Submitted by the Alaska Department of Fish and Game **RC 44**
(at the request of Board Member Webster)
December 4, 2011

Proposal 80

5 AAC 24.331. Gillnet specifications and operations

(a) Copper River and Bering River Districts

(1) each drift gillnet vessel may operate not more than one gillnet; no drift gillnet may exceed 150 fathoms in length, hung measure; [NO MORE THAN TWO VESSELS MAY OPERATE TOGETHER, AND WHILE OPERATING TOGETHER MAY NOT HAVE ON BOARD EACH VESSEL GILLNETS OF MORE THAN 150 FATHOMS IN LENGTH, HUNG MEASURE;]

(x) in the Prince William Sound Area not more than one vessel may be used to operate a drift gillnet;

Proposal 81

5 AAC 24.331. Gillnet specifications and operations

(c) **notwithstanding 5 AAC 39.105(d) (3),** for the purpose of this regulation, a gillnet shall be considered to be a drift gillnet unless it has [INTENTIONALLY] been set, staked, anchored or otherwise fixed.

(f) Notwithstanding 5 AAC 39.105(d) (3), in the Prince William Sound Area, a person may not operate a drift gillnet when the vessel to which it is attached is grounded, or when any part of the gillnet is grounded above the waterline.

(g) In the Prince William Sound Area, a person may not use mechanical power to hold a vessel in substantially the same geographical location while attached to a drift gillnet.

Proposal 83

5 AAC 24.332. Seine specifications and operations

(a) Except for the first five fathoms in length of the purse seine, a purse seine may not be less than 200 meshes or more than [325] **335** meshes in depth, or less than 125 fathoms or more than 150 fathoms in length, hung measure, or with mesh size greater than four inches **stretched measure**[.], **except that the first 25 meshes immediately above or below the lead line may be a "chafing strip" with a mesh size no larger than seven and one-half inches stretched measure.** Leads deeper than the seine[,] **or** exceeding 75 fathoms in length[, OR WITH MESH SIZE LESS THAN SEVEN INCHES] may not be used, except as specified in 5 AAC 39.260(f).

(x) **Notwithstanding 5 AAC 39.260(f) leads with mesh size less than six and one quarter inches, stretched measure, may not be used.**

Substitute Language for Committee B:

Proposal 136

5 AAC 52.023
(23) in the Tebay River drainage,
(A) in Summit Lake,
(i) **repealed** [SPORT FISHING IS ALLOWED ONLY FROM JULY 1 – MAY 31;]
(ii) the bag and possession limit for rainbow trout/steelhead trout is 10 fish, **of** which [MUST BE] **only one may be greater than** [12]**18** inches [OR LESS] in length;

Submitted by the Alaska Department of Fish and Game

Reported harvest[a] of salmon and permits fished in the Glennallen subdistrict by ANS[b] designation area, 2006-2010.

	Reported harvest			Permits fished		
Year	Bridge to Tonsina	Tonsina to Gakona	Gakona to Slana	Bridge to Tonsina	Tonsina to Gakona	Gakona to Slana
2006	39,203	23,114	9,539	701	335	129
2007	47,032	24,872	8,086	892	335	124
2008	28,758	20,488	5,774	913	327	88
2009	30,154	21,639	6,833	834	315	116
2010	43,975	29,912	7,014	1,034	355	109
Average 2006-2010	37,824	24,005	7,449	875	333	113
ANS	25,500 - 39,000	23,500 - 31,000	12,000 - 12,500			

[a] Includes both federal and state reported harvest.
[b] Amount necessary for subsistence.

Submitted by CDFU
December 5, 2011

RC 47

Supplemental to RC 34

Proposal 43:

- Radically allocative
- Displaces commercial fleets from traditional areas
- Based on a premise unsupported by data
- Would have major unintended consequences
    - Will displace valuable commercial PWS blackcod fishery

The Sport Fish Division of ADF&G compiled the following data for Lingcod and Rockfish harvest for the commercial and recreational fleets in PWS, please note this is the same data contained in ***RC 34***.

The numbers show that average annual recreational Lingcod harvest went from around ***60,000lbs*** in the mid 90's to around ***270,000lbs*** in 2007. Meanwhile, the average annual commercial Lingcod harvest has remained steady at approximately ***30,000lbs*** for the same time frame.

The numbers show the average annual recreational Rockfish harvest in PWS *increased* from approximately ***70,000lbs*** in the mid 90's to ***220,000lbs*** in 2007. In comparison, the commercial Rockfish harvest *decreased* from approximately ***150,000lbs*** in the mid 90's to ***81,000lbs*** in 2007.

Finally, the IPHC numbers show there were 78 commercial longliners operating in PWS in 2001 compared to only 45 in 2010.

Submitted by AHTNA

RC 48

Proposal 76
If Personal Use fisheries opening cannot be June 14th, then we support a fisheries opening date of June 7th to allow more kings and sockeye to reach spawning grounds, allow more opportunity for subsistence fisheries to harvest more salmon species.

Northwest & Alaska Seiners Association, Inc.
43961 K-Beach Rd.
Suite E
Soldotna, AK 99669

RC 49

NASA, Inc. hereby withdraws Record Copy 21 from Board consideration.

NASA, Inc. submitted Proposals # 101, 105, 106, 108 for Board consideration. NASA, Inc. recognizes that allocation issues are complex and involve many stakeholders. At this time, NASA, Inc. recommends the Board take no action on the above referenced proposals in order to give NASA, Inc. an opportunity to work with CDFU, PWSAC and the Department during the period leading up to the next board cycle to define those issues on which consensus can be reached, and to narrow those points that may require Board action to resolve.

NASA, Inc. reserves the right to submit the above referenced proposals and RC at a future Board meeting, and the recommendations submitted here should not be binding on NASA, Inc. in the future should it become necessary to submit the same or similar proposals.

Submitted by CDFU Gillnet Division RC 50

December 5, 2011

New language for Proposal 81, the word Intentional has been preventing Public Safety officers from getting convictions for improper use of a gillnet. This revision removes the word Intentional and adds language preventing vessel grounding while attached to the gillnet as well as grounding the gillnet above waterline.

Proposal 81

5 AAC 24.331. Gillnet specifications and operations

(c) FOR THE PURPOSE OF THIS REGULATION A GILLNET SHALL BE CONSIDERED TO BE A DRIFT GILLNET UNLESS IT HAS BEEN [INTENTIONALLY] SET, STAKED, ANCHORED, OTHERWISW FIXED, WHEN A VESSEL TO WHICH IT IS ATTACHED IS GROUNDED, OR WHEN ANY PART OF THE GILLNET IS GROUNDED ABOVE THE WATERLINE.

Submitted by Alaska Department of Fish and Game

RC 51

December 5, 2011

Proposal 79

5 AAC 24.331 Gillnet specifications and operations.

(b)(6) before the first Monday in July, unless modified by emergency order, the Coghill, Unakwik , and Eshamy Districts **and the Port Chalmers Subdistrict,** gillnets with a mesh size of …

Proposal 80

5 AAC 24.331. Gillnet specifications and operations

(a) Copper River and Bering River Districts

(1) each drift gillnet vessel may operate not more than one gillnet; no drift gillnet may exceed 150 fathoms in length, hung measure; [NO MORE THAN TWO VESSELS MAY OPERATE TOGETHER, AND WHILE OPERATING TOGETHER MAY NOT HAVE ON BOARD EACH VESSEL GILLNETS OF MORE THAN 150 FATHOMS IN LENGTH, HUNG MEASURE;]

(x) in the Prince William Sound Area not more than one vessel may be used to operate a drift gillnet;

Proposal 81

5 AAC 24.331. Gillnet specifications and operations

(c) **notwithstanding 5 AAC 39.105(d) (3),** for the purpose of this regulation, a gillnet shall be considered to be a drift gillnet unless it has [INTENTIONALLY] been set, staked, anchored or otherwise fixed.

(f) Notwithstanding 5 AAC 39.105(d) (3), in the Prince William Sound Area, a person may not operate a drift gillnet when the vessel to which it is attached is grounded, or when any part of the gillnet is grounded above the waterline.

(g) In the Prince William Sound Area, a person may not use mechanical power to hold a vessel in substantially the same geographical location while attached to a drift gillnet.

Proposal 82

5 AAC 24.332. Seine specifications and operations

(a) Except for the first five fathoms in length of the purse seine, a purse seine may not be less than 200 meshes or more than [325] **335** meshes in depth, or less than 125 fathoms or more

than 150 fathoms in length, hung measure, or with mesh size greater than four inches **stretched measure**[.]**, except that the first 25 meshes immediately above or below the lead line may be a "chafing strip" with a mesh size no larger than seven and one-half inches stretched measure.** Leads deeper than the seine[,] **or** exceeding 75 fathoms in length[, OR WITH MESH SIZE LESS THAN SEVEN INCHES] may not be used, except as specified in 5 AAC 39.260(f).

Proposal 85

5 AAC 24.332. Seine specifications and operations

(x) **Notwithstanding 5 AAC 39.260(f), leads with mesh size less than six and one quarter inches, stretched measure, may not be used.**

Proposal 90

5 AAC 24.200. Fishing districts, subdistricts , and sections.

(h) Eshamy District: waters [WITHIN ONE NAUTICAL MILE OF THE MAINLAND SHORE FROM THE LONGITUDE OF THE OUTER POINT ON THE NORTH SHORE OF GRANITE BAY TO THE LONGITUDE OF THE LIGHT ON THE SOUTH SHORE OF THE ENTRANCE TO PORT NELLIE JUAN LIGHT]. **east of a line from the entrance to Port Nellie Juan at 60° 35.87'N. lat., 148° 06.13'W. long. to a point approximately 1 nautical mile offshore at 60° 36.87'N. lat., 148° 06.13'W. long., to 60°36.52'N. lat., 148°03.68'W. long., to 60° 30.68'N. lat., 147° 55.93'W. long., to 60° 26.12'N. lat., 147° 54.12'W. long., to 60° 24.00'N. lat., 147° 56.63'W. long., to 60° 24.00'N. lat., 147° 58.90'W. long., to Granite Point at 60° 24.94'N. lat., 147° 57.97'W. long**.

