprises vessels that harvest Pacific whiting for delivery to shoreside processors. Each sector receives a portion of the commercial OY:

- catcher/processors,34 percent

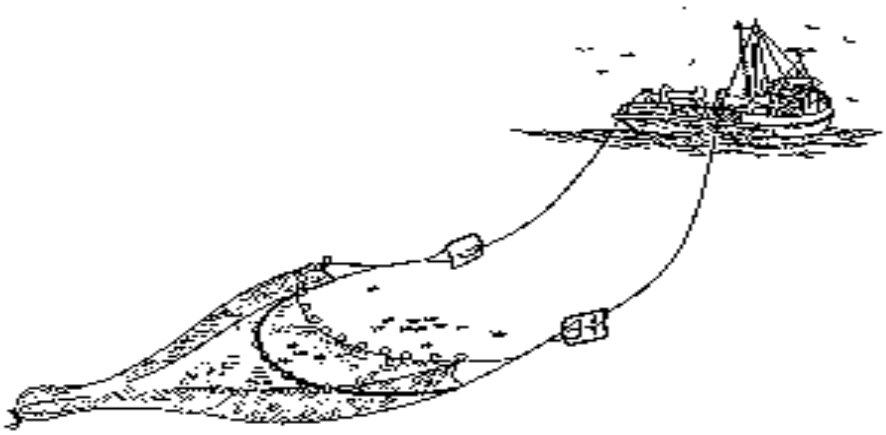
- motherships,24 percent
- shorebased, sector 42 percent.

(Catcher/Processor, above)

Vessel License Requirement
In 2009, new regulations attempted to limit increases in fishing pressure, resulting from increasing vessel interest in the Pacific whiting fishery, until a trawl rationalization program could be implemented. Currently, participation in the whiting fishery requires a whiting vessel license. A list of vessels holding whiting licenses for the shoreside sector of the whiting fishery can be found in Appendix J of this manual.

Gear
Vessels participating in the Pacific whiting fishery are only allowed to use **midwater trawl gear** (a trawl in which the otter boards and footrope of the net remain above

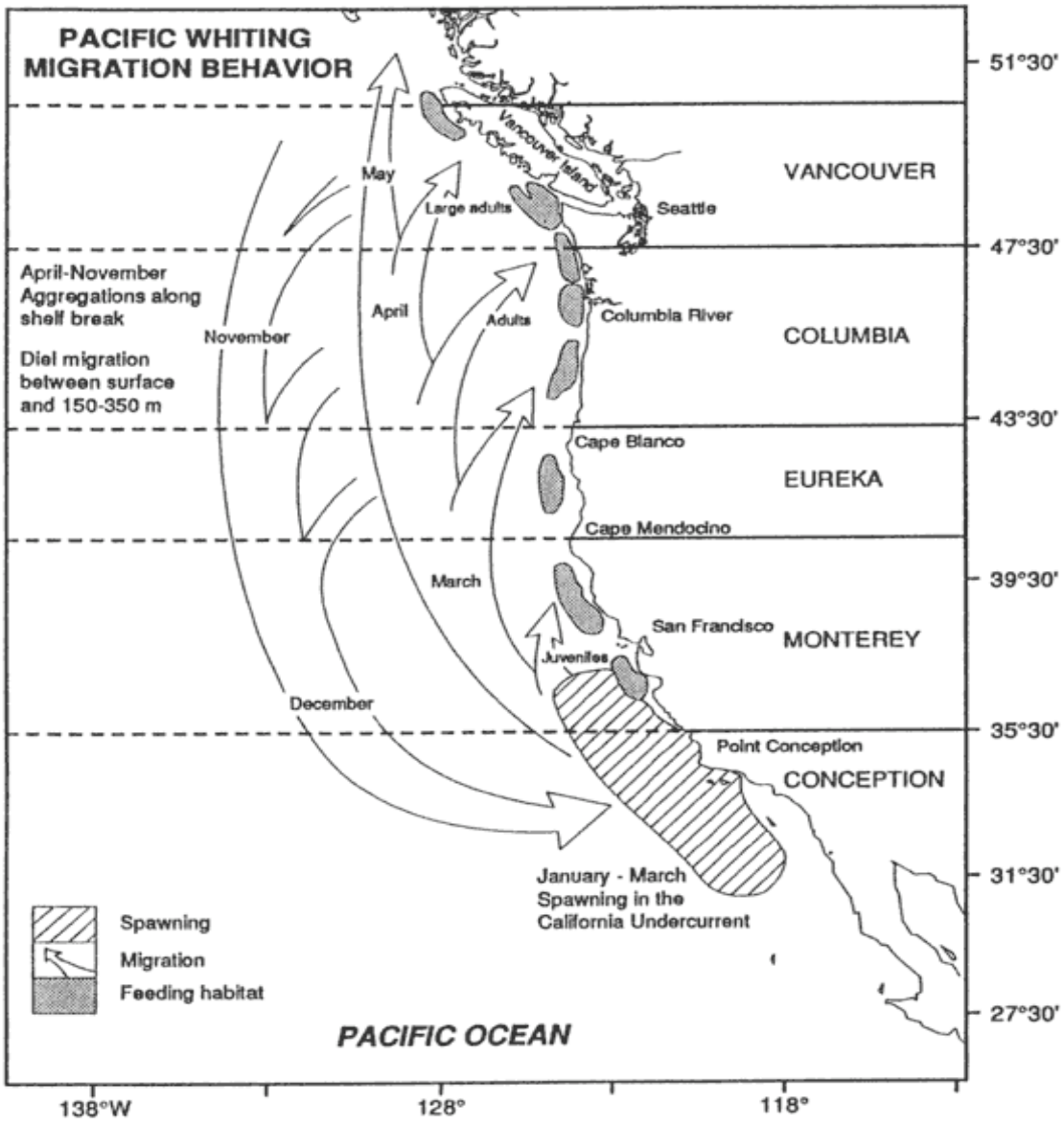
the seabed) and may not have both bottom trawl gear and midwater trawl gear onboard simultaneously.



Fishing Areas

Pacific whiting are a California current species that undertake an extended spawning migration, during which the adults swim south to spawn in the southern California

Bight (coastal waters off southern California, the Channel Islands, and part of the Pacific Ocean) in fall and winter. Pacific whiting migrate from as far north as Vancouver Island to southern California, a distance of several thousand kilometers. The Pacific whiting fishery has historically occurred during the northern migration of adults. The northern migrating adults and the northward drift of larvae and juveniles takes place at depths where fish take advantage of the poleward undercurrent.



Pacific whiting may not be taken and retained in areas designated for the protection of salmon, including: the ocean area surrounding the Klamath River mouth, defined as the Klamath River Salmon Conservation Zone and the ocean area surrounding the Columbia River mouth, defined as the Columbia River Salmon Conservation Zone. In addition to these areas is the Ocean Salmon Conservation Zone, which is

an area that includes all waters shoreward of a boundary line approximating the 100 fathom (183 m) depth contour. When NMFS projects the Pacific whiting fishery might take in excess of 11,000 Chinook within a calendar year, whiting vessels could be required to fish outside this area.

NMFS employs this mitigation method rather than having the Ocean Salmon Conservation Zone in effect throughout the whiting season, which could shift effort offshore and increase catch rates of overfished groundfish species, particularly canary and darkblotched rockfish. This flexible approach allows industry and NMFS to monitor whiting fishing activities and modify fishery restrictions inseason to appropriately respond to environmental factors that influence varying bycatch rates for salmon and depleted rockfish species.

Primary Season Fishery vs. Trip Limits Fishery
The Pacific whiting fishery is currently managed under **a "primary" season structure in which vessels harvest Pacific whiting until the sector allocation is reached**. When the allocation is reached, the primary season fishery for that sector is closed. This is different from most West Coast groundfish fisheries, which are managed under a "trip limit" structure in which vessel catch limits are specified by gear type and species (or species groups), and each vessel can land up to the specified limits. Incidental catches of other groundfish species caught in the Pacific whiting fisheries are managed under the trip limits structure.

The Pacific whiting primary season start dates for each of the three commercial sectors have remained the same since 1997. The primary seasons for the non-tribal mothership and catcher-processor sectors begins May 15. The Pacific whiting shoreside primary season in most of the Eureka area (between 42°- 40°30' north latitude) begins on April 1, and the fishery south of 40° 30' north latitude begins April 15. **The Pacific whiting shoreside fishery north of 42° north latitude begins on June 15.**

No more than 5 percent of the shore-based sector allocation may be taken in the early season fishery off California before the primary season north of 42° north latitude opens on June 15th.

Pacific whiting deteriorates rapidly and must be handled quickly and chilled immediately to maintain product quality. This is particularly true if the Pacific whiting is to be used to make surimi (a fish paste product). The quality or grade of surimi is highly dependent on the freshness of the Pacific whiting, which demands careful handling and immediate cooling or processing for the fishery to be economically feasible. Because rapid cooling can slow flesh deterioration, fishers prefer to move unsorted Pacific whiting catch into refrigerated salt water holds as soon as possible after it is caught. As a primary season fishery, fishers prefer to handle the catch quickly and efficiently so they can return to port for offloading. Given the primary season structure of the fishery, quick and efficient trips result in greater catch for each participating vessel.

Overfished Species Management

Groundfish stocks with depletion levels that fall below 25 percent of estimated unfished biomass level are considered to be overfished stocks. At this time, the following seven groundfish stocks are being managed under overfished species rebuilding plans that are intended to bring the stocks to above 40 percent of their respective estimated remaining biomass levels: bocaccio, canary rockfish, cowcod, darkblotched rockfish, Pacific Ocean perch (POP), widow rockfish, and yelloweye rockfish.

To rebuild these overfished stocks as quickly as possible, the annual OYs have been constrained to well below historical catch levels. Unlike the bottom trawl fisheries, where the availability of the target species OY is constrained by the estimated bycatch of overfished species, Pacific whiting fishery participants have the opportunity to harvest the full commercial Pacific whiting OY, providing the total catch of certain overfished species does not reach specified bycatch limits. If any one of the overfished species bycatch limits is reached, however, all three sectors of the commercial Pacific whiting fishery are closed. To date, bycatch limits have been established for darkblotched, canary, and widow rockfish, and, if limits are reached, NMFS can close the whiting fishery. (50 C.F.R. 370(c)(l)(ii)).

Bycatch Limits for Over Fished Species

The bycatch limits for the whiting fishery are used inseason to close a sector or sectors of the whiting fishery to achieve the rebuilding of an overfished or depleted stock. The availability of overfished species as incidental catch, particularly canary, darkblotched, and widow rockfish, may limit the harvest of the whiting OY during 2010.

Bycatch limits may vary between years and do not represent allocations, but rather hard limits. In addition, the Council may choose to recommend that NMFS take in-season action to adjust the bycatch limits upward or downward. The current bycatch limits for the shoreside sector in 2010are as follows:

- canary rockfish,5.9metric tons (MT),
- widow rockfish,117MT
- darkblotched rockfish,10.5 MT.

Shoreside Monitoring, 1992-2007

In 1992, an observation program was established through the use of **Exempted Fishing Permits (EFPs**). The Shoreside Hake Observation Program (SHOP), a coordinated monitoring effort by the states of Oregon, Washington, and California, was initially established to provide oversight to the EFP activities, including coordination of observer sampling, collection of other necessary catch data, and transmission of summarized catch data to NMFS. Although the program's structure

and priorities changed over the years and observers were no longer used, SHOP maintained the primary responsibility of monitoring EFP activities and provided catch data collected at the processing facilities to NMFS for management of the fishery. EFPs are intended as a short-term temporary and exploratory response to issues that potentially should be addressed by permanent regulations.

Vessels fishing in the shoreside Pacific whiting fishery under the Pacific whiting EFPs are allowed to land unsorted catch, including species in excess of the trip limits and species, such as salmon, that would otherwise be illegal to have on board. Without an EFP, groundfish regulations at 50 CFR 660.306(b) require vessels to sort their catch at sea. Vessels fishing for Pacific whiting without EFPs must discard, as soon as practicable, all prohibited species (including salmon, Pacific halibut, and Dungeness crab), protected species, nongroundfish species, and groundfish species in excess of cumulative limits at sea.

Since 2004, electronic monitoring systems have been used to monitor EFP fishing at sea to assure compliance with the catch retention requirements. In the past, industry observers and port biologists have been used to monitor offloads and collect species composition and biological data (length, weight, sex, and otoliths); these individuals provided weekly data to SHOP. Port biologists also recovered all landed prohibited species from processors (including salmon, Pacific halibut, and Dungeness crab), and provided SHOP with a weekly summary of fish ticket data.

Under the EFP, three sources of data were used by SHOP to estimate total catch:

- state fish tickets, which contain landed species weights, reported by fish processors;
- species composition, which contains landed bycatch species weights, reported by either industry or agency observers;
- prohibited species data, which includes salmon, Pacific halibut, and Dungeness crab biological data reported by port biologists.

Protected Species Management

Since EFPs were first issued to the Pacific whiting shoreside fishery in the early 1990s, management of the salmon and groundfish fisheries has changed substantially. Since 1992, new salmon evolutionarily significant units (ESUs) have been listed under the ESA. NMFS has issued several Biological Opinions under the ESA, pertaining to the effects of the Pacific Coast groundfish Fishery Management Plan (FMP) on Chinook salmon.

The August 1992 Biological Opinion specifically included an analysis of the effects of the Pacific whiting fishery on listed Chinook salmon. The analysis determined that there was a spatial/temporal overlap between the Pacific whiting fishery and the distribution of ESA listed Chinook salmon such that it could result in incidental take of listed salmon. In response, the 1992 Biological Opinion included an incidental take statement that allows the incidental take of 0.05 Chinook salmon

per metric ton of Pacific whiting, up to 11,000 fish for the entire Pacific whiting fishery (all three commercial sectors plus the tribal fishery).

2. MAXIMIZED RETENTION MONITORING

Maximized Retention and Monitoring

NMFS Northwest Region is managing the Pacific whiting shoreside fishery as a maximized retention fishery**. Maximized retention encourages full retention of all catch** while allowing specified minor discarding events to occur. Pacific whiting fishery vessels participating in the maximized retention program must retain all catch, with the exception of very large species (>6 ft in length). Vessels fishing under the exempted fishing permits (EFPs) are required to deliver unsorted catch to on-shore facilities that also hold EFPs.

Retaining catch in excess of trip limits or prohibited species is illegal under the current Pacific Coast groundfish regulations. EFPs allow fishing activity that would otherwise be illegal under the existing regulations, providing the participants follow specific EFP terms and conditions.

For 2010,a maximized retention and monitoring program is defined within the terms and conditions of EFPs that are issued to vessels and first receivers. Pacific whiting shoreside first receivers are persons who receive, purchase, or take custody, control, or possession of Pacific whiting onshore directly from a Pacific whiting shoreside vessel.

Pacific whiting shoreside vessels participating with an EFP would be required to retain catch and would be allowed to land unsorted catch, providing an electronic monitoring system (EMS) is used on all fishing trips. EMS is used by NMFS to verify retention of catch at sea. Allowing EFP vessels to land unsorted catch at Pacific whiting first receivers that also hold EFPs provides an opportunity for Pacific whiting catch to be monitored on shore.

Pacific whiting shoreside first receivers are allowed to possess unsorted catch that may include species in excess of the trip limits and to weigh catch prior to sorting to derive the weight of Pacific whiting, provided they abide by the terms and conditions of the EFP.

New Federal Requirements

NMFS is proposing to implement a Federal regulation for a maximized retention and monitoring program for the Pacific whiting shoreside fishery that would replace the need to issue annual EFPs for managing the fishery. The proposed program could include the following requirements for Pacific whiting shoreside vessels: the retention of all catch, with exceptions of very large species and minor levels of operational discards; a Pacific whiting shoreside vessel certification to identify the number of vessels that intend to fish during an upcoming season; declaration reports to identify when vessels are entering and exiting the

Pacific whiting shoreside fishery; a video-based electronic monitoring system (EMS) to monitor maximized retention; and the required leasing of equipment from NMFS-certified EMS providers. The proposed program would add new monitoring provisions for Pacific whiting shoreside first receivers, including: catch monitor coverage specifications, requirements to procure catch monitors from NMFS-certified catch monitor providers, and defined responsibilities of first receivers relative to the acceptance of unsorted catch and catch monitoring.

Establishing maximized retention requirements and a federal monitoring program will allow NMFS to: account for Chinook salmon catch as specified in the Endangered Species Act, section 7, Biological Opinion for Chinook salmon catch in the Pacific groundfish fishery; meet improved standardized bycatch reporting requirements specified by the Magnuson-Stevens Fishery Conservation and Management Act (Magnuson-Stevens Act); collect biological data on catch that would otherwise not be available; and create the regulatory structure necessary to efficiently manage the Pacific whiting fishery without exempted fishing permits.

Catch Monitors

The objective of the catch monitoring program is to provide accurate, timely, and **independent third-party verification** of landings reports that are used to manage the fishery. Catch monitors conduct dockside monitoring at Pacific whiting shoreside first receivers. They monitor the sorting and weighing of unsorted primary season catch as it is received, purchased, or taken custody, control, or possession of by first receivers. In general, these activities occur at shoreside processing facilities in the port of landing but may occur at other dockside facilities where catch is offloaded onto trucks that transport it to inland processing facilities.

Since the beginning of the shore-based whiting fishery in 1992, new salmon Evolutionarily Significant Units (ESUs) have been listed under the ESA, and several groundfish species that are incidentally taken in the whiting fishery have been declared overfished. Inaccurate catch reports can compromise the ability to adequately monitor whiting catch, bycatch limits for the overfished species and Biological Opinion take thresholds for Chinook salmon. Having the ability to closely monitor bycatch limits and close the whiting fishery if a limit is reached prevents the whiting fishery from affecting the other groundfish fisheries and reduces the risk of exceeding overfished species OYs.

The federal electronic fish tickets are used to collect total catch by species or species group and contain similar information to that required in state fish receiving tickets or landing receipts (state fish tickets). Recordkeeping and reporting requirements for Pacific whiting shoreside first receivers are specified in federal regulation and intended to support a "real time" inseason data system (i.e., preliminary catch weights would be available in a central database within one to two days from the date the catch was landed). The Pacific whiting shoreside fishery needs to have a catch verification system in place so that whiting, overfished

species, and Chinook salmon can be adequately monitored and accounted for inseason and to maintain the integrity of fish ticket values used to manage groundfish species OYs, trip limits, and bycatch limits.

Catch Monitor Duties and Responsibilities

It is important that you understand your duties and their relative importance. A catch monitor's responsibilities fall into five main categories: verification of landings, verification of the sorting process, monitoring the weighing process, recordkeeping and reporting, and incident reporting. The catch monitors' responsibilities include:

- verifying the delivery vessel and documenting the delivery;
- verifying that all catch is offloaded from the vessel;
- verifying that once an offloading begins, all fish are offloaded, sorted to federal species groups, and weighed, including fish kept for personal use;
- verifying that the first receiver's catch-monitoring plan is being followed;
- verifying that each vessel's catch is kept separate until the sorting and weighing process is completed;
- overseeing the sorting of catch at all times, from vessel to scale;
- submitting timely delivery and catch weight information to NMFS;
- personally verifying and recording the weighing process;
- collecting prohibited species information and coordinating disposal with state personnel;
- providing state and federal fisheries enforcement officers with any information relating to catch monitoring that may be requested;
- when necessary, completing and submitting statements to NMFS as soon as possible (within 24 hours, at most) when a problem is suspected or detected.

Certification Process

The minimum qualifying criteria and catch monitor certification requirements are currently defined in the terms and conditions of the first receiver EFP. A catch monitor certification authorizes an individual to fulfill duties as specified in writing by NMFS while under the employ of a catch monitor certified provider.

NMFS will certify individuals who:

- Are employed by a NMFS-approved catch monitor provider at the time of the issuance of the certification and is qualified, as described in Pacific whiting first receiver EFP (Appendix C), and have provided proof of qualifications to NMFS through the catch monitor provider.

- Have successfully completed NMFS-approved training. Successful completion of training by an applicant consists of:
    - Meeting all performance standards issued in writing at the start of training for assignments, tests, and other evaluation tools;
    - Completing all other training requirements established by NMFS.

- Have not been decertified as an observer under provisions for the North Pacific groundfish observer program.

If a candidate fails training, he or she will be notified in writing on or before the last day of training. The notification will indicate the reasons the candidate failed the training and whether and under what conditions the candidate can retake the training.

Standards of Behavior

It is important to be professional, as your actions will set the stage for future catch monitors. Catch monitors must avoid any behavior that could adversely affect the confidence of the public in NMFS, the Catch Monitor Program, Pacific States Marine Fish Commission, or the government, including but not limited to the following:

- Catch monitors must perform their assigned duties as described in manuals or other written instructions provided by NMFS.

- Catch monitors must accurately record the required data, write complete reports, and report accurately any observations of suspected violations of regulations.

- Catch monitors must not disclose data and observations collected at the processing facility to any person except the owner or manager of the processing facility, NMFS Office of Law Enforcement (OLE), or authorized officers or others as specifically authorized by NMFS.

- Catch monitors must not engage in any illegal actions or any other activities that would reflect negatively on their image as professionals, on other catch monitors, or on NMFS as a whole. This includes, but is not limited to:

    - Violating the drug and alcohol policy;

    - Engaging in the use, possession, or distribution of illegal drugs; or

    - Engaging in physical sexual contact with personnel of any delivery vessel or processing facility to which the catch monitor is assigned, or with any vessel or processing plant personnel who may be substantially affected by the performance or nonperformance of the catch monitors duties.

Conflict of Interest

Catch monitors must not have a direct financial interest, other than the provision of observer or catch monitor services, in a North Pacific fishery, Alaska State fishery, or in a Pacific Coast fishery managed by either the state or federal governments in waters off Washington, Oregon, or California, including but not limited to:

- Any ownership, mortgage holding, or other secured interest in a vessel, shore-based or floating stationary processor facility involved in the catching, taking, harvesting, or processing of fish,
- Any business involved with selling supplies or services to any vessel, shore-based or floating stationary processing facility;
- Any business involved with purchasing raw or processed products from any vessel, shore-based or floating stationary processing facilities.

Catch monitors must not solicit or accept, directly or indirectly, any gratuity, gift, favor, entertainment, loan, or anything of monetary value from anyone who either conducts activities that are regulated by NMFS or has interests that may be substantially affected by the performance or nonperformance of the catch monitor's official duties.

They may not serve as catch monitors on any vessel or at any shoreside or floating stationary processing facility owned or operated by a previous employer.

They may not solicit or accept employment as a crewmember or an employee of a vessel, shoreside processor, or stationary floating processor while employed as a catch monitor.

3. CATCH REPORTING

The information you collect as a catch monitor will be used to verify the accuracy of electronic fish ticket information submitted by the first receivers. Therefore, it is important for you to have a basic understanding of the federal catch reporting requirements, the state reporting requirements, and differences between the federal and state requirements that may result in misunderstandings.

Federal Reporting Requirements-Electronic Fish Tickets

Federal regulations require Pacific whiting shoreside first receivers to submit a completed electronic fish ticket for every landing that includes 4,000 lb (1,814 kg) or more of Pacific whiting (round weight equivalent) no later than 24 hours after the date the fish are received, unless a waiver of this requirement has been granted by NMFS.

In addition to the regulatory requirements, the EFPs issued to Pacific whiting first receivers for 2010 are slightly more onerous, as they require electronic fish tickets to be submitted for every delivery received from a Pacific whiting vessel fishing under an EFP, regardless of the amount of whiting delivered.

The information reported on the electronic fish tickets is similar to the information required by the states of Washington, Oregon, and California on fish receiving tickets or landing receipts (more commonly called state fish tickets). The federal electronic fish ticket reporting requirements are in addition to the existing state fish ticket requirements and do not replace any state recordkeeping or reporting requirements. First receivers must use NMFS-approved software for the submission of electronic fish tickets. The NMFS-approved software developed by the Pacific States Marine Fish Commission (PSMFC) allows the landings data to be entered in a format that is similar to the required state fish tickets. The electronic fish ticket data is submitted to PSMFC no later than 24 hours after the date the fish are received. At this time, only Oregon allows submission of a printed and signed electronic fish ticket to meet state reporting requirements.

Electronic fish tickets are used to collect the following types of information on Pacific whiting landings: date of landing; identification of the vessel that made the delivery; gear type used; first receiver identification; round weights of species landed, listed by species or species group, including species with no value; number of salmon by species; number of Pacific halibut. NMFS uses the information on electronic fish tickets to track catch allocations, bycatch limits, and prohibited species.

The catch reported on electronic fish tickets must be by recorded to federal species or species groups (see list in Chapter 7and Appendix A), and all groundfish weights reported on electronic fish tickets must be accurate weights derived from a scale. In addition, the scale must be appropriate to the amount being weighed to ensure the accuracy of the reported weight. It is prohibited for any first receiver to process, sell,

or discard any groundfish received from a Pacific whiting shoreside vessel before weighing it on a scale that weighs accurately and has been used appropriately and/or has not been accounted for on an electronic fish ticket. Because some first receivers transport Pacific whiting catch away from the point of landing for processing, all catch must be sorted and weighed prior to being transported away from the point of landing.

State Reporting Requirements

Each state requires the submission of state fish tickets, but the requirements for reporting differ among the states and from federal requirements. Catch monitors should be aware of the difference between state and federal reporting requirements so they can understand why data reported on state fish tickets, electronic fish tickets, and their catch information may not always align.

In general, when the sorting and weighing requirements specified in federal regulation are more specific than state fish tickets requirements, the processor is required to meet the federal sorting and weighing requirements for all electronic fish ticket submissions. If the state sorting requirements are more specific than federal requirements, it is acceptable for first receivers to use the more specific species or species groups, and the data will be aggregated when queried from the database. Because your data collection is independent of the first receiver, we will use your data set to analyze the accuracy of the first receiver's electronic fish ticket submissions. You will be asked to document in your daily notes any observed differences between your data and that reported by the first receiver. You will also need to inform NMFS staff of the documented differences during the debriefing process.

Oregon

In Oregon, fish dealers are required to submit fish-receiving tickets when food fish is received at the premises, regardless of whether the fish is purchased. Fish-receiving tickets are pre-numbered in books of 50 tickets. The fish-receiving ticket includes:

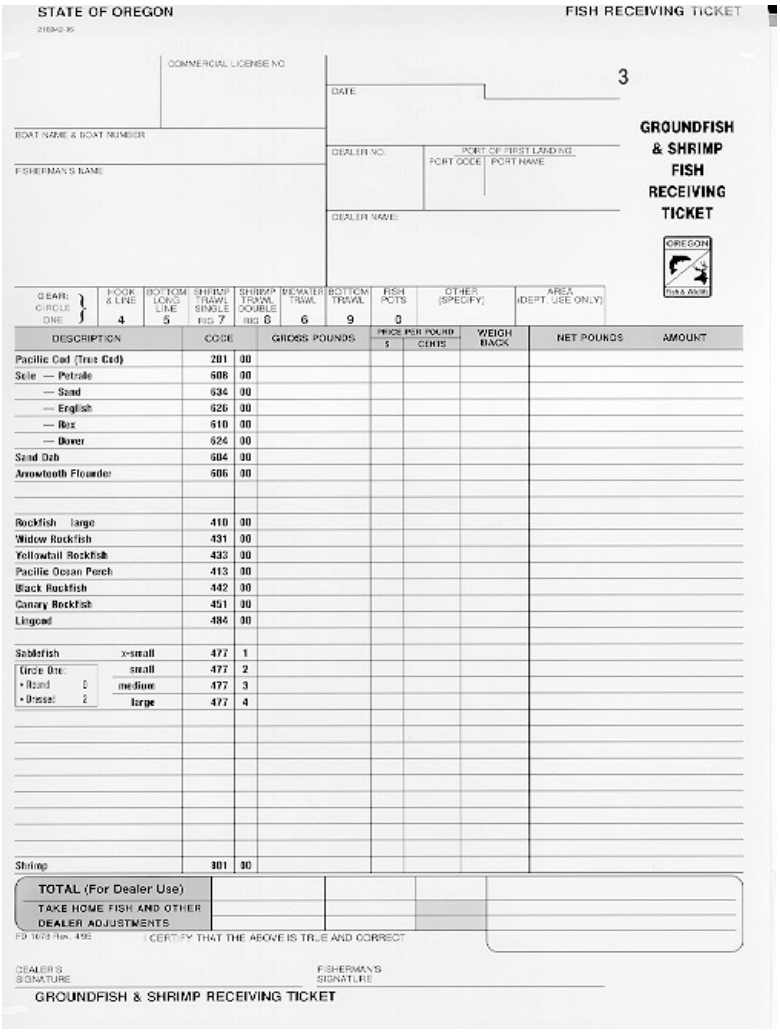
- fish dealer's name and license number
- date of landing
- fisherman's name from whom purchase is made
- boat name
- boat license number and Coast Guard documentation number or State Marine Board number
- fishing gear used by the fisherman
- species of food fish or shellfish received
- pounds of each species received
- price paid per pound for each species received
- signature of the individual preparing the fish receiving ticket
- signature of the fisherman making the landing

- species name, pounds and value of any fish retained by fisherman for personal use.

In Oregon, weights reported on fish-receiving tickets for the Pacific whiting fishery must have been derived from a certified scale. All weighing and measuring devices being used commercially must be licensed with the Department of Agriculture. Each scale must meet state standards for design, readability, accuracy, and reliability, based on National Institute of Standards and Technology (NIST) Handbook 44. Oregon Measurement Standards approval seals are applied only to those examined devices that meet all appropriate design, installation, and accuracy requirements. ***However, the state recognizes that correct weighing or measuring results from knowledgeable, concerned personnel operating correct equipment.*** Oregon requires an approved means of sealing any mechanism used for adjusting a measurement element on a commercial weighing or measuring device. The state also recommends that all devices be placed under appropriate planned maintenance and service programs to avoid unexpected correction expense. The user of the device is responsible for the accuracy of the scale at all times. In other groundfish landings, pounds may be determined using any one of the following methods:

- an actual round weight based on certified scale measurements
- an actual round weight measured using a hopper scale
- a weight converted to round weight by multiplying the appropriate conversion weight listed in state regulations.

"Weighbacks" are fish or shellfish with no commercial value and must be sorted to federal report groups, weighed, and included on a fish-receiving ticket.



STATE OF OREGON — FISH RECEIVING TICKET

COMMERCIAL LICENSE NO. — DATE — 3

BOAT NAME & BOAT NUMBER — FISHERMAN'S NAME — DEALER NO. — PORT OF FIRST LANDING (PORT CODE / PORT NAME) — DEALER NAME

GROUNDFISH & SHRIMP FISH RECEIVING TICKET

OREGON — Fish & Wildlife

GEAR: CIRCLE ONE — HOOK & LINE 4 | BOTTOM LONG LINE 5 | SHRIMP TRAWL SINGLE RIG 7 | SHRIMP TRAWL DOUBLE RIG 8 | MIDWATER TRAWL 6 | BOTTOM TRAWL 9 | FISH POTS 0 | OTHER (SPECIFY) | AREA (DEPT. USE ONLY)

DESCRIPTION		CODE		GROSS POUNDS	PRICE PER POUND $	PRICE PER POUND CENTS	WEIGH BACK	NET POUNDS	AMOUNT
Pacific Cod (True Cod)		201	00						
Sole — Petrale		608	00						
— Sand		634	00						
— English		626	00						
— Rex		610	00						
— Dover		624	00						
Sand Dab		604	00						
Arrowtooth Flounder		606	00						
Rockfish large		410	00						
Widow Rockfish		431	00						
Yellowtail Rockfish		433	00						
Pacific Ocean Perch		413	00						
Black Rockfish		442	00						
Canary Rockfish		451	00						
Lingcod		484	00						
Sablefish	x-small	477	1						
Circle One: • Round 1 • Dressed 2	small	477	2						
	medium	477	3						
	large	477	4						
Shrimp		801	00						

TOTAL (For Dealer Use) — TAKE HOME FISH AND OTHER — DEALER ADJUSTMENTS

FD 1073 Rev. 4/95 — I CERTIFY THAT THE ABOVE IS TRUE AND CORRECT

DEALER'S SIGNATURE — FISHERMAN'S SIGNATURE

GROUNDFISH & SHRIMP RECEIVING TICKET

Washington

In Washington, the buyer (a person who has a fish-buyer's license and receives fish or shellfish) is required to complete a fish-receiving ticket. Washington nontreaty fish-receiving ticket forms contain the following information:

- name and address of licensed deliverer
- name or Coast Guard documentation number of landing vessel
- Washington department of fish and wildlife (WDFW) boat registration number
- gear used
- signature of deliverer
- date of landing
- name and WDFW number assigned to dealer
- name and WDFW number assigned to buyer
- signature of original receiver
- days fished
- whether fish were caught inside or outside state waters
- catch area
- species code

- number of salmon, sturgeon, ghost shrimp, and oysters
- total round weight in pounds of all fish or dressed weight if designated so
- catch value of fish and shellfish sold or purchased.

The marine fish-receiving ticket is used for deliveries of marine fish or bottomfish. The poundage of any fish or shellfish deemed to be unmarketable, discards, or weighbacks must be shown on a fish-receiving ticket and identified as such by a zero dollar.

For the Pacific whiting fishery, the original receiver must enter the estimated weight of Pacific whiting on the fish-receiving ticket immediately upon completion of the delivery. The exact weights of whiting, by grade, and all incidental species in the delivery must be entered on the fish-receiving ticket within 24 hours of the landing. There is current Washington regulatory code pertaining to the use of weighing and measuring devices installed after July 5, 1997, that are used for commercial purposes (Chapter 16-664 WAC). Like Oregon, requirements for commercial scales are required to be traceable to a National Type Evaluation Program (NTEP)[1] Certificate of Conformance[2]. In Washington, the owner or operator of weighing or measuring equipment is responsible for the maintenance and accuracy of weighing or measuring devices at all times. Washington Weights and Measures approval seals are placed on devices, which meet all appropriate design, installation, and accuracy requirements. The seal indicates that the device passed the inspection during the specified month and year. Weights and Measures officials perform unannounced inspections.

California

In California, every commercial fisherman who sells or delivers to a licensed fish receiver must complete a California state landing receipt when the fish is received, transferred, or purchased, whichever occurs first. Information on a landing receipt includes:

- an accurate weight of the species of fish received (dressed weight is acceptable for sablefish)
- name and identification number of the fisherman
- department registration number of the boat
- recipient's name and identification number

[1] A program of cooperation between the National Conference on Weights and Measures (NCWM), the National Institute of Standards and Technology, the states, and the private sector was created for just this purpose. Through 12 participating laboratories, NTEP evaluates the performance, operating characteristics, features, and options of weighing and measuring devices against the applicable standards.

[2] An official National Type Evaluation Program Certificate of Conformance is issued by NCWM following successful completion of the evaluation and testing of a device. This certificate indicates that the device meets applicable requirements for commercial weighing and measuring equipment in the United States.

- date of receipt
- price paid
- CDFG block number where the fish were caught
- type of gear used,
- any other information the department may prescribe.

Unlike Washington and Oregon, California requires overage catch to be reported on the same ticket as all other catch from the delivery.

In California, the Division of Measurement Standards is responsible for weights and measures. California requires any scale used commercially to be "type approved" for such use. Commercial use of a nontype-approved scale is illegal in California. Additionally, each commercial scale must have a registered service agent place it into service or first inspected by a local weights and measures official.

PacFIN Data Management

The Pacific Coast Fisheries Information Network (PacFIN) is a regional fisheries data network maintained by the Pacific States Marine Fish Commission. Data from fisheries occurring in ocean areas off the coasts of Washington, Oregon, California, Alaska, and British Columbia are provided to the PacFIN central database. PacFIN provides information which enables state and federal agencies and industries to track commercial fish catches. As the intensity of U.S. fisheries has increased, the need for PacFIN data has become more critical.

The PacFIN central database includes state fish ticket and vessel registration data provided by the Washington, Oregon, and California state fishery agencies. In addition the states supply species-composition and catch-by-area proportions developed from their port sampling and trawl logbook data systems. NMFS supplies the central database with limited-entry permit data. U.S. Coast Guard vessel data is also incorporated into PacFIN. The federal electronic fish ticket database is maintained by PSMFC on the PacFIN network. The catch data is available in season to NMFS for monitoring the attainment of the Pacific whiting shore-based allocation, determining when to close the fishery, and for monitoring bycatch limits established for overfished species. In addition to being the primary data used to manage the Pacific whiting shoreside fishery in season, data collected by catch monitors will be used to verify the fish ticket information provided by the Washington, Oregon, and California state fishery agencies.

4. VERIFICATION OF LANDINGS

Workload Priorities

- Gather delivery information from all landings.
- Verify the delivery information from as many landings as possible.
- Confirm that all catch is offloaded.

Determining Delivery Schedules

To monitor the sorting and weighing of the landings, you will need to know the delivery schedule. The EFP requires that the first receiver designate someone to assist you with this task. Many facilities will have prearranged times when the vessels will call/radio in for status updates. Ask if this is the case at your assigned facility, as this will help you determine your work schedule. If you are unable to monitor all landings, and you choose to use the Random Selection Table (Chapter 6), NEVER give your monitoring schedule to the first-receiver or notify them in advance that you will not be monitoring a delivery. First-receivers are required to notify the catch monitors of deliveries at least 30 minutes but not more than two hours before beginning an offload. If you intend to take a delivery off and do not wish to be disturbed, turn the ringer on your cell phone down or off so that the first receiver may still notify you by leaving a message.

Note —If you are working with a partner, make sure the first receiver knows what shifts each of you are working so that they notify the right person.

Dock foremen and other personnel are a good source of information with regards to how long offloads will take. Factors that affect offload times might include tank space, tides, worker schedules, or breakdowns. If for some reason you cannot complete a delivery verification, retain the data you have collected but note that the delivery was not completed. If you have been issued a laptop for data entry, do not enter the species data for this delivery. Please record the circumstances regarding the event in your daily notes and notify NMFS program staff during your debriefing. This should be a rare occurrence. If it occurs more than once, contact NMFS staff for further guidance.

Note—Some first receivers may take other groundfish deliveries, shrimp, sardines, tribal hake or non-EFP (pre-sorted) hake. The only deliveries you should monitor are shoreside whiting EFP landings. Do not verify the catch for these other deliveries, but do be sure they are not mixed with EFP whiting deliveries. Deliveries should never be mixed prior to sorting and weighing.

Verifying Deliveries

One of your primary tasks will be to confirm delivery information from all EFP whiting landings. This includes recording the date, delivering vessel and state ticket numbers and confirming all catch has been offloaded from the vessel on as many deliveries as possible. This information will be entered on the header of each **Catch**

Monitor Form for each delivery, regardless of whether you watched the offload. In other words, you should have a Catch Monitor Form for every delivery, regardless of whether you verified the sorting and weighing or not. In cases where the offload verification was not completed, complete only the header portion of the form.

Sources of Information

There are many sources of information available to you for verifying deliveries. Always try to get the most reliable information. Keep in mind that the more hands the information passes through, the more opportunities there are for mistakes.

- When recording U.S. Coast Guard documentation numbers, try to get the number directly from the boat. This number is usually six digits and is displayed on the outside of the vessel. Alternatively, the number can be found on the state fish ticket. Verify the number with the table in your manual **(Appendix J).**If there is a discrepancy, call NMFS program staff.

- When acquiring state fish ticket numbers for your paperwork, get them directly from the state ticket instead of processor reports or delivery lists.

Confirming Offloading of All Catch

When a vessel offload is completed, check from the dock to see if the tanks and storage areas on and around the deck appear to be empty. Note if there were fish on the vessel that had not been sorted or weighed by the first receiver. If you can determine the species or general species group, include that in your notes. Since deliveries are not allowed to be split between processors, the tanks should always be empty when the offload is complete. If catch was also retained on the deck (catch from net or deck cleaning), it should also be removed from the vessel at the time of offload. Your observations should be done by looking over the side of the dock into the tanks before they put the covers back on the hold. If you cannot see that the tanks are empty from the dock and have reason to believe that all catch may not have been offloaded, note it on your Catch Monitor Form. If the tanks are not empty when the delivery is “completed”, immediately notify enforcement and document the situation thoroughly in your daily notes.

When communicating with vessel or first receiver personnel, introduce yourself and explain to them the information you need. It is important to maintain a friendly and professional attitude toward vessel and first receiver personnel at all times. This will create a situation that encourages cooperation and a willingness to assist you in completing your tasks.

5. OFFLOADING ACTIVITIES

The Sorting Process

Workload Priorities

- Verify that all catch is sorted to federal species groups in as many deliveries as possible
- Verify that each vessel's catch is kept separate in as many deliveries as possible
- Verify that all catch is retained until weighing in as many deliveries as possible
- Prepare written documentation of all operational issues that may affect the quality of catch sorting and result in federal requirements not being met
- Verify that catch monitoring plans are being followed
- Prepare written documentation of the sorting process.

The Offloading Process

Pumping Fish

Most first receivers use a large hose attached to a vacuum pump to transfer catch from the vessel to the dock. This pump deposits catch into a hopper where the water is drained. After dewatering, the catch is transported on conveyor belts to be sorted or transported on belts to hopper scales where it is weighed as unsorted catch and then transferred on a conveyor for sorting.

Brailing

Some first receivers may use a brailer to transfer fish from a vessel. A brailer involves draining the vessel's holding tanks of water and lowering a net, or brailer, into the tank. Usually one or more people shovel the catch into the brailer until it is full, at which point it is raised and dumped into totes. In most cases, the catch is transported on conveyor belts for sorting prior to being weighed. It should be noted, however, that scales can be incorporated into the brailer system so that the unsorted catch can be weighed as it hangs in the net prior to sorting.

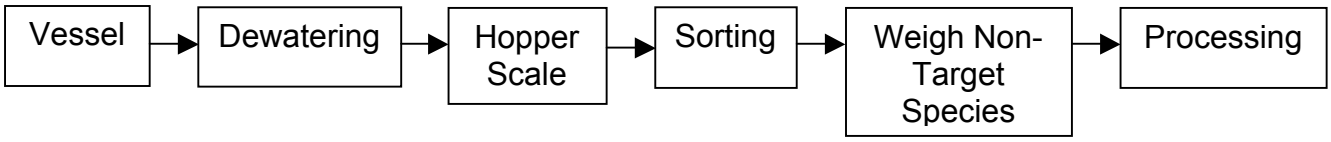
Note — The federal groundfish regulations and EFP do not allow brailer scales to be used to derive weights reported on the electronic fish tickets.

Using a brailer to transfer fish is time-consuming and labor-intensive and is therefore not commonly used in the high-volume whiting fishery. Currently, only one first receiver uses this method and only for the end of the offloading process.

When Unsorted Catch is Weighed

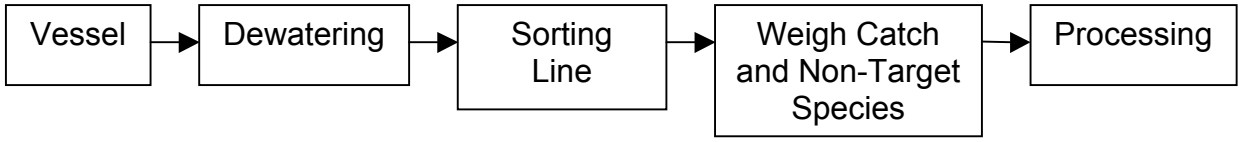
It is important to note which process occurs first, the sorting or the weighing. This will dictate how the species weights are calculated.

The EFP issued to first receivers allows the catch to be weighed prior to sorting, if a hopper scale is used, to derive the target species weight. Unlike most groundfish species, Pacific whiting is a high volume groundfish species. This allows first-receivers to configure their facilities so that a total weight is obtained by hopper scales before the nonwhiting species is separated from the catch. If this happens at your assigned facility, it is important to ensure that all the nonwhiting species are correctly sorted, weighed, and subtracted from the total weight of the catch; this includes nonwhiting catch that may get past the sorters and subsequently be sorted from the processing line inside the facility.



When the Catch is Weighed After Sorting

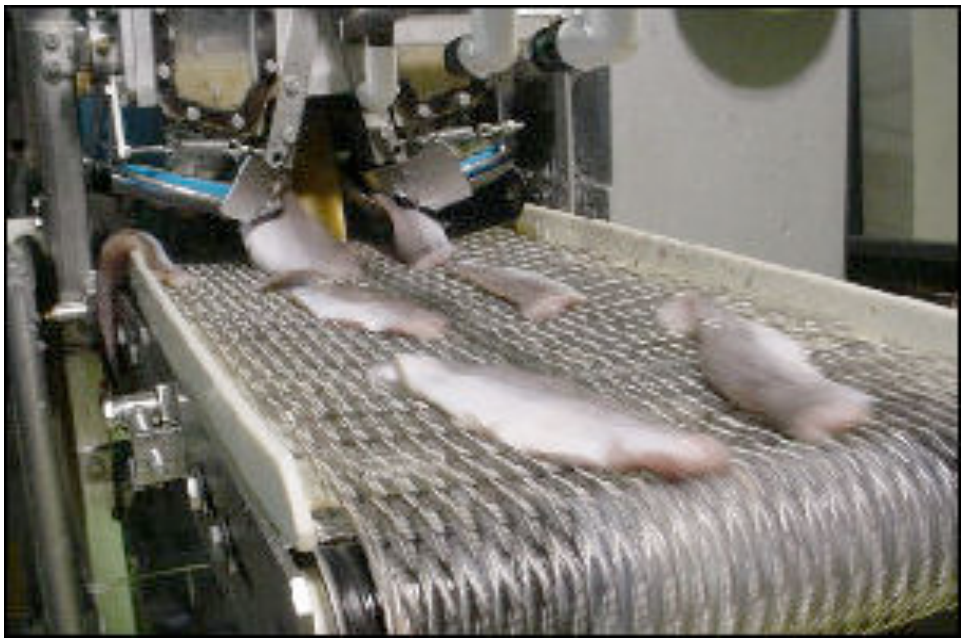
Most first receivers will sort their catch first and then weigh each species or species group. The catch is sorted before it is weighed either by a hopper scale or totes that are transported to a scale. In this case, the nonwhiting catch is not subtracted from a total weight.



