

CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE REPORT ON PACIFIC BLUEFIN MONITORING AND
MANAGEMENT ACTIVITIES FOR RECREATIONAL AND COMMERCIAL FISHERIES

Background

In 2014 the Council recommended National Marine Fisheries Service (NMFS) reduce recreational fishing limits for Pacific bluefin tuna (PBT) in order to address concerns over the stocks' overfished status. As a result, NMFS reduced the daily bag and possession limits for PBT. Additionally, the Council recommended NMFS gather more data on the occurrence of adult fish and spawning potential present in the Eastern Pacific Ocean in hopes that it will be able to inform and improve the current stock assessment model used for management in the future. This, along with state rulemaking to conform to federal PBT bag, possession and fillet limits (80 FR 44887), federal commercial quota reductions in accordance with IATTC Resolution C-14-06, new commercial trip limits (50 FR 660), and new IATTC reporting requirements for recreational fisheries per Resolution C-14-06, has increased the need for heightened fishery management, monitoring and outreach undertaken by the State of California. California Department of Fish and Wildlife (CDFW) continues to monitor landings and work toward expanding and improving data collection for the recreational and commercial PBT fisheries. Below is a summary of current and future efforts, along with updates on final 2014 and current 2015 landings in both recreational and commercial fisheries.

Overview of Monitoring Efforts

Biological Data Collection

Commercial sampling of PBT catch is currently being conducted opportunistically by CDFW. On May 29, 2015, CDFW was notified that multiple commercial purse seine vessels were landing PBT. On May 30, 2015, staff worked with Southwest Fisheries Science Center (SWFSC) samplers to ensure standardization of methodology across agencies, and arrived at multiple locations to collect biological data from some of these commercial landings. A total of 239 lengths, ranging from 75.5 to 122.5 cm (29.7 to 48.2 in); 179 corresponding weights, ranging from 9.4 to 32.1 kg (20.7 to 70.8 lbs); and multiple skin, gut, and gonad samples were collected and provided to the SWFSC for further research. CDFW plans to continue opportunistic commercial monitoring efforts in ports already actively sampled, as well as increase collection activities in ports occasionally receiving landings of PBT and other highly migratory species.

In addition to expanding commercial monitoring efforts, CDFW in collaboration with Sportfishing Association of California (SAC) and NOAA Fisheries, plans to expand collection of length data on PBT and other tuna species. Obtaining more robust and representative size data on PBT and other species of tuna landed in California will improve catch statistics and help fill biological data gaps.

Biological and Fishery Data Collection in the California Recreational Fisheries Survey (CRFS)

Biological data collection on PBT continues through the CRFS field survey in 2015, where CDFW samplers intercept private boat anglers at public launch ramps fishing in Mexican and U.S. waters, as well as onboard CPFV trips fishing in U.S. waters on trips up to 24 hours in length. CDFW CRFS samplers collect detailed catch and effort information, including target species, trip duration, fishing location, trip type, demographic information, as well as biological information on catch such as number of fish released and retained, length, weight and species composition. In 2014, CRFS samplers obtained measurements for 109 PBT, while in 2015, 204 length measurements have been obtained thus far through July. Most of these biological data have been obtained at southern California public launch ramp sites from private boats targeting highly migratory species. Unprecedented increases in intercepted catch through the launch ramp survey can be attributed to the high level of fishing effort and increased availability of PBT in nearshore U.S. waters in 2014 and 2015 over previous years. The mean length of PBT sampled in 2014 was 697mm, and 868 mm for 2015 through July, which is consistent with anecdotal reports that larger fish are occurring in U.S. waters this year.

Recreational Bag Limit Conformance Rulemaking

CDFW recommended that the California Fish and Game Commission adopt state regulations conforming to federal recreational bag and possession limit reductions for PBT. On July 30th, successful coordination between state and federal regulatory processes resulted in concurrent effective dates for state and federal regulations. This allowed the public to abide by a single set of changes and ensured the most efficient and problem free transition to the new rules.

The state regulation reduces the existing bag limit of 10 PBT per day to 2 PBT per day (Title 14 §28.38(b)) and the maximum multiday possession limit (for trips of 3 days or more) (Title 14 §27.15) from 30 PBT to 6 PBT in accordance with the federal rule (80 FR 44887).

