

# Best Fishing Practices Coastal Fish Friendly Workshop



Washington  
Department of  
**FISH and  
WILDLIFE**

# Purpose

- To provide information on why these regulations have been implemented.
- To provide information on how to comply with these regulations.
- To try to help fishers strengthen the sustainability of the fishing opportunity by limiting our effect on weak stocks.



# Requirements of Management

We do not have Endangered Species Act (ESA) listed stocks in Willapa Bay or Grays Harbor, however if we did, we must comply with the Endangered Species Act (ESA) put forth by the Pacific Salmon Treaty (PST) and the North of Falcon process:

- ESA makes any unauthorized “take” of a listed species illegal.
- A take (death or harassment of a salmon) can be authorized by NOAA Fisheries provided they are convinced all reasonable actions are being taken to minimize “take”
- Determination that the fishery will not jeopardize the species.



# ESA listed Puget Sound fish stocks:

Puget Sound Chinook (1999)

Puget Sound Steelhead (2007)

3 Species of Rockfish (2009)

Hood Canal and Strait of Juan de Fuca Summer Chum (1999)

- Release of ESA listed fish along with practices like brailing and recovery boxes are the means approved by NOAA that allow these fisheries to continue.
- These regulations also comply with US/Canada Salmon Treaty and other Pacific Salmon Treaty agreements



# Management Goal

- Minimize encounters and release mortality on all non-target species
- How? By implementing and evaluating these “Fish Friendly” best fishing regulations to meet our target fishery objectives





If our selective harvest techniques are not successfully continued and expanded, seasons will have to be shortened due to impacts.

Your commitment to selective fishery practices will determine future fishing opportunity.

# WDFW Monitoring Program

WDFW deploys observers on vessels to observe individual sets

Observers collect the following information:

- Total catch of salmon by species
- Marked or unmarked status of those fish
- Marine Mammal interactions
- Other bycatch



# Before you fish:

- Ensure the crew are familiar with:
  - Fish Friendly Regulations
  - Salmon, Steelhead, and Sturgeon Identification
  - Recovery box dimensions





# What is the information used for?

Observer data is used to estimate the incidental catch of non-target species that are required to be released. Since these fish don't show up on fish tickets, under our Federal Fishing authorization we would have to estimate non-landed impacts of ESA listed stocks.

Secondarily, observers collect data on target species to better inform in-season management decision. This data also includes further ESA coverage data collection on marine mammals and sea bird encounters



# What to expect from WDFW observers

- Will inform you of intent to board
- Will comply with your directions on where to board
- Will be polite, respectful, and professional
- Will attempt to minimize effect on your fishing operations and work with your crew to collect required data
- Fishery data recorded are confidential and not released to other fishers
- Observers may ride all day or night when observing:
  - Gill net fisheries
    - Safer than transferring observers on the water during any nighttime fisheries.
  - Limited participation fisheries



# What WDFW expects from fishers

- Provide safe access for boarding and disembarking the vessel
- Provide access to catch, so required data can be obtained
- Answer observer's questions
- Be polite, respectful, and professional
- Work with observers to allow for the required data collection



# Fish Handling

- Proper fish handling is essential for compliance with Fish Friendly and Best Fishing Practices.
- Improved fish handling not only improves the survival of released fish, but it can also improve the quality of the product for market.
- Helps achieve our ESA goal of reducing impacts to listed stocks of fish.



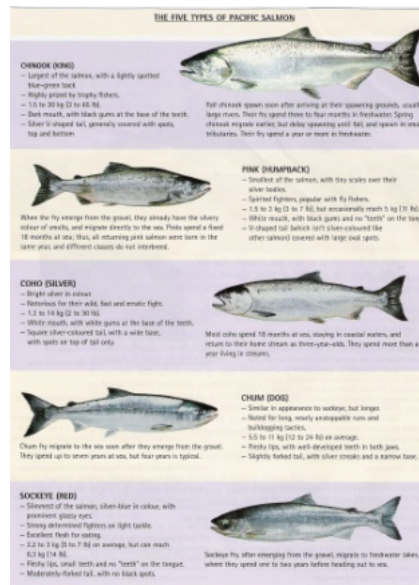
# Proper fish identification through crew training

## Why

- Crew must be able to identify fish required to be released quickly for successful live release.

