

WESTERN PACIFIC REGIONAL FISHERY MANAGEMENT COUNCIL

#### Pelagics Plan Team Meeting May 15-17, 2012 1164 Bishop St., Suite 1400 Honolulu, Hawaii

#### Report

The Pelagics Plan Team met between May 15 and May 17, 2012. Most of the meeting was devoted to making a critical review of the Pelagics Annual Report content and format. The PPT made specific comments on the 2011 modules to guide the final production of the 2011 annual report modules for Hawaii, Guam, CNMI and American Samoa. These comments are listed as '2011' in the following action items. The PPT made an extensive list of the action items to be used to guide the production of 2012 draft annual report modules.

There were no recommendations from the four island areas nor were there any international or region-wide recommendations.

Action Item Summary, 2011 Final Module revisions are noted, all other revisions pertain to draft 2012 modules which will ideally be produced by 2013.

## CNMI

- 1. 2011 Final Module Check non tuna PMUS charter catches in 2010, aggregate and by species which are all at zero
- 2. 2011 Final Module Check the high 2008 blue marlin catch
- 3. Make the time series symbols more explicitly for black and white printing
- 4. 2011 Final Module -Check Table 1a which may include non PMUS in the non-Tuna PMUS total
- 5. 2011 Final Module -Check the creel survey logs for the charter fishery to see if any opportunistic surveys were conducted to augment the low charter survey numbers
- 6. 2011 Final Module -Ensure there is text to clarify what is meant by 'bycatch'

## American Samoa

- 1. Split module between Longline and Troll similar to Hawaii module
- 2011 Final Module Re-examine the differences between Tables 1 and 2, especially the 8% difference between albacore in 2011, versus no difference in 2010
- 3. 2011 Final Module Clarify sampling by Gordon Yamasaki for the average fish sizes collected from Cannery and fish processor versus the creel survey
- 4. 2011 Final Module Add a total column to Table 3B
- 5. Delete Figure 16
- 6. Figure 17, add a column to show the percentage of coverage
- 7. Delete Figure 18
- 8. In Figure 23A, terminate the data time series in 2005
- 9. Delete Tables 6A-C, which mixes troll and longline data as this is not useful
- 10. Use cannery data for sampled albacore in Fig 23A and add to Fig 23B. Start in 1998 for albacore and other species in 2001
- 11. Add cannery average weights data for 2010 and 2011
- 12. 2011 Final Module Update data for Figure 15 A and B, missing data for permits by vessel size class

# Guam

**1.** 2011 Final Module - Move Table 4 and place after page 2-32

# Hawaii, revisions pertain to draft 2012 module

2010 Annual Report Draft	Page #	Corresponding Table # and Page # in 2011 module draft	Edit
Hawaii Module Tables			
Table 75. Number of Hawaii commercial marine licenses			Keep table
(CMLs) in 2009 and 2010	200		Keep table and add a second table with
Table 76. Hawaii commercial pelagic landings, revenue, and			Hawaii deep and shallow set longline
average price by species, 2009-2010	201	Table 1 Page1	pounds and revenue
			Split longline row in Table into deep and
Table 77. Hawaii commercial pelagic landings, revenue, and	202		shallow longline
average price by fishery, 2009-2010	203	Table 2 Page 2	catch and revenues
			Create two sets of
			tables showing deep
			and shallow longline catches by area.
Table 79 Howaii based longline actab (number of fich) by			Truncate time series
Table 78. Hawaii-based longline catch (number of fish) by area, 1991-2010	237-239	Table 3 Page 35-37	to begin at 2002
aica, 1991-2010	237-239	1 able 5 1 age 55-57	Create two sets of
			tables showing deep
			and shallow longline
			fisheries. Truncate
Table 79. Average weight in pounds of fish landed by the			time series to begin at
Hawaii-based longline fishery, 1987-2010	240-241	Table 4 page 38-39	2002
			Create two sets of
			tables showing deep
Table 80. Bycatch, retained catch, and total catch for the			and shallow longline
Hawaii-based longline fishery, 2010	243	Table 5 Page 40	fisheries.

