

## Agenda Item Summary

### BACKGROUND

State rules governing fisheries for Coastal Pelagic Species (CPS), including Pacific sardine, Pacific mackerel, jack mackerel, northern anchovy, market squid, and krill are based on rules adopted federally. The Pacific Fishery Management Council (Council) conducts a significant public process when determining harvest limits and regulatory recommendations, which are considered and implemented (occasionally with adjustments) by the National Marine Fisheries Service (NMFS).

For these fisheries, the Oregon Fish and Wildlife Commission (Commission) incorporates federal regulations annually as the basis for additional or more conservative regulations adopted through the state process. The state has the latitude to adopt concurrent or more conservative regulations, not more liberal.

Aside from regulations associated with a limited-entry system, state regulations for the CPS fisheries are designed to reduce impacts to other species and reduce the potential for wastage.

Two issues are set forth here for the Commission to consider: 1) adoption of federal harvest specifications for the Pacific sardine fishery for the July 2017 through June 2018 fishing period, and for federal harvest allowances for minor directed CPS fisheries; and 2) adoption of state fishery management regulations for northern anchovy.

### PUBLIC INVOLVEMENT

A significant public process was conducted by the Council in development of the federal harvest regulations for commercial CPS fisheries.

State regulation proposals for northern anchovy were adopted via temporary rules during part of 2016 and 2017. Industry participants were consulted directly by the Department as part of that process. In addition, Department staff sought public input at a public meeting to evaluate the northern anchovy fishery on February 15 in Astoria. About 26 industry, conservation, and other participants attended.

### ISSUE 1

#### **FEDERAL HARVEST SPECIFICATIONS AND MANAGEMENT MEASURES FOR COMMERCIAL COASTAL PELAGIC SPECIES FISHERIES**

### ANALYSIS

Under the Council's CPS Fishery Management Plan (FMP), CPS are classified under three management categories: 1) Pacific sardine and Pacific mackerel are actively managed stocks; 2) jack mackerel, market squid and two subpopulations of northern anchovy are monitored stocks; and 3) all species of krill (euphausiids) are prohibited stocks. Harvest and management measures are specified annually for each actively managed stock, and on a multi-year basis for monitored stocks. Coastwide (WA/OR/CA), all species except jack mackerel and krill are subject to active directed commercial fisheries. In Oregon, CPS fisheries primarily

target and harvest Pacific sardine, although targeting and harvest of market squid, northern anchovy, and Pacific mackerel has occurred, especially in recent years.

**Pacific Sardine**

For the 2017-2018 coastwide Pacific sardine fishery, the Council recommended at the April 2017 meeting that no harvest be allowed by the directed non-tribal commercial fishery (Attachment 4, pages 5-7). This decision continues the closure begun July 1, 2015 for the fishery on the west coast (Figure 1). For comparison, the harvest allocated for the non-tribal directed sardine fishery was set at 17,793 metric tons (mt) for the 2014-2015 season. Although directed non-tribal harvest was not allowed during 2015-2017, US harvest limits were set at very low levels to allow for incidental, Tribal, and other small harvest activities to continue (as described below).

