

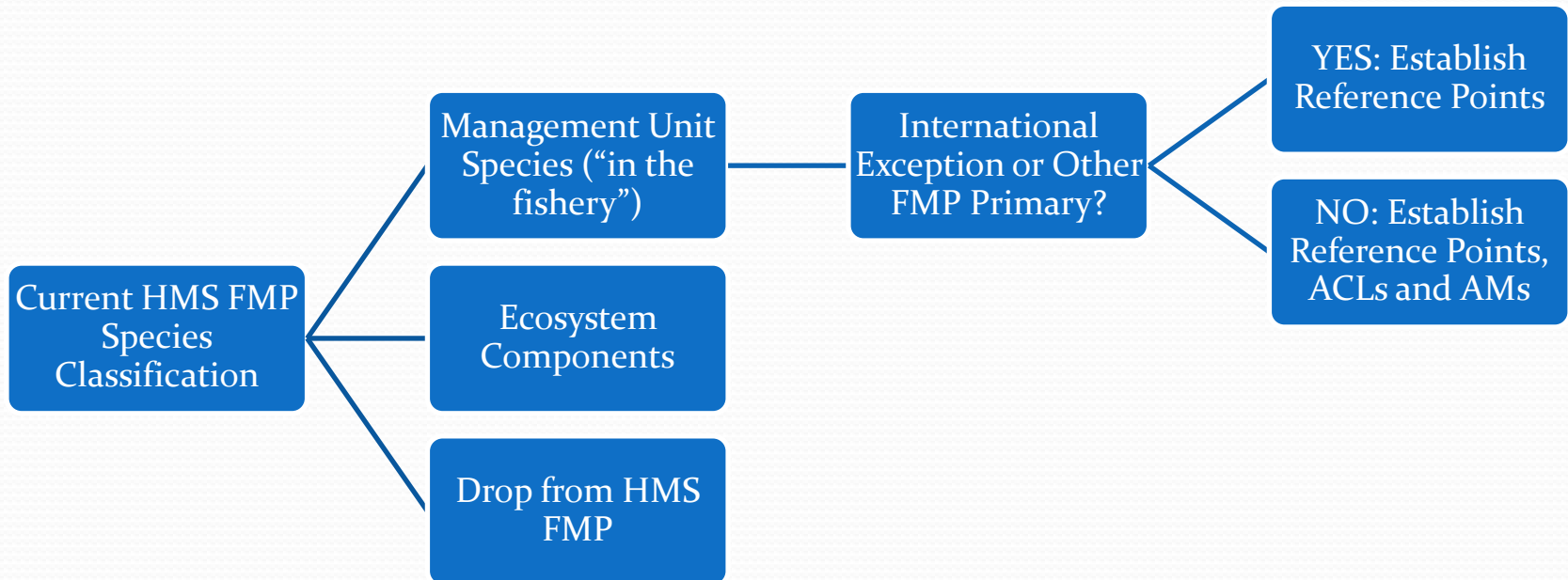
**Amendment 2 to the FMP for U.S. West Coast
Fisheries for Highly Migratory Species:
Revised National Standard 1
Guidelines (ACLs)
HMSMT Report Overview**

Pacific Fishery Management Council Meeting
Portland, Oregon
11 April 2010

Guide to HMSMT Report Sections

1. Reclassifying HMS FMP Species to meet National Standard 1 requirements (p. 1)
2. Vulnerability Analyses to Inform Reclassification Decisions (p. 8)
3. Application of the International Exception to MUS (p. 9)
4. Determining the Primary FMP for MUS (p. 14)
5. Establishing Reference Points, ACLs and Accountability Measures (p. 16, Supplemental HMSMT Report)

Decision Flow Chart



Reclassifying HMS FMP Species

- Tables 1 (p. 4) shows commercial landings and recreational catch for selected MUS and monitored species under the current HMS FMP, including possible reclassifications
- Table 3 (p. 6) provides estimated CA DGN observer catch for the same group of species
- Proposed reclassification of MUS as ecosystem components: bigeye thresher shark, pelagic thresher shark
- Proposed reclassification of monitored species as MUS: opah

Vulnerability Analysis (1)

