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**Analysis of a salmon allocation plan for Prince William  
Sound based on enhanced salmon.**

Prepared under contract to the Cordova District Fishermen United Gillnet Division for  
the Alaska Board of Fisheries.

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## Table of Contents

Introduction .....	1
Data Sources and Methodology .....	1
Trends in the fishery.....	2
An Enhanced Only Allocation Plan .....	7
Background .....	7
The Morris Concept Proposal .....	8
Feasibility of the Morris Concept Plan .....	8
Impact of the Morris Plan to Allocation Trends .....	9
Conclusions .....	10
References: .....	12
ACRONYMS USED IN THIS REPORT .....	13
Appendix A. Morris Concept Proposal .....	14
Appendix B. COAR Prices and ZEPHYR avg. weights. ....	15
Appendix C. Wild and enhanced harvest data. ....	18
Appendix D. Wild & enhanced value data.....	21
Appendix E. Enhanced only harvest data.....	24
Appendix F. Enhanced only value data.....	25

## **Introduction**

The commercial fishermen of the Prince William Sound management area have invested a great deal of time and effort developing the Sound's hatchery program. Along side the highly successful hatchery program fishermen, aquaculture associations and managing agencies have developed policies and regulations that insure an equitable allocation of hatchery produced salmon stocks. Over time the Sounds fisheries have shown periods of dramatic change resulting from various natural, man made and economic pressures. This evolution has necessitated the periodic review and revision of these policies and regulations. At the December 2005 Alaska Board of Fisheries meeting, numerous proposed regulatory changes will be reviewed. Many of these proposals focus on alterations of 5AAC 24.370. Prince William Sound Management and Salmon Enhancement Allocation Plan. Over the course of the regulatory cycle, a new concept for structuring this allocation plan has emerged. This concept, introduced by Board member Mel Morris, removes wild salmon from the scheme, basing the regulatory allocation structure entirely on enhanced salmon (Appendix A).

In this report fishery trends and the allocation history over the past 46 years are reviewed. A focused analysis is performed of the most recent nine years where mass marking techniques have enabled ADF&G research staff to generate a statistically robust estimates by stock of each hatcheries contribution to the commercial fisheries. These data provide a clearer picture of allocation situation of today and how an allocation scheme based on only enhanced salmon might function.

## **Data Sources and Methodology**

Data used in this report come from a variety of sources. The data used to portray ex-vessel values by gear type for the years 1960 – 1984 come from the Prince William Sound Aquaculture Corporation (PWSAC) Allocation Task Force's Trends and Conditions report (Allocation Task Force, February 1990). These data have been broadly accepted by the PWS stake holders, and have been used as the foundation for the establishment of the allocation percentages currently contained in 5 AAC 24.370.

Commercial harvest data for the years 1985 – 2004 were obtained from ADF&G, Commercial Fisheries HQ (Plotnick, 2005). These data are a summary run of the state's fish ticket database using the query application ZEPHYR. The data set used contains annual commercial harvest numbers and pounds, for each species of salmon, each district of Prince William Sound and each commercial gear type (cost recovery fish were excluded). Due to the state's confidentiality statutes, data records that have fewer than four unique permits are considered confidential and are not included. These confidential records amounted to 0.2% of the total landings; consequently any error resulting from the omission of these data is negligible. A summary of this data is presented in Appendix C.

Price data for the years 1985 – 2004 were provided by ADF&G, Commercial Fisheries HQ. These data are a summary run of the state's Commercial Operators Annual Report (COAR). The data set used contains average annual price per pound, for each species of

salmon, and each commercial gear type (cost recovery fish were excluded), the processors paid in the Prince William Sound management area. This data is not distinct specific. Due to the state's confidentiality statutes, set gillnet price data for some years were considered confidential and were not included in the data provided by ADF&G. Average prices for these years were interpolated from non-confidential drift gillnet price records. A summary of this data is presented in Appendix B.

Price data for the 2005 season are estimated based on information received from commercial fishermen, processors and ADF&G.

Hatchery contributions to the commercial fisheries for the years 1997 – 2005 were provide by the ADF&G PWS research staff (Moffitt, 2005). These data are the best available data for enhanced salmon contributions in PWS. The data consists of estimated annual enhanced salmon contributions (number of fish) to each district, by hatchery stock. District contributions that are shared by more than one gear type are proportionately allocated to gear type based upon each gear type's proportion of the total harvest from that district.

To generate estimates of value by gear type for the years 1985 – 2004, price data from COAR, and production data from ZEPHYR were merged, using a query in Microsoft Access. Value was calculated as the product of price and pounds for each specific species, gear type and district. A summary of these results are provided in Appendix D. To generate estimates of the value of enhanced only contributions by gear type for the years 1985 – 2004, price data from COAR, average weight data from ZEPHYR were merged with hatchery contribution data, using a query in Microsoft Access. A summary of these results are provided in Appendix F. The year 2005 is a special case as COAR data is not yet available. Consequently value data for 2005 should be treated as preliminary.

## **Trends in the fishery**

**The Wild Stock Period 1960-1980.** Over the past 46 years there have been distinct periods of change in the fishery values as illustrated in Figure 1. Three distinct periods emerge from these data. The first period from 1960 through about 1980, is a period during which the fishery was composed almost exclusively of wild stocks. When the Prince William Sound salmon allocation plan was developed, these years were used as a baseline. The allocation percentages in the plan, 50% seine, 49% drift gillnet and 1% set gillnet, derived from this period (1960-84), representing long term average production prior to significant contribution from hatchery stocks.

**The Hatchery Dominated Period.** The second distinct period is from about 1978 through 1992. During this period the value of all fisheries increased dramatically. Salmon markets were favorable and hatchery production was contributing significantly to the values of the PWS salmon fisheries.

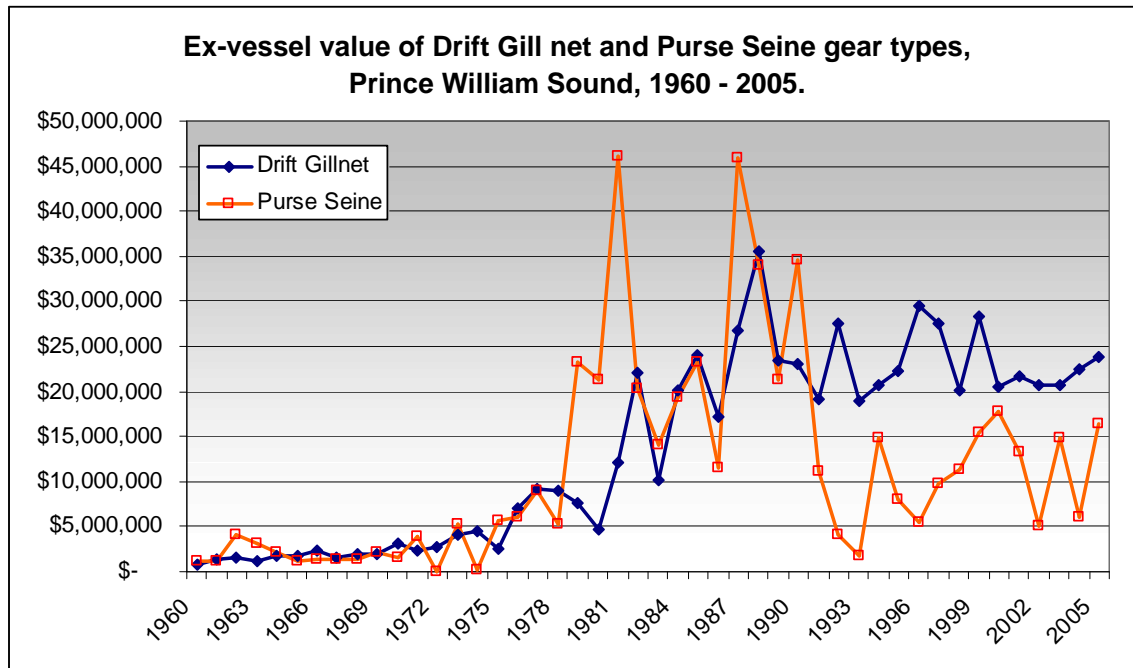
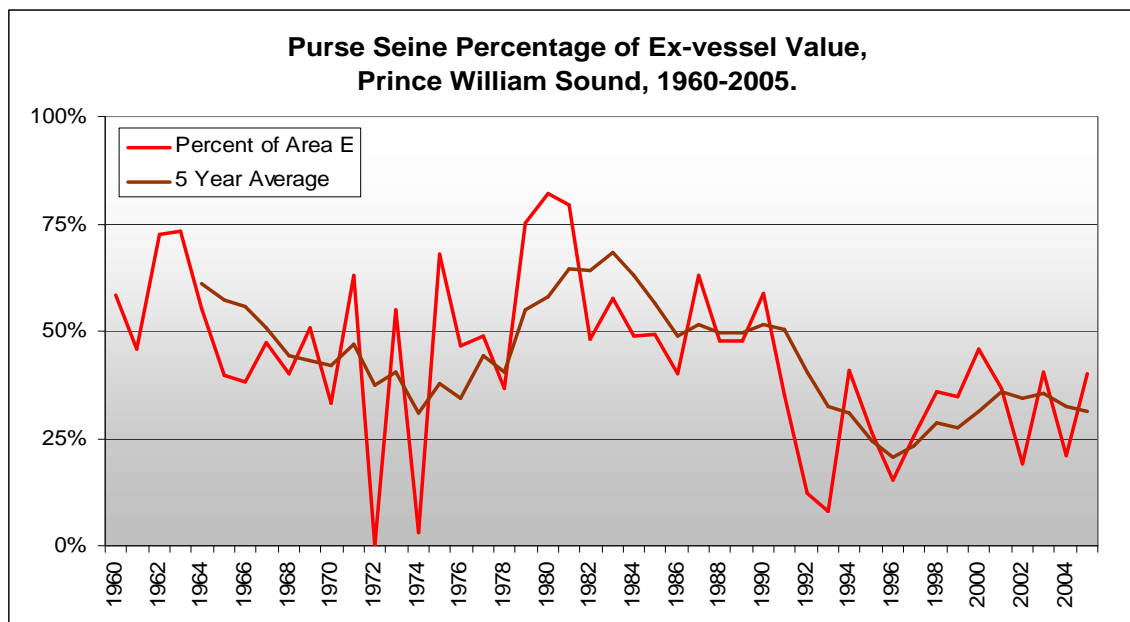


Figure 1. Ex-vessel value of Drift Gillnet and Purse Seine commercial harvest of wild and hatchery salmon in Prince William Sound, 1960 – 2005. Data for years 1960 – 1984 from PWSAC Allocation Task Force. Data for 1985 – 2005 from ADF&G Zephyr and COAR databases. 2005 data preliminary.

