Vessel Monitoring Plan

Trawl Gear

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**OPERATOR RESPONSIBILITIES:**

#### Before Trip

* Confirm that you have the right declaration with the Office of Law Enforcement for Electronic Monitoring:

**888-585-5518**

* + Declaration remains until changed.
* If taking a **bottom trawl or non-whiting midwater trawl trip**, Contact the West Coast Groundfish Observer Program (WCGOP) at least 48 hours prior to **EACH** trip:
	+ **Call: 866-780-8064**
	+ **or use the Observer-web application (**[**https://www.webapps.nwfsc.noaa.gov/observer-web/login**](https://www.webapps.nwfsc.noaa.gov/observer-web/login)**)**
	+ Be sure to state whether you are fishing under **Maximized or Optimized** retention.
	+ If you are selected to carry a scientific observer, you will be contacted and must wait for observer before departing on a fishing trip.

#### Trip Start

* Manually turn on camera system.
* Run a functionality test before starting each trip.
	+ See the Malfunction section if there is a problem.
* Check and ensure that the hard drive has adequate space to store data for the entire trip and that a spare drive is available onboard).
* Confirm that you have required logbooks: **State Trawl Logbook** and **Discard Logbook (for bottom trawl trips).**
* If you have a scientific observer onboard, provide them with access to this VMP.
	+ Observer Instructions:
		- Perform all WCGOP duties as you would on any standard trip.
		- Do not handle or interact with the equipment in any manner (e.g., adjusting, blocking, cleaning).
		- Avoid interaction with winch and hydraulic sensors.
		- Use the monitor in the wheelhouse to get a sense of where cameras are pointing on the deck. Think about body positioning relative to the camera focused on your work area to avoid blocking view of the fish.
		- Any discarding of catch must be done **in full view of a camera, if safe.** All vessels have designated “discard control points”. Refer to the vessel’s Individual Vessel Monitoring Plan to learn where these are. Please use these locations on the vessel when discarding sampled catch.
		- Skippers are required to fill out logbooks as part of the EFP. If asked, and you have information or expertise that might be useful in this process (identification, weight estimation, etc.), please provide what assistance you can, as time allows.

#### Daily during trip

* Maintain uninterrupted electrical power to the EM unit while vessel is underway.
* Check the video feed screen and confirm that cameras are clean and positioned correctly (consistent with the images identified in Appendix A).
* During haul and catch handling, use video feed screen to confirm that cameras are recording, not blocked by crew, covered with water spots or otherwise dirty, etc.
* Note the date/time and system status after system checks in the logbook.
* If cameras stop recording before sorting is complete, manually trigger recording until sorting of haul is complete.

#### Trip End

* Do not manually turn off cameras until after offload begins.
	+ Recording must continue until the start of the offload
* Provide logbooks to your EM Service Provider within 24 hours of landing for each trip (or next business day if the landing occurs on a weekend or holiday).
* Perform a data drive swap and submit the hard drive to your EM Service Provider:
	+ For **Shoreside Whiting,** hard drive must be submitted after every **5th trip** (maximum), and postmarked within 72-hours of landing (or on the next business day if the landing occurs on a weekend or holiday) and no later than 10 days after the end of the 1st trip on the hard drive, except:
		- First two EFP trips (if applicable): Hard drives from each of the first two EFP trips must be postmarked within 24-hours of landing (or on the next business day if the landing occurs on a weekend or holiday).
		- After an EM system malfunction: Hard drives from a trip that experienced an EM system malfunction must be postmarked within 24-hours of landing that trip (or on the next business day if the landing occurs on a weekend or holiday).
	+ For **Non-whiting midwater trawl** and **bottom trawl**, EM data must be submitted **after every 2 trips (maximum).** Hard drives must be postmarked no later than 10 days after the date of landing of the first trip and within 72 hours of landing for the 2nd (or only) trip, except:
		- First two EFP trips (if applicable): Hard drives from each of the first two EFP trips must be postmarked within 24-hours of landing (or on the next business day if the landing occurs on a weekend or holiday).
		- After an EM system malfunction: Hard drives from a trip that experienced an EM system malfunction must be postmarked within 24-hours of landing that trip (or on the next business day if the landing occurs on a weekend or holiday).
	+ For **At-Sea** **Mothership Catcher Vessel Whiting**, hard drive must be submitted after **every trip**, and postmarked within 72 hours of landing.
* Hard drives must be mailed using a method that requires a signature for delivery and provides a return receipt or delivery notification to the sender, such as certified mail, UPS, or FedEx.
* If you need additional hard drives, contact your EM service provider.

