RC 034

To the Board of Fish,

My name is Mike Crawford. I live in Soldotna Alaska. I am a lifelong fisherman and hunter. Prior to moving to Alaska in 2000, I lived in Washington State for 12 years. I grew up in east Texas. Since moving to Alaska I have become a member of the Kenai-Soldotna fish and game Advisory committee. I have been the chairman of the AC for approximately 8 years. I have attended numerous BOF, BOG, meetings. I authored proposals 245, 253, 258.

In 2009 I attended the BOF meeting in which a commercial fishing season was revived by the board. The board was convinced that ADFG had the ability and knowledge to manage this new fishery. Many sport fisherman felt that the fishery was already maxed out. Several department biologists amazed us with science that included tagging of shrimp and other amazing feats. They assured the board that they knew what they were doing. They were so sure of themselves on this. They have shown you how they think everything is ok. Look a little closer at the numbers they have presented. I have included department supplied data from RC-3. In the BOF meeting in 2012 they did it again. The ADFG led the board to believe that they still knew everything about the shrimp in PWS. The board took away the sport fish allocation. Turning it into a GHL. They made no mention of the lack of shrimp in area 3 to be fished that year. I do not remember the admission that they should have made. They could not even figure out how many pounds of shrimp were in a gallon. They missed that by over 60%! This mistake led to the over harvest for several years. There is a question if this commercial fishery is profitable. Some people think that it is not. Look to the department's own proposal 257. Do they think some may be cheating?

Before you look at this again, remember that ADFG has NOT successfully managed a single shellfish fishery in south central Alaska. History shows that they mismanaged the PWS spot shrimp fishery in the past. How long has it been since there was a shrimp season in Kachemak Bay? How about Tanner crabs, Dungeness crabs, King crabs, Steamer clams, Razor clams, Butter clams, Mussels? The ADFG has managed these fisheries into closures.

In the past when the PWS fishery was closed we averaged a harvest across the entire Inlet of 230,000 pounds a year for 8 years. We now have fished 5 years averaging 150,000 pounds. This is in a smaller area than before. Where is the line at? When do we collapse the fishery for 20 more years again?

Proposal 245
I ask you to reinstate the allocation so the department can manage in both times of abundance, and when we have low abundance. I am not asking for more GHL just a return of the allocation that was taken away in 2012.

Proposal 249
I ask you to institute a subsistence permit. This is included in the current permit but there is no way of knowing what portion is subsistence.

Proposal 253
Reinstate the super exclusive language that you put into the original plan.

Proposal 254
Keep the 25% rule per stat area as it is now.

Proposal 258
Close the commercial fishery until some acceptable limits in harvest which will prevent the crash of this fishery.

This table shows the failure of the commercial fishery in area 3 in 2012. The important issue here is the department told the board the shrimp were there. The 51240 GHL preseason number resulted in a 42% miss.

Table 1.-Prince William Sound total allowable harvests (TAH), guideline harvest levels (GHL), and harvests in commercial and noncommercial shrimp pot fisheries, 2010-2014.

		GHL (lb)		Shrimp Harvest (lb)			% of
Year	TAH (lb)	Noncommercial	Commercial	Noncommercial	Commercial	Total	TAH
2010	137,500	82,500	55,000	142,146	45,349	187,495	139
2011	131,900	79,140	52,760	95,924	52,694	148,618	113
2012	128,100	76,860	51,240	90,385	21,561	111,946	87
2013	165,750	99,450	66,300	85,988	61,644	147,631	89
2014	166,500	99,900	66,600	89,155	68,464	157,619	95

Table 2 shows reduction in egg bearing shrimp. Area 1 (2010-2013) shows a reduction from 17% to 12.5%

Area 2 (2011-2014)shows reduction of 24.9% down 10.1%

Table 2.-Prince William Sound spot shrimp survey results, 1992-2014.