Monitoring Offloading and Sorting

Sorting Duties and Strategies

When first arriving at your assigned first receiver, record all locations you can see where nonwhiting species could be removed from the catch. This list should include locations such as sorting lines, storage totes, cutting lines and any other locations you can see where incidental catch could be removed from the catch prior to weighing. Indicate these locations on your first receiver diagram. Choose the best place to situate yourself during offloads. The ideal place will be one where you can see both the sorting line and the weighing area at the same time. If this is not possible, efforts should be taken to monitor both areas as well as possible. If you find yourself in this situation, try to move back and forth between the two areas, while spending more time in the location where fish are most likely to disappear.



Nontarget catch that is overlooked on the sorting line should be returned to the sorting area when it is encountered during processing. Ensure that this catch is accounted for in the weighing process and added to the correct landing.

You will need to work closely with first receiver personnel to get the information you need. When recording catch weights, record the values you observe on the scale or hopper scale printout. Because your job is to **INDEPENDENTLY** verify electronic fish ticket data, **do not** copy species or weights recorded by first receiver personnel. If you are unsure of a species, save (freeze or refrigerate) a specimen, if possible, and contact NMFS staff to arrange assistance.

Fish should be sorted to federal species or species groups (see species lists in **Chapter 7, Species Identification).** If first receiver personnel are not sorting to these specifications, notify the dock foreman or plant manager immediately. Unlike observers who independently sort catch to species, catch monitors will verify and document that the first receivers sort catch to required federal species groups. It is acceptable for first receivers to sort to more specific groups than are required but not to more general groups. An example is the shark category. First receivers are required to sort spiny dogfish sharks to species but are allowed to group other groundfish-category sharks (leopard and soupfin sharks) into unidentified sharks. Sharks that are not groundfish should be recorded as nongroundfish. Opposite this, if the first receiver chooses to sort a nongroundfish shark to species, they are welcome to do so. As discussed in Chapter 3, there may be coastwide variations in sorting practices due to differences in state reporting requirements.

In order to accurately assign fish to a specific landing, all nontarget species must be retained and separated by landing until the offload is complete. That means that only whiting from a landing can be rendered or transported away from the first receiver until the entire offload has been completed. If you witness the transportation of nonwhiting catch away from the first receiver or nonwhiting catch being rendered before completion of the offload, document it in your logbook, discuss it with the manager, and notify NOAA Fisheries Office of Law Enforcement (OLE).

Documentation of the Effectiveness of Sorting

Ensure that you document in your logbook:

- Whether the flow allowed for accurate sorting of nontarget species and how you handled the situation if it did not.
- Whether personnel were knowledgeable about the species and species groups. Be sure to record instances in your logbook of situations where the sorting crew was not properly sorting incidental catch to federal species groups.
- Deliberate removal or destruction of catch prior to the weighing process. Work with the plant managers to have these problems resolved; remember to document the solutions.
- Any situation in which the personnel did not provide reasonable assistance when requested to do so.

It is important to properly document in your logbook all situations in which the first receiver fails to follow the terms and conditions of the EFP or federal regulations **(Appendix E).** A statement (**see chapter 10**) may also be required. Even if it does not pose an immediate significant problem, it is important to have an accurate and complete record of events in case they become a problem in the future.

Operational Issues

This is the third year of a monitoring program that will soon be going into permanent regulation. It is important that NMFS learn as much as possible about the details of how each facility operates so that any operational issues can be addressed before permanent regulations are implemented. It is important that any sorting and weighing problems are fully documented in your logbook, including initial problems that were resolved, those that could become future problems, and especially those that were not resolved, even if they were not violations.

Monitoring Plans

Each first receiver has submitted a monitoring plan to NMFS. These plans contain specific information about each facility and how they intend to meet the catch-accounting regulations, as well as the terms and conditions of the EFP. One of your tasks is to monitor whether the first receiver is following its plan. Monitoring plans are more fully discussed in **Chapter 9.**

THE WEIGHING PROCESS

Workload Priorities

- Verify that all catch is weighed by federal species groups from as many deliveries as possible, with an emphasis on nonwhiting species
- Verify that all catch is weighed in a manner that results in an accurate weight from as many deliveries as possible
- Verify that appropriate weighing equipment is being used appropriately
- Verify catch monitoring plan information regarding scales
- Submit Catch Monitor Forms to NMFS
- Prepare written documentation of procedures.

Weights and Measures

This section of the manual is intended to familiarize you with weighing devices you are likely to see at first receiver facilities and provides basic information on proper scale use and weighing practices. Understanding weights and measures is an important aspect of the catch monitor's responsibilities. Weights have been used over the centuries as a reference standard for determining the value of raw materials and goods, usually for the purpose of trade and commerce. Standards supplied to all the states by the National Institute of Standards and Technology (NIST) assure uniformity throughout the country, as well as compliance with the international community.

Weighing Devices (Scales)

Accuracy, precision, and measurement uncertainty

In every commercial transaction involving the weighing of a commodity over a scale, accurate weight and proper weighing practices protect the buyer and the seller. In

addition, in fisheries management, NMFS needs accurate data for monitoring harvest guidelines, catch allocations and catch limits.

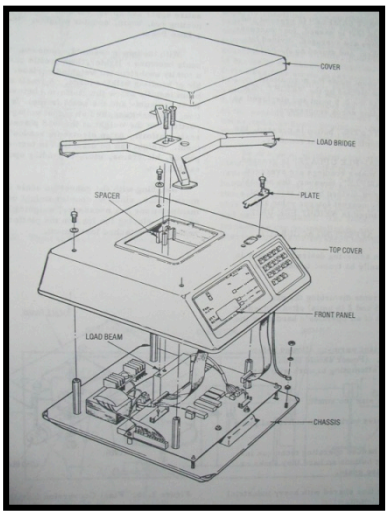
NIST Handbook 44 establishes tolerances, specifications, and other technical requirements for commercial weighing and measuring. For the most part, the states of California, Washington, and Oregon have adopted, by reference, specifications, tolerances, and other technical requirements defined in the NIST Handbook 44. Weighing devices are divided into accuracy classes according to the number of scale divisions and the value of the scale division. There are five classes of scale categories.

Class	Purpose
I	Precision laboratory weighing.
II	Laboratory weighing precious metals & gem weighing grain test scales.
III	All commercial weighing not otherwise specified, grain test scales, retail precious metals and semi-precious gem weighing, animal scales, postal scales used to determine laundry charges, and vehicle on-board weighing systems.
III L	Vehicle, axle-load, livestock, railway track scales, crane, hopper (Other than grain hopper) scales, and vehicle on-board weighing systems.
IIII	Wheel-load weighers and portable axle load weighers used for highway weight enforcement (Generally the California Highway Patrol).

State weights and measures officials inspect, test, and seal commercial scales to ensure they are accurate and correct. To be accurate, a scale must be within applicable tolerances and specific performance requirements determined during testing. To be correct, a scale must be accurate and meet all applicable specification requirements (design, type approval, selection, installation, use, and maintenance). Once the scales are tested and found to be correct, they are sealed. In addition to the familiar approval seal, some devices have provisions for security sealing mechanisms used by service agents to make adjustments and calibrations. Although none will prevent access, they provide evidence of tampering. For the scale to provide accurate weights, however, the user of the scale must ensure that the weighing practices are correct.

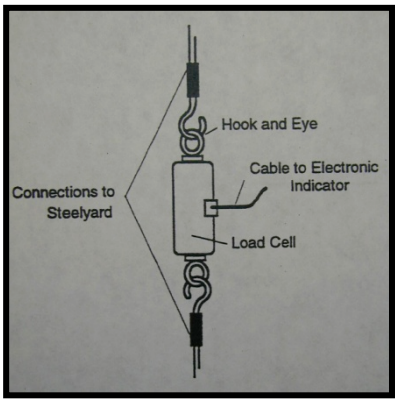
Tolerance in Scale Divisions				
	1	2	3	5
Class	Test Load			
I	0 – 50,000	50,001 -200,000	200,001 +	

II	0 – 5,000	5 001 - 20 000	20,001 +	
III	0 – 500	501 - 2 000	2, 001 - 4, 000	4,001 +
IIII	0 – 50	51 - 200	201 - 400	401 +
III L	0 – 500	501 - 1 000	(Add 1d for each additional 500d or fraction thereof)	



Weighing Device Type

All scales have the same basic components. The load rests on a platform deck of wood, steel or concrete, platter or pan, conveyor belt, hopper, tank, or monorail that is supported by a suspension system that transmits the load to the indicating element. The weighing element transmits the force of the load from the load-receiving element to the weight-indicating element by lever systems (mechanical), load cell systems (electronic), or electromechanical (both mechanical and electronic). Indicating elements include weight beams, dials, and electronic indicators.



Weight Beam Scale

Weight beam scales have nonautomatic indicators, and the scale operator must perform actions to obtain a reading. Weight beams with a sliding poise can balance a considerable range of loads. The scale is read when the weight beam tip rests in the center of the trig loop or when the tip oscillates equidistant from the center.

Analog Scales, Spring Scales, Dial Scales

In a typical spring scale, the spring stretches (as in a hanging scale in the produce department of a grocery store) or compresses (as in a simple bathroom scale) in proportion to how hard the Earth pulls down on the object. Every spring has a proportionality constant that relates how hard you pull it to how far it stretches. Dial scales may be equipped with a tare bar for balancing off the weight of an empty container.

Electronic Scales, Load-Cell Scales

This category includes mechanical scales with electronic or dial-scale displays and fully electronic or load-cell scales. A load cell is a transducer that converts force into a measurable electrical output. Although there are many varieties of load cells,

strain-gage-based load cells are the most commonly used type. Load cell designs can be distinguished according to the type of output signal generated (pneumatic, hydraulic, electric) or according to the way they detect weight (bending, shear, compression, tension, etc.). Hydraulic load cells are force-balance devices, measuring weight as a change in pressure of the internal filling fluid. As force increases, the pressure of the hydraulic fluid rises. Typical hydraulic load cell applications include tank, bin, and hopper weighing. Pneumatic load cells also operate on the force-balance principle. These devices provide higher accuracy than a hydraulic device. Pneumatic load cells are often used to measure relatively small weights in industries where cleanliness and safety are of prime concern. Disadvantages include relatively slow speed of response and the need for clean, dry, regulated air or nitrogen. Strain-gage load cells convert the load acting on them into electrical signals. The gauges are bonded onto a beam or structural member that deforms when weight is applied. In most cases, four strain gages are used to obtain maximum sensitivity and temperature compensation. When weight is applied, the strain changes the electrical resistance of the gauges in proportion to the load. Other load cells are fading into obscurity as strain gage load cells continue to increase their accuracy and lower their unit costs.

Button-Style Compression Load Cells

Scales Commonly Used at Whiting First Receivers

Hopper Scales

Hopper scales are devices that automatically weigh large volumes of fish. A conveyor belt transports the catch to a large container, where the catch is collected. Once the weight of catch in the container reaches a pre-set range, the catch is diverted to a second container. The catch in the first container is automatically weighed and recorded and dumped onto another belt that transports the catch to the next process. You should be able to gain access to the hopper scale records by speaking to the individual designated in the monitoring plan.

Platform Scales

These scales can come in many sizes. The size most common in this industry is a 5,000 lb scale that can accommodate a large tote deposited by a forklift. These scales are used to weigh both whiting and bycatch. Smaller scales of this type are normally used for quality control purposes and to weigh small amounts of bycatch. Usually scales of this type require manual recording of data by dock personnel.

Forklift Scales

Some first receivers have scales incorporated into their forklifts to tare and weigh totes when they lift the containers to be moved. This can greatly increase the speed

of operations. If your facility has this type of scale, you will need to work more closely with dock personnel to the get data you require.

Recording Weights from Different Devices

In addition to monitoring the sorting process, one of your primary duties is to verify the weighing of catch to federal species groups from as many deliveries as possible. Though we want you to verify the weighing of whiting, your emphasis will be on the weighing of nonwhiting species. You will attempt to determine if the catch is being weighed so that it will result in accurate weights being reported on the electronic fish tickets, or if there are basic issues that may result in inaccurate reporting.

Using appropriate scales and using them properly are important for obtaining accurate weights. Each first receiver has submitted a catch monitoring plan that includes a listing of the scales that they intended to use for weighing Pacific whiting catch. These scales are expected to meet state performance standards and be in good working order. Before completing training, you will have an opportunity to review the monitoring plans and ask questions about scale use and how best to acquire the total weight-by-species report group, given the type of scales available at your plant.

Accurate Weights for
Federal Electronic Fish Tickets

Accurate weights are those derived from a suitable scale that meets state standards for type, testing, and accuracy.

Common estimation methods **NOT** acceptable for calculating accurate weight of catch include:

- Volumetric estimation=volume taken up by catch * and estimated density value
- Average weight estimation = the number of fish * an average weight
- Conversions to whole weights using a conversion factor or product recovery value.

Each first receiver will have its own system for obtaining catch weights. It's up to you to work with personnel to develop an understanding of the methodology being used by the facility. During this process, you will need to have access to scale printouts or readouts. You will also need to document the procedures used at your facility. Methods used by the first receivers to obtain catch weights include (please note that not all methods are acceptable):

- Weighing Unsorted Catch With a Hopper Scale

Unsorted catch is weighed in batches using a hopper scale. Catch is pumped from the vessel to the hoppers, where the excess water is removed, and the catch is weighed. Once the catch is weighed, it is moved out of the hopper, and the hopper is refilled. Nonwhiting catch is then sorted out and weighed separately on appropriate scales. The whiting weight is derived by summing the weights from the hopper scale and subtracting nonwhiting catch from the weight obtained from the hopper scale. If your first receiver is using this method, you should verify that the scale printout or readout matches the weight recorded by the first receiver and that nontarget weights have been correctly subtracted from the total catch weight.

- Weighing Sorted Catch With a Hopper Scale

Sorted whiting is weighed in batches using a hopper scale. Catch is pumped from the vessel to a sorting line, where the bycatch is removed. Whiting is then transferred to the hoppers, where it is weighed. Once the catch is weighed, it is moved out of the hopper, and the hopper is refilled. Nonwhiting catch is weighed separately on appropriate scales. If the first receiver is using this method, you should verify that the scale printout or readout matches the weight recorded by the first receiver and ensure that any whiting catch that may be removed on the sorting line is also added to the catch weight form with the appropriate weighing code.

- Sorted average tote weights

Sorted whiting catch is weighed in uniform containers. An average weight for containers is applied to the total number of containers to derive the whiting weight. All nonwhiting catch is sorted and weighed on appropriate scales. Average weights are not used for nonwhiting catch. If your first receiver is using this method, you will need to keep track of the number of totes on the **back of your catch verification form**. You will also need to request the weighing of 20 totes per month to verify the average tote weight and determine if the average weight has remained constant throughout your deployment. These totes do not need to be weighed all at once but can be spread throughout the week. Record average weight calculations in your logbook.

- Sorted summed tote weights

Sorted catch is weighed in pre-tared containers, and weights are summed to derive total weights. All nonwhiting catch is weighed on appropriate scales. If your first receiver is using this method, you will need to keep track of the tote weights on the **back of your catch verification form.**

- Sorted single container (or no container)

Sorted catch is weighed in a single container. The taring of the container can take place either before, by scale, or after, by subtracting the weight of the container. All non-whiting catch is weighed on appropriate scales. Weighing

catch directly on the scale (no container) is acceptable only if the weight of the catch is above the minimum weight allowed for that scale. See “Under Minimum Weights” on page 39 for further guidance.

The following are **unacceptable** catch weighing methods about which you should contact OLE agents or State enforcement officers:

- Unsorted average tote weights

Unsorted catch is weighed in uniform containers. An average weight for containers is applied to the total number of containers. The whiting weight is derived by subtracting nonwhiting catch.

- Unsorted summed tote weights

Unsorted catch is weighed using uniform containers for which the scale is pre-tared. The whiting weight is derived by subtracting non-whiting catch.

- Unweighed catch

Not all groundfish are weighed.

Verifying Tote Weights Randomly

If the processor uses totes to weigh whiting, you are expected to count the total number of totes in each delivery and watch as many totes being weighed as possible, providing it does not compromise your ability to monitor the weighing or sorting of nonwhiting catch. When verifying the weight of whiting in sorted totes:

1. Record the tared weight of 20 full totes randomly selected throughout the offload (weight of whiting only, not whiting and tote). To calculate average weight, sum the weights of the 20 tared totes and divide by the number of totes.

2. Count the number of totes weighed throughout the offload. To do this, use a tally method on the back of your Catch Weight Verification Form.

3. Multiply the number of totes in the offload by the average tote weight to get an approximate weight of whiting. Record all calculations in your logbook.

4. Ensure you collect accurate weights for all bycatch species.

Collecting Random Tote Weights for Whiting Weight Calculations

A random system using either space or time is desired for collecting weights to calculate average tote weights. This ensures that the weights are randomly collected throughout the entire delivery. It is important to select your method before beginning the delivery and to maintain the system throughout the entire delivery.

Space— This method involves selecting units based on the number of totes. To use this method, you must first estimate the number of whiting totes to be weighed in the entire delivery.

- **Example**:
  - Hail weight is estimated to be 152,000 lbs, and a full tote is estimated to be about 800 lbs.
  - Desired number of units: 20.
  - Using the estimates, calculate the total number of expected whiting totes: 152,000 lbs/800 lbs = 190 totes.
  - Divide 190 totes by 20 totes = 9.5 (round to 10).
  - So you will then record the weight of every 10^{th} tote.
- **Selecting a starting point:**
  - Select a random number within your first interval (in the spatial example, this would be totes 1 - 10) using the random number table. This will be your first unit (tote).You will record every nth tote weight (where n is the sample interval) until the delivery is complete.
- **Continuing example from above**:
  - On the Random Number Table, 4 is selected.
  - You will record the weight of the fourth tote and every 10^{th} tote thereafter (4, 14, 24, 34…).

Time—This method involves selecting units based on time. To use this method, begin by estimating the amount of time it will take to complete the landing.

- **Example**:
  - Estimate the total time at 10 hours.
  - Desired number of units: 20 totes.
  - Divide 10 by 20 = ½-hour.
  - So you will record the weight of a tote every½-hour.
- **Selecting a starting point:**
  - Select a random minute within your first interval (30 min) using a clock. This will be your first unit (tote). You will record every n^{th} minute (where n is the sample interval) until the delivery is complete.
- **Continuing example from above**:
  - On the clock, 22 min is selected.
  - You will record the weight of the tote at 22 minutes and every 22 minutes thereafter (00:22, 00:52, 1:22, 1:52, 2:22, 2:52…).

Note —Due to the possibility of delay in deliveries and the limited availability of clocks, using the spatial method may be preferred.

Variations

If this proves too complicated or time consuming, it can be simplified by grouping units. For example, instead of recording the weight of one tote every 10 units, you could record three consecutive totes every 30 units. This method is acceptable as long as you collect weights from at least three distinct groups and select a random starting point.

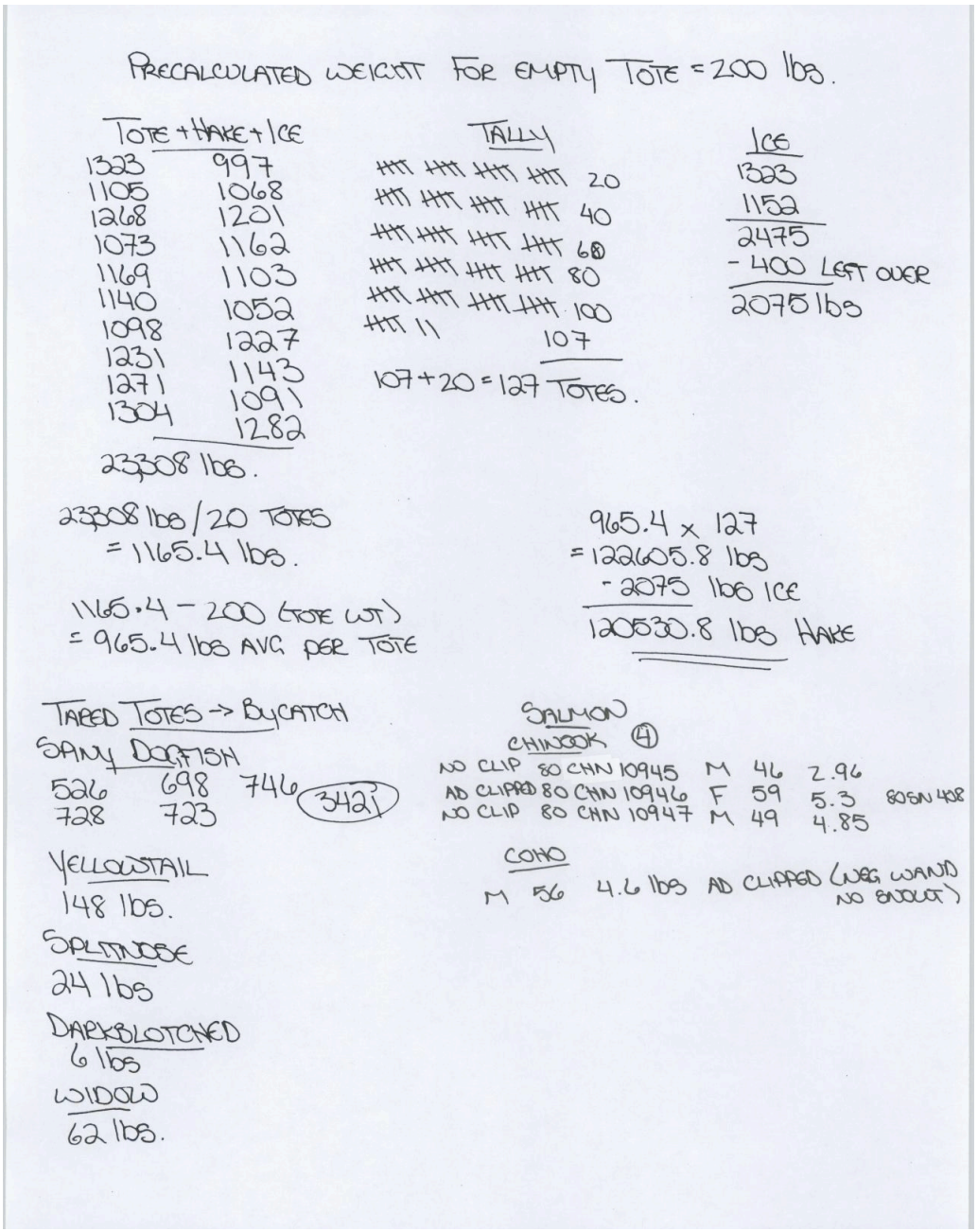
Calculating Empty Tote Weights

When tallying totes of whiting, it is also necessary to collect information about the weight of the empty totes so that a weight of only whiting can be calculated. To calculate weights of empty totes, ask the first receiver to weigh at least 20 empty totes of each type that are used to weigh whiting. Sum the weights and divide by the number of totes weighed.

Average weight = Sum of empty totes/ total # of totes

This task should be completed once a month during your contract and should be recorded in the appropriate section of your logbook.

Sample Tally Sheet


PRECALCULATED WEIGHT FOR EMPTY TOTE = 200 lbs.

TOTE + HAKE + ICE

1323	997
1105	1068
1268	1201
1073	1162
1169	1103
1140	1052
1098	1227
1231	1143
1271	1091
1304	1282

23308 lbs.

TALLY

20 / 40 / 60 / 80 / 100 / 107

107 + 20 = 127 TOTES.

ICE

1323
1152
2475
- 400 LEFT OVER
2075 lbs

23308 lbs / 20 TOTES
= 1165.4 lbs.

1165.4 - 200 (TOTE WT)
= 965.4 lbs AVG PER TOTE

965.4 x 127
= 122605.8 lbs
- 2075 lbs ICE
120530.8 lbs HAKE

TARED TOTES → BYCATCH

SPINY DOGFISH

526	698	746	342?
728	723		

YELLOWTAIL
148 lbs.

SPLITNOSE
24 lbs

DARKBLOTCHED
6 lbs

WIDOW
62 lbs.

SALMON

CHINOOK (4)

NO CLIP	80 CHN 10945	M	46	2.96	
AD CLIPPED	80 CHN 10946	F	59	5.3	80 SN 408
NO CLIP	80 CHN 10947	M	49	4.85	

COHO

M 56 4.6 lbs AD CLIPPED (NEG WAND NO ENVELOPE)

Tare Weights

Tare is the deduction of weight to account for the weight of the container. When the first receiver uses totes for weighing whiting, a tare weight should be incorporated into the weighing process. Some acceptable methods for taring totes for weighing whiting include:

- Adding water or ice to totes prior to adding catch so that they are all the same weight. That way the number of totes can simply be counted and multiplied by the tare weight to get a total weight of the totes.

- Weighing each tote to get the most accurate weight possible, either zeroing each tote as it is used, or recording the weight of each tote and subtracting the weight later.

When the first receiver weighs bycatch, it is important to get the most accurate weight possible. Each tote used to weigh bycatch should be tared individually on a scale of appropriate size for the amount of catch to be weighed. For example, it is inappropriate to weigh a 0.25-lb. animal on a scale weighing in 1-lb. increments. Average tote weights should **never** be used for weighing bycatch.

Recording Information about and during the Weighing Process

When you arrive at the facility, fill out the section in your logbook about the sorting and weighing process. Complete this section as thoroughly as possible and include detailed diagrams.

As you verify landings it is important to be aware of activities around you. If you notice anything you think is inappropriate or strange, document it in your daily notes and fill out a statement.

Inappropriate Weighing Methods

Over Capacity
Scales should never be used to weigh amounts over the maximum capacity. Many scales will read up to 5 percent over the recommended capacity, but they are not considered accurate over maximum capacity as they are not tested or calibrated for weights over the maximum recommended capacity.

Under Minimum Weights
Scales should not be used to measure amounts within the first 20 divisions of the scale. For example, a scale with a capacity of 5,000 lbs with divisions of 1 lb should not be used to weigh anything less than 20 lbs. The first receiver **can** place a tote on the scale platform to increase the weight on the scale, tare it, then weigh a small item, but nothing under 20 lbs should be placed directly on the scale used in this example.

Weighing Catch
Using average weights for totes is inappropriate. Each tote should be individually weighed to acquire the most accurate weights possible.

Ineffective Hopper Scales
If fish are leaking from the hopper scale containers prior to weighing, notify the dock foreman immediately. Give the first receiver a chance to fix the mechanical problem. Document this in your daily notes, outlining the problem, people involved and actions taken by you and the processor and complete and submit a statement form.

Uncertified Scales
If the scales are not currently certified, the calibration seal is broken, or the scales used are different from those outlined in the Monitoring Plan, record this in your daily notes and notify the dock foreman immediately to give the first receiver a chance to remedy the problem. If the problem is not corrected immediately, fill out a statement according to the instructions in **Chapter 10.**

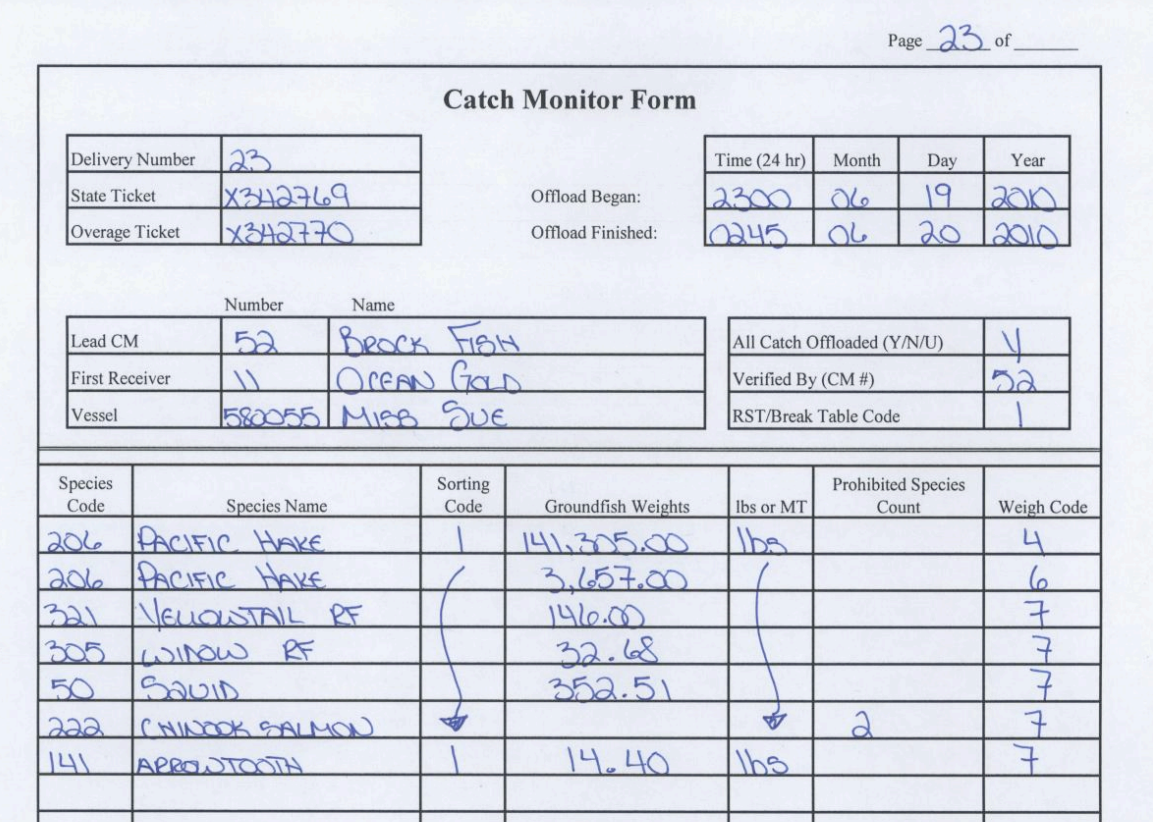
This also includes using your brass spring scales for weighing catch. Because these scales are not licensed by the state, they should not be used for the purposes of buying of selling commercial goods

Catch Monitor Delivery Form

The purpose of the Catch Monitor form is twofold. The form is used to document all deliveries so NMFS can verify that all electronic fish tickets were completed for every delivery. It is also used to document the sorting and weighing process for landings.

The information provided on the Catch Monitor form will also be used by NMFS to examine the accuracy of electronic fish ticket information from all deliveries and analyze differences between verified and unverified electronic tickets. The form will also be used along with your logbooks and daily notes as a tool to improve verification strategies in future years. Be sure that a form is completed for all shoreside whiting EFP landings. If you did not verify the landing, complete only the top of the form and the prohibited species count.

You should complete a Catch Monitor form for each delivery for which you verify sorting and weighing processes. NMFS will use this information both inseason for ticket comparisons and for postseason analysis of fish ticket accuracy and sorting and weighing methodologies at first-receiving facilities.



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Catch Monitor Form

Delivery Number	23
State Ticket	X342769
Overage Ticket	X342770

	Time (24 hr)	Month	Day	Year
Offload Began:	2300	06	19	2010
Offload Finished:	0245	06	20	2010

	Number	Name
Lead CM	52	BROCK FISH
First Receiver	11	OCEAN GOLD
Vessel	580055	MISS SUE

All Catch Offloaded (Y/N/U)	Y
Verified By (CM #)	52
RST/Break Table Code	1

Species Code	Species Name	Sorting Code	Groundfish Weights	lbs or MT	Prohibited Species Count	Weigh Code
206	PACIFIC HAKE	1	141,305.00	lbs		4
206	PACIFIC HAKE		3,657.00			6
321	YELLOWTAIL RF		146.00			7
305	WIDOW RF		32.68			7
50	SQUID		352.51			7
222	CHINOOK SALMON				2	7
141	ARROWTOOTH	1	14.40	lbs		7

Instructions

Header

All entries should be clearly printed in pencil.

Page: Enter the page numbers in sequential order. Put the page number in the first blank and the total number of pages in the second space. For example, “Page 3 of 40,” indicates that this is the third page of 40 for this form.

Delivery Number: All deliveries must be recorded and assigned a number. Delivery numbers should be sequential, beginning at 1. If there are no deliveries made for an entire day, record the date, enter 0, and note “no deliveries.”

State Ticket Number: The number assigned to each delivery by the first receiver can be found on official state records.

Overage Ticket Number: An additional ticket number is assigned to deliveries that have exceeded trip limits for specific species. Only Oregon and Washington have overage tickets; landings exceeding trip limits in California are entered on the same ticket.

Catch Monitor (CM) Number: This is the identification number assigned to you during training.

First Receiver Code: Each first receiver has a unique identification code. Select the correct code from the list provided in **Appendix I.**

CM Name: Your first and last name.

First Receiver Name: Name of assigned first receiver

Delivery Vessel Name: The name of the delivering vessel.

Vessel Number (Documentation Number): Get this number directly from the vessel or from the list in your manual in **Appendix J.**

Offload Began: Time sorting and weighing activities began, using a 24-hour clock followed by month, day, and year

Offload Finished: Time sorting and weighing activities were completed, using a 24-hour clock followed by month, day, and year

All Catch Offloaded, Y or N:

- **Y —**Yes, if you were able to visually confirm that all catch was offloaded for that landing or have no reason to suspect that not all catch was offloaded.
- **N —**No, if you know or suspect all catch was not offloaded. Document the situation in your logbook. If you can confirm all catch was not offloaded, complete a statement.
- **U —**If you were not present or, for some other reason, cannot confirm that all catch was offloaded. Document the reason in your logbook.

Verified By: Record the CM number of the individual who monitored the delivery. If more than one monitor verified the delivery record, enter the number of the individual who monitored the majority of the sorting and weighing activities.

Random Selection Table/Random Break Table (RST/RBT) Code: Record the verification status using the following codes:

1. *Delivery Verified*. Use this code when you are able to verify all (100%) deliveries and are not using the RST to subselect the deliveries for monitoring.

2. *Delivery Verified*. Use this code when you are using the RST to indicate that the delivery is an “on” delivery.

3. *Delivery Not Verified*. Use this code when you are using the RST to indicate an “off” delivery.

4. *Delivery Not Verified*. Use this code when you are using the RST to indicate an “on” delivery using the RST but on break using the RBT.

5. *Delivery Not Verified*. Use this code when you do not verify a delivery that was “on” because of failure to notify, fatigue, etc.

Body

Species code: Enter the species or group code for each species listed. A list of codes is given, beginning in **Appendix A**. Enter the code that corresponds to the most specific identification that you could positively make.

Species name: List each species encountered by its common name.

Sorting Codes

1. *Adequate sorting*. All groundfish catch was adequately sorted to federal species groups **without** catch monitor assistance.

2. *Adequate sorting with catch monitor assistance*. All groundfish catch was adequately sorted to federal species groups **with** catch monitor assistance.

3. *Presorting*. Catch was not adequately sorted to federal species groups, because some catch was presorted[1].

4. *Mixed report groups*. Catch was not adequately sorted to federal species groups, because catch was sorted into incorrectly mixed groups.

5. *Mixed catch transported*. Catch was not adequately sorted to federal species groups, because some nonwhiting catch was transported from the first receiver before the catch was completely sorted.

6. *“After Scale” bycatch*. Nontarget species sorted out after the initial sorting and weighing process. Usually requires subtracting pounds from the total weight of whiting and adding the bycatch pounds to the Catch Monitor Delivery Form.

If codes 2-5 were used, document circumstances in daily notes section of your logbook.

Groundfish Weights

[1] Presorted catch is catch that is removed before or during sorting and taken away before the weighing process. Catch taken for personal use by processing or vessel crew would fit this category, as would catch that is hidden and not placed with other sorted catch that will eventually be weighed.

This column is used to record the weight of each species landed. Weights should be independently collected directly from hopper scale printouts or platform scale displays.

Lbs or MT: Note if the estimated weight is recorded in pounds or metric tons. Weights are most commonly recorded in pounds.

Prohibited Species Count: This column is used to record the count of each prohibited species landed. Counts should be independently collected.

Weighing Codes:

1. *Unsorted Hopper*. Unsorted catch was weighed using a hopper scale; **whiting** weight was derived by subtracting nonwhiting catch.

2. *Unsorted average tote weights*. Unsorted catch was weighed in uniform containers in which an average weight for containers was applied to the total number of containers; whiting weight was derived by subtracting non-whiting catch. **(Currently not allowed under EFP.)**

3. *Unsorted summed tote weights*. Unsorted catch was weighed using uniform containers for which the scale was pre-tared; whiting weight was derived by subtracting non-whiting catch. **(Currently not allowed under EFP.)**

4. *Sorted hopper scale weights.* **Whiting** catch was first sorted, then weighed on hopper scales.

5. *Sorted average tote weights*. Sorted **whiting** catch was weighed in uniform containers in which an average weight for containers was applied to the total number of containers to derive the whiting weight.

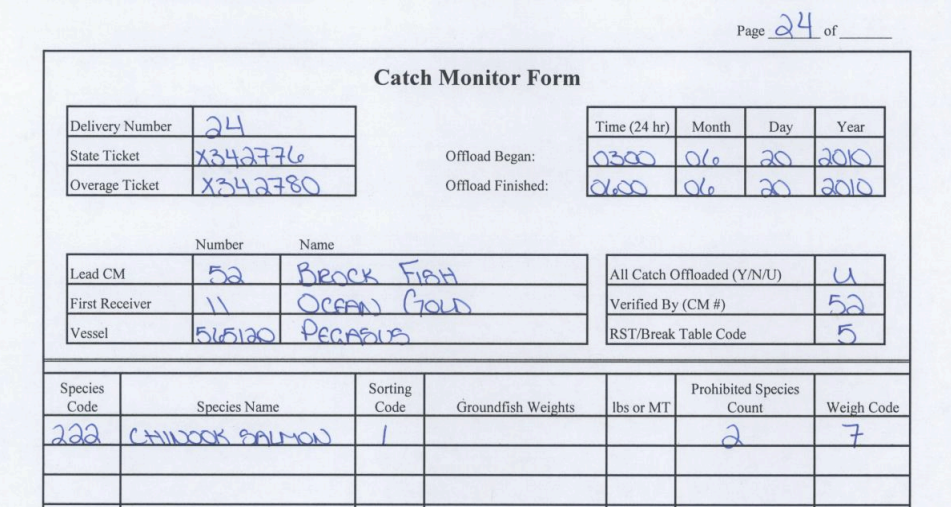
6. Sorted summed tote weights: Sorted catch was weighed in pre-tared containers, and weights were summed to derive total weights.

7. *Sorted single container*. Sorted catch was weighed in a single container that was tared either before, by scale, or after, by subtracting the weight of the container.

8. *Unweighed catch*. Catch was not weighed on scales.

9. *Other*: Document in logbook.

If you do not verify a delivery, you are still expected to record any prohibited species that were landed. Only prohibited species should be recorded on the catch monitor form and entered in to the database.



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Catch Monitor Form

Delivery Number	24
State Ticket	X342776
Overage Ticket	X342780

Offload Began: 0300 06 20 2010
Offload Finished: 2400 06 20 2010

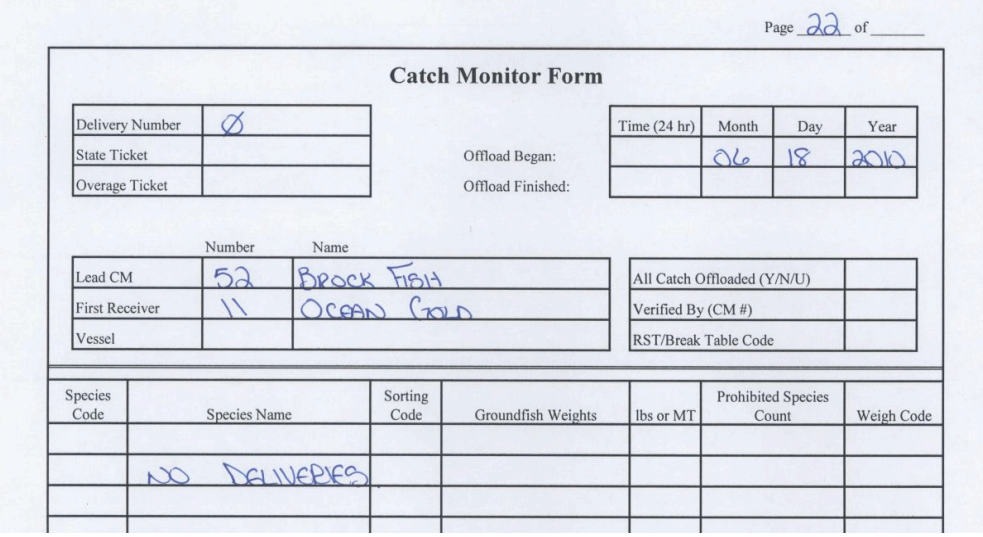
(Time (24 hr) / Month / Day / Year)

	Number	Name
Lead CM	52	BROCK FISH
First Receiver	11	OCEAN GOLD
Vessel	516120	PEGASUS

All Catch Offloaded (Y/N/U)	U
Verified By (CM #)	52
RST/Break Table Code	5

Species Code	Species Name	Sorting Code	Groundfish Weights	lbs or MT	Prohibited Species Count	Weigh Code
222	CHINOOK SALMON	1			2	7

On days were no whiting deliveries were received by the first receiver, the form header should be completed with available information and entered into the database. See example below.



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Catch Monitor Form

Delivery Number	Ø
State Ticket	
Overage Ticket	

Offload Began:
Offload Finished:

(Time (24 hr) / Month / Day / Year)
Month: 06 Day: 18 Year: 2010

	Number	Name
Lead CM	52	BROCK FISH
First Receiver	11	OCEAN GOLD
Vessel		

All Catch Offloaded (Y/N/U)	
Verified By (CM #)	
RST/Break Table Code	

Species Code	Species Name	Sorting Code	Groundfish Weights	lbs or MT	Prohibited Species Count	Weigh Code
	NO DELIVERIES					

Submission of Catch Monitor Forms

The information submitted on the Catch Monitor Form will be used during the season for management purposes. This information is important for the monitoring of total catch and should be transmitted even if there are no landings.

If you have been assigned a laptop for data entry, data should be submitted **at least daily**. If for some reason, this is not possible, you should notify NMFS program staff immediately to assist in solving the problem and advising of alternate methods of data transfer. If you have not been assigned a laptop, follow instructions of program staff.

As soon as you have completed a day (0001-2400), you will be required to submit data to NMFS as a daily report. Please do not send incomplete data.

If you have any problems sending data or with the data entry software, immediately notify program staff so the problem can be resolved.

If you find errors in your data during the season, resubmit the corrected data as soon as possible.

6. Essential Information Section

Data Confidentiality

While you are deployed, the first receiver may ask to see your data for his facility. ***Never share logbook data or daily notes with the first receiver.*** All other data you collect may be shared with the first receiver.

Skippers and first receivers are often intensely secretive of their operations. They count on you to be discrete when discussing their operations.

If you are assigned to more than one first receiver during your contract, keep your data in a safe and secure place. **No first receiver personnel should ever be allowed to see data from another first receiver.** Sharing a first receiver's data, even inadvertently, can be grounds for decertification. Be particularly discreet when discussing problems, "fishing stories," or assignments in public places, on other vessels or through e-mail. You may inadvertently give more information than you mean to.

Signing Statements

First receiver personnel have occasionally requested that catch monitors make written statements, or sign prepared statements, regarding catch monitor duties, safety issues, validity of their data, or compliance issues. You may discuss these topics with industry members, but it is critical that you ***do not sign any forms that you have not previously seen in a training or briefing.*** Additionally, written statements should be prepared only for NMFS staff. If vessel or first receiver personnel want more information, please have them contact NMFS program staff (see "NMFS Contact Information" in your manual).

Completing and Organizing Forms

The specific directions on how to fill out each form can be found in the manual. ***Always have your manual with you when you are filling out paperwork*.** Have the instructions to each form in front of you when filling it out. This will save you time by allowing you to complete the form correctly and completely the first time, rather than returning to it to fix errors or fill in columns that were missed. More general information for completing your data forms follows.

Legibility

Your data and logbook entries must be clear and legible. If your writing is unclear, incorrect data may be entered into the in-season database used to manage the fishery. During debriefing, these errors need to be fixed, and if the debriefer is unsure of a number, s/he will need to have you present to interpret your data. This will lengthen debriefing time, and if questions cannot be resolved, may cause data to be lost. To ensure that your data are legible:

- write carefully in clear, dark writing

- check the forms for stray marks or incomplete erasures before faxing
- record the data in an organized manner.

Organization of Forms

Keep a separate set of data for each first-receiver assignment. For each first receiver you are assigned to, you may have Catch Monitor Forms, Salmon Bycatch Forms, Statement Forms, and/or fish and crab identification forms.

Page Numbering

Data forms are numbered separately for each form type. Page numbers must be entered at the top of each form in the "page __of__" fields. Put the number of the page in the first blank and the total number of pages in the second blank. For example, "page 3 of 40," indicates that this is the third page of forty for this form type. Delivery Verification Forms and Catch Weight Forms are two different form types, so they must be numbered separately. These forms should also be numbered separately if you are assigned to more than one first receiver during your contract.

Recording Time

When recording time in your logbook or anywhere else, use the 24-hour clock (0000-2359). **Most digital watches can be set to a 24-hour clock. This makes tracking and recording time easier.**

Monitor Logbook Entries

Your logbook is probably the single most important piece of data, because it contains additional information about all other data. Have your logbook with you whenever completing paperwork so you can easily record your calculations, make notes regarding your data collection, fill out scale verification records, and document seabird sightings and regulation issues. Many monitors make notes on their catch monitor forms to remind them of particular events that happened while they were on the dock. This is an excellent idea but is only effective if the details of the events are filled in as soon as possible in the logbook. Remember, events that seem ordinary to you on this assignment may be unusual to the fishery, so don't hesitate to write down any information that affects your work or day-to-day life at the facility.

Daily Notes Section (or E-log)

Use the Daily Notes section to include notes on problems that occur while you are on contract, any illnesses or injuries you suffered, and the reasons you chose all sampling methods used. Record the circumstances surrounding any violation you witness, including interference with your duties, harassment, or mishandling of prohibited species.

Set aside time every day to write Daily Notes.
Make an entry for every day, describing the day's events, even if it was what you would consider an "ordinary day." The more self-explanatory your notes are, the better. Logbooks may be consulted months or even years after your contract is

complete. Therefore, good documentation is vital to what NMFS considers “meeting expectations” for a successful contract.

Do not use your daily notes as a personal journal. Although you must document any interference or inappropriate behavior toward you, avoid venting frustrations or making slanderous, derogatory, or discriminatory remarks in your logbook. Your logbook must be kept private while you are on contract, but it is a public document and part of the data turned over to NMFS during debriefing. After this, the contents of the logbook and your name may be released.