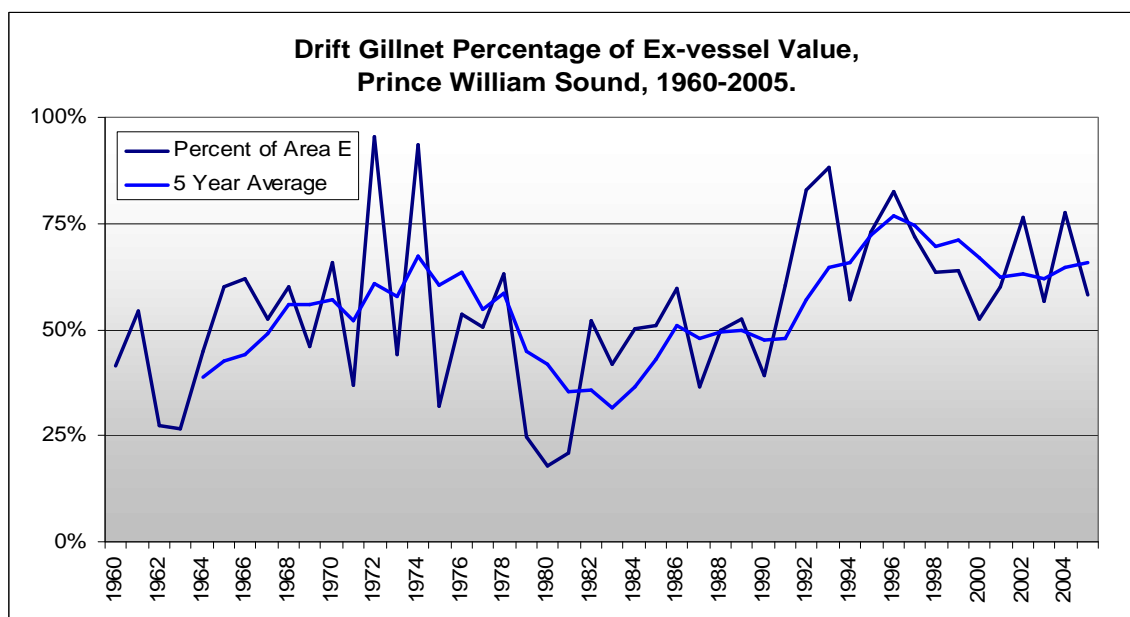
**The Price Collapse Period.** The third period is from 1992 through the present. It is apparent that starting in 1992 the period of economic growth in the fishery came to an abrupt end, as salmon markets entered a period of decline. Also noteworthy in this phase in the departure of the purse seine trend line from that for drift gillnet.

Figures 2 and 3 illustrate how allocation between purse seine and drift gillnet values has trended on a proportional basis. Focusing first on Figure 2, the annual purse seine ex-vessel value is plotted as a proportion of the total ex-vessel value of the Prince William Sound common property salmon harvest. These values correspond to the percentages referred to in the 5 AAC 24.370. The second line on this graph is a smoothed trend line calculated from a running five year average. During the first, wild stock dominated time period (1960-1978), seine values start above the 50% trend line and then are pulled below by the total fishery closures in 1972 and 1974. In the second, hatchery dominated, period (1978-1992) the seine fishery recovered remained predominately above the 50% trend line. In the third, price collapse period, the seine fishery trend line falls below the 50% reference line and also falls for a period below the 25% reference line.

In Figure 3, the same information is plotted for the drift gillnet gear type. The drift gillnet trend lines in large part track as a mirror opposite of the purse seine trends. Set net percent of ex-vessel values are not plotted. These values range from 0-5% and have little influence over the purse seine and drift gillnet trend lines.



**Figure 2. Purse seine gear percentage of the total ex-vessel value of the commercial harvest of wild and enhanced salmon stocks in Prince William Sound, 1960 – 2005. Data for years 1960 – 1984 from PWSAC Allocation Task Force. Data for 1985 – 2005 from ADF&G Zephyr and COAR databases. 2005 data preliminary.**



**Figure 3. Drift gillnet gear percentage of the total ex-vessel value of the commercial harvest of wild and enhanced salmon stocks in Prince William Sound, 1960 – 2005. Data for years 1960 – 1984 from PWSAC Allocation Task Force. Data for 1985 – 2005 from ADF&G Zephyr and COAR databases. 2005 data preliminary.**

**The Copper River Effect.** It is clear from these data that the price collapse that contributed to the third period referenced above, had a much greater impact on purse seine fisheries than it did on the drift gillnet fishery. This differential is largely due to the success of the marketing program for Copper River sockeye salmon. The Prince William Sound seine fishery is largely dependant upon price trends in pink salmon which contribute on average 79% of the ex-vessel value (Brady, 2005). Figure 4 depicts Prince William Sound pink salmon prices as compared with other pink salmon fisheries in the state. It can be noted that PWS pinks trended like most other pink stocks in the state, showing a sharp decline after 1988. As a result of this price collapse, purse seine effort in Prince William Sound also dropped precipitously from 1991 when 96% of the permits in the fishery were active to less than 50% of the permit being fished in 1999, Figure 6.

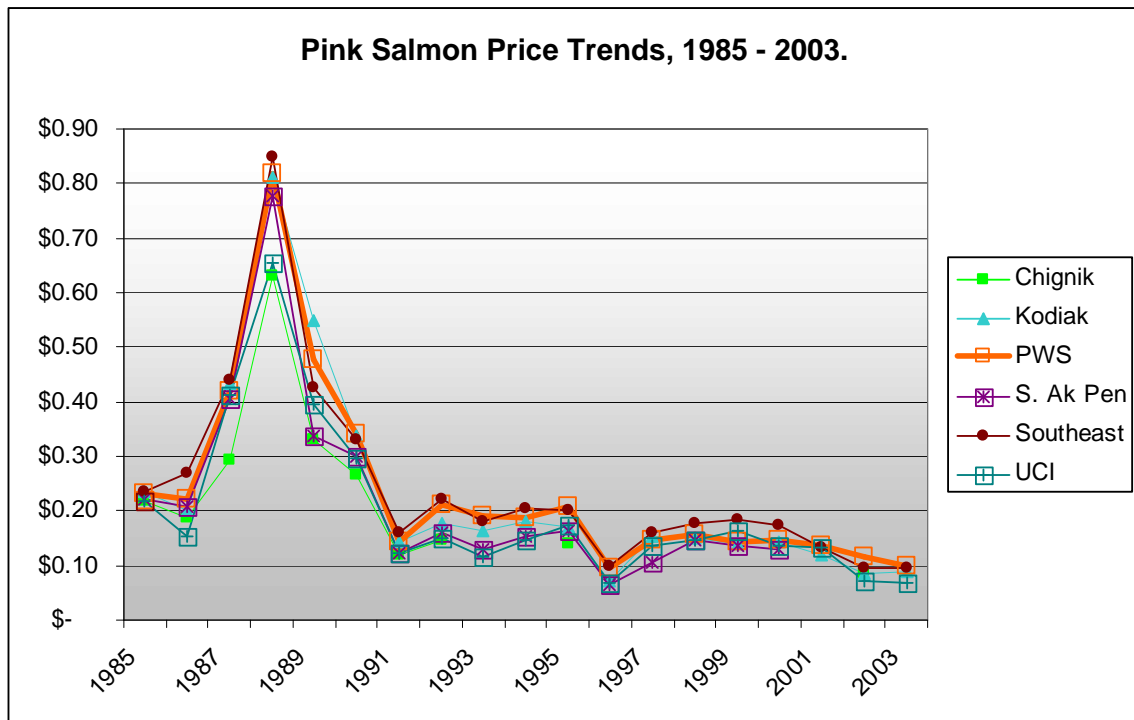


Figure 4. Average annual pink salmon price in Prince William Sound seine fishery as compared with other major commercial fisheries in Alaska, 1985 through 2003. Data from COAR.

By contrast the sockeye salmon price trends in the Prince William Sound gillnet fisheries have consistently performed above the prices in other sockeye fisheries in Alaska, Figure 5. These data, from the Commercial Operators Annual Report (COAR) database reflect the average price for gillnet sockeyes from all districts of Prince William Sound. Data specific to the Copper River was not available, but likely it would show an even greater departure from other sockeye fisheries in the state.

In Figure 6, it can be noted that while purse seine effort experienced a sharp decline in the price collapse period after 1992, drift gill net effort remained relatively stable with 90% – 95% of the permits active each year. Participation in the set gill net fishery was also stable or increasing over this same time period.

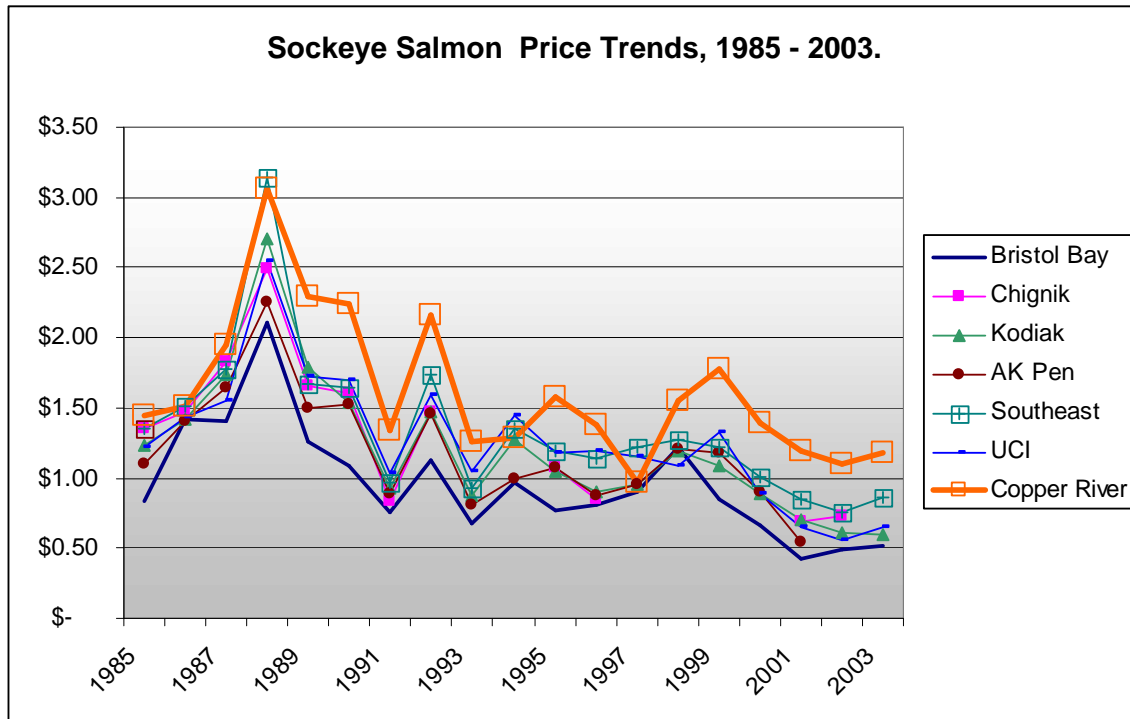


Figure 5. Average annual sockeye salmon price in Prince William Sound drift gillnet fishery as compared with other major commercial fisheries in Alaska, 1985 through 2003. Data from COAR.