	Number of	Catch	Average	Number of	Percent		
Year	Pots	Weight (lb)	lb/Pot	Shrimp	Male	Female	Egg Bearing
1992	349	249	0.71	5009	88.2	11.8	11.4
1993	325	121	0.37	2434	80.6	19.4	19
1994	355	145	0.41	4128	95.1	4.9	4.7
1995	350	206	0.59	5053	95.7	4.3	3.9
1996	350	182	0.52	4618	94.9	5.1	NA
1997	345	142	0.41	3835	94.1	5.9	5.6
1998	264	76	0.29	2252	94.6	5.4	5.3
1999 [a]	346	165	0.48	4392	94.3	5.7	5.6
2000	349	245	0.7	6545	95.1	4.9	4.7
2001	351	331	0.94	7034	92.7	7.3	7.3
2002 [b]	304	377	1.24	8797	91	9	8.9
2003	352	398	1.13	9333	92	8	8
2004	352	502	1.43	12,593	91.5	8.5	8.3
2005	349	481	1.38	14,453	95	5	4.7
2006	346	553	1.6	14,203	91.6	8.4	7.7
2007	349	838	2.4	24,152	94.2	5.8	4.8
2008	348	893	2.56	23,004	93.4	6.6	5.4
2009	351	825	2.35	17,622	86.2	13.8	12.1
2010	350	478	1.37	8,585	81.8	18.2	17
2011	350	687	1.96	11,627	74.8	25.2	24.9
2012	392	834	2.13	15,928	84.7	15.3	13.9
2013	392	744	1.9	14,453	85.7	14.3	12.5
2014	393	752	1.91	16,051	89.2	10.8	10.1

Note: NA = Data not available.

[a] Sex data interpolated for 452 lost data points.

[b] Sex data interpolated for 192 lost data points.

Table 4 shows area 1 (2010 -2013) reduction from 2.52lbs down to 1.77lbs a reduction of ¾ of a pound per pot.

Area 2 (2011-2014) 1.78lbs down to 1.67lbs. down .11lbs per pot.

Table 4.—Prince William Sound commercial shrimp pot fishery guideline harvest levels (GHL), effort, gear limits, harvest, and catch per unit effort (CPUE), 2010-2014.

			Effort		Gear limits			Shrimp harvest (lb)			CPUE
Year	Area	GHL (lb)	Vessel count	Pot lifts	Open	Close	Spot	Coonstripe	Other	Total	(lb/pot)
2010	1	55,000	75	18,025	20	20	45,076	263	10	45,349	2.52
2011	2	52,760	45	29,580	40	40	51,302	1,204	44	52,550	1.78
2012	3	51,240	35	19,644	50	50	18,097	3,428	36	21,561	1.10
2013	1	66,300	43	34,804	30	50	59,376	2,266	2	61,644	1.77
2014	2	66,600	32	41,027	40	50	64,220	4,085	158	68,464	1.67

Table 5 shows the department allowed the overharvest by the department miscalculating the pounds per gallon.

That number went from 2.41 pounds to 3.89 pounds. A 61% error.

Table 5.-Number of permits issued, reporting rate, total pot days of effort, total harvest of whole spot shrimp, catch per unit effort (CPUE), and the total number of lost pots by year in the noncommercial pot shrimp fishery, Prince William Sound.

