

**REGULATORY IMPACT REVIEW**

**FOR A RULE TO IMPLEMENT DECISIONS OF THE WESTERN AND  
CENTRAL PACIFIC FISHERIES COMMISSION FOR:**

**FISHING RESTRICTIONS FOR BIGEYE TUNA AND YELLOWFIN TUNA IN  
PURSE SEINE FISHERIES FOR 2012  
(RIN 0648-BB73)**

**Prepared by:**

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## **Introduction**

This regulatory impact review (RIR), prepared under Executive Order 12866, “Regulatory Planning and Review,” reviews the expected economic effects of a regulatory action to implement, for the U.S. purse seine fishery for 2012 only, a decision of the Western and Central Pacific Fisheries Commission (Commission or WCPFC) for fishing restrictions for bigeye tuna (*Thunnus obesus*) and yellowfin tuna (*Thunnus albacares*) in the western and central Pacific Ocean (WCPO).

## **Problem Statement and Objectives**

The objective of the Convention on the Conservation and Management of Highly Migratory Fish Stocks in the Western and Central Pacific Ocean (Convention) is to ensure, through effective management, the long-term conservation and sustainable use of highly migratory fish stocks in the WCPO. Article 5 of the Convention states that management measures adopted by the Commission shall be designed to maintain or restore stocks subject to the Convention to levels capable of producing maximum sustainable yield (MSY), as qualified by relevant environmental and economic factors.

The WCPFC adopted “Conservation and Management Measure for Bigeye and Yellowfin Tuna in the Western and Central Pacific Ocean” (CMM 2008-01) in December 2008. CMM 2008-01 is based in part on the findings by the WCPFC that the WCPO stock of bigeye tuna (*Thunnus obesus*) was experiencing a fishing mortality rate greater than the rate associated with MSY and that the WCPO stock of yellowfin tuna (*Thunnus albacares*) was experiencing a fishing mortality rate close to the rate associated with MSY. In accordance with Article 5 of the Convention, the objectives of CMM 2008-01 include achieving, over the 2009-2011 period, a reduction in fishing mortality on bigeye tuna in the WCPO of at least 30 percent and no increase in fishing mortality on yellowfin tuna in the WCPO, relative to a specified historical baseline.

Pursuant to the Western and Central Pacific Fisheries Convention Implementation Act (Public Law 109-479, Sec 501, *et seq.*, codified at 16 U.S.C. § 6901 *et seq.*), the Secretary of Commerce is authorized to implement regulations to carry out the obligations of the United States under the Convention, including the implementation of Commission decisions. In 2009 NMFS issued regulations (“the 2009 rule”)<sup>1</sup> to implement, for U.S. purse seine vessels, the following provisions of the CMM: (1) limits on fishing effort in purse seine fisheries; (2) periods during which purse seine fishing may not be done on schools in association with fish aggregating devices; (3) areas of high seas closed to purse seine fishing; (4) requirements to retain tuna on board purse seine vessels up to the first point of landing or transshipment; and (5) requirements to carry observers on purse seine vessels. Those regulations are codified at 50 CFR 300.223(a)-(e). In accordance with the effective dates of the CMM, the requirements in the existing regulations are applicable until December 31, 2011.

The regulatory action considered here would extend the applicable dates of the existing

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<sup>1</sup> A proposed rule was published June 1, 2009 (74 FR 26160) and a final rule was published August 4, 2009 (74 FR 38544).

regulations through December 31, 2012, pursuant to a decision made by the Commission in December 2011 to extend the effectiveness of CMM 2008-01. The Commission was scheduled to discuss the CMM's provisions and to decide whether to adopt the same or changed measures to reduce or otherwise control the fishing mortality rates on bigeye tuna and yellowfin tuna in the WCPO in December 2011, but that meeting was postponed unexpectedly due to a fire at a major power plant in Palau, where the meeting was scheduled to be held. The annual meeting is now scheduled for March 26-30, 2012.

