

# Management of the Flatfish Fisheries in the Amendment 80 Sector

## DISCUSSION PAPER: NMFS, ALASKA REGION

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### 1. Overview

In December 2010, the Council requested a review of the potential use of nonspecified reserves or other alternative management measures by the Amendment 80 sector (i.e., non-American Fisheries Act trawl catcher/processors) for flatfish fisheries in the Bering Sea and Aleutian Islands Management Area (BSAI). This discussion paper focuses on the management of flathead sole, rock sole, and yellowfin sole. The paper examines one approach for providing Amendment 80 cooperatives with additional harvest opportunities for these three flatfish species without increasing the total allowable catch (TAC) assigned to those species. This approach would require regulatory changes that would need to be implemented independent of the annual harvest specification process. The analytical and rule making process could not be completed before the start of the 2012 fishing season.

### 2. Background

The Fishery Management Plan for Groundfish of the BSAI Management Area (FMP) establishes requirements for setting an Overfishing Level (OFL), an Acceptable Biological Catch (ABC), and a TAC for target groundfish species. The ABC is the maximum permissible annual catch. The TAC cannot be set higher than the ABC, and can be set lower depending on biological or socioeconomic factors considered by the Council and NMFS.<sup>1</sup> The OFL, ABC, and TAC are set through the harvest specification process. The FMP establishes an Annual Catch Limit (ACL) for each target species consistent with National Standard 1 of the Magnuson-Stevens Fishery Conservation and Management Act (MSA).<sup>2</sup> For groundfish of the BSAI, including flathead sole, rock sole, and yellowfin sole, the ACL is equal to the ABC.<sup>3</sup> Typically, the TAC for flathead sole and rock sole is set well below the ABC. Historically, the yellowfin sole TAC has been set at the ABC, but the Council recommended that TAC be set below the ABC in the 2011 and 2012 harvest specifications.<sup>4</sup>

Statute limits the optimum yield (OY) for groundfish species in the BSAI to two million metric tons (mt)<sup>5</sup>. NMFS sets the TAC less than or equal to two million mt to ensure the BSAI OY limit is not exceeded. With the recent increase in the BSAI pollock and Pacific cod biomass, there may be increasing pressure to maximize the TAC for pollock and Pacific cod during the annual harvest specification process. This could result in increased pressure to limit the TAC for flathead sole, rock sole, and yellowfin sole to ensure the total BSAI groundfish TAC does not exceed the two million mt OY limit.

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<sup>1</sup> See regulations at 50 CFR 679.20(a)(3)

<sup>2</sup> National Standard 1 of the MSA, and National Standard 1 guidelines are described in the final rule to implement National Standard 1 guidelines (January 16, 2009; 74 FR 3178), and the final rule implementing Amendments 95 and 96 to the fishery management plans for groundfish of the BSAI and Gulf of Alaska (October 6, 2010; 75 FR 61639).

<sup>3</sup> See section 3.2.3.3.2 of the FMP, "The ACL is equal to the ABC for each stock and stock complex in the target species category."

<sup>4</sup> For example, see Table 1 of Proposed 2011 and 2012 annual harvest specifications (December 8, 2010; 75 FR 76372).

<sup>5</sup> See section 803(c) of Pub. L. No. 108-199 "The optimum yield for groundfish in the Bering Sea and Aleutian Islands Management Area shall not exceed 2 million metric tons."

Rock sole and flathead sole TACs are apportioned between the Western Alaska Community Development Program (CDQ Program) and the Amendment 80 sector. NMFS also sets an incidental catch allowance (ICA) to account for incidental catch in non-CDQ and non-Amendment 80 fisheries. The yellowfin sole TAC is apportioned among the CDQ Program, the Amendment 80 sector, and the BSAI trawl limited access sector (i.e., non-Amendment 80 trawl vessels), with an ICA set aside. NMFS reallocates any portion of the TAC not projected to be harvested by the BSAI trawl limited access sector to Amendment 80 cooperatives during the fishing year.