			Estimates using conversion factor known at the time [a]		Estimates using current conversion factor (3.891b./gal) [a]			
Year	Permits issued	GHL [a]	Harvest (lb) [a]	% of GHL (known) [a]	Effort (pot days)	CPUE	Harvest (lb)	% of GHL
2002	71		9,288		19,387	0.78	15,054	
2003	1,061		13,965		24,094	0.94	22,635	
2004	1,649		25,694		30,694	1.36	41,645	
2005	2,112		31,950		37,271	1.39	51,785	
2009	2,733	57,900 [b]	56,120 [b]	97% [b]	47,631	1.91	90,961	
2010	3,181	82,200	87,699	107%	78,083	1.82	142,146	
2011	3,309	79,200	59,182	75%	56,543	1.70	95,924	
2012	3,098	76,860	55,765	73%	52,620	1.72	90,385	
2013	3,101	99,500	85,988	86%	48,967	1.76	85,988	86%
2014	3,134	100,000	89,155	89%	48,283	1.85	89,155	89%
5 year average	3,165	87,552	75,558	86%	56,899	1.77	100,720	NA
Average (2012-2014)	3,111	92,120	76,969	83%	49,957	1.77	88,509	88% [c]

Note: For the years 2006-2008, permits were not required for noncommercial shrimp harvests in PWS. Harvest data for these years are not comparable and therefore are not included here. *CPUE is catch per unit of effort and GHL is guideline harvest level.*

[a] From 2002 to 2012, a conversion factor of 2.41b/gallon of shrimp was used to estimate harvest in pounds. In late 2012, this conversion factor was re-evaluated and set at 3.89 lb/gallon based on ADF&G study (Mara Wessel, Commercial Fisheries Biologist, ADF&G, Cordova; unpublished data).

[b] These numbers were produced with incorrect conversion factor of 2.4 lb/gallon.

[c] Represents the 2 years since the previous BOF meeting (2013 and 2014) under current regulations and where the updated conversion factor of 3.89 gal/lb were used.

Figure 3 shows the decline in the largest most fecund shrimp.

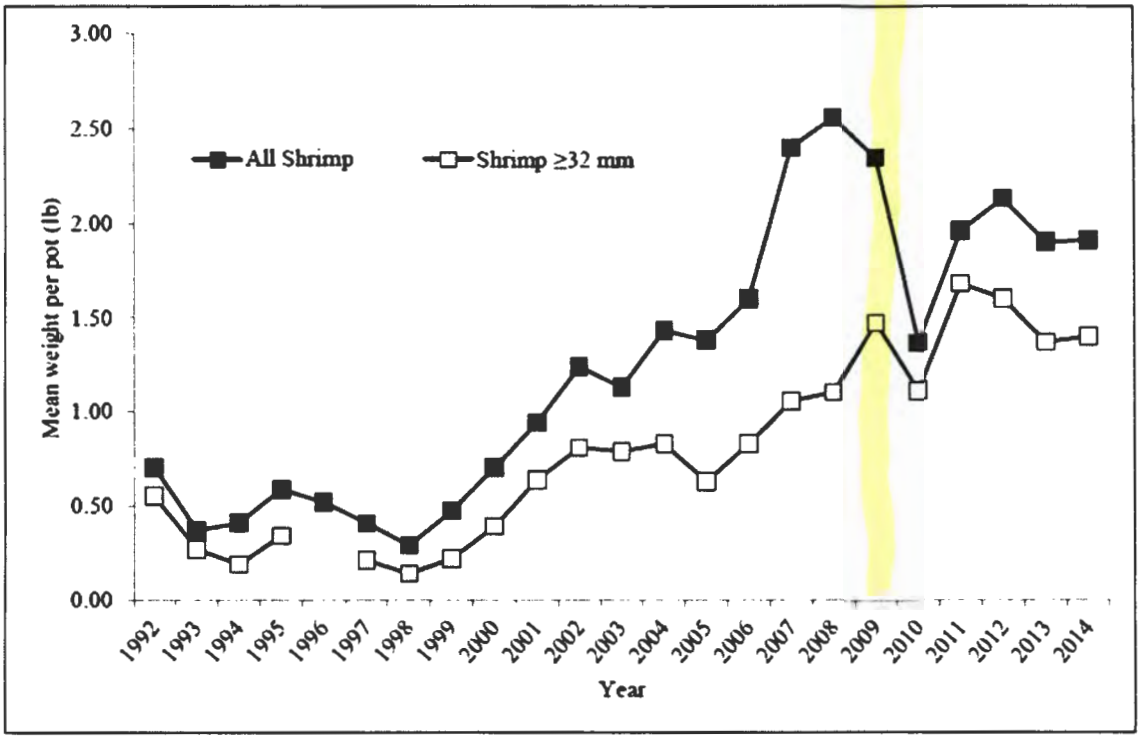

Figure 3.–Prince William Sound spot shrimp survey mean (average) weight of all spot shrimp and commercially marketable spot shrimp per pot (those equal to or greater than 32 mm in carapace length).

