

## COASTAL PELAGIC SPECIES MANAGEMENT TEAM REPORT ON AMENDMENT 17: LIVE BAIT FISHERY ALLOWANCE

At its June 2018 meeting, the Pacific Fishery Management Council (Council) considered a Coastal Pelagic Species Management Team (CPSMT) scoping document for potential changes to the CPS Fishery Management Plan (FMP) provisions regarding live bait fishing when a CPS stock is in an overfished condition. The Council established the scope of the proposed action to apply to the live bait fishery only and initiated an FMP amendment process to address live bait harvest after a stock is declared overfished. The Council requested that the CPSMT develop alternatives consistent with the scope to focus on the live bait fishery. The CPSMT reviewed pertinent sections in the CPS FMP regarding prescribed limits on the live bait fishery when a stock is overfished, and identified a range of alternatives (ROA), described below.

Currently, when a CPS stock is overfished, Section 5.1.4 limits live bait fishing of that stock to no more than 15 percent of landed weight, and if Pacific sardine (sardine) were declared overfished, Section 4.6.2.1 prohibits any directed fishing for sardine. When a CPS stock is not overfished, the FMP does not have a specific framework for setting management measures or harvest restrictions on live bait fishing, but allows the Council to manage the fishery by harvest guideline or quota, season, or gear restrictions at any point under the framework management process.

### **Background**

As the CPSMT previously described (Agenda Item F.1.a, CPSMT Report 1, June 2018), the live bait fishery is an extremely valuable component of the West Coast's recreational fishing community and economy, as well as some commercial fishery sectors such as the albacore tuna fishery.

The live bait fishery typically uses various forms of roundhaul gear such as purse seines to capture relatively small sized CPS schools, and delivers the catch alive to receiver vessels (or 'live bait barges') that have holding tanks and can keep live fish for at least several days. Recreational charter and commercial vessels then purchase live bait by the scoop from these receiver vessels, as they depart for fishing trips.

The live bait fishery targets pure schools of specific species and generally avoids capturing mixed loads. This practice reflects the market demand for pure loads of either anchovies or sardines. Within the California sportfishing industry, the two primary species used for live bait are sardine and anchovy. Sportfishing boats and anglers choose bait species based on the target species, and what that target species is preferentially feeding on at that time of year. Sardine are preferred for long-range trips to Mexico, as they are hardier and more likely to survive and be active for the duration of extended trips, which can be several days or longer. Anchovies are less durable, and therefore more suited for shorter fishing trips, depending on the preferred prey of the target recreational species at the time.

For these reasons, the live bait seine vessels seek and catch pure loads of sardine or anchovy. Catching live bait in pure loads also avoids unnecessary handling needed to separate by species

and allows flexibility in sales by placing species in separate receivers. Although sportfishing boats may carry both species in bait tanks if target species call for it, generally bait are caught, cured (acclimated while kept in receivers pending delivery), and sold separately.

In Washington, the live bait fishery targets anchovy, and similar to the California live bait fishery, serves economically significant recreational fisheries, as well as the commercial albacore tuna fishery. After capture, anchovy are held for live sale in dockside net pens. State regulations prohibit targeting sardine in state waters (0-3 miles), allowing only incidental landings which may not exceed 20 percent of the total landing weight. Therefore the only opportunity to target sardine is in the directed limited entry purse seine fishery, outside of state waters.

Currently in Oregon a small commercial beach seine operation supplies CPS and other bait for recreational anglers, of which some is live bait, including sardine and anchovy. Provisions have been in place since 2009 for a live bait fishery for anchovy to supply the commercial albacore tuna fishery, but to date there has been no activity.

### **Alternatives and Impacts**

To develop appropriate and applicable alternatives for consideration for this action, the CPSMT reviewed current live bait fishery operations, practices and needs, as well as the June 2018 Council guidance and the Purpose and Need statement (Agenda Item F.1.a, CPSMT Report 1, June 2018), which describes allowing Council discretion in selecting management measures as needed, when a CPS stock is overfished:

The purpose of the action is to provide the Council the ability to set incidental catch allowances or allow directed fishing in the live bait fishery with consideration of variables such as stock status, stock mixing, and fishery priorities during each management cycle or under a developed rebuilding plan without being restricted to predetermined limits. The proposed action is needed because the current prescribed fishery management measures in Chapter 5 of the FMP for when a stock is overfished limits the ability of the Council to determine on a case by case basis the appropriate catch levels that will reduce mortality and discard potential, while still allowing for the continued prosecution of other important CPS fisheries.