The portion of the flathead sole, rock sole, and yellowfin sole TAC assigned to the Amendment 80 sector is further apportioned between Amendment 80 cooperatives and the Amendment 80 limited access fishery. Amendment 80 cooperatives receive an exclusive harvest privilege, cooperative quota (CQ), for each species that cannot be exceeded; NMFS retains management authority of the Amendment 80 limited access fishery.<sup>6</sup>

Typically, not all of three flatfish TACs have been fully harvested due to market limitations and closures resulting when halibut prohibited species catch (PSC) limits are reached.<sup>7</sup> However, it is possible that Amendment 80 cooperatives could fully harvest one or more of its flatfish allocations through improved coordination and operational efficiencies gained when fisheries are managed under an exclusive harvest privilege, or catch share.<sup>8</sup>

Recent management measures to protect the Endangered Species Act-listed Western population of the Steller sea lion have constrained the Aleutian Islands Atka mackerel and Pacific cod fisheries that are typically targeted by the Amendment 80 sector.<sup>9</sup> These constraints could result in a shift of fishing effort by Amendment 80 cooperatives from Atka mackerel and Pacific cod to of flathead sole, rock sole, and yellowfin sole.

### 3. A proposed approach

The potential for increased demands in the flatfish fisheries, and requirements to maintain the combined BSAI TAC below two million mt create incentives to maximize the flexibility of the Amendment 80 sector to harvest flatfish. This paper examines one potential approach to provide the Amendment 80 sector greater flexibility to fully harvest the combined allocations of the three flatfish fisheries. This paper is not intended to provide a comprehensive overview of potential flatfish management approaches. This discussion paper assumes that any management approach should:

- Ensure that the OFL and ABC for a target stock are not exceeded.
- Be consistent with the management goals established under the Amendment 80 Program.
- Not result in exceeding TAC amounts.

This paper assumes that NMFS would continue to establish individual OFLs and ABCs for each of the three species through the harvest specification process.

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<sup>6</sup> The methodology and rationale for apportioning the TAC among the CDQ, ICA, Amendment 80 sector, and BSAI trawl limited access fishery, as well as allocations to Amendment 80 cooperatives and the Amendment 80 limited access fishery is detailed in the proposed rule for the Amendment 80 Program (May 30, 2007; 72 FR 30061), and described in the harvest specifications (e.g., See proposed 2011-2012 harvest specifications (December 8, 2010; 75 FR 76372).

<sup>7</sup> S. Whitney, Pers. Comm., January, 2011.

<sup>8</sup> The proposed rule for the Amendment 80 Program details the potential benefits of catch share management for these fisheries (May 30, 2007; 72 FR 30061).

<sup>9</sup> See Interim Final Rule to implement Steller sea lion protection measures (December 13, 2010; 75 FR 77535).

To ensure consistency with the overall intent of the Amendment 80 Program, this paper assumes that any additional flexibility to harvest flatfish species would be limited to Amendment 80 cooperatives. Because Amendment 80 cooperatives receive an exclusive harvest privilege, participants in a cooperative can coordinate their fishing operations to maximize catch with greater precision than is typically possible under non-catch share management. Vessels operating in the Amendment 80 limited access fishery lack an exclusive harvest privilege.

This paper does not examine the use of a nonspecified reserve in the Amendment 80 sector because that approach appears to be contrary to the goals of the Amendment 80 Program. Prior to the implementation of the Amendment 80 Program, NMFS apportioned 15 percent of the annual TAC from these flatfish species to a nonspecified reserve. A part of that nonspecified reserve was reapportioned to the CDQ Program. NMFS reallocated the remaining amount of the nonspecified reserve during a fishing year to allow increased harvest of other species. The nonspecified reserve was a necessary management buffer to ensure TACs were not exceeded. The nonspecified reserve also allowed NMFS to provide additional harvest opportunities, when possible, during the pre-Amendment 80 Program open access fisheries. NMFS managed the reallocation of the nonspecified reserve to ensure that it would not result in exceeding the TAC.<sup>10</sup> The Amendment 80 Program removed the requirement that a portion of the TAC be assigned to a nonspecified reserve “because the Program would establish exclusive harvest privileges that are carefully monitored.... Therefore, the allocation of 15 percent of the TAC of the Amendment 80 species to the nonspecified reserve would not be required to ensure harvests are maintained with the TAC.”<sup>11</sup>