- Productivity and susceptibility assessments (PSA) were performed for five HMS shark management unit species, albacore, swordfish and opah
- Results are displayed in Table 4 (p. 8) and Figure 2 (p. 9)

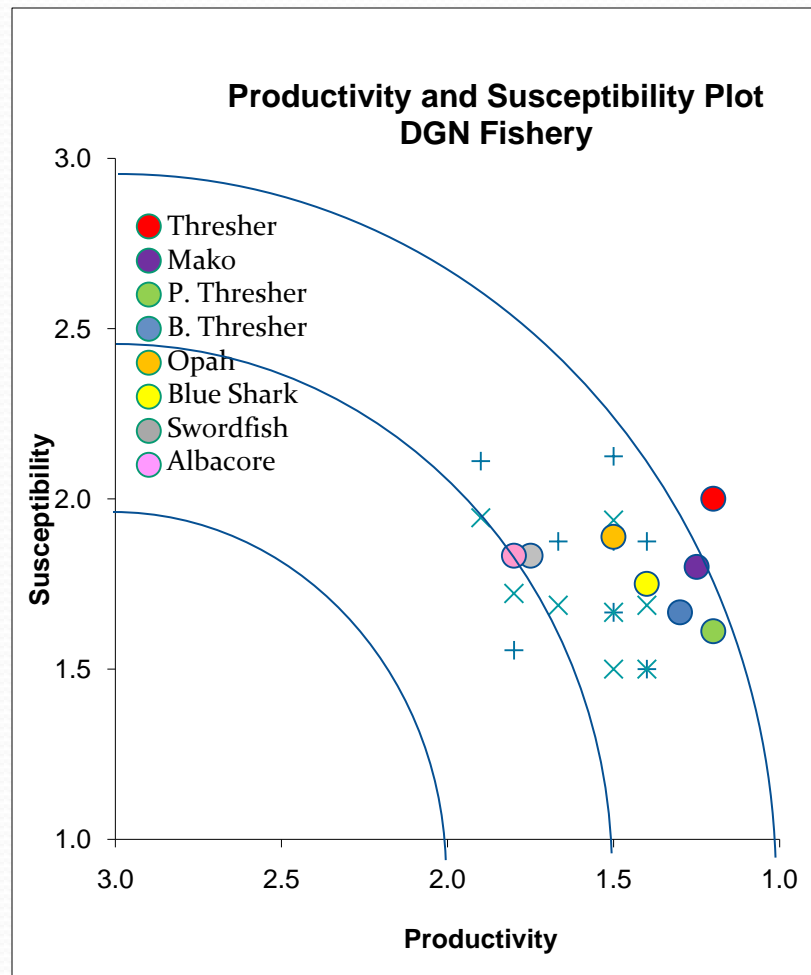
Vulnerability Analysis (2)

- Common thresher and shortfin mako shark were most vulnerable out of included species
- Albacore and swordfish were least vulnerable
- Differences in vulnerability were driven more by variation in productivity than in susceptibility

PSA Scores for HMS FMP Species (1)

PFMC DGN Fishery	Productivity		Susceptibility		Vulnerability
Species	Weighted Attribute Score	Weighted Data Quality Score	Weighted Attribute Score	Weighted Data Quality Score	
Common thresher	1.200	2.100	2.000	2.667	2.059
Shortfin mako	1.250	2.100	1.800	2.750	1.924
Pelagic thresher	1.200	2.200	1.611	3.167	1.901
Bigeye thresher	1.300	2.200	1.667	2.917	1.826
Blue shark	1.400	1.800	1.750	2.000	1.767
Opah	1.500	3.700	1.889	3.000	1.744
Swordfish	1.750	2.000	1.833	1.917	1.502
Albacore	1.800	2.200	1.833	1.750	1.461

PSA Scores for HMS FMP Species (2)



International Exception (1)

Three alternatives are included in the current version of the amendment (p. 9):