The Logbook as Evidence

Your logbook is archived and used as a reference to give more information about your data. It may also be used as evidence if regulatory infractions were noted. Therefore, your calculations may be recorded in pencil, but ***all other entries must be in ink (or e-log).***If you need to make a correction, draw a single line through the incorrect word(s) and continue with the correct wording. Do not completely crossout anything, or use correction fluid, or tear out pages or parts of pages! If you obscure any part of an original entry, you leave the reader wondering what was originally there. This may affect the validity of your logbook and data.

Rounding Rules

If you are performing a calculation, carry the numbers out full field until you have reached your **final product.** Do not round any numbers within the calculation! It is important for you to recognize what final product you are calculating when deciding when to round a number. For example, you may need to use an average tote weight to calculate the total weight of whiting within a delivery. In this calculation, you would not round until you had calculated the total weight of whiting. It is a common mistake to round once the average weight is calculated. Rounding within a calculation will cost you time in debriefing!

Weights on the Catch Monitor Form should be rounded to two decimal places.

To round your final product:

- Look **only at the first digit** to the right of the number you are rounding
- If X $\geq$5, round up; if X <5, round down.

Establishing Schedule for Catch Verification

As a catch monitor, your primary task will be to monitor as many offloads as possible. Monitoring landings includes ensuring species are sorted to federal species groups and the scales are used accurately. In some situations, it will not be possible to verify all landings for accuracy. If you cannot monitor all deliveries, you must randomly select which deliveries you will verify. The use of a random selection method eliminates any subjectivity on your part. The advantage of this to you as a catch monitor is that you cannot be accused of bias against or for the first receiver, a vessel, or their personnel. When random selection methods are used to collect data, NMFS is justified in using statistical methods for estimating population parameters

based upon that data. The precision and accuracy of these estimates can then be determined.

Introduction to Random Selection Theory

The following section explains the basics of random selection theory. In order to properly verify deliveries, it is important that you have a good understanding of random selection theory. If you have any questions please contact NMFS program staff.

When it is not possible for you to monitor every delivery in the whiting season, you will make selections from a population of all deliveries. By using a random selection method to draw a selection from the population of deliveries, you ensure that **every delivery has an equal probability of occurring in the selection**. If every delivery is equally likely to occur in your selection, then when you repeat the selection over time, these repeated selections are representative of the population of all deliveries. If, over time, your selections are representative, they can be used to draw conclusions about the population of all deliveries from which they were taken.

There are four ways to select deliveries for verification:

1. Monitor all landings

   Random Break Table or Selection Table. If there are too many deliveries to verify every one, use the RBT or RST.

2. *Random Break Table*. If you think you can usually verify all deliveries but may need an occasional break, use the RBT.

3. *Both the RST and the RBT*. If after using the RST there are still too many landings to verify, incorporate the RBT as well as the RST.

4. *Not verified due to problem*. Use this code when a delivery should have been verified but was not due to a problem such as failure to notify or fatigue. If this code is used, it should have an accompanying incident report, where appropriate, and the monitoring program coordinator should be notified immediately.

Random Selection Table

In most cases, you should be able to verify all landings. If you doubt that you will be able to verify all of the deliveries landed at the first receiver on a normal day, use the RST to determine which deliveries to verify. If you feel that you will usually be able to keep up with all deliveries, but may need an occasional break if the number of deliveries picks up or you fall behind, the RBT may be a better choice. A discussion on when and how to use each of these tables follows.

Versions of the RST

There are three versions of the RST, based on the percentage of deliveries verified. Deliveries that are not supposed to be verified are referred to as "off," and deliveries that are to be verified are referred to as "on." ***Choose an RST that is appropriate and will best fit your needs.***

Use the RST that is most appropriate to your first receiver. You may always use a more stringent table if you can keep up with it!

The three versions of the RST that you can use are:

- 40 percent deliveries verified
- 50 percent deliveries verified
- 60 percent deliveries verified.

How to Use the RST

In the RST, the bold-face rows of type indicate the number of consecutive "on" deliveries that should be verified. The normal-face type rows are the number of consecutive "off" deliveries that are not verified. You will be instructed how to enter the RST during your training. Once you enter, your first deliveries selected will always be "on" deliveries. From this point, move vertically down through the table verifying or not verifying the number of deliveries as indicated. If you reach the bottom of a column, begin again at the top of the next column. If you reach the end of the table (Z, Z) continue at the top of the table (A, A).

The RST is for your use only. Your selections are meant to represent deliveries under normal circumstances. If the first receivers know which deliveries will or will not be verified, they would have the ability to alter their delivery schedules. In order to avoid this possible bias, do not give your RST to processor personnel.

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P
A	**3**	**1**	**1**	**2**	**1**	**1**	**1**	**1**	**3**	**3**	**1**	**1**	**3**	**3**	**2**	**3**
	1	1	2	3	3	1	3	3	1	2	2	2	1	3	3	2
B	**3**	**2**	**1**	**3**	**2**	**3**	**3**	**1**	**1**	**3**	**1**	**1**	**2**	**2**	**3**	**2**
	2	2	1	3	1	3	2	1	2	3	2	2	2	3	1	1
C	**1**	**1**	**3**	**2**	**1**	**1**	**2**	**1**	**1**	**1**	**3**	**2**	**3**	**3**	**1**	**2**
	2	3	2	2	3	1	3	1	3	3	2	3	3	3	3	2
D	**1**	**2**	**1**	**1**	**1**	**2**	**2**	**1**	**2**	**1**	**1**	**1**	**2**	**1**	**1**	**3**
	2	1	3	2	2	2	1	1	2	2	2	3	3	1	3	1
E	**2**	**1**	**1**	**1**	**1**	**2**	**1**	**3**	**3**	**1**	**3**	**2**	**1**	**1**	**2**	**3**
	2	2	3	1	1	1	2	1	1	2	2	1	3	1	2	2

In this example, verify 3 deliveries, take 3 off, sample 1 more, then take 1 off continuing to the bottom of the column.

Random Break Table

A random break table is used when the first receiver is taking too many deliveries and you can't enough sleep using the RST; or using the RST results in too much time off.

To use the RBT, randomly select a place to start. The easiest method is to close your eyes and place your finger on the page. The closest number to the tip of your finger is your starting place. This number is a time using a 24-hour clock. This is the time when you will start your break. Enter the date on the appropriate line. You will enter a date for everyday from the first day you use the RBT, whether or not you use the table every day. You can see in the table below that the first day the RBT was used was July 3rd; however, the monitor did not need to use the RBT again until July 8th.

Sample RBT:

DATE	_____	1600		DATE	7/7/2008	1200	
DATE	_____	0700		DATE	7/8/2008	~~0100~~	0330
DATE	_____	1200		DATE	7/9/2008	~~2200~~	2230
DATE	7/3/08	~~0800~~	2000	DATE	7/10/2008	~~1500~~	1800
DATE	7/4/08	1400		DATE	7/11/2008	~~0700~~	0800
DATE	7/5/08	2200		DATE	7/12/2008	1800	
DATE	7/6/08	1400		DATE	7/13/2008	1200	

Break Table Summary

- Take a break only on days you need it.
- If the delivery start time of an "on" delivery is before your break time, complete your verification before taking your six-hour break.
- Break for six hours, unless otherwise instructed by NMFS staff.
- Verify the next "on" delivery that has a retrieval time after the end of your six-hour break.
- Deliveries during your break continue to be counted against the RST.

Note — If you are too exhausted to wait for your break, document this in your logbook, take a six-hour break and call NMFS program staff to discuss verifying options.

Using Both the RST and the RBT

If using the random selection table does not allow you enough time to rest, you may use both the RST and the RBT. To do this, follow the RST when the time comes up on your break table, finish your selection, and then begin a six-hour break. Upon completing your break, compare the delivery schedule against your RST to figure out where you are on the table and re-enter the RST at that point.

If Your Verification Schedule is Too Rigorous

If you find that you cannot verify all the "on" deliveries, or that your other work is suffering, there are a few things you can try:

1.If you are only using the RST, start using the break table on some or all days.

2.Look ahead at your schedule and plan to make best use of your rest time. For example, if your RST reads that you have a four-on, one-off, four-on series coming up, try getting more rest before this series. Complete paperwork, nap, and eat between selections, so you have a larger block of rest time during your off haul.

3.If you get caught in an unworkable situation, you can skip one of the deliveries in the series to be verified. If you do not select an "on" delivery, continue verifying the rest of the series as if you had. In the four-on, one-off, four-on series example, if you needed to rest for two deliveries, you would verify four deliveries, rest for two, and verify three deliveries to complete the series. If it is necessary to skip "on" deliveries on a continuing basis, contact NMFS program staff for advice. ***Do not verify "off" deliveries to make up for skipped "on" deliveries!***

4.If you are having difficulty following the RST or RBT regularly, contact NMFS for assistance (see Contact Addresses and Numbers **in Appendix H**). Do not use a solution that has not been approved by NMFS!

Frequently Asked Questions about the RST and RBT

I am supposed to verify four deliveries in a row. The third delivery comes in at 1450, and I am scheduled to begin a break at 1500. Do I verify that delivery?

Yes. Verify the third delivery in that block and then take your six-hour break. When you finish your break, you will re-enter the RST. To re-enter, check the delivery schedule against the RST to see when the next "on" delivery will arrive.

Can I skip breaks and only take them on a few days when I need to?

Yes. On the table, record the date of each day, whether or not a break was taken. You cannot accumulate break time by skipping a day and taking a longer break the following day. You cannot take more than one break per day.

Can I verify more deliveries than those indicated on the RST?

No. Do not verify "off" deliveries on the RST unless you can verify all the deliveries. If the number of deliveries taken by the first receiver was overestimated, you may switch to a more rigorous RST. However, you should not switch more than once.

My break is over, and the delivery currently being processed is an "on" delivery and is about half unloaded. Should I monitor the remaining portion?

No. Since the catch is already half unloaded, you were not present to verify that all bycatch was sorted and weighed to federal species groups. Use this time to complete paperwork, get some more sleep, or take some down time for yourself.

Suppose my break is just ending, and the next delivery unloaded is an "off" delivery, resulting in a longer break than I need. Should I stick to the RST and not verify?

Yes. You should verify only the designated deliveries, resulting in a longer break than the six hours scheduled. Consequently, you may not need to take a break the next day.

I was just assigned to a different processor. How does this affect my use of the RST?

If you are assigned to a new first receiver, continue where you left off on the table if you were in the middle of an "on" series or were going to start another. If you left off in the middle of an "off" series or were going to start another, skip to the next "on" series. **Your first delivery at a first receiver should always be an "on" delivery.**

Species Identification Forms

Your species ID sheets are verification of your correct identification of species seen during a deployment. **Complete, detailed and correct species identification forms are required for all fish and crab species.** First-time monitors are required to complete species ID forms for the first sighting of all fish and crab species. Prior catch monitors will need to complete ID forms for species that have not had an acceptable form filled out in the past. If a prior catch monitor demonstrates a problem with species identification, s/he may be required to complete ID forms for each species seen during his/her next deployment. The rules for filling out these forms are:

- Species ID forms are not needed for invertebrates other than crab species.
- Species should be identified to federal species groups or more specific.

- If you further identify an organism that only needs to be keyed to family, you must fill out a new form for the identified species (e.g., sandpaper skate would need a separate form than skate unidentified).
- Species ID forms **must be filled out with the fish in hand!**
- Species ID forms must describe in detail what you observed from your specimen. Do not copy information verbatim from the key.

During debriefing, you may be asked to provide a verbal description of a fish if you don't have an ID form or if it is incomplete. It is advisable to redo ID forms on species that you do not encounter frequently, so that you have a written record to refer to.

Unidentified Fish

Never guess the identification of a species. If you encounter an individual fish, crab, or bird that you cannot identify, fill out a species description form with as much information as possible. You may find a more identifiable specimen of the same species later, so organize your unidentified fish descriptions with names such as "unidentified dark rockfish #1," or "mystery fish #5." Record all form heading information, so that the data can be changed if the fish is identified later. **Ideally, you should bring the specimen back to NMFS.** If you are unable to bring the fish back, please take photographs of the specimen for ID purposes.

Record unidentified fish in your Catch Monitor Form using the most appropriate group code. For example, an "unidentified long-faced flatfish" should be recorded using the "flatfish unidentified" group code of 100, because you can positively identify it as being a flatfish.

Working with Two Monitors

Some first receivers will take two monitors so that they may operate 24 hours a day. This gives monitors the opportunity to work together. Both monitors are expected to work together as a team to provide **CONSISTENCY** in sampling techniques, data recording, and communications with first receiver personnel. Your employer will assign a "lead" monitor. The other monitor is referred to as the "second."Although **the lead catch monitor is not in a supervisory position,** his/her role is slightly different from that of the second.

Lead Monitor's Role

As a lead monitor, you will be responsible for the entire data set. All data, including catch monitor forms and salmon bycatch forms, should be recorded under your Catch Monitor Number and entered on your laptop, regardless of who actually collected it. As a lead monitor, you are also responsible for ensuring that catch messages are sent to NMFS on time. You and the second catch monitor should maintain separate Daily Notes in your own logbooks or the e-log. If using the e-log, both monitors should enter notes on the lead monitor's laptop.

Because lead monitors are responsible for the data set, they need to direct the sharing of duties and other activities of the monitor team. In instances when opinions differ, the lead monitor will have the immediate say in the matter. NMFS program staff should be notified immediately and will have the final say.

As the lead, your role in debriefing is more involved than that of the second. You are responsible for submitting the data set to NMFS and for making all necessary corrections to the data set. Therefore, it is in your best interest to double-check all paperwork according to the instructions given in the manual. NMFS staff will try to debrief you and the second monitor at the same time, if logistically possible. This is preferred, since speaking to both monitors at the same time makes it easier to clear up any data questions.

Second Monitor's Role

The second monitor has the same responsibilities for data quality and integrity as the lead. As the second monitor, you will record all the data you collect under the lead monitor's identification number, except in the "Delivery Verified By" column on the Catch Monitor Delivery Form, where you will record which deliveries you verified. The only data that you will collect under your own identification number are your fish ID forms and your Daily Notes. Any compliance issues that you witness should be documented thoroughly in your logbook, and the lead catch monitor should be notified. Data collection problems that arise during your shift should be handled immediately, and you should inform the lead monitor. The lead monitor will resolve recurring problems.

If you and the lead monitor do not debrief at the same time, you will need to reconstruct your time at the first receiver during your debriefing interview. Keep very detailed notes in your own logbook regarding how you verified deliveries and any problems you encountered to help you remember specific events aboard the vessel. You may make photocopies of calculations, diagrams, or other pertinent information from the lead monitor's logbook to bring to debriefing, if you would like (this is not required, but some monitors have found it helpful). With the exception of making data corrections, your debriefing will be the same as that of a lead or solo monitor.

Shared Duties

As a part of the monitor team, you are expected to maintain effective communication with your fellow monitor. You should agree on a specified time between shifts to discuss pertinent offloading and verification activities that occurred during the previous shift. Decide on a **secure** common area to leave recent data that your colleague needs to error check. Each monitor is responsible for all landings during his/her shift. Each monitor should be on duty for no more than 12 hours in a 24-hour period. Both monitors should share the responsibility of collecting the data for the Catch Monitor Form. Additionally, both monitors are responsible for, and should take the initiative in, resolving data collection problems that arise because of first receiver configuration and operation. Remember that both monitors should always be advised of all pertinent activities and instances related to monitor duties. Be sure to

establish a system of checking data before sending. **Checking someone else's data for errors is more efficient than checking your own — do both!**

Verifying Deliveries - Tasks

For **every** whiting delivery:

- Enter the landing information in the Catch Monitor Form header.
- Ensure plant operations match the monitoring plan.
- Check for prohibited species; if present, enter the prohibited species counts on a Catch Weight Verification Form and check for coded wire tags (CWTs).

For verified deliveries:

- Ensure ALL catch has been sorted and weighed to federal species groups. This includes:
    - Value whiting
    - Non-value whiting (weighbacks/garbage hake)
    - All nontarget species.
- Ensure the tanks are empty upon completion of offload.
- Remember to collect all data necessary to accurately complete required forms. (Example: remember to record data for both weighback whiting and value whiting to get an accurate weight of total whiting landed.)
- Ensure scales are used properly.
- If the first receiver uses totes to weigh whiting:
    - Tally all whiting totes
    - Record the weight of ice, if applicable
    - Record the tared weight of 10-20 full totes randomly selected from the offload so that an average weight of whiting per tote can be calculated.

For unverified deliveries:

- Indicates a problem. NMFS program staff should be contacted to discuss appropriate verification solutions.

For days when there are no deliveries, enter zero in the delivery number field and the date.

Daily/Irregular Tasks

- Submit data.
- Average tote weights (empty).If the first receiver uses totes to weigh whiting (either weighbacks or value whiting), you should record an average tote weight even if you can normally watch and record all totes being weighed. Ask the first receiver to weigh 20 totes per month of each type of tote to use as an average tote weight. Record this in the appropriate section of your logbook. Work with the first receiver to find a time convenient for both of you to accomplish this task. **Average tote weights should NOT be used when weighing bycatch!**
- Complete daily notes section in logbook (or e-log).

- Complete statements for enforcement whenever necessary. If not sure, complete and submit.
- Take photos of the first 10 salmon OF EACH SPECIES you see.
- Complete species ID forms for all new species.

Photo Collection (in addition to salmon)

- Salmon gonad photos
- Plant operations (unloading, sorting, weighing, recording)
- Comparative photos (i.e., herring, shad, sardine/ king, silver/Pacific mackerel, jackmackerel)
- Photos taken to supplement fish ID diagrams
- Catch Monitors at work
- Interesting photos for manual covers, presentations, etc.
- Evidence.

Fish Collection (Handout)

Debriefing

You will need to complete an exit interview, or debriefing, as soon as you complete your work as a catch monitor. The debriefing process is our opportunity to talk to you about your monitoring procedures, the information you collected, and the operations at the first receiver. We need to be sure that we clearly understand how you collected your information and the problems you faced during your deployment so we can better refine the program and supporting regulations for future years. The debriefing is also your opportunity to let us know about problems or difficulties you had completing the catch monitor responsibilities.

Before your debriefing interview, you will need to turn in the following items:

- Completed data forms

- Salmon snouts
- Logbook
- Species identification sheets
- Any specimens you may have collected.

Your debriefing will likely occur in Portland, Ore., in the days immediately following your deployment. When you turn in your completed data forms, they will be reviewed for completeness, and you may be asked to make changes to your forms. You may also be asked to provide additional clarification on some of your data or your logbook. While you are making changes or adding clarification, you may schedule your debriefing interview, provided you complete all the changes before the interview. Please be aware that you are obligated to be available and to complete the debriefing process. At the end of your debriefing, you will receive a brief written evaluation of your work.

Error-checking your data PRIOR to debriefing includes but is not limited to:

- Completing all required fields
- Making sure vessel and first receiver codes are correct
- Double-checking ALL calculations (this requires recording all raw data in the field)
- Ensuring that you have used correct codes for EVERY entry
- Ensuring data is legible
- Ensuring page numbers have been completed.

Logbook

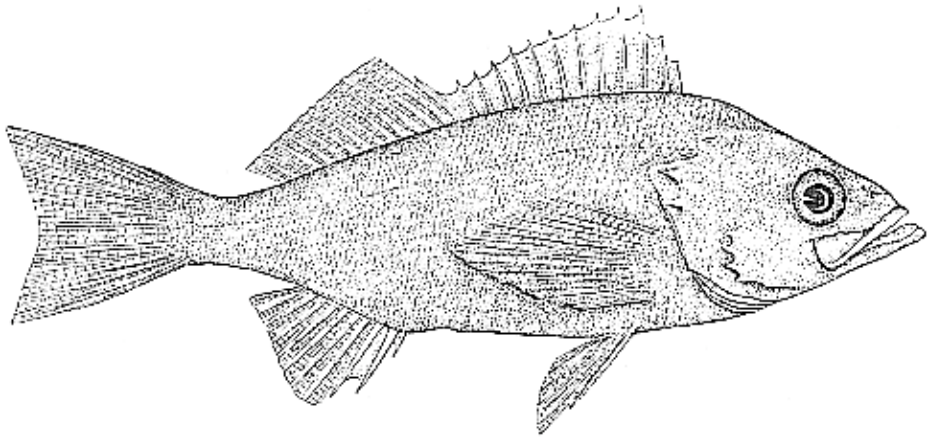
- Make sure **all** sections of your logbook are complete, including but not limited to diagrams, daily notes, average weight calculations, photo log, etc.

ALL data should be submitted electronically prior to turning in your data for debriefing.

Equipment

Before your debriefing is complete, you will need to turn in your unused forms, species identification books and guides, salmon wands, spring scales, and other supplies. Please bring these items with you when you arrive for your debriefing. These items should be clean and ready to turn in. Scales should be well-oiled. There are no cleaning facilities at the debriefing location. If equipment is not clean when you arrive for debriefing, you will be asked to take it with you and return it clean prior to your debriefing.

7. SPECIES IDENTIFICATION



Groundfish Species Groups

There are more than 90 species of groundfish managed under the groundfish management plan. These include more than 60 species of rockfish in the family *Scorpaenidae*, seven roundfish species, 12 flatfish species, assorted sharks, skates, and a few miscellaneous bottom-dwelling marine fish species. The groundfish species occur throughout the Exclusive Economic Zone and occupy diverse habitats at all stages in their life history. Groundfish species group descriptions can be found at § 660.302 under the definition for Groundfish — http://edocket.access.gpo.gov/cfr_2008/octqtr/pdf/50cfr660.302.pdf

Groundfish report groups are as follows:

Roundfish Groups

689 Cabezon, *Scorpaenichthys marmoratus*
603 Lingcod, *Ophiodon elongates*
202 Pacific cod, *Gadus macrocephalus*
206 Pacific whiting, *Merluccius productus*
203 Sablefish, *Anoplopoma fimbria*

Flatfish Groups

141 Arrowtooth flounder, *Atheresthes stomias*
107 Dover sole, *Microstomus pacificus*
108 English sole, *Parophrys vetulus*
112 Petrale sole, *Eopsetta jordani*

105 Rex sole, *Glyptocephalus zachirus*
142 Starry flounder, *Platichthys stellatus*

1000 Other flatfish
- **109** Butter sole*, Isopsetta isolepis*
- **117** Curlfin sole, *Pleuronichthys decurrens*
- **103** Flathead sole, *Hippoglossoides elassodon*
- **137** Pacific sanddab, *Citharichthys sordidus*
- **121** Rock sole, *Lepidopsetta bilineata*
- **115** Sand sole, *Psettichthys melanostictus*

Rockfish Groups
This group includes *Scorpaenidae* genera:*Sebastes*, *Scorpaena*, *Scorpaenodes*, and *Sebastolobus*.
- ***306*** Black rockfish, *Sebastes melanops*
- ***302*** Bocaccio, *Sebastes paucispinis*
- ***423*** California scorpionfish, *Scorpaena guttata*
- ***314*** Canary rockfish, *S. pinniger*
- ***325*** Chilipepper, *S. goodei*
- ***360*** Cowcod, *S. levis (South of 40°10'N lat. in north it's with minor shelf rockfish)*
- ***311*** Darkblotched rockfish, *S. crameri*
- ***352*** Longspine thornyhead, *Sebastolobus altivelis*
- ***301*** Pacific ocean perch, *S. alutus*
- ***318*** Shortbelly rockfish, *S. jordani*
- ***350*** Shortspine thornyhead*, Sebastolobus alascanus,*
- ***315*** Splitnose rockfish, *S. diploproa (South of 40°10'N lat. in north it's with minor slope rockfish)*
- ***305*** Widow rockfish, *S. entomelas*
- ***322*** Yelloweye rockfish, *S. ruberrimus*
- ***321*** Yellowtail rockfish, *S. flavidus*

"Other Rockfish"
- ***3001*** Minor Nearshore Rockfish North
  - **355** Black & yellow rockfish, *S. chrysomelas*
  - **316** Blue rockfish, *S. mystinus*
  - **332** Brown rockfish, *S. auriculatus*
  - **357** Calico rockfish, *S. dalli*
  - **359** China rockfish, *S. nebulosus*
  - **327** Copper rockfish, *S. caurinus*
  - **360** Cowcod, *S. levis*
  - **364** Gopher rockfish, *S. carnatus*
  - **365** Grass rockfish, *S. rastrelliger*
  - **369** Kelp rockfish, *S. atrovirens*
  - **371** Olive rockfish, *S. serranoides*
  - **343** Quillback rockfish, *S. maliger*
  - **380** Treefish, *S. serriceps*

3002 Minor Shelf Rockfish North
- **356** Bronzespotted rockfish, *S. gilli*
- **358** Chameleon rockfish, *S. phillipsi*
- **355** Dusky rockfish*, S. ciliatus*
- **361** Dwarf-red rockfish, *S. rufianus*
- **362** Flag rockfish, *S. rubrivinctus*
- **363** Freckled rockfish, *S. lentiginosus*
- **366** Greenblotched rockfish, *S. rosenblatti*
- **339** Greenspotted rockfish, *S. chlorostictus*
- **313** Greenstriped rockfish*, S. elongatus*
- **367** Halfbanded rockfish, *S. semicinctus*
- **323** Harlequin rockfish, *S. variegatus*
- **368** Honeycomb rockfish, *S. umbrosus*
- **370** Mexican rockfish, *S. macdonaldi*
- **372** Pink rockfish, *S. eos*
- **373** Pinkrose rockfish, *S. simulator*
- **335** Pygmy rockfish, *S. wilsoni*
- **324** Redstripe rockfish, *S. proriger*
- **309** Rosethorn rockfish, *S. helvomaculatus*
- **312** Rosy rockfish, *S. rosaceus*
- **310** Silvergray rockfish, *S. brevispinis*
- **376** Speckled rockfish, *S. ovalis*
- **377** Squarespot rockfish, *S. hopkinsi*
- **378** Starry rockfish, *S. constellatus*
- **328** Stripetail rockfish, *S. saxicola*
- **379** Swordspine rockfish*, S. ensifer*
- **329** Tiger rockfish, *S. nigrocinctus*
- **331** Vermilion rockfish, *S. miniatus*

3003 Minor Slope Rockfish North
- **334** Aurora rockfish, *Sebastes aurora*
- **337** Bank rockfish, *S. rufus*
- **319** Blackgill rockfish, *S. melanostomus*
- **308** Redbanded rockfish, *S. babcocki*
- **307** Rougheye rockfish, *S. aleutianus*
- **304** Sharpchin rockfish, *S. zacentrus*
- **326** Shortraker rockfish, *S. borealis*
- **315** Splitnose rockfish, *S. diploproa*
- **320** Yellowmouth rockfish, *S. reedi*

Miscellaneous Groundfish Groups

66 Spiny dogfish, *Squalus acanthias*

4000 "Other Fish"

392 Kelp greenling, *Hexagrammos decagrammus*

65 Sharks
- **582** Leopard shark, *Triakissemifasciata*
- **64** Soupfin shark, *Galeorhinus zyopterus*

90 Skates
- **550** Big skate, *Raja binoculata*
- **552** California skate, *R. inornata*
- **554** Longnose skate, *R. rhina*

99 Ratfish, *Hydrolagus colliei*

214 Finescale codling, *Antimora microlepis*

83 Pacific rattail, *Coryphaenoides acrolepis*

Species Identification Forms

Your species ID sheets are verification of your correct identification of species seen during a deployment. **Complete, detailed and correct species identification forms are required for all fish and crab species that are new to you.** First-time catch monitors are required to complete species ID forms for the first sighting of all fish species. Prior monitors will need to complete ID forms for species that have not had an acceptable form filled out in the past. If a prior monitor demonstrates a problem with species identification, s/he may be required to complete ID forms for each species seen during his/her next deployment. The rules for filling out these forms are:

- Species ID forms are not needed for invertebrates other than crab species.
- Species should be identified to the level provided in the keys and guides issued by NMFS.
- If you further identify an organism that only needs to be keyed to family, you must fill out a new form for the identified species (e.g., red Irish lord would need a separate form than Irish lord unidentified).
- Sharks should be identified to species using the Family Key and/or Eschmeyer.
- Species ID forms **must be filled out with the fish in hand!**
- Forms should be completed the first time you see each new species. The whiting fishery is quite variable, and you might not have another opportunity to collect the information.
- Species ID forms must describe in detail what you observed from your specimen. Do not copy information verbatim from the key.
- For instructions on how to properly weigh and measure a fish, refer to Chapter 8, Prohibited and Protected Species

During debriefing, you may be asked to provide a verbal description of a fish, if you don't have an ID form, or if it is incomplete. It is advisable to redo ID forms on species that you do not encounter frequently, so that you have a written record to consult.

Unidentified Fish

Never guess the identification of a species. If you encounter an individual fish, crab, or bird that you cannot identify, fill out a species description form with as much information as possible. You may find a more identifiable specimen of the same species later, so organize your unidentified fish descriptions with names such as "unidentified dark rockfish #1," or "mystery fish #5." Record all form heading information, so that the data can be changed if the fish is identified later. **Ideally, you should bring the specimen back to NMFS.** If you are unable to bring the fish back, please take photographs of the specimen for ID purposes.

If you are unsure of the identification of a specimen, use all available resources. Ask state biologists for assistance, if available, and check the groundfish groups to see what reporting group is required. For example, if you're not sure if a rockfish is a shortraker or a blackgill, you can record it as "Minor Slope Rockfish North", since they are both in the same group.

If after all efforts you cannot identify a specimen, use the most specific grouping possible; for example, rockfish unidentified, flatfish unidentified, roundfish unidentified, or Other ID Fish (fish unidentified).

Note—Roundfish unidentified refers to the groundfish category, not the body type.

Do not advise first receiver of reporting requirements, as state requirements may be more specific than federal requirements.

See Appendix B for all species description forms!

8. PROHIBITED AND PROTECTED SPECIES

Workload Priorities

- Verifying prohibited species counts
- Collecting data from coded wire tag (CWT) salmon
- Collecting fin clips for genetic stock identification(GSI) analysis
- Coordinating prohibited species disposition with states representatives.

Prohibited Species

Prohibited species are species or species groups whose retention is prohibited unless authorized by other applicable law. In the Pacific whiting shoreside fishery, most vessels fish under an Exempted Fishing Permit (EFP) that allows them to retain and land prohibited species, provided the vessel abandons them to the state of landing upon offload.

In the groundfish fishery prohibited species includes any species of salmonid, Pacific halibut, or Dungeness crab caught seaward of Washington or Oregon. Dungeness crab is not a prohibited species if caught in waters off California and landed in California.

Verifying prohibited species counts

It is your responsibility to count all of the prohibited species by species and record this information on the Catch Monitor Delivery Form. Prohibited species should always be recorded as a number on your Delivery Form. For deliveries that you do not verify, fill out a Delivery Form and complete for prohibited species only; do not fill in any other nontarget species or whiting. Leave the sorting and weighing codes blank, since you were not present to confirm the actions of the first receiver.

Once an offload has been completed, and the prohibited species have been counted and weighed, you will collect the snouts, fin clips, and biological data from salmon as outlined below. Once this is completed, ensure that the fish stay iced and secured, separated by landing, until state biologists come to retrieve the salmon, halibut, and Dungeness crab (in Washington and Oregon).

The EFP requires upon completion of the offload that the vessels abandon all prohibited species to the state of landing for disposal or donation. You will need to

work cooperatively with the state port biologists so you have an efficient system for gathering the information you need before the biologists transport the catch for donation to local hunger relief agencies. You will meet the state port biologists near the beginning of the season to work out the details of this task.

Salmon

Salmon pose a unique problem in that they are difficult to identify correctly. As documentation for resolving identification issues that may arise, you will take photos of the first 10 salmon of each species encountered during your contract using the digital camera assigned to you. When you take the photos, ensure the identifying characteristics are visible; take more than one photo when necessary. Be sure to record the photo number, species, date, and delivery number in the photo log in your logbook. If you run out of lines in the photo log, use the following blank pages in the logbook.

Collecting information from coded wire tag (CWT) Salmon

Salmon with clipped adipose fins may contain internal tags, such as coded wire tags (CWTs) or passive integrated transponder (PIT) tags or external disc-shaped tags. Coded wire tags are small pieces of stainless steel wire about 1 mm in length, have a distinct code, usually alphanumeric, and are inserted into the snout of an animal. This code contains information about where and when the fish was tagged. Data from tag recoveries can then be used by endangered species scientists to determine which populations are experiencing mortality associated with the fishery, as well as population-specific migration patterns.

Determining whether a salmon has a CWT or PIT is impossible without a scanner. In previous years, tagged salmon have been identified by a clipped adipose fin. However, changes in clipping techniques have resulted in some tagged salmon having clipped adipose fins and some not. Most monitors will be issued scanning wands. Those that are not will collect snouts from all salmon with clipped adipose fins **(Figure 8-1)**, which will be checked later for the presence/absence of CWTs and PITs.

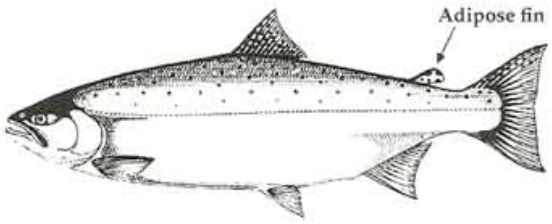


Figure 8-1

The following section includes instructions on how to collect data from salmon that you believe have CWTs.

Data Collection

Before you begin, set up an area to measure and weigh your fish. You will need to use or create a “table” large enough to lay a fish on the plastic strip. If there is no table set up, use the NMFS aluminum board or a tote.

Collecting CWT (Snouts)

Salmon with CWTs may be identified by a missing or clipped adipose fin. To remove the salmon snout, use your knife to make a cut one to two centimeters behind the eye down through the head to the base of the upper jaw. Ensure you cut the snout outside of the eye orbit and corresponding tissue and muscle. You do not need to include the lower jaw since tags are placed in the upper snout **(Figure 8-2).**

Figure 8-2

Once you have removed the salmon snout, fill out the Salmon Bycatch Form **(Figure 8-5),** place it in the ziplock bag, and keep it with the snout.

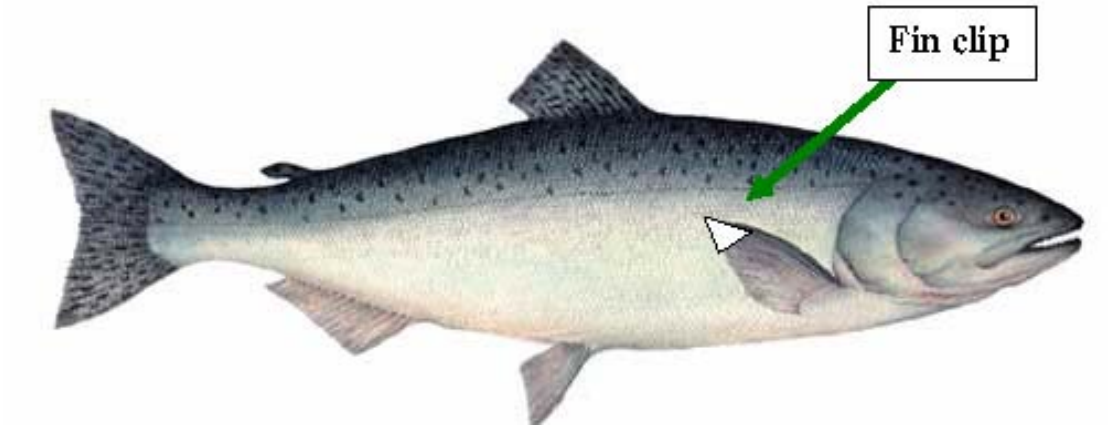
Place only one snout and one snout tag in each of the bags you were issued. Work with the first receiver to freeze the snouts, if possible. If this is not possible, you will need to put several handfuls of table or rock salt in the bag. Periodically drain off any liquid that accumulates in the bag and change the salt.

- **Keep snouts frozen! Use salt only if you have no other option.**
- **Only one snout per bag.**
- **If you are running low on supplies, call NMFS staff to get more BEFORE you run out.**
- **Remember to get frozen snouts out of the freezer when you finish your contract.**

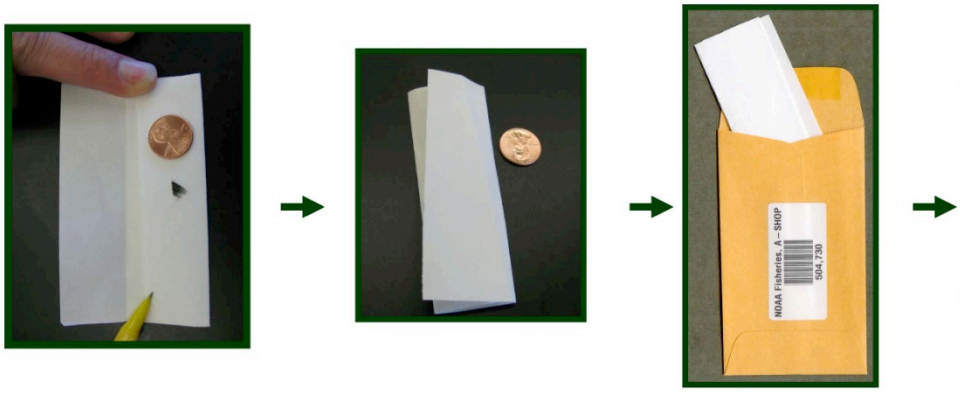
Collecting Fin Clips for Genetic Stock Identification (GSI)

Starting in 2009, whiting catch monitors began collecting genetic samples from Chinook salmon for Project CROOS (Collaborative Research on Oregon Ocean Salmon). CROOS is an interdisciplinary partnership between the salmon troll industry and university, federal, and state agency scientists and managers. The goal is to discover stock-specific distributions of **Chinook salmon** along the entire West Coast. Pectoral fin clips are genetically analyzed to determine stock.

In the 2010 whiting fishery, tissue samples and CWT data are to be collected from salmon bycatch to determine the genetic stock identification (GSI) of this fishery. Tissue samples are to be collected from as many Chinook salmon as time allows.



Cut a dime-sized clip from the pectoral fin using clean scissors. Place tissue in the folded piece of copier paper and put in the envelope.



Fill out appropriate forms to accompany data collected

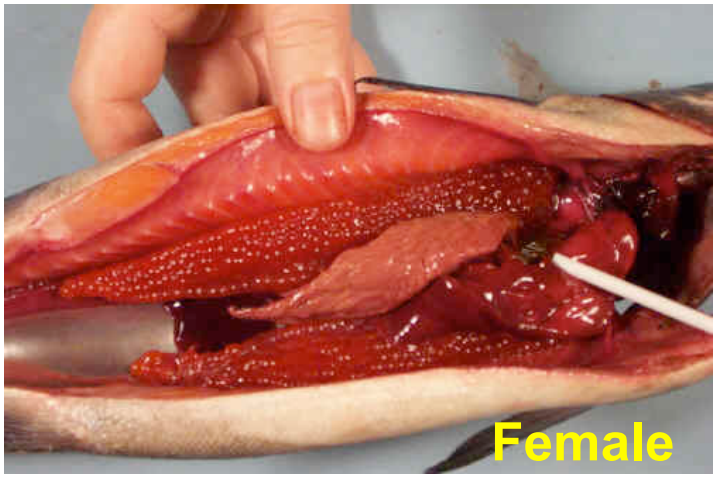
Note — Blood or tissue from other fish will contaminate the DNA tissue samples. Wipe or rinse scissors between fish.

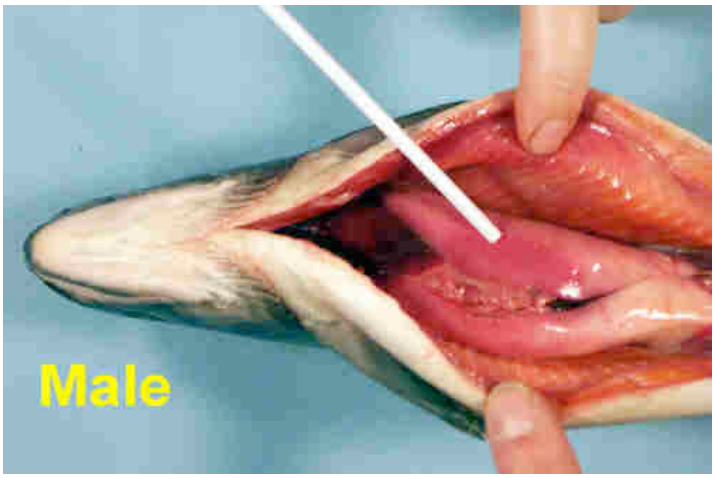
Genetic samples should be stored in a dry location with adequate ventilation. The samples need to dry out as quickly as possible. Do not place the samples in plastic bags or other sealed environments, because the samples will decompose rather than dry out.

Weights

In your assigned gear, you will find two scales, six lbs and 50 lbs. Always use the smaller scale to weigh your fish when possible, as it is more accurate. The biological data you collect should always be recorded in pounds.

Sex





Salmon gonads are far forward in the body and immediately under the backbone. Since many of the fish you will sex will be donated to food banks, it is preferred that you sex salmon with a cut from the anus to the isthmus so as not to damage the product. The gonads will be two long tubes lying parallel to the backbone. Females, mature and immature, will have tubes containing granular eggs in sacs that are pink, yellow, or orange. Mature males will have smooth textured tubes of white or cream color. Immature males will have translucent white tubes that appear empty. They may resemble thin translucent ribbons.

Determine the sex of all the measured fish. If you cannot determine the sex of all the fish, determine the sex of a random subsample of the measured fish. Record the unsexed fish lengths with a “U”.

Lengths

You will be given plastic measuring strips marked at centimeter increments. The first line printed on the strip is 4.5 cm, and the space between that line and the next line represents a measurement of 5 cm. Check your plastic strip on both sides to insure that the first line is really 4.5 cm. Sometimes the manufacturer has cut the strip incorrectly. Notice that the 10-centimeter increments are not marked with a number. That is so you can offset the strip by 10, 20, or 30 centimeters for the larger fish. **Figure 8-3** shows offsetting the plastic strip for measuring large fish. Position the plastic strip on the NMFS aluminum board. The labeled end should be toward the lip of the board, so the snout of the fish may be nudged against it. Alternatives to the aluminum board may be used for taking measurements, but you must be able to nudge the snout against something. The plastic strip can be held down with thumbtacks, tape, or fish slime (rub the back of the strip on the fish and it will “glue” temporarily to the board).

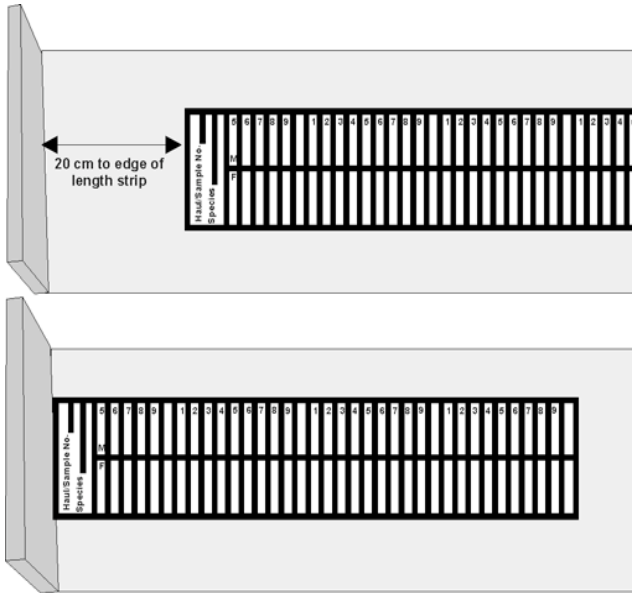


Figure 8-3. Measuring Strip Placement

Steps to Measuring Fish

1.Weigh and sex the fish first, if possible.
2.Lay the fish flat on the plastic measuring strip, parallel to the center line.
3.Close the jaws.
4.Nudge the fish snout against the end of the aluminum board.
5.Stretch out the tail to find the middle rays **(see Figure 8-4).**
6.Read the space where the fork length falls and record this length on a deck form.

If the fork length falls on a printed line on the strip, try remeasuring the fish. If the length falls on the line again, use the **lower** centimeter measurement. If you choose to write directly on the length strip, it should be cleaned with scouring powder to remove the marks and ready it for the next haul's lengths. Be sure you have recorded your data before you clean it! Don't scrub too hard, because you may scour off the centimeter lines!

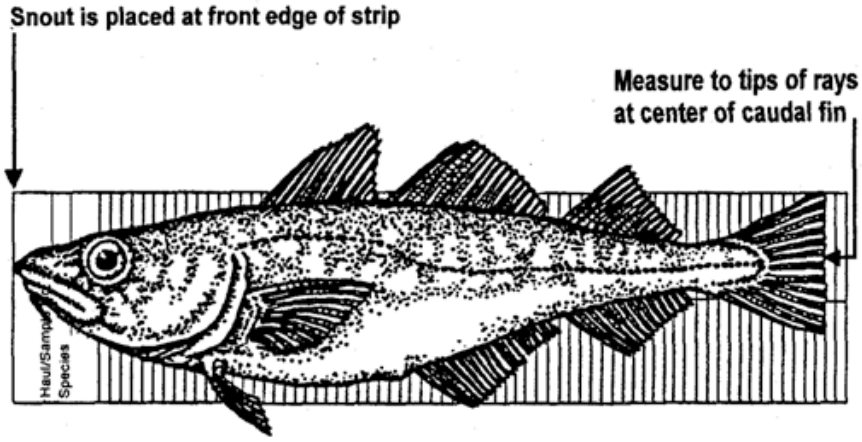


Figure 8-4

Measure all salmon to the fork length. Fork length is the length from the tip of the snout or jaw (whichever sticks out most) to the end of the middle rays of the caudal fin **(see Figure 8-4).**

Sampling Instructions

ALL salmon should be recorded on the Salmon Bycatch Form.
ALL salmon should be examined for clipped adipose fins.

1. Count and identify all salmon to species; record on the Salmon Bycatch Form.
2. Collect GSI data (fin clips) from ALL Chinook salmon.
3. If it is not possible to collect GSI data from all salmon (for example, you get a delivery with more than10 Chinook salmon):

    a. RANDOMLY select a subsample of the entire salmon population (i.e., select every *n*th salmon)from which you will:

        i. identify specimens to species

        ii. collect GSI data (pectoral fin clip) from **Chinook salmon** in the subsample and complete the Salmon Bycatch Form

        iii. examine salmon subsample for CWT; collect snouts where appropriate and complete the Salmon Bycatch Form.