## How

- By providing salmon identification guides for your crew to use.
- Take time to train new crew members how to identify by catch.



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**Take time to train new crew members on how to identify salmon and steelhead required to be released!**



# Effects of Capture

- Physical damage
- Fatigue
- Asphyxiation
- Loss of disease protection
- Loss of disease resistance
- Reduced spawning success
- STRESS



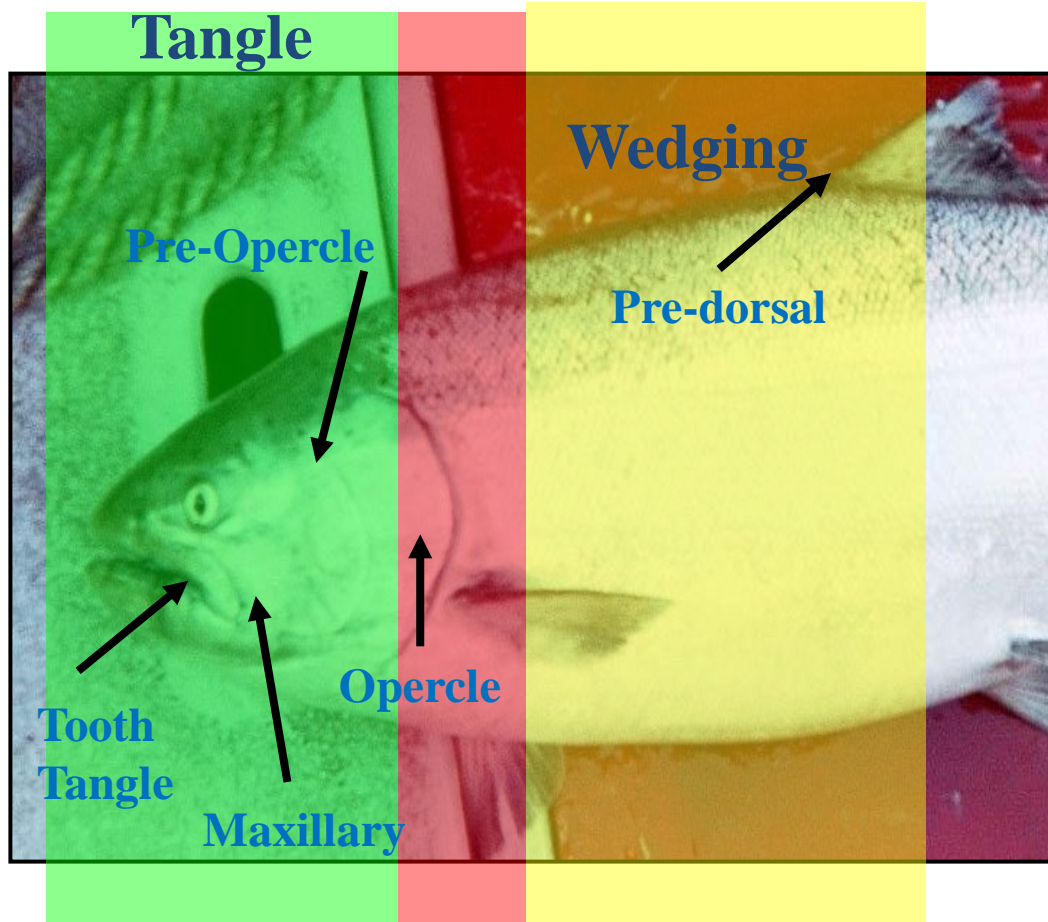
# Keys to Live Capture

- Method of capture leads to high post-release survival rates
- non-target catch
  - small mesh nets
  - shorter nets
  - short drift times
- Recovery boxes
  - revival
  - recovery
- Handling
- Attitude of fishers



# Minimize Harm

## Clamping/Gilling



- Capture method affects survival
  - Tangling maximizes long-term survival
- Gills and breathing
- Protection afforded by scales and slime layer
- Short drift times, small mesh, proper handling





# Keep fish wet and release as quickly as possible

## Why

Keeping the fish wet minimizes slime and scale removal and improves respiration

## How

Minimize time fish out of water, keep hands and surfaces wet.