2010 Annual Report Draft	Page #	Corresponding Table # and Page # in 2011 module draft	Edit
Table 8. Average weight by species for the troll and handline landings, 1987-2011.		Table 8 (really Table 6) Page 66	Keep, truncate time series to begin at 2002

Hawaii Module Figures		Corresponding Figure # and Page # in 2011 module	Edit
Figure 81. Hawaii total commercial landings and revenue, 1987-2010	204	Figure 1 Page 3	Keep, truncate time series to begin at 2002
Figure 82. Hawaii commercial tuna, billfish, shark, and other PMUS landings, 1987-2010	205	Figure 2 Page 4	Keep, truncate time series to begin at 2002
			Keep, split longline column into deep and shallow. Truncate
Figure 83. Total commercial pelagic landings by gear type 1987-2010	206	Figure 3 Page 5	time series to begin at 2002
Figure 84. Total commercial cologic at useful revenue by soor			Keep, split longline column into deep and shallow. Truncate
Figure 84. Total commercial pelagic ex-vessel revenue by gear type 1987-2010	207	Figure 4 Page 6	time series to begin at 2002
			Keep, split longline column into deep and shallow. Truncate
Figure 85. Hawaii commercial tuna landings by gear type, 1987-2010.	208	Figure 5 page 7	time series to begin at 2002

Hawaii Module Figures		Corresponding Figure # and Page # in 2011 module	Edit
		# III 2011 III0ulle	Keep, truncate time
Figure 86. Species composition of the tuna landings by gear			series to begin at
type, 1987-2010	209	Figure 6 Page 8	2002
			Keep, split longline
			column into deep and
			shallow. Truncate
Figure 87. Hawaii bigeye tuna landings by gear type, 1987-	210	F' 7.D 0	time series to begin at
2010	210	Figure 7 Page 9	2002 Kaan anlit langling
			Keep, split longline column into deep and
			shallow. Truncate
Figure 88. Hawaii yellowfin tuna landings by gear type, 1987-			time series to begin at
2010	211	Figure 8 Page 10	2002
			Keep, split longline
			column into deep and
			shallow. Truncate
Figure 89. Hawaii skipjack tuna landings by gear type, 1987-			time series to begin at
2010	212	Figure 9 Page 11	2002
			Keep, split longline
			column into deep and shallow. Truncate
			time series to begin at
Figure 90. Hawaii albacore landings by gear type, 1987-2010	213	Figure 10 Page 12	2002
Tigure 90. Hawan albacore fandings by gear type, 1987-2010	215		Keep, split longline
			column into deep and
			shallow. Truncate
Figure 91. Hawaii commercial billfish landings by gear type,			time series to begin at
1987-2010	214	Figure 11 Page 13	2002
			Keep, truncate time
Figure 92. Species composition of the billfish landings, 1987-			series to begin at
2010	215	Figure 12 Page 14	2002
			Keep, split longline
	016	F. 12 D 15	column into deep and
Figure 93. Hawaii swordfish landings, 1987-2010	216	Figure 13 Page 15	shallow. Truncate

		Corresponding Figure # and Page	Edit
Hawaii Module Figures		# in 2011 module	
			time series to begin at 2002
Figure 94. Hawaii blue marlin landings by gear type, 1987- 2010	217	Figure 14 Page 16	Keep, split longline column into deep and shallow. Truncate time series to begin at 2002
Figure 95. Hawaii striped marlin landings by gear type, 1987-2010	218	Figure 15 page 17	Keep, split longline column into deep and shallow. Truncate time series to begin at 2002
Figure 96. Hawaii commercial landings of other PMUS by gear type, 1987-2010	220	Figure 16 page 18	Keep, split longline column into deep and shallow. Truncate time series to begin at 2002
Figure 97. Species composition of other PMUS landings, 1987-2010	221	Figure 17 page 19	Keep, split longline column into deep and shallow. Truncate time series to begin at 2002
Figure 98. Hawaii mahimahi landings by gear type, 1987-2010	222	Figure 18 page 20	Keep, split longline column into deep and shallow. Truncate time series to begin at 2002
Figure 99. Hawaii Wahoo (Ono) landings by gear type, 1987- 2010	223	Figure 19 Page 21	Keep, split longline column into deep and shallow. Truncate time series to begin at 2002
Figure 100. Hawaii moonfish landings, 1987-2010	224	Figure 20 page 22	Keep, split longline column into deep and