Proposal 98

5 AAC 24.368. Wally Noerenberg (Esther Island) Hatchery Management Plan.

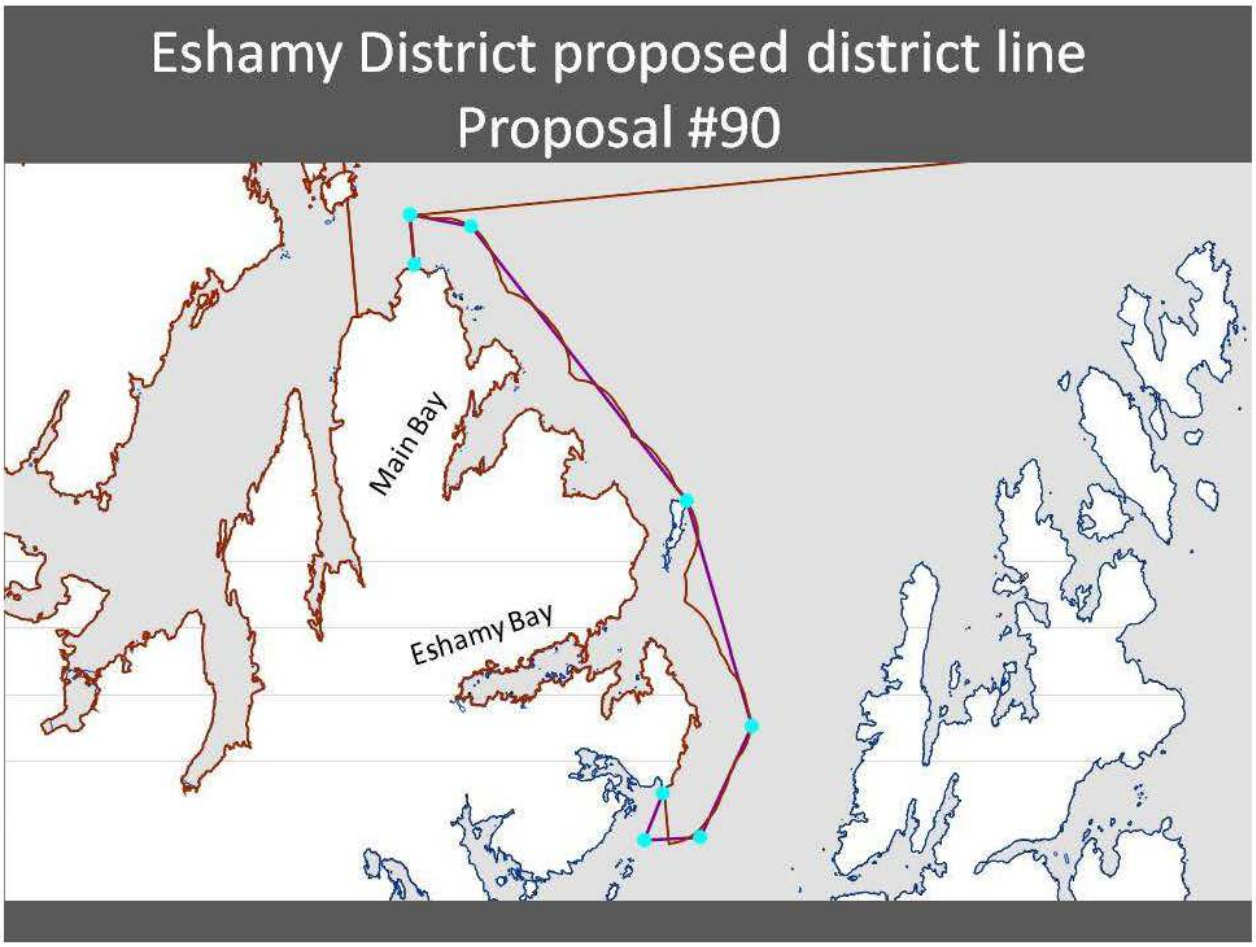
(a) The department in consultation with the hatchery operator, shall manage the Esther Subdistrict [AND] the Perry Island Subdistrict **and the Granite Bay Subdistrict** to achieve the corporation's escapement goal for the Wally Noerenberg (Esther Island) salmon hatchery**; the Granite Bay Subdistrict will be used only if the Esther Subdistrict and the Perry Island Subdistrict are not achieving adequate hatchery escapement.**

Proposal 99

5 AAC 24.365. Armin F. Koernig Salmon Hatchery Management Plan.

(b) The Armin F. Koernig Hatchery Terminal Harvest Area consists of the waters of Sawmill Bay (Evans Island), north and west of a line from [60° 03.63' N. LAT., 147° 59.45'

W. LONG., TO 60° 02.63’ N. LAT., 148° 01.70’ W. LONG.,] **60° 03.66’ N. lat., 147° 59.11’ W. long., to 60° 02.77’ N. lat., 148° 01.00’ W. long., to 60° 02.76’ N. lat., 148° 01.66’ W. long.,** excluding the Armin F. Koernig Hatchery Special Harvest Area.



RC 52

"Land of a Million Heartbeats"

Cordova Ranger District

Chugach National Forest

To: Board of Fish Fax #: 907 465 6094

Dep't.: _____ Phone #: _____

From: Jason Fode Fax #: 907-424-7214

Dep't.: _____ Phone #: 907 424-4743

Remarks: Spawning Habitat of 18mile Slough
Board of Fish Comments

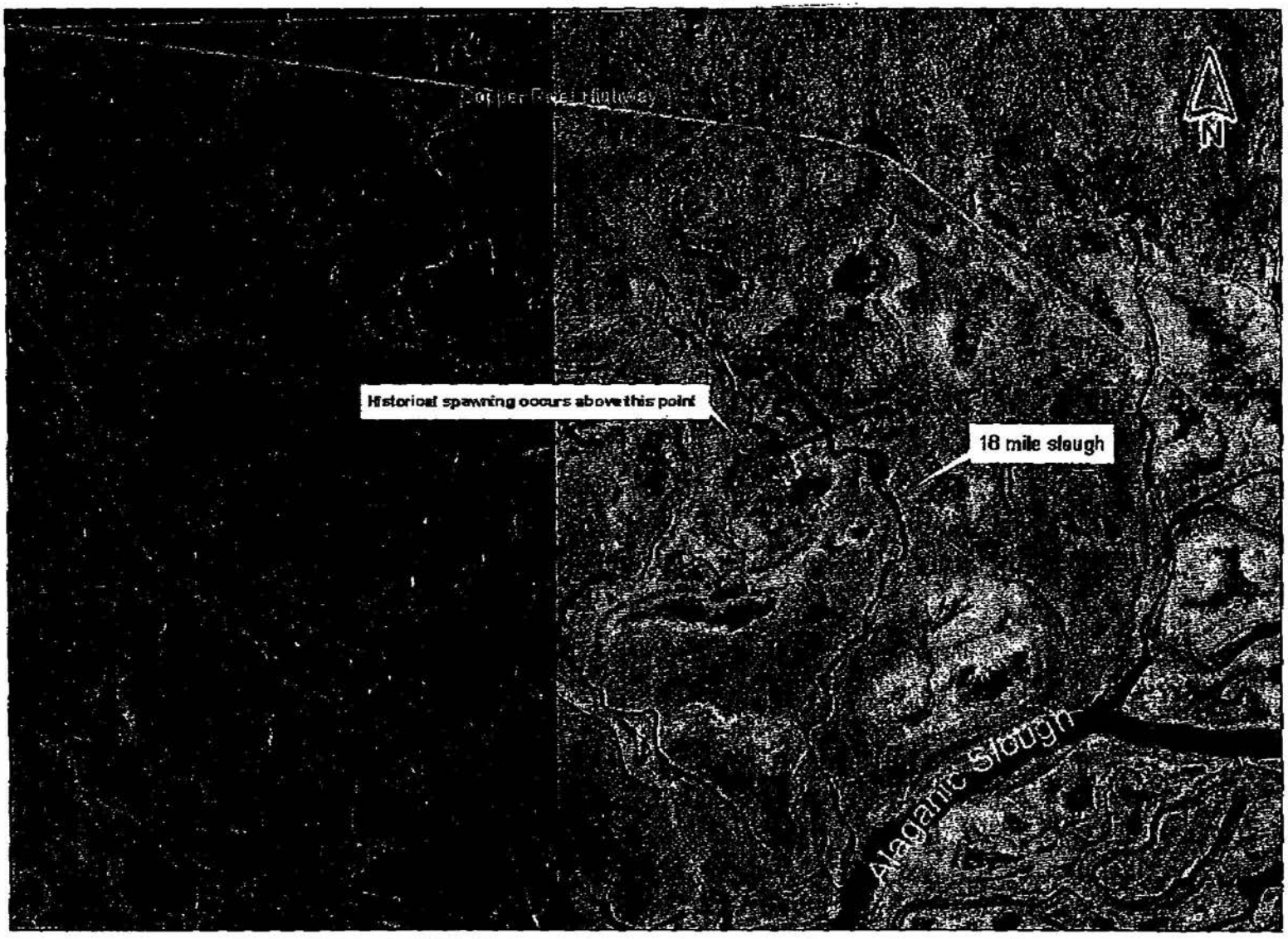
Please Forward on.

Total number of pages (excluding cover): 1

Date sent: 12/5/2011 Time: 14:00

Cordova Ranger District, P.O. Box 280, Cordova, AK 99574 (907) 424-7661, Fax 424-7214

18 mile Spawning Habitat



Point is located at UTM 593987, 6702838 about 1.2 miles above the confluence with Alaganic Slough

RC53

Native Village of Eyak
Department of Environment and Natural Resources

The Native Village of Eyak is submitting this data from the Copper River Chinook salmon monitoring program to help provide additional information for deliberations related to Proposal 76, 5 AAC 77.591. We do not offer any specific conclusions or further recommendations at this time.

A map of the Copper River study area can be found in Figure 1, PC Tab 96. Based on average migration rates calculated between sample events and through previous radiotelemetry studies, it can be assumed that travel time from the Canyon Creek research fishwheels to the lower boundary of the Chitina Subdistrict at Haley Creek is <1 day, and through the Chitina Subdistrict to the lower boundary of the Glennallen Subdistrict at the Chitina-McCarthy Bridge is an additional 1-3 days.

Numbers presented only represent Chinook salmon examined for marks at Canyon Creek, and do not account for variability in catch rates or fishing effort (CPUE). A much more detailed analysis could be presented by deriving weekly abundance estimates past Baird Canyon in each study year, and then correlating these estimates with migration rate averages across a similar time period. However, this would require weeks of statistician time to complete, and is not feasible for this RC. The numbers presented therefore may be interpreted only as a general index of abundance, relative to time and overall abundance, at the Canyon Creek fishwheels, but are not intended to provide an exact estimate of abundance by date.

Figure 1. Cumulative Chinook salmon caught and examined for marks at the Canyon Creek research fishwheels, 2005-2011

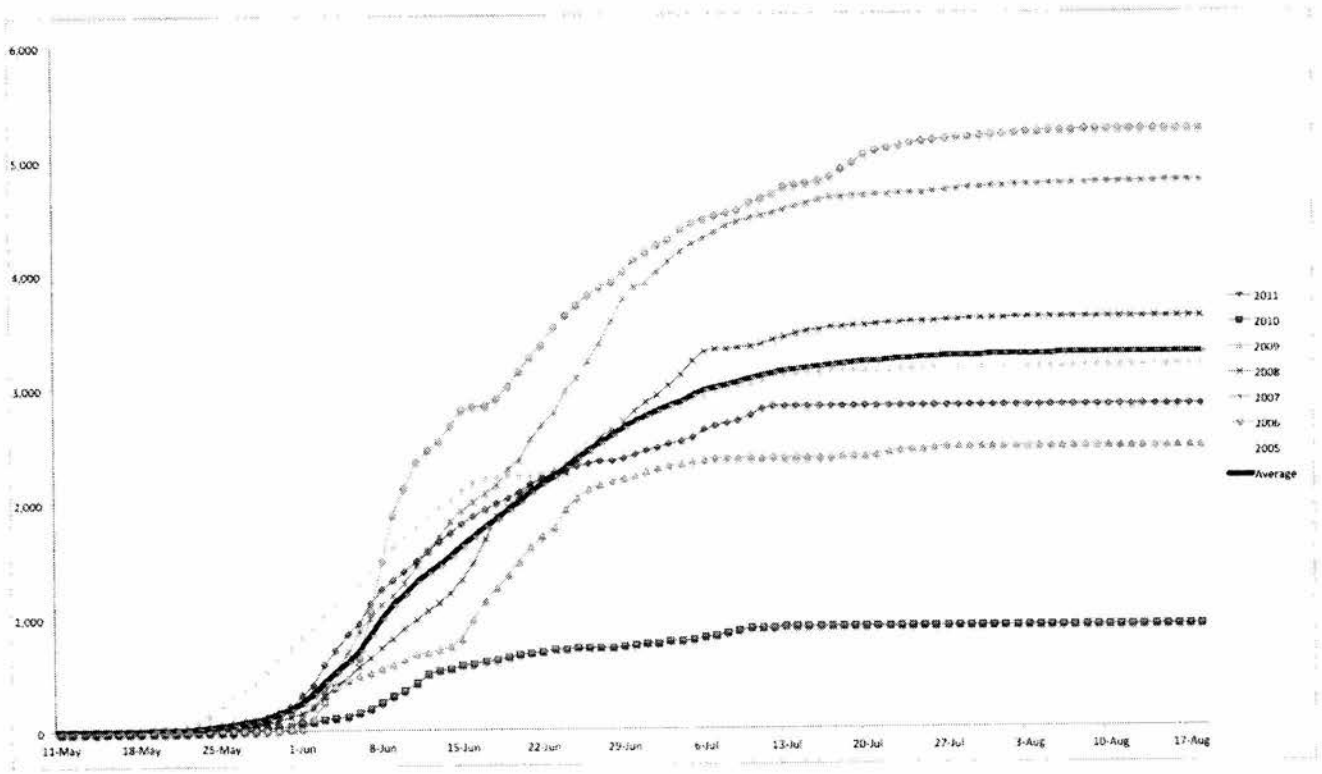


Figure 2. Proportion of total examined Chinook salmon at Canyon Creek by specified dates in a high abundance year (2006), low abundance year (2010), and on average (2005-2011).