# Protect gills and lift properly

## Why

Damaging the gills will result in high mortality.

Holding by tail alone will damage vertebrae and internal organs.

## How

When moving, support both head and tail when lifting fish.



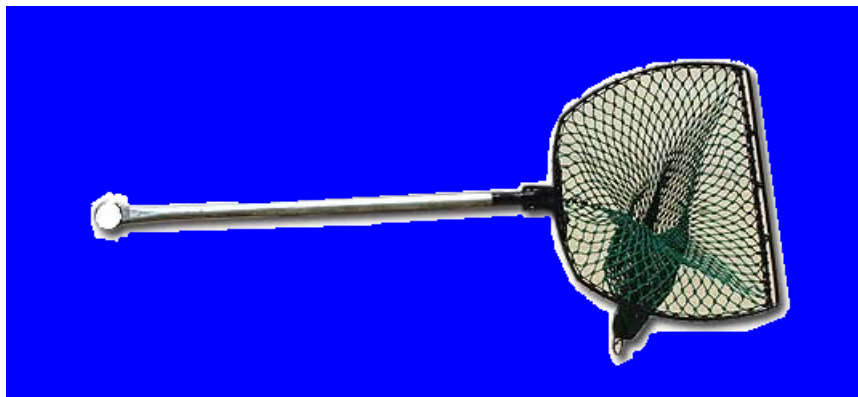
# Use knotless dip nets

## Why

Physical abrasion removes scales and slime making fish more susceptible to infection.

## How

Use knotless dip nets when available and keep net wet to minimize abrasion.



# Avoid drops to hard surfaces

## Why

Hard knocks can cause external and internal damage that may result in death.

## How

If using a brail, lower the brail to the deck or very near deck before spilling fish.



# Best Fishing Practices: Gill Nets



# Recovery Boxes

## Required for Commercial Gillnet Salmon Fisheries in Willapa Bay and Grays Harbor

### Why

Placing salmon in a stream of oxygenated water can often revive fish that are lethargic because they are injured or have been out of the water too long.

### How

Place bleeding or lethargic salmon to be released into a recovery box head into the water flow and monitor their behavior. Release when fish are energetic and swimming



# Recovery Box Dimensions

Each boat must have two operable recovery boxes or one box with two chambers on board when fishing. Each box must be operating during any time the net is being retrieved or picked. The flow in the recovery box must be a minimum of 16 gallons per minute in each chamber of the box, not to exceed 20 gallons per minute. Each chamber of the recovery box must meet the following dimensions as measured from within the box: The inside length measurement must be at or within 39 1/2 inches to 48 inches, the inside width measurements must be at or within 8 to 10 inches, and the inside height measurement must be at or within 14 to 16 inches.



# Recovery Box Dimensions cont...

Each chamber of the recovery box must include a water inlet hole between 3/4 inch and 1 inch in diameter, centered horizontally across the door or wall of the chamber and 1 3/4 inches from the floor of the chamber. Each chamber of the recovery box must include a water outlet hole opposite the inflow that is at least 1 1/2 inches in diameter. The center of the outlet hole must be located a minimum of 12 inches above the floor of the box or chamber. The fisher must demonstrate to department employees, fish and wildlife enforcement officers, or other peace officers, upon request, that the pumping system is delivering the proper volume of fresh river/bay water into each chamber.





# Short Soak Times

## Required in Willapa Bay and Grays Harbor

### Why

Gilled fish have difficulty respirating and rapidly use up oxygen while struggling.

### How

Limited soak time means each set is not to exceed 45 minutes, the time the first net webbing goes in the water to the time the last web comes out. Only soak  $\frac{3}{4}$  of your net or less if you believe the length of your net cannot be retrieved in this amount of time



# Releasing Fish

## Why

Release all fish required to be released by regulations. Fish need to be released quickly, with minimal damage.



## How

May need to cut mesh that ensnares the fish. Picking station should be situated for quick release or placement in recovery box.