The objective of this action is to satisfy the international obligations of the United States, as a Contracting Party to the Convention, to implement, for the U.S. purse seine fishery, the Commission's extension of CMM 2008-01.<sup>2</sup>

### **Description of the Affected Fisheries**

The affected fishery, the U.S. purse seine fleet operating in the WCPO, is described in detail in the environmental assessment (NMFS 2009)<sup>3</sup> prepared for the 2009 rule, including characteristics of the fleet, fishing practices, the current management regime, and recent performance in terms of fishing effort and catches. Chapter 3 of the 2009 environmental assessment is incorporated here by reference.

The affected environment, including the regulated fishery, remains generally unchanged from the time of the 2009 rule. The most notable changes since that time are the changes to the regulatory environment made by 2009 rule itself, which established the five new requirements described above, as well as requirements aimed at mitigating adverse impacts to sea turtles. Those changes have resulted in changes to the fishing patterns and practices of the U.S. purse seine fleet and associated costs to fishing operations, but they have not brought about – and would not be expected to bring about – any discernable changes in the status of the high migratory fish stocks targeted by the U.S. purse seine fleet operating in the WCPO or in the condition of the biophysical environment. The U.S. purse seine fleet remains generally the same in terms of the number of vessels (37 vessels currently, compared to 39 in mid-2009).

### **Description of the Action**

This action would implement, for the U.S. purse seine fishery, the Commission's decision to extend CMM 2008-01 by extending the dates of applicability of the regulations at 50 CFR

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<sup>2</sup> CMM 2008-01 also includes provisions for longline fisheries, which NMFS implemented via regulations in 2009. The extension of the longline provisions of CMM 2008-01 will be undertaken, if necessary, in a rulemaking separate from the rule considered in this RIR.

<sup>3</sup> National Marine Fisheries Service. 2009. Environmental Assessment to Implement the Decisions of the Fifth Regular Annual Session of the Commission for the Conservation and Management of Highly Migratory Fish Stocks in the Western and Central Pacific Ocean: Fishing Restrictions and Observer Requirements in Purse Seine Fisheries for 2009-2011 and Turtle Mitigation Requirements in Purse Seine Fisheries and Bigeye Tuna Catch Limits in Longline Fisheries in 2009, 2010, and 2011. Honolulu: National Oceanic and Atmospheric Administration, National Marine Fisheries Service, Pacific Islands Regional Office. Available at: [http://www.fpir.noaa.gov/IFD/ifd\\_documents\\_data.html](http://www.fpir.noaa.gov/IFD/ifd_documents_data.html)

300.223(a)-(e) through December 31, 2012. The action would be initiated with the issuance of an interim rule that would take effect on the date of publication in the *Federal Register*. Public comments would be solicited in the interim rule, and NMFS would take those comments into consideration when taking final regulatory action, as appropriate.

This action is fundamentally the same as the 2009 rule; the only differences are that this rule would be in effect for a single year (through December 31, 2012) rather than three years, and this rule does not include the sea turtle mitigation requirements that were included in the 2009 action. The sea turtle mitigation requirements derived from a separate CMM of the Commission, and are not time-limited.

Other than the proposed action and the no-action alternative, NMFS was not able to identify any alternatives that were reasonable and feasible.

Under the no-action alternative, the regulations implementing the purse seine fishery-related provisions of CMM 2008-01 would cease to apply after December 31, 2011. U.S. purse seine vessels operating in the Convention Area would be subject to the management regime that was in place prior to the issuance of the 2009 rule.