Date	Proportion of total examined, ave. 05-11	Proportion of total examined, 2010	Proportion of total examined, 2006
June 1	7.55%	0.19%	6.82%
June 4	15.66%	7.10%	11.86%
June 7	25.49%	19.91%	21.36%
June 10	36.45%	40.51%	38.81%
June 13	44.27%	48.37%	58.50%
June 15	49.22%	53.50%	62.75%

NASA, DKC.

NCFC 511-107 RC54

A History of Enhanced Salmon Allocation in the Prince William Sound Management Area.

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

November 2005

James Brady
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www.northcapegraphics.com

Table of Contents

Introduction

Prince William Sound's commercial salmon fisheries have a rich history dating back well over 100 years. In this report I describe the history of salmon allocation among the commercial gear types. Specific focus is directed to the allocation environment that led to the adoption in 1990, of the Prince William Sound enhanced salmon allocation plan (5 AAC 24.370.) and how fishery trends have evolved since that time.

Historical Perspective pre-statehood

It is generally believed that commercial salmon fishing in Prince William Sound and the Copper River waters (now known as the Prince William Sound management area or Area E) began in the late 1800's. Gillnets were used from the earliest days where shallow waters enabled them to operate, such as in the Copper River delta. Various types of gill net gear have been used over time (Allocation Task Force, February 1990). Stake-nets were widely used during early days of the Copper River fishery. Set and drift gill nets were used more in the waters of Prince William Sound. For a brief time fish wheels were employed in the Copper River fishery. Floating fish traps were introduced in the 1880's and quickly became the most effective gear type for deep waters. From the time of their introduction until they were eliminated by Alaska's statehood act, company owned fish traps were controversial and the focus of the first allocation battles in the Sound. Purse seines became extensively used in the Sound around World War I with the advent of powered fishing boats. For a period of time prior to statehood drum seines were widely in use. In the territorial (pre-statehood) days the Sound was divided into four regions, Prince William Sound, Eshamy, Copper River and Bering River. None of the gear groups were restricted by management or regulation as to where they could fish. Seiners tended to focus on the pinks and chums of Prince William Sound, gill nets were more focused in the Eshamy, Copper and Bering areas targeting sockeye and Chinook salmon.

Statehood brings change

With Alaska's statehood in 1959, came a number of significant changes to the salmon fisheries. Fish traps and drum seines were eliminated. In 1960, Alaska received control of its salmon fisheries from the federal agencies and a modernized approach to fisheries management was adopted. To facilitate active escapement based management, the Sound was divided into the 9 districts that exist today. Regulations specified what gear types could fish in which districts based upon historical use patterns. This became the de facto allocation plan for salmon stocks. In the early 1970's salmon stocks throughout the state were in decline. Seine fisheries in PWS were closed entirely or severely restricted. The Copper River sockeye fishery experienced this decline in the late 1970's. The poor economic state of Alaska's salmon fisheries

1977 – 1988 – Hatchery Programs Develop in PWS

With new oil revenues coming into the state's general fund, Alaska's legislature recognized the economic impacts created from the decline of salmon fisheries. Statutes and loan programs were legislated that enabled state and private non profit hatcheries to be developed throughout the state. Prince William Sound was the center of much of the

states hatchery activity. A strong regional aquaculture association, Prince William Sound Aquaculture Corporation (PWSAC) was formed by an active group of commercial fishermen. This group was very effective in getting the private hatchery program operating in the Sound. By the late 1970's, private and state hatcheries had been constructed and were beginning to see modest returns. At present six hatchery programs contribute to the PWS fisheries.

The Armin F. Koernig Hatchery (AFK) started operations in 1974 and was the first successful and the first PWSAC owned hatchery in Prince William Sound. AFK is located at Port San Juan on Evans Island, in the Southwestern District, a purse seine only district of PWS. The original hatchery building was converted from a salmon cannery. Production grew steadily and by 1980 AFK was incubating nearly 100 million pink eggs annually. AFK is currently permitted for 190 million pink eggs and has been operating near that capacity since 1998. An attempt to produce late run chum salmon at AFK met limited success and was eventually dropped. Early chums from WHN have been released at AFK in recent years.

The Cannery Creek Hatchery (CCH) was built in 1978 by the ADF&G Fisheries Rehabilitation, Enhancement and Development (FRED) Division as a pink and chum salmon hatchery. Cannery Creek is located in Unakwik Inlet, in the Northern District, a purse seine only district of Prince William Sound. The chum component of the hatchery program had poor success due to cold lake water temperatures during winter months, and was dropped in 1990. PWSAC assumed operational control of the hatchery in 1988. CCH is permitted to incubate 152 million pink salmon eggs and has been operating at that capacity since 1989.

The Wally Noerenberg Hatchery (WNH) was built in 1985 and is the second PWSAC owned hatchery. WHN is located on Esther Island in the Coghill District, a gill net and purse seine district of Prince William Sound. WNH currently permitted to produces three species of Pacific salmon; 120 million pink eggs, 148 million chum eggs, and 4 million coho eggs. Sockeye and chinook salmon were also cultured at WNH in the past. The sockeye program was transferred to the Main Bay Hatchery in 1990 and the chinook program was discontinued in 1997 to increase coho production. Since 1996 WHN had been operating at a capacity of 130 million pink eggs, 110 million chum eggs, and 1.6 million coho eggs. The chum salmon brood stock at WHN is from Wells Bay, and exhibits early run timing. Since 1993, a portion of the WHN chum fry have been released in Port Chalmers, located in the Montague District, a purse seine only district of Prince William Sound.

The Main Bay Hatchery (MBH) was built in 1981 by the ADF&G Fisheries Rehabilitation, Enhancement and Development (FRED) Division originally designed as a chum salmon facility. MBH is located in the Eshamy District, a small district in western PWS open only to set gill net and drift gill net gear. ADF&G discontinued the chum program in 1986 and switched to a sockeye enhancement program with the goal of producing 20 million sockeye smolts annually. PWSAC assumed operational control of the hatchery in 1990. Up to six different sockeye salmon stocks have incubated and

reared in the same hatchery building requiring innovative and extraordinary disease control measures. In 1998, PWSAC discontinued the early (Eyak Lake) and late (Eshamy Lake) stocks to concentrate solely on the mid timing Coghill Lake stock. MBH currently permitted for 10 million sockeye eggs, and has released 4 to 8 million smolt annually since 1997.

The Gulkana Hatchery is a streamside incubation facility started by ADF&G in 1973. Then Gulkana Hatchery is located on springs, adjacent to the East Fork of the Gulkana River, in the Copper River watershed. Production from this facility benefits drift gill net fishermen in the Copper River District as well as personal use, subsistence and recreational fishers in the Copper River basin.

From 1973 to 1980 the hatchery capacity expanded yearly, while continuing to focus on research in sockeye culture and incubator design. In 1980, with 20 incubators in operation, the emphasis moved from research to production. By 1984, Gulkana became the largest sockeye fry production facility worldwide, with egg takes of 26 million. PWSAC assumed operational control of the hatchery in 1993. By attempting to keep things simple, and pilot new procedures before implementation, Gulkana has achieved goals of taking 35 million eggs in all but one year since 1988. .

The Solomon Gulch Hatchery (SGH) operated by Valdez Fisheries Development Association (VFDA) was constructed in 1983. The Solomon Gulch Hatchery is the only hatchery in PWS not currently operated by PWSAC. The Solomon Gulch hatchery is located in Port Valdez, in the Eastern District, a purse seine only district of PWS. The SGH is permitted to incubate 230 million eggs, is the largest pink salmon facility in PWS. The SGH pink salmon brood stock is from early PWS systems and as a result the SGH contribute significantly to the early seine fishery in PWS.

Dec 1988 - BOF expresses need for Allocation Plan

The Fishery Situation in 1987

As the hatchery program developed in the Sound, discontent about enhanced salmon allocation was developing within the gear groups. In 1987, and estimated 18 million enhanced pink salmon returned to Prince William Sound. PWSAC's AFK hatchery was operating at capacity and the new WHN hatchery had it's first production return. All user groups were paying a 2% enhancement tax to the regional aquaculture association (PWSAC), yet the Sound's enhancement programs, dominated by pink salmon production, were largely benefiting only the seiners. Figure 1.

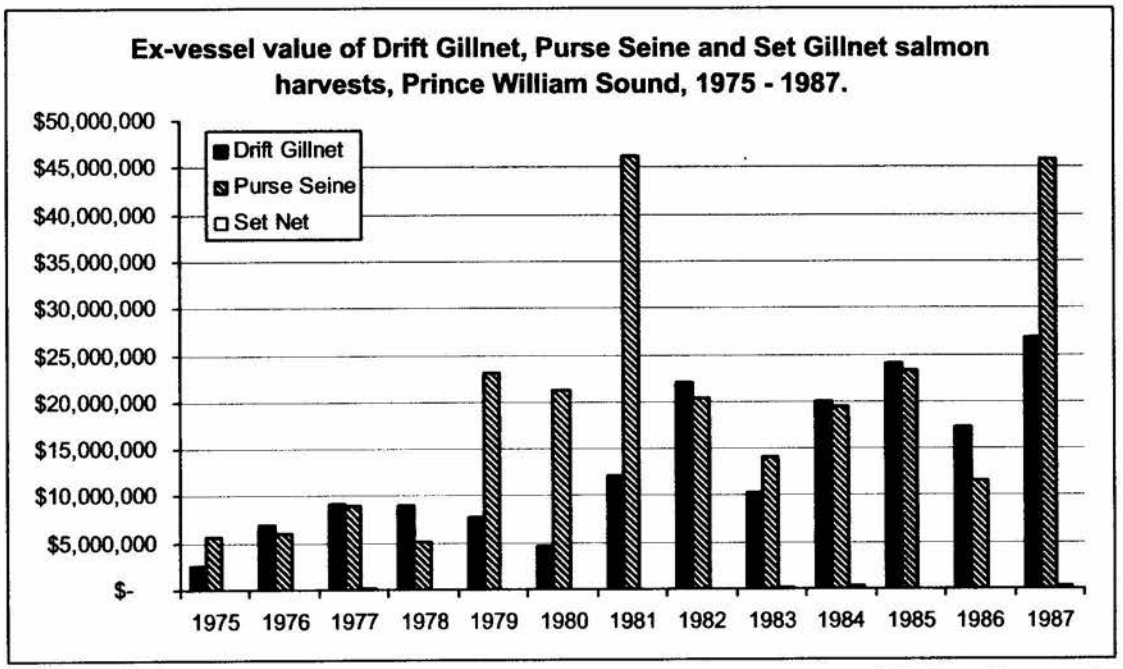

Figure 1. Ex-vessel value of Drift Gillnet, Purse Seine and Set Gillnet commercial salmon harvests in Prince William Sound, 1975 – 1987. Data from PWSAC ATF reports and ADF&G Zephyr database.

