MORRO BAY AND PORT SAN LUIS

COMMERCIAL FISHERIES BUSINESS PLAN

UPDATE 2010




Coastal Conservancy

LWC

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Commercial Fishing Landings

From a business perspective commercial fishing landings (weight and EVV) are a good measure of the commercial fisheries' performance. Landings are the culmination of fishing efforts, fleet size and composition, impacts of resource regulation, experience and innovation, and capacity of the infrastructure. Landings drive employment, capital improvement projects, valued added service opportunities, and expansion and reinvestment. Residual profit generated from fish coming across the dock (in the form of fees or taxes) will eventually fund management and procurement of quotas (with the ITQ protocol), assure stability of the commercial fishery, and help secure the decision-making process on the regional level.

In this chapter, landings are also depicted by species and give commercial fisheries managers and potential funders an understanding of the composition of available resources. Data from the 20 year period from 1990 to 2009 offers a view of trends and relevant significance by species. It is the hope that these commercial analyses will reveal potential opportunities for the future of the commercial fishery.

The California Department and Fish and Game (CDF&G) divides the state into nine geographic areas and collects and summarizes landing data for each area and port annually. Data is collected for every species, including weight and ex-vessel-value (EVV) (the price paid to fisherman at the dock).

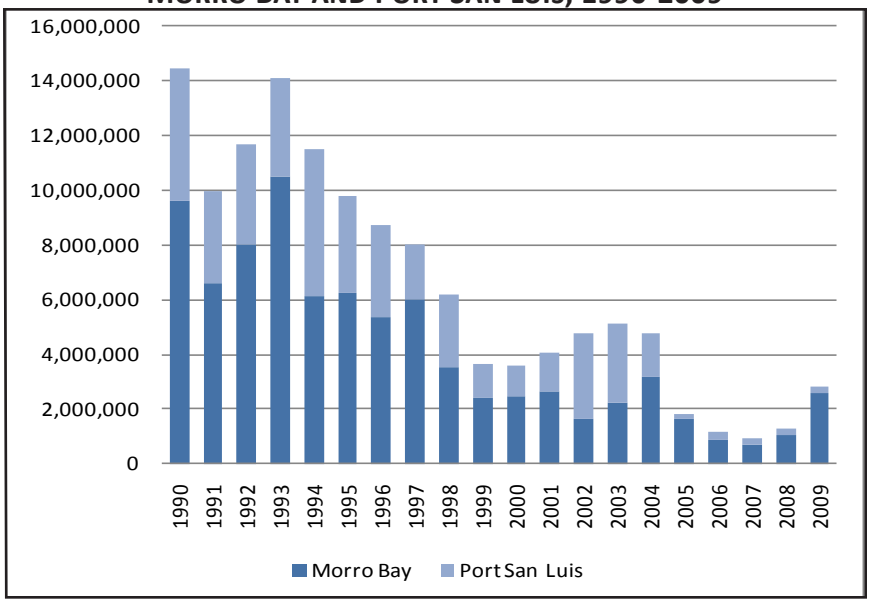
Overview 1990 to 2009

Overall, landings in both ports have dropped drastically over the last 20 years. In 1990, the combined landings of both ports were more than 14 million pounds, and by 2007, the combined landings dropped to under 1 million pounds, the lowest of the 20 year period. Landings however, grew to nearly 3 million pounds by 2009 (See Figure 1). The value of landings in 1990

was approximately $11 million, and EVV consistently dropped to approximately $2.7 million in 2007, to again, the lowest level in the 20 year period. Earnings have rebounded by 2009 to over $4.8 million (See Figure 2). Landings and income have dropped across the species spectrum and gear type. However, landings and earnings exhibit an increase in 2008 and 2009 (Commercial fisheries landings vary widely from year to year based on a number of factors).

Although landings fell more than 80% from 1990 to 2009, EVV (adjusted for inflation) fell about 59%, indicating that landings are increasing in value. As Figure 3 shows, the value per pound has increased from about $0.81 in 1990 to $1.69 in 2009. The emergence of live-fish landings may be a large contributor.

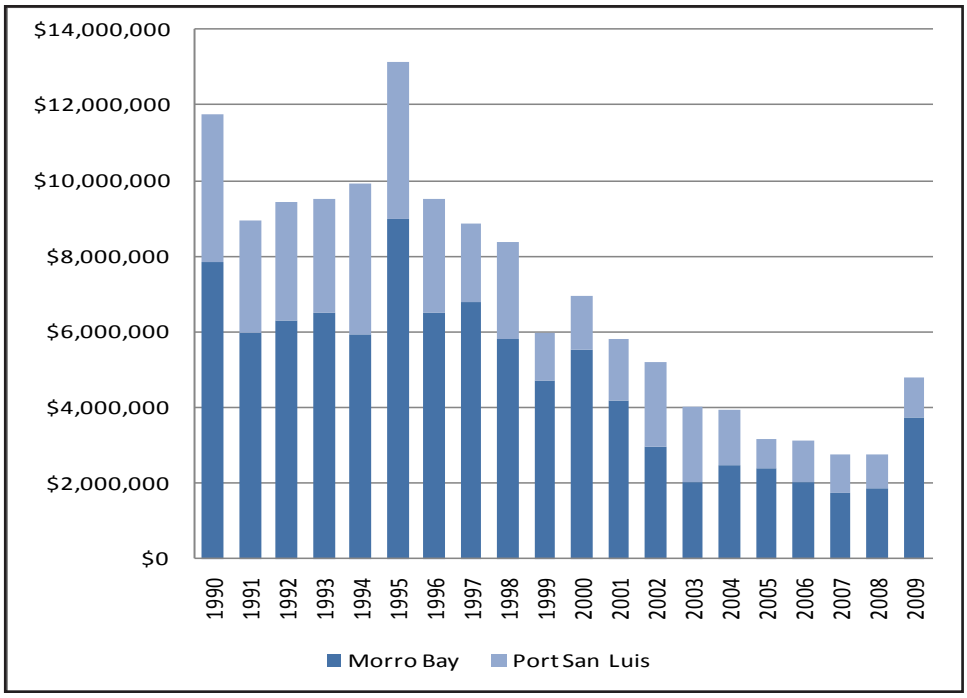
FIGURE 1. COMMERCIAL FISH LANDINGS (LBS.), MORRO BAY AND PORT SAN LUIS, 1990-2009