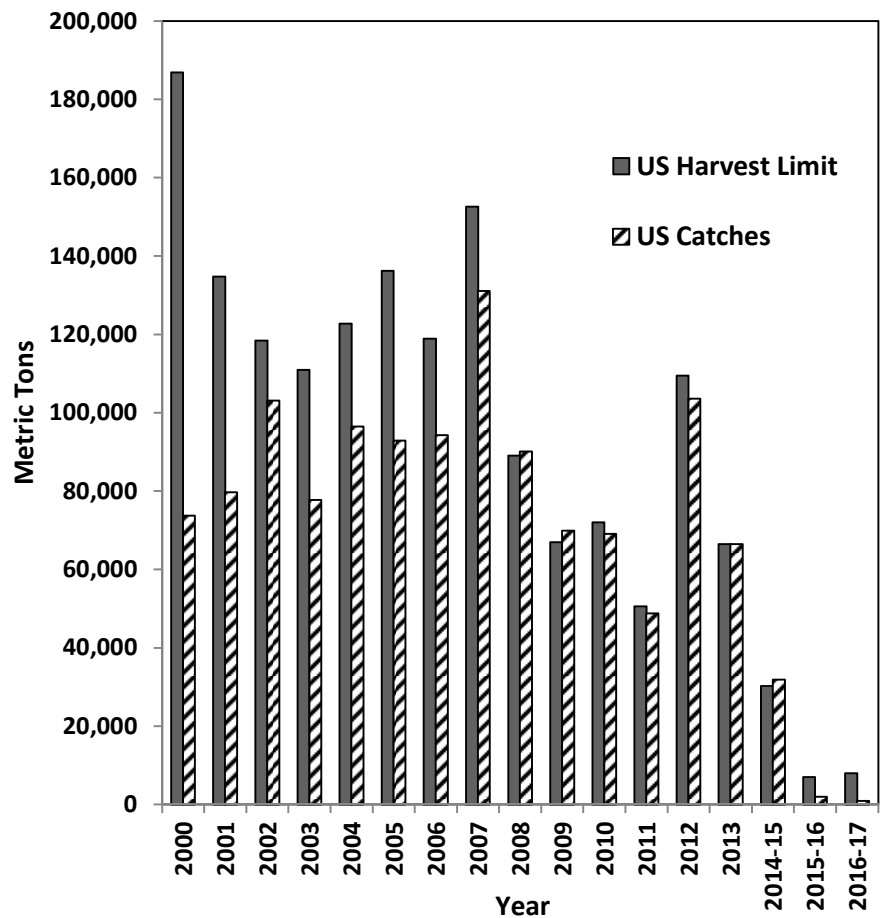


Figure 1. Annual US harvest limits and total catches for Pacific sardine since the implementation of federal management.

The large decline in allowable harvest is due to continued observed declines in sardine biomass estimated by a model using fishery and survey data. The abundance of eggs, larvae and young fish observed in surveys has been very low for the past several years. The population trajectory

estimated by the model shows the population declining each year since peaking in 2006, then recovering slightly in 2017 (Figure 2).

The fishable population estimate must be above 150,000 mt (CUTOFF) in order to allow directed commercial fishing. For 2017, the fishable population estimate is 86,586 mt, smaller than the 150,000 mt CUTOFF level specified under the CPS FMP to protect the spawning population. The fishable population estimate for 2017 is still above 50,000 mt, which is the minimum stock size threshold (MSST) or the biomass below which the sardine population is defined as overfished (Figure 2).

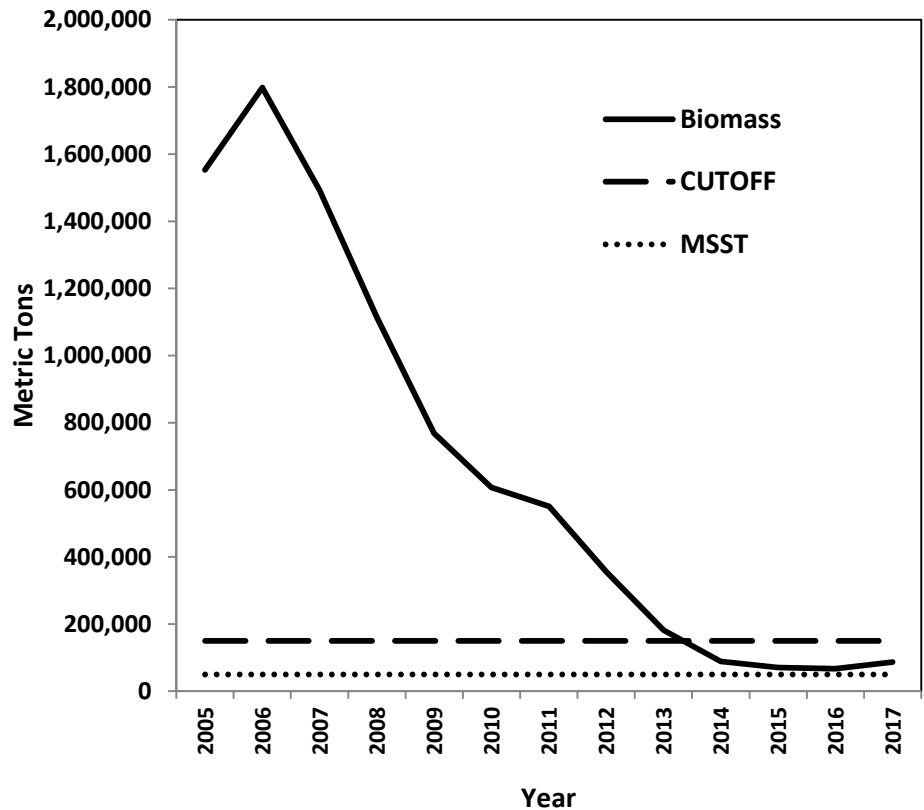


Figure 2. Sardine population trajectory (biomass, ages 1+) estimated by the 2017 assessment in metric tons (mt). The dashed horizontal line represents the level below which non-tribal directed commercial fishing is not allowed (CUTOFF). The solid horizontal line at the bottom indicates the level at which the stock is defined as overfished (MSST).