Discontent is expressed to Board of Fish

A large number of proposals were submitted to the Board of Fisheries expressing discontent with the unbalanced allocation of enhanced salmon in PWS. After considerable debate on this issue, the Board choose not to take action on any of these proposals. Board Chair, Gary Slaven, stated that it was the responsibility of PWSAC and the PWS permit holders to develop an allocation policy that would alleviate the conflict between the gear groups. He challenged the groups to bring an allocation plan back to the Board in 1991 at the next regulatory cycle (Alaska Board of Fisheries, 1997.).

1989-1990 ATF writes PWSAC Allocation Policy.

In response to the charge from Board chair Salven, PWSAC invested considerable time and expense into a two year public process to develop a corporate policy for allocating salmon produced by the association's hatcheries. The Allocation Task Force (ATF), a committee of gear type representatives, was created by PWSAC to accomplish this task. Under contract to PWSAC, CMA Research conducted a broad survey of all PWS permit holders investigating the topics of salmon allocation, management and fishery values. Results of this survey were incorporated into the crafting of an allocation policy. A three volume publication documented the ATF's efforts; (Report No. 1 - Briefing Papers, Report No. 2 – Trends and Conditions and Report No. 3 – Unknown Title).

The ATF hotly debated the issue of basing allocation only on enhanced production verses combining wild production with enhanced. In the end they choose to combine wild and enhanced because ADF&G and PWSAC lacked the ability to accurately differentiate

these stocks. The ATF completed the Allocation Policy and presented it to the PWSAC General Board which adopted it in its entirety in May of 1990. (APPENDIX A.)

Key elements of the Allocation Policy follow below:

PWSAC Allocation Policy

- ***It is the policy of PWSAC to equitably allocate enhanced salmon resources in Area E among all users through long term planning, production and dedication of financial and human resources.***

- ***Subsistence, sport and personal use needs will continue to be addressed within planning and production strategies.***

- ***Pertaining to commercial fisheries, enhanced salmon allocations will be based upon the long term historic economic balance that existed since statehood and prior to significant hatchery returns, as determined by ADF&G ex-vessel value records.***

- ***This balance will be utilized in planning and production as a long term approximate projection goal anticipated to achieve equitable value in returning salmon to drift gill netters, seiners and set gill netters; excluding brood stock and cost recovery salmon.***

Nov. 1990 – PWSAC Issues Policy Clarification Statements

A list of seven interpretive statements were prepared in November 1990 by the PWSAC staff assigned to plan and facilitate the ATF project. These statements were prepared at the request of the PWSAC Production Planning Committee to provide guidance in production planning and to assure decisions were supportive of policy intent. These clarification statements are paraphrased below:

1. *".... that enhanced salmon allocations be conducted at the planning and production phase of fishery development. .... the balance will be approximately 49/50/1 percents for seiners, drift gillnetters and set netters respectively."*
2. *"... that this balance be achieved only over a period of time reasonable to provide for production development and to allow averaging harvest values to dampen the effects of annual fluctuation in harvest...."*
3. *"In-season management of the fishery to achieve any gear group allocation is not to be encouraged."*
4. *"... PWSAC will if necessary propose to the Board of Fisheries regulatory changes..... to provide the long term frame-work management strategy to assure the planned production does indeed deliver fishing opportunity to the intended recipient of enhanced production."*
5. *" ...that such management changes as described in the above paragraph do not result in a re-allocation of existing production."*

6. *"It is the intent of the authors of the policy that production will attempt to achieve a balance of enhanced salmon harvest value. .... However, should it become apparent that economic balance trends away from the historic balance due to persistent failures of wild stocks, changing fish values, evolving environmental conditions, enacted laws, regulations or any other factor(s) which may change the described balance, then production will be planned to rebalance the ration such that the over-all economic balance in the fishery is maintained. ..."*
7. *"... It is the intent of the authors of the policy authors that the developing fishery, guided by the policy will minimize changes in historic fisheries in existence since statehood. To minimize does not preclude change, but attempts to hold change to levels least disruptive, ... "*

1990-1991 RPT Develops Allocation Plan

To implement the PWSAC allocation policy, a stable regulatory framework was needed to ensure that the PWSAC production plan would deliver fish to intended gear groups. A new regulatory management plan designed for this purpose might potentially impact all salmon user groups in the Sound. An organization with broad jurisdiction but independent of PWSAC, was more appropriate to facilitate the development of the management plan. Recognizing this, ADF&G commissioner Don Collingsworth charged the Prince William Sound Regional Salmon Planning Team (RPT), with the task of developing an enhanced salmon allocation plan for PWS. The charge directed the RPT to develop a draft regulatory plan and bring it before the Board of Fisheries at the February 1991 meeting.

Between September 1990 and January 1991, the RPT conducts five well attended public meetings, heard 81 oral testimonies and received 73 written testimonies. Meetings were held inside and outside of Alaska, to obtain the broadest involvement from all gear groups. At the conclusion of its proceedings the RPT succeeded in reaching a consensus (or informed consent) between the three commercial gear types and other users for a regulatory management and allocation plan to present to the Board of Fisheries.

Feb 1991 - Board of Fish Adopts Allocation Plan

The Board of Fisheries met in Cordova in February of 1991 and received oral and written reports on the allocation plan developed by the RPT. The plan and much of the supporting material were presented in a 16 page Proposal Report, authored by the RPT and jointly published by ADF&G and PWSAC. (APPENDIX B.) After it's deliberation, the Board adopted the allocation plan in its entirety as **5 AAC 24.370. Prince William Sound Salmon Management and Salmon Enhancement Allocation Plan**.

The plan contained three sections; 1.) A preamble explaining the foundation of the allocation plan, 2.) An intent section expressing the intent of the Board upon adopting the plan and 3.) A distinct management section which created a new subdistrict and imposed time and area restrictions on gear groups. In its entirety, the allocation plan represented the culmination of a great deal of effort, heated negotiations and mutual compromise that arrived at a balanced agreement between the commercial gear groups.

The Preamble contained important value statements that included:

- *Minimize Impacts on Wild Stocks*
- *Minimize impacts to historic and traditional fisheries while maintaining historic harvest value percentages*
- *Promote highest possible quality of fish*
- *Reduce congestion in the fisheries*
- *Maintain diversity of uses of the salmon resources ...*

The Intent section contained a narrative expressing the design and purpose of the plan, and the district management changes it entailed. Key elements of the intent language include the following:

"... to allocate the natural and enhanced salmon stocks in Prince William Sound in such a manor as to maintain the long term historic balance between competing commercial users that existed since statehood and prior to any significant production from enhancement programs."

" ... to maintain to the maximum extent possible the historic fishing areas and gear types and not allow development of new gear types in non-traditional areas."

"... to endorses the Allocation Policy adopted by PWSAC in May of 1990 and directs Department and PNP operators to plan their enhancement production using the policy as a guideline."

"... preserve pink salmon as the primary species of importance to the purse seine gear type in PWS..."

"... provide opportunity for development of enhanced returns of early timing chum, sockeye and chinook salmon to the gill net districts of PWS for the explicit benefit of the gill net users."

"... development of coho salmon returns after August 25th for the gill net fleet. ..."

"... recognizes that enhanced species returning to gill net districts during the primary seine fishery in western PWS (July 18 – Sept. 1st) will be subject to considerable seine interception and cannot be explicitly targeted to the gill net fleet."

"... wild stock management has the highest priority in determination of fishery openings in PWS."

The District Management section of the allocation plan established a corridor in the western Sound for early stocks of salmon (principally chum and sockeye) to reach gill net fisheries in the Eshamy and Coghill Districts. This was accomplished by preventing purse seine gear from operating; in the Southwestern District prior to July 18, in the Perry

Island Subdistrict prior to July 21 and in the Coghill District prior to July 21. The Perry Island Subdistrict of the Northern district, was created to facilitate this as well as aid in management of hatchery returns to the WNH hatchery.

Although the regulation adopted by the Board did not provide specific allocation percentages by gear type, within its intent language it directed that the enhancement programs in PWS maintain the long term historic balance between the gear types that existed after statehood and prior to significant contributions from hatchery programs.

The "long term historic balance" was generally agreed to be represented by table of ex-vessel value ratios by gear group presented in the ATF "Trends and Conditions" report. (Table 1) The average ratios presented in this table were 50.7% for purse seine, 48.6% for drift gill net and 0.6% for set gill net.

Table 1. Annual ex-vessel value by gear type for the Prince Willian Sound commercial salmon fishery, 1960-1984. Data from the PWSAC Allocation Task Force report number two, *Trends and Conditions*, Tables 11 and 12.

Year	Seine	Drift GN	Set GN	Total Val	Seine	Drift GN	Set GN
1960	$ 1,227.6	$ 875.5	$ -	$ 2,103.1	58.4%	41.6%	0.0%
1961	$ 1,192.3	$ 1,411.5		$ 2,603.8	45.8%	54.2%	0.0%
1962	$ 4,175.4	$ 1,575.8		$ 5,751.2	72.6%	27.4%	0.0%
1963	$ 3,032.9	$ 1,098.4	$ -	$ 4,131.3	73.4%	26.6%	0.0%
1964	$ 2,245.6	$ 1,825.4	$ -	$ 4,071.0	55.2%	44.8%	0.0%
1965	$ 1,212.3	$ 1,829.1		$ 3,041.4	39.9%	60.1%	0.0%
1966	$,425.0	$,308.7		$ 3,733.7	38.2%	61.8%	0.0%
1967	$,358.0	$,501.1	$ -	$ 2,859.1	47.5%	52.5%	0.0%
1968	$,290.1	$,928.6	$ -	$ 3,218.7	40.1%	59.9%	0.0%
1969	$,228.3	$ 2,017.2	$ 38.1	$ 4,383.6	50.8%	46.0%	3.2%
1970	$,546.5	$,081.4	$ 56.2	$ 4,684.1	33.0%	65.8%	1.2%
1971	$,993.6	$,339.2	$ -	$ 6,332.8	63.1%	36.9%	0.0%
1972	$ -	$ 2,657.7	$ 27.0	$ 2,784.7	0.0%	95.4%	4.6%
1973	$ 5,176.3	$ 4,131.2	$ 98.8	$ 9,406.3	55.0%	43.9%	1.1%
1974	$ 143.4	$ 4,458.2	$ 167.2	$ 4,768.8	3.0%	93.5%	3.5%
1975	$ 5,626.4	$ 2,634.0	$ -	$ 8,260.4	68.1%	31.9%	0.0%
1976	$ 6,069.0	$ 6,975.2	$ -	$13,044.2	46.5%	53.5%	0.0%
1977	$ 8,932.8	$ 9,223.0	$ 130.0	$18,285.8	48.9%	50.4%	0.7%
1978	$,192.6	$,949.0	$ -	$14,141.6	36.7%	63.3%	0.0%
1979	$ 3,163.0	$,661.9	$ -	30,824.9	75.1%	24.9%	0.0%
1980	$ 1,238.8	$,658.8	$ 5.7	25,913.3	82.0%	18.0%	0.1%
1981	$ 6,170.5	$ 2,092.7	$ -	58,263.2	79.2%	20.8%	0.0%
1982	$ 0,286.8	$ 2,019.4	$ -	42,306.2	48.0%	52.0%	0.0%
1983	$ 4,122.5	$ 0,232.7	$ 94.5	24,549.7	57.5%	41.7%	0.8%
1984	$ 9,415.9	$ 0,031.7	$ 89.4	39,837.0	48.7%	50.3%	1.0%
			1960-1984 Avg.		**50.7%**	**48.7%**	**0.6%**

NASA, RCSS

The three sections outlined above were adopted by the board, and were incorporated into 5 AAC 24.370. Regulation booklets published in subsequent years contained these sections as part of 24.370. Some years later, however, a Department of Law regulation specialist removed the "preamble" and "intent" sections from 5 AAC 24.370 because these sections were "non regulatory". They felt that such "intent" language should be contained in a Board Finding. Although a finding was to have been written by the Board, one was never was completed. A place holder finding exists (Finding: #91-125-FB). They consequence of this was that significant sections of the management plan were "lost" including the Board's intent and their endorsement of the PWSAC Allocation Policy.