Source: California Department of Fish and Game

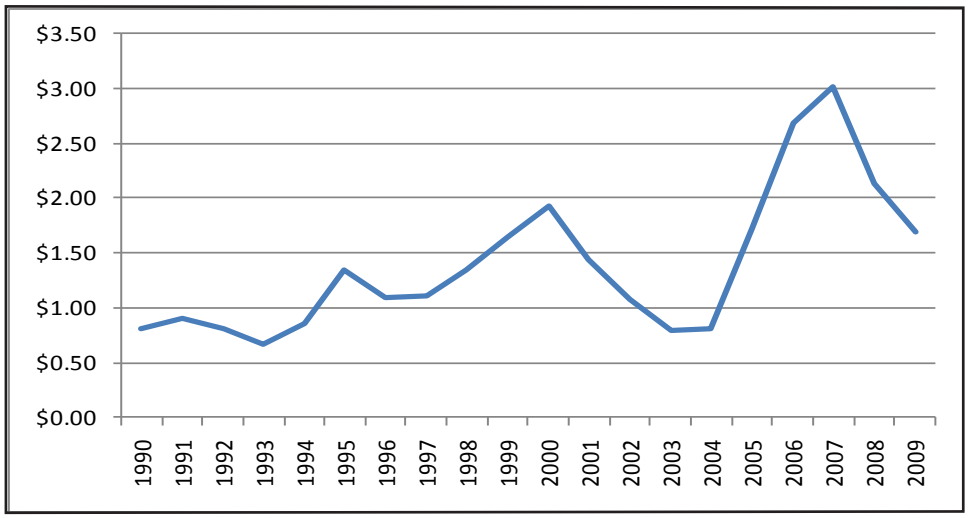
Figures 2 and 3 were converted into 2009 dollars (adjusted to inflation) using a CPI calculator. Figure 4 shows a table of landings and EVV data for both ports.

Figure 2. Value of Landings (2009 dollars), Morro Bay and Port San Luis, 1990-2009



Source: California Department of Fish and Game

Figure 3. Total Value per Pound (2009 Dollars), Morro Bay and Port San Luis, 1990-2009