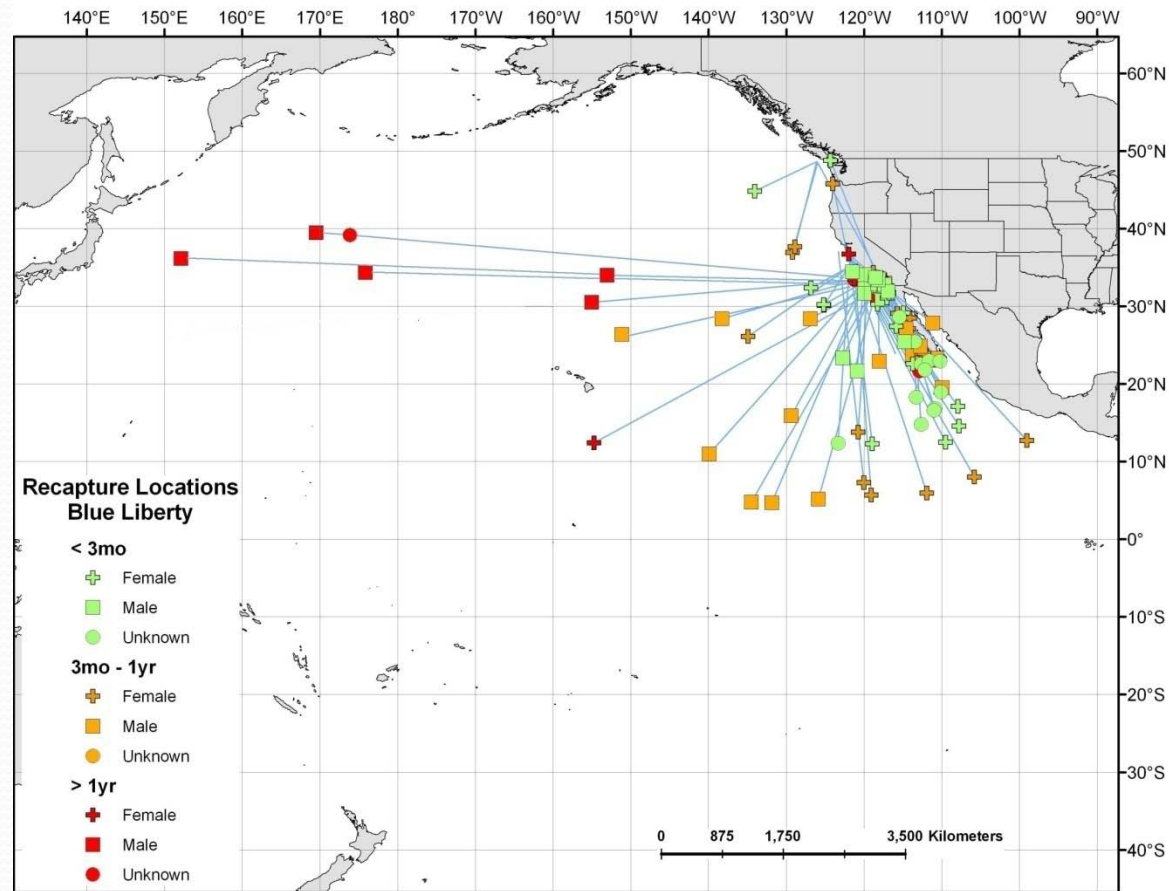
1. Apply the international exception to all HMS MUS
2. Apply the international exception to all HMS MUS except for common thresher shark and shortfin mako shark
3. Apply the international exception to all HMS MUS except for common thresher shark

International Exception (2)