    Note —it is important that the GSI samples are collected

randomly.

b. From the specimens OUTSIDE your randomly selected subsample:

i. identify specimens to species

ii. examine salmon for CWT; when CWT fish are found, collect snout and take a GSI sample.

iii. be sure to mark the box that specifies that the data was collected from outside your randomly collected sample.

Once you have completed all data collection from the salmon within your sample, collect the snouts along with fin clip samples from any adipose-clipped salmon outside your sample, add the data to your form, and be sure to mark the box that specifies that the data were collected from outside your randomly collected sample. Place each snout **individually** in a plastic bag with its corresponding snout tag.

State Specific Procedures
California

1. Snouts should be collected from all salmon with a clipped adipose fin, if possible, even if the wand does not indicate the salmon has a tag.
2. Photocopy all salmon paperwork to turn in during debriefing.
3. Snouts, fin clips, and accompanying paperwork should be turned over to the California Department of Fish and Game (CDFG) for processing when you are finished your assignment.

4. Contact Ed Roberts for assistance with salmon donations:
   Office — (707) 441-5757
   Cell — (707) 599-5318

Washington and Oregon

1. Snouts and GSI data should be collected and turned in during debriefing.
2. Coordinate directly with Oregon Department of Fish and Wildlife (ODFW) and Washington Department of Fish and Wildlife (WDFW) samplers in your port to get the salmon to the food bank.

Documenting Salmonids

- Complete a **Salmon Bycatch Form (Figure 8-5).**If you run out of tags, be sure to use write-in-the-rain paper to mark the snouts temporarily and contact NMFS program staff to arrange to get more. Do not use plain paper as replacement!

- Take photos of the first 10 salmon of each species you see during your contract. Be sure to document the photo numbers in your logbook photo log.

- Ensure the page-number fields are completed.

Salmon Bycatch Form Instructions

- *Page numbers* at the top of the page should be numbered for each landing. For example, if you have a delivery in which two pages are required to record the salmon, the pages should be numbered “1 of 2” and “2 of 2”.

- *Delivery Number:* Enter the corresponding delivery number from the delivery form.

- *State Ticket Number:* The number assigned to each delivery by the first receiver can be found on official state records.

- *Overage Ticket Number:* An additional ticket number assigned to deliveries that have exceeded trip limits for specific species. Only Oregon and Washington have overage tickets**.**

- *Port:* The town where the first receiver is located.

- *Whiting (lbs):* Total pounds from the state fish ticket.

- *Verified by (CM) Number and Name:* Record your contract number (assigned during training) and your first and last name in the appropriate fields.

- *First Receiver Number and Name:* Each first receiver has a unique number; a list is provided in **Appendix I**. Record the name of the first receiver in the appropriate field.

- *Vessel Number and Name:* Acquire this number directly from the vessel or from the list in **Appendix J**, along with the name of the delivering vessel.

- *Date Offload Began:* This is the date the offload BEGINS.

- *Start Time:* Using a 24-hour clock, the time the offload began.

- *Finish Time:* Using a 24-hour clock, the time the offload was completed.

- *Total Salmon Count:* Total number of salmon landed in the delivery, by species.

- *Species Name:* Record common name of the salmon species.

- *Adipose Clipped?*
  - **Y** if the specimen’s adipose fin was clipped.
  - **N** if the specimen’s adipose fin was not clipped.

- *Snout Tag # (CWT):* Record the number of the tag inserted into the snout bag for

identification purposes. Do NOT abbreviate number.

- *Length (cm):* Record the length in centimeters.

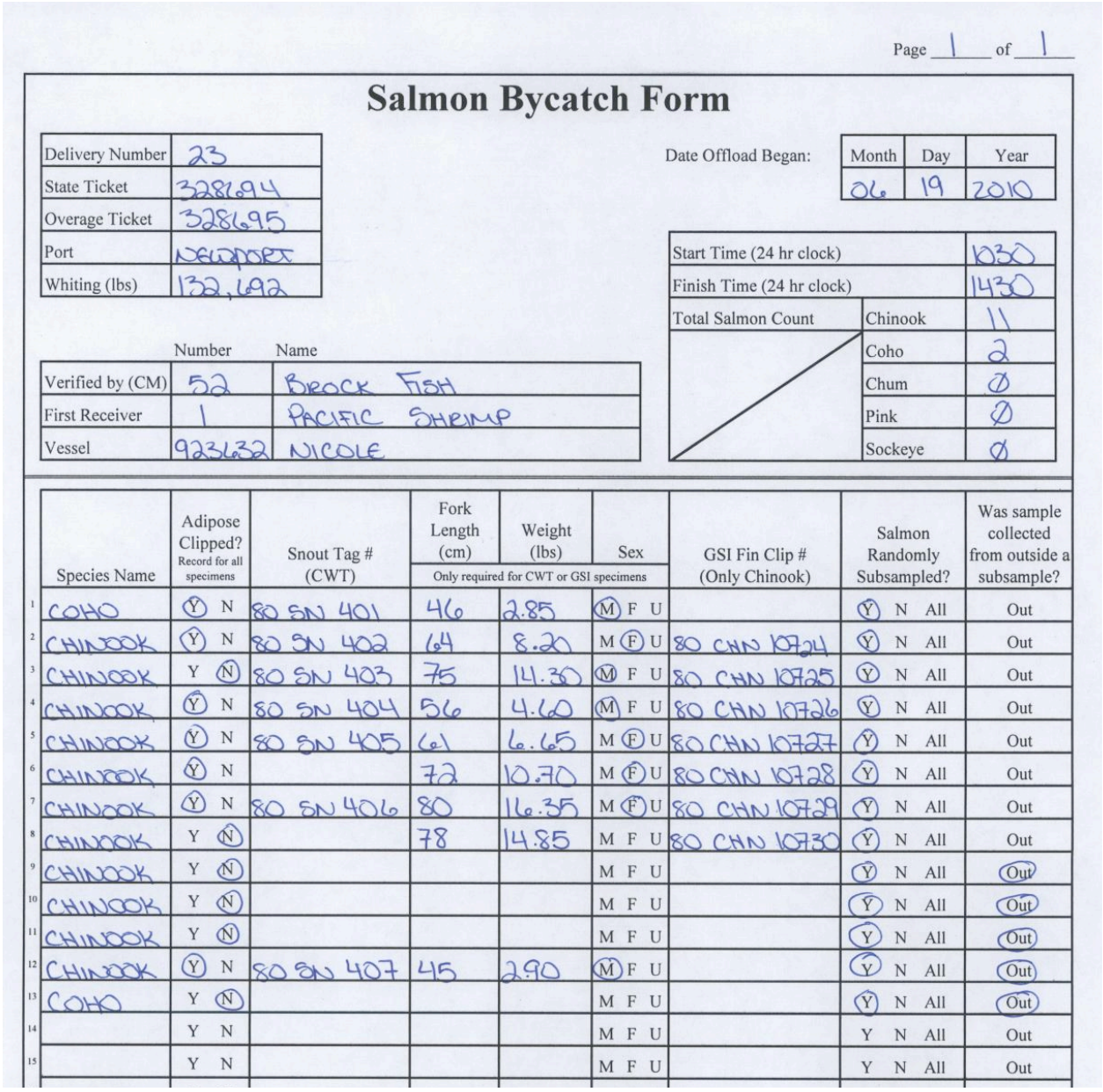
- *Weight (lbs):* Record the weight in pounds.

- *Sex:* Record the sex as male, female, or unknown (M, F, U)

- *Fin Clip # (GSI):* Record the number from the envelope with the fin clip sample. Do NOT abbreviate number.

- *Salmon Randomly Selected?*
    - Circle **YES** if salmon are subsampled randomly.
    - Circle **NO** if salmon are subsampled, but specimens were not collected randomly.
    - Circle **ALL** if all salmon in the delivery were examined for CWT and fin clips were collected from all Chinook.

- *Was sample collected from outside subsample?*
    - Circle **OUT** if specimen was subsampled for fin clips, AND the CWT sample was collected from outside that subsample.
    - Leave the field blank if the delivery was subsampled for fin clips, and the CWT sample was collected from within the subsample.
    - Do not mark this field if all salmon were sampled (all specimens were IN the sample).



Page 1 of 1

Salmon Bycatch Form

Delivery Number	23
State Ticket	328194
Overage Ticket	328695
Port	NEWPORT
Whiting (lbs)	132,692

Date Offload Began: Month 06 Day 19 Year 2010

Start Time (24 hr clock)	1030
Finish Time (24 hr clock)	1430

Total Salmon Count	
Chinook	11
Coho	2
Chum	Ø
Pink	Ø
Sockeye	Ø

	Number	Name
Verified by (CM)	52	BROCK FISH
First Receiver	1	PACIFIC SHRIMP
Vessel	923632	NICOLE

	Species Name	Adipose Clipped? Record for all specimens	Snout Tag # (CWT)	Fork Length (cm)	Weight (lbs)	Sex	GSI Fin Clip # (Only Chinook)	Salmon Randomly Subsampled?	Was sample collected from outside a subsample?
				Only required for CWT or GSI specimens					
1	COHO	(Y) N	80 SN 401	46	2.85	(M) F U		(Y) N All	Out
2	CHINOOK	(Y) N	80 SN 402	64	8.20	M (F) U	80 CHN 10724	(Y) N All	Out
3	CHINOOK	Y (N)	80 SN 403	75	14.30	(M) F U	80 CHN 10725	(Y) N All	Out
4	CHINOOK	(Y) N	80 SN 404	56	4.60	(M) F U	80 CHN 10726	(Y) N All	Out
5	CHINOOK	(Y) N	80 SN 405	61	6.65	M (F) U	80 CHN 10727	(Y) N All	Out
6	CHINOOK	(Y) N		72	10.70	M (F) U	80 CHN 10728	(Y) N All	Out
7	CHINOOK	(Y) N	80 SN 406	80	16.35	M (F) U	80 CHN 10729	(Y) N All	Out
8	CHINOOK	Y (N)		78	14.85	M F U	80 CHN 10730	(Y) N All	Out
9	CHINOOK	Y (N)				M F U		(Y) N All	(Out)
10	CHINOOK	Y (N)				M F U		(Y) N All	(Out)
11	CHINOOK	Y (N)				M F U		(Y) N All	(Out)
12	CHINOOK	(Y) N	80 SN 407	45	2.90	(M) F U		(Y) N All	(Out)
13	COHO	Y (N)				M F U		(Y) N All	(Out)
14		Y N				M F U		Y N All	Out
15		Y N				M F U		Y N All	Out

Figure 8-5

Pacific Halibut and Dungeness Crab

When Pacific halibut or Dungeness crab are landed, they should be weighed and counted by the processors, stored in a secure and iced location, and separated by delivery with the salmon. As a catch monitor, your responsibility is to count these animals and record the number on a delivery verification form. If crabs are landed, they will likely be in many pieces. A good way to estimate the number landed is to count the carapaces.

Protected Species

Protected species are animals that are regulated by the Marine Mammal Protection Act (MMPA), Migratory Bird Treaty Act (MBTA), and the Endangered Species Act (ESA).

Although it is very likely you will see salmon during your contract, it is unlikely you will see any marine mammals or sea birds in the catch. This is because, under the EFP, marine mammals and other large organisms can be discarded atsea if caught in fishing gear. Sea birds will not be a common occurrence, because these whiting vessels are not processing at sea. There are fewer seabirds around during fishing activities, because these vessels do not discard catch or offal that attracts the birds and can potentially cause injury.

Marine Mammals

If a marine mammal is landed, ensure the vessel has a copy of the Marine Mammal Mortality/Injury Reporting Form **(Appendix G)** and that the organism has been weighed and recorded before the mammal is returned to the vessel for at-sea disposal. Document this in your daily notes and use your digital camera to take photos for identification purposes. Remember to take as many as necessary to identify the organism and document the photos in your photo log.

If you witness any harassment of marine mammals, notify the plant manager, document the event fully, and complete a statement for OLE.

Marine Mammal Protection Act

The Marine Mammal Protection Act of 1972 (MMPA) was most recently reauthorized in 1994. In passing the MMPA, Congress found that certain species and populations of marine mammals are, or may be, in danger of extinction or depletion as a result of human activities. The Act states:

- Such species and population stocks should not be permitted to diminish beyond the point at which they cease to be a significant functioning element in the ecosystem of which they are a part, and, consistent with this major objective, they should not be permitted to diminish below their optimum sustainable population level.
- Measures should be taken immediately to replenish any species or population stock, which has diminished below its optimum sustainable level.
- There is inadequate knowledge of the ecology and population dynamics of such marine mammals and of the factors, which bear upon their ability to reproduce themselves successfully.
- Marine mammals have proven themselves to be resources of great international significance, aesthetic and recreational as well as economic.

The MMPA established a moratorium, with certain exceptions, on the taking of marine mammals in U.S. waters, by U.S. citizens on the high seas, and on the

importation of marine mammals and marine mammal products into the United States. It is also illegal to intentionally feed any marine mammal in the wild. Intentional feeding is considered a form of harassment.

Seabirds

If any seabirds are recovered in any deliveries, take photos of the head and beak, the feet, and the whole bird, and document in the photo log in your logbook as well as in your daily notes. If you think you may have an endangered or threatened species, hold it and call NMFS program staff.

Seabird mortalities associated with commercial fisheries are estimated at 300,000 to one million per year worldwide. Most commercial fisheries do not monitor seabird bycatch, making it difficult to accurately estimate mortality rates or predict the long-term effects of fishing on seabird populations.

Seabird mortalities may result from direct interactions with fishing gear or through indirect, or incidental, fishery interactions. Indirect seabird mortalities range from individual stranding on vessel decks to flocks of birds hitting the ship (“bird storms”). Such vessel/bird interactions occur most frequently when birds become disoriented by bright lights used by vessels at night or during inclement weather.

Endangered, Threatened and Banded Seabirds

Three species of seabirds listed as endangered and one species listed as threatened (hereafter referred to as ‘species of interest’) may be encountered by catch monitors.

Endangered Species:

- *Short-Tailed Albatross*
  In 2001, the population estimate for short-tailed albatrosses was about1,600 individuals. These birds occur offshore and are the most likely of the three endangered species to come in contact with commercial fishing gear.
- *California Brown Pelican*
  California brown pelicans are generally sighted inshore. These birds are not likely to be taken by commercial groundfish gear.
- *California Least Tern*
  California least terns are generally sighted inshore. These birds are not likely to be taken by commercial groundfish gear.

Threatened Species:

- *Marbled Murrelet*
  Most incidental takes of marbled murrelets occur in gillnet fisheries.

9. MONITORING PLANS

Workload Priorities

- Determine if catch monitoring plan submitted by the first receiver is being followed.
- Document when the catch monitoring plan is not being followed and submit incident report to NMFS staff and OLE if issue continues.

First Receiver Monitoring Plan

A complete catch monitoring plan was submitted and accepted by NMFS before the first receiver was issued an EFP allowing it to participate in the Pacific whiting shoreside fishery. Before you are deployed, you will be provided with a copy of the monitoring plan submitted by your first receiver. The catch monitoring plan provides detailed descriptions of how the first receiver will meet the weighing and sorting requirements, how the catch monitor requirements will be met, and how prohibited species and overage catch will be handled. The catch monitoring plan also identifies

the name and contact information of an individual who will be responsible for assuring that you are provided with information on delivery schedules.

NMFS staff conducted an inspection of the first receiver's facility before accepting a catch monitoring plan. The purpose of the on-site inspection was to verify that the catch monitoring plan is consistent with the conditions at the first receiver's facility and that there are no obvious issues that may undermine the catch monitoring effort. Because the monitoring plan was accepted as complete by NMFS, the first receiver must submit an addendum to NMFS if it wants to modify the plan. Depending on the nature and magnitude of the change requested, NMFS may require a site inspection.

Are Monitoring Plans Being Followed?

One of your tasks is to monitor whether or not the first receiver is following its catch monitoring plan and if the submitted plan is adequate to meet the defined monitoring and reporting needs. To do this, you will need to be familiar with the monitoring plan issued to your first receiver. The following is a list of basic questions to ask yourself when assessing whether the accepted monitoring plan is being followed and is adequate:

- Did the first receiver work within the hours defined in the plan, if a single monitor was assigned to the facility?
- Does sorting occur in locations that are different from the monitoring plan?
- Is there adequate space for crew to sort catch?
- Is the number of personnel assigned to catch sorting adequate?
- Is the rate of catch flowing through the sorting area more than what the crew can effectively sort?
- Are the sorters' skills adequate for sorting catch to federal species groups?
- Were any scales not listed in the monitoring plan used to weigh catch?
- Did the seals on any of the scales appear to have been tampered with?
- Does first receiver operate and maintain a safe processing and/or receiving facility?
- Did the person responsible for notifying you of planned facility operations, including the receipt of fish, provide adequate notice?
- Were you given access to the catch throughout the sorting and weighing processes and to any documentation required by regulation, including fish tickets and scale test results?
- Were the prohibited species stored in the identified location?
- Were prohibited species labeled by delivery?

You will need to document your assessment of the catch monitoring plan in the Description Monitoring Procedures section of your logbook. In your logbook, you are asked to provide a detailed account of first receiver operations, from vessel through sorting and weighing to final documentation. In addition to your written account of operations, you will include a diagram of the facility that depicts sorting, weighing,

scale display, prohibited species storage, office space, monitor gear storage, and any other significant locations.

If you find that the catch monitoring plan is not being followed, you will need to provide further documentation in the Daily Notes section of your logbook and make NMFS program staff aware of the issue by completing and submitting a statement. Further information on documenting concerns and the submission of incident reports can be found in **Chapter 10**, Reporting Potential Violations.

10. REPORTING POTENTIAL VIOLATIONS

Workload Priorities

- Recognizing noncompliance events.
- Providing state and federal fishery officers with any information when requested.
- Submitting documentation and statements when a problem is suspected or detected.

Overview of Federal Groundfish Regulations

Federal regulations for the Pacific Coast groundfish fishery are recommended by the Pacific Fishery Management Council, approved by the U.S. Department of Commerce, and administered by the National Marine Fisheries Service. In addition to the federal regulations, commercial fisheries are also required to follow many other federal and state regulations.

The federal regulations affecting vessels and first receivers in the Pacific whiting fishery are enforced by the NOAA Fisheries Office for Law Enforcement (OLE), in cooperation with the U.S. Coast Guard. The OLE has also federally-deputized officers in Washington, Oregon, and California through Joint Enforcement Agreements (JEAs). The JEA partnerships allow for a more aggressive stance on marine resource law. In support of these partnerships, OLE agents and officers maintain close working relationships with the state enforcement officers. OLE agents and officers collaborate with their state counterparts on investigations, patrols, inspections, serving warrants and conducting arrests.

The Catch Monitor's Role in Regulatory Compliance

The catch monitor's role in compliance is very different from the role of an OLE agent or state enforcement officer. As catch monitors, you serve as the eyes and ears of fishery managers and as a witness for enforcement. You are not empowered to issue citations or to take enforcement action. The catch monitor's role in compliance is to monitor specific activities and to accurately report observations of suspected violations.OLE and the state enforcement officers will use the information provided by catch monitors to determine what action should be taken.

As a catch monitor you are responsible for:

- knowing the federal requirements pertaining to total catch accounting in the shoreside whiting fishery
- monitoring the activities at the first receiver
- informing the facility manager or dock supervisor of potential violations when a problem is suspected or detected
- documenting all potential violations in your logbook and on a statement form

- submitting the logbooks and statement forms to NMFS in a timely manner
- providing state and federal fishery officers with relevant information when requested.

Catch monitors should not advise the first receivers or vessels on regulations or interpret regulations. You will be given basic information regarding the current regulatory requirements that pertain to your duties and work at the first receiver. You will not be provided with the detailed regulatory language, as it is not necessary. If you have questions regarding your role in compliance monitoring as a catch monitor, contact NMFS program staff, your local OLE agent, or special agent Murray Bauer at 541-867-0580.

Steps to Take if You Suspect a Violation

Common sense and good judgment should prevail if you suspect a violation has occurred. Your role is straightforward: watch, inform, document, and report. Gathering facts and documenting when a violation is suspected are part of your routine duties. A summary of the federal regulations that apply to Pacific whiting shoreside first receivers and the vessels that offload Pacific whiting catch can be found in Appendix E. Please see Appendix H for OLE contact information.

Watch

Watching routine activities at the first receiver is your first step in recognizing possible compliance issues. You may notice an obvious violation, such as catch being incorrectly sorted and weighed in mixed species groups, but other violations may need more investigation. If you suspect a violation, ask the manager of the receiving facility or other personnel to clarify any questions you may have. If you are unsure about a situation and need further guidance, you should contact OLE or NMFS program staff.

Inform

If you think a violation has occurred, notify the facility manager or Dock Supervisor as soon as possible and document your conversation in your daily notes, unless you think informing the facility manager or dock supervisor will put you at risk of harassment. In this case, also document your reason for not informing the facility manager. Providing notice allows the first receiver an opportunity to correct the situation and prevent violations from recurring. Effective communication requires familiarity with the relevant regulatory requirements, good judgment and tact. Be organized and approach the discussion in a calm and reasonable manner. Refer any enforcement questions to OLE.

If the facility manager is responsive, the problem can be remedied immediately. If he or she ignores the information you provide, and the potential violation continues, good documentation is required, as well as the submission of a statement to NMFS.

Document

If you suspect a violation has occurred, you will need to document the events in your Daily Notes. Your notes may be used as evidence, so your documentation must be thorough and factual. Subjective comments should be left out. All written comments must be in ink, and all events should be recorded in chronological order. Good documentation contributes to your credibility as a witness and better supports OLE's ability to take action. All daily notes entries pertaining to suspected violations should include the following information:

Who:

- Identify the first receiver or the vessel by name and permit number (if known).
- Identify the individuals involved by first and last name (if known), position (sorter, deckhand, facility manager), and duties.
- Identify any individuals who may have witnessed the activity by first and last name (if known), position (sorter, deckhand, facility manager), and duties.
- Document any notification you provided, to whom you provided it, and the reaction.

What:

- Describe the events and circumstances in a narrative form.
- Include information about what made you suspect that a violation had occurred.
- Detail the events or what was discovered when you looked into the matter.
- Describe what occurred or did not occur following any discussions or notification about suspected violations.
- Use direct quotes whenever possible.
- Record each instance of a suspected violation separately.

When:

- Record the hour, date, month, and year that each suspected violation occurred.
- If available, the state fish ticket number.

Where:

- Describe the location where the event took place.
- Draw diagrams if it helps to describe the location.

Why:

- Through your observations and discussions you may have an understanding about why the suspected violation occurred. Be as objective as possible in recording observations and discussions about why an event may have occurred.
- Ask yourself if a problem could be due to mistake such as a mathematical error.

- If you feel that the suspected violation was intentional, document the reasons why you think it was done and why you think it was intentional.

How:

- Describe the effects of the possible violation on your ability to perform your catch monitor duties.
- If harassment or intimidation is involved, describe how the actions made you feel.

Documenting in Your Daily Notes

If the first receiver or a vessel delivering to the first receiver is charged with a violation, all parties concerned will have a legal right to inspect your logbook or any other evidence. It is important to make your entries factual. It is important that you remain unemotional and avoid personal opinions. However, when documenting harassment or intimidation, it is important that you document your feelings and emotions about the situation. Do not use your daily notes to blow off steam.

Documenting in a Statement

Many potential violations you encounter may be difficult to interpret. Catch monitors are not expected to be regulatory experts. The following will help guide you through the regulations and statement process. It contains a simplified list of common violation types, short descriptions of common violations, and references to the regulatory text.

Statement Requirements

The catch monitor statement and debriefing processes are critical to the collection of high-quality compliance monitoring data. During the Pacific whiting season and during postseason debriefing, you may be required to compose statements.

Immediate Verbal Notification

The catch monitor is required to provide <u>immediate</u> verbal notification to the catch monitor coordinator AND OLE agents OR state enforcement officers in the following situations:

1) All potential catch monitor victim crimes involving coercion, assault, sexual assault, intimidation, sexual harassment, harassment, and/or data integrity**.**

2) Any incident that affects catch accountability. This includes, but it not limited to:
   - Failure to properly sort all catch
   - Failure to weigh all catch
   - Transporting catch without first sorting and/or weighing
   - Receiving catch at, OR transporting catch for sorting and weighing to, a location that is not specified and permitted in the EFP.

3) Intentional failure to notify of a delivery OR other action(s) to prevent catch monitors from completing their assigned duties.

Completion of a Statement

In all other cases not specified above, where there is an alleged or perceived violation, catch monitors shall complete a statement before going off duty or, in permitted instances, within 24 hours of the incident and submit this report to the monitoring coordinator.

Writing a Statement

Introductory Paragraph: In most cases, you may follow the template below:

> I, (first/last name), was employed by (catch monitor provider) to serve as a catch monitor for the National Marine Fisheries Service. I have served as a catch monitor for (# seasons) and as a fishery observer for (# of deployments or years, if applicable).I was assigned to monitor Pacific whiting offloads at (first-receiver name) out of (city, state). During my assignment, I witnessed (# of) incidents of (state potential violation(s)).

If the opening paragraph template is not used, the following information should be incorporated into the first paragraph of the statement:

- Catch monitor's name and title
- Catch monitor provider
- Level of experience
- First-receiver name
- Assignment dates
- City and state of first-receiver deliveries

Description of the Violation

Your daily notes on your laptop should contain most of the details including who, what, when, where, why, how, and any witnesses. You do not need to repeat details that are already included in other documents**.** You need only repeat the basic elements of the violation(s). These rules should be followed:

- Use complete sentences.
- Write in the first person.
- Identify each event in chronological order.
- Reference other documents by type, page number, and date.
- Be **consistent** between Daily Notes, survey, and statement.
- Address discussions with the vessel command or crew.
- Use full names when possible of the captain and witnesses.
- Be **objective**— no personal opinions, conclusions, or minimization.
- Keep it **accurate and factual.**
- Use "quotation marks" only for direct quotes.
- Briefly describe any aggravating or mitigating circumstance (i.e., resulting intimidation or hostile work environment, voluntary compliance, cooperation, lack thereof, etc.).

If you are asked to write a statement to support an enforcement action, it will be much easier if you have taken the time to document the suspected violation as outlined above. Well-documented cases are more likely to be prosecuted.

If you complete a written statement for OLE, you may be contacted directly by an agent while you are employed as a catch monitor or afterwards. Not all statements or written statements will result in violations. However, if you report a suspected incident, it will be maintained in a database, and over time, it may show a pattern of behavior on which the OLE may act. Based on the statement, OLE will determine if a violation occurred and respond in the most appropriate way to achieve future voluntary compliance. Responses OLE may take include: educational outreach, verbal or written warning, summary settlement, civil penalty, or criminal prosecution. Activities that violate state law may result in a state citation or prosecution. Most violations are settled out of court. However, if a violation results in a court process, you may be subpoenaed to testify as a witness for the government.

It is important that you provide a reliable phone number. If you have completed a written statement, and your contact number may change, an e-mail address or other contact information may be required.

NOAA Fisheries Office of Law Enforcement
Statement Form

EXAMPLE STATEMENT
Instructional Use Only

I, Sir William Sampler make the following statement to Murray Bauer who has identified themself to me as a special agent of the U.S. Department of Commerce, NOAA, NMFS. I understand this statement is being made in connection with an official investigation and may be used as evidence in a court of law or judicial proceedings. I make this statement freely and voulntarily. No threats or promises have been made to me to induce me to make this statement.

I, Sir Sampler, am employed by Alaska Observers Inc. (AOI) and am assigned to serve as a catch monitor for the National Marine Fisheries Service. I have served as a catch monitor for 2 seasons and have served as a fishery observer for 5 years onboard ground-fish vessels for the West Coast Groundfish Observer Program. My current duties include monitoring off-loads from catcher vessels and the receipt of fish by first receivers to ensure catch accountability and proper reporting to fishery management agencies. I am assigned to monitor pacific whiting deliveries to Glory Hole Seafoods located in Newport, OR. On February 1, 2009, I witnessed one incident of failure to notify, two incidents of failure to sort and one incident of intimidation.

On February 1, 2009, at 0900 hours, I went to the plant to collect my samples from the previous day and observed that the F/V Catchalot had began off-loading Pacific whiting to Glory Hole Seafoods. I did not receive notification from the facility about the delivery. At the beginning of the season, I discussed with the facility manager, Ben Johnson, the need and requirement to inform me of pending deliveries at least three hours before the receipt of Pacific whiting. I went to the office to speak with Mr. Johnson. When I walked into his office, he looked at me and said "oh crap, I forgot to call you, sorry". He further told me that they just started off-loading fish.

I went out to the sorting area and noticed there were no employee's on the sorting line. I observed pacific whiting, canary and yelloweye rockfish going by on the belt and into the plant without being sorted. I notified Mr. Johnson and he sent one worker up to the sorting belt. By this time approximately 200 pounds of fish had gone by unsorted. After the off-load, at approximately 1200 hours, I went into the processing area to see if they sorted out the rockfish that was missed at the beginning of the off-load.

I declare under penalty of perjury of the laws of the United States of America that this statement, consisting of 2 pages is true and correct.

Sir Sampler	2/02/2009	Lori Jesse	Lori Jesse	2/02/2009
Signature	Date	Witness Signature		Date

Statement Form - Continuation Sheet

I observed that some of the rockfish had been sorted, but some had gone into totes with the whiting. I then also observed totes that contained long spine and short spine thorneyhead. I moved fish around to see how much of each species were combined in the totes when the production manager, who I only know as Jose, approached me and began yelling to get away from the totes. I told him that the thorneyhead needs to be separated, but Jose continued to yell at me saying he knows his job and if I know what is good for me I should get out of his area. Because of his large size, the tone and volume of his voice, and his active movement towards me, resulting in him standing between me and the tote of fish, I felt intimidated and unsafe. I immediately left and spoke with Mr. Johnson, who stated that Jose was harmless but is a little rough in dealing with people. He assured me that the fish would be sorted, weighed and reported separately.

At 1300 hours, I notified NOAA Special Agent Murray Bauer by telephone regarding these incidents.

End of Statement

TIPS / NOTES:

Page 1, Line 1-6 - Introduction to you, your background, your position, and the alleged violations or issues

Page 1, Line 7-12 - Second paragraph, details of the first violation, including prior knowledge and statements of person involved

Page 1, Line 13+ Third paragraph, details of second violation, including discussions and your actions / observations

Page 2, Line 2-6 - Details of third violation

Page 2, Line 7 - Discussion with the First Receiver manager, include his actions / comments

Page 2, Line 9 - How you responded, if you reported the situation, who you reported it to, etc..

Be sure to write in chronological order.

Offenses involving intimidation / harassment include your personal feeling/reactions

Include "direct quotes" when remembered, position and name of persons involved

Write your statement contemporaneous to the event

Initials: [signature] Witness Initials: [signature]

11. HEALTH AND SAFETY INFORMATION

Catch monitors will be working in the busy environment of a fish plant at all hours of the day. There are hazards to safety and to health, of which each CM should be aware. Each plant will have safety procedures and health warnings. Ask your plant manager to indoctrinate you in these procedures. Machinery, both moving and stationary, represents a significant hazard. Be aware at all times of the operations that are going on around you. Hoists, conveyers, totes, forklifts, overhead doors, and motors are some of the many types of machinery that are potential safety hazards. You should also be aware of chemical use in the plant. Finally, paying attention to hazards associated with your own monitoring operation, such as lifting, is crucial to your safety and your health.

Anhydrous Ammonia

First receivers use anhydrous ammonia in refrigeration and freezing systems. Some general facts:

- Odor Threshold — 46.8 ppm. This is the lowest concentration in air that most humans can detect by smell. The value cannot be relied on to prevent over-exposure. Because human sensitivity to odors varies over wide limits, some chemicals cannot be smelled at toxic concentrations, odors can be masked by other odors, and some compounds rapidly deaden the sense of smell.
- Threshold Limit Value — 25 ppm. Defined as the concentration of the substance in air that can be breathed for five consecutive eight-hour workdays by most people without adverse effect. As some people become ill after exposure to concentrations lower than the TLV, this value cannot be used to define exactly what is a “safe” or “dangerous” concentration.
- Short-term Inhalation Limits — 50 ppm for five minutes. The maximum permissible average exposures for the time periods specified.
- Vapor (gas) irritant characteristics — Vapors cause severe eye or throat irritation and may cause eye or lung injury; vapors cannot be tolerated even at low concentrations.
- Vapor Hazards— Poisonous if inhaled; irritating to eyes, nose, and throat; avoid contact with ammonia vapors!
- Health Hazards—National Fire Protection Association (NFPA) Level 3 Materials, which on short exposure could cause serious temporary or residual injury, even though prompt medical treatment was given.

Note — Since you normally start smelling anhydrous ammonia just below the maximum concentration for a five-minute time period, the smart thing to do is to immediately leave the space!

Fish and Poisoning

Bacteria from fish may lead to infection in cuts, scrapes, or punctures. To prevent "fish poisoning", wash your hands thoroughly after sampling in a solution of hot, soapy water. Change gloves often to keep them dry and discard any torn gloves. Treat **all** minor cuts, especially those on your hands, with antiseptic such as Betadine to avoid infection from fish slime. Spines often carry bacteria and can lead to fish poisoning. If a wound gets red or swollen, soak it for one-half hour in very hot, soapy water at least three times a day. Dry and bandage the wound. Never leave an infection untreated. The threat to your health can become much more far-reaching than simply a pair of inoperative hands.

Heavy and Repetitive Lifting

Proper planning may be the most effective means of reducing the potential for back injury. Things to ask yourself before lifting baskets:

- How heavy is the basket? Can it be filled halfway twice?
- What can be done to minimize the number of lifts required or the amount of weight lifted?

• If it must be lifted, can twisting be avoided?

Proper Lifting Techniques
Even with proper planning and using proper lifting techniques to avoid excessive lifting, monitors will frequently need to lift and move baskets that are heavy. Using proper lifting techniques can help to avoid injuries. When lifting:

• Size up the load before lifting, think about technique
• Squat, don't bend (use your legs as much as possible)
• Stick chest out and back straight (similar to proper sitting position)
• Keep feet apart at shoulder width
• If possible, stagger feet (similar to a lunge lift, but less exaggerated)
• Keep weight close to the body
• Raise up with head first and chest out
• If turning, turn with feet not body
• Do not jerk or twist
• Put the weight down the same way it was lifted (bend knees, not the waist)
• Wear shoes with nonslip soles.

Personal Safety Equipment
Catch Monitors are issued gear such as safety glasses, hard hats, and earplugs to help prevent injuries. This gear may be required at some facilities. Even if it is not required at your facility, it is a good idea to use the provided equipment when appropriate.

Fire
A fire needs heat, fuel and oxygen. Remove any one of these components to stop a fire.

It is wise to know where fire extinguishers and exits are located in every area of the first receiver— especially those areas in which you spend time. Fire extinguishers only have short bursts of fire retardants, so backup extinguishers should be located and brought to the fire as soon as the fire is discovered. To effectively use a fire

extinguisher, fire in short bursts in a low, sweeping motion. Keep your body low so as to avoid smoke inhalation and heat. Do not attempt to fight anything but the smallest fire (in a wastebasket, for example) on your own. Sound the alarm immediately before you take action. After a fire, thorough inspection must be made of the area to ensure it is safe to continue work.

Tsunamis and Earthquakes

Tsunamis
What is a tsunami? A tsunami is a series of waves most commonly caused by an earthquake beneath the ocean floor.

As tsunamis enter shallow water near land, they increase in height and can cause great loss of life and property damage. The first wave is often not the largest; successive waves may be spaced many minutes apart and continue to arrive for several hours.

Recent research suggests that tsunamis have struck the Oregon coast on a regular basis. They can occur any time, day or night. Typical wave heights from tsunamis occurring in the Pacific over the last 80 years have been 20-45 feet at the shoreline. A few waves, however, have been much higher—as much as 100 feet or more—because of local conditions.

A local tsunami caused by an undersea earthquake near the Oregon coast could come onshore within 15 to 20 minutes after the earthquake, before there is time for official warning from a national warning system. Ground shaking from the earthquake may be the only warning. Evacuate quickly!

A distant tsunami is caused by an undersea earthquake far away from the coast and will take four hours or more to come onshore. You will feel no earthquake. The tsunami will generally be smaller than that from a local earthquake. There will typically be time for an official warning and evacuation to safety. Some communities will signal the need for evacuation for a distant tsunami by a sounding a STEADY THREE-MINUTE SIREN BLAST. All coastal communities will receive announcements over NOAA weather radio that the local area has been put into an

official TSUNAMI WARNING. In isolated areas along beaches and bays, you may not hear a warning. A sudden change of sea level should prompt you to move immediately inland to high ground. If you hear the three-minute blast or see sudden sea level changes, evacuate away from shoreline areas, then turn on your local broadcast media or NOAA weather radio for further information.

For both distant and local tsunamis:

1. Evacuate on foot if at all possible because of potential traffic jams.

2. Stay away from potentially hazardous areas until you receive an ALL CLEAR from local officials. Dangerous waves can persist for several hours, and local officials must inspect all flooded or earthquake-damaged structures before anyone can go back into them.

3. If you need help evacuating, tie something WHITE (sheet or towel) to the front door knob. Make it large enough to be visible from the street. If the emergency is a distant tsunami, then help may arrive. In the event of a local earthquake and tsunami, it may be unlikely that anyone will help you, so make a plan and be prepared.

4. After evacuation, check with the local area commander if you can help with special skills or need help locating lost family.

Where do I evacuate?
Go to an area 50 feet above sea level, if possible. Go on foot if necessary, particularly if an earthquake has caused damage to roads and power lines and has produced significant debris.

If you don't have time to travel to high ground, but are in a multi-story building, go to an upper level of the home or building. If you are on the beach and unable to get to high ground, go inland as far as you can. Take your disaster supply kit with you.

Tsunami evacuation routes were developed to assist coastal residents and visitors find safer locations in case of an earthquake and tsunami. Evacuation signs have been placed along roadways to indicate the direction inland or to higher ground. In some places, there may be more than one direction available to reach safer areas. These routes may be marked with several signs showing additional options for evacuation.

Remember:

- Never go to the coast to watch a tsunami. Tsunamis move faster than a person can run. If you are camping on or near the beach, you may have to abandon your campsite to go inland or to higher ground to save your life.

- Do not return to shore after the first wave. Wait for emergency management officials to give the "all clear" before you return.

- If you see an unexpected rise or fall in the coastal water, a tsunami may be approaching. Do not wait. Instead, move inland or uphill as quickly as possible.

- Stay tuned to your radio, marine radio, or NOAA Weather Radio during a disaster. Bulletins will be issued regularly through local emergency management officials and the National Weather Service.

- Call 911 only for life threatening emergencies.

Earthquakes
What should I do if an earthquake occurs while I'm at the coast?

- Drop, cover, and hold. Get under a sturdy object and hold on. Watch for falling objects.

- As soon as the shaking is over, move to high ground or inland. Do not wait for an official warning.

- Stay away from the shoreline. Waves may continue to arrive for hours.

- Listen to your local radio station for an official "all clear" notice before returning to the coastal area.

- Be alert for aftershocks.

Disaster Supply Kit:
Assemble a 3-day minimum supply:

- First-aid supplies, personal prescriptions
- Nonperishable food, utensils
- Water (one gallon per person per day)
- Water bag or container
- Extra blankets, ponchos, clothing
- Plastic bags for garbage and waste
- Rubber, latex, and heavy-duty gloves
- Pocket knife, flat 12-inchpry bar, duct tape
- Tube tent
- Flashlights, extra batteries
- Battery-operated AM radio, extra batteries
- Whistles
- Dental and personal hygiene items
- Dust masks
- Matches

Illness and Accidents

Monitors must contact a coordinator and your employer anytime an injury occurs or anytime illness or injury prevents monitoring! If you become ill, such as coming down with a severe cold or flu that inhibits work, you must inform your coordinator of the situation. If the illness gets worse or continues to affect your work for more than three days, your assignment may need to be changed.

12. CONFLICT RESOLUTION

Nature of Conflict

Definition of conflict:

Conflict is the natural tension that arises from differences.

The natural tension arises whenever people have different:

goals	expectations
values	ideas
needs	perceptions

When conflict goes unresolved:

- people feel defeated and demeaned
- distance between people increases
- a climate of distrust develops
- cooperation may decrease
- resistance develops when team work is needed
- some will leave because of the turmoil and tension

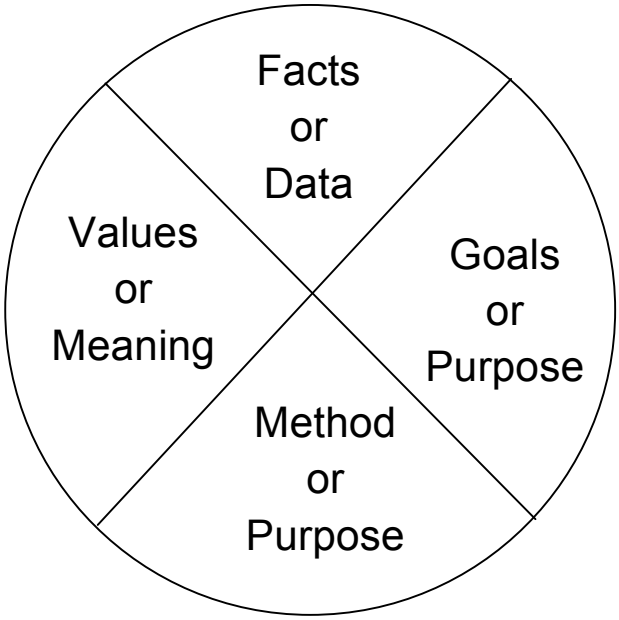
When conflict is handled creatively:

- better ideas are produced
- people are forced to search for new approaches
- long-standing problems surface and are dealt with
- people can test their capabilities and skill

Areas of conflict:

1. Facts or Data
   - Individuals have different information or perception of the facts.
2. Goals or Purpose
   - Individuals cannot agree on the group's basic purpose or mission or what they would like it to be.
3. Method or Process
   - Individuals disagree about the best way to achieve a goal or solve a problem.
4. Values or Meaning
   - Individuals have different beliefs or disagree about the significance or basic meaning of a situation or behavior.

Areas of Conflict



Facts or Data:	Different information or perception of the facts
Goals or Purpose:	Cannot agree on basic purpose or mission
Method or Process:	Disagree on best way to achieve goal or solve problem
Values or Meaning:	Different beliefs or meaning of situation

Prepared by Douglas Dunn Extension Agent, Community Leadership and Resource Development,
Arizona Cooperative Extension
Oregon State University Extension Service

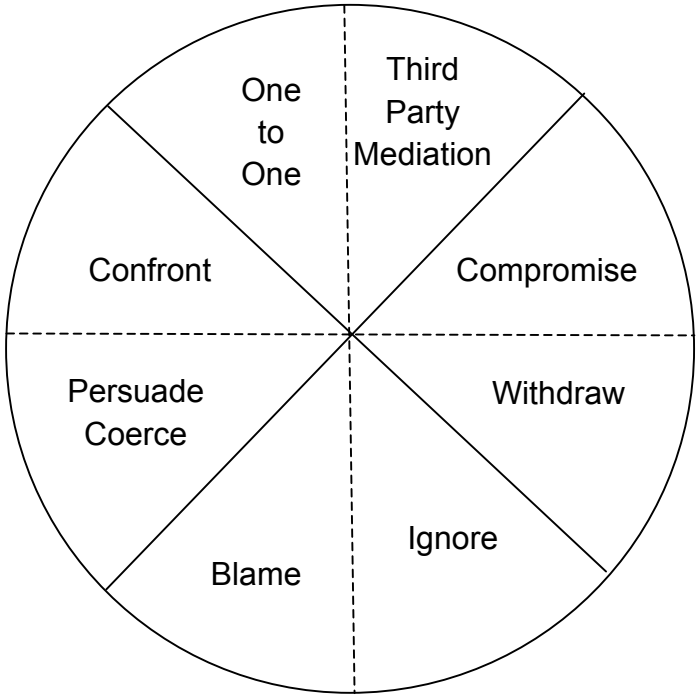
Response to Conflict

Conflict is not the problem

Each of us successfully resolves conflict every day. Rather, some conflicts become problems because of how we deal with them, the ways we try to resolve or ignore them.

Ways of managing conflict

- One to One
- Confront
- Persuade/Coerce
- Blame
- Ignore
- Withdraw
- Compromise
- Third Party Mediation



At one time or another, most of us probably use all of the alternatives. Most of us, however, do have one or two preferred ways of dealing with opposition.

Five Basic Methods for Resolving Conflict

Method	What Happens When Used:	Appropriate to Use When:	Inappropriate to Use When:
Denial or withdrawal	Person tries to solve problem by denying its existence. Results in win/lose.	Issue is relatively unimportant; timing is wrong; cooling off period is needed; short-term use.	Issue is important; when issue will not disappear, but build.
Suppression or smoothing over	Differences are played down; surface harmony exists. Results in win/lose in forms of resentment, defensiveness, and possible sabotage if issue remains suppressed.	Same as above, also when preservation of relationship is more important at the moment.	Reluctance to deal with conflict leads to evasion of an important issue; when others are ready and willing to deal with issue.
Power or dominance	One's authority, position, majority rule or a persuasive minority settles the conflict. Results in win/lose if the dominated party sees no hope for self.	When power comes with position of authority; when this method has been agreed upon.	Losers have no way to express needs; could result in future disruptions.
Compromise or negotiation	Each party gives up something in order to meet midway. Results in win/lose if "middle of the road" position ignores the real diversity of the issues.	Both parties have enough leeway to give; resources are limited; when win/lose stance is undesirable.	Original inflated position is unrealistic; solution is watered down to be effective; parties involved doubt commitment.
Collaboration	Abilities, values, and expertise of all are recognized; each person's position is clear, but emphasis is on group solution. Results in win/win for all	Time is available to complete the process; parties are committed and trained in use of process.	The conditions of time, abilities, and commitment are not present.