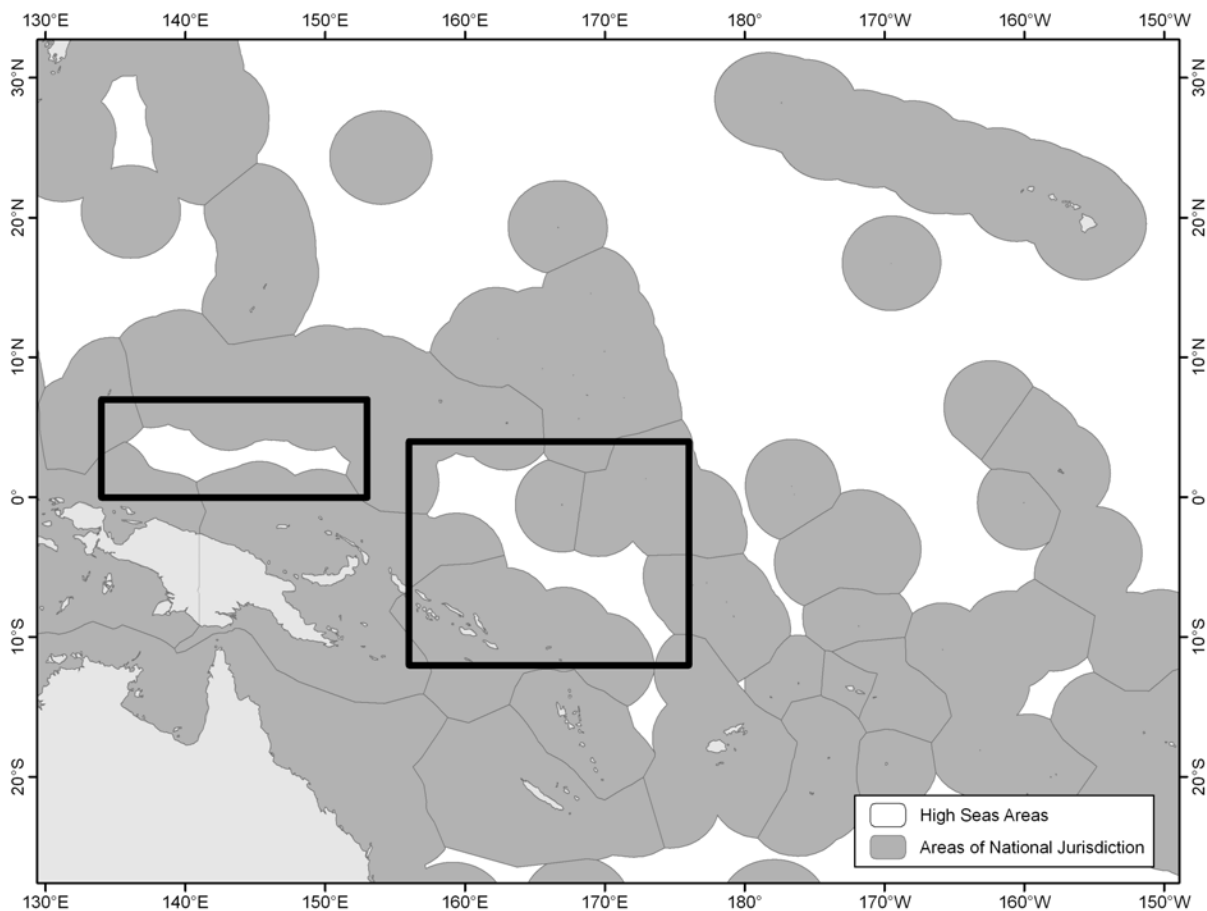
The rule would amend the existing regulations for purse seine fishing such that they would apply in 2012 as follows:

(1) *Fishing effort limits*: Limits are established on the number of fishing days that may be spent by the U.S. purse seine fleet on the high seas and in areas under U.S. jurisdiction within the Convention Area for each of: 2012 (3,882 fishing days); the two-year period 2011-2012 (6,470 fishing days); and the three-year period 2010-2012 (7,764 fishing days). If one of the limits is reached and the fishery is closed with notice from NMFS, it will be prohibited to use a U.S. purse seine vessel to fish in the Convention Area on the high seas or in areas under U.S. jurisdiction until the end of the applicable period.

