

Adopted

Finance Committee Minutes
September 24, 1987

The Finance Committee met on September 24, 1987 with the following in attendance:

William Aron	Robert McVey
Donald Bevan	John Peterson
Joseph Blum	Clarence Pautzke
Jim Branson	Judy Willoughby
Fred Gaffney	John Winther, Chairman
Rich Marasco	

Programmatic Funding

Rich Marasco presented the SSC's prioritized programmatic projects for 1988. They are as follows as prioritized.

- (1) Development of limited access system for \$200,000. This project could include any fishery but targets groundfish. There will probably be more than one RFP issued for this project. It is expected up to \$100,000 could be contracted to CFEC for a license system. CFEC's expertise would be utilized because of their experience and data bank.
- (2) Domestic Observer Program for \$200,000. This project would extend the Observer Program for one additional year. This additional year is needed for the start-up problem to be worked out and to allow an agency or industry to find the funding for a permanent program.
- (3) Evaluation of alternatives management strategies for Alaska king and Tanner crab fisheries for \$50,000. This would be an analysis of different alternatives and how the management measures would affect the stocks and industry.
- (4) Bering Sea pollock stock structure studies for \$45,000 (morphometric/meristic comparisons). This will supplement the activities by NWAFC and will be contracted out.

- (5) System design and program development for integration of state and federal data bases for \$100,000. This would be a project to design and implement a user friendly data program combining federal and state data system for access by the SSC, plan teams, Council, and Advisory Panel.
- (6) Support recommendation of Pacific Fishing^{ery} Management Council's SSC for funding of trawl mesh selection study. No money involved. This is to recommend to NMFS support of a programmatic request by PFMC for continuation of an ongoing mesh study by Ellen Pakich of the University of Washington. This project is being co-funded by NWAFC, industry, Sea Grant, and the State of Oregon.

Fred Gaffney moved and John Peterson seconded to submit these projects for funding as prioritized. Mr. Blum did note for project ~~4~~⁵, "system design and program development," that the SSC should pursue what is available. If preexisting programs are not useable, the project should be funded. The motion passed with no objection.

Recording Contract

Alaska Sound Labs' contract for sound and recording of Council meeting was extended for three years. The motion, made by John Peterson and seconded by Joe Blum passed with no objection.