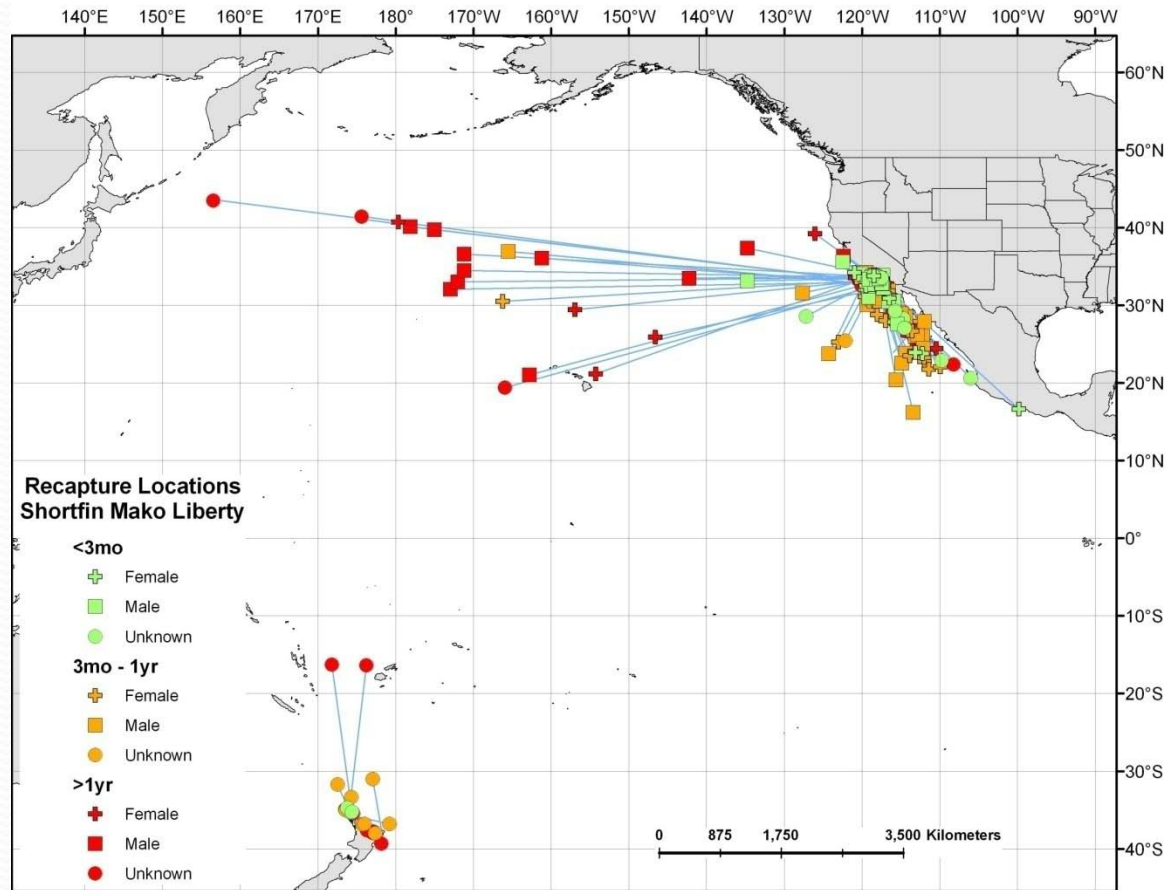
Considerations in applying the international exception:

1. Does the species' geographic distribution lie within PFMC management jurisdiction (e.g the West Coast EEZ)?
2. Is the species already subject to other management under another FMP, RFMO or state agency?