(2) *FAD prohibition period*: From July 1 through September 30, 2012, owners, operators, and crew of U.S. fishing vessels will be prohibited from setting a purse seine around a FAD or within one nautical mile of a FAD or deploying or servicing a FAD or its associated electronic equipment in the Convention Area. It will also be prohibited during this period to set a purse seine in a manner intended to capture fish that have aggregated in association with a FAD, such as by setting the purse seine in an area from which a FAD has been moved or removed within the previous eight hours or setting the purse seine in an area into which fish were drawn by a vessel from the vicinity of a FAD.

(3) *High seas area closures*: Two specific areas of high seas within the Convention Area are closed to purse seine fishing through December 31, 2012. The two areas are depicted on the map in Figure 1.

**Figure 1.** High seas closed areas. Areas of high seas are indicated in white; areas of claimed national jurisdiction, including territorial seas, archipelagic waters, and exclusive economic zones, are indicated in dark shading. Areas closed to purse seine fishing through December 31, 2012, are all high seas areas (in white) within the two rectangles bounded by the bold black lines. The coordinates of the two rectangles are set forth in the regulation. This map displays indicative maritime boundaries only.



(4) *Catch retention:* It is prohibited to discard any bigeye tuna, yellowfin tuna, or skipjack tuna from a U.S. purse seine vessel at sea within the Convention Area through December 31, 2012. Exceptions are provided for fish that are unfit for human consumption for reasons other than their size, for the last set of the trip if there is insufficient well space to accommodate the entire catch, and for cases of serious malfunction of equipment that necessitate that fish be discarded.

(5) *Observer coverage:* U.S. purse seine vessels must, through December 31, 2012, carry observers deployed as part of the WCPFC Regional Observer Programme (WCPFC ROP) or deployed by NMFS on all trips in the Convention Area. These observer requirements do not apply to fishing trips for which: the portion of the fishing trip within the Convention Area takes place entirely within areas under U.S. jurisdiction or entirely within areas under the jurisdiction of any other single nation; no fishing takes place in the Convention Area in the area between 20°

N. latitude and 20° S. latitude; or NMFS has determined that an observer is not available.

### **Expected Economic Effects**

NMFS prepared an RIR (“the 2009 RIR”) for the 2009 rule to implement the provisions of CMM 2008-01 for purse seine vessels in 2009.<sup>4</sup> The effects of this rule are expected to be generally the same as those of the 2009 rule, as described in the 2009 RIR. The only substantial differences are that: (1) the effects of this rule would be more limited than those of the 2009 rule because of its only one-year duration; and (2) this rule does not include the sea turtle mitigation measures that were included in the 2009 rule and that were to be implemented indefinitely, so this rule would not bring any particular benefits with respect to sea turtle resources or any costs associated with implementation of turtle mitigation measures relative to the no-action alternative.

The 2009 rule has been in effect for more than two years, and it could be possible, based on observations of fishing activities during that period, to examine at least some of the actual effects of the 2009 rule. However, fishing data for the period after 2009 are incomplete. Also, as was the case for the 2009 RIR, virtually no operational cost data are available. In any case it would be difficult to link cause and effect from only observational data (for other than obvious effects like shifting fishing effort out of closed areas, and not using FADs during the FAD closure periods). For these reasons, as well as because the 2009 RIR generally described impacts qualitatively (with the exception of the observer requirements, for which quantitative compliance costs were estimated), the analyses made in the 2009 remain useful for analyzing the expected effects of this rule. Based on the findings of the 2009 RIR, adjusted to account for the two differences between this action and the 2009 action described above, the expected effects of this rule are summarized below. Further details can be found in the 2009 RIR, which is incorporated here by reference.

#### ***Summary of effects on net benefits***

The action can be expected to have a positive effect on net benefits that the United States can potentially enjoy through the maintenance of productive WCPO bigeye tuna and yellowfin stocks. Those effects, however, cannot be quantified and they would occur only if the other fishing nations in the WCPO implement similar actions and if all the fishing nations in the WCPO implement similar or more conservation actions beyond the one-year duration of this WCPFC-mandated action (see discussion of cumulative effects below).