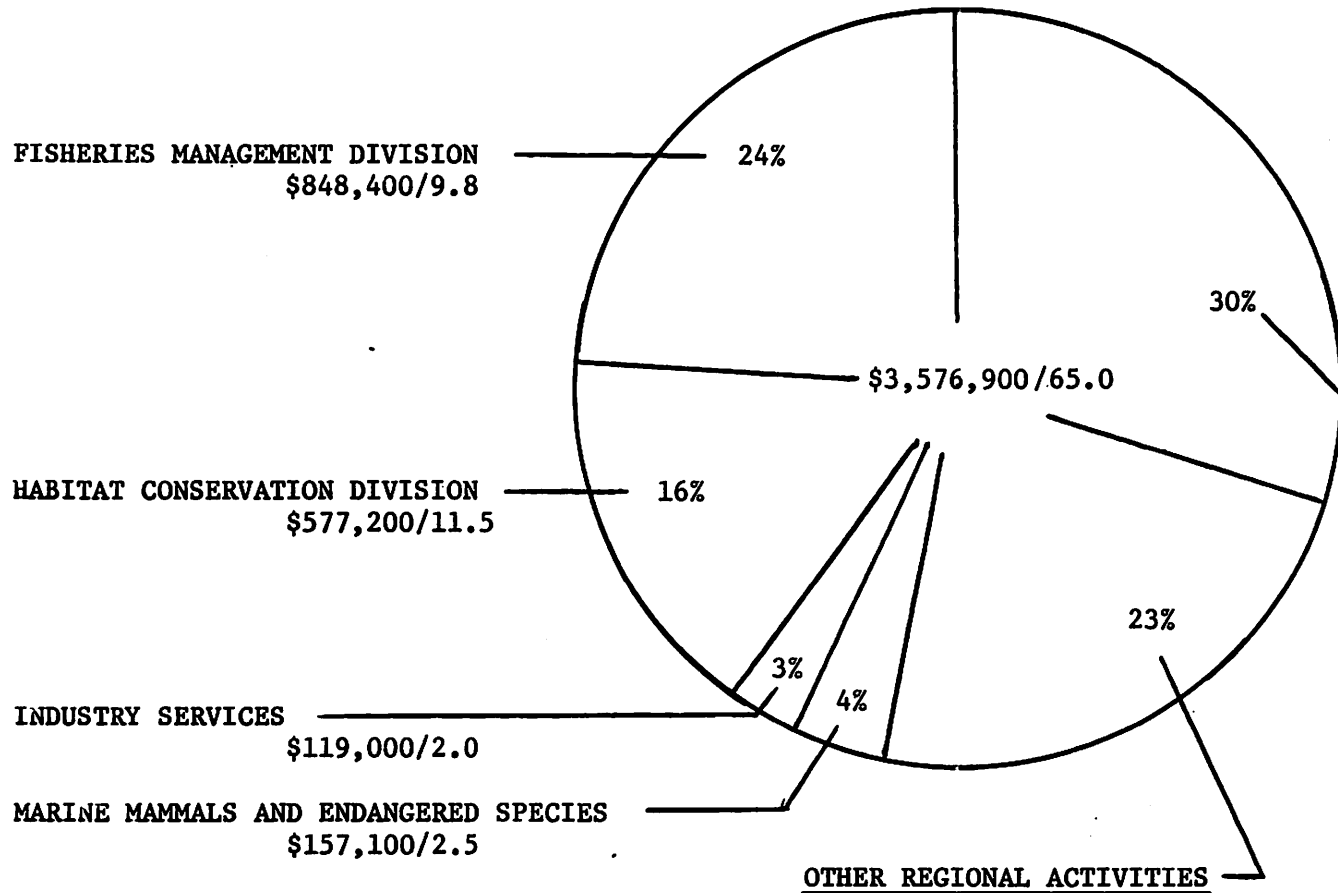
Other Business

Robert McVey presented a summary of the Region's FY88 funding and a summary of planned activities. Bill Aron then presented the status of NWAFC's projected funding and a summary of planned projects.

FISCAL YEAR 1988 FUNDING

ALASKA REGION AND ENFORCEMENT PROGRAMS

(Dollars/FTE's)^{4/}



Operating Funds	\$3,576,900
Grants	
Saltonstall Kennedy Funding for Fishery Development	-0- <u>1/</u>
P.L. 88-309 Commercial Fisheries Research and Development Act	-0- <u>2/</u>
P.L. 89-304 Anadromous Fish Conservation Act	-0- <u>3/</u>
Pacific Salmon Treaty	4,730,800
Standard Level User Charge	<u>285,000</u>
TOTAL	\$8,592,700

OTHER REGIONAL ACTIVITIES

Executive Support	\$268,700/4.0
Planning, Budgeting & Administrative Services	163,200/3.6
Office of Information Resources	129,600/4.0
Engineering, Facilities Planning & Maintenance	193,800/3.6
Regional Economist	69,900/1.0
	<u>\$825,200/16.2</u>

1/ We expect an allocation for S-K Grants of \$1,000,000

2/ We expect an allocation for P.L. 88-309 of the same general magnitude as the FY 1987 allocation of \$240,000

3/ We expect an allocation for P.L. 89-304 of the same general magnitude as the FY 1987 allocation of \$455,000

4/ FTE's = Full Time Equivalent (Personnel Ceilings)