The regulations also establish new requirements for filleting tuna at-sea, south of Point Conception (Title 14 §27.65(b)(11)). Each fish must be cut into six pieces (4 loins, belly piece including anal vent, and collar with pectoral fins attached), with the skin left intact and placed in an individual bag labeled with the species. This is to assist law enforcement personnel in accurately identifying the different tuna species.

Public Outreach and Education

CDFW has undertaken many outreach activities to better inform the public of the new sport regulations involving PBT, including collaborative efforts with NOAA Fisheries, such as the development of a joint FAQ on bluefin tuna management changes, providing information at sportfishing events, dissemination of information through the annual sportfishing booklet, and other electronic media. CDFW staff continues to respond to outreach needs through agency news releases and web-based blog posts, and

through continued coordination with federal partners, SAC and other industry representatives, and law enforcement. Developing outreach materials to support understanding of new fillet methods and tuna fillet identification has been a key priority need, as well as describing the application of the State’s multi-day fishing regulations to the new reduced PBT daily bag limit.

Commercial Landings Update

In 2014 the commercial fishery for PBT was closed on September 5th in anticipation of the fleet reaching the 500 mt quota. After the closure, incidental take of PBT was allowed in other fisheries, so long as it did not exceed 1 mt. Prices for purse seine landings of PBT ranged from \$0.30 to \$0.80 per pound, while incidental catch by drift gillnet and hook and line ranged from \$1.00-\$5.50 per pound. On July 8, 2015, the commercial limit was reduced by NMFS under 80 FR 38986 in accordance with IATTC resolution C-14-06, to 600 mt for the 2015-16 and 2016-17 seasons. This rule incorporated recommendations from the Council to incorporate catch and trip limits. The rule established a 600 mt catch limit for the two year period, not to exceed 425 mt in a single year. Further, the rule specified that if U.S. catches exceed 300 mt in 2015, then they may not exceed 200 mt in 2016. The rule also established a trip limit of 25 mt until catch is within 50 mt of the catch limit, and a 2 metric ton limit when catch is within 50 mt of the limit. These restrictions, along with minimal interest from markets to purchase large amount of PBT, has resulted in minimal directed fishing effort thus far. Landings made by purse seine ranged in price from only \$0.25 to \$1.00 per pound. Fish taken incidentally in drift gillnet and hook and line sold for a few dollars more (\$1.00-\$5.00 per pound).

A total of 408 mt of PBT was landed commercially in California in 2014 from 85 landings and 36 vessels. Landing locations ranged from San Francisco to San Diego port areas; the majority of landings in terms of tonnage (98 percent) occurred in the Los Angeles port area by purse seine gear. As of September 1, 2015, preliminary estimates of California commercial landings for PBT in 2015 total 71.6 mt from 42 landings and 24 vessels. The majority of landings were from Los Angeles port areas, but landings have been made as far north as Morro Bay and as far south as San Diego. Table 1 displays commercial landings by month for 2014 and 2015.

Table 1. California commercial Pacific bluefin tuna landings (metric tons) for 2014 and 2015 (preliminary).

	<i>Jan</i>	<i>Feb</i>	<i>Mar</i>	<i>Apr</i>	<i>May</i>	<i>Jun</i>	<i>Jul</i>	<i>Aug</i>	<i>Sep</i>	<i>Oct</i>	<i>Nov</i>	<i>Dec</i>	<i>Total</i>
2014	2	0	0	0	-	-	1	371	32	0	1	1	408
2015	1	-	-	-	49	-	3	18					71

Data from fewer than three vessels has been omitted to protect confidentiality. *Source: 2014 data from the California Fisheries Information System (CFIS), Preliminary 2015 data from landing receipts recorded in the field and CFIS as available.*

Recreational Landings Update

Beginning in 2015, CDFW enhanced its recreational PBT fishery monitoring and catch tracking activities. Traditionally, CDFW has compiled estimates of recreational catch from the private boat fleet from its

CRFS program, and for the Commercial Passenger Fishing Vessel (CPFV) fleet from its CPFV logbook program (Agenda Item G.4.b CDFW Report 2 September 2014). This year, CDFW is keeping a daily log of industry-reported catches provided to sportfishingreport.com, in order to compare this data stream with CPFV logbook records (Table 2). Current sportfishingreport.com totals as of September 5 are approximately 16,140 PBT. The difference between this number and that available to CDFW may largely be resultant of the lag in logbook data. There is an approximate 2 month lag from the day of fishing to data entry into CDFW databases (due to submission time and data processing requirements).