Jan 1997 – BOF adds 25% Piggy Bank section to Plan

At the next two regulatory cycles the Board of Fisheries were again faced with numerous proposals from the gear groups requesting modifications to the allocation structure. In the 93-93 regulatory cycle the Board elected not to modify the plan, recognizing the significance of the balance that had been reached for the ATF and the RPT's efforts. However in the 97-97 regulatory cycle, a new Board make-up choose to look into modifying the plan.

The Fishery Situation in 1996

Following the adoption of the allocation plan in February 1991, the situation in PWS changed significantly. The seine fishery which derives 80% of its income from pink salmon (Figure 2.), had fallen on hard times. The pink salmon returns to the Sound in 1992 and 1993 yielded the lowest commercial harvests since 1978. Pink salmon prices had crashed from the 1988 peak of $0.84/lb to $0.07/lb in 1996. (Figure 3). The lower prices demanded that the hatcheries harvest more cost recovery fish, leaving fewer fish for the common property fishery. In response to the economic pressure participation in the seine fishery dropped from 259 active permits in 1991 to 94 permits in 1996. (Figure 3.)

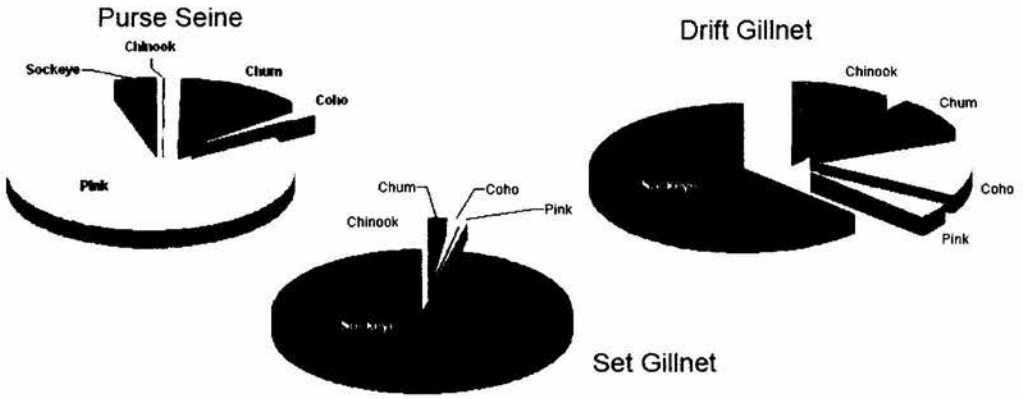

Figure 2. Proportion of average ex-value that salmon species contribute to the commercial Purse Seine, Drift Gillnet and Set Gillnet fisheries in Prince William Sound, 1984 -2004. Source: COAR.

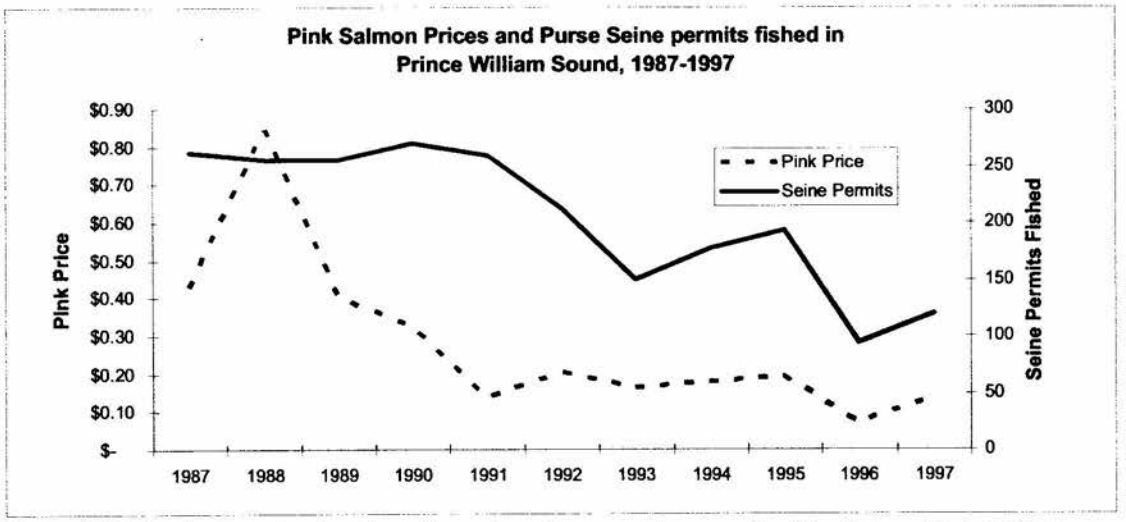

Figure 3. Pink salmon price trends and number of purse seine permits fished annually in Prince William Sound, 1987-1997. Source; COAR and Zephyr.

On the gill net side the picture was different. The gill net fleet derives over 60% of its income from sockeye salmon (Figure 2). Although sockeye prices had also declined, the magnitude of the decline was less than for pink salmon. (Figure 4.) This was largely due to the successful marketing strategies for Copper River salmon. While the gill net fleet had seen little benefit from the hatchery program in 1991, they now were experiencing successful returns of chum salmon to the WNH hatchery in the Coghill District. The Copper River sockeye stocks were experiencing record returns. Annual participation in the gill net fishery was relatively steady at over 500 active permits each year. (Figure 4.)

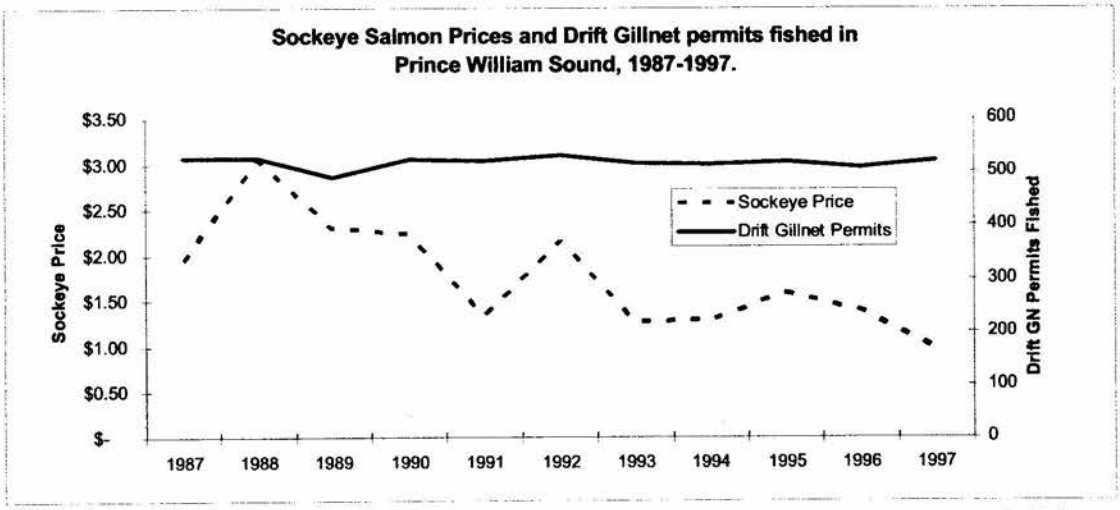

Figure 4. Sockeye salmon price trends and number of drift gillnet permits fished annually in Prince William Sound, 1987-1997. Source; COAR and Zephyr.

BOF Analysis

Based on BOF Finding 97-167-FB (APPENDIX C), the Board identified two factors contributing to the "problem" in the PWS fishery; 1.) the drop in pink salmon prices and 2.) the inability of PWSAC to fulfill that portion of the allocation plan which required additional production of fish. The problem as stated in the BOF finding was:

> *"... the fact that, over the last six years, the average ex-vessel value for the drift gill net fleet has been approximately 75% of the total ex-vessel value of all salmon (wild and enhanced) and the average ex-vessel value for the seine fleet has been approximately 25% of the total ex-vessel value."*

The Board questioned the use of both wild and enhanced fish for calculating these values, but concluded from review of the plans original intent language and the PWSAC Clarification Statements that this was indeed the intent of the original policy. The finding points out that:

> *"If only enhanced fish are used in the calculation of ex-vessel value, the disparity is minimal and no adjustment would be necessary."*

The Board reviewed the percentages (drift gillnet 50%, seine 49% and set gillnet 1%), and determined that they represented an allocation for each gear group approximating long term historic averages. Although the Board would have preferred the percentages be expressed as ranges, they recognized their significance, and consequently included them into 5 AAC 24.370 unchanged.

The "piggy bank" concept

While recognizing that "parity" was a long term goal measured over many years, the Board felt that there should be a short term correction to bring gear groups into compliance with allocation percentages. Based on this logic, the Board decided to create a "piggy bank" to adjust allocation disparities over short time frames. One "piggy bank", would benefit seiners while the other would benefit drift gill netters. The seiner's piggy bank consisted of shared access to the enhanced chum salmon return to the Esther Subdistrict between June 1 and July 20. The drift gillnet "piggy bank" consisted of the enhanced chum return to the Port Chalmers Subdistrict. The Board established a threshold or trigger, whereby if one of the gear groups fell below 25% of the total ex-vessel value for the common property harvest in Prince William Sound, then that gear type would go into the "piggy bank" on the following year. Recognizing the purse seine gear was more efficient that drift gillnet gear, the drift fleet would have exclusive access to Port Chalmers "piggy bank" while the seiners would share the Esther Subdistrict "piggy bank" with the drift fleet, having equal time but not necessarily equal area. The Board established that the "piggy bank" concept would not go into effect until after the1997 season which would be a base year.

Feb 2003 – Piggy Bank trigger revised to 40%

The Fishery Situation in 2002

The 1997 "base year" for the allocation plan, yielded an ex-vessel value percentage for the seine fleet of 26.1% (Gray et. al. 2003), falling short of activating the 25% "piggy bank" trigger. However the 2002 season had placed the purse seine value ratio clearly below the 25% trigger. (Figures, 5 & 6.)