Note: **Data for spot shrimp 32 mm and greater not available for 1996.**

Figure 4 shows the decline in the effort, harvest, and CPUE. Remember the question on how many pounds of shrimp per gallon. These are best guesses from the shrimper. Actual weight would clean this up for better estimates of sport catch.

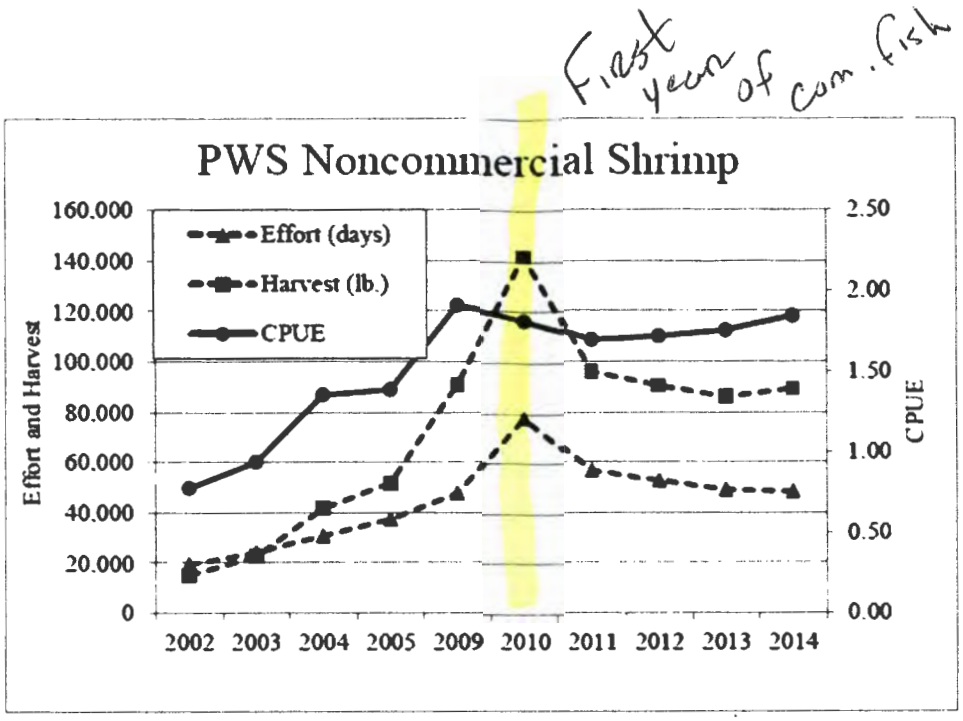

Figure 4.–Total estimated harvest, effort, and catch per unit effort (lb of whole shrimp caught in 1 pot soaked for 24 hr; CPUE) in the nonconmmercial pot shrimp fishery of Prince William Sound.

Figure 5 shows the downward trend of the fishery. The top part shows that the area near Whittier and Port Wells has declined and not recovered from the opening of area 2 to commercial fishing.