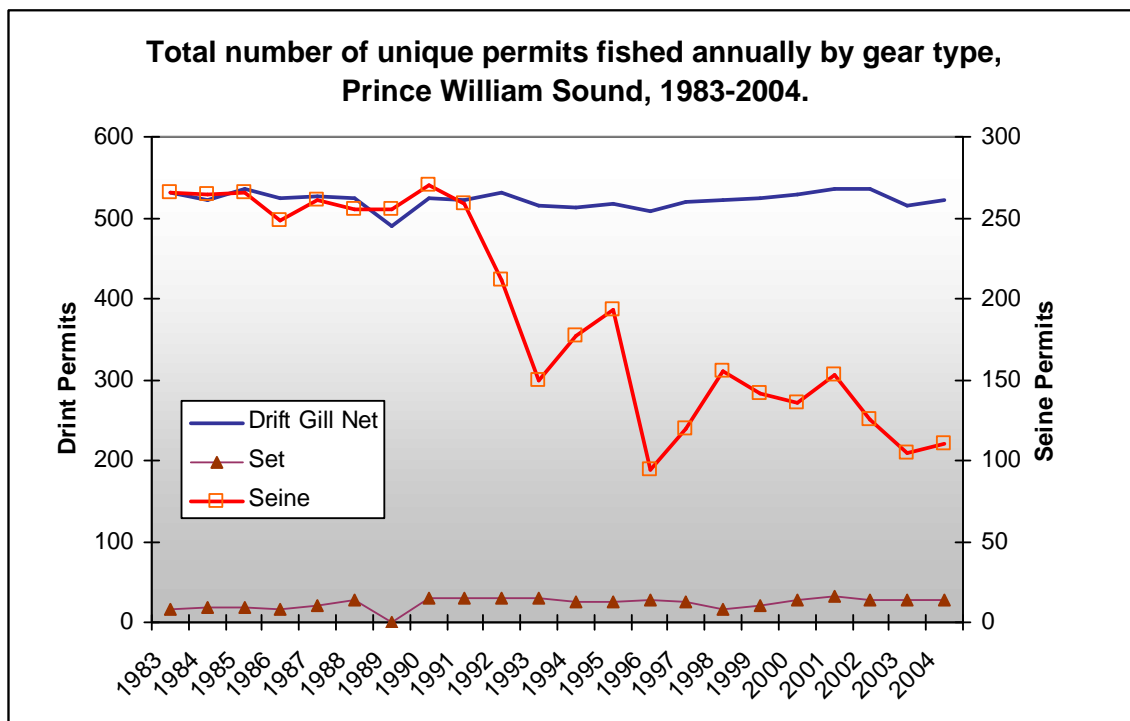


Figure 6. Total number of purse seine, drift gillnet and set gillnet permits fished annually in the Prince William Sound commercial salmon fishery, 1983 – 2004. Source COAR.

The Copper River market effect is particularly evident when the hatchery fish are entirely removed from the picture. This has become possible with the mass marking programs that have enabled ADF&G to separate hatchery contributions from the commercial harvest. Unfortunately these data are only available from 1997 to the present. In Figure 7, the ex-vessel values of the wild salmon component of the commercial harvests for purse seine and drift gillnet fisheries are graphed. Looking purely at wild fish over this nine year period the purse seine fishery value is on average only 15% of the value of the drift gillnet fishery. In fact in three of these years, had the purse seine fishery harvested all of the enhanced salmon in the Sound their value still would not have equaled the value of the drift gillnet wild stocks.

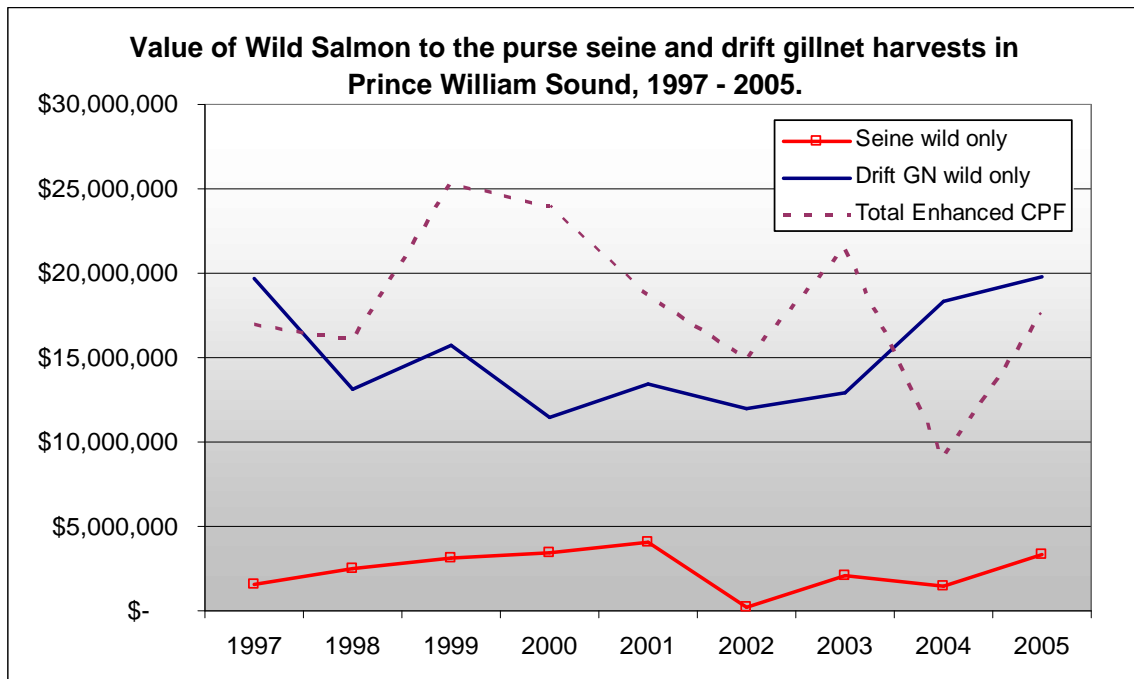


Figure 7. Value of wild salmon only contributions to the purse seine and drift gill net fisheries of Prince William Sound, 1997 – 2005. Total value of enhanced salmon harvested in all common property fisheries combined depicted in dashed line. Source, COAR, Zephyr and ADF&G.

## An Enhanced Only Allocation Plan

### **Background**

In the fall of 2003, the Board of Fisheries in response to an agenda change request submitted by the law Office of Dan Coffee, formed an Allocation Workgroup. This group was charged to explore options to find an equitable balance between the user groups. The three Board members on the committee established a panel of public advisors composed of two seine only, two drift gill net only and one combined gear representatives, one set net and two PWSAC managers and one VFDA representative. The public panel has subsequently met on over six occasions. Modest progress has been

made by this group, including agreement on using a 5 year rolling average for measuring allocation trends, delaying implementation for “piggy bank” seasons by one year due to the COAR numbers not coming out until March, and setting “piggy bank” triggers at 40%. No overall consensus has yet been reached on the enhanced salmon allocation plan.

At the workgroup’s meeting on October 12<sup>th</sup>, chairman Mel Morris introduced a concept plan for allocation in Prince William Sound that pertained only to enhanced salmon (Appendix A.). Morris indicated at the conclusion of the meeting that he would submit this concept plan to the full Board at the PWS regulatory meeting scheduled for December.

### ***The Morris Concept Proposal:***

The concept plan submitted by Morris differs from the existing plan (5 AAC 24.370.) in one fundamental way; the existing plan uses the combined value of all salmon (wild and enhanced) to calculate the target percentages by gear group, while Morris’s concept plan calculated targeted percentages using only the value of enhanced salmon.

The Morris Concept plan states the objectives of providing “a fair and reasonable allocation [of enhanced salmon] among the gear groups and to reduce conflicts among these users.” The plan specifies four goals:

1. make the allocation plan achievable.
2. decrease the occurrence of allocation short falls,
3. make the fisheries more predictable and regular over the long-term, and
4. encourage improvement of product value.

The concept plan sets allocation percentages for enhanced salmon to be approximately 48% for Purse Seine, 48% for drift gillnet and 4% for set gillnet. Trigger points would be set at 40% for both Purse Seine and Drift Gillnet, with a piggy bank catch-up provision similar to the existing plan.

For Purse Seine gear, if the 5 year rolling average percent drops below 40%, the Purse Seine fleet would, in the following year, be granted additional access to hatchery stocks. Options outlined in the Morris concept plan include; sharing Esther chums with the drift gill net fleet (consistent with 24.370.) and possibly additional areas.

For the drift gillnet fleet, if the 5 year rolling average percent drops below 40%, the drift gillnet fleet would, in the following year, be granted exclusive access to Port Chalmers chums, consistent with 24.370.

### ***Feasibility of the Morris Concept Plan***

Technologically, this concept is feasible. One key development in PWS that makes this approach possible, is the implementation of mass marking techniques to the hatchery produced salmon releases. This marking program gives ADF&G the ability to quantitatively distinguish wild and hatchery stocks with a degree of precision that was not possible six years ago. ADF&G has been able to generate estimates on hatchery only

contributions to commercial gear types since 1997. This time frame provides an adequate basis from which to generate benchmarks such as a five year rolling averages.

A similar allocation plan has been working in Southeast Alaska for the past 15 years. The Southeastern Alaska Area Enhanced Salmon Allocation Management Plan (5 AAC 33.364.) provides a good example of a functioning allocation plan based strictly on enhanced salmon. This plan endeavors to “provide a fair and reasonable distribution of salmon from enhancement projects among the seine, troll and drift gill net commercial fisheries...”. This plan which has been in effect since 1991, allocates value of harvested salmon to the gear groups in specified percent ranges. Similar to the Morris concept plan, the Southeast plan uses five year increments to evaluate allocation percentages.

Permit holders in the fishery recognize that it is time to implement a new approach to the PWS enhanced salmon allocation plan. At the October 12<sup>th</sup> allocation committee meeting, all gear groups represented agreed that this approach would work. The Purse Seine representatives did not support the plan, however when specifically asked by Morris, they conceded that the plan would work.

### ***Impact of the Morris Plan to Allocation Trends***

In Table 1, the ex-vessel values for enhanced salmon taken in the purse seine, drift gillnet and set gill net fisheries are presented. Values for the enhanced component of the annual purse seine harvest range from \$4.6 to \$14.3 million. The enhanced components for the drift gillnet fishery ranges from \$4.0 to \$12.5 million. Enhanced only set net ex-vessel values range from \$0.2 to \$1.2 million.