Although a commercial directed fishery is not allowed, the Council provided for limited harvests of sardines in other fisheries (Figure 1). The Council adopted a limit of 8,000 mt for all harvests of sardines on the west coast, including tribal fisheries, incidental harvests in other commercial fisheries, and a live bait fishery, plus small recreational fisheries and research. Federal regulations are anticipated to be adopted that implement the Council’s recommendations.

The Council adopted the following automatic in-season actions for non-tribal CPS fisheries:

- An incidental per landing allowance of 40 percent Pacific sardine (by weight) until a total of 2,000 mt of Pacific sardine are landed.
- When the 2,000 mt is achieved, the incidental per landing allowance would be reduced to 20 percent, until a total of 5,000 mt of Pacific sardine are landed.
- When 5,000 mt have been landed, the incidental per landing allowance would be reduced to 10 percent for the remainder of the 2017-2018 fishing year.

In addition, the Council adopted a 2 mt incidental per landing allowance in non-CPS fisheries for the 2017-2018 fishing year.

### **Allowances for Minor Directed CPS Fisheries**

The primary commercial directed fishery for CPS on the US West Coast is conducted by purse seine vessels. The federal CPS FMP specifies incidental landing allowances to minimize negative impacts to other fisheries while meeting conservation goals, and provides criteria for establishing different incidental allowances. Limited landing allowances are intended to provide for the continued prosecution of the other open CPS fisheries, non-CPS fisheries, as well as the operation of a directed live bait fishery.

A very small sector of the directed commercial CPS fishery harvests minor amounts of CPS, generally not as part of the primary commercial directed fishery. This fishery sector typically sells catch as specialty dead bait to recreational and commercial fisheries, or for human consumption to restaurants and the public. Because these small landings are composed primarily of the target CPS species, they have not been allowed to continue under the incidental landing allowances when the primary directed fishery for that CPS species is closed. Total landings from this sector typically make up less than one percent of the total landings of any particular CPS stock.

At its April 2016 meeting, the Council adopted a CPS FMP Amendment allowing limited minor directed harvests by this sector when other directed fishing is closed. The default allowance for minor directed fishing is that no vessel or person may land over one mt per day and vessels may not make more than one trip per day. Once the ACL is reached or projected to be exceeded, minor directed fishing will not be allowed. Federal regulations are anticipated to be adopted that implement the Council's recommendations. The Council's intent is to only provide opportunity for existing operations, although new harvest activity potentially may occur. The Council's advisory bodies will monitor landings records and if much new harvest does occur, this allowance may be curtailed.

In Oregon, one small beach seine operation in the Umpqua River estuary would benefit from the new allowance for minor directed fishing. This operation supplies dead bait to recreational fishers and its fishing activity has been substantially curtailed by the sardine fishery closures of recent years. Since 2005, 95% of its daily landings containing sardines were  $\leq 1$

mt and therefore, the majority of their historical activity would be allowed with implementation of the CPS FMP Amendment. Commercial beach seining is not allowed in any other Oregon estuaries and staff does not anticipate much, if any, harvest by new small-scale operations under this provision.

## OPTIONS

1. Adopt concurrent rules for Coastal Pelagic Species fisheries as shown in Attachment 3.
2. Adopt more conservative measures.

## STAFF RECOMMENDATION

1. Option 1

## ISSUE 2

### PERMANENT STATE REGULATIONS FOR NORTHERN ANCHOVY COMMERCIAL FISHERIES

## ANALYSIS

In 2016, a historically large commercial purse seine fishery for northern anchovy developed in the Columbia River between Buoy 10 and the Astoria-Megler Bridge and landed the catch in Astoria. The magnitude of anchovy landings, potential impacts to salmon stocks and other predators, and potential conflicts with recreational fishers became points of concern as the fishery grew. ODFW monitored the fishery and consulted with relevant management entities and a variety of stakeholders, including the commercial fishing industry and recreational fishing and environmental groups. The National Marine Fisheries Service (NMFS) advised ODFW that re-consultation on impacts to ESA-listed salmon would be needed to allow for continued anchovy fishing at levels higher than the traditional low-volume fishery. As a result, ODFW adopted temporary rules to limit anchovy landings from the Columbia River and is recommending the same measures as permanent rules.

