FLYWIRE

Augmenting the WCROP with Electronic Monitoring Capacity

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Problem

1. Action is needed to increase transparency in West Coast Region Highly Migratory Species (HMS) fisheries observed under the Marine Mammal Protection Act (MMPA) and the Endangered Species Act (ESA), specifically in HMS fisheries where management concerns over potential interactions with Endangered, Threatened or Protected (ETP) species have constrained the development of responsible economic opportunities for fishermen. This action is needed because responsible transparency targets (e.g., observation rates) cannot be met with human observers alone due to cost and logistics challenges.

2. Action is needed to allow fishermen to capitalize on existing private sector technologies and services that increase catch transparency without compromising the profitability of their businesses. Action is also needed to allow the National Marine Fisheries Service (NMFS) to benefit from existing private sector technologies and services that efficiently scale the operational capabilities of current human observer programs in order to better meet management needs (e.g., additional monitoring coverage for EFPs, etc.).

Solution

This action seeks to implement an EM-augmentation option in West Coast Region HMS fisheries under **FlyWire's Force-Multiplier Model™**. Whereby EM data collection uses a methodology materially consistent with human observers, such that EM data can be ingested, processed and utilized alongside existing human observer data, within existing NMFS infrastructure.

The purpose of **FlyWire's Force-Multiplier Model™** is to:

(1) Significantly shorten the timeline to implement an effective EM-augmentation option, so that fishermen can access the benefits of Individual Accountability-based management measures faster.

(2) Materially reduce NMFS' per-set program administration costs.

(3) Provide policymakers with actionable tools to solve data-deficient management bottlenecks that prevent fishermen from effectively developing responsible economic opportunities.

How is this solution implemented?

1. Authorize a common, multi-fishery EM-augmentation option for use, as needed, by HMS fishermen operating across the Drift Gillnet (DGN), Set Net, Deep Set Buoy Gear (DSBG), and Alternative Gear fisheries.
2. Capitalize on previous EM work conducted in the Region by implementing the multi-fishery EM-augmentation option in West Coast Region HMS fisheries under a framework that is materially consistent with the Pacific Fishery Management Council (PFMC) -approved Groundfish program.
3. Utilize a data collection strategy that is materially consistent with the existing EM Data Collection Proposal collaboratively developed by FlyWire and the NMFS West Coast Region Observer Program.
4. Implement a real, market-based EM solution – a competitive, open market wherein fishermen choose the monitoring service that best meets their business need.
5. Secure NMFS funding, consistent with MMPA and ESA human observer funding mandates, as necessary, to cover the long-term costs of the EM-augmentation option together with the cost of human observers.

Funding Partners:

Elemental Excelerator

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Milestones achieved in 2022

1. Developed EM Data Collection Proposal in collaboration with the WCROP that captures materially all critical management data currently collected by human observers:
    - Trip metadata
    - Set and haul metadata
    - Catch characterization (e.g., species ID, measurements, disposition, etc.)
    - ESA species specific data elements

2. Completed initial equipment installation and shake down runs.

2023 Milestones

1. Verify EM Data Collection Proposal data requirements are met.
2. Verify FlyWire Digital Debrief™ is an effective QA/QC mechanism.
3. Work undertaken to prepare: (1) observer program sample design, (2) cost analysis and (3) relevant FR amendment(s) with updates provided to Council.

The goal of this Action

- EM is accessible for the 2024 season.
- During the 2024 season, boats that want to, are able to make the transition to EM-augmented observation.
- Human observers will participate on new boats and new gear types until NMFS is comfortable that digital data systems are functioning as expected.

Why this goal is important

Electronic monitoring is an enabling technology necessary to implement effective, Individual Accountability (IA)-based management strategies.

IA-based strategies are necessary to equitably:

- Minimize protected species and unmarketable finfish bycatch.
- Enable a wide range of harvest strategies for swordfish off the West Coast.
- Allow fishermen to meet demand for locally caught product and reduce seafood imports (i.e., support economic viability of the swordfish fishery).
- Responsibly develop new economic opportunities for fishermen (e.g., snap gear fisheries and access to PLCA).

Expected Outcomes of this Action

1. HMS fishermen responsibly expand revenue opportunities.
2. Individual Accountability (IA)-based strategies adopted to increase the precision of management and conservation efforts.
3. Investment in efficiencies and improvements to the monitoring processes reduces NMFS' per-set cost of observation over time.
4. Work within existing NMFS data infrastructure, built on previous EM work conducted in the Region, enables the PFMC to expand access to new tools while expensing fewer resources.

Questions?

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