Table 1. Ex-vessel value for enhanced salmon taken in the purse seine, drift gillnet and set gillnet fisheries of Prince William sound, 1997 – 2005<sup>1</sup>.

<b>Year</b>	<b>Seine S01E</b>	<b>Drift S03E</b>	<b>Set S04E</b>	<b>Grand Total</b>
1997	\$ 8,296,432	\$ 7,853,235	\$ 873,662	\$ 17,023,328
1998	\$ 8,874,780	\$ 7,023,620	\$ 178,594	\$ 16,076,994
1999	\$12,283,084	\$12,487,884	\$ 582,737	\$ 25,353,704
2000	\$14,379,812	\$ 8,956,333	\$ 607,998	\$ 23,944,144
2001	\$ 9,201,538	\$ 8,299,326	\$1,137,021	\$ 18,637,885
2002	\$ 4,919,789	\$ 8,832,301	\$1,171,105	\$ 14,923,196
2003	\$12,659,631	\$ 7,734,636	\$1,073,723	\$ 21,467,989
2004	\$ 4,557,285	\$ 4,035,938	\$ 417,454	\$ 9,010,677
2005 <sup>1</sup>	\$12,958,510	\$ 4,016,280	\$ 629,111	\$ 17,603,901
<b>Total</b>	<b>\$88,130,862</b>	<b>\$69,239,552</b>	<b>\$6,671,404</b>	<b>\$164,041,817</b>

<sup>1</sup> Value data for 2005 is preliminary.

The annual percentage of the enhanced component of the ex-vessel value for the three gear types is in presented in Table 2. These annual percentages correlate with the allocation percentages in the Morris concept plan. The overall averages are 54%, 42% and 4% for purse seine, drift gillnet and set gillnet respectively. The five year rolling averages are also presented. These averages are calculated as the average of the percents

of the current year and the preceding four. For example the 5 year average percent for 2001 is the average of the percents for the years 1997 – 2001.

Table 2. Purse seine, drift gillnet, set gillnet percent of the total value of enhanced salmon taken the common property fishery, Prince William Sound, 1997 – 2005<sup>1</sup>.

Year	Percent of total enhanced CPF value			5 year average		
	Seine	Drift	Set	Seine	Drift	Set
1997	49%	46%	5%			
1998	55%	44%	1%			
1999	48%	49%	2%			
2000	60%	37%	3%			
2001	49%	45%	6%	52%	44%	3%
2002	33%	59%	8%	49%	47%	4%
2003	59%	36%	5%	50%	45%	5%
2004	51%	45%	5%	50%	44%	5%
2005 <sup>1</sup>	74%	23%	4%	53%	41%	5%
<b>97-05 Avg.</b>	<b>54%</b>	<b>42%</b>	<b>4%</b>			

<sup>1</sup> Value data for 2005 is preliminary.

These data are presented graphically in Figures 8 and 9. In these figures the allocation percentage of ex-vessel value for enhanced salmon only are contrasted with the values for combined wild and enhanced.

## Conclusions

- A salmon price collapse occurring in the early 1990's has had a large economic impact on PWS fisheries.
- The PWS purse seine fishery, which is heavily dependant upon pink salmon, was severely impacted by this price collapse. Active seine permits in the fishery has declined by 50% since 1990 levels.
- The gillnet fisheries in PWS which are largely dependant on sockeye salmon, have faired much better.
- Heavily weighted by the effect of the Copper River district, Prince William Sound sockeye salmon prices have faired far better that sockeye prices elsewhere in the state.
- As a result the drift gillnet and set net fisheries remain economically viable with nearly all permits participating annually.
- The Copper River effect is largely driven by wild stocks.
- An allocation plan based only on enhanced salmon takes out the variability observed in wild production.
- An allocation plan based only on enhanced salmon is feasible.

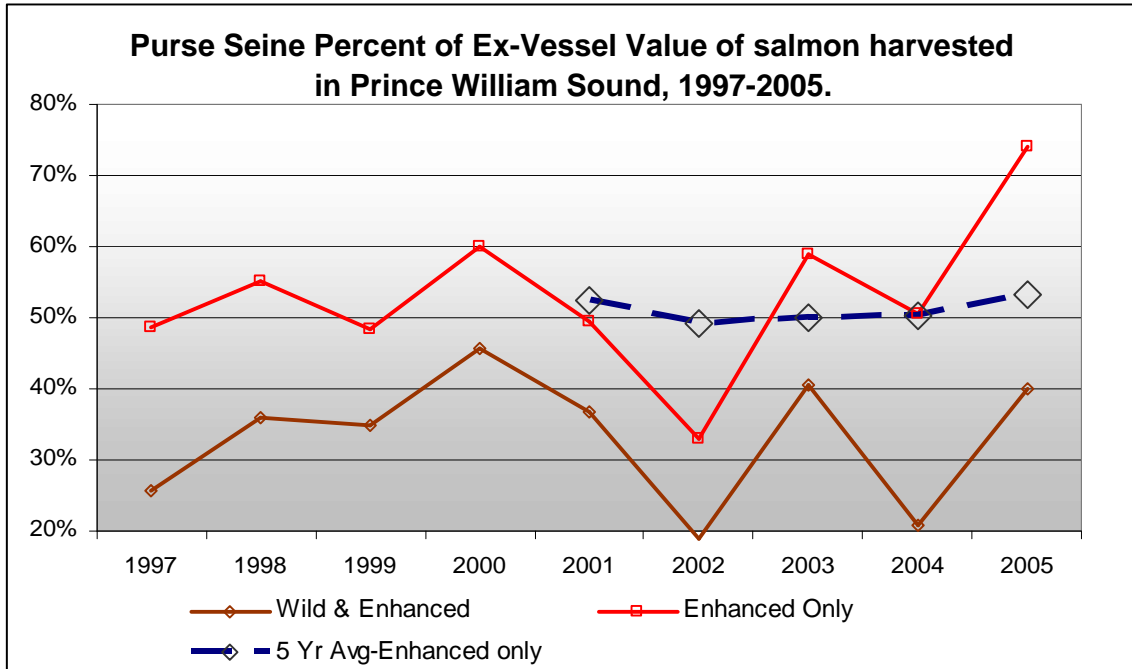


Figure 8. Comparison of purse seine gear percentage of the ex-vessel value of the commercial harvest of wild and enhanced and enhanced only salmon stocks in Prince William Sound, 1997 – 2005. Enhanced salmon allocation data from Cordova ADF&G. Price information from COAR. 2005 data preliminary.

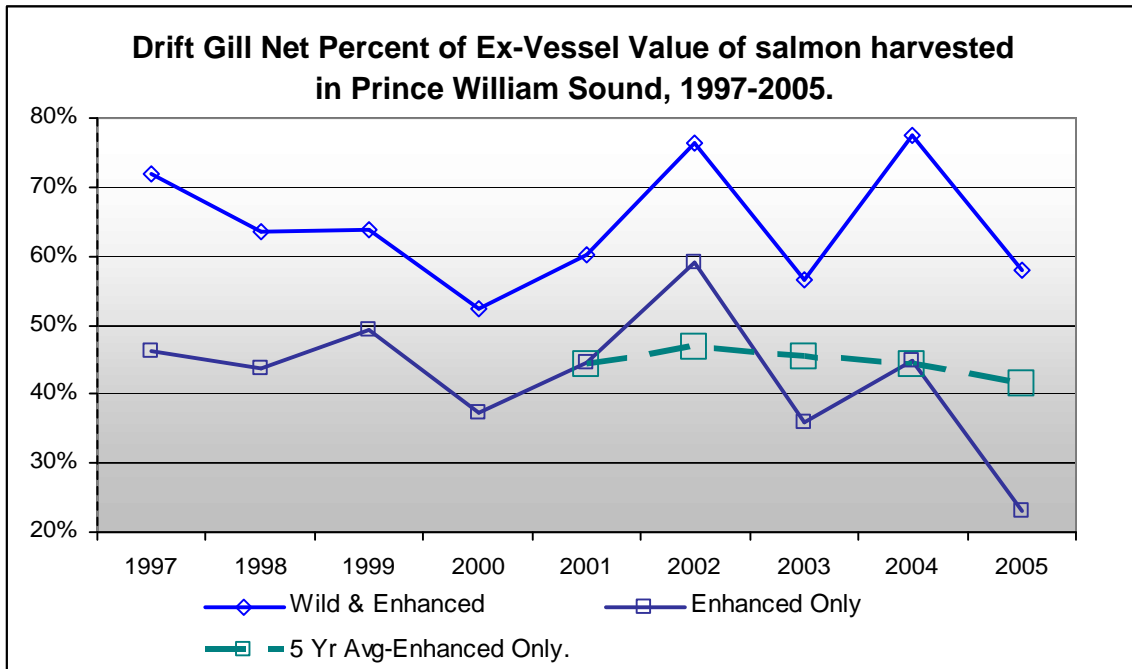


Figure 9. Figure 4. Comparison of drift gill net gear percentage of the ex-vessel value of the commercial harvest of wild and enhanced and enhanced only salmon stocks in Prince William Sound, 1997 – 2005. Enhanced salmon allocation data from Cordova ADF&G. Price information from COAR. 2005 data preliminary.

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## ACRONYMS USED IN THIS REPORT

AAC	Alaska Administrative Code
ACR	Agenda Change Request – An out of cycle proposal to the BOF.
ADF&G	Alaska Department of Fish and Game
AFK	Armin F Koernig Hatchery operated by PWSAC
ATF	Allocation Task Force – a committee created by PWSAC
BEG	Biological Escapement Goal
BOF	The Alaska Board of Fisheries
CCH	Cannery Creek Hatchery- owned by state & operated by PWSAC
COAR	Commercial Operators Annual Report
CPF	Common property fishery
GN	Gillnet
MBH	Main Bay hatchery owned by state & operated by PWSAC
PWS	Prince William Sound
PWSAC	Prince William Sound Aquaculture Corporation
RPT	The PWS Regional Salmon Planning Team
SGH	Solomon Gulch Hatchery – operated by VFDA
VFDA	Valdez Fisheries Development Association
WNH	Wally Noerenberg Hatchery on Esther Is. Operated by PWSAC
ZEPHYR	ADF&G's fish ticket computer database

## Appendix A. Morris Concept Proposal

PROPOSED ALTERATION OF 5AAC 24.370. Prince William Sound management and salmon enhancement allocation plan

The purpose of the management and allocation plan is to provide a fair and reasonable allocation among the gear groups and to reduce conflicts among these users. With these objectives in mind, it is my intent to 1) make the allocation plan achievable, 2) decrease the occurrence of allocation shortfalls, 3) make the fisheries more predictable and regular over the long-term, and 4) encourage improvement of product value. These goals are not meant to supersede the underlying purpose of maintaining long-term historic balance between the user groups. However, it must be recognized that significant changes have occurred in salmon markets and fisheries since the inception of the allocation plan in 1990-91 rendering the plan as currently written, basically, ineffective. The enhanced stock only plan is a strawman proposal that I have prepared for your review and comments per the cover letter. I'll look forward to hearing from you at the meeting at the Capt. Cook in Anchorage on 10/12.