Those positive effects can be expected to be countered by costs to the nation in terms of reduced producer surplus and increased public sector costs. The only costs that can be quantifiably estimated are the costs of carrying observers that would be borne by purse seine fishing operations. These costs are expected to be the same as those during 2009-2011. Purse seine

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<sup>4</sup> National Marine Fisheries Service. 2009. Regulatory Impact Review for a Rule to Implement the Decisions of the Fifth Regular Annual Session of the Commission for the Conservation and Management of Highly Migratory Fish Stocks in the Western and Central Pacific Ocean: Fishing Restrictions and Observer Requirements in Purse Seine Fisheries for 2009-2011 and Turtle Mitigation Requirements in Purse Seine Fisheries. Honolulu: National Oceanic and Atmospheric Administration, National Marine Fisheries Service, Pacific Islands Regional Office. Available at: [http://www.fpir.noaa.gov/IFD/ifd\\_documents\\_data.html](http://www.fpir.noaa.gov/IFD/ifd_documents_data.html)

fishing businesses with vessels operating in the WCPO in 2012 are expected to bear observer-related costs of up to about \$31,300 to \$39,100 per vessel. Assuming 40 such vessels in the fleet, the total fleet-wide cost for 2012 would be up to approximately \$1.3 to \$1.6 million. The sum of all costs associated with this rule cannot be quantified, but because the benefits would not accrue immediately, during 2012 the costs would almost certainly outweigh the benefits. It is not possible to determine whether the benefits of this rule would outweigh the costs in the long term. Given the value of WCPO bigeye tuna and WCPO yellowfin tuna to the United States, the benefits appear to have the potential to outweigh the costs.

### ***Distributional changes in net benefits***

The proposed action would apply only to the U.S. WCPO purse seine fishery. Fisheries involving other vessel types and in other areas of the United States would be unaffected. To the extent that the action results in the stocks of WCPO bigeye tuna and WCPO yellowfin tuna being larger than they otherwise would be, other U.S. fisheries in the Pacific Ocean that exploit the stocks would benefit without bearing any costs.

The economic losses stemming from the catch retention requirement would likely be different for vessels that tend to operate out of Pago Pago and deliver their catch to the canneries in Pago Pago versus vessels that transship most of their catch to other vessels. For vessels in the former category, which have to steam relatively far from the fishing grounds in order to land their fish, a fishing trip typically only ends when the fish holds are full in order to maximize revenue during a given trip. Revenues and profits for these vessels are therefore strongly dependent on the size of their fish wells and on the value of fish per unit of well space. There have been occasions when the canneries have charged vessel operators to unload small fish. If that occurs with small fish that under this rule are retained that otherwise would not be, vessel owners and operators would bear direct economic costs. For vessels that tend to transship their catches at ports near the fishing grounds, well space is a less important constraint on profits, so the economic impacts of this requirement on these vessels would likely be less.

The proposed action would not appear to have distributional impacts in terms of the sizes of affected businesses.

### ***Changes in income and employment***

It is not possible to quantify impacts in terms of income and employment, but to the extent that this rule would cause the delivery of less – in the short term – tuna from the U.S. purse seine fleet in 2012 than under the no-action scenario and consequent adverse economic impacts to the producers (fishing businesses), it would also bring adverse impacts to business sectors with backward linkages to the producers, such as businesses that supply the fishing vessels. This could also be true for business sectors with forward linkages to the producers, such as the canneries in Pago Pago that process much of their catches, but because the canneries also handle deliveries from the fishing fleets of other nations, as well as from other domestic fleets, the canneries are unlikely to be appreciably impacted by this rule.

## *Cumulative effects*

*Benefits:* This rule would have the potential to reduce (relative to the no-action outcome) the total fishing mortality rate of WCPO bigeye tuna and WCPO yellowfin tuna by only small amounts (e.g., in the case of WCPO bigeye tuna, the reduction achieved by the proposed action would be small compared to the estimated 30 percent reduction that is needed to reach the level associated with MSY). Moreover, the reduction would be attained for only the one year during which the requirements would be in effect. Other reasonably foreseeable actions, however, could result in more substantial and durable beneficial impacts on WCPO bigeye tuna and WCPO yellowfin tuna.