# Best Fishing Practices: Purse Seines



# Recovery Boxes

## Required in Areas 7 & 7A Chum Fisheries

### Why

Placing salmon in a stream of oxygenated water can often revive fish that are lethargic because they are injured or have been out of the water too long

### How

Place bleeding or lethargic salmon to be released into a recovery box headfirst into the water flow and monitor behavior. Release when fish are energetic and swimming



# Closed Hatch Covers and Sorting

Always required

## Why

Prevent prohibited species from accidentally going into the hold.



## How

Keep the hatch closed until brail load or hand pulled net is deposited on deck. Promptly sort the catch and using proper handling technique to release the by-catch or place lethargic or bleeding fish in an operating recovery box.



# Brailing

## Why

By reducing the total weight of fish being lifted out of the water at one time the crushing and net marking of fish is reduced. Also, the smaller number of fish on deck can be quickly sorted.

## How

Use brailer or for small sets hand lift net over the side of the vessel. Do not overcrowd the fish in the net between brails.

Place bleeding or lethargic salmon to be released into a recovery box head face flow and monitor behavior.

Release when fish are energetic and swimming



# Best Fishing Practices: Reef Nets & Beach Seines



# Reef net or Beach Seine gear has the potential for very high release survival if the following techniques are used:

- Properly identify and release fish
- Keep fish wet but not over-crowded or dried out
- Use knotless dip nets
- Use wetted gloves or wetted hands
- Use proper lifting techniques





# Advantages for Fish & Fishers

- Maximizes fishing opportunity on healthy stocks
- Allows fisheries to occur and comply with requirements under ESA to maximize survival of listed fish
- Improves the health of weak stocks
- Increases potential future harvest
- Improves public perception of fishery practices
- Finally, these techniques may also improve the quality of retained product



# WDFW Commercial Salmon Monitoring Program

Monitoring Data Collection includes:

- Fleet Distribution
- Catch per unit effort (CPUE)
- Catch Composition
- Location and effort
- Genetic stock identification (GSI)
- Sex, length, and scales
- Total Landed catch



# Derelict Fishing Gear, and Marine Mammal Entanglements



# Reporting Derelict or Lost Gear

- Regulations require any person who loses or abandons commercial fishing gear to report it to the Department of Fish and Wildlife within 24 hours of loss.
- “No-fault” Approach
  - The focus of the Derelict Fishing Gear Removal Project is not on assessing blame. The goals are to remove lost or abandoned gear.



# Reporting Entangled Large Whales

Large whales periodically become entangled in active or derelict fishing gear, or other ropes/lines/chains in the marine environment. Whales that are entangled can suffer from injuries, infection, and wrapping that can impair their ability to feed or swim.

## How You Can Help:

- Prompt reporting is the best way to help entangled whales. Please stay with the whale if it is safe to do so.
- Safety First! Because whales in distress may act unpredictably, do not closely approach the animal. NEVER attempt disentangle or remove any gear without training and authorization.
- Video or photos showing the entangling gear can be helpful for our efforts to reduce these entanglements in the future. Please collect and provide video or photos to NOAA Fisheries but remember to stay at least 100 yards from the whale and beware that lines in the water could entangle your vessel.



# Other Items

- **Hotline: # 360.902.2500 Option 1**
- **Region 6: 360-249-4628**
- **Website:**

**<https://wdfw.wa.gov/fishing/commercial/gillnet#information>**

- **Make sure to complete the Fish Friendly Online Attestation and send electronically to [WillapaBay@dfw.wa.gov](mailto:WillapaBay@dfw.wa.gov) or [GraysHarbor@dfw.wa.gov](mailto:GraysHarbor@dfw.wa.gov)**

A scenic view of a lake at sunset. The sun is low on the horizon, casting a golden glow across the sky and reflecting on the water. In the foreground, the back of a boat is visible, with a green net and some equipment. The background shows a shoreline with buildings and hills under a cloudy sky.

Congratulations!  
You have completed the Fish Friendly  
workshop.

Thank you for participating.  
Remember to complete your Fish Friendly  
Online Attestation and send it in to receive  
your Fish Friendly card