		Corresponding Figure # and Page	Edit
Hawaii Module Figures		# in 2011 module	
			shallow. Truncate
			time series to begin at
			2002
			Keep, split longline
			column into deep and
			shallow. Truncate
			time series to begin at
Figure 101. Hawaii pomfret landings, 1987-2010	225	Figure 21 Page 23	2002
			Keep, split longline
			column into deep and
			shallow. Truncate
	00.5		time series to begin at
Figure 102. Hawaii shark landings, 1987-2010	226	Figure 22 Page 24	2002
$\Gamma'_{1} = 102$ Number of Herry'' have the effective second state $1007$			Keep, truncate time
Figure 103. Number of Hawaii-based longline vessels, 1987-	207	E'	series to begin at
2010	227	Figure 23 Page 25	2002
			Keep, remove Mixed Trips, re-label Tuna
			and Swordfish Trips
			as Deep and Shallow.
Figure 104. Number of trips by the Hawaii-based longline			Truncate time series
fishery, 1991-2010	228	Figure 24 Page 26	to begin at 2002
History, 1991 2010	220		Keep, truncate time
Figure 105. Number of hooks set by the Hawaii-based longline			series to begin at
fishery, 1991-2010	229	Figure 25 page 27	2002
		<u> </u>	Delete all but
			Honolulu CPI and
			move to front of
Figure 106. Hawaii longline landings and revenue, 1987-2010	230	Figure 26 Page 28	module
			Delete
Figure 107. Hawaii longline tuna landings, 1987-2010	231	Figure 27 Page 29	
Figure 108. Hawaii longline billfish landings, 1987-2010	232	Figure 28a Page 30	Delete
rigure 100. riuwan longine onnish landings, 1907-2010	232	1 15010 200 1 050 50	Delete
Figure 109. Hawaii longline marlin landings, 1987-2010	232	Figure 28b Page 30	Denete

Hawaii Module Figures		Corresponding Figure # and Page # in 2011 module	Edit
Figure 110. Hawaii longline landings of other PMUS, 1987-	224	Eigung 20 Dage 22	Delete
2010 Figure 111. Hawaii longline blue and total shark landings, 1987-2010	234 235	Figure 29 Page 32 Figure 30a Page 33	Delete
Figure 112. Hawaii longline mako, thresher and other shark landings, 1987-2010	235	Figure 30b Page 33	Delete
Figure 113. Hawaii longline CPUE for major tunas on tuna trips, 1991-2010	244	Figure 31 page 41	Keep, truncate time series to begin at 2002
Figure 114. Hawaii longline swordfish CPUE by trip type, 1991-2010	245	Figure 32 Page 42	Keep, truncate time series to begin at 2002, re-label Tuna and Swordfish Trips as Deep and Shallow, lose Mixed
Figure 115. Longline blue marlin CPUE by trip type, 1992-2009	246		Keep, truncate time series to begin at 2002, re-label Tuna and Swordfish Trips as Deep and Shallow, lose Mixed
Figure 116. Longline striped marlin CPUE by trip type, 1992-2009	246	Figure 33b Page 43	Keep, truncate time series to begin at 2002, re-label Tuna and Swordfish Trips as Deep and Shallow, lose Mixed
Figure 117. Hawaii longline mahimahi CPUE by trip type,			Delete
1991-2010 Figure 118. Hawaii longline ono (wahoo) CPUE by trip type, 1991-2010	248 248	Figure 34a Page 45 Figure 34a Page 45	Delete
Figure 119. Hawaii longline moonfish CPUE by trip type, 1991-2010	250	Figure 35a Page 45	Delete

Hawaii Module Figures		Corresponding Figure # and Page # in 2011 module	Edit
Figure 120. Hawaii longline pomfret CPUE by trip type, 1994-			Delete
2010.	250	Figure 35a Page 45	
			Keep, truncate time series to begin at 2002, re-label Tuna and Swordfish Trips
Figure 121. Hawaii longline blue shark CPUE by trip type, 1991-2010	252	Figure 36 page 49	as Deep and Shallow, lose Mixed
Pages missing from 2010 report- refer to 2011 draft Hawaii Module			
Figure 37. Number of Main Hawaiian Islands troll fishers and number of days fished, 1987-2011.		Figure 37 Page 50	Keep, truncate time series to begin at 2002,
Figure 38. Main Hawaiian Islands troll landings and revenue, 1991-2011.		Figure 38 Page 51	Keep, truncate time series to begin at 2002,
Figure 39. Main Hawaiian Islands troll tuna landings, 1991-		E'	Keep, truncate time series to begin at 2002, delete albacore
2011. Figure 40. Main Hawaiian Islands troll billfish landings, 1991- 2011.		Figure 39 Page 52 Figure 40 Page 53	time series Delete
Figure 41. Main Hawaiian Islands troll landings of other pelagic PMUS, 1991-2011.		Figure 41 Page 54	Delete
Figure 42. Main Hawaiian Islands troll tuna landings per day/hour fished, 1991-2011.		Figure 42 Page 55	Keep, truncate time series to begin at 2002, keep CPUE pounds per hour fished
Figure 43. Main Hawaiian Island troll marlin landings per			Keep, truncate time series to begin at 2002, keep CPUE pounds per hour
day/hour fished, 1991-2011.		Figure 43 Page 56	fished