Prepared by Douglas Dunn Extension Agent, Community Leadership and Resource Development, Arizona Cooperative Extension

It is your choice:

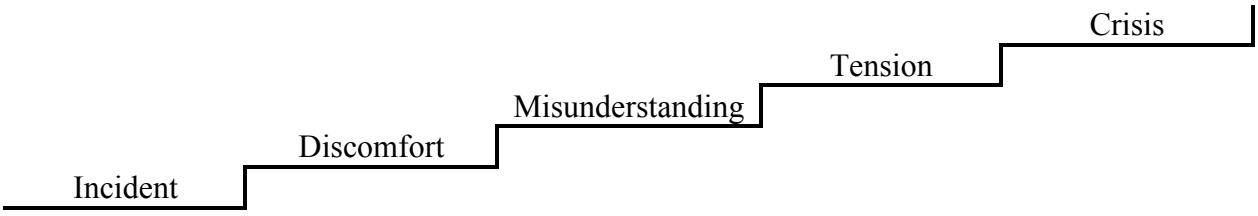
Our effectiveness in dealing with conflict is largely dependent upon how we choose to react to it. We have basically three choices:

1. Let it pass and forget it, hopefully without resentment.
2. Attack, depreciate or terminate the relationship or the situation.
3. Work to improve the relationship or situation, which may require considerable effort and emotional energy

Is there anything you would like to change in the ways you handle conflict? Do you handle conflict differently in community situations than you do in your family or work relationships?

Recognizing Conflict

The first step in responding appropriately or creatively to conflict is to recognize conflict at the earliest possible point and ask: "Is this a conflict that requires action?'" If it is, you have an opportunity for a creative response rather than waiting until a later point when you probably will be able only to react.



Skills for conflict management

Good communication is the key to effective conflict management and resolution. For communication to occur two things must happen: You must understand the messages others are sending you, and you must send messages others understand.

The two skills which are vital to communication:

Active Listening - You are actively engaged in the task of listening to another. This skill is useful for acknowledging and exploring problems, increasing understanding and diffusing strong emotions.

'I' Statements - You express your concerns clearly and assertively. This skill is important for making requests, responding to complaints and setting limits in a manner that is respectful of both yourself and your listener.

Active Listening

Active Listening

People are not able to listen to our view until they feel sure we have heard their view. In order to effectively manage conflict, we first have to listen. This means:

- Invite the other person to talk, e.g., "Tell me about it." "Tell me what happened."
  "I'm interested in hearing more about it."
  "Go on."

- Reflect the content that you hear, e.g.; 'You are concerned about what is going on." 'You think there is a problem with that approach." "Others don't help out when you ask."

- Acknowledge the underlying feelings. Match intensity, e.g., 'You feel frustrated." "You seem confused." "I'm hearing a lot of disappointment." "You are really angry!"

- Probe for greater understanding, e.g., "Please explain what you meant when you said she has not been honest with you." "What has she been doing?" "Help me understand why that is important to you."

Giving Feedback

Giving Feedback

"Feedback" is a way of giving another person information about his/her behavior in a given situation. The person receiving the feedback is made aware of how this behavior affects him/herself and others in the group.

Feedback helps individuals to keep behavior "on target" and focused on intended goals. The person receiving feedback can decide if a change of behavior is desirable.

Feedback is useful when it is:

Descriptive

It is descriptive rather than evaluative. By describing one's own reaction, it leaves the individual free to use it as he/she sees fit. By avoiding evaluative language, it reduces the need for the individual to react defensively.

Specific

It is specific rather than general. To be told that one is "dominating" will probably not be as useful as to be told that "just now when we were deciding the issue you did not listen to what others said and I felt forced to accept your arguments or face attack from you."

Considers Needs

It takes into account the needs of both the receiver and the giver of feedback. Feedback can be destructive when it serves only our own needs and fails to consider the needs of the person on the receiving end.

A Realistic Request

It is directed toward behavior that the receiver can do something about. Frustration is only increased when a person is reminded of some shortcoming over which he/she has no control.

Giving Feedback

Solicited

It is solicited, rather than imposed. Feedback is most useful when the receiver himself has formulated the kind of question that those observing him can answer.

Well-Timed

It is well-timed. In general, feedback is most useful at the earliest opportunity after the given behavior (depending, of course, on the person's readiness to hear it, support available from others, etc.).

Clearly Communicated

It is checked to insure clear communication. One way of doing this is to have the receiver try to rephrase the feedback s/he has received to see if it corresponds to what the sender had in mind.

Accurate

When feedback is given to a group, both giver and receiver have opportunity to check with others in the group the accuracy of the feedback -- to determine if the statement is one person's impression or an impression shared by others.

Feedback, then, is a way of giving help; it is a corrective mechanism for the individual who wants to learn how well his/her behavior matches his/her intentions, and it is a means for establishing one's identity -- for answering "Who Am I?"

Note: "Feedback," I Messages" and "Listening" all require time for practice. If using these activities plan accordingly.

“I” Messages

What is an “I” Message?

Active listening is vital to effectiveness in conflict management. Conflict is not resolved through listening alone. One must also clearly convey one's own opinion, needs, concerns, and feelings.

Most of the messages we send to people about their behavior are "you" messages. These are messages directed at the other person and have high probability of putting them down, making them feel guilty, making them feel their needs are not important and, generally making them resist change. Examples of "you" messages are usually orders or commands, or blaming or name calling statements, or statements that give solutions, thereby removing the responsibility for behavior change from the other person. Perhaps the worst of all "you" messages is the "if .... then" threat.

An "I" message, on the other hand, allows a person who is affected by the behavior of another to express the impact it has on him or her and, at the same time, leave the responsibility for modifying the behavior with the person who demonstrated that particular behavior.

The "I" message provides an effective means for expressing your thoughts in an assertive, but non-threatening manner. It involves expressing your own concerns, needs, opinions or feelings through an honest straightforward statement that begins with the word "I". An "I" message consists of three parts:

1. the specific behavior,
2. the resulting feeling you experience because of the behavior,
3. the tangible effect on you.

"I'm concerned about ...” "I would prefer if we ... " "I am upset by ...” "I suggest ... ".

Care should be taken to express yourself in direct but nonthreatening, non-judgmental manner, questioning, advising, criticizing and defending become roadblocks to communication. They tend to generate a defensive rather than a cooperative response.

Avoid "You" messages. "You should have ...” "You didn't consider ...” "You hurt my feelings ...” "You don't know what you are talking about ... " "You" statements tend to be directive and judgmental.

Once you have expressed your concern, stop. Your silence allows the other person to think about what you have said, and to speak whatever is on his/her mind. Seek feedback. The information you receive through listening may overcome a misconception or otherwise modify your need to pursue the issue further.

Counter any defensive responsive with reflective listening. Summarize back in your own words what you understood the person's verbal message and feeling to be: "You feel ...” "You think ...” "I can see your point ... ". When one becomes defensive, it is generally useless to keep hammering away with further "I" messages. Instead, take time to listen. Restore mutual respect.

Most conflict is resolved through a simple process of shifting back and forth from active listening to "I" messages, back to listening and more "I" messages as we seek to clarify and understand each other's needs and concerns and the feelings behind them. As you begin to understand more completely one another's point of view, you move on to collaborative problem solving, to the resolution of the conflict. The key is your willingness to be involved in the process of listening and sharing clear "I" messages.

In effect, the "I" message allows the sender to implicitly say, "I trust you to decide what change in behavior is necessary. In this manner, "I" messages build relationships and equally importantly, they do not place the sender in the position of enforcing a new behavior, as is frequently the case with the "you" message.

"I" Messages Used When:

1. We want to solve problems.
2. I want to let another know how I feel.
3. I want another to do something different.

In order to understand and use the "I" message effectively, people should be given a chance to practice. Below is a guide which some have found helpful in formulating an "I" message.

When (behavior), I feel; (feelings).

Sample practice situations

- Your daughter or son consistently leaves her/his room in shambles.
- Your husband/wife/roommate refuses to share the household chores.
- A neighbor has borrowed a lawn mower and has failed to return it.
- A close friend has listened to you explain a difficult problem that you are currently facing.
- An aunt keeps telling you that you are raising your children all wrong.
- Your son/daughter keeps putting off household chores.
- Your husband/wife/mother/father doesn't seem interested in helping you with an important project.
- You are making your third call to the telephone company in a week concerning an extension phone they agreed to install one month ago.
- Your best friend told someone else something you told him/her in confidence.
- An acquaintance borrowed some money and has not paid it back.
- You take your car back to a mechanic for the third time -- because it still isn't fixed.

Words Describing Feelings

(to be used with "I" statements)

Pleased	Rejected	Provoked
Irritated	Comfortable	Anxious
Excited	Distracted	Affectionate
Frustrated	Bored	Ignored
Cowardly	Satisfied	Unrecognized
Glad	Joyous	Contented
Happy	Cautious	Weary
Playful	Elated	Uncomfortable
Uneasy	Fascinated	Witty
Daring	Hesitant	Hopeful
Surprised	Apathetic	Eager
Afraid	Cheated	Stupid
Angry	Discounted	Loving
Appreciated	Put Down	Lonely
Confused	Inferior	Competitive
Hurt	Attracted	Guilty
Trusting	Defensive	Sad
Repulsed	Shy	Affirmed
Helpless	Worthless	Disappointed
Neglected	Awkward	Unappreciated

Road Blocks
Things That Increase Conflict

Give advice, diagnose the problem

- You should have ...
- The problem seems to be ...
- The best solution ...

Persuade with logic, defend

- Did you realize that...?
- You're mistaken ...
- You haven't considered....
- It stands to reason that....
- Look at it this way ...

Ridicule, shame, demoralize

- You're being inconsiderate of others ...
- If you had stopped to think ...
- You're making a mountain out of a mole hill ...
- If you really cared, you'd ...
- You shouldn't think that way...
- You only want to look good...
- You are being a bit paranoid ...

Judge, blame, criticize

- That doesn’t make sense ...
- You are out of line ...
- That was the wrong thing to say ...
- You are being hard-headed ...

Warn, threaten

- If you don't ... , ... will happen ...
- It would be best for you if ...
- You don't have the authority to ...
- That is not how it is done around here...
- You must ... , I expect you to ...
- You have problems with authority ...

Question, Interrogate, Interpret

- Why did you...?
- What made you think that you could?
- What have you done to try to solve it?
- You feel that way because ...
- You have problems with authority.

Things That Decrease or Prevent Conflict

Schedule "conflict" discussion at a special time so they can be private and allow plenty of time to handle feelings and bring some resolution or closure.

- I want to discuss this ... with you, but could we agree upon a time ...

Encourage each other to express the positive feelings for each other, what is appreciated about the relationship.

- I really admire your patience ...
- You bring a different perspective to this issue which I don't have ...

Encourage each other to fully express negative feelings about the issue without placing blame.

Paraphrase what you thought the other person said, check out assumptions carefully.

Accept honest feedback thoughtfully.

Deal with behaviors, issues, not personalities.

Take responsibility for your role in the conflict.

Strive for a win/win solution.

Note: Conflict is difficult, but with both parties working constructively it can be creative. The results can be a more rewarding and fulfilling relationship.

Conflict Managed

Discovering our styles for reacting to conflict situations gives us information about how we affect others. Once we know what our usual style is, we can judge if it is useful or if another method might be more appropriate. Learning new methods for resolving conflict gives the possibility to choose the style best suited to each situation. By testing a variety of techniques we can be more selective -in our behavior and become more effective. The changes we make in our own patterns will frequently produce corresponding changes in the responses of others.

While conflict may seem negative, it is actually a natural event in relationships between people. It can become a liability if it remains unresolved. Depending on how they are handled, conflicts may have negative or positive consequences. The chart below gives participants the opportunity to compare the possible results of unsuccessful and successful (creative) conflict resolution.

In itself, conflict is neither good nor bad. It is what we do with it that makes the difference. We can become more effective in conflict situations if we respond by consciously selecting our behavior, instead of merely reacting based on habitual, unexamined patterns. To prepare us for managing conflict creatively, we need to become aware of the methods we choose in dealing with conflict situations and learn new ways of handling them. It takes conscious effort and much practice to turn the effective and appropriate responses to conflict situations into a "natural" response (habit).

Results of Conflict Resolution

Unsuccessful

- People feel defeated and humiliated.
- The distance between parties increases.
- A climate of distrust develops.
- Cooperation may decrease
- Resistance develops when activities or work is needed.
- Some people leave because of turmoil.

Successful

- Better ideas are produced.
- People are forced to search for new approaches.
- Long-standing problems surface and are addressed.
- People are forced to clarify their views.
- Tension stimulates interest and creativity.
- People have a chance to test their capabilities.

Additional Resources on "Conflict"

Arapakis, M., Softpower: How to speak up Set Limits and Say No Without Losing Your Lover Your Job Your Friends. New York: Warner Books, 1990.

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Wilmot, J. and W., Interpersonal Conflict. Wm. C. Brown Company, 1978.

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13. EQUIPMENT USE AND MAINTENANCE

Safety Equipment and Monitoring Gear

NMFS supplies safety equipment and monitoring gear for catch monitors. You should check all gear to see that it is in good working order when issued. It is your requirement **to maintain** the gear and return it in the best condition possible. Catch monitors may be charged for misuse or neglect of sampling/safety gear. Because you will rely on your gear for safety and to perform your monitoring, it is recommended that you make gear cleaning and upkeep a daily routine.

How to Care for Sampling Gear

- Keep gear in a secure place. Avoid leaving gear exposed to the weather when not in use.
- Keep forms, books, pencils, pens, and unused equipment in a dry safe place.
- Keep all gear as clean as possible. Use fresh water hoses to rinse slime, scales, and blood off length boards, clipboards, and knives after each use.
- Keep metal parts clean and well oiled. The lubricant oil issued is food-grade and should be used often.
- Do not put wet scales, knives, thumb counters, measuring tapes, or other metal objects in plastic bags or boxes. They will rust.
- If something does happen to your issued gear, document the events in your logbook and let NMFS staff know as soon as possible.
- Keep your gear consolidated. This will minimize the chance of forgetting something and will be appreciated by the first receiver. When not in use, gear should be stored in the secure location designated by the first receiver.

- **If you are issued a laptop computer, DO NOT LEAVE it at the first receiving facility for storage.**

If replacement gear is required, contact NMFS program staff as soon as possible.

Scales

Monitors are supplied with two scales:

- A six-pound hand-held brass scale for items up to six pounds.
- A 50-pound hand-held brass scale for items up to 50 pounds.

Scale Maintenance

- Remember to rinse your scales with fresh water after use and store in clean and dry location.
- Oil your scales often, but only when clean and completely dry. When you're issued your scales, you will test them for accuracy. You will test them again when you turn in your gear after your deployment.
- During the season, NMFS program staff may stop at your facility and ask that you use calibrated weight to test scales.
- Remember to regularly calibrate your scales while deployed. When you arrive at your duty station, find a couple of objects that will not change weight, so that you have a field calibration weight. Gallon water jugs work well for this purpose. If you use water jugs, however, be sure to use the same ones throughout your contract, as there can be variation between containers. Write down the weight of these items in your logbook so you remember how much they weigh when you test your scales.

Salmon Wand

You may be issued a salmon wand to determine if there are salmon in the catch that have coded wire tags. Salmon wands are expensive pieces of equipment that must be handled with care and maintained.

14. NMFS Information Technology Security

NOAA's mission is to understand and predict changes in the Earth's environment and conserve and manage coastal and marine resources to meet our nation's economic, social, and environmental needs. The mission is at risk if we do not protect our information assets.

Security awareness helps you protect NOAA systems, resources, and information from unintended and unauthorized access or misuse. As an authorized NOAA computer user, you need to know:

- **How to recognize information security concerns**
- **What to do about them**

At NOAA, we need to be familiar with two types of access control: physical and logical.

Physical Access Controls

Physical access controls, such as guards, locks, and badges, protect you and other NOAA assets from unwanted activities in the workplace. For example, an attacker may be able to:

- Steal hardware or media containing sensitive information.
- Disrupt operations by damaging equipment or other assets.
- Install new wireless hardware to make the network available by radio.
- Access the network by adding or changing connections (bypassing the firewall).
- Install malicious software, such as a virus or a keystroke logger. Keystroke loggers can track, store, and forward all of a user's keystrokes, including passwords, e-mails, credit card numbers, and more.

Equipment
Equipment should be placed to minimize unneeded access. Monitors and printers should not face windows or be placed in areas easily observed by unauthorized persons. Lock portable equipment — e.g., laptops, personal digital assistants (PDAs), mobile telephones, and similar items —out of sight in safe storage overnight.

Logical Access Controls

Logical access controls allow or deny the use of a resource (e.g., a system or file) by a person or process.

The most common logical access control is a combination of a user name and password. Passwords verify a person's identity. Jane Doe enters her user name to inform the system that she intends to log in. Her password confirms that she is Jane Doe and not someone else.

Passwords protect user accounts, such as network, Web, and e-mail accounts. Passwords are also used with screen savers, voicemail, routers and other network devices, and many other items.

Although passwords are a widely used control, they have weaknesses.

If you are careless with your password, an intruder may gain access to your account and assigned resources. You may be blamed for his or her actions

NOAA Passwords

1. Passwords in readable form (e.g., written on paper) must be kept in a safe location and not accessible to others. For example, safe locations include storage in a locked container accessible only to the user.
2. IT systems and workstations must not display or print passwords as they are entered.
3. User applications must not be enabled to retain passwords for later use or be configured to bypass authentication mechanisms. For example, Internet browsers must not be set to save passwords for reuse. However, use of password-retaining programs is allowed if the retaining program requires authentication and stores passwords in an encrypted manner.

Many incidents of information loss are not the result of hackers but of simple, avoidable human error, such as leaving a PDA or laptop computer on an airplane or a car.

Protecting Information

All NOAA information and information entrusted to NOAA by third parties is either public or nonpublic.

Public information has been explicitly approved as suitable for public dissemination. Examples include Freedom of Information Act (FOIA) information, information brochures, and press releases.

Nonpublic information requires protection, because if it were improperly disclosed, altered, or destroyed, NOAA's ability to accomplish its mission would be compromised. Access to **sensitive nonpublic information** is restricted. Disclosure requires the approval of the owner of the information and, in the case of third parties, also a signed confidentiality agreement. Examples include employee performance reviews and confidential commercial information, such as trade secrets. Classified

information is also non-public. For more information about classified information, see the link at the end of this section.

Nonpublic Information Includes:

- information about NOAA investigations and enforcement actions
- vessel catch data
- first receiver landing data
- information not releasable under the Freedom of Information Act (FOIA)

Threats to Nonpublic Information:

- accidental disclosure
- court-ordered disclosure
- social engineering
- shoulder surfing
- eavesdropping
- authorized user abuse/fraud — disgruntled employees might publish nonpublic information on the Internet or take it to a competitor
- errors and omissions (e.g., in the data entry process)
- crackers (who might sell the data or post it to the Internet to carry out a threat or prove that they really have the data)
- industrial espionage
- missing software patches
- a misconfigured firewall
- improper division of duties
- malware (worms and Trojan horse programs that steal information)
- spyware (software that collects information from your computer)
- ransomware (software that extortionists use to encrypt information and charge victims a fee to have the information unscrambled)
- improper disposal of sensitive media (and more).

What Are the Consequences?
"The loss of personally identifiable information can result in substantial harm, embarrassment, and inconvenience to individuals and may lead to identity theft or other fraudulent use of the information."
Source: OMB Memorandum M-06-15, "Safeguarding Personally Identifiable Information," May 22, 2006.

Consequences for violations of IT security policies and procedures may include disciplinary action (up to the termination of employment), civil action against NOAA

and/or the employee, and criminal prosecution of the employee based upon the severity of the incident. **Individuals who fail to follow specific requirements of the Privacy Act may be charged with a misdemeanor and fined up to $5,000 per violation.**

What Are the Requirements for Protecting Nonpublic Information?
NOAA employees and contractors are responsible for:

1. Knowing what constitutes nonpublic information.
2. Correctly handling and protecting nonpublic information,
3. Reporting unauthorized disclosure of information.

E-mail Use

E-mail should be used for authorized purposes only, in accord with the NOAA Rules of Behavior (listed in the Responsibilities section).

Security Concerns Related to E-mail Include:

- disclosure of information
- privacy and monitoring
- inappropriate content
- spoofing
- phishing, hoaxes, chain letters, and Spam
- retention and disposal
- malicious code.

Disclosure of Information
E-mail has made communications faster and easier. E-mail makes it easy to distribute information, including sensitive and nonpublic information. Should sensitive information be leaked through e-mail, it could:

- Harm NOAA's ability to perform its mission
- Damage NOAA's reputation
- Create an opportunity for lawsuits.

Nonpublic information can leak from e-mail several ways. The sender may send sensitive information unencrypted, or, worse, the sender may accidentally send it to the wrong address.

Also, e-mail is persistent. If you send an e-mail, it is best to assume that the message will never go away. It could be stored on your organization's e-mail server, the destination e-mail servers, or any of the systems along the way. E-mail might be stored on backups of any of these systems. Any of the recipients might save the e-mail indefinitely.

Privacy and Monitoring

NOAA users should not expect privacy when using NOAA information systems. All NOAA information systems, including e-mail, are subject to monitoring and inspection. Use of NOAA information technology resources is generally neither private nor anonymous.

- Be careful with what you write in e-mail.
- Do not use e-mail to convey nonpublic information over the Internet, unless the e-mail is encrypted.
- When participating in electronic discussions such as e-mail, bulletin boards, and discussion groups, **use a disclaimer to express personal, not official, opinions.** For example, at the bottom of the message, add: "The contents of this message are mine personally and do not necessarily reflect any position of NOAA."

Inappropriate Content

Before you send an e-mail, ask yourself:

- Would this message be more appropriately conveyed over the phone or in person?
- Does it contain any sensitive issues or information about NOAA employees, customers, or contractors?
- Does it contain any private information that would embarrass you if it were read by anyone other than the intended recipient?
- Did you include anything other than the facts?

If you can answer "No" to these questions, it's probably all right for you to click “send.”

Never use e-mail for inappropriate subject matter, including: sexual content, jokes, gambling/sports pools, chain letters, raffles, and any fundraising activities not officially sanctioned by NOAA.

Do not send negative comments about any person or company in e-mail. Never comment on a person's age, appearance, or personal habits in an e-mail, even if you consider the comments to be positive. Avoid comments on race, creed, religion, politics, ethnicity, sex, disability, national origin, or sexual orientation.

Spoofing

E-mail can be spoofed (made to look as though sent from an address that doesn't belong to the spoofer). Spammers and virus writers often forge (or spoof) the "From"

address of an e-mail to make it look official (e.g., **support@bankofamerica.com**) or as though someone else (e.g., **jane.doe@noaa.gov**) sent the message.

Phishing, Hoaxes, Chain letters, and Spam
Phishing is an attempt to criminally and fraudulently acquire sensitive information, such as usernames, passwords and credit card details, by pretending to be a trustworthy source, most often via electronic communication such as e-mail, instant messaging, or even telephone voice mail.

How To Identify and Handle Phishing E-mails

Don't trust the "From:" address of an e-mail. The "From" address of an e-mail message (e.g., support@microsoft.com) can easily be spoofed, or faked.

Don't trust clickable links within an e-mail. Phishing e-mails use fake Websites to steal personal information. These fake Websites often look identical to the legitimate versions, so don't rely on a clickable link within an e-mail.

If in doubt, never click a link within an e-mail. If you have any doubts about an e-mail, don't follow its links. Instead, go directly to the company's Website by manually typing in the address (e.g., key in www.amazon.com instead of clicking the link in the e-mail).

Legitimate organizations and banks will never ask you for your password in an e-mail. Never give out your online banking passwords based on an e-mail telling you to click the link and log in. Don't enter your online passwords into a Website unless you have manually entered the Web address into your browser.

Look for spelling mistakes or the wrong names of companies. An e-mail link that contains spelling mistakes or that misuses a company name is a fake. Criminals try to register Website addresses that are similar to the legitimate site's address, for example, www.eboy.com instead of www.ebay.com.

Hoaxes and Scams
Suspect e-mails may:

- Contain unnecessary characters in subject lines
- Have only first names in the "From" field
- Contain bad grammar in the subject or message body (this is becoming less frequent)

- Request personal or financial information (e.g., account numbers, social security numbers, passwords, PINs)
- Instruct you to click on a link to update account information
- Be overly familiar in nature while appearing to be from a professional contact
- Arrive in multiple copies from the same or different people
- Have a blank subject or body with an attachment
- Urge you to view the attachment
- Have an attachment with a double or triple extension such as ".gif.exe" or ".jpg.jpg.vbs"
- Come from an unknown party or have a strange variation of the address of a known individual
- Have an incorrect sent date or time (to catch your attention when the mail suddenly appears farther down in your e-mail queue than other newly arrived messages
- Promise that you will receive large amounts of money with little or no work
- Ask you to make large payments in advance, before you have a chance to examine the product or business
- Offer free information (these often have a hidden administrative or registration fee)
- Contain assurances that "this is not a scam!"
- Notify you that you have won something
- Be a request for assistance from someone you don't know
- Contain a file or information that you requested but don't remember requesting
- Have a subject line or an attached file about earning money, losing weight, working from home, pornography, stocks, a music file, a screen saver, etc.
- Contain a .zip file attachment that requires you to enter a password.

Retention and Disposal

E-mail messages can be considered official records. An official record is material created or received by you and preserved as evidence of business activities of your office, or material preserved for its informational value regardless of the medium in which it was transmitted. Official e-mail records must be downloaded and filed with all relevant explanatory materials, including a list of all recipients, if an e-mail group address is used, and disposed of in accordance with records control schedules.

The Freedom of Information Act (FOIA) presumes that records in the possession of agencies and Executive Branch departments of the government are accessible to the public. Although there are exemptions allowing an agency to refuse to disclose information to a requestor, user e-mail can be requested. Contact the FOIA coordinator in your center/office for more information.

Malicious Code
E-mail is one of the most common ways that malicious code spreads. Malicious e-mail often contains a return address of someone you know and may have a provocative subject line. You can learn more about malicious code later in this course.

Browsing the Web

A 2006 study of 200 companies with 500 or more employees found that organizations that allow personal Web surfing are more likely to be infected with worms and viruses than those that do not. The survey showed that up to 30 percent of companies with 500 or more staff had been infected as a result of Internet surfing, while only 20 to 25 percent of the same companies experienced viruses and worms from e-mails.

Many security experts now believe that Web browsing is the leading vector of malware infection. These infections may come directly from casual browsing or by following links to poisonous Web sites sent in phishing and spam e-mail messages.

Even seemingly benign online activities are not without risk. With the rising popularity of sites like YouTube and rich media across the Web has come a new mode of malware infection: video. Most often, the malicious code does not exploit the system itself but instead offers the viewer a hyperlink to click, perhaps with the prompt that a plug-in or codec requires updating to view the video, or that content related to the video can be found offsite. Usually, the pages at the other end of these hyperlinks attempt to install a worm or otherwise infect the viewer's computer.

Web surfing can lead to malware infections and identity theft. In September 2007, employees at The Nature Conservancy visited a Website loaded with malicious software. The employees' computers were infected and the contents of their hard drives were transferred to a hacker.

Among the stolen data were personally identifiable information on current and former employees and their dependents, including Social Security numbers and bank account numbers used for payroll deposits.

Source: Tim Wilson, "Web Hack Exposes Personal Data of 14,000 At Nature Conservancy," Dark Reading, Oct.2, 2007.

Authorized Internet Use

Authorized use is any use in the official interest of NOAA and related to employees' assigned duties, such as:

- Communicating with fellow members of a committee in a professional organization

- Collaborating on articles and other writings
- Transferring the full text of public-domain or freely-distributable manuals, documentation, and self-teaching workbooks
- Connecting to resources that provide information relating to career and educational opportunities
- Reading electronic mail discussion groups on professional or future career development topics
- Researching information, products, or services in support of NOAA's mission.

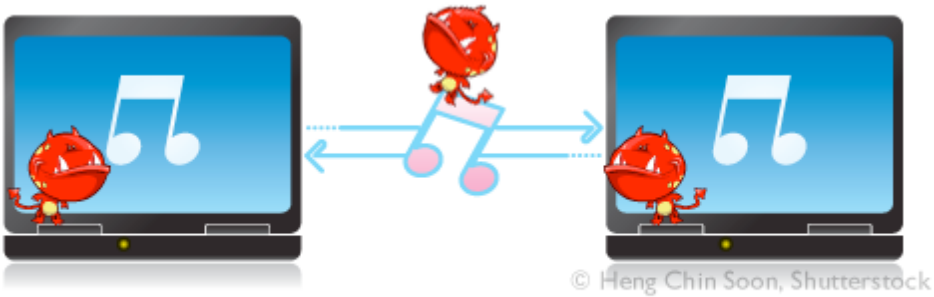
Limited personal use of the Internet during working or nonworking hours is authorized, provided it does not interfere with official duties or consume excessive resources. Limited personal use of the Internet includes e-mail and World Wide Web access and the use of personal computers, networks, and printers to support such access.

Peer-to-Peer Networks and File Sharing

Peer-to-peer (P2P) networks allow computer users to access files directly from each other's hard drives. To do this, they download software that connects their computers to a network made up of other computers running the same software.

Users of P2P software may not realize that:

- **Use of P2P software can result in disclosure of sensitive information.** In addition to sharing files that they intend to share, they also may be allowing others to copy their private files (e.g., e-mail messages, photos, or financial or medical records).
- Web "cookie" files that sometimes include passwords for credit card and e-commerce accounts have been unintentionally shared through P2P networks.
- Closing the file-sharing program window does not always close the connection to the P2P network. Some P2P programs automatically open any time the PC is turned on.
- Some file sharing programs install spyware.
- Downloaded software from P2P networks can introduce viruses to NOAA computers.
- Using P2P software could involve NOAA in illegal activities, as many P2P systems are used to share copyrighted files illegally.
- P2P software can consume excessive network resources (e.g., when sharing large files) and slow network traffic for all NOAA users.



Peer-to-Peer (P2P) networking invites risks.

DOC Policy (IT Security Program Policy) prohibits the use of P2P software without prior written authorization from the NOAA CIO.

Instant Messaging and Chat Security

Instant messaging (IM) and chat channels allow groups of individuals to exchange dialog, Web site address links, and, in many cases, files of any type. As a result, instant messages can transfer worms and other malware. IM programs such as AIM® (America On Line Instant Messenger), ICQ® (I seek you), MSN® Messenger, Yahoo!® Messenger, and other chat applications can expose computers and the NOAA network to viruses, hackers/exploits, and privacy violations.

Users are often security complacent while Web browsing, and malware authors are increasingly taking advantage through the use of spoofs, phishing, and social engineering tactics. Current Web browsers provide some protection through new features that warn users about Websites known to be forged or malicious.

One new standard, Extended Validation SSL (EV SSL), indicates legitimate links by displaying those URLs in green. Studies show that users seldom understand or acknowledge the browser features and warnings that aim to protect them. In 2007, a joint Harvard University/MIT study found that while performing online banking tasks, 100 percent of users ignored the status of the HTTPS security key icon (the golden padlock), and 53 percent ignored warnings that a site's security certificate might be erroneous.

Users can surf more safely by understanding the risks of browsing the Web and heeding the signals that can help prevent a security smash-up.

Blogs and Social Networking

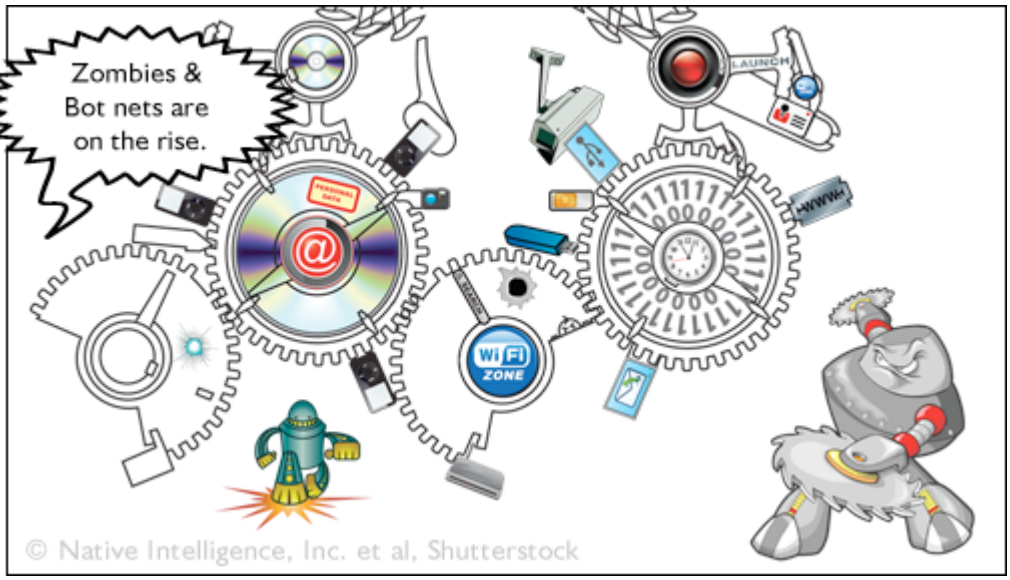
Social networking services are online communities that help people connect with others. Users of social networking Websites form a network of colleagues — often called "friends" — with like interests and communicate with them through e-mail, Weblogs (blogs), instant messages, and multimedia content like photos, audio, and video files.

Information leaks are common on social networking sites and blogs. Before revealing anything about NOAA or your employment duties online, be sure that doing so does not violate an acceptable use policy or nondisclosure agreement with NOAA or its contracting organizations. Doing so can lead to unwanted negative attention or scrutiny and could result in punitive actions against you by an affected party.

Rise of Zombies and Botnets

Experts anticipate an increase in stealth software — programs hidden on a computer to perform tasks without a user's knowledge. These infected or "hijacked" machines are sometimes called zombies. Zombie machines often appear functional but somewhat impaired as they work cooperatively with other hijacked machines as part of a "Bot network" or "botnet." Botnets are often used to send spam, execute denial of service (DoS) attacks on other computer networks, or for brute force attempts to crack another network's security.

The security company CipherTrust reported that more than 180,000 PCs are turned into zombies every day, and this number is likely to increase. Unwanted spam e-mail will continue to be the main way that criminals put botnet programs on computers.



What Happens To Employees Who Misuse the Internet?
NOAA employees and contractors who misuse the Internet and other computing resources may be subject to criminal prosecution and/or administrative disciplinary action, including reprimand, suspension from duty without pay, or removal from their position and federal employment.

Software Licenses and Piracy

Software piracy is the illegal distribution and/or reproduction of software applications (including fonts) for business or personal use. Whether software piracy is deliberate or not, it is illegal and punishable by law.

Many of the software applications that NOAA "buys" don't belong to NOAA (including this course). Instead, NOAA licenses the use of those programs. NOAA purchases the right to use the software on one or more computers. NOAA computer users are not allowed to put copies on other machines or pass licensed software along to colleagues (unless installing applications is one of their official duties).

NOAA computer systems, as well as those operated by contractors on NOAA's behalf, must not be used for the downloading of illegal and/or unauthorized copyrighted content, including illegal downloads using file-sharing programs.

Federal organizations have reprimanded and removed personnel involved in cases of copyright violations, such as downloading and copying music or video content illegally.

Online piracy poses a major threat to countries via "warez" groups (groups whose members distribute unauthorized copies of material), spam, auction sites (that offer pirated software), and peer-to-peer (P2P) systems. **Copying software without buying the appropriate number of licenses is copyright infringement,** as is underreporting the number of computers using licensed software.

Software Downloaded from the Internet
Only properly licensed, authorized software (including "freeware" or "shareware", if used in accordance with the general permission of the creator) may be installed on NOAA computers. NMFS program staff must approve the software installations in advance.

Users of file-sharing networks intending to download pirated software or media files may lose more than they gain. In late 2007, an employee at a McLean, Va., investment firm used a company computer to access a peer-to-peer network. In the process, he exposed the contents of his computer to users of the file-sharing service.

Among the data lost was personally identifiable information, including names and Social Security numbers, of 2,000 of the firm's clients. Many of these individuals are high-powered lawyers and Washington figures, including U.S. Supreme Court Justice Stephen Breyer.

Unlike a pilfered bank vault, data loss is not always transparent, obvious, or even discovered until the damage is done. Illegal downloads do not need to be malicious to harm organization resources when permittivity by proximity can be just as damaging.

Source: "Justice Breyer Is Among Victims in Data Breach Caused by File Sharing," Washington Post, A01, July 9, 2008.

Malicious Software

Malicious software (malware) can damage hardware, software, data, and even NOAA's reputation. Malware can cause denial of service attacks and decrease productivity, preventing NOAA personnel from using the network by consuming network resources as it spreads. Some malicious programs allow an attacker to remotely control any computer on which the program is installed. Computers controlled in this way are called "zombies" or "bots."

Malware can spread through:

- malicious Web sites
- files downloaded from the Internet
- e-mail (usually in attachments)
- NOAA's network connections
- files shared online or on diskettes, CDs/DVDs, or other media
- software — even new commercial software has been tainted with malware.

Spyware and Adware
Spyware and adware programs monitor your actions and collect and send information to an outside party without your knowledge or permission. Spyware could be used to access sensitive data, can result in unwanted advertisements, and can be hard to detect and remove.

You may have spyware on your system if you experience:

- suspicious and/or excessive pop-up ads with strange content
- pop-up ads when you're not connected to the Internet
- poor system performance — your computer runs slower, takes longer to start up, randomly stops responding, or experiences "illegal operation errors"
- strange browser behavior including browser crashes or the unexpected appearance of unfamiliar bookmarked sites
- a change in your browser's default or start-up homepage
- unauthorized 1-900 number charges — some spyware will hangup your normal Internet connection and tell your computer to silently dial a 1-900 number.

Worms and Botnets
Computer worms cause passive infections by autonomously spreading to vulnerable computers through network connections. Worms generally infect computers that suffer a known, unpatched vulnerability, such as those found in a computer's operating system. Worms usually carry malicious payloads like adware, spyware, or botnet code. Worm outbreaks are difficult to manage. Worms may slow down networks or cause denial of service due to the amount of network bandwidth consumed.

Malicious worms often conscript a computer into a network of infected machines, or botnet. Criminal organizations use botnets to spread spam and malware or to make coordinated attacks on other systems or networks. Unlike most viruses or trojans,

botnet malware stays in touch with its authors, allowing its capabilities to grow and its actions to be directed. Updates to the bot code help infected machines avoid detection from antivirus and other security software. Botnets continue to grow. In 2008, Georgia Tech researchers estimated that 15 percent of online computers are infected with botnet malware, a 50 percent increase over the year before.

Patching and Prevention

Timely application of software patches is critical to computer security. Malware is often most effective when it takes advantage of a little-known vulnerability — such as one known only to the code's author — or a known vulnerability for which there is no fix, or a fix is just newly available.

An attack that begins on the same day a vulnerability is disclosed is known as a zero-day exploit. Zero-day attacks occur either before a vendor can release a corrective patch or before users or system administrators have an opportunity to apply it.

Microsoft releases software patches on the second Tuesday of each month. Known as "Patch Tuesday", hackers have responded with "Exploit Wednesday" as they rush to take advantage of newly discovered vulnerabilities.

In October 2008, Microsoft released an emergency, off-cycle software patch for some of its Windows operating systems. Within days, a new worm, Gimmiv.A, was discovered circulating the Internet and attempting to infect vulnerable, un-patched computers. This worm installs malicious code that searches a computer for passwords and forwards that data to a remote server and is but one example of the important protection timely software patching can provide.

Some forms of malware exploit software vulnerabilities. However, many infections are enabled by victims who respond to phishing and similar ploys that use social engineering and psychological tactics to influence their actions. Spam messages are only one such example. Pop-up "spoofs" on the Web trick users into heeding an illegitimate warning message that may lead to malware infection.

One prevalent spoof is a "scareware" scam. A fake message tells users their computer is infected with a virus and prompts them to download corrective software. The software is a sham that hijacks computers until the user pays a fee. Some distributions of the software install other malware, too. This scam has links to Russian organized crime, generates millions of dollars, and is known to target only English-speaking countries.

Viruses are often difficult to detect and usually do not modify the operation of the infected program in any way prior to activation. Watch for changes in the pattern of your system's activities. Any of the following signs can be an indication of a viral infection:

- program loads take longer than normal, computer response time is much slower
- disk accesses seem excessive for simple tasks
- unusual error messages occur often
- inexplicable changes in file modification dates
- system devices indicate activity when there should be none
- less system memory is available than usual
- programs or files disappear
- available disk space is suddenly reduced
- files unexpectedly increase in size
- PCs and servers experience total failure
- e-mail programs send mail to every address in your address book.

How NOAA Handles Viruses
NOAA licenses and requires the use of the **McAfee Active Virus Defense (AVD) suite** software, which covers all products within the AVD suite.

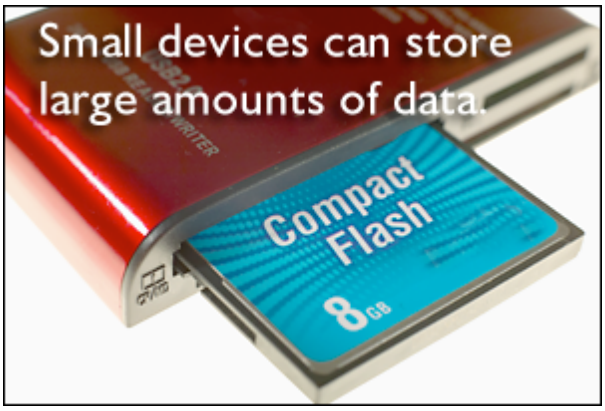
NOAA's Virus Protection Requirements
Virus detection and protection software is required to be installed and run on all systems, including servers, desktop and laptop computers (this includes desktops in training rooms and labs), and personal digital assistants (PDAs).

If you think your computer has been infected with a virus, inform NMFS program staff immediately.

Note —Receiving an e-mail alert stating that the virus came from your e-mail address is **not** an indication that your computer is infected. Viruses that spread through e-mail often forge the sender's address.

Portable devices are prominent tools in our information landscape. Once a glimmer in the eye of technologists, ubiquitous computing — the ability to process and interface with information anywhere as an everyday occurrence — is an emerging reality. Portable and mobile computing devices increase productivity by keeping us connected in and out of the office. However, with this convenience comes new and fluid security challenges. The workplace is no longer something easily defined by traditional physical bounds. Instead, the workplace and the accompanying need to protect its assets now extend to wherever employees connect to organization resources and access or carry organization data.

Portable Devices



Portable devices are generally any computing or storage devices that can carry or access information. These devices may belong to your organization and be issued for use, or belong to an employee, contractor, or visitor. Common portable devices include:

- portable personal computers(laptops and tablets)
- personal digital assistants (PDAs), such as BlackBerry devices and Treos
- cell phones with digital cameras and smart phones (cell phones with built-in PDAs)
- universal serial bus (USB) memory keys and other removable memory devices (flash memory, secure digital (SD) cards)
- iPods and MP3 players
- global positioning system (GPS) satellite receivers
- personal computer memory care (PCMCIA or cardbus) devices
- small (pocket-size) USB and FireWire (IEEE1394) hard drives.

Concerns with Portable Devices

- Often, these devices have removable memory cards that create the potential for data leaks or loss.

- Such devices are not easily managed by centralized systems.
- Few organizations have sufficient safeguards in place to check what data is coming and going.
- Mobile-device breaches are often harder to discover than nonmobile breaches, because users may not know about the loss (e.g., a lost flash drive) for days or weeks.
- Handheld devices are often perceived as cheaper, easier to replace, and less valuable than laptops. Yet they can hold something of great value: sensitive information.

In 2008, a joint Dell Computer and Ponemon Institute study found that travelers misplace up to 12,000 laptops in United States airports every week. Most of these laptops are lost at security checkpoints, and up to 70 percent are never reclaimed.

A notable risk to privacy, over half of business travelers carry sensitive corporate information on their laptops, and two-thirds of travelers do not take security precautions to protect confidential information on their devices.

Source: "Airport Insecurity: The Case of Missing & Lost Laptops," Dell, Inc. and Ponemon Institute, June 30, 2008.

Risks of Personally-Owned Portable Devices

Personal, non-NOAA issued devices can increase security risks. To work more efficiently, workers may be tempted to use iPods, small portable hard drives, and other personal electronic entertainment devices as business tools. These devices have storage capability up to 250 Gigabytes (GB) and higher. News stories show that it is common for workers to download files containing customer lists, database files, and financial records onto these devices as backups or for easy transfer to another machine, without the knowledge or consent of their employer.

Use of portable devices for NOAA work requires management approval. Site/local management may restrict the use of these types of devices. All portable devices used for NOAA work must be owned by NOAA. Do NOT put NOAA data on your personally-owned media/devices.

More Potential Problems

- Insiders could use cell phones with digital cameras to take pictures of screens containing sensitive data, and then sell this information.
- Loss of the mobile device or transfer of unsecured data to another unauthorized device/user could cause significant loss or damage to NOAA.

- Someone with bad intentions can easily bring a USB drive into a facility without notice. Anyone with access to NOAA work areas could plug a USB drive into an NOAA-networked computer. This could result in a loss of sensitive information.
- Malicious code, spyware, and keystroke loggers can be loaded onto a USB drive that is left for a user to find. USB (thumb) drives are small, popular, affordable, and can hold gigabytes of data. They plug into desktop or laptop USB ports. There is no software to install. They can be used on most computers. Thumb drives can also be bootable and can bypass a computer's access controls.

Laptops

- Every laptop must have its hard drive fully encrypted, even if sensitive information is not present on the laptop.

Removable Memory

Removable memory often looks like a small removable disk drive to the operating system. These devices plug into a memory slot or the USB port, making them useful on just about every computer currently sold. Newer operating systems such as Windows XP and Mac OS X automatically recognize these USB drives. This allows for near-instant installation of such devices on almost any computer in a matter of seconds. You don't have to install any software to use one. Older operating systems (e.g., Windows 98 and 95) may require a software "driver" to recognize a USB device.

USB flash drives and other removable memory for computers are often called "thumb drives" or "key chain drives." Some have built-in encryption to protect information if the device is lost or stolen.

Special security problems concerning removable memory drives include:

- Because they are small, they are easily misplaced, lost, or stolen.

- They can be a huge source of data leakage. Thumb drives are easy to conceal. A person with bad intentions can easily slip one in and out of a facility, stealing gigabytes of data.
- Just as with floppy and optical disks, there is a danger of users importing viruses on thumb drives.
- Thumb drives can be "bootable," so they're popular for diagnostic or repair work, but they're also convenient for the bad guys.
- Users who are unaware of the risks often store information that they need, such as passwords or other sensitive information, on these USB flash devices.
- Management can order PCs without floppy drives to reduce the threat of floppy-born viruses, but it's hard to find a PC without USB ports.