1) Enhanced allocation plus trigger points. Using the 2000 – 2004 enhanced only catch by species and gear type applied to 2004 prices, the allocation percentages are approximately: PS--48%, DGN--48% and SGN--4%. Trigger points would be set at 40% for both PS and DGN with a piggy bank plan similar to the existing plan.

2) If PS 5-year rolling average drops below 40%:

- a) PS will share Esther as per the current plan.
- b) Port Chalmers as per plan.
- c) Will share Coghill and/or Main Bay on alternating periods from 6/1-7/30

3) If DGN drops below 40%

- a) DGN will share Port Chalmers on alternating periods from 6/1-7/30
- b) Coghill, Main Bay and Esther per current plan.

4) Redraw the Esther Subdistrict or add a buffer subdistrict to minimize interception of hatchery chums by DGN for cost recovery concerns or allocation disparity corrections.

Management Options:

- a) establish separate subdistrict managed in consultation with PWSAC.
- b) ADFG closes subdistrict for GN whenever PS fishing.
- c) ADFG closes subdistrict for GN for entire season whenever PS is to have access.

## Appendix B. COAR Prices and ZEPHYR avg. weights.

Appendix Table B. Average price per pound from COAR and average weights from ZEPHYR for Prince William Sound salmon, 1985 – 2005<sup>1</sup>.

		Average Price/Pound			Average Weight		
		Seine	Drift	Set	Seine	Drift	Set
<b>1985</b>	Chinook	\$ 0.25	\$ 1.65		18.1	20.2	
	Chum	\$ 0.37	\$ 0.44	\$ 0.44	8.3	7.7	7.4
	Coho	\$ 0.50	\$ 0.90	\$ 0.80	8.2	9.0	8.8
	Pink	\$ 0.23	\$ 0.20	\$ 0.20	3.6	3.9	3.5
	Sockeye	\$ 1.20	\$ 1.44	\$ 1.00	6.0	6.2	6.1
<b>1986</b>	Chinook	\$ 0.88	\$ 1.46	\$ 1.00	9.2	20.2	18.2
	Chum	\$ 0.33	\$ 0.37	\$ 0.37	8.4	7.8	7.5
	Coho	\$ 0.54	\$ 0.91	\$ 0.90	8.4	9.2	9.7
	Pink	\$ 0.22	\$ 0.24	\$ 0.24	3.0	3.8	3.4
	Sockeye	\$ 1.38	\$ 1.51	\$ 1.00	6.2	6.3	6.6
<b>1987</b>	Chinook	\$ 1.24	\$ 2.16	\$ 1.50	14.1	22.7	13.8
	Chum	\$ 0.47	\$ 0.44	\$ 0.44	7.9	7.3	7.8
	Coho	\$ 0.83	\$ 0.99	\$ 0.90	7.1	8.6	5.1
	Pink	\$ 0.43	\$ 0.42	\$ 0.42	3.5	4.0	3.7
	Sockeye	\$ 1.76	\$ 1.96	\$ 1.20	6.7	6.9	6.5
<b>1988</b>	Chinook	\$ 2.48	\$ 3.28	\$ 2.00	10.8	18.1	15.2
	Chum	\$ 1.06	\$ 1.05	\$ 1.00	8.5	8.5	8.8
	Coho	\$ 1.79	\$ 2.01	\$ 1.50	7.8	9.2	7.9
	Pink	\$ 0.84	\$ 0.83	\$ 0.83	3.4	4.0	3.6
	Sockeye	\$ 2.76	\$ 3.06	\$ 2.00	6.3	6.4	6.5
<b>1989</b>	Chinook	\$ 1.47	\$ 2.28		11.7	21.0	
	Chum	\$ 0.41	\$ 0.44		8.4	8.8	
	Coho	\$ 0.58	\$ 0.67		7.9	8.1	
	Pink	\$ 0.40	\$ 0.39		3.5	3.8	
	Sockeye	\$ 1.60	\$ 2.29		6.6	6.9	
<b>1990</b>	Chinook	\$ 1.48	\$ 2.33	\$ 2.00	12.5	20.1	12.9
	Chum	\$ 0.69	\$ 0.75	\$ 0.75	9.3	8.8	9.6
	Coho	\$ 0.88	\$ 0.98	\$ 0.90	8.6	8.9	7.8
	Pink	\$ 0.32	\$ 0.32	\$ 0.32	3.0	3.4	3.3
	Sockeye	\$ 1.80	\$ 2.24	\$ 1.50	6.6	6.4	6.2
<b>1991</b>	Chinook	\$ 0.97	\$ 1.72	\$ 1.20	10.3	17.4	15.2
	Chum	\$ 0.41	\$ 0.66	\$ 0.66	8.2	7.3	9.7
	Coho	\$ 0.59	\$ 0.74	\$ 0.70	7.8	8.4	7.2
	Pink	\$ 0.14	\$ 0.12	\$ 0.12	2.5	3.0	3.1
	Sockeye	\$ 0.99	\$ 1.34	\$ 1.00	6.0	6.1	5.5

**Appendix Table B. Average price per pound from COAR and average weights from ZEPHYR for Prince William Sound salmon, 1985 – 2005. (Continued)**

		Average Price/Pound			Average Weight		
		Seine	Drift	Set	Seine	Drift	Set
<b>1992</b>	Chinook	\$ 1.65	\$ 2.77	\$ 1.75	9.9	18.5	12.6
	Chum	\$ 0.46	\$ 0.69	\$ 0.69	7.7	8.1	8.6
	Coho	\$ 0.82	\$ 0.99	\$ 0.90	7.9	8.6	7.4
	Pink	\$ 0.20	\$ 0.23	\$ 0.23	3.3	3.4	3.5
	Sockeye	\$ 1.69	\$ 2.16	\$ 1.50	6.2	6.1	6.1
<b>1993</b>	Chinook	\$ 0.60	\$ 1.70	\$ 1.20	13.5	18.1	15.9
	Chum	\$ 0.37	\$ 0.69	\$ 0.69	6.4	6.4	6.8
	Coho	\$ 0.55	\$ 0.82	\$ 0.80	7.0	7.7	7.9
	Pink	\$ 0.16	\$ 0.16	\$ 0.16	2.8	3.4	3.4
	Sockeye	\$ 0.85	\$ 1.27	\$ 1.00	5.7	6.0	5.8
<b>1994</b>	Chinook	\$ 0.64	\$ 1.49	\$ 1.00	15.0	19.0	16.0
	Chum	\$ 0.25	\$ 0.48	\$ 0.48	7.9	8.3	8.4
	Coho	\$ 0.62	\$ 0.74	\$ 0.70	8.5	9.5	8.3
	Pink	\$ 0.18	\$ 0.15	\$ 0.15	3.1	3.3	3.4
	Sockeye	\$ 1.08	\$ 1.28	\$ 1.00	6.0	6.0	5.6
<b>1995</b>	Chinook	\$ 0.75	\$ 2.28	\$ 1.50	13.6	16.0	12.1
	Chum	\$ 0.28	\$ 0.44	\$ 0.44	7.7	8.1	8.1
	Coho	\$ 0.41	\$ 0.52	\$ 0.45	8.3	8.8	7.8
	Pink	\$ 0.19	\$ 0.22	\$ 0.22	3.5	3.6	3.7
	Sockeye	\$ 0.89	\$ 1.58	\$ 1.20	5.9	5.8	5.5
<b>1996</b>	Chinook	\$ 1.37	\$ 1.68	\$ 0.42	15.3	19.0	16.7
	Chum	\$ 0.13	\$ 0.22	\$ 0.22	7.9	8.7	8.7
	Coho	\$ 0.43	\$ 0.53	\$ 0.40	7.9	8.7	8.3
	Pink	\$ 0.07	\$ 0.13	\$ 0.11	3.6	3.6	3.6
	Sockeye	\$ 1.12	\$ 1.38	\$ 0.97	6.3	6.6	6.2
<b>1997</b>	Chinook	\$ 0.86	\$ 2.02	\$ 0.50	15.3	17.8	13.3
	Chum	\$ 0.29	\$ 0.37	\$ 0.37	8.3	8.3	8.1
	Coho	\$ 0.61	\$ 0.55	\$ 0.47	7.7	8.0	8.3
	Pink	\$ 0.14	\$ 0.12	\$ 0.10	3.7	3.9	3.8
	Sockeye	\$ 0.82	\$ 0.97	\$ 0.68	6.3	6.6	6.3
<b>1998</b>	Chinook	\$ 1.07	\$ 2.44		16.0	18.9	
	Chum	\$ 0.25	\$ 0.43	\$ 0.43	8.1	8.1	7.5
	Coho	\$ 0.37	\$ 0.63	\$ 0.54	7.8	8.1	9.1
	Pink	\$ 0.14	\$ 0.13	\$ 0.11	3.7	3.7	3.5
	Sockeye	\$ 1.05	\$ 1.55	\$ 1.08	6.3	6.2	6.3

**Appendix Table B. Average price per pound from COAR and average weights from ZEPHYR for Prince William Sound salmon, 1985 – 2005. (Continued)**