The approach considered here would allow Amendment 80 cooperatives to reapportion part of their CQ from one flatfish species to another flatfish species. Under this approach the aggregate CQ amount could never be exceeded. It is a zero-sum game. For example, if 100 mt were reapportioned from flathead sole to yellowfin sole, there is 100 mt less flathead sole for harvest and 100 mt more yellowfin sole, but no change in the aggregate CQ allocation.

Regulations would need to limit the maximum amount of reapportionment to ensure that the initial allocation of CQ is set so that the potential harvest of all initially allocated CQ, reassigned CQ, and catch from other sources could not result in total catch greater than the ABC. This could be done by limiting the maximum amount of CQ that can be reassigned to some percentage (e.g., 5, 10, or 15 percent) of the amount of CQ initially assigned to a cooperative. Setting a fixed reassignment percentage in regulation would aid NMFS and Amendment 80 cooperative managers by clearly establishing the maximum amount of CQ that could be reapportioned during the annual harvest specification process prior the start of the fishing year. Establishing a percentage that could vary each year as part of the annual harvest specification process would require clearly defined criteria for establishing the appropriate percentage, and additional discussion and analysis by the Council on an annual basis. Given the complex analytic and rule making requirements in the current annual harvest specification process, a reapportionment percentage that would vary from year to year is not explored further in this paper.

Consistent with the goals and current management of the Amendment 80 Program, this paper assumes that NMFS would require that a cooperative; (1) must reconcile all CQ accounts by the end of the calendar year; and (2) could not harvest an amount greater than the combined aggregate CQ.<sup>12</sup>

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<sup>10</sup> M. Furuness, Pers. Comm., January, 2011.

<sup>11</sup> Amendment 80 Program Proposed Rule (May 30, 2007; 72 FR 30061).

<sup>12</sup> These requirements are similar to those currently in place requiring end-of-year reconciliation of CQ accounts (see 50 CFR 679.7(o)(4)(iv)).

In order to provide flexibility for the Amendment 80 sector to harvest these species, without exceeding the TAC, it would be necessary to establish an aggregate TAC for the three flatfish species. Tables 1, 2, and 3 provide an example of a potential reapportionment process using an aggregate TAC. The example described in Tables 1, 2, and 3 use information from the proposed 2011 and 2012 harvest specifications.<sup>13</sup> Table 1 shows the ABC, TAC, and allocations of the flatfish species.

Table 1: ABC, TAC, and allocations of flathead sole, rock sole, and yellowfin sole (amounts in mt)

Species	ABC	TAC	CDQ allocation	ICA	Amendment 80 allocation (CQ)	BSAI Trawl limited access allocation
Flathead sole	68,100	60,000	6,420	5,000	48,500	0 mt
Rock sole	242,000	90,000	9,630	10,000	70,370	0 mt
Yellowfin sole	227,000	213,000	22,791	2,000	147,983	40,226

Table 2 demonstrates the potential for the Amendment 80 sector to exceed the TAC for a species if Amendment 80 cooperatives are allowed to reapportion CQ among flatfish species without an aggregate TAC. Table 2 assumes that Amendment 80 cooperatives could receive 5, 10, or 15 percent of the amount of CQ initially assigned to that species as a reapportionment from another species. Table 2 also shows the total potential harvests from all sources (CDQ Program, ICA, Amendment 80 sector, and the BSAI trawl limited access sector). The example described in Table 2 also assumes that all of the Amendment 80 sector participants are active in an Amendment 80 cooperative, and therefore all of the Amendment 80 allocation would be issued as CQ. All Amendment 80 sector participants are participating in cooperatives in 2011.