Source: California Department of Fish and Game

Figure 4. Commercial Fish Landings and EVV, 1990-2009

Year	Port	Landings (Pounds)	Ex Vessel Value (EVV)	EVV 2009 Dollars	Average value/lb. 2009 Dollars
1990	Morro Bay	9,639,835	$ 4,769,912	$ 7,829,334	$ 0.81
	Port San Luis	4,839,513	2,393,408	3,928,540	0.81
	Combined	**14,479,348**	**7,163,320**	**11,757,873**	**0.81**
1991	Morro Bay	6,610,062	3,792,618	5,974,132	0.90
	Port San Luis	3,363,482	1,891,259	2,979,111	0.89
	Combined	**9,973,544**	**5,683,877**	**8,953,243**	**0.90**
1992	Morro Bay	8,024,770	4,116,330	6,294,280	0.78
	Port San Luis	3,667,720	2,060,733	3,151,067	0.86
	Combined	**11,692,490**	**6,177,063**	**9,445,347**	**0.81**
1993	Morro Bay	10,518,895	4,384,168	6,509,174	0.62
	Port San Luis	3,589,414	2,018,728	2,997,205	0.84
	Combined	**14,108,309**	**6,402,896**	**9,506,380**	**0.67**
1994	Morro Bay	6,114,677	4,111,880	5,952,357	0.97
	Port San Luis	5,412,810	2,742,230	3,969,652	0.73
	Combined	**11,527,487**	**6,854,110**	**9,922,010**	**0.86**
1995	Morro Bay	6,249,712	6,395,280	9,002,636	1.44
	Port San Luis	3,533,176	2,930,728	4,125,586	1.17
	Combined	**9,782,888**	**9,326,008**	**13,128,221**	**1.34**
1996	Morro Bay	5,345,759	4,767,279	6,518,301	1.22
	Port San Luis	3,361,097	2,203,249	3,012,502	0.90
	Combined	**8,706,856**	**6,970,528**	**9,530,803**	**1.09**
1997	Morro Bay	5,993,915	5,087,758	6,800,806	1.13
	Port San Luis	2,020,455	1,543,521	2,063,225	1.02
	Combined	**8,014,370**	**6,631,279**	**8,864,031**	**1.11**
1998	Morro Bay	3,522,692	4,409,331	5,803,561	1.65
	Port San Luis	2,671,261	1,958,468	2,577,736	0.96
	Combined	**6,193,953**	**6,367,799**	**8,381,297**	**1.35**
1999	Morro Bay	2,404,637	3,654,132	4,705,426	1.96
	Port San Luis	1,239,452	996,314	1,282,954	1.04
	Combined	**3,644,089**	**4,650,446**	**5,988,379**	**1.64**
2000	Morro Bay	2,479,990	4,445,948	5,539,207	$ 2.23
	Port San Luis	1,129,344	1,136,967	1,416,547	1.25
	Combined	**3,609,334**	**5,582,915**	**6,955,754**	**1.93**
2001	Morro Bay	2,629,353	3,442,779	4,170,582	1.59
	Port San Luis	1,405,130	1,361,221	1,648,983	1.17
	Combined	**4,034,483**	**4,804,000**	**5,819,566**	**1.44**
2002	Morro Bay	1,651,568	2,488,921	2,968,038	1.80
	Port San Luis	3,140,495	1,856,857	2,214,302	0.71
	Combined	**4,792,063**	**4,345,778**	**5,182,340**	**1.08**
2003	Morro Bay	2,223,895	1,755,101	2,046,448	0.92
	Port San Luis	2,889,159	1,695,294	1,976,713	0.68
	Combined	**5,113,054**	**3,450,395**	**4,023,161**	**0.79**
2004	Morro Bay	3,163,988	2,196,074	2,494,081	0.79
	Port San Luis	1,632,857	1,258,648	1,429,447	0.88
	Combined	**4,796,845**	**3,454,722**	**3,923,528**	**0.82**
2005	Morro Bay	1,663,085	2,176,782	2,391,195	1.44
	Port San Luis	179,238	712,804	783,015	4.37
	Combined	**1,842,323**	**2,889,586**	**3,174,210**	**1.72**
2006	Morro Bay	868,353	1,906,328	2,028,714	2.34
	Port San Luis	290,430	1,017,878	1,083,226	3.73
	Combined	**1,158,783**	**2,924,206**	**3,111,940**	**2.69**
2007	Morro Bay	669,032	1,696,022	1,754,874	2.62
	Port San Luis	239,882	952,381	985,429	4.11
	Combined	**908,914**	**2,648,403**	**2,740,303**	**3.01**
2008	Morro Bay	1,046,420	1,876,388	1,869,633	1.79
	Port San Luis	248,817	890,020	886,816	3.56
	Combined	**1,295,237**	**2,766,408**	**2,756,449**	**2.13**
2009	Morro Bay	2,600,300	3,727,892	3,727,892	1.43
	Port San Luis	320,819	1,086,567	1,086,567	3.39
	Combined	**2,921,119**	**4,814,459**	**4,814,459**	**1.65**

Source: California Department of Fish and Game

Top Landed Species

Based on data at both ports, 13 species represented between 75% and 98% of all landings between 1990 and 2009. These species include: sole, rockfish, thornyheads, market squid, shrimp, sablefish, tuna, crab, salmon, swordfish, spot prawn, cabezon, and halibut. Figure 5 shows the top species landings between 1990 and 2009 and also illustrates the percentage of total landings that the species represented.

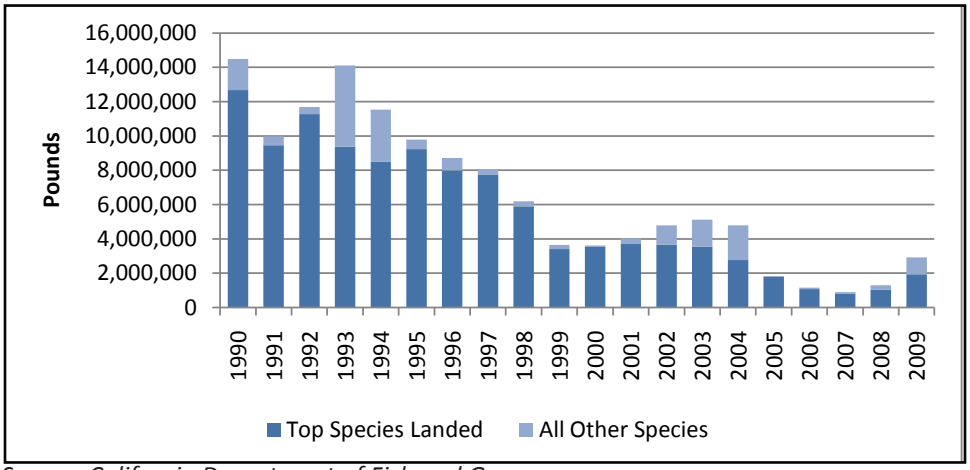
Figure 5. Top Landed Species, Morro Bay and Port San Luis, 1990-2009

	Species	Pounds Landed (Millions)	% of Total Landings		Species	Pounds Landed (Millions)	% of Total Landings
1	Sole, all species	34.8	27.1%	8	Crab, all species	4.9	3.8%
2	Rockfish, all species	23.7	18.5%	9	Salmon, all species	3.3	2.6%
3	Thornyheads, all species	16	12.4%	10	Swordfish	2.5	1.9%
4	Squid, market	12.5	9.8%	11	Prawn, Spot	1.4	1.1%
5	Shrimp, all species	7.1	5.5%	12	Cabezon	1.4	1.1%
6	Sablefish	7.8	6.1%	13	Halibut, California	1.1	0.9%
7	Tuna, all species	5.4	4.2%	-	Total, Other Species	6.7	5.2%

Source: California Department of Fish and Game

Between 1990 and 2009, sole, rockfish, and thornyheads represented 58% of total landings at both ports. Market squid landings represented almost 10% of total landings in the same period. Combined, these four species represented nearly 70% of all species landed at both ports. Like market squid, the remaining top species landings fluctuated greatly.