		Average Price/Pound			Average Weight		
		Seine	Drift	Set	Seine	Drift	Set
<b>1999</b>	Chinook	\$ 4.05	\$ 4.22	\$ 1.06	14.0	16.4	9.0
	Chum	\$ 0.20	\$ 0.25	\$ 0.25	8.1	8.2	8.2
	Coho	\$ 0.55	\$ 0.60	\$ 0.51	7.2	7.4	7.5
	Pink	\$ 0.13	\$ 0.12	\$ 0.10	3.0	3.3	3.3
	Sockeye	\$ 1.42	\$ 1.77	\$ 1.24	5.7	6.1	6.2
<b>2000</b>	Chinook	\$ 3.88	\$ 3.84	\$ 0.96	14.8	16.6	17.5
	Chum	\$ 0.25	\$ 0.26	\$ 0.26	8.1	7.9	7.9
	Coho	\$ 0.38	\$ 0.53	\$ 0.45	7.8	9.4	9.0
	Pink	\$ 0.14	\$ 0.09	\$ 0.08	3.4	3.5	3.4
	Sockeye	\$ 1.48	\$ 1.40	\$ 0.98	6.1	6.8	6.5
<b>2001</b>	Chinook	\$ 0.85	\$ 3.74	\$ 1.00	12.2	19.6	15.6
	Chum	\$ 0.38	\$ 0.39	\$ 0.39	8.0	7.2	7.5
	Coho	\$ 0.24	\$ 0.35	\$ 0.35	8.2	8.2	8.4
	Pink	\$ 0.13	\$ 0.06	\$ 0.06	3.4	3.6	3.5
	Sockeye	\$ 0.71	\$ 1.19	\$ 1.00	6.1	6.4	6.2
<b>2002</b>	Chinook	\$ 0.47	\$ 3.53	\$ 1.00	13.9	15.8	17.3
	Chum	\$ 0.15	\$ 0.15	\$ 0.15	8.3	7.7	8.0
	Coho	\$ 0.26	\$ 0.36	\$ 0.36	8.4	8.7	8.2
	Pink	\$ 0.09	\$ 0.04	\$ 0.04	3.5	3.8	3.4
	Sockeye	\$ 0.62	\$ 1.10	\$ 0.81	5.9	6.5	6.2
<b>2003</b>	Chinook	\$ 0.48	\$ 3.48		15.4	17.4	
	Chum	\$ 0.17	\$ 0.18	\$ 0.19	5.9	6.4	6.3
	Coho	\$ 0.42	\$ 0.48	\$ 0.48	7.4	7.6	5.1
	Pink	\$ 0.08	\$ 0.06	\$ 0.04	3.7	3.8	3.7
	Sockeye	\$ 0.71	\$ 1.19	\$ 0.81	6.0	6.1	6.2
<b>2004</b>	Chinook	\$ 0.62	\$ 4.69	\$ 1.00	17.2	16.4	12.5
	Chum	\$ 0.20	\$ 0.23	\$ 0.21	7.8	7.3	7.2
	Coho	\$ 0.47	\$ 0.72	\$ 0.34	8.2	8.3	7.1
	Pink	\$ 0.10	\$ 0.09	\$ 0.05	3.6	3.7	3.6
	Sockeye	\$ 0.60	\$ 1.53	\$ 0.84	5.6	6.0	5.9
<b>2005<sup>1</sup></b>	Chinook	\$ 0.52	\$ 4.70		15.4	21.7	
	Chum	\$ 0.18	\$ 0.27	\$ 0.28	7.7	8.2	7.2
	Coho	\$ 0.10	\$ 0.82	\$ 0.69	7.2	8.0	7.8
	Pink	\$ 0.10	\$ 0.10	\$ 0.50	3.5	3.9	3.9
	Sockeye	\$ 0.54	\$ 1.69	\$ 0.92	6.1	5.8	6.0

<sup>1</sup> Data for 2005 is preliminary.

## Appendix C. Wild and enhanced harvest data.

Appendix Table C. Harvest of wild and enhanced salmon by species and gear type, Prince William Sound, 1985 – 2005. Data from ZEPHYR.

		Seine	Drift	Set	Total
1985	Chinook	694	42,833		43,527
	Chum	1,025,026	267,374	1,295	1,293,695
	Coho	16,441	1,008,037	74	1,024,552
	Pink	23,330,611	507,896	33,284	23,871,791
	Sockeye	124,993	1,321,609	3,439	1,450,041
1985 Total		24,497,765	3,147,749	38,092	27,683,606
1986	Chinook	699	41,420	9	42,128
	Chum	1,439,618	239,296	5,764	1,684,678
	Coho	11,460	412,043	86	423,589
	Pink	10,399,605	73,909	42,123	10,515,637
	Sockeye	80,587	1,206,564	1,043	1,288,194
1986 Total		11,931,969	1,973,232	49,025	13,954,226
1987	Chinook	485	41,517	34	42,036
	Chum	1,557,140	345,398	48,394	1,950,932
	Coho	27,158	141,135	336	168,629
	Pink	25,528,640	754,668	88,291	26,371,599
	Sockeye	151,468	1,584,756	5,507	1,741,731
1987 Total		27,264,891	2,867,474	142,562	30,274,927
1988	Chinook	325	31,377	101	31,803
	Chum	1,145,680	569,068	94,627	1,809,375
	Coho	27,313	444,714	284	472,311
	Pink	7,792,900	1,668,449	182,135	9,643,484
	Sockeye	23,353	726,362	18,526	768,241
1988 Total		8,989,571	3,439,970	295,673	12,725,214
1989	Chinook	695	31,288		31,983
	Chum	670,624	201,410		872,034
	Coho	69,517	302,192		371,709
	Pink	13,180,443	699,145		13,879,588
	Sockeye	10,066	1,162,729		1,172,795
1989 Total		13,931,345	2,396,764		16,328,109
1990	Chinook	111	21,985	56	22,152
	Chum	272,316	575,540	94,494	942,350
	Coho	89,943	419,441	532	509,916
	Pink	32,945,528	2,093,746	369,589	35,408,863
	Sockeye	22,204	878,619	10,204	911,027
1990 Total		33,330,102	3,989,331	474,875	37,794,308
1991	Chinook	156	35,122	76	35,354
	Chum	32,115	257,052	49,394	338,561
	Coho	13,336	575,374	504	589,214
	Pink	30,868,994	290,923	20,075	31,179,992
	Sockeye	18,707	1,531,595	184,028	1,734,330
1991 Total		30,933,308	2,690,066	254,077	33,877,451

Appendix Table C, continued. Harvest of wild and enhanced salmon by species and gear type, Prince William Sound, 1985 – 2005. Data from ZEPHYR.

		<b>Seine</b>	<b>Drift</b>	<b>Set</b>	<b>Total</b>
1992	Chinook	114	40,236	101	40,451
	Chum	30,088	242,197	4,698	276,983
	Coho	38,982	505,816	1,242	546,040
	Pink	4,863,595	329,187	390,097	5,582,879
	Sockeye	32,972	1,430,950	144,604	1,608,526
1992 Total		4,965,751	2,548,386	540,742	8,054,879
1993	Chinook	58	30,454	55	30,567
	Chum	9,689	681,159	20,369	711,217
	Coho	5,583	435,934	832	442,349
	Pink	3,262,946	200,680	84,568	3,548,194
	Sockeye	36,222	1,599,456	101,717	1,737,395
1993 Total		3,314,498	2,947,683	207,541	6,469,722
1994	Chinook	121	48,352	9	48,482
	Chum	82,497	588,457	6,908	677,862
	Coho	46,920	988,173	628	1,035,721
	Pink	25,728,307	325,120	311,134	26,364,561
	Sockeye	81,381	1,256,722	97,676	1,435,779
1994 Total		25,939,226	3,206,824	416,355	29,562,405
1995	Chinook	129	67,916	19	68,064
	Chum	70,987	449,326	6,621	526,934
	Coho	95,199	855,514	695	951,408
	Pink	10,682,835	242,040	28,118	10,952,993
	Sockeye	46,129	1,383,171	30,814	1,460,114
1995 Total		10,895,279	2,997,967	66,267	13,959,513
1996	Chinook	63	58,558	13	58,634
	Chum	364,821	662,779	9,276	1,036,876
	Coho	111,012	309,047	309	420,368
	Pink	17,656,080	84,862	16,648	17,757,590
	Sockeye	24,021	2,757,354	132,268	2,913,643
1996 Total		18,155,997	3,872,600	158,514	22,187,111
1997	Chinook	200	53,421	12	53,633
	Chum	680,081	727,455	8,475	1,416,011
	Coho	55,216	24,700	163	80,079
	Pink	15,595,495	309,781	76,610	15,981,886
	Sockeye	28,830	3,672,136	196,005	3,896,971
1997 Total		16,359,822	4,787,493	281,265	21,428,580
1998	Chinook	227	71,136		71,363
	Chum	399,240	353,279	214	752,733
	Coho	50,625	123,762	94	174,481
	Pink	19,327,718	507,437	34,311	19,869,466
	Sockeye	20,447	1,522,894	25,646	1,568,987
1998 Total		19,798,257	2,578,508	60,265	22,437,030

Appendix Table C, continued. Harvest of wild and enhanced salmon by species and gear type, Prince William Sound, 1985 – 2005. Data from ZEPHYR.

		<b>Seine</b>	<b>Drift</b>	<b>Set</b>	<b>Total</b>
1999	Chinook	473	63,946	132	64,551
	Chum	1,444,365	728,174	11,101	2,183,640
	Coho	23,078	145,901	1,092	170,071
	Pink	31,430,758	169,900	43,443	31,644,101
	Sockeye	24,546	1,908,620	74,378	2,007,544
1999 Total		32,923,220	3,016,541	130,146	36,069,907
2000	Chinook	187	32,922	41	33,150
	Chum	1,744,575	1,676,979	12,319	3,433,873
	Coho	264,085	449,540	662	714,287
	Pink	27,126,934	473,282	139,008	27,739,224
	Sockeye	34,696	1,295,521	101,105	1,431,322
2000 Total		29,170,477	3,928,244	253,135	33,351,856
2001	Chinook	547	40,823	26	41,396
	Chum	990,043	1,166,667	7,058	2,163,768
	Coho	198,334	273,056	1,006	472,396
	Pink	21,518,712	685,740	127,754	22,332,206
	Sockeye	123,004	1,921,030	176,167	2,220,201
2001 Total		22,830,640	4,087,316	312,011	27,229,967
2002	Chinook	250	40,175	35	40,460
	Chum	1,972,336	1,797,145	22,987	3,792,468
	Coho	32,714	617,248	525	650,487
	Pink	7,966,126	132,499	64,421	8,163,046
	Sockeye	17,693	1,909,104	241,665	2,168,462
2002 Total		9,989,119	4,496,171	329,633	14,814,923
2003	Chinook	117	49,158		49,275
	Chum	1,481,707	753,884	6,265	2,241,856
	Coho	66,819	434,634	663	502,116
	Pink	38,668,960	118,951	28,537	38,816,448
	Sockeye	196,390	1,950,250	215,733	2,362,373
2003 Total		40,413,993	3,306,877	251,198	43,972,068
2004	Chinook	153	38,977	11	39,141
	Chum	881,129	581,742	10,381	1,473,252
	Coho	33,857	575,123	825	609,805
	Pink	11,573,514	81,088	51,655	11,706,257
	Sockeye	17,530	1,500,951	91,412	1,609,893
2004 Total		12,506,183	2,777,881	154,284	15,438,348
2005	Chinook	224	35,008		35,232
	Chum	560,901	858,846	3,452	1,423,199
	Coho	147,576	360,422	882	508,880
	Pink	47,012,517	228,450	126,135	47,367,102
	Sockeye	63,482	1,605,928	109,532	1,778,942
2005 Total		47,784,700	3,088,654	240,001	51,113,355

## Appendix D. Wild & enhanced value data.

Appendix Table D. Ex-vessel value of wild and enhanced salmon by species and gear type, Prince William Sound, 1985 – 2005. Harvest data from ZEPHYR, price data from COAR.