Based on this review, the CPSMT determined that the ROA is appropriately represented by a no action alternative and one action alternative. In part, the rationale is that the live bait fishery currently relies on the capture of relatively pure schools of the target species. Therefore, potential alternatives based on a variation of incidental restrictions would have the same impact to the industry as the existing 15 percent allowance. Additionally, because all landings regardless if they were taken at different levels of incidental capture or as directed, they would be accounted for against the applicable total harvest limit, making analysis of impacts to the stock similar as well.

The CPSMT proposes the following range of alternatives:

### Proposed Alternatives

**No Action Alternative 1, Status quo:** This alternative would maintain the current regulatory approach for live bait fishing, including the FMP provision that restricts live bait fishing to a 15 percent incidental allowance when a stock is in an overfished condition. Live bait landings would still be accounted for and would count against the annual catch limit. The live bait industry would be able to target pure or mixed loads as they wish, unless a stock were to be declared overfished. In that case, the 15 percent incidental landing limit would apply to all CPS live bait fishing. The Council and NMFS would still have the authority to apply management measures as needed, when a stock is overfished and when it is not.

**Alternative 2, Remove Prescribed Live Bait Restrictions in the CPS FMP:** This alternative would remove the predetermined incidental allowance for live bait fishing when a CPS stock is in an overfished condition. Landing limits and other management measures would be established by the Council and NMFS as part of a rebuilding plan or when setting management measures when a stock is overfished. The process to determine appropriate catch levels and associated management measures would be similar to how the Council has set catch levels for the past four years for sardine while it has been below CUTOFF value of 150,000 metric tons.<sup>1</sup>

The Council is required to minimize fishing mortality on an overfished stock to the extent practicable and to undertake a rebuilding program, which for CPS may be implicit to the harvest control rule or explicit. The intent of this action is not to prevent the Council from undertaking any measure authorized under the CPS FMP that may be necessary to manage the live bait or other commercial fisheries under normal procedures or any conditions if the need arises. For example, the FMP already states that the live bait fishery could be managed by harvest guideline or quota, season, or gear restrictions at any point under the framework management process. Additionally, actively managed CPS stocks have an implicit rebuilding plan through the use of the CUTOFF term that reduces harvest rates at low biomass levels and provides a buffer for the spawning stock. Further, as has been the case with sardine, the Council has taken additional management measures to reduce mortality and discards.

With the closure of the directed sardine fishery since 2015, the CPSMT has annually provided the Council with recommendations on annual catch limits (ACL) levels based on projections and needs of other fishery sectors, including live bait and incidental catch limits for other commercial CPS fisheries. These recommendations considered current fishery operations and potential levels of stock mixing, and have allowed other commercial CPS fisheries to continue while still limiting the harvest of sardine well below the levels necessary to prevent exceeding the overfishing limit, and therefore presumably allowing rebuilding to occur when ocean conditions are favorable. The CPSMT foresees a similar process – evaluating fishery sector needs while considering resource status and providing recommendations to the Council for setting landing limits.

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<sup>1</sup> The CUTOFF value is a sardine biomass estimate below which directed fishing is closed. The Pacific sardine directed fishery has been closed since 2015, with only incidental allowances, live bait, tribal harvest, small scale, and other minor sources of mortality allowed. Total annual landings have been in the 100mt – 500mt range, with ACLs of 7,000mt – 8,000mt, intended to account for all sources of mortality.

The CPSMT recognizes that this alternative does not assume that under all scenarios allowing directed harvest by the live bait fishery would be an appropriate management measure. The Council has been able to account for the management uncertainty associated with the catch in this sector to date, although certain stock sizes or total harvest levels may not make directed harvest a feasible option. However, the CPSMT does see scenarios where management measures could continue to appropriately account for directed harvest when a stock is in an overfished condition.