**Logbook Requirements**

* **Trawl Logbook**
* State Trawl Logbook (Fill out all sections)
	+ Check box if EFP trip, if applicable.
	+ Check box if Observed trip
* Thoroughly complete trip begin and end date, time, port, and dealer information.
* Report fish ticket number(s) on logbook.
* Report codend capacity on logbook in **POUNDS.**
	+ Report on a haul-by-haul basis if different for each haul.
* Report all retained and discarded species and weights per haul.
* Report the time/date and EM system status for each haul (e.g., cameras recording and imagery clear).
* Record all hauls, regardless of whether any catch was retained or discarded.
* Comment on any equipment malfunctions or gear/catch issues if applicable.
* Comment on any additional video recording due to delay in offloading or offloading at multiple first receivers.
* **Catcher Vessels:** Report hauls and discards via email or radio to the mothership observer to be included in mothership observer reports.
* Record any interactions with marine mammals and complete a Marine Mammal Authorization Program mortality/injury report form

<https://www.fisheries.noaa.gov/national/marine-mammal-protection/marine-mammal-authorization-program#reporting-a-death-or-injury-of-a-marine-mammal-during-commercial-fishing-operations>

* Discard Logbook for **Bottom Trawl** and **Non-whiting Midwater Trawl** Trips
* Note State Logbook Page Number and Set Date and Time for Haul being reported
* Note whether the trip was **maximized or optimized retention**
* Report all retained priority species (Yelloweye) estimated weights and fish counts per haul
* In the case of an unavoidable discard or mutilated fish discard, report all IFQ species discard weights and fish counts by species per haul

**Discards and Catch Handling:**

 **1. General Catch Handling – All EM Trips**

* Any and all sorting must occur in clear view of the camera.
* Crewmembers must not block camera views while sorting.
* All discards must occur at a discard control point designated on the vessel diagram in Appendix A.
* All catch handling must be complete before the next haul is brought onboard, unless an alternate arrangement has been developed with PSMFC through a NMFS-accepted VMP.
* Vessel operator must provide adequate lighting for cameras.
	+ Lighting must not shine directly at cameras and impede video reviewers’ ability to view fishing activity.
* All retained yelloweye rockfish (priority species)) must be **sorted by species into totes in view** of the camera to allow video reviewers to obtain accurate counts.
* On declared Trawl Gear EFP trips, all retained salmon and eulachon must be sorted by haul into totes and stored in view of the camera to allow video reviewers to verify compliance with haul-level sorting and storage.
* If selected to carry an observer, the vessel operator must provide all other reasonable assistance to enable the observer to carry out their duties, as required by §660.140(h)(1)(viii), including access to catch and discards for sampling before discarding.
* If you encounter endangered **short-tailed albatross**, refer to Appendix E in this VMP (or regulations 660.21(c)(1)(v)) for handling and disposition requirements.

**2. Species-Specific Catch Handling – by Retention Type**

Note: This section contains catch handling requirements for all trawl EM including Pacific whiting, non-whiting midwater trips under optimized OR maximized retention rules, and bottom trawl under optimized OR maximized retention rules. Be sure to follow the correct catch handling protocols based on your trip. Your VMP must include approved deck sorting protocols under Appendix A in order to take an optimized retention EM trip where sorting occurs.