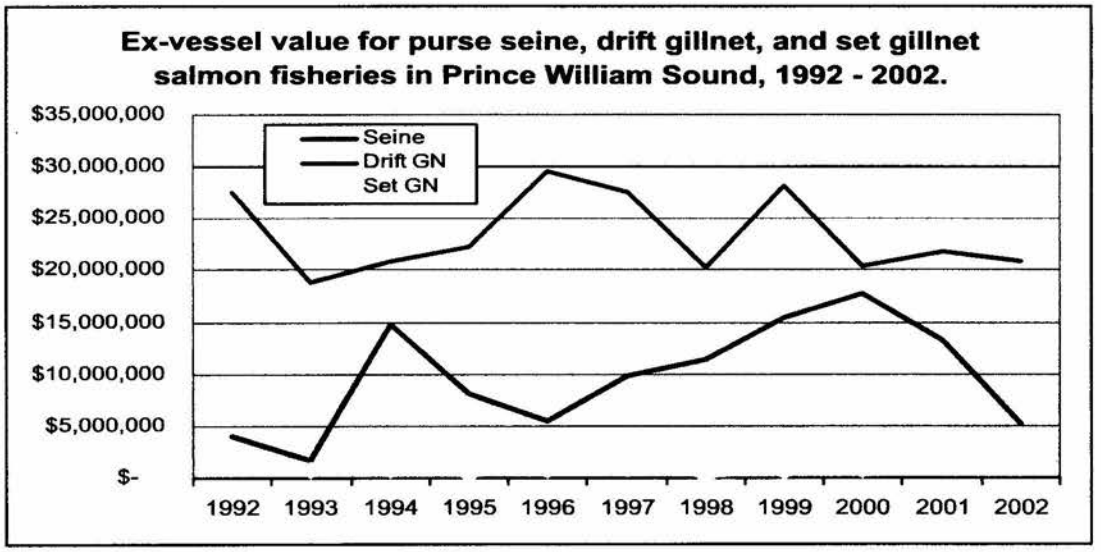

Figure 5. Ex-vessel values of purse seine, drift gillnet and set gillnet salmon fisheries in Prince William Sound, 1992 -2002. Source; COAR & Zephyr.

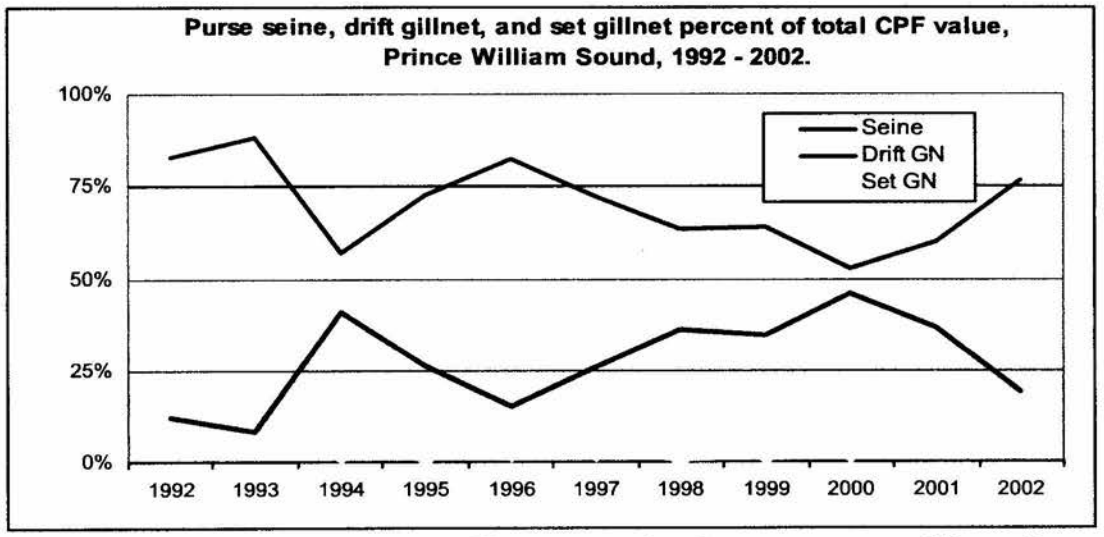

Figure 6. Purse seine, drift gillnet and set gillnet percent of total common property fishery value, Prince William Sound, 1992-2002. Source; COAR & Zephyr.

Table 2. Purse seine, drift gillnet and set gillnet percent of the total Area E common property fishery ex-vessel value, 1992 – 2002. Source COAR & Zephyr.

Year	Seine	Drift GN	Set GN	
1992	12%	83%	5%	
1993	8%	88%	3%	
1994	41%	57%	2%	
1995	26%	73%	1%	
1996	15%	83%	2%	
1997	26%	72%	2%	25% Piggy Bank base year
1998	36%	63%	1%	
1999	35%	64%	1%	
2000	46%	52%	2%	
2001	37%	60%	3%	
2002	19%	76%	5%	

Board increases trigger point to 40%

The Board of Fisheries met in Cordova Jan 31- Feb 6, 2003. They adopted an amended version of a proposal which increased the "piggy bank" trigger from 25% to 40%. This action made it "easier" for a gear group's ex-vessel value ration shortfall to trigger the "piggy Bank" clause in the following year. For example, had the Board set the trigger at 40% rather than 25% in 1996, the purse seine group would have been given access to the "piggy Bank" in every year since 1997 rather than just 2002 (Table 2). The Board also revised the manor that the ex-vessel value was calculated, using Commercial Operators Annual Report (COAR) rather than ADF&G estimates of value. This action had only a minor impact on the calculated percentages. All percentages and ex-vessel values presented in the report for dates later than 1984, use COAR data.

October 2003 – Board Allocation Committee Formed

Coffey ACR

At it's October 2003 fall work session, the Board received an Agenda Change Request (ACR#4) from the Law offices of former Board member Dan Coffey, representing the seine fishermen of PWS. The ACR contended that the Board's efforts to allocate salmon to the commercial gear groups in 5 AAC 24.370 had been "voided by the cost recovery actions of PWSAC", and "as a result the commercial harvest for the 2003 season was not in conformity with the board's regulation". The ACR did not propose any specific solution.

Comments on ACR #4, provided to the Board by ADF&G explained the complex PWSAC cost recovery policy. PWSAC has an integrated cost recovery program that involves all of its facilities. They have two independent cost recovery goals annually, a

gillnet goal and a purse seine goal. The gillnet goal is based on the operational costs for producing fish that benefit gillnet fisheries. The revenue to meet this goal is generated from cost recovery harvesting fish that would otherwise be caught in gillnet fisheries. Similarly the seine cost recovery goal is based on the production costs of seine fis and is taken from the returns that would otherwise benefit seiners. Because the seiners had shared access to the early chums at Esther due to the "piggy bank" (5 AAC 24.370. (e)), in 2003, PWSAC's cost recovery plan treated the early chums as shared fish for both gill net and seine. The Board's deliberation of ACR #4 found it to be allocative and consequently they failed to accept it.

Allocation Workgroup Formed

In response to ACR #4, the Board established a committee composed of board members, Nelson (chair), Bouse and Morris, to examine the PWS Allocation Plan (5 AAC 24.370.), and the cost recovery plan for PWSAC. The goal of the committee was to: " reach a better understanding of past and present allocation and cost recovery issues and to explore options to find an equitable allocation balance between the user groups."

The committee established a panel of public advisors composed of two seine only, two drift gill net only, one combined gear representative, one set net representative, two PWSAC managers and one VFDA representative.

December 2003 – Allocation Workgroup meets

The Board's PWS allocation workgroup had its first meeting in December 2003. The Department reviewed the "piggy bank" fishery for seiners in 2003. They presented harvest statistics for the drift gill net and purse seine fishery through July 21, 2003 as outlined below:

Species	Seine	Drift Gillnet
Sockeye	125,641	161,872
Pink	11,439,915	44,419
Chum	750,835	726,431
Coho	724	9,900

The group discussed the concept of a buffer around the Esther Subdrist to prevent gill net interception of chums when the seiners were fishing, and the concept of reducing the outer area of the Esther Subdistrict to reduce Main Bay sockeye interception by seiners. The Department expressed concern about the buffer concept during large return years and requested a "relief valve" if the Board were to go this route.

No consensus was reached on any of these issues.

February 2004 – BOF schedules special PWS meeting

Near the conclusion of the February 2004 meeting on Alaska Peninsula and Aleutian Islands Finfish, the Board received a report from the PWS Allocation Committee and

progress made at the December meeting. A motion was made and passed to address trigger points for seiners, and the buffer zone at a special April meeting before the 2004 fishing season.

March 2004 – Allocation Work Group Meeting

The workgroup had its second meeting. The focus of the meeting was to address the two proposals the Board had generated for the April special meeting. Lively discussion and debate continued through the meeting, providing Board committee members with more information, but still no consensus from the gear groups on the issues.

April 2004 – Board of Fish Mtg

The Board met to address out of cycle proposals 258 and 259 dealing with PWS allocation. Proposal 258 to amend the 40% "piggy bank" trigger failed. The BOF directed the PWS Allocation Workgroup to continue to meet and see if consensus could be reached. Proposal 259 passed, modifying the buffer zone outside Esther to address quality concerns. The Board's summary is Below:

PROPOSAL NO. 258 ACTION: Failed
DESCRIPTION: Amend the purse seine fleet catch trigger percentage in the Prince William Sound Management and Salmon Enhancement Allocation Plan
DISCUSSION: The board met as a committee of the whole with the working group and other members of the public selected from those who provided testimony at this meeting. There was no consensus reached by participants of the public panel. Some of the points brought up during the committee meeting include: the 40 percent put in place last year was considered a band-aid; the board created their own "buffer zone" by the percentage that was put in place. Board discussed an amendment of 49 percent with an intent of eliminating as much of the variables as possible for participants in the fishery. Discussion included that without it, the fishery will continue to be unstable. The amendment failed, but further discussion showed that although allocation issues should be dealt with in cycle, the board is concerned and intends to continue allowing the workgroup to meet to see if consensus can be found.

PROPOSAL NO. 259 ACTION: Carried as amended
DESCRIPTION: Amend the buffer zone outside the Esther Subdistrict surrounding Esther Island
AMENDMENT: Modified the buffer zone area and addressed quality concerns.
DISCUSSION: The board met as a committee of the whole to discuss this issue. There was no consensus reached by participants of the public panel. Department reported an increased likelihood that the sockeye BEG for Coghill River will be exceeded due to less commercial fishing time/area in the general Coghill District as a result of the buffer area. In the event of a buildup of chum salmon in the buffer area, there will be some lag time between recognition of the problem and prosecution of a fishery resulting in reduced product quality. Board does not believe radical changes are appropriate at this time and that adopting this will address some of the concerns brought regarding this fishery. The amendment addresses the issue of the alternating access.

Committee Progress leading to Dec. 2005 Board Meeting

The Board's allocation committee has continued to meet and slow progress has been made in some areas. In October 2005, a new concept was introduced by committee chair Morrison, that would base the allocation plan on enhanced fish only. ADF&G staff prepared an analysis of salmon returns back to 1997, with allocation of the enhanced salmon contributions to each gear type.

NASA, DMC RC 56

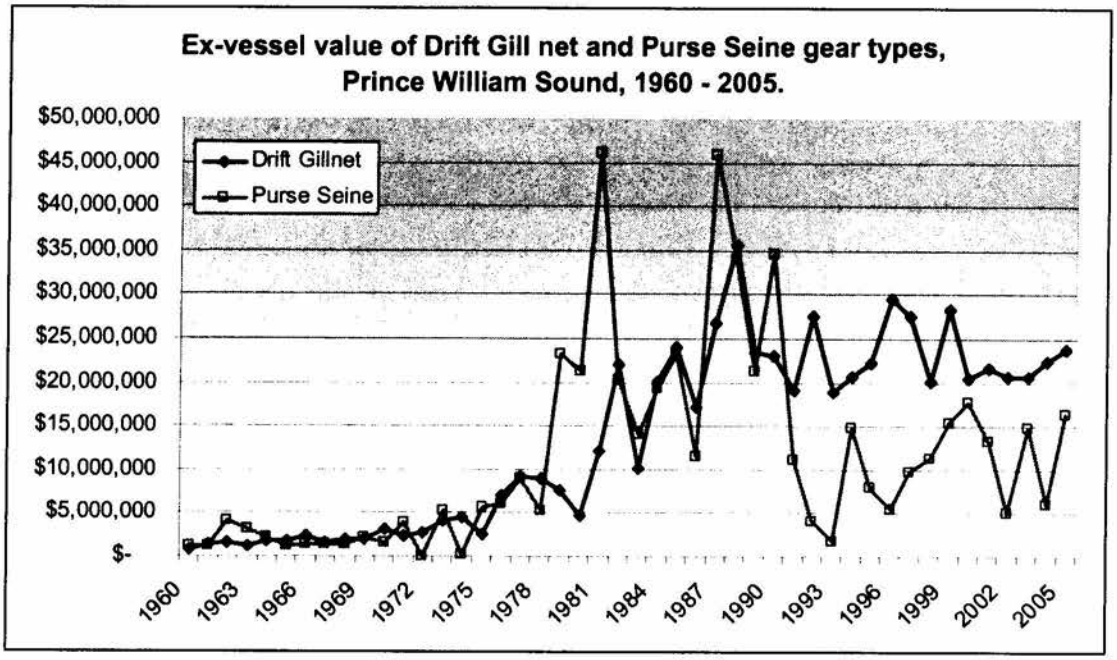

Figure 1. Ex-vessel value of Drift Gillnet and Purse Seine commercial harvest of wild and hatchery salmon in Prince William Sound, 1960 – 2005. Data for years 1960 – 1984 from PWSAC Allocation Task Force. Data for 1985 – 2005 from ADF&G Zephyr and COAR databases. 2005 data preliminary.