Figure 6. Top Landed Species, Both Ports Combined, 1990-2009



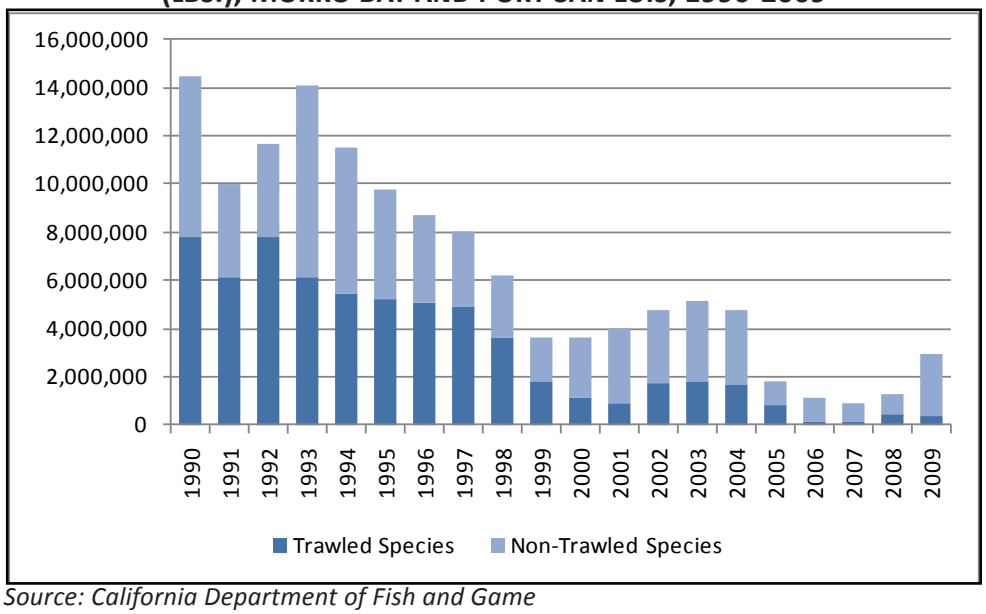
Source: California Department of Fish and Game

Trawl Landings

Trawl landings played an important role in the history of the Morro Bay and Port San Luis commercial fisheries. Besides being the largest purchaser of fuel, ice, and provisions, trawlers gave the commercial fisheries access to valuable flatfish, increasing the port's economic value and diversity of product mix. However, trawler landings in Morro Bay and Port San Luis have followed a national, declining trend. As Figure 7 and 8 show, until the late 1990s a significant share of landings were trawl species.

In the future, more sustainable trawling may represent an important component for a viable commercial fishery in Morro Bay and Port San Luis. Typical three to five day trips can yield up to 30,000-50,000 pounds of fish. Modifications in net design and spatial constraints, which reduce bycatch and disruption to benthic habitat, may allow the commercial fishery to market trawl-caught fish as more sustainably harvested. Trawling provides access to a highly profitable, local resource of flatfish, including sole, halibut, turbot, flounder and an array of rockfish not commercially available with other gear[3]. A trawler component of the working waterfront can complement other commercial fisheries and provide activity throughout the year. This, in turn, raises offloading income and provides more consistent employment opportunities on the dock as well as more consistent product availability for distributors, processors, and consumers.

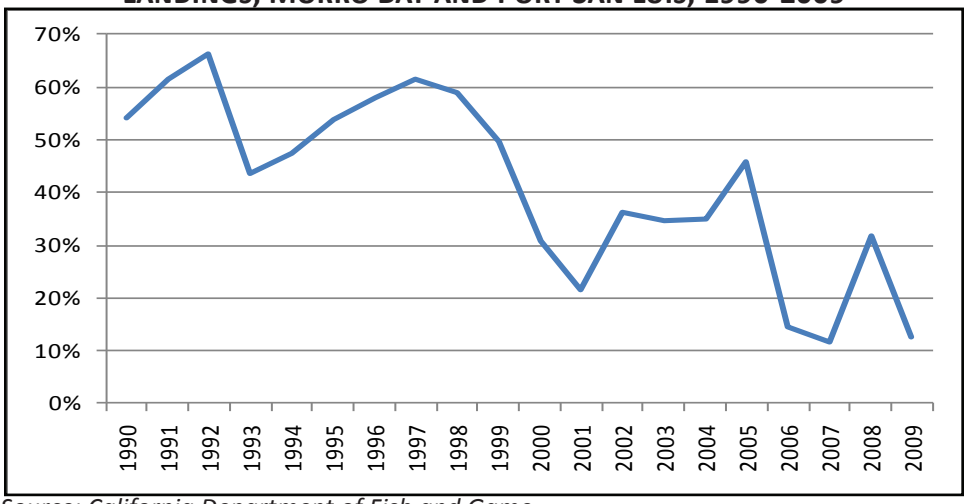
Figure 7. Trawl and Non-Trawl Species Landings (lbs.), Morro Bay and Port San Luis, 1990-2009



Source: California Department of Fish and Game

[3] Rockfish can be caught using trawl gear, or hook and line catch methods. To measure landings of specific rockfish species bycatch method, rockfish species have been divided into "trawl dominant rockfish" and "hook and line dominant rockfish".