#### **Federal Management and Historical Commercial Fishery**

Commercial fisheries off Oregon and Washington harvest anchovy from the Northern Subpopulation of Northern Anchovy (NSNA), a monitored species in the Council's CPS FMP. The northern subpopulation occurs from northern California to north of Vancouver Island. Federal harvest specifications for the portion that occurs off Oregon and Washington (Table 1) remain in effect on a multi-year basis until new information becomes available warranting a change. These include an overfishing limit (OFL), an acceptable biological catch (ABC), an annual catch limit (ACL) and an annual catch target (ACT) in the corresponding amounts shown below.

Table 1. Annual catch limits (in metric tons) and other management specifications for the northern anchovy stock (NSNA) off Oregon and Washington.

Stock	Overfishing Level	Acceptable Biological Catch	Annual Catch Limit	Annual Catch Target
Anchovy, Northern Subpopulation	39,000	9,750	9,750	1,500

In most years since 2000, NSNA landings (Figure 3) totaled a few hundred metric tons, taken primarily by fisheries for bait and landed into Washington. Landings into Oregon were intermittent and averaged about 67 mt annually during 2000-2015. These anchovy were sold either as bait or processed as a local specialty product for human consumption.

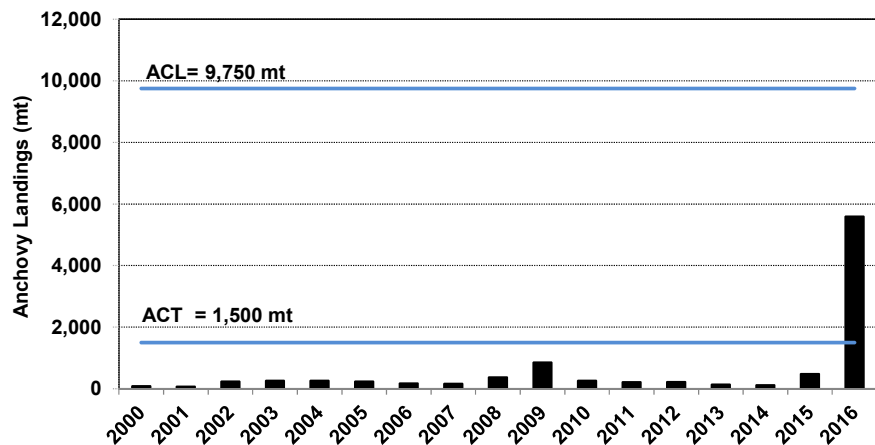


Figure 3. Annual landings of the northern subpopulation of northern anchovy combined for Oregon, non-treaty Washington and tribal commercial fisheries, 2000-2016. (To maintain confidentiality, landings are not shown individually by management entity).

However in 2016, total NSNA landings (Oregon and Washington) spiked to 5,588 mt (Figure 3), with the majority landed into Astoria, Oregon. A relatively large volume market primarily for human consumption developed overseas and spurred landings into Oregon beginning in 2015. This greatly increased in 2016 when a total of 5,313 mt were landed into Astoria. The majority of this catch was taken from the Columbia River upriver from Buoy 10, although some was harvested just offshore from the northern Oregon coast. Three purse seine vessels and two processors participated in the 2016 Oregon fishery, which yielded \$1.15 million in ex-vessel revenue. In addition, Washington commercial fishers and for the first time, a Quinault Indian Nation (QIN) commercial fisher landed smaller amounts of NSNA anchovy in 2016.

As a result of this spike in harvest, the 1,500 mt ACT was exceeded for the first time in August 2016 (Figure 3). Attaining or exceeding the ACT triggers consultation between Oregon and Washington; consultation is

intended to evaluate potential fishery management changes for the following year, because catches exceeding the ACT indicate a change in fishery activities. ODFW immediately initiated information sharing and discussions with staff from the Washington Department of Fish and Wildlife (WDFW). The consultation led to fishery observation activities and then in-season temporary rules, as described below. In addition, ODFW, WDFW, and QIN reported to the Council at their September and November meetings on the status and management action for the NSNA fishery.

### **State Monitoring and Management**

Oregon's management goals are to balance the economic benefits for the fishing industry and communities with conservation goals that include protecting salmon listed under the Endangered Species Act (ESA) and other sensitive species, and maintaining an adequate forage base. The economic benefits during 2016 partially covered some losses in Astoria from the recent sardine fishery closures. However, concerns arose about the potential for bycatch mortalities of adult and juvenile salmonids (smolts), reductions in forage for dependent species of fish, seabirds and marine mammals, and conflicts with recreational fishers during the popular Buoy 10 salmon fishery.