Table 2: Maximum harvests of flathead sole, rock sole, and yellowfin sole relative to TAC under a 5, 10, and 15 percent CQ reapportionment limit (amounts in mt)

Species	TAC	CDQ, ICA, and BSAI allocation	Am. 80 CQ initial allocation	Maximum tonnage if 5 percent	Maximum tonnage if 10 percent	Maximum tonnage if 15 percent	Total potential harvests from all sources at 5, 10, and 15 percent reapportionment of CQ.
				More of the CQ initially allocated can be reapportioned and harvested			
Flathead sole	<b>60,000</b>	11,420	48,500	50,925	53,350	55,775	5%: <b>62,345</b> 10%: <b>64,770</b> 15%: <b>67,195</b>
Rock sole	<b>90,000</b>	19,630	70,370	73,889	77,407	80,925	5%: <b>93,519</b> 10%: <b>97,037</b> 15%: <b>100,555</b>
Yellowfin sole	<b>213,000</b>	65,017	147,983	155,383	162,781	170,181	5%: <b>220,400</b> 10%: <b>227,798</b> 15%: <b>235,198</b>

As shown in Table 2, under all cases, the potential maximum harvests from all sources would exceed the TAC. Table 3 describes the potential maximum harvests under a 5, 10, and 15 percent CQ reapportionment limit relative to ABC using an aggregate TAC. NMFS would continue to specify OFLs and ACLs for each species individually.

<sup>13</sup> See Tables 1 and 6 of the proposed 2011-2012 harvest specifications (December 8, 2010; 75 FR 76372).

Table 3: Maximum harvests of flathead sole, rock sole, and yellowfin sole relative to ABC under a 5, 10, and 15 percent CQ reapportionment limit (amounts in mt)

Species	ABC	Aggregate TAC	CDQ, ICA, and BSAI allocation	Am. 80 CQ initial CQ allocation	Total potential harvests from all sources at 5, 10, and 15 percent
Flathead sole	68,100	<b>363,000</b>  (60,000 + 90,000 + 213,000)	11,420	48,500	5%: 62,345 10%: 64,770 15%: 67,195
Rock sole	242,000		19,630	70,370	5%: 93,519 10%: 97,037 15%: 100,555
Yellowfin sole	227,000		65,017	147,983	5%: 220,400 10%: <b>227,798</b> 15%: <b>235,198</b>

This approach would maintain harvests below the ABC only if all three of the species; (1) have a TAC that is set lower than the ABC; and (2) the combined initial allocation of CQ and percentage of reapportionment is set to ensure total maximum harvests from all sources is less than the ABC. As Table 3 demonstrates, if the initial allocations were set as described in the proposed 2011 and 2012 harvest specifications, and more than 5 percent of the CQ initially assigned to the yellowfin sole fishery could be reapportioned, potential total harvest of yellowfin sole could exceed the ABC. This concern could be addressed either by setting a lower initial allocation of yellowfin sole CQ during the annual specification process, or by setting an appropriately limiting fixed percentage (e.g., 5 percent).

#### 4. Future steps

If the Council wished to further explore this concept, future iterations of this discussion paper would need to include additional input from NMFS Inseason Management, stock assessment scientists, and NOAA General Counsel. NOAA General Counsel has not examined the potential legal implications of the approach described in this paper. The Council should note that the approach to TAC management described in this paper represents a significant departure from the well-established policy of setting a species specific TAC when adequate biological information exists. A few additional notes:

- NMFS staff have not comprehensively reviewed the FMP to determine if an FMP amendment would be required. It may be.
- At a minimum, the approach outlined in the discussion paper would require regulatory revisions to: (1) the TAC setting process for these three species; (2) ensure that the combined initial CQ allocations and reapportionment could not result in harvests greater than the ABC; (3) specify the method for assigning the amount of the reapportionment percentage that could be used by a cooperative; and (4) year-end CQ accounting.
- Given the scope of these regulatory changes (addressing both TAC management and the Amendment 80 Program), these regulatory changes would need to be implemented independent of the annual harvest specification process with a dedicated analytical and rule making process.
- No changes in the regulations governing the management of these species could be implemented in time for the 2012 fishery, given the time required to conduct an analysis, take Council action, and proceed with proposed and final rule making