Table 2. Preliminary monthly comparison of recreational landings of PBT for 2015 from Sportfishingreport.com and CPFV logbooks. *Data Source: CDFW MLS CPFV logbooks and Sportfishingreport.com*

Month	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug
Sportfishing.com	616	928	59	9	435	1,101	4,275	8,342
CPFV Logbooks	420	268	20	11	716	857	3,977	6,047
Difference	196	660	39	-2	-281	244	298	2,295

Also in 2015, CDFW, in collaboration with SAC, Golden Gate Salmon Association and other charter industry representatives, is transitioning the CPFV fleet to logbook reporting via electronic methods, which allow for electronic submission of logbooks when vessels have internet access between fishing trips. The e-logbook program began this spring with a pilot project, and is now transitioning to widespread use, although use of the e-logbooks remains voluntary.

State logbook regulations still require that paper logbooks be submitted monthly, but a pilot study currently underway utilizing electronic logbooks for reporting show potential for improving timeliness of data collection. Currently, approximately 140 CPFV vessels are using the pilot e-log application.

An estimated total of 29,205 PBT were caught recreationally in 2014 (Table 3). So far in 2015, 12,810 fish have been reported to CDFW. Table 3 provides a breakdown of yearly catch by (trip) type and primary fishing effort (U.S. versus Mexico waters). CPFV numbers are based on logbook reports available in the system through August 2015 and are not expanded to account for non-compliance. Private vessel data are estimations based on data collected through the CRFS program. In U.S. waters, the estimations include primary and secondary launch sites, as well as private marina and nighttime effort (PR-PAN mode, collected through telephone survey). However, the PR-PAN phone survey does not collect data for fishing effort in Mexico, so effort estimates for Mexican waters are expanded from effort and sample data collected in the field from public launch ramps only.

Table 3. Preliminary California recreational Pacific bluefin tuna landings (number of fish) by majority effort area for 2015. CPFV data is through August 2015; Private Vessel data is through June 2015. Source: CDFW MLS CPFV logbooks and PRELIMINARY CRFS estimates data

	CPFV				Private Vessels				Totals	
	2014		Preliminary 2015		2014		Preliminary 2015		2014	Preliminary 2015
	U.S.	Mex	U.S.	Mex	U.S.	Mex	U.S.	Mex		
Number of Fish	18,460	7,851*	12,090	210*	2,691	203*	465	45*	29,205	12,810

*NOTE: Landings in this table under “Mex” may not have actually been taken in Mexican waters. CPFV logs record the CDFG block for the MAJORITY of effort, not necessarily where specific fish were taken. Data for private vessels is similarly classified. THE ABOVE TABLE DOES NOT IMPLY THAT THERE WAS ILLEGAL FISHING ACTIVITY IN MEXICO DURING BLUEFIN CLOSURES.