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.

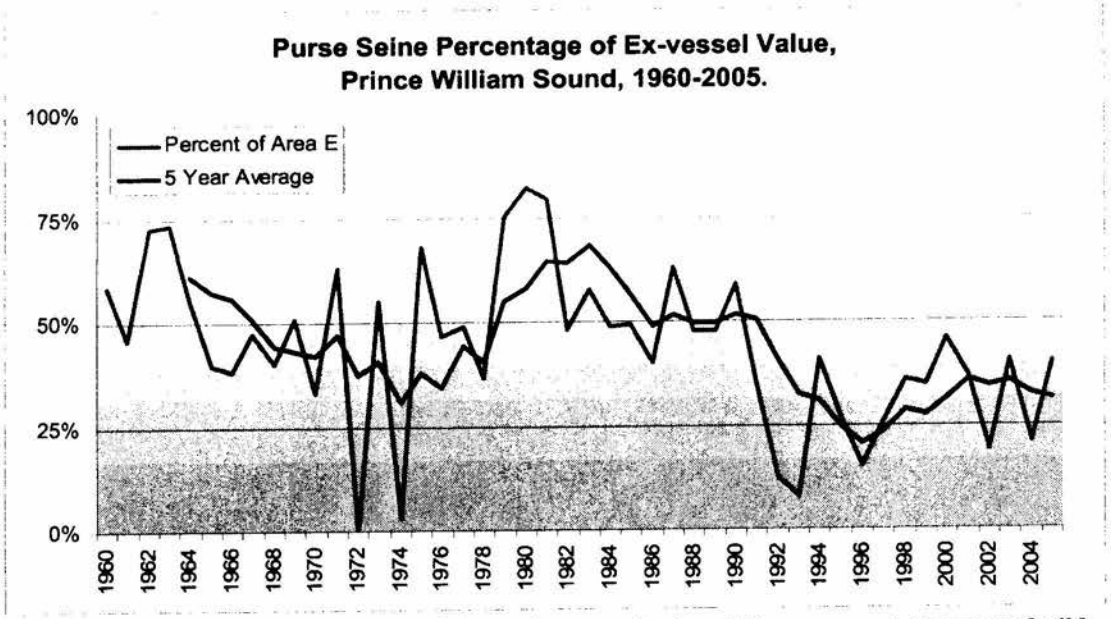

Figure 2. Purse seine gear percentage of the total ex-vessel value of the commercial harvest of wild and enhanced salmon stocks in Prince William Sound, 1960 – 2005. Data for years 1960 – 1984 from PWSAC Allocation Task Force. Data for 1985 – 2005 from ADF&G Zephyr and COAR databases. 2005 data preliminary.

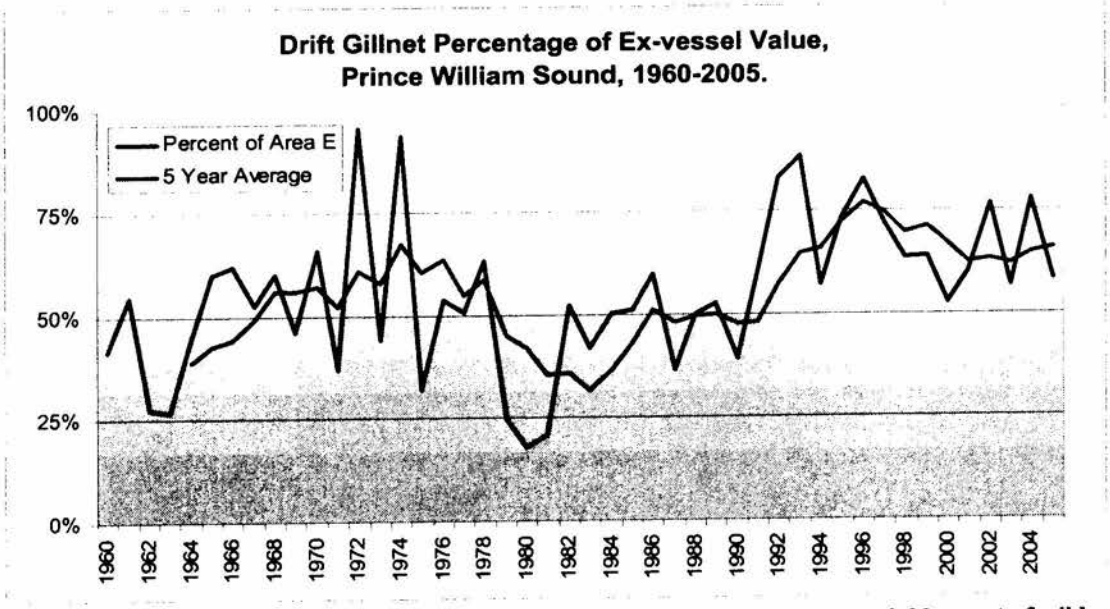

Figure 3. Drift gillnet gear percentage of the total ex-vessel value of the commercial harvest of wild and enhanced salmon stocks in Prince William Sound, 1960 – 2005. Data for years 1960 – 1984 from PWSAC Allocation Task Force. Data for 1985 – 2005 from ADF&G Zephyr and COAR databases. 2005 data preliminary.

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 form 1991 when 96% of the permits in the fishery were active to less than 50% of the permit being fished in 1999, Figure 6.

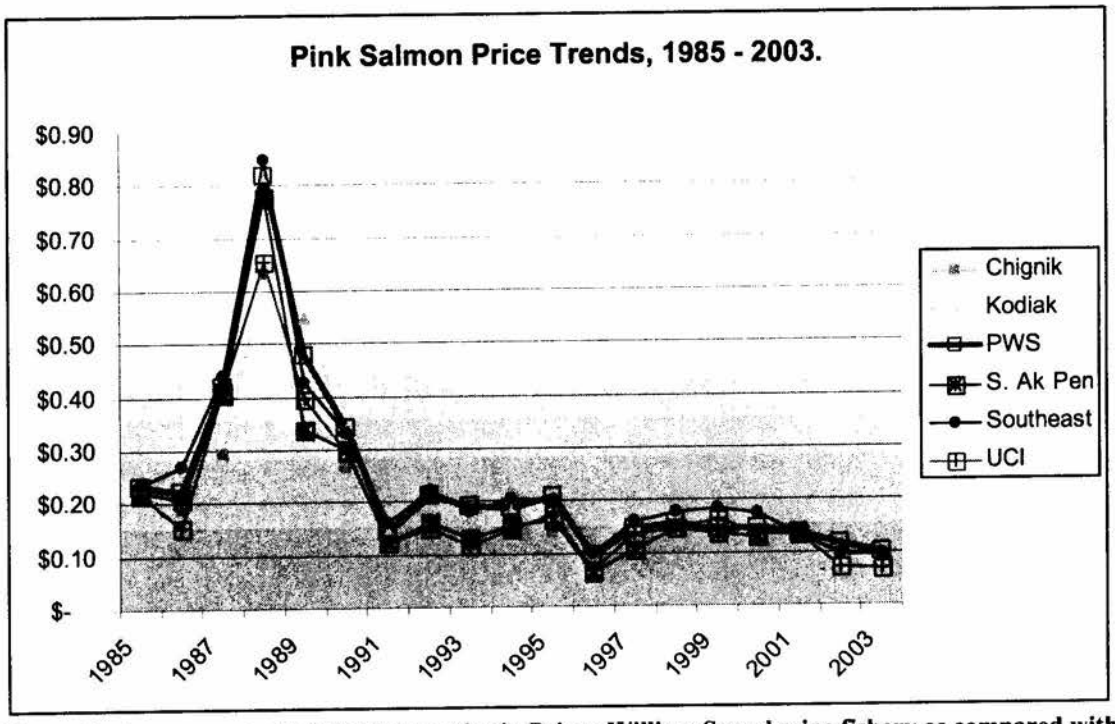

Figure 4. Average annual pink salmon price in Prince William Sound seine fishery as compared with other major commercial fisheries in Alaska, 1985 through 2003. Data from COAR.

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.

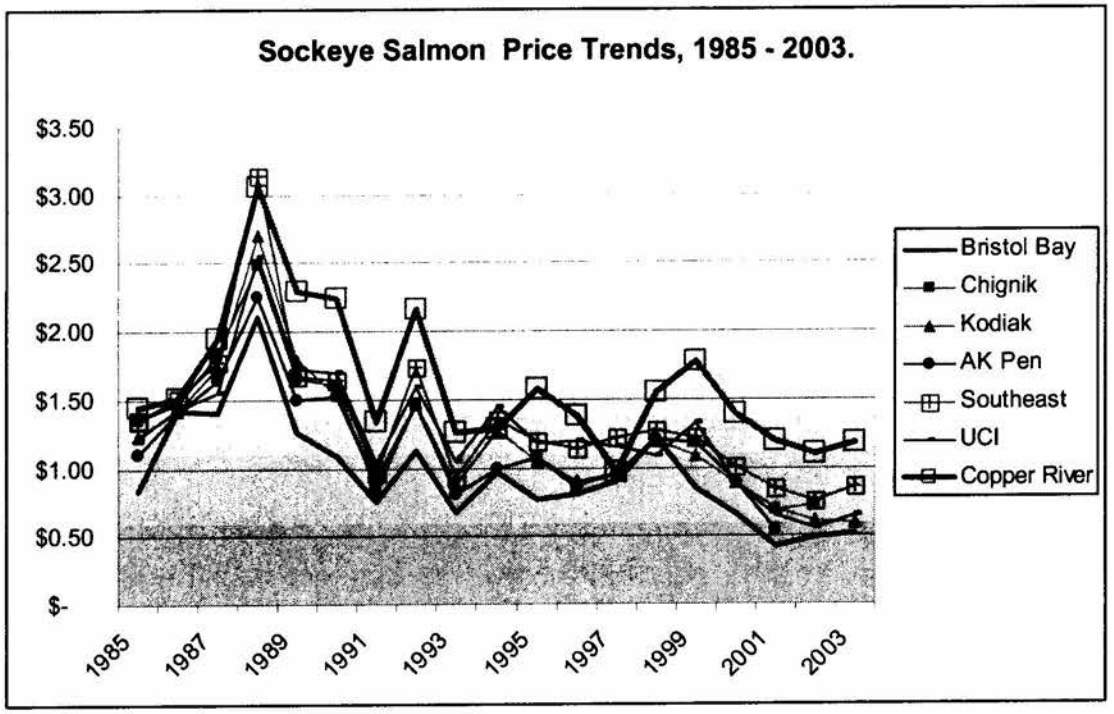

Figure 5. Average annual sockeye salmon price in Prince William Sound drift gillnet fishery as compared with other major commercial fisheries in Alaska, 1985 through 2003. Data from COAR.