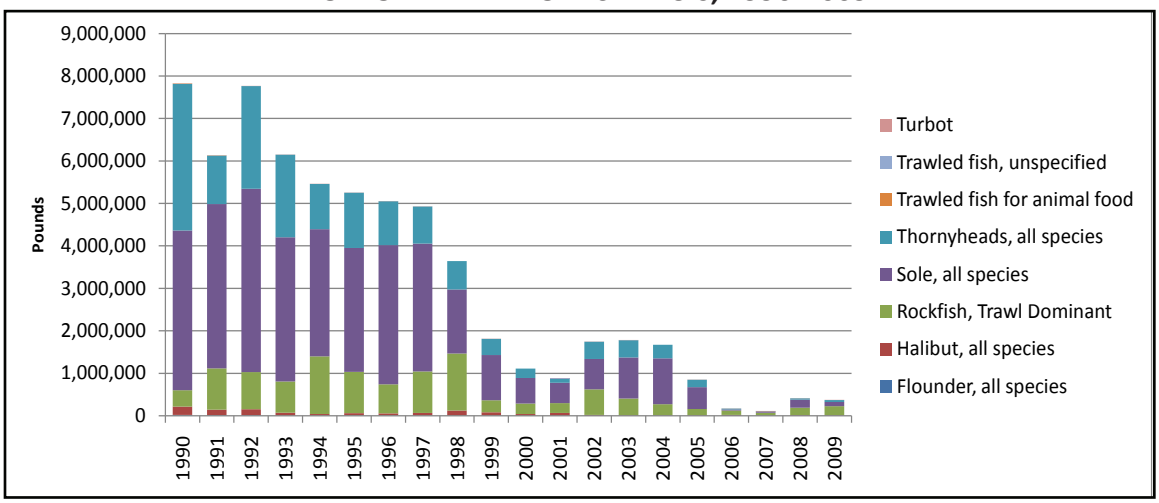
FIGURE 8. TRAWL SPECIES LANDINGS AS A PERCENTAGE OF TOTAL LANDINGS, MORRO BAY AND PORT SAN LUIS, 1990-2009



Source: California Department of Fish and Game

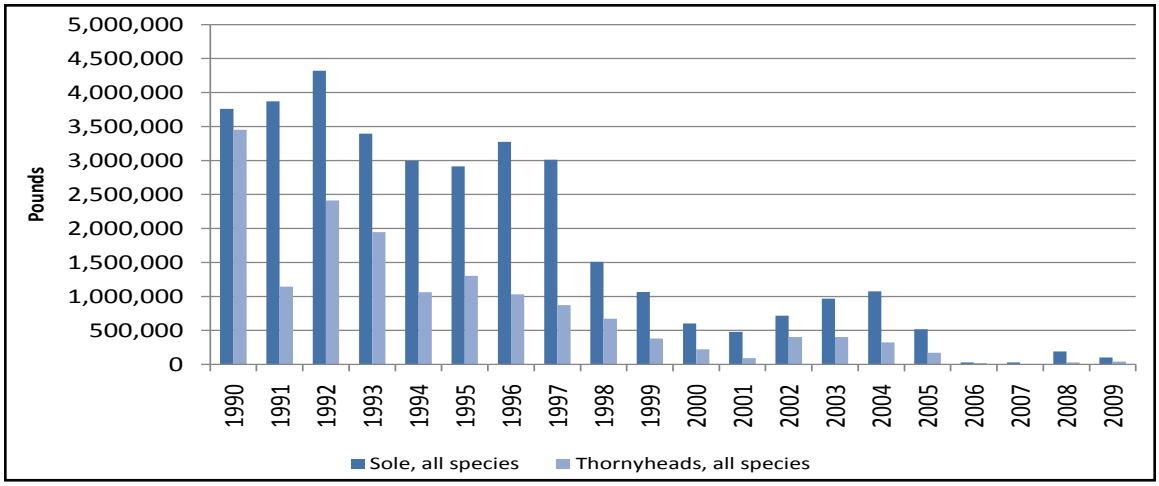
Several species, such as turbot, sole, halibut and flounder are nearly impossible to catch in traps or hook and line on a commercial basis, and thus, targeted predominately using trawl gear. As Figures 9 and 10 illustrate, sole and thornyheads, have historically represented significant "trawl" landing activity and economic value. Sole (all species) was the top landed (weight) category between 1990 and 2009 at 34.8 million pounds total, and accounted for 27% of total weight landed for both ports. There were approximately 15.9 million pounds of thornyheads landed by trawl vessels (12% of total weight) in the same time period. Sole EVV was $11.7 million (11% of total EVV) at an average of $0.34 per pound. Thornyhead EVV was $9.2 million (9% of total EVV) at an average of $0.58 per pound.