It is against Department of Commerce (DOC) policy to store sensitive data on removable devices/media such as thumb drives.

What Should NOAA Users Do If a Device is Lost, Missing, or Stolen?

The loss of any computing device is a serious issue. Whether accidental or due to suspected or confirmed theft, immediate actions must be taken to identify the extent of the loss, to assess the nature of the data that may be potentially compromised, to notify security and law enforcement officials, and to prevent any recurrence of the loss.

NOAA has specific requirements for all employees and contractors in case a laptop, PDA, or other hand-held information device is discovered missing, lost, or stolen. Should your laptop go missing, notify NMFS program staff immediately.

Limited Personal Use

Use of NOAA data for personal profit is prohibited. Limited use of NOAA office equipment for personal needs during staff non-work time is allowed if the use:

- Does not interfere with official business
- Involves minimal additional expense for NOAA; personal use of NOAA office equipment is limited to situations where NOAA is already providing equipment or services, and your use of such equipment or services will not result in any additional expense to NOAA, or the use will result in only normal wear and tear or the use of small amounts of electricity, ink, toner, or paper
- Does not reflect adversely on NOAA or the DOC
- Does not violate standards of ethical conduct.

Employees have **no inherent right** to use government office equipment for other than official activities. The privilege to use Government equipment for non-government purposes may be revoked or limited at any time by NOAA management.

Personal Internet Use

NOAA personnel may use NOAA-provided Internet services during official working hours only for authorized purposes (i.e., in the official interest of NOAA and related to employees' assigned duties), except when the use:

1. does not harm the employee's performance and does not hinder work toward NOAA's mission
2. does not pose a security risk
3. occurs during nonworking hours
4. does not consume excessive resources;
5. does not reflect poorly on NOAA or the DOC, such as by creating the impression that the employee’s personal views or activities represent the official position of NOAA or the DOC.

The DOC defers to management judgment to define excessive resource use. However, some examples include burdening e-mail accounts with personal and/or nonbusiness-related content, creating or transmitting personal mass mailings or chain letters, downloading or sending large personal files via e-mail, or downloading large nonwork-related audio or video streams.

Ethical Conduct

The general principles of ethical conduct emphasize your role at NOAA as one serving the public interest that must uphold the public trust. This trust renders personal interests (financial, material, or career-focused) as subsidiary and sometimes in conflict with the interests of the people of the entire United States.

The basic principles of ethical conduct for federal employees are:

- No self-dealing
- No special favors
- Avoid undue influence
- Avoid divided loyalties
- Do not steal
- Avoid misuse of your prior Federal relationship
- Tell the whole truth.

For example, as a public servant, one should not seek or negotiate employment outside NOAA with any entity currently seeking or maintaining work before one's office. Doing so would constitute an ethics violation, as the public could no longer

trust that personal interests did not impact the relationship between the outside entity and NOAA.

When in doubt about a situation and your legal and ethical obligations, you should seek advice from an agency ethics official. These individuals are available to help disambiguate situations and clarify whether an ethics principle or rule applies.

For more information about ethics, please see the **Summary of Ethics Rules** provided by the DOC Ethics Division of the Office of the Assistant General Counsel for Administration (link at end of this page).

Misuse and Inappropriate Personal Use of Office Equipment

If you cause loss to NOAA through unauthorized access or improper use, you may be held financially responsible for any costs incurred. Unauthorized access or improper use may also be subject to disciplinary action or prosecution under applicable federal laws.

Misuse or inappropriate personal use of NOAA office equipment during work and staff nonwork time includes but is not limited to:

- Any activity that uses NOAA resources for personal profit (e.g., running a business using NOAA computers).
- Any activity directed toward the success or failure of a political party, candidate for partisan political office, or partisan political group, and any activity in support of political fundraising.
- Engagement in any prohibited direct or indirect lobbying.
- Online gambling.
- Any personal use that could cause congestion, delay, or disruption of service to any NOAA system or equipment, such as viewing, downloading, or storing greeting cards, video, sound, or other large files sent to you as an e-mail attachment or using NOAA-installed software that facilitates streaming download, such as listening to radio broadcasts or downloading illegal copies of music or video.
- Use of peer-to-peer file sharing services.
- Transmission of sensitive information without adequate security protection.
- Creating, copying, transmitting, or forwarding chain letters, regardless of the subject matter. A chain letter is any message or document sent to several persons asking or instructing each person to send copies of the letter to an equal or greater number of persons.
- Using NOAA office equipment to engage in activities that are illegal, inappropriate, or offensive to fellow staff or the public. Such activities include, but are not limited to, creating, downloading, viewing, storing, copying, or transmitting material that ridicules others on the basis of race, creed, religion, color, sex, disability, national origin, or sexual orientation. Violations will be

interpreted in accordance with relevant statute, executive order, regulation, and case law.
- Creating, downloading, viewing, storing, copying, or transmitting sexually explicit or sexually oriented materials. Violations will be interpreted in accordance with relevant statute, executive order, regulation, and case law.
- The intentional unauthorized acquisition, use, reproduction, transmission, or distribution of any controlled information, including computer software and data, that includes privacy information, copyrighted, or trademarked material, or material with other intellectual property rights (beyond fair use), proprietary data, or export controlled software or data.

No personal software may be installed on any NOAA equipment without the approval of the system owner and a virus-scan.

What Are The Consequences?

NOAA employees and contractors who misuse the Internet and other computing resources may be subject to criminal prosecution and/or administrative disciplinary action, including reprimand, suspension from duty without pay, or removal from their position and federal employment.

Incident Reporting

An incident is any event that could cause loss or harm to a computer or information system and related assets. It's important for you to know how to recognize potential and actual incidents and report concerns as soon as you become aware of them.

Incidents include violations of security policies and any actions that evade or bypass security controls. Examples of incidents include:

- malware infections

- compromised passwords
- attempted or actual break-ins
- damage, disclosure, or loss of data
- denial of service
- theft
- misuse of information systems .

Symptoms of a Computer Incident May Include:

- unusual items appearing on the display, including graphics, odd messages, or system error messages
- corrupted or inaccessible program files, hard disks, or diskettes
- programs taking longer to start up, running more slowly than usual, or not running at all
- unexplained decreases in the amount of available system memory.

What to Report:

- **Improper disclosure or loss of sensitive data** — this also applies to incidents involving **personally identifiably information (PII)** in electronic or physical form and does not distinguish between suspected and confirmed breaches. **Immediately report incidents involving sensitive data** to NMFS program staff within one hour of discovering the incident.
- **Lost or stolen equipment** — **immediately** report the loss or theft of any IT device (laptop, PDA, cell phone, or anything capable of storing and retaining data) to NMFS program staff.
- Someone using a computer without authorization.
- Files that have been tampered with.
- A computer acting strangely — including unusual activity, such as systems that appear to be running slowly, files with "last modified" dates that may be inaccurate, new files that you do not recognize, unusual items on the display (e.g., graphics, odd messages, system error messages).
- Approaches by a suspected social engineer (on phone, by e-mail, or in person).
- Defacement of NOAA Web pages.
- Password compromises.
- Attempted or actual break-ins, including social engineering.
- Denial of service.

When and to Whom to Report

If you notice suspicious activity on your computer or suspect a security incident, **immediately contact NMFS program staff.**

Why Report Potential Incidents?

Incident reports are an important way to identify what needs to be fixed. NOAA has far more employees than security staff. **Employees, especially those who use computers, are positioned to notice things that security personnel might not see.** What may look like a minor problem can lead to a major security breach.

A quick response to computer security incidents is important because:

- A compromised computer on NOAA's network can affect other systems connected to the network (in various locations and organizations).
- It increases the opportunity to spot a trend early and prevent additional damage.

Incident report data is used to determine what controls are needed to reduce the risk of similar incidents in the future.

Incident reporting is needed for NOAA to comply with federal regulations and laws that require organizations to notify persons whose personal data is released without their consent or authorization.

When an incident involves the theft, loss, or misuse of personal or sensitive information, in any format (electronic, paper, microfiche, etc.), it's important to act quickly. Safeguarding sensitive information is essential to building trust with citizens.

NOAA security staff and managers are tasked to evaluate risk and decide what to do about it. **If you suspect a security problem, do not accept the risk by not reporting it.**

All NOAA computer users have a responsibility to be familiar with security policies, procedures, rules, and regulations (know what to do, how to do it, and why).

Individuals who are authorized to use computing resources must comply with the End User Responsibilities listed below.

NOAA'S INFORMATION TECHNOLOGY SYSTEM RULES of BEHAVIOR

NOAA provides access to computing resources (hardware, software, data) to its employees and contractor staff. These resources are provided to facilitate completion of assigned responsibilities, with prior authorization. The policies and procedures governing use of NOAA computing resources are detailed in NOAA management directives. Individuals who are authorized to use NOAA computing resources must comply with NOAA management directives and the specific rules of behavior listed below.

End User Responsibilities

- Users are required to report known or suspected incidents —including unauthorized use of NOAA computer resources; lost, missing or stolen IT hardware (laptop computers, Personal Digital Assistants, removable memory devices); and loss of any potential Personally Identifiable Information (PII) — to their local ISSO/ITSO, and to the NOAA Computer Incident Response Team (N-CIRT), by calling (301) 713-9111 and using NOAA Form 47-43. All incidents must be reported with 24 hours of detection. Incidents involving potential release of PII must be reported to the N-CIRT within one hour of detection.
- Use NOAA computers only for lawful and authorized purposes.
- Comply with safeguards, policies, and procedures to prevent unauthorized access to NOAA computer systems.
- **Passwords.** User passwords are required to comply with the DOC IT Security Program Policy and Minimum Implementation Standards Policy for Password Management. User passwords must be changed at least every 60 days and at a minimum contain at least 12 characters consisting of numbers, letters, and special characters. Passwords cannot be reused for two years and can't contain dictionary words (spelled forward and backwards.) Do not write down or share your log-on or account password with anyone (including the help desk). Users must logoff or use a password-protected screen saver whenever leaving their workstation

unattended.

- **Individual Accountability.** NOAA computer users are accountable for their assigned User IDs, passwords, and IT equipment. Each user must have a unique ID to access NOAA systems. User IDs are used to identify an individual's actions on NOAA systems and the Internet. Individual user activity is recorded, including sites and files accessed on the Internet. Individual employees must safeguard IT equipment, including laptop computers, PDAs, and removable storage devices (including "thumb drives") assigned to them. **Employees can be held individually financially responsible for missing, lost, stolen, or damaged property if it is determined to be the result of employee negligence.**

- **E-mail.** Chain letters, games, and threatening, obscene, or harassing messages are not allowed. Management must approve use of broadcast features. Do not open unsolicited or suspicious e-mail messages or their attachments, do not forward chain mail, and do not generate or send offensive or inappropriate e-mail messages, images, or sound files. Limit distribution of e-mail to only those who need to receive it.
- **Antivirus Protection.** Users are required to use regular updated antivirus software while using or accessing government IT systems and resources. When your workstation begins an update of its antivirus software, let that update finish. Use authorized virus-scanning software on your workstation or PC and your home computer. Know the source before using diskettes or downloading files. Scan files for viruses before execution. Minimize the threat of viruses: (1) write-protect diskettes and CD's;(2) virus-check any foreign data source; and (3) never circumvent the antivirus safeguards on the system.
- **Data Backups.** Ensure that data are backed up, tested, and stored safely.
- **Protection of IT Hardware.** Users are responsible for safeguarding IT hardware assigned to them from loss and damage. Users must know the reporting requirements for lost, stolen, or damaged hardware.
- **Protection of Copyright Licenses (software).** Users of government-owned equipment are not permitted to download and/or install any software application(s) on systems without prior system owner approval. All software must be properly licensed prior to installation on any government-owned equipment. Audit logs will be reviewed to determine whether employees attempt to access government-owned systems or IT resources on which valuable, commercial off-the-shelf or government software resides but to which users have not been granted access.
- **Copyrighted Software.** Unauthorized copying of copyrighted software is prohibited. Users are required to comply with the DOC Copyrighted Software Policy and Title 17, United States Code, Section 106.
- **Connections to the Internet.** All desktop PCs, workstations and servers that have access to the Internet and its use must be in accordance with

the DOC and NOAA Internet Use Policies.

- **Use of Government Equipment.** Users are permitted limited personal use of government-owned equipment during nonduty hours (before scheduled work hours, lunch times, and after work hours). Personal use of government-owned equipment and IT resources must not incur any additional costs to the government and/or violate any federal regulations, DOC or NOAA policies. Activities specifically not permitted on government-owned IT resources include, but are not limited to the following: a) private commercial business activities or profit-making ventures; b) engagement in matters directed toward the success or failure of a political party; c) engagement in any prohibited direct or indirect lobbying; d) use that could generate or result in an additional charge or expense to the government; e) viewing, obtaining, creating, distributing, or storing sexually explicit material; f) participation in or encouragement of illegal activities or the intentional creation, downloading, viewing, storage, copying, or transmission of materials that are illegal or discriminatory; g) use of government e-mail addresses in a manner that will give the false impression that an employee's otherwise personal communication is authorized by the department; h) engagement in unauthorized charitable fundraising (see the Broadcast E-Mail Policy) or soliciting volunteers to raise funds; and/or i) activity that would bring discredit on the department or violation of any statute or regulation, including applicable copyright laws. Personally purchased software is not allowed on government equipment. DOC IT Security Program Policy and Minimum Implementation Standards Policy for Peer-to-Peer File Sharing restricts the use of peer-to-peer file sharing. Users will not use peer-to-peer (P2P) connection sharing for transferring copyrighted files.
- **Remote Access.** Designated managers may authorize remote access to specific IT systems and resources of specific systems for remote user access. All remote users are required to review and comply with all aspects of the DOC and NOAA Remote Access Policy and sign the Remote Access Agreement. These rules of behavior apply for all remote accesses.
- **Data Destruction.** Properly dispose of unneeded data: (1) Do not throw sensitive hard copy into a wastebasket (shred or burn). (2) Delete sensitive information from memory on hard drive and diskettes permanently by overwriting it. Ask your ISSO/ITSO for aid.
- **NOAA Security Awareness Training.** Users are required to complete the NOAA IT Security Awareness course annually.
- Users need permission from appropriate NOAA officials before they discuss security or antipiracy practices with external organizations or individuals.

What are the penalties for noncompliance?

Noncompliance will be enforced through sanctions ranging from a verbal or written warning, removal of system access for a specific period of time, or reassignment to other duties, to termination, depending on the severity of the violation.

In summary

1. Don’t leave your laptop unsecured when not in use.
2. Don’t position yourself in a place where someone could look over your shoulder when viewing or working with sensitive data.
3. Do not enable applications to retain passwords
4. If you suspect your password has been compromised or if you are prompted to change the password, notify NMFS program staff, and they will advise you on how to proceed.
5. Never use personal devices to store or transfer NMFS data.
6. Do not use your NMFS laptop for peer-2-peer networking (e.g.,Napster)
7. Do not use instant messaging.
8. Do not download or install any software that is not NMFS approved.
9. Don’t do anything inappropriate or illegal.
10. If you are prompted to change the SecureDoc password or feel that the password has been compromised, CALL NMFS STAFF for instructions on how to proceed. DO NOT CHANGE THE PASSWORDUNLESS INSTRUCTED BY NMFS STAFF!
11. If your laptop has gone missing, or you feel the machine has been compromised, notify NMFS program staff IMMEDIATELY!

APPENDIX A: FISH SPECIES LIST AND CODES

Code	Common Name	Scientific Name	Groundfish Report Groupings
1226	Abyssal Grenadier	*Coryphaenoides armatus*	Other
710	Albacore Tuna	*Thunnus alalunga*	Other
1237	Aleutian Skate	*Bathyraja aleutica*	Other
606	American Shad	*Alosa sapidissima*	Other
605	Anchovy Unid	*Engraulididae*	Other
10645	Anglerfish Unid	*Lophiiformes*	Other
141	Arrowtooth Flounder	*Atheresthes stomias*	Arrowtooth Flounder
204	Atka Mackerel	*Pleurogrammus monopterygius*	Other
334	Aurora Rockfish	*Sebastes aurora*	Minor Slope Rockfish, North
180	Banded Guitarfish	*Zapteryx exasperata*	Other
337	Bank Rockfish	*Sebastes rufus*	Minor Slope Rockfish, North
770	Barracudina Unid	*Paralepididae*	Other
475	Barred Sand Bass	*Paralabrax nebulifer*	Other
264	Basketweave Cusk-eel	*Ophidion scrippsae*	Other
480	Bass Unid	*Percichthyidae/Serranidae*	Other
561	Bat Ray	*Myliobatis californica*	Other
185	Bay Pipefish	*Syngnathus leptorynchus*	Other
252	Bearded Eelpout	*Lyconema barbatum*	Other
453	Beardless spearnose Poacher	*Ganoideus vulsus*	Other
1238	Bering Skate	*Bathyraja interrupta*	Other
550	Big Skate	*Raja binoculata*	Miscellaneous Groundfish
454	Bigeye starnose Poacher	*Asterotheca pentacantha*	Other
575	Bigeye Thresher Shark	*Alopias superciliosus*	Other
711	Bigeye Tuna	*Thunnus obesus*	Other
254	Bigfin Eelpout	*Lycodes cortezianus*	Other
Code	**Common Name**	**Scientific Name**	**Groundfish**

			Report Groupings
119	Bigmouth Sole	*Hippoglossina stomata*	Other
10646	Bigscale Unid	*Melamphaidae*	Other
355	Black and Yellow Rockfish	*Sebastes chrysomelas*	Minor Nearshore Rockfish, North
725	Black Croaker	*Cheilotrema saturnum*	Other
255	Black Eelpout	*Lycodes diapterus*	Other
850	Black Hagfish	*Eptatretus deani*	Other
306	Black Rockfish	*Sebastes melanops*	Black Rockfish
551	Black Skate	*Bathyraja trachura*	Other
630	Black Surfperch	*Embiotoca jacksoni*	Other
256	Blackbelly Eelpout	*Lycodopsis pacifica*	Other
683	Blackchin Unid	*Neoscopelidae*	Other
684	Blackdragon Unid	*Idiacanthidae*	Other
455	Blackedge Poacher	*Xeneretmus latifrons*	Other
456	Blackfin starnose Poacher	*Bathyagonus nigripinnis*	Other
319	Blackgill Rockfish	*Sebastes melanostomus*	Minor Slope Rockfish, North
257	Blackmouth Eelpout	*Lycodapus fierasfer*	Other
685	Blacksmith	*Chromis punctipinnis*	Other
856	Blob Sculpin	*Psychrolutes phrictus*	Other
316	Blue Rockfish	*Sebastes mystinus*	Minor Nearshore Rockfish, North
69	Blue Shark	*Prionace glauca*	Other
1241	Bluebarred Prickleback	*Plectobranchus evides*	Other
712	Bluefin Tuna	*Thunnus thynnus*	Other
457	Bluespotted Poacher	*Xeneretmus triacanthus*	Other
302	Bocaccio Rockfish	*Sebastes paucispinus*	Bocaccio Rockfish
1219	Bonito (Shortfin Mako) Shark	*Isurus oxyrinchus*	Other
687	Bristlemouth Unid	*Gonostomatidae*	Other
356	Bronzespotted Rockfish	*Sebastes gilli*	Minor Shelf Rockfish, North

Code	Common Name	Scientific Name	Groundfish Report Groupings
68	Brown Cat Shark	*Apristurus brunneus*	Other
408	Brown Irish Lord Sculpin	*Hemilepidotus spinosus*	Other
332	Brown Rockfish	*Sebastes auriculatus*	Minor Nearshore Rockfish, North
576	Brown Smoothhound Shark	*Mustelus henlei*	Other
409	Buffalo Sculpin	*Enophrys bison*	Other
410	Bull Sculpin	*Enophrys taurina*	Other
198	Bullet Mackerel	*Auxis rochei*	Other
109	Butter Sole	*Pleuronectes isolepis*	Other Flatfish
1234	Butterfly Ray	*Gymnura marmorata*	Other
689	Cabezon	*Scorpaenichthys marmoratus*	Cabezon
357	Calico Rockfish	*Sebastes dalli*	Minor Nearshore Rockfish, North
631	Calico Surfperch	*Amphistichus koelzi*	Other
682	California Barracuda	*Sphyraena argentea*	Other
692	California Corbina	*Menticirrhus undulatus*	Other
1225	California Grenadier	*Nezumia stelgidolepis*	Other
124	California Halibut	*Paralichthys californicus*	Other
151	California Lizardfish	*Synodus lucioceps*	Other
1212	California Moray	*Gymnothorax mordax*	Other
423	California Scorpionfish	*Scorpaena guttata*	California Scorpionfish
794	California Sheephead	*Semicossyphus pulcher*	Other
552	California Skate	*Raja inornata*	Miscellaneous Groundfish
160	California Slickhead	*Alepocephalus tenebrosus*	Other
113	California Tonguefish	*Symphurus atricauda*	Other
314	Canary Rockfish	*Sebastes pinniger*	Canary Rockfish
604	Capelin	*Mallotus villosus*	Other
870	Cat Unid Shark	*Scyliorhinidae*	Other
358	Chameleon Rockfish	*Sebastes phillipsi*	Minor Shelf Rockfish, North

Code	Common Name	Scientific Name	Groundfish Report Groupings
325	Chilipepper Rockfish	*Sebastes goodei*	Chilipepper Rockfish
359	China Rockfish	*Sebastes nebulosus*	Minor Nearshore Rockfish, North
118	C-O (C-O Turbot) Sole	*Pleuronichthys coenosus*	Other
1247	Cod Unid	*Gadidae*	Cod Unidentified
1210	Combfish Unid	*Zaniolepididae*	Other
577	Common Thresher Shark	*Alopias vulpinus*	Other
327	Copper Rockfish	*Sebastes caurinus*	Minor Nearshore Rockfish, North
360	Cowcod Rockfish	*Sebastes levis*	Cowcod Rockfish
1221	Crested Bigscale	*Poromitra crassiceps*	Other
727	Croaker Unid	*Sciaenidae*	Other
117	Curlfin Turbot	*Pleuronichthys decurrens*	Other Flatfish
262	Cusk-eel Unid	*Ophidiidae*	Other
227	Cutthroat Trout	*Oncorhynchus clarkii*	Other
679	Daggertooth	*Anotopterus pharao*	Other
311	Darkblotched Rockfish	*Sebastes crameri*	Darkblotched Rockfish
899	Decomposed Fish	*Decomposed fish*	Other
609	Deepbody Anchovy	*Anchoa compressa*	Other
553	Deepsea Skate	*Bathyraja abyssicola*	Other
693	Deepsea smelt Unid	*Bathylagidae*	Other
110	Deepsea Sole	*Embassichthys bathybius*	Other
559	Diamond Stingray	*Dasyatis dipterura*	Other
121	Diamond Turbot	*Hypsopsetta guttulata*	Other
221	Dog (Chum) Salmon	*Oncorhynchus keta*	Salmon
578	Dogfish Shark Unid	*Squalus sp.*	Other
228	Dolly Varden	*Salvelinus malma*	Other
694	Dolphinfish	*Coryphaena hippurus*	Other
107	Dover Sole	*Microstomus pacificus*	Dover Sole

Code	Common Name	Scientific Name	Groundfish Report Groupings
1101	Dragonfish, Unid	*Melanostomiidae*	Other
1216	Dusky Sculpin	*Icelinus burchami*	Other
783	Dwarf Wrymouth	*Cryptacanthodes aleutensis*	Other
361	Dwarf-red Rockfish	*Sebastes rufianus*	Minor Shelf Rockfish, North
250	Eelpout Unid	*Zoarcidae gnn.*	Other
108	English Sole	*Pleuronectes vetulus*	English Sole
601	Eulachon	*Thaleichthys pacificus*	Other
855	Fangtooth	*Anoplogaster cornuta*	Other
120	Fantail Sole	*Xystreurys liolepis*	Other
1229	Filamented Grenadier	*Coryphaenoides filifer*	Other
579	Filetail Cat Shark	*Parmaturus xaniurus*	Other
854	Finescale Triggerfish	*Balistes polylepis*	Other
1239	Fine-spined Skate	*Bathyraja microtrachys*	Other
362	Flag Rockfish	*Sebastes rubrivinctus*	Minor Shelf Rockfish, North
258	Flatcheek Eelpout	*Embryx crotalina*	Other
100	Flatfish Unid	*Pleuronectiformes*	Flatfish Unid
1236	Flathead Skate	*Bathyraja rosispinis*	Other
103	Flathead Sole	*Hippoglossoides elassodon*	Other Flatfish
858	Flying Fish Unid	*Exocoetidae*	Other
363	Freckled Rockfish	*Sebastes lentiginosus*	Minor Shelf Rockfish, North
197	Frigate Mackerel	*Auxis thazard*	Other
411	Fringed Sculpin	*Icelinus fimbriatus*	Other
853	Garibaldi	*Hypsypops rubicundus*	Other
1227	Ghostly Grenadier	*Coryphaenoides leptolepis*	Other
82	Giant Grenadier	*Albatrossia pectoralis*	Other
740	Giant Kelpfish	*Heterostichus rostratus*	Other
476	Giant Sea Bass	*Stereolepis gigas*	Other

Code	Common Name	Scientific Name	Groundfish Report Groupings
760	Giant Wrymouth	*Cryptacanthodes giganteus*	Other
364	Gopher Rockfish	*Sebastes carnatus*	Minor Nearshore Rockfish, North
365	Grass Rockfish	*Sebastes rastrelliger*	Minor Nearshore Rockfish, North
580	Gray Smoothhound Shark	*Mustelus californicus*	Other
231	Green Sturgeon	*Acipenser medirostris*	Other
366	Greenblotched Rockfish	*Sebastes rosenblatti*	Minor Shelf Rockfish, North
102	Greenland Turbot	*Reinhardtius hippoglossoides*	Other
390	Greenling Unid	*Hexagrammidae*	Other
339	Greenspotted Rockfish	*Sebastes chlorostictus*	Minor Shelf Rockfish, North
313	Greenstriped Rockfish	*Sebastes elongates*	Minor Shelf Rockfish, North
80	Grenadier Unid	*Macrouridae*	Other
412	Grunt Sculpin	*Rhamphocottus richardsoni*	Other
430	Gunnel Unid	*Pholidae*	Other
695	Hachetfish Unid	*Sternoptychidae*	Other
77	Hagfish Unid	*Myxinidae*	Other
367	Halfbanded Rockfish	*Sebastes semicinctus*	Minor Shelf Rockfish, North
697	Halfmoon	*Medialuna californiensis*	Other
323	Harlequin Rockfish	*Sebastes variegatus*	Minor Shelf Rockfish, North
368	Honeycomb Rockfish	*Sebastes umbrosus*	Minor Shelf Rockfish, North
581	Horn Shark	*Heterodontus francisci*	Other
122	Hornyhead Turbot	*Pleuronichthys verticalis*	Other
155	Hundred fathom Mora	*Physiculus rastrelliger*	Other
116	Hybrid Sole	*Inopsetta ischyra*	Other
175	Jack Smelt	*Atherinops californiensis*	Other
207	Jackmackerel	*Trachurus symmetricus*	Other
477	Kelp Bass	*Paralabrax clathratus*	Other
392	Kelp Greenling	*Hexagrammos decagrammus*	Miscellaneous Groundfish

Code	Common Name	Scientific Name	Groundfish Report Groupings
369	Kelp Rockfish	*Sebastes atrovirens*	Minor Nearshore Rockfish, North
632	Kelp Surfperch	*Brachyistius frenatus*	Other
742	Kelpfish Unid	*Clinidae*	Other
222	King (Chinook) Salmon	*Oncorhynchus tshawytscha*	Salmon
608	King of the Salmon	*Trachipterus altivelis*	Other
699	Lancetfish Unid	*Alepisauridae*	Other
700	Laternfish Unid	*Myctophidae*	Other
867	Lavender Sculpin	*Leiocottus hirundo*	Other
1251	Leaf Like Eel	*Thalassenchelys cohen*	Other
582	Leopard Shark	*Triakis semifasciata*	Miscellaneous Groundfish
150	Lightfish Unid	*Photichthyidae*	Other
603	Lingcod	*Ophiodon elongatus*	Lingcod
10647	Longfin Dragonfish	*Tactostoma macropus*	Other
1249	Longfin Mako Shark	*Isurus paucus*	Other
125	Longfin Sanddab	*Citharichthys xanthostigma*	Other
1253	Longfin Smelt	*Spirinchus thaleichthys*	Other
852	Longnose Cat Shark	*Apristurus kampae*	Other
785	Longnose Lancetfish	*Alepisaurus ferox*	Other
554	Longnose Skate	*Raja rhina*	Miscellaneous Groundfish
690	Longspine Combfish	*Zaniolepis latipinnis*	Other
352	Longspine Thornyhead	*Sebastolobus altivelis*	Longspine Thornyhead
152	Loosejaw Unid	*Malacosteidae*	Other
153	Louvar	*Luvarus imperialis*	Other
525	Lumpsucker Unid	*Cyclopteridae*	Other
792	Lumptail Searobin	*Prionotus stephanophrys*	Other
196	Mackerel Unid	*Scombridae*	Mackerel Unid
774	Manefish	*Caristius macropus*	Other

Code	Common Name	Scientific Name	Groundfish Report Groupings
1231	Manta Ray	*Mata birostris*	Other
154	Medusafish	*Icichthys lockingtoni*	Other
370	Mexican Rockfish	*Sebastes macdonaldi*	Minor Shelf Rockfish, North
869	Midshipman (Toadfish) Unid	*Batrachoididae*	Other
259	Midwater Eelpout	*Melanostigma pammelas*	Other
3001	Minor Nearshore RF, North	*Aggregate*	Minor Nearshore Rockfish, North
3002	Minor Shelf RF, North	*Aggregate*	Minor Shelf Rockfish, North
3003	Minor Slope RF, North	*Aggregate*	Minor Slope Rockfish, North
810	Mola Mola (Sunfish)	*Mola mola*	Other
272	Monkeyface Prickleback	*Cebidichthys violaceus*	Other
176	Night Smelt	*Spirinchus starksi*	Other
610	Northern Anchovy	*Engraulis mordax*	Other
303	Northern Rockfish	*Sebastes polyspinis*	Other Rockfish
241	Northern Ronquil	*Ronquilis jordani*	Other
458	Northern spearnose Poacher	*Agonopsis vulsa*	Other
798	Ocean Whitefish	*Caulolatilus princeps*	Other
371	Olive Rockfish	*Sebastes serranoides*	Minor Nearshore Rockfish, North
435	Onespot Fringehead	*Neoclinus uninotatus*	Other
297	Opah	*Lampris gattatus (regious)*	Other
157	Opaleye	*Girella nigricans*	Other
1000	Other Flatfish	*Aggregate*	Other Flatfish
4000	Other Groundfish	*Aggregate*	Other Groundfish
777	Other Id Fish	*Fish other id*	Other
295	Oxeye Oreo	*Allocyttus folletti*	Other
583	Pacific Angel Shark	*Squatina californica*	Other
681	Pacific Argentine	*Argentina sialis*	Other
1250	Pacific Black Dogfish	*Centroscyllium nigrum*	Other

Code	Common Name	Scientific Name	Groundfish Report Groupings
686	Pacific Bonito	*Sarda chiliensis*	Other
688	Pacific Butterfish	*Peprilus simillimus*	Other
202	Pacific Cod	*Gadus macrocephalus*	Pacific Cod
584	Pacific Dogfish Shark	*Squalus suckleyi*	Other
562	Pacific Electric Ray	*Torpedo californica*	Other
214	Pacific Flatnose	*Antimora microlepis*	Miscellaneous Groundfish
83	Pacific Grenadier	*Coryphaenoides acrolepis*	Miscellaneous Groundfish
79	Pacific Hagfish	*Eptatretus stouti*	Other
206	Pacific Hake	*Merluccius productus*	Pacific Hake
101	Pacific Halibut	*Hippoglossus stenolepis*	Pacific Halibut
611	Pacific Herring	*Clupea pallasii*	Other
75	Pacific Lamprey	*Lampetra tridentata*	Other
199	Pacific Mackerel	*Scomber japonicus*	Other
301	Pacific Ocean Perch Rockfish	*Sebastes alutus*	Pacific Ocean Perch Rockfish
158	Pacific Pomfret	*Brama japonica*	Other
137	Pacific Sanddab	*Citharichthys sordidus*	Other Flatfish
239	Pacific Sandfish	*Trichodon trichodon*	Other
670	Pacific Sandlance	*Ammodytes hexapterus*	Other
614	Pacific Sardine	*Sardinops sagax*	Other
607	Pacific Saury	*Cololabis saira*	Other
1218	Pacific Scabbardfish	*Lepidopus xantusi*	Other
62	Pacific Sleeper Shark	*Somniosus pacificus*	Other
530	Pacific Spiny Lumpsucker	*Eumicrotremus orbis*	Other
413	Pacific Staghorn Sculpin	*Leptocottus armatus*	Other
209	Pacific Tom Cod	*Microgadus proximus*	Other
797	Pacific Viperfish	*Chauliodus macouni*	Other
394	Painted Greenling	*Oxylebius pictus*	Other

Code	Common Name	Scientific Name	Groundfish Report Groupings
260	Pallid Eelpout	*Lycodapus mandibularis*	Other
762	Paperbone Unid	*Notosudidae*	Other
862	Pelagic Stingray	*Dasyatis violacea*	Other
585	Pelagic Thresher Shark	*Alopias pelagicus*	Other
112	Petrale Sole	*Eopsetta jordani*	Petrale Sole
633	Pile Surfperch	*Rhacochilus vacca*	Other
225	Pink (Humpback) Salmon	*Oncorhynchus gorbuscha*	Salmon
372	Pink Rockfish	*Sebastes eos*	Minor Shelf Rockfish, North
634	Pink Surfperch	*Zalembius rosaceus*	Other
373	Pinkrose Rockfish	*Sebastes simulator*	Minor Shelf Rockfish, North
664	Plainfin Midshipman	*Porichthys notatus*	Other
450	Poacher Unid	*Agonidae*	Other
84	Popeye Grenadier	*Coryphaenoides cinereus*	Other
750	Prickleback Unid	*Stichaeidae*	Other
459	Pricklebreast Poacher	*Stellerina xyosterna*	Other
586	Prickly Shark	*Echinorhinus cookei*	Other
205	Prowfish	*Zaprora silenus*	Other
374	Puget Sound Rockfish	*Sebastes emphaeus*	Misc Rockfish
1242	Purple Brotula	*Oligopus diagrammus*	Other
460	Pygmy Poacher	*Odontopyxis trispinosa*	Other
335	Pygmy Rockfish	*Sebastes wilsoni*	Minor Shelf Rockfish, North
159	Queenfish	*Seriphus politus*	Other
343	Quillback Rockfish	*Sebastes maliger*	Minor Nearshore Rockfish, North
280	Ragfish	*Icosteus aenigmaticus*	Other
1252	Rainbow Smelt	*Osmerus mordax*	Other
635	Rainbow Surfperch	*Hypsurus caryi*	Other
563	Ray Unid	*Myliobatoidea*	Other

Code	Common Name	Scientific Name	Groundfish Report Groupings
224	Red (Sockeye) Salmon	*Oncorhynchus nerka*	Salmon
1215	Red Brotula	*Brosmophycis marginata*	Other
407	Red Irish Lord Sculpin	*Hemilepidotus hemilepidotus*	Other
308	Redbanded Rockfish	*Sebastes babcocki*	Minor Slope Rockfish, North
324	Redstripe Rockfish	*Sebastes proriger*	Minor Shelf Rockfish, North
636	Redtail Surfperch	*Amphistichus rhodoterus*	Other
105	Rex Sole	*Errex zachirus*	Rex Sole
564	Ribbonfish Unid	*Trachipteridae*	Other
393	Rock Greenling	*Hexagrammos lagocephalus*	Other
104	Rock Sole	*Pleuronectes bilineatus*	Other Flatfish
1213	Rock Wrasse	*Halichoeres semicinctus*	Other
300	Rockfish Unid	*Sebastes*	Rockfish Unid
461	Rockhead Poacher	*Bothragonus swani*	Other
240	Ronquil Unid	*Bathymasteridae*	Other
309	Rosethorn Rockfish	*Sebastes helvomaculatus*	Minor Shelf Rockfish, North
312	Rosy Rockfish	*Sebastes rosaceus*	Minor Shelf Rockfish, North
414	Roughback Sculpin	*Chitonotus pugetensis*	Other
307	Rougheye Rockfish	*Sebastes aleutianus*	Minor Slope Rockfish, North
114	Roughscale Sole	*Clidoderma asperrimum*	Other
1235	Roughshoulder/Broad Skate	*Amblyraja badia*	Other
612	Round Herring	*Etrumeus teres*	Other
560	Round Stingray	*Urolophus halleri*	Other
200	Roundfish Unid	*Roundfish unid.*	Roundfish Unid
637	Rubberlip Surfperch	*Rhacochilus toxotes*	Other
203	Sablefish	*Anoplopoma fimbria*	Sablefish
1243	Salmon Shark	*Lamna ditropis*	Other
220	Salmon Unid	*Oncorhynchus*	Salmon

Code	Common Name	Scientific Name	Groundfish Report Groupings
115	Sand Sole	*Psettichthys melanostictus*	Other Flatfish
136	Sanddab Unid	*Citharichthys*	Sanddab Unidentified
555	Sandpaper Skate	*Bathyraja kincaidii*	Other
436	Sarcastic Fringehead	*Neoclinus blanchardi*	Other
1217	Sargo	*Anisotremus davidsonii*	Other
790	Scaleless Dragonfish Unid	*Melanostomiidae*	Other
791	Scaly Dragonfish Unid	*Stomiidae*	Other
400	Sculpin Unid	*Cottidae*	Other
375	Semaphore Rockfish	*Sebastes melanosema*	Misc Rockfish
793	Senorita Senorita	*Oxyjulis californica*	Other
1220	Sevengill Shark	*Notorynchus cepedianus*	Other
65	Shark Unid	*Squaliformes*	Shark Unidentified
304	Sharpchin Rockfish	*Sebastes zacentrus*	Minor Slope Rockfish, North
415	Sharpnose Sculpin	*Clinocottus acuticeps*	Other
638	Shiner Surfperch	*Cymatogaster aggregata*	Other
318	Shortbelly Rockfish	*Sebastes jordani*	Shortbelly Rockfish
326	Shortraker Rockfish	*Sebastes borealis*	Minor Slope Rockfish, North
354	Shortraker/Rougheye Rockfish	*Sebastes Shortraker/Rougheye*	Shortraker/Rougheye Rockfish
691	Shortspine Combfish	*Zaniolepis frenata*	Other
350	Shortspine Thornyhead	*Sebastolobus alascanus*	Shortspine Thornyhead
349	Shortspine/ Longspine Thornyhead	*Sebastolobus*	Thornyhead Unid
1222	Shoulderspot Grenadier	*Coelorinchus scaphopsis*	Other
181	Shovelnose Guitarfish	*Rhinobatos productus*	Other
223	Silver (Coho) Salmon	*Oncorhynchus kisutch*	Salmon
639	Silver Surfperch	*Hyperprosopon ellipticum*	Other
310	Silvergray Rockfish	*Sebastes brevispinus*	Minor Shelf Rockfish, North
416	Silverspotted Sculpin	*Blepsias cirrhosus*	Other

Code	Common Name	Scientific Name	Groundfish Report Groupings
78	Sixgill Shark	*Hexanchus griseus*	Other
90	Skate Unid	*Rajidae*	Skate Unid
713	Skipjack Tuna	*Euthynnus lineatus*	Other
860	Slender Codling	*Halargyreus johnsonii*	Other
111	Slender Sole	*Lyopsetta exilis*	Other
162	Slickhead Unid	*Alepocephalidae*	Other
417	Slim Sculpin	*Radulinus asprellus*	Other
270	Smalleye Squaretail	*Tetragonurus cuvieri*	Other
602	Smelt Unid	*Osmeridae*	Other
1224	Smooth Grenadier	*Nezumia liolepis*	Other
857	Smooth Stargazer	*Kathetostoma averruncus*	Other
462	Smootheye Poacher	*Xeneretmus leiops*	Other
1246	Smoothhound Shark Unid	*Mustelus Sp.*	Other
1233	Smoothtail Mobula	*Mobula lucasana*	Other
795	Snaggletooth Unid	*Astronesthidae*	Other
500	Snailfish Unid	*Liparis*	Other
868	Snakehead Eelpout	*Embryx crotalinus*	Other
1214	Snipe Unid Eel	*Nemichthyidae*	Other
186	Snubnose Pipefish	*Cosmocampus arctus*	Other
263	Soft Eelpout	*Bothrocara molle*	Other
1223	Softhead Grenadier	*Malacocephalus laevis*	Other
64	Soupfin Shark	*Galeorhinus galeus*	Miscellaneous Groundfish
463	Southern Spearnose Poacher	*Agonopsis sterletus*	Other
376	Speckled Rockfish	*Sebastes ovalis*	Minor Shelf Rockfish, North
126	Speckled Sanddab	*Citharichthys stigmaeus*	Other
665	Specklefin Midshipman	*Porichthys myriaster*	Other
1232	Spinetail Mobula	*Mobula japanica*	Other

Code	Common Name	Scientific Name	Groundfish Report Groupings
66	Spiny Dogfish Shark	*Squalus acanthias*	Spiny Dogfish Shark
464	Spinycheek Starnose Poacher	*Asterotheca infraspinata*	Other
418	Spinyhead Sculpin	*Dasycottus setiger*	Other
315	Splitnose Rockfish	*Sebastes diploproa*	Splitnose Rockfish
796	Spookfish Unid	*Opisthoproctidae*	Other
726	Spotfin Croaker	*Roncador stearnsi*	Other
419	Spotfin Sculpin	*Icelinus tenuis*	Other
640	Spotfin Surfperch	*Hyperprosopon anale*	Other
261	Spotted Cusk-eel	*Chilara taylori*	Other
99	Spotted Ratfish	*Hydrolagus colliei*	Miscellaneous Groundfish
1245	Spotted Rockfish Unid	*Sebastomus*	Minor Shelf Rockfish, North
478	Spotted Sand Bass	*Paralabrax maculatofasciatus*	Other
123	Spotted Turbot	*Pleuronichthys ritteri*	Other
377	Squarespot Rockfish	*Sebastes hopkinsi*	Minor Shelf Rockfish, North
142	Starry Flounder	*Platichthys stellatus*	Starry Flounder
378	Starry Rockfish	*Sebastes constellatus*	Minor Shelf Rockfish, North
556	Starry Skate	*Raja stellulata*	Other
226	Steelhead (Rainbow Trout)	*Oncorhynchus mykiss*	Salmon
479	Striped Bass	*Morone saxatilis*	Other
741	Striped Kelpfish	*Gibbonsia metzi*	Other
156	Striped Mullet	*Mugil cephalus*	Other
641	Striped Surfperch	*Embiotoca lateralis*	Other
242	Stripefin Ronquil	*Rathbunella hypoplecta*	Other
328	Stripetail Rockfish	*Sebastes saxicola*	Minor Shelf Rockfish, North
452	Sturgeon Poacher	*Podothecus acipenserinus*	Other
230	Sturgeon Unid	*Acipenser*	Other
177	Surf Smelt	*Hypomesus pretiosus*	Other

Code	Common Name	Scientific Name	Groundfish Report Groupings
642	Surfperch Unid	*Embiotocidae*	Other
587	Swell Shark	*Cephaloscyllium ventriosum*	Other
379	Swordspine Rockfish	*Sebastes ensifer*	Minor Shelf Rockfish, North
420	Thornback Sculpin	*Paricelinus hopliticus*	Other
557	Thornback Skate	*Platyrhiniodis triseriata*	Other
421	Threadfin Sculpin	*Icelinus filamentosus*	Other
161	Threadfin Slickhead	*Talismania bifurcata*	Other
329	Tiger Rockfish	*Sebastes nigrocinctus*	Minor Shelf Rockfish, North
178	Top Smelt	*Atherinops affinis*	Other
380	Treefish Rockfish	*Sebastes serriceps*	Minor Nearshore Rockfish, North
465	Tubenose Poacher	*Pallasina barbata*	Other
807	Tubeshoulder Unid	*Searsiidae*	Other
253	Twoline Eelpout	*Bothrocara brunneum*	Other
331	Vermilion Rockfish	*Sebastes miniatus*	Minor Shelf Rockfish, North
805	Viperfish Unid	*Chauliodontidae*	Other
201	Walleye Pollock	*Theragra chalcogramma*	Other
643	Walleye Surfperch	*Hyperprosopon argenteum*	Other
466	Warty Poacher	*Occella verrucosa*	Other
251	Wattled Eelpout	*Lycodes palearis*	Other
1248	Whiptail Gulper Unid	*Saccopharyngidae*	Other
728	White Croaker	*Genyonemus lineatus*	Other
481	White Sea Bass	*Atractoscion nobilis*	Other
558	White Skate	*Bathyraja spinosissima*	Other
232	White Sturgeon	*Acipenser transmontanus*	Other
644	White Surfperch	*Phanerodon furcatus*	Other
613	Whitebait Smelt	*Allosmesus elongatus*	Other
273	Whitebarred Prickleback	*Poroclinus rothrocki*	Other

Code	Common Name	Scientific Name	Groundfish Report Groupings
391	Whitespotted Greenling	*Hexagrammos stelleri*	Other
305	Widow Rockfish	*Sebastes entomelas*	Widow Rockfish
780	Wolf-eel	*Anarrhichthys ocellatus*	Other
799	Wrymouth Unid	*Cryptacanthodidae*	Other
1228	Yaquina Grenadier	*Coryphaenoides yaquinae*	Other
422	Yellowchin Sculpin	*Icelinus quadriseriatus*	Other
322	Yelloweye Rockfish	*Sebastes ruberrimus*	Yelloweye Rockfish
729	Yellowfin Croaker	*Umbrina roncador*	Other
714	Yellowfin Tuna	*Thunnus albacares*	Other
320	Yellowmouth Rockfish	*Sebastes reedi*	Minor Slope Rockfish, North
698	Yellowtail Jack	*Seriola dorsalis*	Other
321	Yellowtail Rockfish	*Sebastes flavidus*	Yellowtail Rockfish