* **Maximized Retention - Pacific Whiting (Shorebased and MSCV):**
	+ **Mutilated fish** - Mutilated fish that are squashed, maimed, or fish with carcass torn up by other events can be discarded.
		- Discarded mutilated fish must be sorted to species into a tote of known size within camera view before discarding to assist video reviewers in estimating weight.
		- Discarded mutilated fish must be noted in logbook.
	+ Debris (trash, mud, rocks, and other inorganic debris), Large marine organisms (marine mammals, sea turtles, and non-ESA listed seabirds, and fish longer than 6-ft) may be discarded in camera view.
	+ **Unavoidable discard** that is the result of an event that is beyond the control of the vessel operator or crew, such as a safety issue or mechanical failure, is allowed.
		- Record weight by species, reason for the discard, and the location of tow in the logbook.
* **Maximized Retention - Bottom Trawl and Non-whiting Midwater Trawl Trips:**
	+ **Mutilated fish** - Mutilated fish that are squashed, maimed, or fish with carcass torn up by other events can be discarded.
		- Discarded mutilated fish must be sorted to species into a tote of known size within camera view before being discarded to assist video reviewers in estimating weight.
		- Discarded mutilated fish must be noted in logbook.
	+ Debris (trash, mud, rocks, and other inorganic debris), Large marine organisms (marine mammals, sea turtles, and non-ESA listed seabirds, and fish longer than 6-ft) may be discarded in camera view.
	+ **Unavoidable discard** that is the result of an event that is beyond the control of the vessel operator or crew, such as a safety issue or mechanical failure, is allowed.
		- Record weight by species, reason for the discard, and the location of tow in the logbook.
* **Optimized Retention Bottom Trawl and Non-whiting Midwater Trawl Trips:**
	+ Allowable discards must be sorted to species before being placed in designated discard tote, and discarded in camera view at the location designated in diagram only.
		- Allowable non-IFQ fish and invertebrates/trash must either be: sorted in separate totes (fish tote and invertebrate/trash tote) in camera view; or be individually displayed in camera view prior to discard. Non-toted discards must be held up to the camera clearly and in a way which allows accurate identification during review.
	+ **Pacific halibut** - All halibut must be placed in view of the camera and on or near a measuring tool for measurement prior to discarding.
		- **Pacific halibut need to be measured, handled with care, and discarded within view of the camera.  Proper discard technique should include supporting the fish with one hand under the body, while releasing it head-first into the sea.  Avoid handling fish by the gills and returning the fish to the water by the tail (potentially dis-articulating the spine).**
* **Mutilated fish** - Mutilated fish that are squashed, maimed, or fish with carcass torn up by other events, not predation, can be discarded.
	+ Discarded mutilated fish must be sorted to species into a tote of known size within camera view before being discarded to assist video reviewers in estimating weight.
	+ Discarded mutilated fish must be noted in logbook.
* Debris (trash, mud, rocks, and other inorganic debris), Large marine organisms (marine mammals, sea turtles, and non-ESA listed seabirds, and fish longer than 6-ft) may be discarded in camera view.
* **Unavoidable discard** that is the result of an event that is beyond the control of the vessel operator or crew, such as a safety issue or mechanical failure, is allowed.
	+ Record weight by species, reason for the discard, and the location of tow in the logbook.
* **Prohibited and protected species**
	+ Vessels must discard the following species, in view of the camera:
		1. Pacific halibut (see discard requirements above)
		2. Dungeness crab caught seaward of Washington or Oregon or south of Point Reyes, California
		3. Green sturgeon
		4. California halibut (except as allowed by state regulations)
		5. Nearshore groundfish species below state commercial minimum size limits
		6. Non-ESA listed seabirds (dead short-tailed albatross must be retained – see Appendix E).
		7. Sea turtles
		8. Marine mammals

**\*\*ALL SALMON AND EULACHON MUST BE RETAINED\*\***

**except that, on trips with scientific observers, eulachon may be discarded after observer sampling is complete**

* **Heads and Guts from Processing at Sea**: (For Sablefish J-Cut at sea)
	+ Cut the fish in clear camera view
	+ Tote the heads and guts in camera view
	+ Discard tote contents at control point
	+ Only heads and guts may be discarded
* **Additional allowable discards** (with proper catch handling, display, measuring, and logbook recording):
	+ IFQ species on the **IFQ Allowable Discard List**
	+ Non-IFQ species not on the **Non-IFQ Prohibited Discard list**
	+ Allowable discards must be sorted to species before being placed in designated discard tote, and discarded at the location designated in diagram only.
		- Allowable non-IFQ fish and invertebrates/trash must be sorted in separate totes (fish tote and invertebrate/trash tote)

**IFQ ALLOWABLE DISCARD LIST**

**Flatfish**

Arrowtooth Flounder

English Sole

Dover Sole (discarded deep sea sole may be counted as dover sole)

Pacific Sanddab (other sanddabs discarded may be counted as Pacific sanddab)

**Roundfish**

Pacific Whiting

Lingcod

**NON-IFQ PROHIBITED DISCARD LIST**

**Flatfish**

Greenland Turbot

Slender Sole

Hybrid Sole

C-O (C-O Turbot) Sole

Bigmouth Sole

Fantail Sole

Hornyhead Turbot

Spotted Turbot

**Roundfish**

Walleye Pollock

Slender Codling

Pacific Tom Cod

Salmon

Eulachon

**Rockfish**

Northern Rockfish

Black Rockfish

Blue Rockfish

Shortbelly Rockfish

Olive Rockfish

Puget Sound Rockfish

Semaphore Rockfish