FIGURE 9. TRAWLED SPECIES LANDINGS (LBS.), MORRO BAY AND PORT SAN LUIS, 1990-2009



Source: California Department of Fish and Game

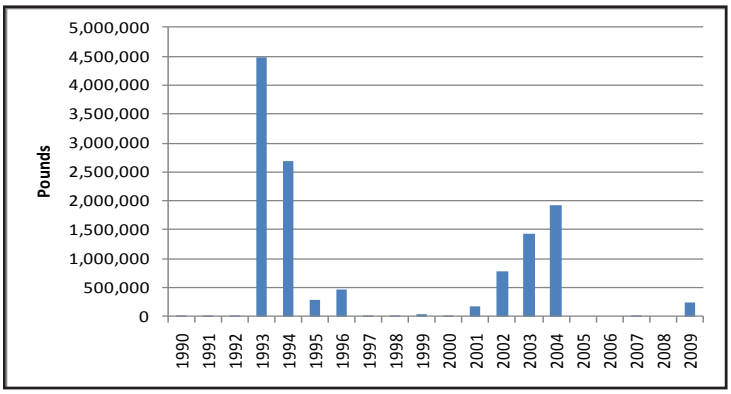
FIGURE 10. SOLE AND THORNYHEAD LANDINGS (LBS.), MORRO BAY AND PORT SAN LUIS, 1990-2009



Source: California Department of Fish and Game

Other Top Landed Species

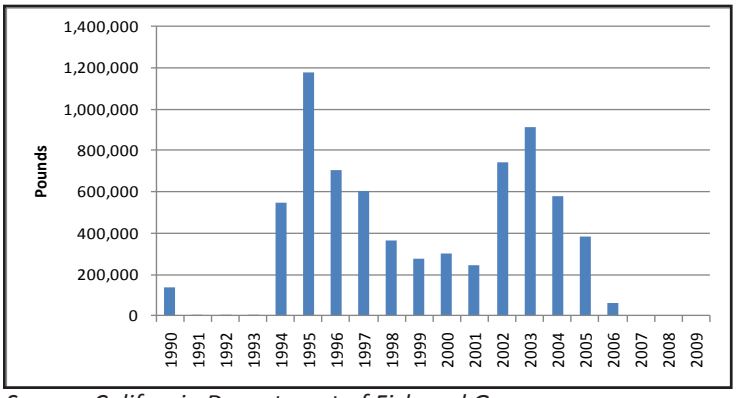
Figure 11. Market Squid, Both Ports, 1990-2009



Source: California Department of Fish and Game

Market Squid landings (Figure 11) accounted for approximately 1/3 of all landings in 1993. Besides high landings in 1994, and again between 2002 and 2004, landings were virtually non-existent in all other years. Market squid accounted for nearly 10% of all species landed between 1990 and 2009. However, of the 12.5 million pounds of market squid landed in that period, EVV totaled just $1.9 million, or less than 2% of total EVV at $0.20 per pound.

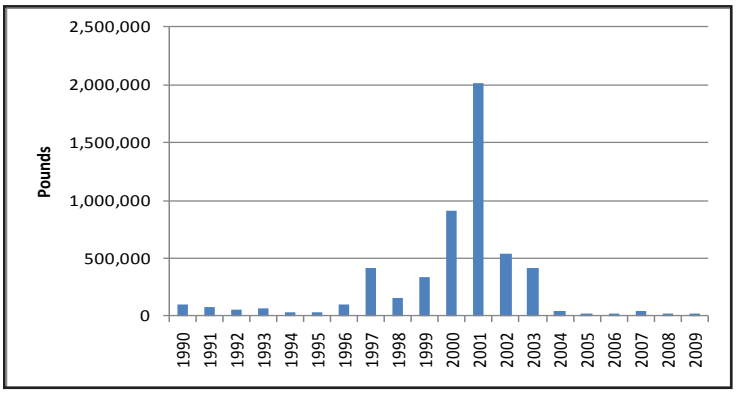
Figure 12. Shrimp, Both Ports, 1990-2009



Source: California Department of Fish and Game

Shrimp landings (Figure 12) totalled 7 million pounds, or 5.5% of all species between 1990 and 2009. Landings were highest in 1995 and 2003; however, there were virtually no landings of shrimp in the early 1990s or 2006-2009. Shrimp EVV accounted for $3.7 million, or 3.5% of overall EVV between 1990 and 2009 at $0.52 per pound.

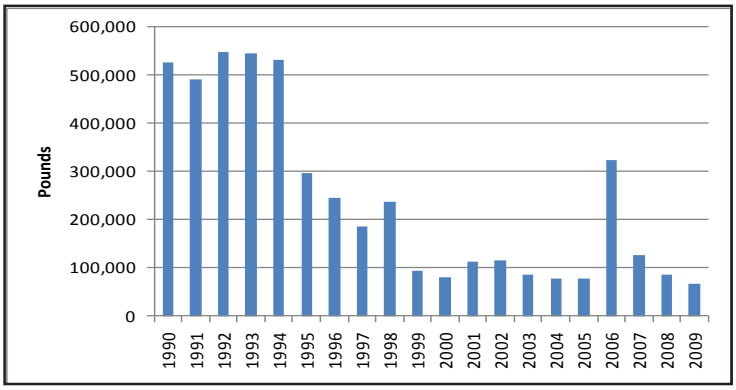
Figure 13. Tuna, Both Ports, 1990-2009



Source: California Department of Fish and Game

Tuna landings (Figure 13) in 2001 were nearly 2 million pounds. 1990 through 1996 and 2004 through 2009 saw practically no tuna landings. Between 1990 and 2009, tuna EVV is approximately $4.5 million at $0.82 per pound. Albacore accounts for approximately 95% of all tuna landed at both ports.