	Corresponding Figure # and Page	Edit
Hawaii Module Figures	# in 2011 module	
		Keep, truncate time series to begin at
		2002, keep CPUE
Figure 44. Main Hawaiian Island troll mahimahi and ono		pounds per hour
landings per day/hour fished, 1991-2011.	Figure 44, Page 57	fished
		Keep, truncate time
		series to begin at
		2002, keep CPUE
Figure 45. Number of Main Hawaiian Islands handline fishers		pounds per hour
and number of days fished, 1987-2011.	Figure 45 Page 58	fished
		Keep, truncate time
		series to begin at
		2002, keep CPUE
Figure 46. Main Hawaiian Island handline landings and		pounds per hour
revenue, 1991-2011.	Figure 46 page 59	fished
Figure 47. Main Hawaiian Island handline tuna landings, 1991-		Delete
2011.	Figure 47 Page 60	Delete
		Keep, truncate time
		series to begin at
		2002, keep CPUE
Figure 48. Main Hawaiian Island handline tuna landings per		pounds per hour
day/hour fished, 1991-2011.	Figure 48 Page 61	fished
		Keep, truncate time
Figure 49. Number of offshore handline fishers and days		series to begin at
fished, 1990-2011.	Figure 49 Page 62	2002.
		Keep, truncate time
		series to begin at
Figure 50. Offshore handline landings and revenue, 1991-2011.	Figure 50 Page 63	2002.
Figure 51. Offshore handline landings, 1991-2011.	Figure 51 Page 64	Delete
		Keep, truncate time
Figure 52. Offshore handline landings per day fished, 1991-		series to begin at
2011.	Figure 52 Page 65	2002.
		Delete
Figure 53. Hawaii aku boat (pole and line) vessel and trip	Figure 43 Page 67	

Hawaii Module Figures	Corresponding Figure # and Page # in 2011 module	Edit
activity, 1987-2011.		

## International

International Module Tables	Page #	Edit
Table 81. Total reported purse seine catch (metric tons) of skipjack, yellowfin and bigeye tuna in the Pacific Ocean. Source: SPC		Keep, truncate to begin at 1993
	255	
Table 82. Total reported longline catch (metric tonnes) of PMUS in the Pacific Ocean.	260	Keep, truncate to begin at 1993
Table 83. Total reported pole-and-line catch (metric tonnes) of skipjack in the Pacific Ocean. Source: SPC.	267	Keep, truncate to begin at 1993
Table 84. Estimated annual catch (metric tons) of tuna species in the Pacific Ocean. Source: SPC.	268	Keep, truncate to begin at 1993
		Keep, include EPO IATTC
Table 96 (really 85) Schedule of completed stock assessments for WPRFMC PMUS	270	stock assessments
		Add column for
Table 85 (really 86). Estimates of stock status in relation to overfishing and overfished reference points for WPRFMC PMUS	281	BFLAG

International Module Figures	Page #	Edit
Figure 122. The western and central Pacific Ocean (WCPO), the eastern Pacific Ocean (EPO) and the WCPFC Convention Area (WCP–CA in dashed lines)	253	Кеер
Figure 123. Total purse seine catch of skipjack and yellowfin tuna in the Pacific Ocean, 1968-2010. Source: SPC	256	Keep, truncate to begin at 1993
Figure 124. Distribution of purse seine skipjack catch in 2008. Source: SPC and I-ATTC.	256	Delete
Figure 125. Distribution of purse seine yellowfin catch in 2008. Source: SPC and IATTC	257	Delete
Figure 126. Reported longline tuna catches in the Pacific Ocean. Source: SPC and I-ATTC.	261	Keep, truncate to begin at 1993
Figure 127. Reported longline billfish catches in the Pacific Ocean. Source: SPC and I-ATTC	261	Keep, truncate to begin at 1993
Figure 128. Distribution of longline catches of yellowfin tuna reported in 2004. Source: SPC public domain data.	262	Delete
Figure 129. Distribution of longline catches of bigeye tuna reported in 2004. Source: SPC public domain data.	262	Delete
Figure 130. Distribution of longline catches of albacore tuna reported in 2004. Source: SPC public domain data.	263	Delete
Figure 131. Distribution of longline catches of swordfish reported in 2004. Source: SPC public domain data.	263	Delete
Figure 132. Distribution of longline catches of blue marlin reported in 2004. Source: SPC public domain data.	264	Delete
Figure 133. Distribution of longline catches of striped marlin reported in 2004. Source: SPC public domain data.	264	Delete
Figure 134. Distribution of pole-and-line catch of skipjack reported in 2004. Source: SPC public domain data.	266	Delete
Figure 135. Reported pole-and-line catch (metric tons) in the Pacific Ocean. Source: SPC.	267	Keep, truncate to begin at 1993
Figure 136. Estimated total catch of tuna species in the Pacific Ocean. Source: SPC	267	Keep, truncate to begin at 1993 and reformat as bar chart