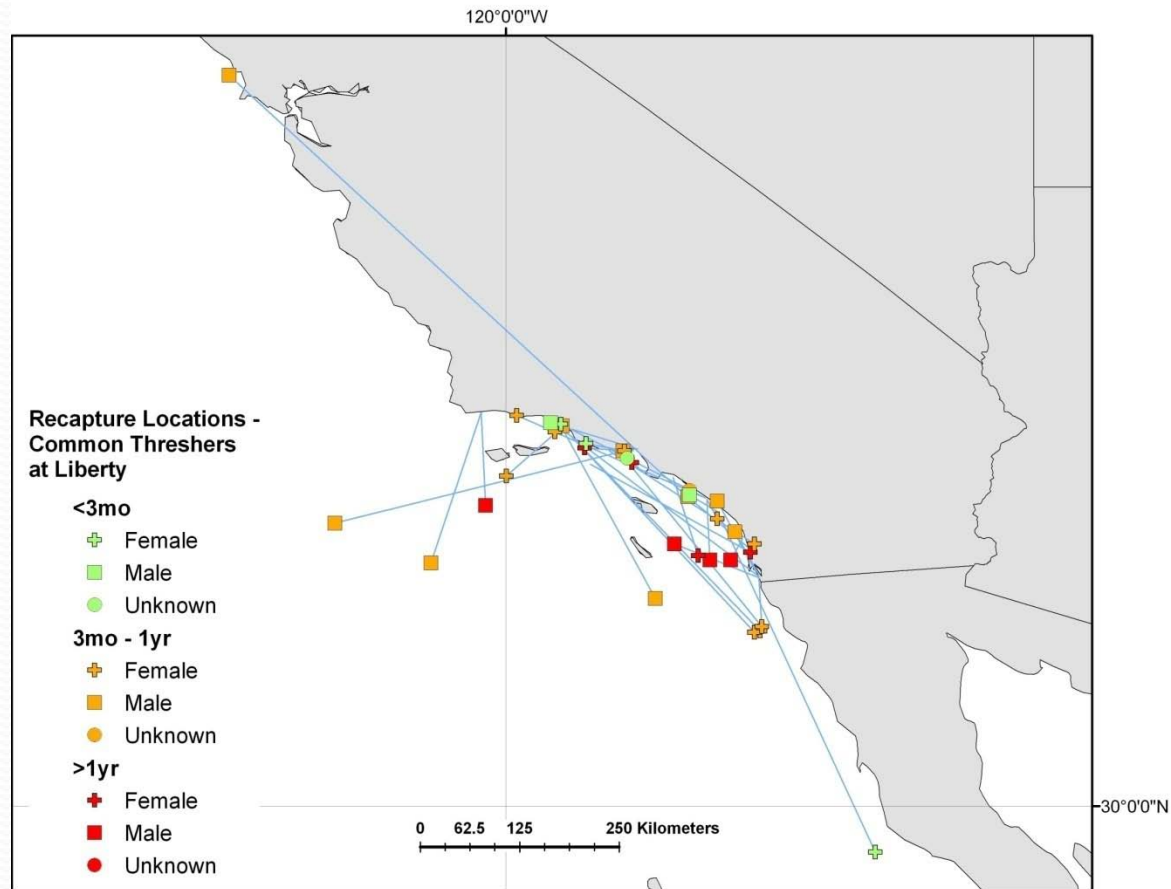
Blue shark recapture locations



Shortfin mako shark recapture locations



Common thresher shark recapture locations



IATTC Resolutions on Shark Conservation

- Resolution C-05-03 (June 2005) addresses conservation of sharks caught in association with EPO fisheries
- Resolution C-04-05 (June 2006) is a consolidated resolution on bycatch which includes shark bycatch mortality reduction measures in its scope (paragraphs 2 and 7)
- The Angtigua Convention (Article VII, paragraph (f)) provides for adoption of IATTC conservation and management measures for HMS sharks

Determining the Primary FMP

- Management unit species in the HMS FMP are all included in the WPFMC's Pelagics FMP
- Table 6. (p. 16) displays proposed primary FMP designations for current and possible additional MUS in the HMS FMP

Establishing Reference Points, ACLs and AMs

- All HMS FMP MUS require establishing reference points: MSY, OY and SDCs
- Stocks not subject to the MSA international exception must further establish ACLs and AMs
- Section 5 of the HMSMT Report (p. 16) reviews current HMS FMP reference points and considers approaches to address revised NS₁ requirements

Supplemental HMSMT Report (1)

- The Supplemental HMSMT Report provides further input based on the HMSMT's meeting with the SSC's HMS Subcommittee
- The SSC requested further clarification regarding proposed alternatives to reclassify stocks in the FMP; this is provided in Section 1 of the Report.
- With the exception of bat ray, leopard sharks and Pacific bonito, all species proposed to be dropped from the HMS FMP have annual landings of less than 1 mt over the past 9 years

Supplemental HMSMT Report (2)

- A number of currently monitored species are recommended to remain in the HMS FMP as ecosystem component species (see bottom of p. 2)
- Regarding the application of the international exception to MUS, the HMSMT offered some clarification of the rationale for Alternative 3 to apply the international exception to all MUS except common thresher shark

Supplemental HMSMT Report (3)

- Section 3 of the Report provides additional clarification on determining the primary FMP for MUS in both the Pelagics FMP and the HMS FMP
- Section 4 of the Report contains additional input from the discussion with the SSC a tired approach to determining MSY or an MSY proxy for MUS depending on the quality of the available data
- Section 4 reflects discussion with the SSC's HMS Subcommittee regarding possible statistically valid methods for estimating scientific uncertainty in setting ABCs such as the P^* methodology used by the Groundfish Management Team