INVERTEBRATE SPECIES LIST AND CODES

Code	Common Name	Scientific Name	Groundfish Report Groupings
1206	Amiphpod Unid	*Amphipoda*	Other
55	Anemone Unid	*Actiniaria*	Other
19	Angulatus Tanner Crab	*Chionoecetes angulatus*	Other
1207	Aplacophora Unid	*Aplachophora*	Other
888	Arched Swimming Crab	*Callinectes arcuatus*	Other
5	Armored Box Crab	*Mursia gaudichaudi*	Other
4	Bairdi Tanner Crab	*Chionoecetes bairdi*	Other
1260	Bamboo Corals	*Calaxonia*	Other
48	Barnacles Unid	*Cirripedia*	Other
27	Bivalves Unid	*Bivalvia*	Other
1201	Black Coral	*Antipatharia*	Other
866	Brachiopod Unid	*Brachiopoda*	Other
22	Brittle/Basket Star Unid	*Ophiuroidea*	Other
6	Brown Box Crab	*Lopholithodes foraminatus*	Other
7	California King Crab	*Paralithodes californiensis*	Other
10	Cancer Unid Crab	*Cancridae*	Other
28	Chiton Unid	*Neoloricata*	Other
32	Corals Unid	*Anthozoa*	Other
1	Crab Unid	*Brachyura/Anomura*	Other
53	Crinoids Unid	*Crinoidea*	Other
892	Crustacean Unid	*Crustacea*	Other
39	Decorator/Spider Unid Crab	*Majidae*	Other
871	Deep-sea Rock Crab	*Glyptolithodes cristatipes*	Other
872	Deep-sea Spider Crab	*Paralomis manningi*	Other
12	Dungeness Crab	*Cancer magister*	Dungeness Crab

Code	Common Name	Scientific Name	Groundfish Report Groupings
38	Flat-legged Spider Crab	*Paralomis verrilli*	Other
873	Furrowed Rock Crab	*Cancer branneri*	Other
1202	Gorgonian Coral, unid	*Gorgonian*	Other
44	Graceful Crab	*Cancer gracilis*	Other
874	Green Crab	*Carcinus maenus*	Other
17	Hair Crab	*Paralomis multispina*	Other
875	Heart Crab	*Phyllolithodes papillosus*	Other
15	Hermit Unid Crab	*Paguridae*	Other
1258	Horny Gorgonians	*Holaxonia*	Other
1205	Hydrocoral	*Hydroida*	Other
13	Invertebrate Unid	*Animalia*	Other
1240	Irregular Echinoids	*Echinoidea*	Other
33	Isopod Unid	*Isopoda*	Other
35	Jellyfish Unid	*Scyphozoa*	Other
876	Kelp Unid Crab	*Pugettia ssp*	Other
2	King Unid Crab	*Lithode*	Other
877	Long-armed Spider Crab	*Macroregonia macrochiera*	Other
840	Lyre Unid Crab	*Hyas spp.*	Other
878	Masking Crab	*Loxorhynchus crispatus*	Other
34	Mollusk Unid	*Mollusca*	Other
25	Nudibranch Unid	*Nudibranchia*	Other
60	Octopus Unid	*Octopoda*	Other
879	Pacific Rock Crab	*Cancer antennarius*	Other
1208	Peanut Worm Unid	*Sipuncula*	Other
880	Porcelain Unid Crab	*Porcellanidae*	Other
881	Puget Sound King Crab	*Lopholithodes mandtii*	Other
882	Purple Globe Crab	*Randallia ornata*	Other
9	Red Rock Crab	*Cancer productus*	Other

Code	Common Name	Scientific Name	Groundfish Report Groupings
883	Rhinoceros Crab	*Rhinolithodes wosnessenskii*	Other
16	Scarlet King Crab	*Lithodes couesi*	Other
41	Sea Cucumber Unid	*Holothuroidea*	Other
1259	Sea Fans	*Calaxonia*	Other
1255	Sea Pansies	*Pennatulacea*	Other
1256	Sea Pens	*Pennatulacea*	Other
30	Sea Snail Unid	*Gastropoda*	Other
889	Sea Spider Unid	*Pycnogonida*	Other
47	Sea Squirts Unid	*Tunicata Tunicate*	Other
20	Sea Star Unid	*Asteroidea*	Other
1254	Sea Whips	*Pennatulacea*	Other
884	Sheep Crab	*Loxorhynchus grandis*	Other
70	Shrimp Unid	*Caridea*	Other
1203	Soft Coral	*Alcyonacea*	Other
885	Spiky King Crab	*Neolithodes diomedeae*	Other
8	Spiny King Crab	*Paralithodes rathbuni*	Other
1230	Spiny Lithode Crab	*Acantholithodes hispidus*	Other
891	Spiny Lobster Unid	*Palinura*	Other
26	Sponge Unid	*Porifera*	Other
1257	Spongy Gorgonians	*Scleraxonia*	Other
890	Squat Lobster Unid	*Galatheidae*	Other
50	Squid Unid	*Teuthoidea*	Other
1204	Stony Coral	*Scleractinia*	Other
3	Tanner Unid Crab	*Chionoecetes spp.*	Other
18	Tanneri Tanner Crab	*Chionoecetes tanneri*	Other
886	Umbrella Unid Crab	*Cryptolithodes ssp*	Other
54	Urchin Unid	*Echinoidea*	Other
49	Urochordate Unid	*Urochordata*	Other

Code	Common Name	Scientific Name	Groundfish Report Groupings
1209	Worm Unid	*Annelida*	Other
887	Xantus Swimming Crab	*Portunus xantusii*	Other
11	Yellow Rock Crab	*Cancer anthonyi*	Other

APPENDIX B: SPECIES IDENTIFICATION FORMS

Flatfish Species Description Form

First Receiver name:_____ FR code:_____

Species common name: _____

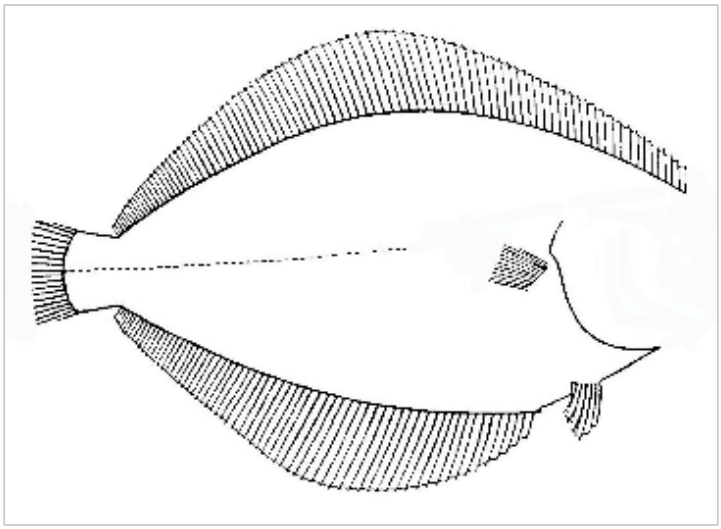
Catch Monitor:_____ CM number:_____

Delivery #:_____ Fork length:_____

Specimen collected? _____ Weight:_____

Complete the diagram below using the specimen in your hand. Include:

1. mouth, showing the size
2. preopercle and tail shape
3. eyes, size and position
4. lateral line shape
5. ADB size
6. distinctive markings or structures (spots, distinctive scales, etc.)



Field characteristics used in recognizing this species:

_____

_____

_____

_____

(OVER)

Flatfish Species Description Form

Right-eyed or Left-eyed? RIGHT LEFT

Pelvic fins symmetrical around abdominal ridge? YES NO

Describe the lateral line, including presence/absence of ADB, length of ADB, and shape of lateral line over the pectoral fin:_____

_____

_____

Can the dorsal eye be seen from the blind side? YES NO

Describe the color of the blind side:_____

Where does the maxilla end relative to the lower (ventral) eye?

_____forward of orbit _____below posterior part of orbit

_____below anterior part of orbit _____beyond the orbit

_____below mid-eye

The posterior margin of the preopercle is: ANGLED ROUNDED

Is the anal spine present? YES NO

Gill rakers on first arch:

Eyed side	Blind side
_____Upper	_____Upper
_____Lower	_____Lower
_____Total	_____Total

Gill rakers on upper part of second arch (if arrowtooth):_____

Rockfish Species Description Form

First Receiver name:_____ FR code:_____

Species common name: _____

Catch Monitor:_____ CM number:_____

Delivery #:_____ Fork length:_____

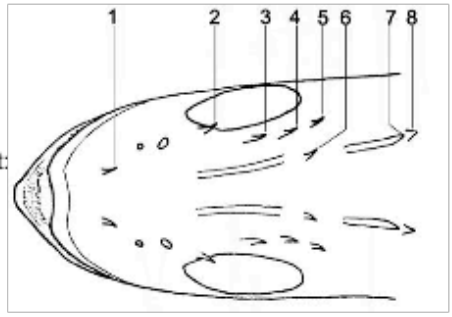
Specimen collected? _____ Weight:_____

Which color category is this specimen?_____

Head spine strength (circle one):

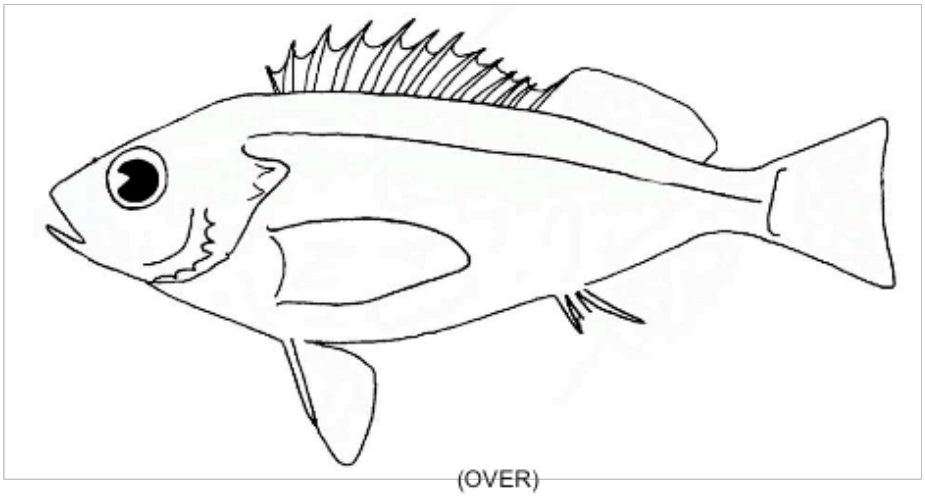
WEAK STRONG

Circle the numbers of all head spines present:



Draw the characteristics you used to identify this species, including the following:

1. Symphyseal knob
2. Maxilla
3. Anal fin spine and membrane
4. Pigment pattern



(OVER)

Rockfish Species Description Form

Is a symphyseal knob present? If so, describe it:_____

Dark blotches on body? – (Draw these on front of form)

_____None _____Bars extending below lateral line

_____Above lateral line only _____Dispersed all over body

Markings on opercle? – (Draw these on front of form)

_____None _____Diffuse opercular blotch

_____Bars radiating from eye _____Distinct opercular blotch

Peritoneum color:_____

Describe the anal fin slant relative to body axis and relative length of anal spines:

_____

_____

_____

Are suborbital spines present? (and if so, how many?):_____

Coloration and other field characteristics important in recognizing this species:

_____

_____

_____

_____

Crab Species Description Form

First Receiver name:_____ FR code:_____

Species common name: _____

Catch Monitor:_____ CM number:_____

Delivery #:_____

Specimen collected? _____ Weight:_____

CRABS:

How many pairs of walking legs does the crab have?_____

Describe the carapace shape as well as any spines, bumps, hairs, or decorations present on the carapace and legs:_____

_____

_____

Draw the crab here, including a full view of the carapace as well as a detailed view of the rostrum:

Field characteristics important in recognizing this species:

_____

_____

_____

Miscellaneous Species Description Form

First Receiver name:_____ FR code:_____

Species common name: _____

Catch Monitor:_____ CM number:_____

Delivery #:_____ Fork length:_____

Specimen collected? _____ Weight:_____

FISHES:

How many dorsal fins does the fish have? 1 2 3

Is an adipose fin present? YES NO

Pelvic fins? Present Absent

Pelvic fin position: abdominal thoracic jugular

Describe the caudal peduncle (if present) and caudal fin shape:

_____

_____

Describe the lateral line(s) if present:

_____

_____

Draw the fish here:

Field characteristics important in recognizing this species:

_____

_____

_____

_____

Skate Species Description Form

First Receiver name:_____ FR code:_____

Species common name: _____

Catch Monitor:_____ Total length:_____

CM.number:_____ Precaudal length:_____

Delivery #:_____ Tail length:_____

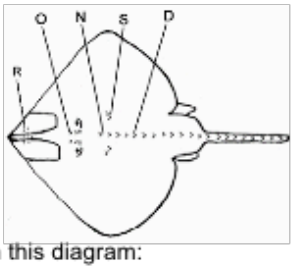
Specimen collected? _____ Weight:_____

Which series of thorns are present?

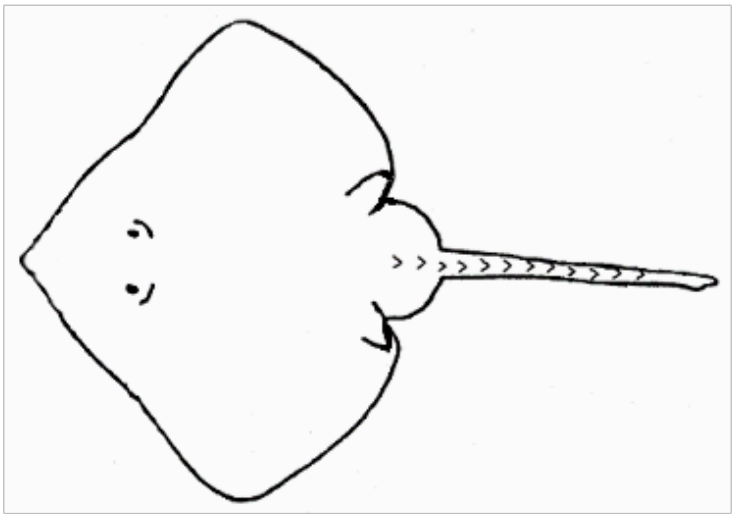
____ Rostral ____ Scapular

____ Orbital ____ Mid-dorsal

____ Nuchal



Draw the thorns and any distinctive pigment patterns on this diagram:



Additional field characteristics used to identify this species:

_____

_____

_____

(OVER) F

Skate Species Description Form

What is the dorsal coloration of the skate?

uniform brown or gray	dark with light blotches
uniform black	dark with white “eyebrows”
other:_____	

What is the ventral coloration of the skate?

uniform light	light, with dark tail
uniform dark	dark, with white areas
other:_____	

Describe the pattern of denticles on the dorsal (upper) and ventral (lower) surface:

_____

_____

_____

_____

APPENDIX C: PACIFIC WHITING SHORESIDE FIRST RECEIVER EXEMPTED FISHING PERMIT

PACIFIC COAST GROUNDFISH FISHERY
EXEMPTED FISHING PERMIT (EFP)
AUTHORITY: Title 50, Code of Federal Regulations
Sections 600.745 and 660.406, and part 660

MAXIMIZED RETENTION AND MONITORING FOR FIRST RECEIVERS PARTICIPATING IN THE 2010 COASTWIDE PACIFIC WHITING SHORESIDE FISHERY

First Receiver Name: [*insert first receiver name*] **PERMIT #** 10-**WFR-**XX

The Administrator of the Northwest Region of the National Marine Fisheries Service (NMFS), acting on behalf of the Secretary of Commerce, hereby permits the Pacific whiting first receiver *[insert name]* to engage in the exempted activities in the Pacific Coast groundfish fishery over which the United States exercises fishery management authority under the Magnuson- Stevens Fishery Conservation and Management Act, 16 United States Code 1801 et seq. (Magnuson-Stevens Act), and implementing groundfish regulations at 50 CFR Part 660 and section 600.745, and under salmon regulations at 50 CFR 660.406. All activities must be conducted in accordance with the provisions of the Magnuson-Stevens Act and 50 CFR Parts 600 and 660, except as provided in the attached terms and conditions incorporated herein.

This permit implements a maximized retention and monitoring program to monitor the bycatch of salmon and groundfish in the Pacific whiting shoreside fishery. This permit is effective when signed by both the Regional Administrator and the authorized representative of the first receiver (hereinafter referred to as the "EFP holder") on the later of the two signature dates as provided for in D.1. It expires 24 hours after notification by the Regional Administrator of termination of the EFP, or when any of the provisions listed at D.2. is met, or on 11:59 p.m. PST December 31, 2010, whichever is earlier. It also may be terminated or modified earlier by regulatory action pursuant to 50 CFR Part 660, or by revocation, suspension, or modification pursuant to 15 CFR Part 904, or successor regulations, or by the terms and conditions of this permit.

Signature	Date Signed	Signature	Date Signed
Barry A. Thom, Acting Regional Administrator Northwest Region		EFP Holder.	

National Marine Fisheries Service

By signing this document, the EFP holder agrees that the EFP holder, all owners, managers, and employees of the first receiver understand and will comply with the intent and the terms and conditions of this EFP

EFP Holder's Name/Address: *[insert EFP holder's name, address, phone number, fax]*

EXEMPTED FISHING PERMIT

MAXIMIZED RETENTION AND MONITORING FOR FIRST RECEIVERS PARITICIPATING IN THE 2010 COASTWIDE SHORE-BASED PACIFIC WHITING FISHERY

TERMS AND CONDITIONS

A. PURPOSE

Issuance of the EFPs would allow NMFS to collect catch data on incidentally caught species, including salmonids listed under the Endangered Species Act, and would allow new components of an overall monitoring program to be investigated before implementation of a regulatory program.

B. BACKGROUND

If issued, the EFPs would provide for a maximized retention and monitoring program for the Pacific whiting shoreside fishery. The maximized retention and monitoring program requirements specified in the EFP are intended to allow for the Pacific whiting shoreside fishery to be efficiently prosecuted while providing accurate catch data such that the Endangered Species Act and Magnuson-Stevens Fishery Conservation and Management Act requirements for this fishery are adequately met.

A Pacific whiting shoreside vessel fishing with an EFP is required to retain all catch and is allowed to land unsorted catch providing an electronic monitoring system (EMS) is used on all fishing trips. EMS is used by NMFS to verify retention of catch at sea. EFP catch may only be landed at Pacific whiting first receivers that hold Pacific whiting shoreside first receiver EFPs. Allowing EFP vessels to land unsorted catch at Pacific whiting first receivers that also hold EFPs allows an opportunity for Pacific whiting catch to be monitored on shore.

To accept unsorted deliveries from Pacific whiting vessels fishing under the maximized retention and monitoring EFP, a Pacific whiting first receiver must: have submitted a catch monitoring plan and had it accepted by NMFS; have been issued a maximized retention and monitoring EFP; and obtain catch monitor service from a specified provider such that the specified coverage requirements can be met. Catch monitors oversee the sorting, weighing, and recordkeeping process. Catch monitors also collect information on incidentally caught salmon. Catch monitors are paid for by the first receiver and trained by NMFS.

C. SCOPE.

1. This permit applies to all landings from a vessel fishing under a maximized retention and monitoring EFP for the Pacific whiting shoreside fishery during the effective dates of this EFP, as described in Section D of this EFP.

2. By signing this document, the EFP holder agrees that the EFP holder, the owners, managers and employees of the first receiver will comply with the intent and the terms and conditions of this permit. Further, the EFP holder is responsible for seeing that conditions of this permit are understood by the owners, managers and employees of the first receiver.

3. This EFP authorizes, for limited purposes as described in this permit, the following activities which would otherwise be prohibited:

a. Under 50 CFR § 660.306 (a)(10), it is unlawful for any person to take, retain, possess or land more than a single cumulative limit of a particular species, per vessel, per applicable cumulative limit period. This EFP allows Pacific whiting shoreside first receivers to possess more than a single cumulative limit of a particular species, per vessel, per applicable cumulative limit period.

b. Under 50 CFR § 660.306 (a)(7), it is unlawful for any person to fail to sort, prior to the first weighing after offloading, those groundfish species or species groups for which there is a trip limit, size limit, scientific sorting designation, quota, harvest guideline, or OY, if the vessel fished or landed in an area during a time when such trip limit, size limit, scientific sorting designation, quota, harvest guideline, or OY applied. This EFP allows Pacific whiting shoreside first receivers to use a “hopper type” scale to derive an accurate total catch weight prior to sorting, providing that immediately following weighing of the catch and prior to processing or transport away from the point of landing, the catch is sorted to the federal species groups as defined in 50 CFR 660.370 and any incidental catch is accurately weighed. To derive the weight of Pacific whiting, the weight of incidental catch will be deducted from the total catch weight to derive the weight of Pacific whiting. Catch with mixed species must not be transported away from the facility until all catch being transported has been sorted and weighed to the appropriate federal species group as defined in 50 CFR 660.370.

3. All other provisions of 50 CFR Part 660, that apply to Pacific whiting shoreside first receivers, apply under this permit.

D. EFFECTIVE DATES.

1. This permit is effective when signed by the NMFS Regional Administrator and the EFP holder. If the permit is signed by NMFS Regional Administrator and the EFP holder on different dates, the effective date is the later of the two signature dates. If both dates precede the opening date of the fishery, this EFP is not valid until the Pacific whiting shoreside fishery primary season is open, as announced pursuant to Federal regulations at §660.373.

2. This permit is effective when the 2010 Pacific whiting shoreside fishery primary season is open, as announced pursuant to Federal regulations at §660.373, or consistent with paragraph 3 below, unless it is rendered ineffective at an earlier date by one of the following actions:

a. At the request of the EFP holder, in which case the original EFP must be returned in person or by mail to the NMFS Northwest Region permits office.

b. When the Regional Administrator determines it is necessary to issue an amended EFP containing additional or revised terms and conditions, in which case this EFP is no longer effective. This EFP is no longer effective when NMFS receives the signed amended permit from the first receiver, or seven calendar days after the NMFS mailing date of the amended permit to the first receiver, whichever occurs first.

3. When the Pacific whiting shoreside fishery is closed because of the achievement or projected achievement of the Pacific whiting allocation, commercial harvest guideline, or a bycatch species limit, only deliveries of catch taken by vessels with EFPs prior to the specified closure time may be accepted by the Pacific whiting first receiver under this EFP.

4. The EFP holder is responsible for advising all first receiver owners, managers and employees that the permit is no longer effective.

E. PERMIT CONDITIONS.

1. Whenever deliveries are received from a vessel fishing under a maximized retention and monitoring EFP for the Pacific whiting shoreside fishery, a copy of this EFP must be available at the receiving facility for inspection, upon request.

2. All sorting, weighing, and recordkeeping of EFP catch, during the effective dates of this permit, must be conducted in accordance with regulatory requirements set out in 50 CFR §§ 660.303, 660.306, 660.370 and 660.373, and this EFP.

3. Immediately upon offloading, all groundfish caught in excess of the trip limits, set out in 50 CFR §660 subpart G Table 3, must be abandoned to the State of

landing by the vessels making the landing. The first receiver must handle the groundfish according to the direction of the State of landing.

a. No first receiver may pay (cash or an equivalent) a vessel for any fish landed in excess of any cumulative trip limits or vessel EFP limits in effect at the time of landing.

b. The EFP holder must include all groundfish on the electronic fish ticket submission, including groundfish with no value.

4. Immediately upon offloading, all prohibited species must be abandoned to the State of landing by the vessels making the landing. The first receiver must handle the prohibited species according to the direction of the State of landing.

a. All prohibited species included in EFP landings **must be labeled by delivery, showing date of landing and vessel name or number.** If prohibited species from more than one landing are stored together, each landing shall be clearly separated (e.g., separated by ice, bags, or totes).

b. All prohibited species must be iced immediately or refrigerated in a secure location, and not dressed.

F. REPORTING REQUIREMENTS

1. Federal regulations at 50 CFR §660.303 require Pacific whiting first receivers to use NMFS approved electronic fish ticket software to submit catch information within 24 hours of the date of landing. Failure to submit accurate and timely electronic fish tickets is a violation of this EFP. Failure to resubmit electronic fish tickets should an error be found, is a violation of this EFP.

2. Federal regulations at 50 CFR § 660.373 (j)(1)(i) require all groundfish weights reported on electronic fish tickets to be recorded from scales with appropriate weighing capacity to ensure the accuracy for the amount of fish being weighed. Failure to weigh and report catch accurately is a violation of this EFP.

3. This EFP allows Pacific whiting shoreside first receivers to use a hopper type scale (A scale designed for weighing bulk commodities whose load-receiving element is a tank, box, or hopper mounted on a weighing element) to derive an accurate total catch weight prior to sorting, providing that immediately following weighing of the total catch and prior to processing or transport away from the point of landing, the catch is sorted to the federal species groups and all incidental catch (groundfish and non groundfish species) is accurately weighed and the weight of incidental catch deducted from the total catch weight to derive the weight of Pacific whiting. Failure to weigh and report catch accurately is a violation of this EFP.

4. If totes are used to weigh catch, each individual tote must be weighed empty prior to being used. Each time catch is weighed, the scale must be tared to the weight of the tote prior to catch being weighed.

G. MONITORING REQUIREMENTS

1. Catch monitors

a. Catch monitor coverage. It is the EFP holder's responsibility to procure the services of the catch monitor. Each Pacific whiting shoreside first receiver is required to have catch monitor coverage of each delivery such that the full duration of offloading, sorting and weighing of each delivery is monitored, unless the first receiver has been granted a written waiver from the catch monitor requirements by NMFS NWR permits office. For the health and safety of the catch monitor, the working hours of each individual catch monitor will be limited as follows:

i. An individual catch monitor shall not be required or permitted to work more than 16 hours per calendar day, with a maximum of 14 hours being work other than the summary and submission of catch monitor data.

ii. Following a monitoring shift of more than 8 hours, each catch monitor must be provided with a minimum 6 hours break before they may resume monitoring.

b. Procurement of catch monitors services. The EFP holder must arrange and pay for the services of a certified catch monitor from an observer provider that is permitted by the NMFS North Pacific Groundfish Observer Program under 50 CFR 679.50(i) (see Appendix to this EFP), and that has recent experience in providing observers or catch monitors for the Pacific coast fisheries. The EFP holder must pay all associated costs for the catch monitor, including training and debriefing, unless notified by NMFS that NMFS personnel or a NMFS contracted employee will be placed at the first receiver in place of the catch monitor.

c. NMFS certified catch monitors. NMFS will certify individuals who:

i. Meet the following minimum qualifying criteria.

A. Are a U.S. Citizen or have authorization to work in the U.S.

B. Are at least 18 years of age.

C. Have a high school diploma and; at least two years of study from an accredited college with a major study in natural resource management, natural sciences, earth sciences, natural resource anthropology, law enforcement/police science, criminal justice, public administration, behavioral sciences, environmental sociology, or other closely related subjects pertinent to the management and protection of natural resources, or one year of specialized experience performing duties which involved communicating effectively and obtaining cooperation, identifying and reporting problems or apparent violations of regulations concerning the use of protected or public land areas, and carrying out policies and procedures within a recreational area or natural resource site.

D. Have a current and valid driver's license.

E. Have passed a background investigation for criminal and civil convictions.

F. Pass health and physical fitness exams. Physical fitness exams shall be conducted by a medical doctor who has been provided with a description of the job duties and work conditions and who provides a written conclusion regarding the candidate's fitness relative to the required duties and work conditions. Physical exams may include testing for illegal drugs. Candidates must have a minimum visual acuity of 20/100 corrected to 20/20 in at least one eye.

G. Have signed a statement under penalty of perjury indicating that they are free from conflict of interest.

ii. Are employed by a NMFS specified provider at the time of the issuance of the certification and have provided proof of qualifications to NMFS, through the provider.

iii. Have successfully completed NMFS-approved training. Successful completion of training by an applicant consists of meeting all attendance and conduct standards issued in writing at the start of training; meeting all performance standards issued in writing at the start of training for assignments, tests, and other evaluation tools; and completing all other training requirements established by NMFS.

iv. Have not been decertified as an observer under provisions in 50 CFR § 660.314.

d. Catch monitor safety. The EFP holder must ensure that the Pacific whiting first receiver adheres to all applicable rules, regulations, or statutes pertaining to safe operation and maintenance of a processing and/or receiving facility. A tour of the facility and information on emergencies and evacuation plans must be provided to the catch monitor upon arrival.

e. Notification. The EFP holder **must ensure that the catch monitor is provided notification** in person, by personal communications radio, or by telephone of planned facility operations, including the receipt of fish, at least 30 minutes and not more than 2 hours prior to the start of the planned operation, unless the catch monitor specifically requests other arrangements.

f. Free and unobstructed access. The EFP holder must allow catch monitors free and unobstructed access to:

i. The catch throughout the sorting process and the weighing process.

ii. Any documentation required by regulation including fish tickets and scale test results.

iii. A telephone (or telephone line) during the hours that Pacific whiting is being processed at the facility and for at least 30 minutes after completing the processing of the last delivery each day.

g. Reasonable assistance. The EFP holder must ensure that the catch monitors are provided reasonable assistance to enable them to carry out their duties. Reasonable assistance includes, but is not limited to: informing the monitor when bycatch species will be weighed, and providing a secure place to store equipment and gear.

2. NMFS-accepted monitoring plans The EFP holder is required to submit a complete catch monitoring plan and to have NMFS accept the catch monitoring plan as complete before being issued an EFP. The monitoring plan must be submitted to NMFS at least 14 calendar days prior to receiving Pacific whiting shoreside fishery deliveries, unless otherwise specified by NMFS.

a. Catch monitoring plans. The catch monitoring plan must include the following information:

i. Name and signature of the person submitting the monitoring plan, and the EFP holder.

ii. Address, telephone number, fax number and email address (if available) of the person submitting the monitoring plan;

iii. Name and physical location of the first receiver, and the physical location of where catch will be received from the vessel if the location is different from the physical location of the first receiver's business;

iv. A detailed description on how the first receiver will meet the weighing and sorting requirements including:

A. The sorting locations and the amount of space for sorting catch; the adequacy of lighting for sorting, catch identification and catch monitor safety; the number of personnel assigned to catch sorting; and, the maximum rate that catch will flow through the sorting area.

B. Processor skills and training for sorting catch to federal species groups.

C. The process for weighing catch, including large and small volumes of target and incidentally caught species. If totes will be used to weigh catch, a description of how tote weights will be derived and when the weight of the tote will be deducted for both bycatch and target species.

D. The makes, models, and serial numbers of scales being used to weigh catch during the Pacific whiting shoreside fishery, including the most current test date provided by the Department of Weights and Measures for the state of landing and whether or not the scale met the testing criteria either initially or upon retesting.

E. A description of how the catch monitor requirements would be met, including:

- How the first receiver operates and maintains a safe processing and/or receiving facility.
- Who would be responsible for notifying the catch monitor of planned facility operations, including the receipt of fish.
- How the catch monitor would be given access to the catch throughout the sorting process and the weighing process and to any documentation required by regulation including fish tickets and scale test results.
- The name and contact information for an individual(s) who will be responsible for assuring that the catch monitor obtains the necessary information from the first receiver.

F. A description of when and where prohibited species will be counted and where they will be stored for sampling by the catch monitor and subsequent surrender to the state.

b. Monitoring plan acceptance. NMFS will review and provide written notice of the monitoring plans acceptance as complete within 14 calendar days of receiving the monitoring plan, unless otherwise stated.

c. Nonacceptance of a monitoring plan. If NMFS does not accept a monitoring plan as complete the first receiver owner or manager may submit a revised monitoring plan.

d. Monitoring plan inspections. To assure that the monitoring plan is complete you must also have an inspection of your facility conducted by NMFS staff. To arrange a time and place for a monitoring plan inspection you may contact Lori Jesse, the NMFS Pacific whiting shoreside monitoring coordinator at 503-230-5429 (office) or 541-521-5058 (cell).

e. Changing a monitoring plan. An EFP holder may change an accepted monitoring plan by submitting an addendum to NMFS. NMFS will review the modified monitoring plan and accept as complete if it meets all of the NMFS specified criteria. Depending on the nature and magnitude of the change requested, NMFS may require a monitoring plan inspection. A monitoring plan addendum must contain:

i. Name and signature of the person submitting the addendum, and the EFP holder;

ii. Address, telephone number, fax number and email address (if available) of the person submitting the addendum;

iii. A complete description of the proposed monitoring plan change.

H. RESTRICTIONS

1. It is a violation of this EFP to:

a. Receive for transport or processing, catch from a Pacific whiting shoreside vessel without obtaining verification from vessel personnel that the vessel has an EMS from the NMFS provider installed on the vessel.

b. Process catch without coverage of a catch monitor as specified above under G. 1. a. unless NMFS has granted a written waiver specifically exempting the first receiver from the catch monitor coverage requirements.

c. Process catch without a NMFS accepted monitoring plan, unless NMFS has granted a written waiver specifically exempting the first receiver from the catch monitor plan requirement.

d. Fail to sort fish to federal species groups as specified in regulations at 50 CFR § 660.370.

e. Process, sell, or discard any groundfish landed from a vessel fishing under a Pacific whiting shoreside fishery EFP that has not been accurately weighed on a scale and accounted for on an electronic fish ticket report.

f. Fail to sort and weigh catch landed from a vessel fishing under a Pacific whiting shoreside fishery EFP prior to transporting the catch away from the point of landing. (If fish will be trucked to a different location for processing, all sorting and weighing to federal species groups must occur before transporting the catch away from the point of landing).

g. Mix catch from more than one delivery prior to the sorting and weighing of catch.

h. Fail to abandon to the state of landing all groundfish landed in excess of
the cumulative trip limits or prohibited species.

i. Transport away from the facility, catch with mixed species unless all catch being transported has been weighed to the appropriate federal species group as specified at 50 CFR 660.370.

j. Violate any terms or conditions of this EFP.

k. Attempt any of the above.

2. It is also a violation of this EFP to:

a. Fail to allow a catch monitor unobstructed access to catch sorting, processing, catch counting, catch weighing, or electronic or paper fish tickets.

b. Fail to provide reasonable assistance to a catch monitor.

c. Forcibly assault, resist, oppose, impede, intimidate, harass, sexually harass, bribe, or interfere with a catch monitor.

d. Interfere with or bias the procedure employed by a catch monitor.

e. Tamper with, destroy, or discard a catch monitor's equipment, records, photographic film, papers, or personal effects without the express consent of the catch monitor.

f. Harass a catch monitor by conduct that: has sexual connotations, has the purpose or effect of interfering with the catch monitors work performance, and/or, otherwise creates an intimidating, hostile, or offensive environment.

g. Require, pressure, coerce, or threaten a catch monitor to perform duties normally performed by first receiver employees.

h. Fail to provide the catch monitor notification in person, by personal communications radio, or by telephone of planned facility operations, including receipt of fish, at least 30 minutes and not more than 2 hours prior to the start of the planned operation, unless the catch monitor specifically requests other arrangements.

i. Attempt any of the above.

I. DELIVERIES.

1. All catch received from a vessel fishing under a Pacific whiting shoreside fishery EFP must be accepted for offloading by one first receiver (i.e. the offloading of catch from one trip cannot be split between two or more first receivers before an electronic fish ticket has been completed).

2. Once offloading to a first receiver has begun all fish onboard the vessel must be accepted for offloading at that first receiver.

J. CLOSURES.

1. Official notification of the Pacific whiting shoreside fishery closure will be announced by a single faxed notification to the fax number provided to NMFS by each EFP holder during the EFP application process.

2. NMFS will bear no responsibility if a closure notification is not received because the fax number provided to NMFS was not in service.

K. SANCTIONS.

Failure to comply with the terms and conditions of this permit, a notice issued under 50 CFR Part 660 or any other applicable provision of 50 CFR Parts 600 and 660, the Magnuson-Stevens Act, or any other regulations promulgated hereunder, may be grounds for revocation, suspension, or modification of this permit (50 CFR 600.745(b)(8)), as well as civil or criminal penalties under the Magnuson-Stevens Act with respect to all persons and vessels conducting activities under the EFP.

L. WAIVER.

The EFP holder on his/her own behalf, and on behalf of all persons conducting activities authorized by the permit under his/her direction, waives any and all claims against the United States or the State, and its agents and employees, for any liability whatsoever for personal injury, death, or damage to property directly or indirectly due to activities under this permit.

APPENDIX -- Observer providers permitted by the North Pacific Groundfish Observer Program under 50 CFR 679.50(i).

Alaskan Observers, Inc. (AOI) 130 Nickerson, Suite 206 Seattle, WA 98109	VOICE 206/283-7310, 206/283-6604 FAX 206/283-6519 aoistaff@alaskanobservers.com www.alaskanobservers.com
MRAG Americas Inc. 1810 Shadetree Circle Anchorage, AK 99502	VOICE 907/677-8772 FAX 907/677-6022 bryan.belay@mragamericas.com www.mragamericas.com
NWO, Inc. (NWO) P.O. Box 624 Edmonds, WA 98020	VOICE 425/673-6445 FAX 425/673-5995 alaska@nwoinc.com www.nwoinc.com
Saltwater, Inc. (SWI) 733 N. Street Anchorage, AK 99501	VOICE 907/276-3241 FAX 907/258-5999 Mary@saltwaterinc.com www.saltwaterinc.com
TechSea International (TSI) 2303 W. Commodore Way Suite 306 Seattle, WA 98199	VOICE 206/285-1408 FAX 206/285-1535 Toll Free 877/980-1408 info@techsea.com dave@techsea.com www.techsea.com

APPENDIX D: PACIFIC WHITING SHORESIDE VESSEL EXEMPTED FISHING PERMIT

PACIFIC COAST GROUNDFISH FISHERY
EXEMPTED FISHING PERMIT (EFP)
AUTHORITY: Title 50, Code of Federal Regulations
Sections 600.745 and 660.406, and part 660

MAXIMIZED RETENTION AND MONITORING FOR
VESSELS PARTICIPATING IN THE 2010
COASTWIDE PACIFIC WHITING SHORESIDE FISHERY

F/V [*insert vessel name*] **PERMIT #** [*09-HAK-XX*]

Pacific Coast Groundfish Limited Entry Permit #

The Administrator of the Northwest Region of the National Marine Fisheries Service (NMFS), acting on behalf of the Secretary of Commerce, hereby permits the fishing vessel [*insert vessel name*], documentation number [*insert USCG documentation Number*] to engage in the exempted harvest of Pacific Coast groundfish over which the United States exercises fishery management authority under the Magnuson-Stevens Fishery Conservation and Management Act, 16 United States Code 1801 et seq. (Magnuson-Stevens Act), and implementing groundfish regulations at 50 CFR Part 660 and section 600.745, and under salmon regulations at 50 CFR 660.406. The exempted fishing must be conducted in accordance with the provisions of the Magnuson-Stevens Act and 50 CFR Parts 600 and 660, except as provided in the attached terms and conditions incorporated herein.

This permit implements a maximized retention and monitoring program to monitor the bycatch of salmon and groundfish in the Pacific whiting shoreside fishery. This permit is effective when signed by both the Regional Administrator and the authorized representative of the vessel owner (hereinafter referred to as the "EFP holder") and on the later of the two signature dates as given in D.1. It expires 24 hours after notification by the Regional Administrator of termination of the EFP, or when any of the provisions listed at D.2. are met, or on 11:59 p.m. PST December 31, 2010, whichever is earlier. It also may be terminated or modified earlier by regulatory action pursuant to 50 CFR Part 660, or by revocation, suspension, or modification pursuant to 15 CFR Part 904, or successor regulations, or by the terms and conditions of this permit.

Signature Date Signed
Barry A. Thom, Acting Regional Administrator

Northwest Region
National Marine Fisheries Service

Signature Date Signed
EFP Holder (Authorized Representative of Vessel Owner)

_____
Print EFP Holder Name

By signing this document, the EFP holder agrees that the EFP holder, the vessel owner(s), all vessel operators, and crew members of the vessel understand and will comply with the intent and the terms and conditions of this permit.

Vessel Owner's Name/Address:

EXEMPTED FISHING PERMIT

MAXIMIZED RETENTION AND MONITORING FOR VESSELS PARTICIPATING IN THE 2010 COASTWIDE PACIFIC WHITING SHORESIDE FISHERY

TERMS AND CONDITIONS

A. PURPOSE

Issuance of the EFPs would allow NMFS to collect catch data on incidentally caught species, including salmonids listed under the Endangered Species Act, and would allow new components of an overall monitoring program to be investigated before implementation of a regulatory program.

B. BACKGROUND

If issued, the EFPs would provide for a maximized retention and monitoring program for the Pacific whiting shoreside fishery. The maximized retention and monitoring program requirements specified in the EFP are intended to allow for the Pacific whiting shoreside fishery to be efficiently prosecuted while providing accurate catch data such that the Endangered Species Act and Magnuson-Stevens Fishery Conservation and Management Act requirements for this fishery are adequately met.

A Pacific whiting shoreside vessel fishing under this EFP is required to retain all catch and is allowed to land unsorted catch providing an electronic monitoring system (EMS) is used on all fishing trips. EMS is used by NMFS to verify retention of catch at sea. EFP catch may only be landed at Pacific whiting first receivers that hold Pacific whiting shoreside first receiver EFPs. Allowing EFP vessels to land unsorted catch at Pacific whiting first receivers that also hold EFPs allows an opportunity for Pacific whiting catch to be monitored on shore.

To accept unsorted deliveries from Pacific whiting vessels fishing under the maximized retention and monitoring EFP, a Pacific whiting first receiver must: have submitted a catch monitoring plan and had it accepted by NMFS; have been issued a maximized retention and monitoring EFP; and obtain catch monitor service from a specified provider such that the specified coverage requirements can be met. Catch monitors oversee the sorting, weighing, and recordkeeping process. Catch monitors also collect information on incidentally caught salmon. Catch monitors are paid for by the first receiver and trained by NMFS.

C. SCOPE.

1. This permit applies to all fishing activities by the permitted vessel on Pacific whiting trips (trips made while the vessel has a valid Pacific whiting shoreside fishery declaration as described under section G.1) during the effective dates of the EFP as described in Section D of this EFP.

2. By signing this document, the EFP holder agrees that the EFP holder, the vessel owner(s), all vessel operators, and crew members of the vessel will comply with the intent and the terms and conditions of this permit. Further, the EFP holder is responsible for seeing that conditions of this permit are understood by the vessel owner(s), the vessel operator(s) and vessel crew

3. This EFP authorizes, for limited purposes as described in this permit, the following activities which would otherwise be prohibited by federal regulation:

a. Under 50 CFR § 660.306 (a)(10) it is unlawful for any person to take, retain, possess or land more than a single cumulative limit of a particular species, per vessel, per applicable cumulative limit period. This EFP allows the permitted Pacific whiting shoreside vessel to take and retain, possess and land more than a single cumulative limit of a particular species, per applicable cumulative limit period.

b. Under 50 CFR § 660.306 (a)(2) it is unlawful for any person to retain any prohibited species, which must be returned to the sea as soon as practicable with a minimum of injury when caught and brought on board. This EFP allows the permitted Pacific whiting shoreside vessel to retain prohibited species until offloading and requires the vessel to deliver all catch, including prohibited species to first receivers participating in the program.

4. All other provisions of 50 CFR Part 660 apply to fishing conducted under this permit.

D. EFFECTIVE DATES.

1. This permit is effective when signed by both the NMFS Regional Administrator and the EFP holder. If the permit is signed by the NMFS RA and the EFP holder on different dates, the effective date is the later of the two signature dates.

2. This permit is effective only when the 2010 Pacific whiting shoreside fishery primary season is open, as announced in Federal regulations at 50 CFR §660.373. A permit that is in effect may be cancelled by one of the following events:

a. At the request of the EFP holder, in which case the original EFP must be returned in person or by mail to the NMFS NWR permits office.

b. When the Regional Administrator determines it is necessary to issue amended EFPs containing additional or revised terms and conditions, in which case this EFP will cease to be effective upon NMFS receipt of a signed amended permit, or seven calendar days after the NMFS mailing date of the amended permit, whichever occurs first.

c. When the Pacific whiting shoreside fishery is closed for any reason, including the achievement or projected achievement of the Pacific whiting allocation, bycatch limit, commercial harvest guideline, or species' harvest guideline, in which case this EFP is no longer effective concurrent with the closure as announced in the Federal Register, and further written notification to the EFP holder or vessel owner is not required.

d. When the new federal maximized retention and monitoring program regulations become effective.

3. The EFP holder is responsible for advising all vessels owners, vessel operators and crew members that the permit is no longer effective.

E. PERMIT CONDITIONS.

1. A copy of this EFP must be carried on board the vessel while EFP fishing and when fish caught while fishing under the EFP are onboard the vessel.

2. All fishing trips that occur while the vessel has a valid declaration report filed with NMFS for the Pacific whiting shoreside fishery using midwater trawl gear, as defined in Section G.1., during the effective dates must be conducted in accordance with this permit.

3. All groundfish caught in excess of the trip limits set out in 50 CFR §660 subpart G Table 3 and described in paragraph (J)(3) and all prohibited species

defined at 50 CFR 660.302 and 660.370(e), must be abandoned to the State of landing by the vessel making the landing immediately upon offloading.

4. No EFP holder, vessel owner, operator or crew can receive payment (cash or an equivalent) for any groundfish landed in excess of any cumulative trip limits in effect or for any prohibited species.

F. FISHING RESRICTIONS

1. Gear restrictions. Only legal midwater groundfish trawl gear may be used for fishing under this EFP.

2. Maximized retention requirements A vessel fishing under this EFP must bring all catch on board the vessel and retain that catch (including prohibited species) until offloading, with the following exceptions:

i. Operational discards. Pacific whiting removed from the deck and fishing gear during cleaning may be discarded, provided that the total operational discards must not exceed one basket from any single haul, with the maximum dimensions of the basket being 24 inches by 16 inches by 16 inches. If net cleaning results in a greater amount, all catch in excess of the one basket must be placed into the fish hold. Discarding operational discards of more than one basket of Pacific whiting per haul is prohibited. Discarding any quantity of groundfish species other than Pacific whiting is prohibited.

ii. Large marine organisms. Large individual marine organisms, such as marine mammals or fish species longer than 6 ft (1.8 m) in length, may be discarded. If a large marine organism is discarded, the species and the reason for discarding must be recorded and labeled as “discard” in the required logbook. Any incidentally caught marine mammals must be documented in the vessel logbook and reported to the NMFS Office of Protected Resources by submitting a completed Marine Mammal Authorization Program mortality/injury report form as required by regulations at § 50 CFR 229.4. Forms are available at http://www.nmfs.noaa.gov/pr/pdfs/interactions/mmap_reporting_form.pdf. Further information is available at http://www.nmfs.noaa.gov/pr/interactions/mmap/

3. Landing restrictions. All fish must be offloaded at only one designated processing plant (i.e. the offloading of catch from one trip cannot be split between two or more processing plants). Once offloading has begun at a designated processing plant, all fish onboard the vessel must be continuously offloaded at that plant.