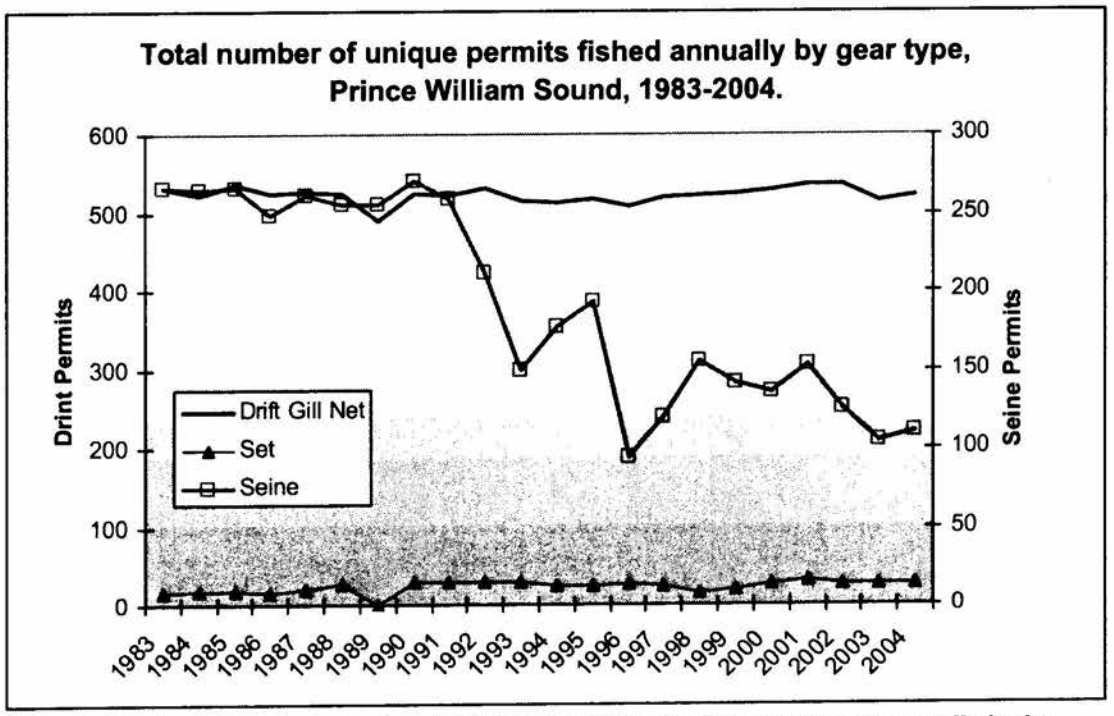

Figure 6. Total number of purse seine, drift gillnet and set gillnet permits fished annually in the Prince William Sound commercial salmon fishery, 1983 – 2004. Source COAR.

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.

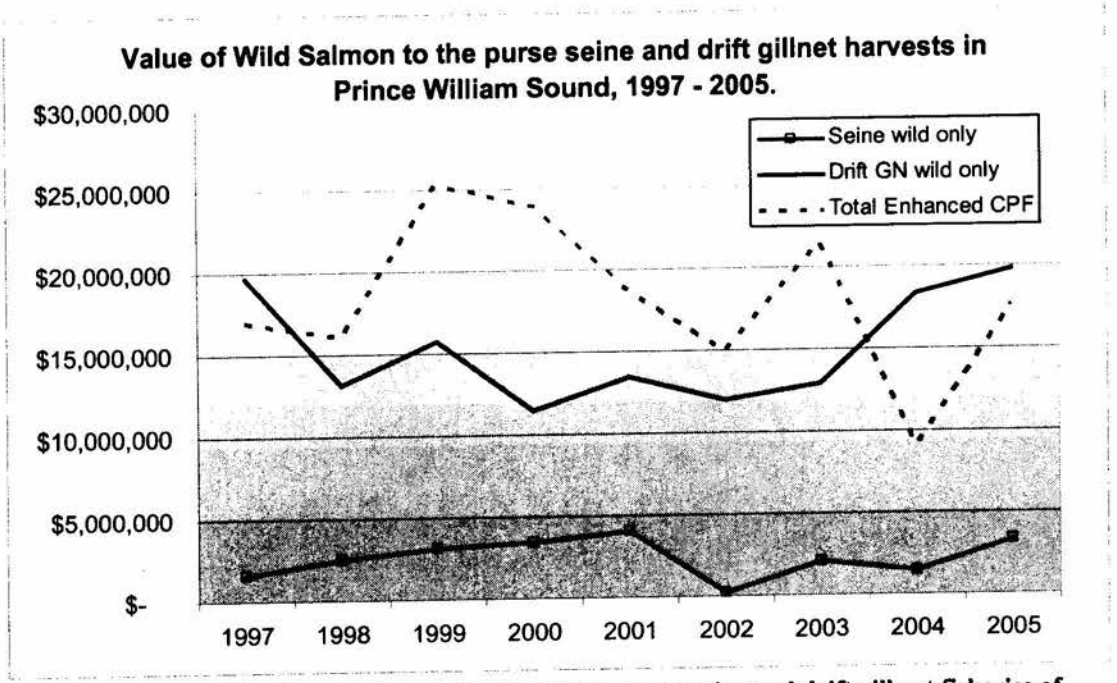

Figure 7. Value of wild salmon only contributions to the purse seine and drift gill net fisheries of Prince William Sound, 1997 – 2005. Total value of enhanced salmon harvested in all common property fisheries combined depicted in dashed line. Source, COAR, Zephyr and ADF&G.

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" seawons by one year due to the COAR numbers not coming out until March, and setting "ptggy bank" triggers at 40%. No overall consensus has yet been reached on the enhanced salmon allocation plan.

At the workgroup's meeting on October 12th, 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 12th 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[1].

Year	Seine S01E	Drift S03E	Set S04E	Grand Total
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[1]	$12,958,510	$ 4,016,280	$ 629,111	$ 17,603,901
Total	**$88,130,862**	**$69,239,552**	**$6,671,404**	**$164,041,817**

[1] 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[1].

	Percent of total enhanced CPF value			5 year average		
Year	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[1]	74%	23%	4%	53%	41%	5%
97-05 Avg.	**54%**	**42%**	**4%**			

[1] 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.

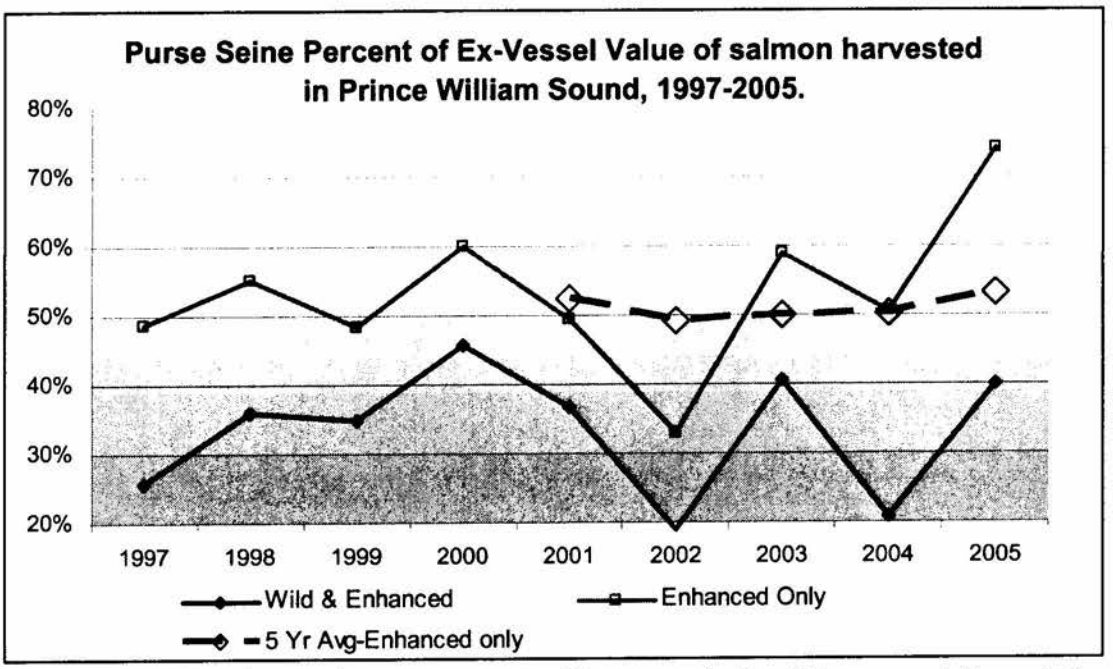

Figure 8. Comparison of purse seine gear percentage of the ex-vessel value of the commercial harvest of wild and enhanced and enhanced only salmon stocks in Prince William Sound, 1997 – 2005. Enhanced salmon allocation data from Cordova ADF&G. Price information from COAR. 2005 data preliminary.

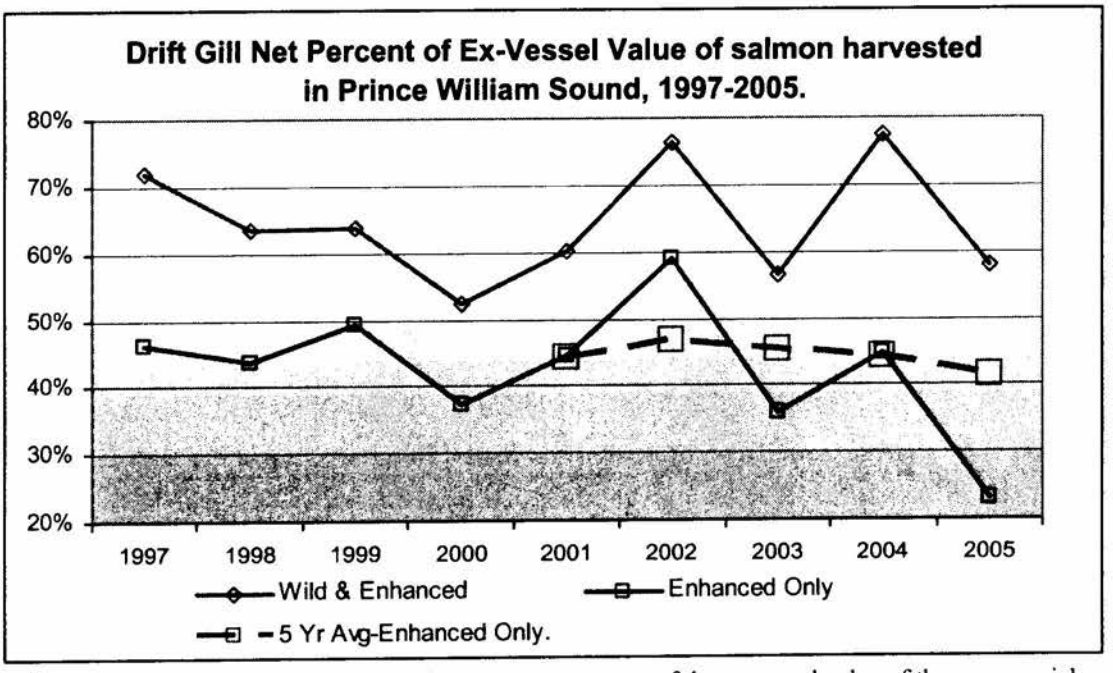

Figure 9. Figure 4. Comparison of drift gill net gear percentage of the ex-vessel value of the commercial harvest of wild and enhanced and enhanced only salmon stocks in Prince William Sound, 1997 – 2005. Enhanced salmon allocation data from Cordova ADF&G. Price information from COAR. 2005 data preliminary.