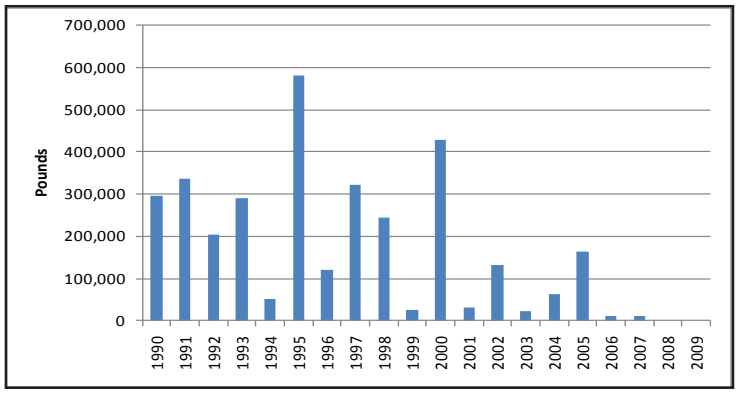
FIGURE 14. CRAB, BOTH PORTS, 1990-2009



Source: California Department of Fish and Game

Dungeness crab and "Unspecified Rock Crab" (Figure 14) held the highest landings of all crab species at both ports between 1990 and 2009. Crab landings dropped by almost 50% in 1995 from their 1990-1994 levels. Landings in the mid 1990s through 2005 remained a fraction of the 1990-1995 levels. Crab landings totaled 4.9 million between 1990 and 2009, and accounted for $6.9 million in EVV at $1.42 per pound.

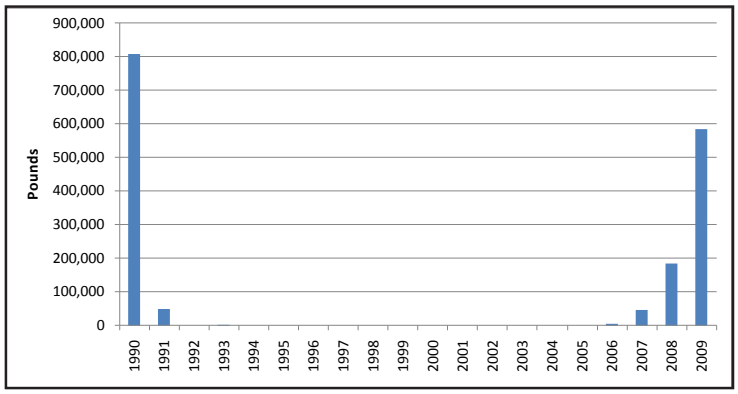
FIGURE 15. SALMON, BOTH PORTS, 1990-2009



Source: California Department of Fish and Game

Like squid, tuna, and crab, salmon is cyclical, and landings are inconsistent (Figure 15). Salmon landings accounted for 3.3 million pounds, or 2.6% of total landings between 1990 and 2009. Salmon EVV was $7.4 million in the same period, or 7.1% of overall EVV at $2.22 per pound.

FIGURE 16. HAGFISH, BOTH PORTS, 1990-2009



Source: California Department of Fish and Game

While Pacific hagfish did not make the top landed species for the 1990-2009 study period, landings saw a significant uptick in 2007, 2008 and 2009 (Figure 16). The Pacific hagfish fishery contributed significantly to employment, wages and spending in the community as well as providing opportunities for several commercial fishermen.

2010 LANDINGS SUMMARY

In 2010, Morro Bay experienced a large influx of commercial fishing vessels targeting sablefish in the open access fishery. A majority of these vessels came from ports north of Morro Bay, specifically north of 36° North latitude (the north-south dividing line for open access sablefish trip limits). Open access sablefish weekly trip limits south of 36° North latitude from January to August 2010 were 1,500 pounds, while the during the same time period they were 800 pounds north of 36° North latitude. From September to December 2010, open access weekly trip limits for sablefish increased to 2,500 pounds south of 36° North latitude, while the weekly trip limit increased only to 950 pounds north of 36° North latitude. The majority of visiting vessels in Morro Bay were from Moss Landing and came to land sablefish south of 36° North latitude, and capitalize on economic opportunities not available in their home port.

Due to the drastic decrease in petrale sole trip limits, The Nature Conservancy has been unable to find an interested party to lease the trawl vessel, f/v *South Bay*, and thus there were no trawl landings by the f/v *South Bay* in 2010.

Trawler landings in MB and PSL dropped to almost zero in 2010. This is likely due to the PFMC's request to the National Marine Fisheries Service to propose interim changes to 2009 – 2010 management measures to reduce petrale sole landings in response to a revised and lower stock assessment. The reduction in the petrale sole trip limits in 2010 made it uneconomical to trawl considering sole species, specifically petrale sole, accounted for more than 27% of the total landings for these ports from 1990 to 2009.