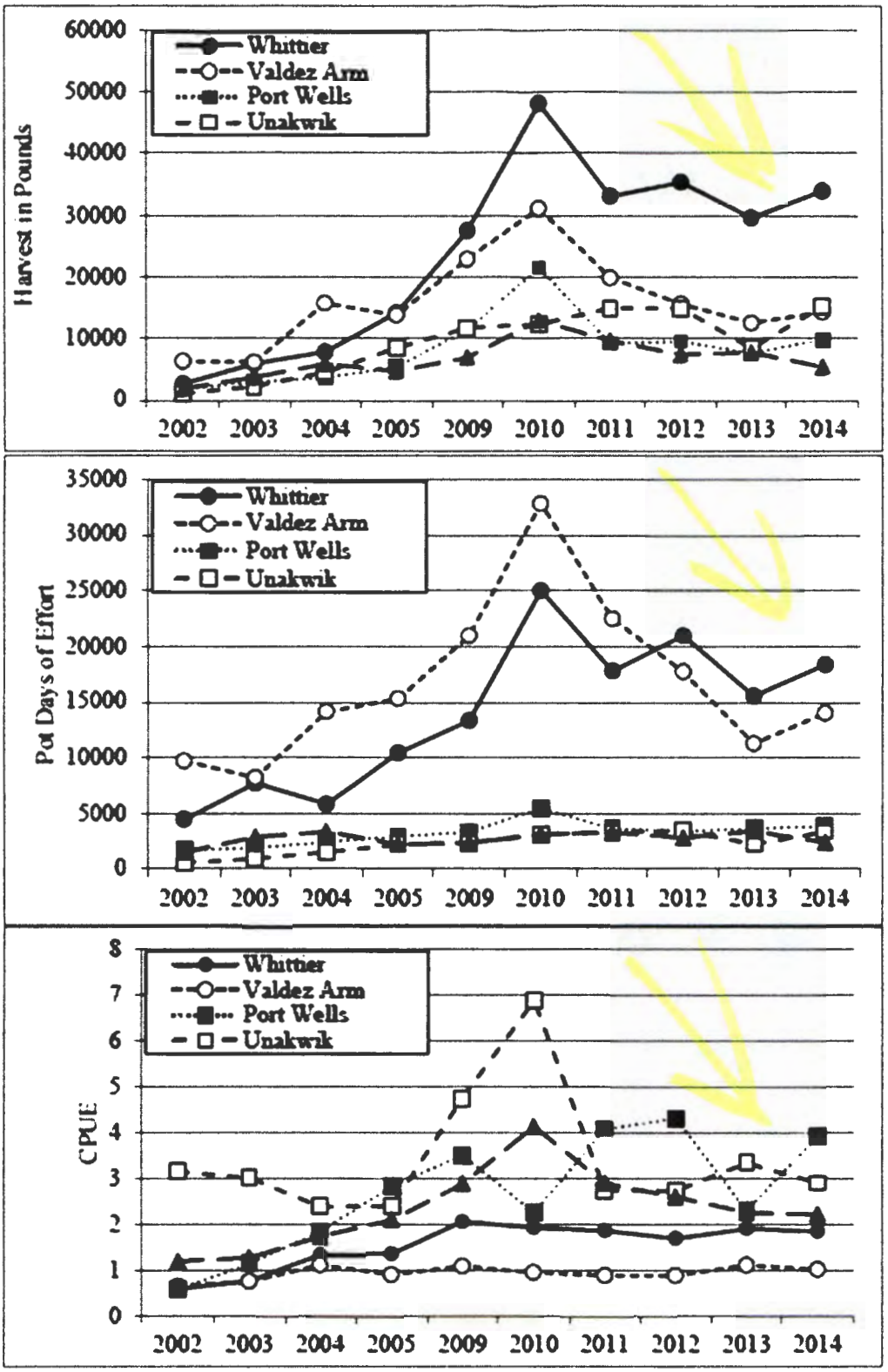

Figure 5.–Harvest, effort, and catch per unit effort (lb of whole shrimp caught in 1 pot soaked for 24 hr; CPUE) at the 5 statistical areas that support the majority of effort and harvest in the noncommercial pot shrimp fishery of Prince William Sound.