		Seine	Drift	Set	Total
1985	Chinook	\$ 2,781	\$ 1,964,113		\$ 1,966,895
	Chum	\$ 3,234,230	\$ 947,714	\$ 4,194	\$ 4,186,139
	Coho	\$ 68,353	\$ 9,215,561	\$ 518	\$ 9,284,433
	Pink	\$ 18,971,572	\$ 426,355	\$ 23,498	\$ 19,421,425
	Sockeye	\$ 916,619	\$ 11,464,983	\$ 21,065	\$ 12,402,667
1985 Total		\$ 23,193,556	\$ 24,018,727	\$ 49,275	\$ 47,261,558
1986	Chinook	\$ 6,284	\$ 1,578,731	\$ 164	\$ 1,585,179
	Chum	\$ 3,994,124	\$ 724,669	\$ 15,950	\$ 4,734,743
	Coho	\$ 53,180	\$ 3,627,336	\$ 754	\$ 3,681,270
	Pink	\$ 6,835,681	\$ 63,781	\$ 34,748	\$ 6,934,210
	Sockeye	\$ 694,782	\$ 11,140,184	\$ 6,843	\$ 11,841,809
1986 Total		\$ 11,584,050	\$ 17,134,701	\$ 58,460	\$ 28,777,211
1987	Chinook	\$ 7,077	\$ 2,451,719	\$ 702	\$ 2,459,498
	Chum	\$ 5,803,968	\$ 1,109,899	\$ 166,564	\$ 7,080,431
	Coho	\$ 168,593	\$ 1,191,473	\$ 1,529	\$ 1,361,595
	Pink	\$ 38,067,563	\$ 1,260,136	\$ 136,598	\$ 39,464,297
	Sockeye	\$ 1,793,312	\$ 20,751,048	\$ 42,823	\$ 22,587,184
1987 Total		\$ 45,840,514	\$ 26,764,275	\$ 348,217	\$ 72,953,005
1988	Chinook	\$ 9,103	\$ 2,727,141	\$ 3,072	\$ 2,739,316
	Chum	\$ 10,306,582	\$ 5,159,921	\$ 832,745	\$ 16,299,248
	Coho	\$ 406,341	\$ 8,705,567	\$ 3,386	\$ 9,115,294
	Pink	\$ 22,854,790	\$ 5,244,554	\$ 538,913	\$ 28,638,257
	Sockeye	\$ 418,605	\$ 13,618,691	\$ 239,908	\$ 14,277,204
1988 Total		\$ 33,995,421	\$ 35,455,875	\$ 1,618,024	\$ 71,069,320
1989	Chinook	\$ 15,935	\$ 1,887,896		\$ 1,903,831
	Chum	\$ 2,383,673	\$ 784,190		\$ 3,167,863
	Coho	\$ 321,229	\$ 1,643,234		\$ 1,964,463
	Pink	\$ 18,437,335	\$ 988,220		\$ 19,425,555
	Sockeye	\$ 105,173	\$ 18,091,631		\$ 18,196,803
1989 Total		\$ 21,263,346	\$ 23,395,170		\$ 44,658,516
1990	Chinook	\$ 2,098	\$ 1,323,156	\$ 1,446	\$ 1,326,701
	Chum	\$ 1,765,311	\$ 3,916,313	\$ 680,555	\$ 6,362,179
	Coho	\$ 681,137	\$ 3,745,050	\$ 3,730	\$ 4,429,917
	Pink	\$ 31,823,911	\$ 2,117,585	\$ 394,682	\$ 34,336,178
	Sockeye	\$ 263,272	\$ 12,027,383	\$ 94,440	\$ 12,385,095
1990 Total		\$ 34,535,729	\$ 23,129,486	\$ 1,174,853	\$ 58,840,069
1991	Chinook	\$ 1,674	\$ 1,372,639	\$ 1,387	\$ 1,375,700
	Chum	\$ 110,434	\$ 1,540,647	\$ 315,597	\$ 1,966,678
	Coho	\$ 64,756	\$ 3,788,969	\$ 2,527	\$ 3,856,252
	Pink	\$ 10,910,775	\$ 105,308	\$ 7,587	\$ 11,023,669
	Sockeye	\$ 112,458	\$ 12,380,441	\$ 1,015,918	\$ 13,508,818
1991 Total		\$ 11,200,097	\$ 19,188,004	\$ 1,343,016	\$ 31,731,117

**Appendix Table D, continued. Ex-vessel value of wild and enhanced salmon by species and gear type, Prince William Sound, 1985 – 2005. Harvest data from ZEPHYR, price data from COAR.**

		Seine	Drift	Set	Total
1992	Chinook	\$ 2,141	\$ 2,780,076	\$ 2,228	\$ 2,784,445
	Chum	\$ 105,149	\$ 1,325,690	\$ 28,011	\$ 1,458,849
	Coho	\$ 254,346	\$ 4,597,119	\$ 8,321	\$ 4,859,787
	Pink	\$ 3,339,246	\$ 273,796	\$ 317,106	\$ 3,930,148
	Sockeye	\$ 341,327	\$ 18,624,810	\$ 1,312,527	\$ 20,278,664
1992 Total		\$ 4,042,209	\$ 27,601,491	\$ 1,668,193	\$ 33,311,893
1993	Chinook	\$ 389	\$ 1,110,064	\$ 1,049	\$ 1,111,502
	Chum	\$ 23,505	\$ 3,147,267	\$ 95,153	\$ 3,265,925
	Coho	\$ 22,300	\$ 2,764,495	\$ 5,264	\$ 2,792,059
	Pink	\$ 1,519,995	\$ 110,224	\$ 46,616	\$ 1,676,834
	Sockeye	\$ 182,173	\$ 11,763,340	\$ 594,462	\$ 12,539,974
1993 Total		\$ 1,748,361	\$ 18,895,390	\$ 742,544	\$ 21,386,294
1994	Chinook	\$ 1,125	\$ 1,615,972	\$ 144	\$ 1,617,240
	Chum	\$ 169,343	\$ 2,405,967	\$ 28,012	\$ 2,603,322
	Coho	\$ 240,131	\$ 7,259,671	\$ 3,670	\$ 7,503,473
	Pink	\$ 13,869,283	\$ 154,798	\$ 159,951	\$ 14,184,032
	Sockeye	\$ 528,989	\$ 9,357,939	\$ 550,141	\$ 10,437,069
1994 Total		\$ 14,808,870	\$ 20,794,348	\$ 741,919	\$ 36,345,137
1995	Chinook	\$ 1,324	\$ 3,732,049	\$ 345	\$ 3,733,717
	Chum	\$ 155,361	\$ 1,563,830	\$ 23,712	\$ 1,742,903
	Coho	\$ 341,298	\$ 4,207,678	\$ 2,436	\$ 4,551,413
	Pink	\$ 7,327,953	\$ 190,107	\$ 23,090	\$ 7,541,150
	Sockeye	\$ 239,153	\$ 12,610,825	\$ 203,723	\$ 13,053,701
1995 Total		\$ 8,065,089	\$ 22,304,489	\$ 253,306	\$ 30,622,884
1996	Chinook	\$ 1,404	\$ 2,343,275	\$ 91	\$ 2,344,771
	Chum	\$ 401,289	\$ 1,294,849	\$ 17,686	\$ 1,713,825
	Coho	\$ 378,693	\$ 1,484,686	\$ 1,020	\$ 1,864,399
	Pink	\$ 4,470,856	\$ 39,353	\$ 6,446	\$ 4,516,654
	Sockeye	\$ 170,218	\$ 24,325,747	\$ 794,494	\$ 25,290,459
1996 Total		\$ 5,422,459	\$ 29,487,911	\$ 819,737	\$ 35,730,107
1997	Chinook	\$ 2,847	\$ 2,451,060	\$ 80	\$ 2,453,987
	Chum	\$ 1,674,791	\$ 2,340,832	\$ 25,488	\$ 4,041,111
	Coho	\$ 254,056	\$ 106,092	\$ 639	\$ 360,788
	Pink	\$ 7,763,656	\$ 146,901	\$ 29,938	\$ 7,940,495
	Sockeye	\$ 146,054	\$ 22,513,538	\$ 839,946	\$ 23,499,538
1997 Total		\$ 9,841,404	\$ 27,558,423	\$ 896,090	\$ 38,295,918
1998	Chinook	\$ 4,285	\$ 3,918,051		\$ 3,922,336
	Chum	\$ 857,330	\$ 1,194,573	\$ 690	\$ 2,052,593
	Coho	\$ 146,674	\$ 688,609	\$ 459	\$ 835,742
	Pink	\$ 10,260,295	\$ 226,814	\$ 13,305	\$ 10,500,414
	Sockeye	\$ 133,013	\$ 14,125,540	\$ 174,083	\$ 14,432,636
1998 Total		\$ 11,401,598	\$ 20,153,588	\$ 188,536	\$ 31,743,722

**Appendix Table D, continued. Ex-vessel value of wild and enhanced salmon by species and gear type, Prince William Sound, 1985 – 2005. Harvest data from ZEPHYR, price data from COAR.**