Landings for Dungeness crab and salmon were very limited in both Morro Bay and PSL in 2010. Even though there was a salmon season (8 days) in the waters surrounding Morro Bay and PSL in 2010, commercial salmon landings in Morro Bay and PSL were limited or non-existent.

Other items of note in 2010 are the continued development of the market for live thornyheads and local halibut and white sea bass landings. Both the Exempted Fishing Permit participants and the Limited Entry Fixed Gear permit holders have successfully developed markets for live thornyheads. In 2010, ex-vessel value (EVV) for live thornyheads was as high as $5.50 per pound, while dead thornyheads in the round fetched an approximately $1.10 to $1.20 per pound. Morro Bay and PSL also saw an increase in halibut and white sea bass landings in 2010. Halibut were landed by a fleet of small, primarily trailerable boats. White sea bass is normally not landed by commercial fishermen in large amounts in either Morro Bay or Port San Luis. However, 2010 saw an increase in landings that is likely attributed to the abundance of market squid (prey) in surrounding waters.

Morro Bay also gained a small offloading facility at the Tognazzini Dockside Too site. Additional offloading opportunities increase competition and ultimately benefit fishermen by providing more options and potentially, access to more markets.

Central Coast Groundfish Program (CCGP)

In late 2007, the CCGP began with the TNC-owned *F/V South Bay* fishing trawl gear under gear restrictions, spatial reporting and gear constraints. In 2008, the commercial fishing communities of Morro Bay and Port San Luis began executing an exempted fishing permit (EFP) within the larger CCGP. Following the success of the 2008 EFP, sponsors of the EFP petitioned the PFMC and were granted permission to fish the EFP in 2009 and 2010. EFP sponsors include: the Morro Bay and Port San Luis commercial fishing organizations, the City of Morro Bay, Port San Luis Harbor District, TNC, NOAA, and CDFG. The EFP gives selected fishermen access to groundfish quota associated with six (6) federal groundfish trawl permits owned by TNC by using non-trawl gear, observing spatial restrictions, and adhering to monitoring and reporting requirements.

Since the inception of the CCGP and as of August 2010, the program has generated approximately 1,273,789 pounds in landings and $1,826,000 in EVV.

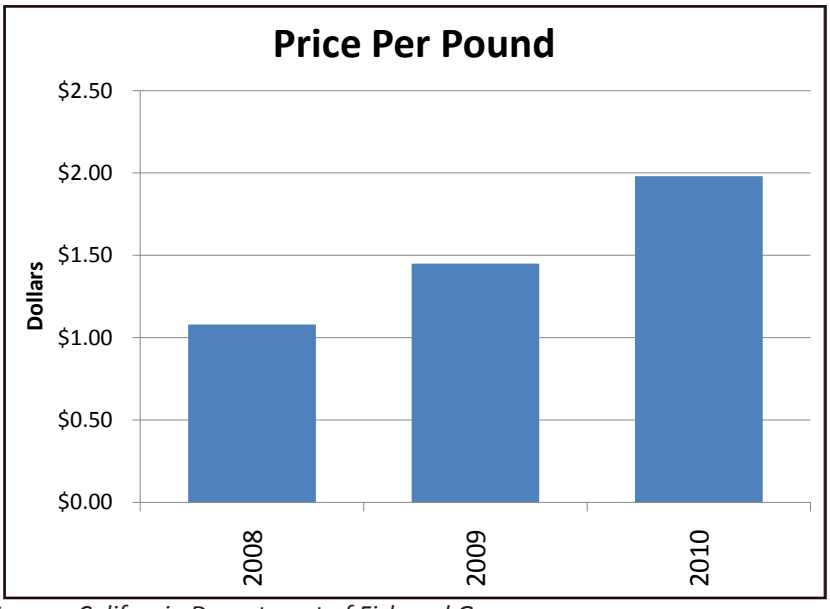
Fishing in 2007 occurred late in the year, but landings exceeded 45,800 pounds with an EVV of more than $50,000. Petrale sole and bank rockfish were the top landed species during the few trips conducted in late 2007.

In 2008, CCGP landings totaled 437,068 pounds, and earnings were approximately $472,000. Four fishermen participated in the program in 2008. The majority of the catch was sole species (petrale, dover, rex and English sole) with over 275,000 landed and over 125,000 pounds of rockfish species were also landed. CCGP landings in 2008 contributed approximately 33% to the total landings in Morro Bay and Port San Luis.

In 2009, CCGP landings totaled 487,703 pounds, and earnings exceeded $705,000. Five fishermen participated in the program in 2009, and landings accounted for approximately 17% of total landings in Morro Bay and Port San Luis.

By August of 2010, CCGP landings totaled more than 289,000 pounds, and earnings exceeded more than $574,000. Six fishermen participated in the CCGP in 2010. There were no trawler landings in the program in 2010.

FIGURE 17. AVERAGE PRICE PER POUND 2008-2010



Source: California Department of Fish and Game

The average price per pound associated with CCGP landings has increased each year of the program (Figure 17). In 2008, the average price per pound was $1.08 and increased to $1.45 in 2009. In 2010, the average price per pound continued to increase and by August the average had reached $1.98 per pound.