

FIELDWORK COMPARISONS BASED ON STRAWMAN FOR STANDARD CONFIGURATION CAMERA WITH INTEGRATED TOOLS

Preliminary document for discussion at September 2014 EM Workgroup meeting

Potential 2015 Field work comparisons for Standard EM

Element 4: Vessel selection method/sampling design

Option 1: Vessels opt into EM strata on annual basis, random selection of vessels that opt in; **(to pilot test likely operational methods)**

Option 2: Vessels apply to be in EM strata on annual basis; NMFS determines which vessels cannot take observer and move into EM strata on annual basis. **(evaluate criteria)**

Element 5: Duration of EM coverage

Option 1: vessels carry EM for entire year; subset of trips randomly sampled. **(to evaluate data quality and costs)**

Option 2: vessels carry EM for 2-6 month periods; all or a subset of trips randomly sampled. **(to evaluate data quality and costs)**

Element 7: Weight estimation-----(to evaluate piece count to weight conversion methods)****

Option 1: Weight of retained catch would be based on landings information; piece counts of drop-offs and discards would be derived from video review and converted to weight estimates based on average PRR weights.

Option 2: Weight of retained catch would be based on landings information; piece counts of drop-offs and discards would be derived from video review and converted to weight estimates based on temporally and spatially similar observer or survey data.

Element 8: Onboard handling procedures to improve accuracy for priority species (Priority species based on AFSC Feb, 13, 2014 letter)

A) Vessel specific monitoring plan identifying operator and crew duties needed to provide sufficient data quality. **(what should contents be)**

B) Rockfish full retention validation (options/costs)

- a. Deck Cam with night time shut down
- b. Aggregate trip rockfish piece counts validated by dockside/vs. video monitoring spot checks
- c. Set specific piece counts of aggregate rockfish entered in logbook validated by dockside/vs. video monitoring spot checks
- d. Other

- C) Discard location validation **(options/costs)**
 - a. Option 1: Deck Cam with night time shut down
 - b. Other
- D) Halibut release size estimates **(improved precision vs. operational compatibility)**
 - a. Option 1: no measuring boards
 - b. Option 2: measuring boards or other procedures to allow identification of < 32" halibut discarded.
- E) Halibut release mortality estimates—**(collect data to build the relationship between the release method and injury codes)**

Element 9: Logbooks: (to evaluate purpose, platform, and necessary fields for EM logbook support)

- F) Option 1: Logbook data used to provide set specific effort data including hook size, hook spacing, skate length, and number of skates/set.
- G) Option 2: For P cod longline fishery, vessel operator maintains logbook piece counts for all halibut released to improve turn-around time for halibut PSC estimates.
- H) Option 3: Elog—evaluate efficacy of using elogs to gather necessary data.

Element 10: Data review services: (to evaluate data reviewed times, costs and sub sample methods)

- A) All discards and drop-off identified to lowest taxonomic level.
 - a. Option 1: Allow Species Groupings:
 - i. RE/Sr rockfish—group
 - ii. Thornyhead rockfish—group
 - iii. Grenadier (?????????)
- B) Sets/trips manually reviewed following census or estimation protocols as determined appropriate.
 - a. Option 1: census—100% video review of all sets from all trips
 - b.
 - c. Option 2: subsample—
 - i. Subsample sets from trips
 - ii. Subsample portions of sets
 - 1. Based on skates
 - 2. Based on haul time
- C) Catch composition
 - a. Option 1: EM reviewers count all creatures
 - b. Option 2: EM reviewers count only discards
- D) Effort determination
 - a. Option 1: use logbook effort/hooks
 - b. Option 2: video count of hooks/skates
- E) Data turn-around times—TBD
 - a. Option 1: central review (PSMFC)
 - b. Option 2: local review
 - i. Local pre-review
 - ii. Local full review.

Element 11: Dockside monitoring (to evaluate costs and necessary tasks for EM support)

Option 2: dockside monitoring supports QA/QC and hard drive/logbook collection (IPHC model)

Option 3: Dockside monitoring supports collection of biological samples (IPHC model)

Option 4: Dockside monitoring support validation of retained species ID. (Canadian model)

Element 12: Field Services: (To estimate infrastructure needs to support various levels of EM deployment and costs)

- a) Number of install/service ports
- b) Number of dockside monitoring ports
- c) Data collection
- d) QA/QC
- e) Data review
- f) other

Element 14: Incentives:

- a) vessel report card
- b) monetary incentives
- c) removal from EM pool