4. Pacific whiting shoreside fishery crossover provisions. Crossover provisions for any vessel participating in both the Pacific whiting shoreside fishery and the

bottom trawl groundfish fishery in the same cumulative limit period are found at 50 CFR § 660.373(b)(3).

5. Eureka area trip limit restrictions. Eureka area restrictions specified at § 660.373 (d) apply to all vessels participating in the Pacific whiting shoreside fishery.

G. REPORTING REQUIREMENTS

1. Declaration Reports Vessels fishing under this EFP must have a valid declaration for midwater trawl gear as specified at 660.303 (d). When making the declaration, vessels fishing under this EFP must also identify that they will be participating in the Pacific whiting shoreside fishery. The number for submitting declarations is 800-585-5518

2. Logbooks Any person who is required to do so by the applicable state law must make and/or file, retain, or make available any and all reports (i.e., logbooks, fish tickets, etc.) of groundfish harvests and landings containing all data, and in the exact manner, required by the applicable state law. For vessels participating in the Pacific whiting shoreside fishery maximized retention program, logbooks must also include the documentation of all discard events. It is unlawful to fail to report catches as required while fishing pursuant to an exempted fishing permit (50 CFR 600.725(l)). Failure to maintain the required documents may result in a vessel's inability to obtain an EFP permit in the future, and may be grounds for revocation, suspension, or modification of this permit as well as civil or criminal penalties under the Magnuson-Stevens Act with respect to all persons and vessels conducting activities under the EFP.

a. Trawl logbooks must be maintained by the vessel operator as required by the applicable state law. On each trip that the vessel participates in the Pacific whiting shoreside fishery, "Maximum Retention Fishing Trip" (or "MAX") must be legibly written at the bottom of each page of the log.

b. The estimated weight (in pounds) of all species, including, but not limited to, whiting, other groundfish, salmon, Pacific halibut, and Dungeness crab, observed in each tow must be recorded in the logbook as required by the applicable state law.

c. For each tow, an estimate of the total amount of discarded catch for each species must be legibly written at the bottom of the page. Accurate location of the tow, and reason for discarding must also be recorded and labeled "discard" in the logbook required by the State of landing, on the line associated with that tow.

d. If discard occurs as a result of gear malfunction, a description of the event must be recorded in the logbook required by the State of landing and labeled "gear malfunction" in the logbook, on the line associated with that tow.

3. Other Reports. This permit does not relieve any person from any other state or federal reporting requirements that may apply to the fishing activities carried out under this permit.

4. Public Release of Information. The fishing activities carried out under this permit, which are otherwise prohibited, are for the purpose of collecting catch information. The vessel owner, operator, and EFP holder agree to the public release of any and all information obtained as a result of activities conducted under this permit. The vessel owner, operator, crew and the EFP holder must allow the electronic monitoring system (EMS) provider access to logbooks to record information during periodic EMs maintenance and service.

H. MONITORING REQUIREMENTS

1. Procurement of electronic monitoring system services**.** Each vessel must have properly installed and functioning EMS equipment, unless the vessel has been granted a written EMS coverage waiver by NMFS. Owners of vessels must arrange for EMS services from a NMFS EMS service provider and pay all associated costs including half the costs of cataloging the initial data. The following are NMFS-specified EM system providers for 2010:

- Jessica Schrader or Morgan Dyas at Archipelago Marine Research, Ltd;
  telephone: 888-383-4535 or 250-383-4535.

2. Installation. A vessel owner intending to fish under this EFP must schedule a time with the NMFS-specified EMS provider for installation of the system. The EMS must be installed, tested, the system initialized and the EMS computer box sealed with tamper evident seals before the vessel leaves port on the first EFP fishing trip. Fishing without installing and testing the EMS equipment is a violation of this EFP.

3. EMS maintenance and data retrieval. As specified by the EMS provider, the vessel operator must schedule maintenance of EMS equipment and data removal by the NMFS-specified EMS provider by scheduling periodic appointments during the term of this EFP.

4. System checks. On each trip prior to leaving port, the vessel operator must conduct an EMS system status check as specified by the EMS provider to confirm that all components of the EMS are functioning properly. The EMS will record the results of this check. If the EMS check identifies a malfunction, the vessel must contact the NMFS-specified EMS provider immediately. When requested by the EMS service provider, the vessel would be required to carry

EMS units that transmit system performance data while a vessel is at sea. Any such requirement would be in addition to the operator initiated system check which is to occur on each trip.

5. Lighting requirements. From 30 minutes before official sunset until 30 minutes after official dawn, each vessel required to have EMS must provide lighting to the following vessel areas such that the manipulation of trawl nets and fish handling can be clearly recorded by the EMS cameras: fish hold openings, deck spaces, and the trawl ramp.

6. System malfunctions. The vessel is obligated to monitor the EMS performance. When aware that the EMS is not functioning properly or that the power has been interrupted, the vessel must contact the EMS service provider immediately. The EMS provider is required to provide technical service within 24 hours of notification at the vessels expense.

7. EMS coverage waiver. NMFS NWR permits office may provide written notification to the vessel owner for a single trip stating that a determination has been made to temporarily waive coverage requirements because of circumstances that are deemed to be beyond the vessel's control. Waivers will not be granted if the EMS equipment malfunction results from tampering with the system, or mistreatment of components of the system. When requesting a waiver, the EFP holder must fully describe the EMS system failure and verify that the EMS service provider was contacted.

8. Additional observer coverage. Vessels required to procure EMS services may also be required to carry an observer under observer coverage requirements specified at 50 CFR § 660.314 (c)(2).

I. OTHER RESTRICTIONS

1. It is unlawful and in violation of this EFP for any person to do any of the following actions while fishing under this EFP:

    a. Participate in the Pacific whiting shoreside fishery with a vessel that does not have a valid declaration report for midwater trawl gear;

    b. Use a gear other than midwater trawl gear to take and retain, possess or land groundfish when the vessel has a valid declaration for midwater trawl gear;

    c. Target a species other than Pacific whiting when the vessel has a valid declaration for midwater trawl gear;

d. Participate in the Pacific whiting shoreside fishery with a vessel that does not have properly installed and functioning EMS equipment provided by a NMFS specified EMS provider, unless the vessel has been granted a written EMS coverage waiver by NMFS;

e. Tamper with, disconnect, damage, destroy, alter, or in any way distort, render useless, inoperative, ineffective, or inaccurate any component of the EMS unit required by this EFP;

f. Fail to provide a continuous power supply to the EMS unit or notice to the EMS provider of <u>any</u> interruption in the power supply to the EMS unit;

g. Interrupt the power supply to the EMS unit;

h. Fail to abandon all prohibited species and overage catch to the state of landing;

i. Fail to bring all catch onboard the vessel and retain that catch (including all prohibited species) until offloading, with the exception of large marine organisms and operational discards;

j. Fail to cease fishing and return to port immediately following an unavoidable discard event as described in section F. iii;

k. Attempt to take any action listed in this section I;

l. Violate any term or condition of this EFP.

J. <u>LANDINGS</u>

1. EFP catch may only be landed at Pacific whiting first receivers that hold Pacific whiting shoreside first receiver EFPs.

2. All catch from a vessel with a Pacific whiting shoreside EFP must be offloaded at only one first receiver (i.e. the offloading of catch from one trip cannot be split between first receivers). Once offloading has begun all fish onboard the vessel must be offloaded at that first receiver.

3. In addition to the current midwater trawl limits specified in federal regulations (i.e., trip limit table 3) for widow rockfish and yellowtail rockfish, The following limits are be available to the vessel fishing under this EFP all limits are express as round weights:
   - Lingcod: 600 lb per calendar month
   - Minor slope rockfish, including darkblotched rockfish: 1,000 lb per calendar month

- Pacific ocean perch: 600 lb per calendar month
- Pacific cod: 600 lb per calendar month
- Sablefish: 1,000 lb per calendar month

K. CLOSURES.

1. Official notification of the Pacific whiting shoreside fishery closure will be announced by a single faxed notification to the fax number provided to NMFS in the original EFP application. Also, NMFS may send notification email address provided to NMFS on the EFP application by each EFP holder. Given that fishery closure may occur shortly after NMFS sends a fax notification, the EFP holder must monitor their fax machine seven days a week to ensure receipt of such notice.

2. NMFS will bear no responsibility if a closure notification is not received because the fax number provided to NMFS was not in service.

L. SANCTIONS

Failure to comply with the terms and conditions of this permit, a notice issued under 50 CFR Part 660 or any other applicable provision of 50 CFR Parts 600 and 660, the Magnuson-Stevens Act, or any other regulations promulgated hereunder, may be grounds for revocation, suspension, or modification of this permit (50 CFR 600.745 (b)(9)), as well as civil or criminal penalties under the Magnuson-Stevens Act with respect to all persons and vessels conducting activities under the EFP.

M. WAIVER

The EFP holder on his/her own behalf, and on behalf of all persons conducting activities authorized by the permit under his/her direction, waives any and all claims against the United States or the State, and its agents and employees, for any liability whatsoever for personal injury, death, or damage to property directly or indirectly due to activities under this permit.

APPENDIX E: GROUNDFISH REGULATIONS

The following excerpts have been taken from the federal regulations at 50 CFR 660 and are intended to provide catch monitors with a working knowledge of the relevant Federal regulations that apply to Pacific whiting first receivers and vessels. The full regulations are available in the Code of Federal Regulations (50 CFR 660). The regulations have been simplified and reorganized for use by catch monitors

§ 660.3 Reporting and recordkeeping.
Any person who is required to do so by applicable state law or regulation must make and/or file all reports of management unit species landings containing all data and in the exact manner required by applicable state law or regulation.

§ 660.302 Definitions.

Closure or closed means, when referring to closure of a fishery or a closed fishery, that taking and retaining, possessing, or landing the particular species or species group covered by the fishing closure is prohibited. Unless otherwise announced in the Federal Register or authorized in this subpart, offloading must begin before the closure time.

Electronic fish ticket means a software program or data files meeting data export specifications approved by NMFS that is used to send landing data to the Pacific States Marine Fisheries Commission. Electronic fish tickets are used to collect information similar to the information required in state fish receiving tickets or landing receipts, but do not replace or change any state requirements.

Pacific whiting shoreside first receivers means persons who receive, purchase, or take custody, control, or possession of Pacific whiting onshore directly from a Pacific whiting shoreside vessel.

Electronic Monitoring System (EMS) means a data collection tool that uses a software operating system connected to an assortment of electronic components, including video recorders, to create a collection of data on vessel activities.

Fishing gear includes the following types of gear and equipment:

(11) Trawl gear.
(ii) Midwater (pelagic or off-bottom) trawl. A trawl in which the otter boards and footrope of the net remain above the seabed. It includes pair trawls if fished in midwater. A midwater trawl has no rollers or

bobbins on any part of the net or its component wires, ropes, and chains. For additional midwater trawl gear requirements and restrictions, see §660.381(b).

Fishing trip is a period of time between landings when fishing is conducted.

Land or landing means to begin transfer of fish, offloading fish, or to offload fish from any vessel. Once transfer of fish begins, all fish aboard the vessel are counted as part of the landing.

Legal fish means fish legally taken and retained, possessed, or landed in accordance with the provisions of 50 CFR part 660, the Magnuson-Stevens Act, any document issued under part 660, and any other regulation promulgated or permit issued under the Magnuson-Stevens Act.

Office of Law Enforcement (OLE) refers to the National Marine Fisheries Service, Office of Law Enforcement, Northwest Division.

Overage means the amount of fish harvested by a vessel in excess of the applicable trip limit.

Pacific whiting shoreside or shore-based fishery means Pacific whiting shoreside vessels and Pacific whiting shoreside first receivers.

Pacific whiting shoreside first receivers means persons who receive, purchase, or take custody, control, or possession of Pacific whiting onshore directly from a Pacific whiting shoreside vessel.

Pacific whiting shoreside vessel means any vessel that fishes using midwater trawl gear to take, retain, possess and land 4,000 lb (1,814 kg) or more of Pacific whiting per fishing trip from the Pacific whiting shore-based sector allocation for delivery to a Pacific whiting shoreside first receiver during the primary season.

Processing or to process means the preparation or packaging of groundfish to render it suitable for human consumption, retail sale, industrial uses or long-term storage, including, but not limited to, cooking, canning, smoking, salting, drying, filleting, freezing, or rendering into meal or oil, but does not mean heading and gutting unless additional preparation is done.

(1) At-sea processing means processing that takes place on a vessel or other platform that floats and is capable of being moved from one location to another, whether shore-based or on the water.

(2) Shore-based processing or processing in the shore-based sector means processing that takes place at a facility that is permanently fixed to land.

Processor means person, vessel, or facility that engages in processing; or receives live groundfish directly from a fishing vessel for retail sale without further processing.

Prohibited species means those species and species groups whose retention is prohibited unless authorized by other applicable law (for example, to allow for examination by an authorized observer or to return tagged fish as specified by the tagging agency).

Regional Administrator means the Administrator, Northwest Region, NMFS.

Specification is a numerical or descriptive designation of a management objective, including but not limited to: ABC; optimum yield; harvest guideline; quota; limited entry or open access allocation; a set aside or allocation for a recreational or treaty Indian fishery; an apportionment of the above to an area, gear, season, fishery, or other subdivision.

Sustainable Fisheries Division (SFD) means the Chief, Sustainable Fisheries Division, Northwest Regional Office, NMFS, or a designee.

Target fishing means fishing for the primary purpose of catching a particular species or species group (the target species).

Tax-exempt organization means an organization that received a determination letter from the Internal Revenue Service recognizing tax exemption under 26 CFR part 1(§§1.501 to 1.640).

Trip limits. Trip limits are used in the commercial fishery to specify the maximum amount of a fish species or species group that may legally be taken and retained, possessed, or landed, per vessel, per fishing trip, or cumulatively per unit of time, or the number of landings that may be made from a vessel in a given period of time, as follows:

(1) A per trip limit is the total allowable amount of a groundfish species or species group, by weight, or by percentage of weight of legal fish on board, that may be taken and retained, possessed, or landed per vessel from a single fishing trip.

(2) A daily trip limit is the maximum amount of a groundfish species or species group that may be taken and retained, possessed, or landed per vessel in 24 consecutive hours, starting at 0001 hours local time (l.t.) Only one landing of groundfish may be made in that 24-hour period. Daily trip limits may not be accumulated during multiple day trips.

(3) A weekly trip limit is the maximum amount of a groundfish species or species group that may be taken and retained, possessed, or

landed per vessel in 7 consecutive days, starting at 0001 hours l.t. on Sunday and ending at 2400 hours l.t. on Saturday. Weekly trip limits may not be accumulated during multiple week trips. If a calendar week falls within two different months or two different cumulative limit periods, a vessel is not entitled to two separate weekly limits during that week.

(4) A cumulative trip limit is the maximum amount of a groundfish species or species group that may be taken and retained, possessed, or landed per vessel in a specified period of time without a limit on the number of landings or trips, unless otherwise specified. The cumulative trip limit periods for limited entry and open access fisheries, which start at 0001 hours l.t. and end at 2400 hours l.t., are as follows, unless otherwise specified:

(i) The 2-month or “major” cumulative limit periods are: January 1–February 28/29, March 1–April 30, May 1–June 30, July 1–August 31, September 1–October 31, and, November 1–December 31.

(ii) One month means the first day through the last day of the calendar month.

(iii) One week means 7 consecutive days, Sunday through Saturday.

§ 660.303 Reporting and recordkeeping.

(a) This subpart recognizes that catch and effort data necessary for implementing the PCGFMP are collected by the States of Washington, Oregon, and California under existing state data collection requirements.

(b) Any person who is required to do so by the applicable state law must make and/or file, retain, or make available any and all reports (i.e., logbooks, fish tickets, etc.) of groundfish harvests and landings containing all data, and in the exact manner, required by the applicable state law.

(c) Any person landing groundfish must retain on board the vessel from which groundfish is landed, and provide to an authorized officer upon request, copies of any and all reports of groundfish landings containing all data, and in the exact manner, required by the applicable state law throughout the cumulative limit period during which a landing occurred and for 15 days thereafter.

(5) Declaration reports.

(i) The operator of a vessel specified in paragraphs (d)(1), (d)(2), and (d)(3) of this section must provide a declaration report to NMFS OLE prior to leaving port on the first trip in which the vessel meets the requirement specified at §660.312 (b) to have a VMS.

(A) One of the following gear types must be declared:

(3) Limited entry midwater trawl, *(NOTE: vessels fishing with Pacific whiting EFPs must also indicate that they are fishing for Pacific whiting)*

(e) Participants in the Pacific whiting shoreside fishery. Reporting requirements defined in the following section are in addition to reporting requirements under applicable state law and requirements described at §660.303(b).

(1) Reporting requirements for any Pacific whiting shoreside first receiver

(i) *Responsibility for compliance*. The Pacific whiting shoreside first receiver is responsible for compliance with all reporting requirements described in this paragraph.

(ii) *General requirements*. All records or reports required by this paragraph must: be maintained in English, be accurate, be legible, be based on local time, and be submitted in a timely manner as required in paragraph (e)(1)(iv) of this section.

(iii) *Required information*. All Pacific whiting shoreside first receivers must provide the following types of information: date of landing, Pacific whiting shoreside vessel that made the delivery, gear type used, first receiver, round weights of species landed listed by species or species group including species with no value, number of salmon by species, number of Pacific halibut, and any other information deemed necessary by the Regional Administrator as specified on the appropriate electronic fish ticket form.

(iv) *Electronic fish ticket submissions*. The Pacific whiting shoreside first receiver must:

(A) Sort all fish, prior to first weighing, by species or species groups as specified at §660.370 (h)(6)(iii).

(B) Include as part of each electronic fish ticket submission, the actual scale weight for each groundfish species as specified by requirements at §660.373 (j)(2)(i)

and the Pacific whiting shoreside vessel identification number.

(C) Use for the purpose of submitting electronic fish tickets, and maintain in good working order, computer equipment as specified at §660.373 (j)(2)(ii)(A);

(D) Install, use, and update as necessary, any NMFS-approved software described at §660.373 (j)(2)(ii)(B);

(E) Submit a completed electronic fish ticket for every landing that includes 4,000 lb (1,814 kg) or more of Pacific whiting (round weight equivalent) no later than 24 hours after the date the fish are received, unless a waiver of this requirement has been granted under provisions specified at paragraph (e)(1) (vii) of this section. *(NOTE: vessels fishing with Pacific whiting EFPs must for all deliveries from vessels that are declared to be in the Pacific whiting fishery)*

(v) Revising a submitted electronic fish ticket submission. In the event that a data error is found, electronic fish ticket submissions may be revised by resubmitting the revised form. Electronic fish tickets are to be used for the submission of final data. Preliminary data, including estimates of fish weights or species composition, shall not be submitted on electronic fish tickets.

(vi) Retention of records. [Reserved]

(vii) Waivers for submission of electronic fish tickets upon written request. On a case-by-case basis, a temporary written waiver of the requirement to submit electronic fish tickets may be granted by the Assistant Regional Administrator or designee if he/she determines that circumstances beyond the control of a Pacific whiting shoreside first receiver would result in inadequate data submissions using the electronic fish ticket system. The duration of the waiver will be determined on a case-by-case basis.

(viii) Reporting requirements when a temporary waiver has been granted. Pacific whiting shoreside first receivers that have been granted a temporary waiver from the requirement to submit electronic fish tickets must submit on paper the same data as is required on electronic fish tickets within 24 hours of the date received during the period that the waiver is in effect. Paper fish

tickets must be sent by facsimile to NMFS, Northwest Region, Sustainable Fisheries Division, 206–526–6736 or by delivering it in person to 7600 Sand Point Way NE, Seattle, WA 98115. The requirements for submissions of paper tickets in this paragraph are separate from, and in addition to existing state requirements for landing receipts or fish receiving tickets.

§ 660.306 Prohibitions.

In addition to the general prohibitions specified in §600.725 of this chapter, it is unlawful for any person to:

(a) General.

(4) Fish for groundfish in violation of any terms or conditions attached to an EFP under §600.745 of this chapter or §660.350.

(5) Fish for groundfish using gear not authorized in this subpart or in violation of any terms or conditions attached to an EFP under §660.350 or part 600 of this chapter.

(6) Take and retain, possess, or land more groundfish than specified under §§660.370 through 660.373 or §§660.381 through 660.385, or under an EFP issued under §660.350 or part 600 of this chapter.

(f) Pacific whiting fisheries.

(6) Pacific whiting shoreside first receivers.

(i) [Reserved]

(ii) Fail to sort fish received from a Pacific whiting shoreside vessel prior to first weighing after offloading as specified at §660.370 (h)(6)(iii) for the Pacific whiting fishery.

(iii) Process, sell, or discard any groundfish received from a Pacific whiting shoreside vessel that has not been weighed on a scale that is in compliance with requirements at §660.373 (j)(1)(i) and accounted for on an electronic fish ticket with the identification number for the Pacific whiting shoreside vessel that delivered the fish.

(iv) Fail to weigh fish landed from a Pacific whiting shoreside vessel prior to transporting any fish from that landing away from the point of landing.

§ 660.370 Specifications and management measures.

(e) Prohibited species. Groundfish species or species groups under the PCGFMP for which quotas have been achieved and/or the fishery closed are prohibited species. In addition, the following are prohibited species:

(1) Any species of salmonid.

(2) Pacific halibut.

(3) Dungeness crab caught seaward of Washington or Oregon.

(f) Exempted fisheries. U.S. vessels operating under an exempted fishing permit (EFP) issued under 50 CFR part 600 are also subject to restrictions in §§660.301 through 660.394, unless otherwise provided in the permit. EFPs may include the collecting of scientific samples of groundfish species that would otherwise be prohibited for retention.

(6) Sorting. Under §660.306(a)(7), it is unlawful for any person to “fail to sort, prior to the first weighing after offloading, those groundfish species or species groups for which there is a trip limit, size limit, scientific sorting designation, quota, harvest guideline, or 660.G 70 February 4, 2008 OY, if the vessel fished or landed in an area during a time when such trip limit, size limit, scientific sorting designation, quota, harvest guideline, or OY applied.” The States of Washington, Oregon, and California may also require that vessels record their landings assorted on their state fish tickets. This provision applies to both the limited entry and open access fisheries. The following species must be sorted:

(i) For vessels with a limited entry permit:

(A) Coastwide – widow rockfish, canary rockfish, darkblotched rockfish, yelloweye rockfish, shortbelly rockfish, black rockfish, minor nearshore rockfish, minor shelf rockfish, minor slope rockfish, shortspine and longspine thornyhead, Dover sole, arrowtooth flounder, petrale sole, starry flounder, English sole, other flatfish, lingcod, sablefish, Pacific cod, spiny dogfish, other fish and Pacific whiting;

(B) North of 40°10' N. lat.--POP, yellowtail rockfish, and, for fixed gear, blue rockfish;

(C) South of 40°10' N. lat.--minor shallow nearshore rockfish, minor deeper nearshore rockfish, California scorpionfish, chilipepper rockfish, bocaccio rockfish, splitnose rockfish, Pacific sanddabs, and cabezon.

iii) Sorting requirements for the Pacific whiting shoreside fishery. Fish delivered to Pacific whiting shoreside first receivers (including shoreside processing facilities and buying stations that intend to transport catch for processing elsewhere) must be sorted, prior to first

weighing after offloading from the vessel and prior to transport away from the point of landing, to the species groups specified in paragraph (h)(6)(i)(A) of this section for vessels with limited entry permits. Prohibited species must be sorted according to the following species groups: Dungeness crab, Pacific halibut, Chinook salmon, Other salmon. Nongroundfish species must be sorted as required by the state of landing.

§ 660.373 Pacific whiting (whiting) fishery management

(b) Seasons. The primary seasons for the whiting fishery are: For the shore-based sector, the period(s) when the large-scale target fishery is conducted (when trip limits under paragraph (b) of this section are not in effect); for catcher/processors, the period(s) when at-sea processing is allowed and the fishery is open for the catcher/processor sector; and for vessels delivering to motherships, the period(s) when at-sea processing is allowed and the fishery is open for the mothership sector. Before and after the primary seasons, trip landing or frequency limits may be imposed under §660.370(c). The sectors are defined at §660.370(a).

(3) Trip limits in the whiting fishery. The “per trip” limit for whiting before and after the regular (primary) season for the shore-based sector is announced in Table 3 of this subpart, and is a routine management measure under §660.370(c). This trip limit includes any whiting caught shoreward of 100 fm (183 m) in the Eureka, CA area. The “per trip” limits for other groundfish species before, during, and after the regular (primary) season are announced in Table 3 (North) and Table 3 (South) of this subpart and apply as follows:

(i) During the groundfish cumulative limit periods both before and after the primary whiting season, vessels may use either small and/or large footrope gear, but are subject to the more restrictive trip limits for those entire cumulative periods.

(ii) During the primary whiting season for a sector of the fishery, then the midwater trip limits apply and are additive to the trip limits for other groundfish species for that fishing period (i.e., vessels are not constrained by the lower midwater limits and can harvest up to a footrope-specific trawl limit plus the midwater trawl limit per species or species group for that cumulative limit period).

(***4) Bycatch limits in the whiting fishery.*** The bycatch limits for the whiting fishery may be used inseason to close a sector or sectors of the whiting fishery to achieve the rebuilding of an overfished or

depleted stock, under routine management measure authority at §660.370 (c)(1)(ii). These limits are routine management measures under §660.370 (c) and, as such, may be adjusted inseason or may have new species added to the list of those with bycatch limits. The whiting fishery bycatch limits for the sectors identified §660.323(a) are 4.7 mt of canary rockfish, 275 mt of widow rockfish, and 25 mt of darkblotched rockfish.

(j) Additional requirements for participants in the Pacific Whiting Shoreside fishery.

(1) Pacific whiting shoreside first receiver responsibilities

(i) Weights and measures. All groundfish weights reported on fish tickets must be recorded from scales with appropriate weighing capacity that ensures accuracy for the amount of fish being weighed. For example: amounts of fish less than 1,000 lb (454 kg) should not be weighed on scales that have an accuracy range of 1,000 lb–7,000 lb (454 - 3,175 kg) and are therefore not capable of accurately weighing amounts less than 1,000 lb (454 kg).

(ii) Electronic fish tickets

(A) Hardware and software requirements. First receivers using the electronic fish ticket software provided by Pacific States Marine Fish Commission are required to meet the hardware and software requirements below. Those whiting first receivers who have NMFS-approved software compatible with the standards specified by Pacific States Marine Fish Commission for electronic fish tickets are not subject to any specific hardware or software requirements.

(1) A personal computer with Pentium 75–MHz or higher. Random Access Memory (RAM) must have sufficient megabyte (MB) space to run the operating system, plus an additional 8 MB for the software application and available hard disk space of 217 MB or greater. A CD-ROM drive with a Video Graphics Adapter(VGA) or higher resolution monitor (super VGA is recommended).

(2) Microsoft Windows 2000 (64 MB or greater RAM required), Windows XP (128 MB or greater RAM required) or later operating system.

(3) Microsoft Access 2003 or newer for:

(i) NMFS Approved Software Standards and Internet Access. The Pacific whiting shoreside first receiver is responsiblefor obtaining, installing and updating electronic fish tickets software either provided by Pacific States Marine Fish Commission, or compatible with the data export specifications specified by Pacific States Marine Fish Commission and for maintaining internet access sufficient to transmit data files via email. Requests for data export specifications can be submitted to: Attn: Frank Lockhart, National Marine Fisheries Service, Northwest Region, Sustainable Fisheries Division, 7600 Sand Point Way NE, Seattle, WA 98115, or via email tofrank.lockhart@noaa.gov.

(ii) Maintenance. The Pacific whiting shoreside first receiver is responsible for ensuring that all hardware and software required under this subsection are fully operational and functional whenever the Pacific whiting primary season deliveries are accepted.

(2) Pacific whiting shoreside first receivers and processors that receive groundfish species other than Pacific whiting in excess of trip limits from Pacific whiting shoreside vessels fishing under an EFP issued by the Assistant Regional Administrator are authorized to possess the catch.

(3) Vessel owners and operators, first receivers, or shoreside processor owners, or managers may contact NMFS in writing to request assistance in improving data quality and resolving monitoring issues. Requests may be submitted to: Attn: Frank Lockhart, National Marine Fisheries Service, Northwest Region Sustainable Fisheries Division, 7600 Sand Point Way NE, Seattle, WA 98115, or via email to frank.lockhart@noaa.gov

APPENDIX F: OLE STATEMENT FORM

NOAA Fisheries Office of Law Enforcement

Statement Form

I, _____make the following statement to _____ _____who has identified themself to me as a special agent of the U.S. Department of Commerce, NOAA, NMFS. I understand this statement is being made in connection with an official investigation and may be used as evidence in a court of law or judicial proceedings. I make this statement freely and voluntarily. No threats or promises have been made to me to induce me to make this statement.

Iam/was employed by ___Alaska Observers Inc___, to serve as a catch monitor for the National Marine Fisheries Service. I have served as a catch monitor for (#)_____ seasons and as a fishery observer for _____ (# of deployments or years, if applicable). I was assigned to monitor Pacific whiting offloads at _____(First Receiver *Name)* located in _____ _____ *(city, state).* During my assignment, I witnessed _____*(#) of* incidents of _____ _____ *(State Potential Violation(s))*.

1 _____

2 _____

3 _____

4 _____

5 _____

6 _____

7 _____

8 _____

I declare under penalty of perjury of the laws of the United States of America that this statement, consisting of ___ pages is true and correct.

Signature Date Witness Signature Date

Statement Form – Continuation Sheet

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Initials: _____ Witness Initials: _____

APPENDIX G: MARINE MAMMAL MORTALITY/INJURY REPORTING FORM

MARINE MAMMAL AUTHORIZATION PROGRAM

MORTALITY/INJURY REPORTING FORM

National Marine Fisheries Service, 1315 East-West Highway, Silver Spring, MD 20910

PLEASE PRINT NEATLY AND IN CAPITAL LETTERS

1- LAST NAME OF VESSEL OWNER/OPERATOR

2- FIRST NAME OF VESSEL OWNER/OPERATOR

3-MI

4-MAILING ADDRESS

5- CITY

6- STATE

7- ZIP

8- VESSEL NAME

9- COAST GUARD DOC. NO. OR VESSEL STATE REG. NO.

10- STATE COMMERCIAL VESSEL NO.

11- FISHERY I.D. NO.

12- FISHERY GEAR TYPE AND TARGET SPECIES

13- DATE OF MORTALITY/INJURY (MM DD YYYY)

14- APPROXIMATE TIME OF MORTALITY/INJURY

AM/PM

15- LOCATION OF MORTALITY/INJURY

LATITUDE ° ' LONGITUDE ° '

16- TYPE OF INTERACTION (PLACE AN "X")

INCIDENTAL

INTENTIONAL

17- ENTER SPECIES CODE, TYPE OF MORTALITY/INJURY (SEE LIST OF CODES ON PREVIOUS PAGE), AND THE NUMBER OF EACH SPECIES INVOLVED. MAKE ONE ENTRY FOR EACH SPECIES INVOLVED IN THIS INCIDENT. YOU MAY MAKE UP TO THREE MORTALITY/INJURY CODES PER SPECIES.

SPECIES	MORTALITY/INJURY CODE	NUMBER

18- DESCRIPTION OF UNKNOWN SPECIES OR CIRCUMSTANCES OF MORTALITY/INJURY INCIDENT

OMB CONTROL NO. 0648-0292 (expires 11/30/2012)

MARINE MAMMAL AUTHORIZATION PROGRAM

MORTALITY/INJURY REPORTING FORM

National Marine Fisheries Service, 1315 East-West Highway, Silver Spring, MD 20910

INSTRUCTIONS FOR COMPLETING THE MORTALITY/INJURY REPORTING FORM

This reporting form is required ONLY WHEN there is an incidental mortality or injury to a marine mammal during commercial fishing activities. You are required to report the incidental mortality or injury within 48 hours after the end of the fishing trip (even if an observer is on board), or, for non-vessel fisheries, within 48 hours of an occurrence of an incidental mortality or injury. A separate report form is required for each fishery, for each date, and for each location.

PLEASE PRINT NEATLY AND IN CAPITAL LETTERS.

The reporting form should be detached from this instruction sheet, folded, and sealed prior to mailing. No postage is necessary for mailing. Forms may also be faxed to NMFS at (301) 713-4060. Questions regarding completion of this form, and requests for additional forms, may be directed to the NMFS Office of Protected Resources, 1315 East-West Hwy., Silver Spring, MD 20910-3226, (301) 713-2322.

MORTALITY/INJURY REPORT FIELD DEFINITIONS

1 - **LAST NAME:** Enter the last name of the vessel owner/operator or permit holder.
2 - **FIRST NAME:** Enter the first name of the vessel owner/operator or permit holder.
3 - **MI:** Enter the middle initial of the owner/operator of the vessel or permit holder.
4 - **ADDRESS:** Enter the street address or P.O. Box number of the vessel owner/operator or permit holder.
5 - **CITY:** Enter the city name of the vessel owner/operator or permit holder.
6 - **STATE:** Enter the 2-digit state code of the vessel owner/operator or permit holder.
7 - **ZIP:** Enter the zip code of the vessel owner/operator or permit holder.
8 - **VESSEL NAME:** Enter the name of the vessel as it is identified for commercial fishing operations. For non-vessel fisheries, leave this blank.
9 - **COAST GUARD DOCUMENT NO.:** Enter the vessel's Coast Guard Documentation number; OR Enter the **VESSEL'S STATE REGISTRATION NO.:** One of these numbers must be provided. For non-vessel fisheries, enter the state fishery permit number.
10 - **STATE COMMERCIAL VESSEL LICENSE NO.:** Enter the vessel's state commercial vessel license number, if applicable.
11 - **FISHERY IDENTIFICATION NO.:** (Category I or Category II fisheries) Enter the NMFS' fishery I.D. number (indicated on the vessel's MMAP authorization certificate) for the fishery in which this incident occurred. If the fishery ID number is unknown, or the vessel is not registered under the MMAP, fill in gear type and target species under item 12.
12 - **GEAR TYPE AND TARGET SPECIES:** (Category III fisheries) Enter the type of fishing gear used and the target species being fished when this incident occurred.
13 - **DATE OF MORTALITY/INJURY:** Enter the date the mortality/injury occurred. For example: November 1, 2009 is entered as 11/01/2009.
14 - **TIME OF MORTALITY/INJURY:** Enter the approximate time of day the mortality/injury occurred. Indicate AM if the mortality/injury occurred between midnight & noon, or PM if the mortality/injury occurred between noon and midnight.
15 - **LOCATION OF MORTALITY/INJURY LATITUDE & LONGITUDE:** Use standard entries in degrees and minutes.
16 - **TYPE OF INTERACTION:** Enter whether this incident was incidental or intentional.
17 - **SPECIES INCIDENTALLY KILLED OR INJURED:** Enter the species code and the mortality/injury code of the animal(s) involved. (Refer to the species and mortality/injury code lists included on page 2 of these instructions.) Enter the number of animals involved in each mortality/injury. You may enter up to three (3) injury codes per species. Make as many entries as apply to the date, time, and location entered in items 13-15.
18 - **DESCRIPTION OF UNKNOWN SPECIES:** If you have entered a species code for an unidentified species, please provide a detailed description of the animal involved, including color patterns, length, and body shape (drawings are helpful). State whether the animal involved was a cetacean (whale, dolphin, or porpoise), pinniped (seal or sea lion), walrus, manatee or sea otter. You may also use this space for other comments regarding this incident.

OMB Control No. 0648-0292 (expires 11/30/2012)

MARINE MAMMAL AUTHORIZATION PROGRAM

MORTALITY/INJURY REPORTING FORM

National Marine Fisheries Service, 1315 East-West Highway, Silver Spring, MD 20910

SPECIES AND STOCK CODES FOR MARINE MAMMALS

Pinnipeds (seals and sea lions)

100- Steller (northern) sea lion
101- California sea lion
105- Northern (Pribilof) fur seal
115- Harbor seal
116- Spotted seal
117- Ringed seal
121- Ribbon seal
124- Gray seal
127- Hawaiian monk seal
129- Northern elephant seal
130- Bearded seal
131- Harp seal
132- Hooded seal
203- Unidentified sea lion
204- Unidentified seal
205- Unidentified pinniped

Small Cetaceans (dolphins and porpoises)

047- Atlantic white-sided dolphin
049- Pacific white-sided dolphin
053- Common dolphin
054- Bottlenose dolphin
055- Grampus (Risso's) dolphin
058- Spotted dolphin
060- Spinner dolphin
061- Striped dolphin
063- Northern right whale dolphin
068- Harbor porpoise
072- Dall's porpoise
235- Unidentified small cetacean (porpoise or dolphin)

Large Cetaceans (toothed whales and baleen whales)

002- North Atlantic right whale
005- Gray whale
007- Fin whale
010- Minke whale
011- Humpback whale
012- Sperm whale
016- Beluga whale
038- False killer whale
039- Killer whale
221- Pilot whale
230- Beaked whale
231- Bryde's whale
232- Dwarf sperm whale
210- Unidentified baleen whale
220- Unidentified toothed whale

Other Marine Mammals

114- Walrus
135- Sea otter
139- Manatee

MORTALITY/INJURY CODES FOR MARINE MAMMALS

01 - Visible blood flow
02- Loss of/damage to appendage/jaw
03- Inability to use appendage(s)
04- Asymmetry in shape of body or body position
05- Any noticeable swelling or hemorrhage (bruising)
06- Laceration (deep cut)
07- Rupture or puncture of eyeball
08- Listlessness or inability to defend
09- Inability to swim or dive
10- Equilibrium imbalance
11- Ingestion of gear
12- Released trailing gear/gear perforating body
13- Other wound or injury
14- Killed

COLLECTION MANDATE

This collection of information is mandated by the Marine Mammal Protection Act of 1972, as amended (16 U.S.C. 1361 *et. seq.*), and by implementing regulations contained at 50 CFR 229.4. The information supplied on this form will be used by the National Marine Fisheries Service to estimate levels of incidental mortalities and injuries in U.S. commercial fisheries. Certain information supplied on this form may be considered proprietary and therefore subject to data confidentiality restrictions of 50 CFR Part 229.11.

Public reporting burden for this collection of information is estimated to average 0.15 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Director, Office of Protected Resources, National Marine Fisheries Service, 1315 East-West Hwy., Silver Spring, MD 20910-3226.

The National Marine Fisheries Service may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a current and valid OMB control number. The OMB control number for this form is 0648-0292, which expires on 11/30/2012.

OMB Control No. 0648-0292 (expires 11/30/2012)

APPENDIX H: NMFS CONTACT INFORMATION

NMFS primary program staff contact:

Lori Jesse
Pacific whiting shoreside monitoring coordinator
1201 NE Lloyd Blvd, Suite 1100
Portland, OR 97232

lori.jesse@noaa.gov
Tel: 503-230-5429
Cell: 541-521-5058
Fax: 503-872-2737

If you have questions regarding regulations contact the Northwest Regional Office staff.

Becky Renko
Seattle, WA
becky.renko@noaa.gov
Tel: 206-526-6110

If you have questions regarding your role in compliance monitoring as a catch monitor or a suspected violation contact NMFS program staff, your local OLE agent or special agent Murray Bauer at

Murray Bauer
Newport, OR
murray.bauer@noaa,gov
Tel: 541-867-0580
Fax: 541-867-0546

Urgent statements should be submitted as instructed by the agent/trooper requesting the statement.

Non-urgent statements should be faxed to: **503-872-2737**and marked **Attention: Lori Jesse**

APPENDIX I: FIRST RECEIVER LIST AND CODES

First Receiver	First Receiver Code	Port	State
Pacific Shrimp	1	Newport	OR
Pacific Coast	2	Warrenton	OR
Jessie's Ilwaco	3	Ilwaco	WA
Ocean Beauty	4	Newport	OR
Pt Adams	5	Hammond	OR
Del Mar Seafoods, Astoria	6	Astoria	OR
Bandon Pacific	7	Charleston	OR
Trident Seafoods	8	Newport	OR
Da Yang	9	Astoria	OR
Bornsteins	10	Astoria	OR
Ocean Gold	11	Westport	WA
Pacific Choice Seafoods, Eureka	12	Eureka	CA
Pacific Choice Seafoods, Crescent City	13	Crescent City	CA
Oregon Brand (Non-EFP)	14	Charleston	OR
Albers Seafoods	15	Crescent City	CA
LCZ Unloaders	16	Crescent City	CA
Next Seafoods	17	Crescent City	CA
Caito Fisheries	18	Crescent City	CA
West Bay Marketing	19	Astoria	OR
Wild Planet Foods	20	Crescent City	CA
Jessies's Ilwaco at Crescent City	21	Crescent City	CA

APPENDIX J: SHORESIDE WHITING VESSEL DOCUMENTATION NUMBERS

Documentation Number	Vessel Name	Documentation Number	Vessel Name
603820	ALEUTIAN CHALLENGER	612155	PACIFIC FUTURE
613847	AMERICAN BEAUTY	589115	PACIFIC RAM
562157	ANNETTE	565120	PEGASUS
521200	BAY ISLANDER	536873	PERSEVERANCE
979437	BLUE FOX	547390	PREDATOR
618158	CAPE KIWANDA	629499	RAVEN
617797	CHELLISSA	553396	SEA CLIPPER
593809	COLLIER BROTHERS	628959	SEA STORM
619236	DEFIANT	548685	SEADAWN
578930	EXCALIBUR	924585	SEEKER
655151	FISHWISH	617807	STARWARD
528842	GEORGE ALLEN	936611	STORMIE C
514665	GRUMPY J	929356	TRAVELER
932586	JAMIE MARIE	539091	WARRIOR II
928882	JEANETTE MARRIE	516880	WESTERN SEAS
532419	LAST STRAW		
584360	LISA-MELINDA		
596156	MARATHON		
509552	MARK I		
530215	MASTER CHARGE		
610150	MESSIAH		
913277	MISS BERDIE		
921578	MISS SARAH		
580055	MISS SUE		
1037811	MORNING STAR		
611524	MUIR MILACH		
599534	NEAHKAHNIE		
504299	NEW LIFE		
923632	NICOLE		
542651	NORDIC FURY		
926699	OCEAN HUNTER		
561518	OCEAN LEADER		
626917	PACIFIC		
518937	PACIFIC CHALLENGER		

APPENDIX K: USEFUL WEBSITES

For current whiting information
http://www.nwr.noaa.gov/Groundfish-Halibut/Groundfish-Fishery-Management/Whiting-Management/index.cfm

Regulations
Groundfish species group descriptions: § 660.302 under the definition for Groundfish
http://edocket.access.gpo.gov/cfr_2008/octqtr/pdf/50cfr660.302.pdf

Fish Identification

- General ID: http://www.fishbase.org
- Rockfish ID:http://www.afsc.noaa.gov/groundfish/RockfishGuide/rockfishtoc.htm

Favorites

Other websites have been added to the favorites folder on your laptop for your reference. When Internet Explorer is opened, click the star icon in the top left of the browser to see the preset references.

APPENDIX L: GLOSSARY OF TERMS AND ACRONYMS

Bycatch

- As defined in the Magnuson Stevens Act, bycatch refers to fish which are harvested in a fishery, but which are not sold or kept for personal use, and includes economic discards and regulatory discards.
- Industry generally uses this term to refer to any catch that is not targeted. In the whiting fishery, any fish that is not whiting is considered "bycatch".

CDFG – California Department of Fish and Game

EFP – Exempted Fishing Permit, a fishing permit that allows participants to be excused from specific regulations regarding fishing activities. In the EFP whiting fishery, vessels are allowed to land catch that may be in excess of trip limits which would otherwise require them to sort their catch at-sea. The trade off is that they must retain all catch except small amounts of operational discard and items/animals exceeding 6 feet in length.

ODFW – Oregon Department of Fish and Wildlife

OLE – Office of Law Enforcement, Federal agents also known as NMFS Enforcement

OSP – Oregon State Police

Pacific Fisheries Management Council (PFMC) - The Pacific Fishery Management Council is made up voting representatives from Oregon, Washington, California, and Idaho; many advisory bodies; and staff members. Some Council members represent state or tribal fish and wildlife agencies, and some are private citizens who are knowledgeable about recreational or commercial fishing or marine conservation. The Council process is a bottom-up process, emphasizing public participation and involvement in fisheries management. Public input is encouraged and appreciated. Management measures developed by the Council are recommended to the Secretary of Commerce through the National Marine Fisheries Service (NMFS). Management measures are implemented by NMFS Northwest and Southwest Regional offices and enforced by the NOAA Office of Law Enforcement, the U.S. Coast Guard 11th District, and local enforcement agencies.

Pacific States Marine Fisheries Commission (PSMFC) - Its purpose shall be "to promote the better utilization of fisheries – marine, shell, and anadromous, which are of mutual concern, and to develop a joint program of protection and prevention of physical waste of such fisheries in all of those areas of the Pacific Ocean over which the compacting states jointly or separately now have or may hereafter acquire jurisdiction."

Presorted Catch – Is catch that is removed prior to or during sorting and taken away before the weighing process. Catch taken for personal use by processing or vessel crew prior to accounting activities would fit this category as would catch that is hidden and not placed with other sorted catch that would eventually be weighed.

Prohibited Species – Species whose allowable retention is zero. In the whiting fishery, prohibited species vary by state.

CA – All salmon species, Pacific halibut
OR – All salmon species, Dungeness crab, Pacific halibut
WA– All salmon species, Dungeness crab, Pacific halibut

WDFW – Washington Department of Fish and Wildlife

Weighback – An industry term that refers to those fish or shellfish with no commercial value. May include small, broken, contaminated or unmarketable fish you should always clarify what the first receiver is including in this definition to ensure that all non-target species is accounted for.