International Module Figures	Page #	Edit
Figure 137. Specification of fishing mortality and biomass reference points in the WPRFMC Pelagics FMP and current stock status in the western-central (WCPO) and eastern Pacific Ocean (EPO).	270	Keep
Figure 138. Ratios of F/FMSY (top) and B/BMSY (bottom) for skipjack tuna in the WCP-CA. The horizontal line at 1.0 in the F/FMSY figure indicates an overfishing reference point. The shaded area in the B/BMSY figure indicates an overfished reference point.	271	Keep
Figure 139. Ratios of F/FMSY (top) and B/BMSY (bottom) for yellowfin tuna in the WCP-CA. The horizontal line at 1.0 in the F/FMSY figure indicates an overfishing reference point. The shaded area in the B/BMSY figure indicates an overfished reference point (MSST)	274	Keep
Figure 140. Ratios of F/FMSY F (top) and B/BMSY (bottom) for bigeye tuna in the WCP-CA. The horizontal line at 1.0 in the F/FMSY figure indicates an overfishing reference point. The shaded area in the B/BMSY figure indicates an overfished reference point.	277	Keep
Figure 141. Ratios of F/FMSY (top) and B/BMSY (bottom) for South Pacific albacore. The horizontal line at 1.0 in the F/FMSY figure indicates an overfishing reference point. The shaded area in the B/BMSY figure indicates an overfished reference point	278	Keep

## **Recreational & West Coast**

Recreational + West Coast Module Tables	Page #	Edit
Table 87. Estimated recreational pelagic fish catches in the four principal island groups of the Western Pacific Region in 2010	288	Keep, truncate time series to begin at 2002
Table 88. Estimated catches by pelagic charter fishing vessels in Guam, Hawaii and Northern Mariana Islands in 2010	289	Keep
Table 89. Comparison of species composition of landings made by Hawaii pelagic charter vessels versus commercial troll vessels, 2010	289	Keep
Table 90. Comparison of species composition of landings made by Guam pelagic charter vessels versus commercial troll vessels, 2010	290	Keep , only one digit after decimal point
Table 91. Charter vessel catches in Hawaii by island, 2010	290	Keep , only one digit after decimal point
Table 92. Composition of charter vessel catches in the Main Hawaiian Islands, 2010	291	Keep , only one digit after decimal point
Table 93. Recreational fish catches in Hawaii between 2003 and 2010. Source: HDAR HMFRS and NMFS PIFSC	293	Keep , only one digit after decimal point
Table 94. Annual West Coast Highly Migratory Species Landings (mt) by Species	298	Delete
		Delete
Table 95. Annual Value (\$) of West Coast Highly Migratory Landings by Species	299	Delete
Table 96. Pacific Coast Commercial Landings of Highly Migratory Species by State, 1986-2008	300	Delete
Table 97. Pacific Coast Commercial Landings of Highly Migratory Species by State, 1986-2008 (Cont.)	301	Delete
Table 98. Pacific Coast real Commercial Ex-Vessel Revenues (1999)1 from Highly Migratory Species by State	303	Delete

Recreational Module Figures	Page #	Edit
		Keep, truncate time series to begin at
Figure 142. Annual number of small vessel fleet registrations in Hawaii, 1966-2010. Figure shows total		2002
fleet size, and percentage of vessels being registered for commercial fishing (Source: Hawaii Division of	205	
Boating and Ocean Resources)	285	Diliti
Figure 143. Catch number estimates for six major pelagic species in 2003-2010. Black vertical bars are		Delete
95% confidence intervals.	294	
Figure 144 Annual representational fishers, landings by weight of six major palagia fish species in Harvaii		Keep but delete
Figure 144. Annual recreational fishery landings by weight of six major pelagic fish species in Hawaii between 2003 and 2010	294	striped marlin
Figure 145. Average weight of six major pelagic fish species caught by recreational fishing in Hawaii		Convert figure into a
between 2003 and 2010	295	table