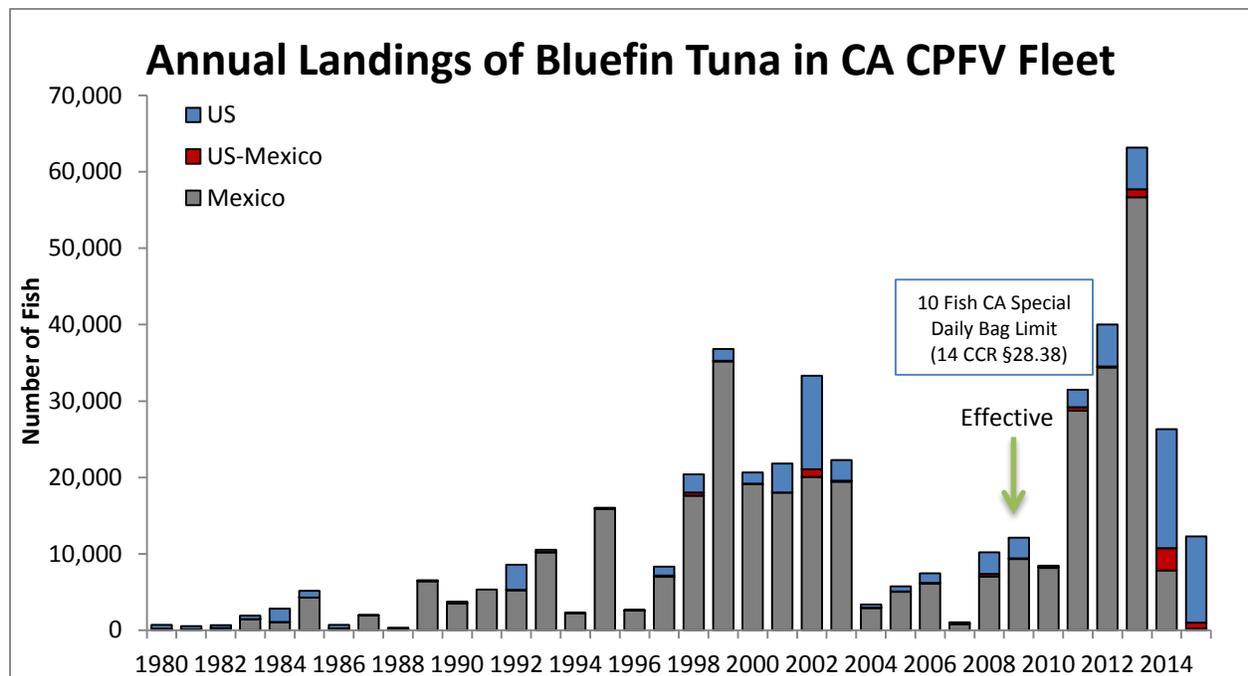


Figure 1. Historical CPFV Landings of Pacific bluefin tuna in U.S., Mexico, and CDFG blocks straddling the U.S.-Mexico border. 2015 data are PRELIMINARY. Data Source: CDFW MLS CPFV logbook database. Updated 09-10-2015.

With the enactment of the new bag limit for PBT, CDFW did some preliminary investigations of catch per unit effort (CPUE) of anglers fishing onboard CPFVs recreationally. Although CDFW was unable to complete a full bag analysis with 2014 and 2015 data, a summary of average fish caught per angler (for all anglers on CPFV trips which kept at least 1 PBT per trip), by month, was compiled (Table 4) in order to compare catch per unit fishing effort in 2014 to that of the first half of 2015. Both catch and angler numbers were considerably higher in the beginning of 2015 than those of 2014 due to unusual presence

of fish in close range, but effort over the last two months is less than 2014, and catch is considerably less.

Table 4. Average catch of Pacific bluefin tuna per CPFV angler for 2013, 2014 and 2015 (as of 8/28/15, preliminary). As of July 30, 2015 the daily bag limit is 2 PBF. Source: CDFW MLS CPFV logbook database

Month	2013			2014			Preliminary 2015		
	Total Anglers	Total Bluefin	Average Fish/Angler	Total Anglers	Total Bluefin	Average Fish/Angler	Total Anglers	Total Bluefin	Average Fish/Angler
Jan	0	0	0.0	0	0	0.0	384	420	0.0
Feb	0	0	0.0	32	16	0.5	423	268	0.6
Mar	0	0	0.0	30	3	0.1	32	20	0.6
Apr	0	0	0.0	0	0	0.0	22	11	0.0
May	0	0	0.0	474	822	1.7	1,137	716	0.6
Jun	2,693	3,033	1.1	2,016	599	0.3	2,314	851*	0.4
Jul	12,454	20,059	1.6	10,746	12,930	1.2	9,415	3,754*	0.4
Aug	17,767	23,052	1.3	9,646	7,354	0.8	5,255	4,284*	0.8
Sep	10,273	13,150	1.3	2,359	2,940	1.2			
Oct	2,800	4,408	1.6	1,208	1,182	1.0			
Nov	0	0	0.0	619	426	0.7			
Dec	0	0	0.0	251	39	0.2			
Totals	45,987	63,702	1.4	27,381	26,311	1.0	18,982	10,324	0.5

*Note: The totals for June through August in this table are lower than CPFV numbers reported in tables 2 and 3, as the data used for this table was pulled 13 days prior to the final updates.