The other members of the WCPFC are, like the United States, obligated to implement the purse seine-related provisions of the extension of CMM 2008-01. They are also obligated to limit in 2012 catches of bigeye tuna in their longline fisheries (NMFS will implement that provision in a separate rule from this one, if necessary). As stated in CMM 2008-01, its objective for WCPO bigeye tuna is a 30 percent reduction in fishing mortality and for WCPO yellowfin tuna, no increase in fishing mortality. The specific collective provisions in the CMM, however, are unlikely to achieve these objectives, at least for bigeye tuna, even if fully implemented by WCPFC members. In other words, the CMM as a whole, by design, is expected to result in a reduction in the fishing mortality rate for bigeye tuna somewhat less than 30%. Taking into account that implementation of the CMM is likely to be somewhat less than complete, the likely cumulative effect is expected to be somewhere between nil and the target reduction of 30 percent. Any fisheries exploiting WCPO bigeye tuna and WCPO yellowfin tuna, including U.S. fleets, would benefit in the future from this cumulative conservation effect.

The WCPFC is likely to adopt conservation and management measures in the future for WCPO bigeye tuna and WCPO yellowfin tuna. It is not possible to predict what those measures would be, when they would be adopted or would apply, or what their effects on the two tuna stocks would be. The next opportunity to adopt measures will be at the WCPFC's Eighth Regular Annual Session, tentatively scheduled for March 2012. It is possible that the WCPFC could at that time adopt measures applicable in 2012 that differ from those in the extended CMM 2008-01 (which for the United States could necessitate rulemaking apart from this rule). Or it could adopt identical or different measures that are applicable starting in 2013 and beyond. In any case, any fisheries exploiting the two stocks, including U.S. fleets, would benefit from the cumulative conservative effects of such future measures.

One category of future actions that is difficult to foresee but that could have marked cumulative effects is the future of the South Pacific Tuna Treaty, which allows access by, and governs the conduct of, U.S. purse seine vessels in the waters of the members of the Pacific Islands Forum Fisheries Agency. The Treaty, which is due to become void in mid-2012, is currently being renegotiated. Potential outcomes range from a similar regime to the current one, to an end to the Treaty altogether. In the latter case, most or all of the vessels in the U.S. purse seine fleet would be expected to move out of the WCPO and/or reflag to other nations. To the extent that this leads to less purse seine fishing effort in the WCPO, any fisheries exploiting the two stocks, including U.S. fleets, would benefit from the cumulative effects on the stocks. On the other hand, it is possible that U.S. vessels that move to other flags could fish in a less restrained manner, with



adverse impacts on the two stocks, with consequent adverse cumulative effects with respect to this action.

*Costs:* If in the future the WCPFC adopts conservation and management measures that the United States implements with respect to the U.S. purse seine fishery, the businesses involved in the fishery would bear costs. Neither those future measures nor their associated costs can be predicted.

*Net effects:* As described above, neither the cumulative benefits nor cumulative costs of the proposed action can be estimated quantitatively. It is consequently not possible to determine whether the cumulative benefits to the United States would outweigh the cumulative costs.

### **Determination of Significance under Executive Order 12866**

In accordance with E.O. 12866, NMFS has made the following determinations:

- This rule is not likely to have an annual effect on the economy of more than \$100 million or to adversely affect in a material way the economy, a sector of the economy, productivity, jobs, the environment, public health or safety, or state, local, or tribal governments or communities.
- This rule is not likely to create any serious inconsistencies or otherwise interfere with any action taken or planned by another agency.
- This rule is not likely to materially alter the budgetary impact of entitlements, grants, user fees or loan programs or the rights or obligations of recipients thereof.
- This rule is not likely to raise novel or policy issues arising out of legal mandates, the President's priorities, or the principles set forth in E.O. 12866.

Based on these determinations, the rule considered in this RIR is not a "significant regulatory action" for the purposes of E.O. 12866. Furthermore, the rule is not controversial.