Oregon's rules for commercial anchovy fishing are designed to minimize wastage and bycatch of other species. The fishery is open access and open year round. In the Columbia River permanent rules require:

- a completed ODFW logbook, including the estimated catch of other species, and the number of salmon encountered and number judged as released alive or dead;
- a grate over the intake with 2 3/8-inch spacing between bars;
- seines with mesh size  $\geq 0.5$  inch and  $\leq 1400$  feet in length;
- salmon and groundfish to be dip-netted out of the seine and immediately returned to the water;
- all other species to be immediately returned to the water; and
- no more than 10% of a landing (by weight) to be used for other than human consumption or bait (i.e., no reduction to fish meal or fertilizer).

A commercial vessel catching anchovy is allowed to pump fish from the pursed seine of another, up to 20% of each landing.

Washington's rules for commercial harvest of anchovy from the Columbia River and state coastal waters include a daily maximum limit of 5 mt per vessel and a weekly maximum limit of 10 mt per vessel regardless of catch area. Fishing is not allowed in waters less than 20 feet deep. Seine mesh size and length requirements, requirements to return other species immediately to the water, and limits on the amount of anchovy used for reduction are similar to Oregon's rules.

During 2016, Oregon landings began on June 9 and ended on September 27, as weather worsened and anchovy became more difficult to locate. The majority of incidental bycatch reported in logbooks and on fish tickets included small amounts of other CPS species (sardine and mackerels), shad, and Dungeness crab, along with some adult salmon (Table 2). Most of the 56 salmon reported were judged to be alive when released.

Table 2. Incidental catches in the 2016 Oregon anchovy fishery, as reported by anchovy fishers in their ODFW logbooks and by fish processors on fish receiving tickets.

<b>Logbook Records</b>	<b>Fish Ticket Records</b>
56 salmon (46 alive)	44 lbs salmon (4 fish)
4,000 lbs other CPS	6,978 lbs other CPS
800 lbs shad	258 lbs shad
355 lbs crab	220 lbs Dungeness crab
700 lbs flatfish	125 lbs pomfret
2 sturgeon	

ODFW and WDFW placed observers on board the fishing vessels primarily to detect incidental catches of salmonids. In late September, three fishing trips, which represented about 127 mt of anchovy landed, were observed at sea. All fishing and catch on these observed trips occurred in the ocean; none in the Columbia River. No salmonids were identified, and observed incidental catches were consistent with those in Table 2. Staff monitored several offloads while collecting anchovy biological data, including the entire landing for two of the observed trips. A small number of salmonids (<10) were noted, with none seen during the two fully monitored offloads.

Due to uncertainty about the impacts of the anchovy fishery on salmon, other fish species, and the ecosystem, ODFW adopted a temporary rule which established landing limits for vessels fishing for anchovy inside the Columbia River, effective October 3, 2016. Commercial fishing vessels were limited to 5 mt per day and 10 mt per week of anchovy from any trip where fishing occurred upstream of Buoy 10. The Oregon fishery in the Columbia River and ocean ended by September 27.

Information on the potential impacts to ESA-listed fish stocks in the lower Columbia River estuary was obtained from sources other than the anchovy fishery. Through consultation with salmon managers and researchers, ODFW determined that at least two stocks of ESA-listed salmonids and/or green sturgeon are at moderate to peak abundance in the Columbia River estuary at all times that anchovy fishing occurred. ESA-listed eulachon were not present in the lower Columbia River then.

ODFW subsequently consulted with NMFS managers about future prosecution of the anchovy fishery given the potential fishery impacts on ESA-protected species in the Columbia River. NMFS advised ODFW



that re-consultation on impacts to ESA-listed salmon would be needed to allow for continued anchovy fishing at levels higher than the historical low-volume fishery that primarily landed anchovy as bait into Washington (Figure 3). Re-consultation, if initiated, could not be completed before 2018 and possibly later.

Consistent with guidance from NMFS, staff recommends that anchovy landing limits currently in place by temporary rule for the Columbia River upriver of Buoy 10 be adopted as permanent rules. Staff is not recommending extending these limits to the Oregon ocean waters because the primary concerns are related to the concentration of anchovy harvest activity in the Columbia River. ODFW staff intends to monitor the fishery, consider public input, and evaluate fishery management for future years.

## OPTIONS

1. Status quo
2. Adopt rules for the northern anchovy fishery as shown in Attachment 3.

## STAFF RECOMMENDATION

1. Option 2

DRAFT MOTION	I move to adopt the staff recommendations for Coastal Pelagic Species fisheries as proposed in Attachment 3.
EFFECTIVE DATE	Upon filing