### Impacts of Alternatives

**No Action Alternative 1, Status quo:** If a CPS stock were to be declared overfished, the CPS FMP dictates that live bait fishing for that stock will be restricted to a 15 percent incidental allowance regardless of what the total allowable harvest level is determined to be for that year. Based on current live bait fishing practices this would result in a de facto closure of live bait fishing for that particular stock. Therefore, if and when a stock became overfished, maintaining status quo could result in negative economic impacts to the live bait fleet as well as to the recreational, charter and commercial fishing operations that depend on clean loads of live bait. The live bait fishery would have to either sell mixed loads, which are considered less desirable by the recreational fleet, or would have to segregate live bait catches, which increases mortality and decreases durability of the live fish.

During 2015, anglers in California took over 727,000 saltwater fishing trips aboard charter or party boats, also known as commercial passenger fishing vessels (CPFV), and spent \$163 million on charter trip-related expenditures in the state (NMFS 2017). The total value-added trip impacts of recreational boat fishing in 2015 in California exceeded \$243 million, while total trip and durable good expenditures exceeded \$1 billion. The 2017 coastwide commercial albacore tuna fishery was valued at \$38.9 million (PFMC 2018).

Should this alternative result in reduced availability of sardine for live bait, the effects of this change can be substantial, as sardine currently constitute at least 75 percent of the catch reported by live bait haulers and used by California sportfishing boats, and specifically, is the preferred bait for long-range multi-day trips to Mexico. The impact of limits on sardine for live bait would also be felt in Oregon's beach seine operations that provide sardine for recreational fishermen. In Washington, the effects would be limited, but the live bait and commercial albacore tuna fisheries would be significantly impacted should anchovy become overfished and directed harvest not be allowed.

**Alternative 2, Remove Prescribed Live Bait Restrictions in the CPS FMP:** The economic impacts of this alternative would depend on the specific management measures adopted by the Council and NMFS during those fishing years while a stock is in an overfished condition, while any potential impacts to the stock would be similar to the no action.

The potential impacts to the applicable stock itself would likely be similar to the no action alternative, because all landings are subject to the ACL, regardless of whether the species is landed as part of a directed fishery or as incidental catch. The total allowable harvest of the stock would be the same whether the live bait fishery is limited to incidental harvest or not.

However, the economic impacts to the live bait fishing sector, to the recreational industry, and the commercial fishery sector that uses live bait could be substantially reduced by allowing harvest on live bait. Although the overall harvest would still be subject to an ACL by allowing directed fishing, the live bait sector, recreational, and commercial sectors that depend on pure loads, would not be substantially affected as compared with the No Action Alternative. From an economic standpoint, because the fishery currently relies on the capture of relatively pure schools of the target species, potential alternatives based on a variation of incidental restrictions would likely have the same impact on CPS stocks as the existing 15 percent allowance.

### Discussion

Consideration of appropriate measures, including whether to allow directed live bait fishing, will be framed by factors such as stock status, maximum level of allowable harvest recommended by the Scientific and Statistical Committee, stock mixing, and fishery priorities during each management cycle or under a developed rebuilding plan without being restricted to predetermined limits.

Under current management, the sustainable take for a CPS stock is set by an overfishing limit, an acceptable biological catch, and an annual catch limit. It is likely that these same reference points would be set whether the stock is overfished or not. The provisions under CPS FMP Sections 5.1.4 and 4.6.2.1 were part of the original CPS FMP and therefore existed prior to adoption of overfishing limits and annual catch limits for all stocks. Therefore, since total annual harvest limits did not exist that would have triggered a closure of the fishery, the inclusion of these original fishing rate-based restrictions was likely envisioned as a way to ultimately reduce the year end harvest total.

The CPSMT plans to submit a Supplemental Report for the September Council meeting that will provide additional information on live bait fishery operations, catch history, and catch reporting.

### **References**

National Marine Fisheries Service (NMFS). 2017. Fisheries Economics of the United States, 2015. U.S. Dept. of Commerce, NOAA Tech. Memo. NMFS-F/SPO-170, 247p.

Pacific Fishery Management Council (PFMC). 2018. Highly Migratory Species Stock Assessment and Fishery Evaluation. <https://www.pcouncil.org/highly-migratory-species/stock-assessment-and-fishery-evaluation-safe-documents/current-hms-safe-document/fishery-performance/>

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