		Seine	Drift	Set	Total
1999	Chinook	\$ 26,025	\$ 5,703,170	\$ 1,249	\$ 5,730,444
	Chum	\$ 2,394,489	\$ 1,501,461	\$ 22,526	\$ 3,918,476
	Coho	\$ 99,734	\$ 706,578	\$ 4,186	\$ 810,499
	Pink	\$ 12,671,216	\$ 70,889	\$ 14,960	\$ 12,757,064
	Sockeye	\$ 202,489	\$ 20,244,049	\$ 567,259	\$ 21,013,797
1999 Total		\$ 15,393,953	\$ 28,226,147	\$ 610,181	\$ 44,230,280
2000	Chinook	\$ 10,693	\$ 2,634,324	\$ 691	\$ 2,645,708
	Chum	\$ 3,570,366	\$ 3,530,309	\$ 25,414	\$ 7,126,089
	Coho	\$ 893,064	\$ 2,309,245	\$ 2,688	\$ 3,204,997
	Pink	\$ 13,015,001	\$ 149,097	\$ 35,858	\$ 13,199,956
	Sockeye	\$ 321,722	\$ 11,800,260	\$ 644,884	\$ 12,766,866
2000 Total		\$ 17,810,846	\$ 20,423,235	\$ 709,536	\$ 38,943,616
2001	Chinook	\$ 7,115	\$ 3,238,205	\$ 406	\$ 3,245,726
	Chum	\$ 2,923,038	\$ 3,428,183	\$ 20,576	\$ 6,371,797
	Coho	\$ 373,548	\$ 870,998	\$ 2,950	\$ 1,247,496
	Pink	\$ 9,415,264	\$ 132,834	\$ 26,460	\$ 9,574,558
	Sockeye	\$ 515,262	\$ 14,044,445	\$ 1,096,907	\$ 15,656,614
2001 Total		\$ 13,234,225	\$ 21,714,666	\$ 1,147,299	\$ 36,096,190
2002	Chinook	\$ 1,840	\$ 2,909,442	\$ 605	\$ 2,911,887
	Chum	\$ 2,433,054	\$ 2,215,548	\$ 27,638	\$ 4,676,240
	Coho	\$ 70,882	\$ 2,097,214	\$ 1,551	\$ 2,169,647
	Pink	\$ 2,586,387	\$ 19,044	\$ 8,679	\$ 2,614,109
	Sockeye	\$ 59,911	\$ 13,536,893	\$ 1,212,719	\$ 14,809,523
2002 Total		\$ 5,152,074	\$ 20,778,141	\$ 1,251,192	\$ 27,181,407
2003	Chinook	\$ 899	\$ 3,891,891		\$ 3,892,791
	Chum	\$ 1,759,108	\$ 854,720	\$ 7,384	\$ 2,621,212
	Coho	\$ 224,125	\$ 1,754,158	\$ 1,611	\$ 1,979,895
	Pink	\$ 11,918,830	\$ 26,416	\$ 4,015	\$ 11,949,261
	Sockeye	\$ 849,335	\$ 14,135,623	\$ 1,077,950	\$ 16,062,908
2003 Total		\$ 14,752,298	\$ 20,662,808	\$ 1,090,961	\$ 36,506,067
2004	Chinook	\$ 1,709	\$ 4,108,616	\$ 137	\$ 4,110,462
	Chum	\$ 1,374,443	\$ 982,039	\$ 15,820	\$ 2,372,303
	Coho	\$ 134,790	\$ 3,770,127	\$ 1,972	\$ 3,906,889
	Pink	\$ 4,456,706	\$ 26,937	\$ 10,116	\$ 4,493,758
	Sockeye	\$ 50,384	\$ 13,506,268	\$ 450,911	\$ 14,007,563
2004 Total		\$ 6,018,032	\$ 22,393,986	\$ 478,956	\$ 28,890,975
2005	Chinook	\$ 1,788	\$ 3,571,497		\$ 3,573,285
	Chum	\$ 773,066	\$ 1,890,977	\$ 6,962	\$ 2,671,005
	Coho	\$ 106,547	\$ 2,373,196	\$ 4,747	\$ 2,484,489
	Pink	\$ 16,371,746	\$ 87,928	\$ 24,272	\$ 16,483,946
	Sockeye	\$ 208,605	\$ 15,837,855	\$ 607,886	\$ 16,654,347
2005 Total		\$ 17,461,753	\$ 23,761,453	\$ 643,867	\$ 41,867,073

## Appendix E. Enhanced only harvest data.

Appendix Table E. Harvest of enhanced salmon from all prince William Sound facilities by species and gear type, 1997 – 2005. Data from ADF&G PWS Research staff, Cordova. 2005 data preliminary.

Year	Gear	Sockeye	Coho	Pink	Chum	Grand Total
1997	S01E	15,456	45,551	14,540,287	212,965	14,814,259
	S03E	919,728	5,033	282,699	603,804	1,811,264
	S04E	192,493		70,069	7,282	269,844
<b>1997 Total</b>		<b>1,127,677</b>	<b>50,584</b>	<b>14,893,055</b>	<b>824,051</b>	<b>16,895,367</b>
1998	S01E	696	27,756	15,703,040	219,015	15,950,507
	S03E	648,766	2,454	418,255	233,112	1,302,587
	S04E	24,815		24,705	184	49,704
<b>1998 Total</b>		<b>674,277</b>	<b>30,210</b>	<b>16,146,000</b>	<b>452,311</b>	<b>17,302,798</b>
1999	S01E	514	65,172	24,719,111	1,202,619	25,987,416
	S03E	1,049,162	564	97,028	636,524	1,783,278
	S04E	72,793		22,709	9,538	105,040
<b>1999 Total</b>		<b>1,122,469</b>	<b>65,736</b>	<b>24,838,848</b>	<b>1,848,681</b>	<b>27,875,734</b>
2000	S01E	18,772	214,932	21,843,269	1,412,028	23,489,001
	S03E	577,050	82,352	208,298	1,545,917	2,413,617
	S04E	89,983		47,629	10,585	148,197
<b>2000 Total</b>		<b>685,805</b>	<b>297,284</b>	<b>22,099,196</b>	<b>2,968,530</b>	<b>26,050,815</b>
2001	S01E	94,891	171,566	14,940,747	661,902	15,869,106
	S03E	697,712	2,540	575,997	1,039,546	2,315,795
	S04E	176,060		108,598	6,063	290,721
<b>2001 Total</b>		<b>968,663</b>	<b>174,106</b>	<b>15,625,342</b>	<b>1,707,511</b>	<b>18,475,622</b>
2002	S01E	2,040	23,569	7,819,297	1,881,328	9,726,234
	S03E	952,250	609	72,302	1,667,796	2,692,957
	S04E	227,878		34,738	19,751	282,367
<b>2002 Total</b>		<b>1,182,168</b>	<b>24,178</b>	<b>7,926,337</b>	<b>3,568,875</b>	<b>12,701,558</b>
2003	S01E	115,264	60,745	34,252,001	1,156,283	35,584,293
	S03E	949,170	9,232	56,875	655,629	1,670,906
	S04E	213,443		6,351	5,383	225,177
<b>2003 Total</b>		<b>1,277,877</b>	<b>69,977</b>	<b>34,315,227</b>	<b>1,817,295</b>	<b>37,480,376</b>
2004	S01E	70	26,673	8,756,820	700,003	9,483,566
	S03E	334,824	9,492	40,810	547,064	932,190
	S04E	80,403		37,757	8,920	127,080
<b>2004 Total</b>		<b>415,297</b>	<b>36,165</b>	<b>8,835,387</b>	<b>1,255,987</b>	<b>10,542,836</b>
2005	S01E	34,125		34,896,172	509,442	35,439,739
	S03E	206,967		142,994	871,868	1,221,829
	S04E	87,755		71,844	1,975	161,574
<b>2005 Total</b>		<b>328,847</b>	<b>-</b>	<b>35,111,010</b>	<b>1,383,285</b>	<b>36,823,142</b>

## Appendix F. Enhanced only value data.

Appendix Table F. Ex-vessel value of enhanced salmon from all prince William Sound facilities by species and gear type, 1997 – 2005. Harvest data from ADF&G PWS Research staff, Cordova. Value data from COAR. 2005 data preliminary.

Year	Gear	Sockeye	Coho	Pink	Chum	Grand Total
1997	S01E	\$ 78,182	\$ 209,126	\$ 7,490,326	\$ 518,797	\$ 8,296,432
	S03E	\$ 5,750,761	\$ 24,326	\$ 134,125	\$1,944,023	\$ 7,853,235
	S04E	\$ 824,363		\$ 27,392	\$ 21,906	\$ 873,662
<b>1997 Total</b>		\$ 6,653,306	\$ 233,452	\$ 7,651,844	\$2,484,726	\$17,023,328
1998	S01E	\$ 4,475	\$ 79,428	\$ 8,281,405	\$ 509,474	\$ 8,874,780
	S03E	\$ 6,036,109	\$ 12,851	\$ 185,455	\$ 789,205	\$ 7,023,620
	S04E	\$ 168,423		\$ 9,578	\$ 593	\$ 178,594
<b>1998 Total</b>		\$ 6,209,007	\$ 92,278	\$ 8,476,438	\$1,299,271	\$16,076,994
1999	S01E	\$ 4,314	\$ 292,586	\$ 9,949,379	\$2,036,805	\$12,283,084
	S03E	\$11,129,970	\$ 2,066	\$ 40,028	\$1,315,819	\$12,487,884
	S04E	\$ 555,542		\$ 7,830	\$ 19,365	\$ 582,737
<b>1999 Total</b>		\$11,689,826	\$ 294,652	\$ 9,997,237	\$3,371,989	\$25,353,704
2000	S01E	\$ 176,315	\$ 727,967	\$10,589,153	\$2,886,377	\$14,379,812
	S03E	\$ 5,200,188	\$ 434,992	\$ 65,212	\$3,255,941	\$ 8,956,333
	S04E	\$ 573,888		\$ 12,283	\$ 21,828	\$ 607,998
<b>2000 Total</b>		\$ 5,950,391	\$1,162,959	\$10,666,648	\$6,164,145	\$23,944,144
2001	S01E	\$ 405,832	\$ 325,301	\$ 6,534,449	\$1,935,957	\$ 9,201,538
	S03E	\$ 5,126,398	\$ 6,429	\$ 111,550	\$3,054,949	\$ 8,299,326
	S04E	\$ 1,096,854		\$ 22,480	\$ 17,687	\$ 1,137,021
<b>2001 Total</b>		\$ 6,629,084	\$ 331,729	\$ 6,668,479	\$5,008,593	\$18,637,885
2002	S01E	\$ 7,294	\$ 51,254	\$ 2,511,763	\$2,349,478	\$ 4,919,789
	S03E	\$ 6,758,529	\$ 1,820	\$ 10,509	\$2,061,444	\$ 8,832,301
	S04E	\$ 1,142,662		\$ 4,683	\$ 23,760	\$ 1,171,105
<b>2002 Total</b>		\$ 7,908,484	\$ 53,074	\$ 2,526,954	\$4,434,683	\$14,923,196
2003	S01E	\$ 498,915	\$ 204,732	\$10,557,327	\$1,398,657	\$12,659,631
	S03E	\$ 6,947,395	\$ 29,989	\$ 12,780	\$ 744,472	\$ 7,734,636
	S04E	\$ 1,066,485		\$ 893	\$ 6,345	\$ 1,073,723
<b>2003 Total</b>		\$ 8,512,795	\$ 234,721	\$10,570,999	\$2,149,474	\$21,467,989
2004	S01E	\$ 246	\$ 106,515	\$ 3,378,412	\$1,072,113	\$ 4,557,285
	S03E	\$ 3,047,766	\$ 50,901	\$ 13,880	\$ 923,392	\$ 4,035,938
	S04E	\$ 396,464		\$ 7,394	\$ 13,595	\$ 417,454
<b>2004 Total</b>		\$ 3,444,476	\$ 157,416	\$ 3,399,686	\$2,009,099	\$ 9,010,677
2005	S01E	\$ 112,224		\$12,143,868	\$ 702,419	\$12,958,510
	S03E	\$ 2,042,682		\$ 55,053	\$1,918,546	\$ 4,016,280
	S04E	\$ 486,830		\$ 13,830	\$ 3,982	\$ 504,641
<b>2005 Total</b>		\$ 2,641,735	\$ -	\$12,212,751	\$2,624,946	\$17,479,432