ORGANIZATION

Original

ALASKA			
Dockside Sampling	\$240,000	198,000	-17 1/2%
Age Determination	60,000	0	-100%
Processor Reporting	35,000	0	-100%
TOTAL AK:	\$335,000		
PMFC			
PacFIN Operations	\$120,000	120,000	
TOTAL PMFC:	\$120,000		
WASHINGTON			
Enhanced Groundfish Monitoring	\$170,000	140,250	-17 1/2%
Improved Data Flow	\$170,000	140,250	-17 1/2%
TOTAL WA:	\$340,000		
OREGON			
Enhanced Groundfish Monitoring	\$150,000	123,750	-17 1/2%
Improved Data Flow	\$140,000	115,500	-17 1/2%
TOTAL OR:	\$290,000		
CALIFORNIA			
Enhanced Groundfish Monitoring	\$310,000	255,750	-17 1/2%
Enhanced Salmon Monitoring	\$165,000	136,125	-17 1/2%
	\$475,000		
HAWAII			
Enhanced Data Collection	\$125,000	103,125	-17 1/2%
SAMOA, GUAM & N. MARIANAS			
Improved Surveys & Biological Sampling	\$225,000	185,625	-17 1/2%
NWAF C			
Alaska Domestic Observers	\$400,000	220,500	-100%
PacFIN Support	\$315,000	220,500	-30%
TOTAL NWAF C			
SWC			
PacFIN Support	\$225,000	157,500	-30%
W PacFIN Improvements	\$150,000	105,000	-30%
TOTAL SWFC:	\$375,000		

Self Data Processing

~~3,000,000~~
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2001.375



Attachment # 1

COMMERCIAL FISHERIES COMPARISON FY87-FY88 (COWPER BASE)

31-Mar-87

	FY86 ACTUAL	FY87 AUTH	FY87 RESTR	OLD FY88 BASE	NEW FY88 BASE	REDUCED % FROM 87 RESTR	REDUCED % FROM 87 AUTH	REDUCED % FROM 86 ACTUAL
REGIONAL SUMMARY								
Southeastern	5248.6	4434.5	3965.7	3554.7	3905.8	-1.5	-11.9	-25.6
Central	5248.8	4773.1	4385.0	3860.4	4262.3	-2.8	-10.7	-18.8
A-Y-K	2739.5	2638.0	2451.7	2367.7	2421.2	-1.2	-8.2	-11.6
Westward	4387.3	4247.5	4026.5	3328.3	4214.8	4.7	-0.8	-3.9
Headquarters	2504.2	2885.9	2499.9	2139.6	2203.9	-11.8	-23.6	-12.0
	20128.4	18979.0	17328.8	15250.7	17008.0	-1.9	-10.4	-15.5
SPECIES SUMMARY								
Salmon	10036.0	9225.8	8499.5	7748.9	8224.3	-3.2	-10.9	-18.1
Herring	1364.1	1295.9	1143.7	1012.2	1026.6	-10.2	-20.8	-24.7
Shellfish	1950.3	1337.9	1264.5	1106.6	1357.8	7.4	1.5	-30.4
Groundfish	406.6	413.6	367.7	106.3	677.1	84.1	63.7	66.5
Other	7158.2	6705.8	6053.4	5276.7	5722.2	-5.5	-14.7	-20.1
	20915.2	18979.0	17328.8	15250.7	17008.0	-1.9	-10.4	-18.7

or -8.9%
-25.7%



FY 88 Values DO NOT include the 10% Personal Services reduction!

PROPOSED GENERAL FUND INCREMENTS: OVERVIEW

SHELLFISH ASSESSMENT SURVEYS

This increment purchases the vessel charters required to assess major shellfish stocks which cannot be covered with test-fishing funds.

not in A-4

Region I	\$44.3 K
Region II	\$33.9 K
Region III*	{ \$92.8 K in even fiscal years \$0.0 K in odd fiscal years
Region IV*	{ \$88.2 K in even fiscal years \$181.0 K in odd fiscal years
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Total	\$259.2 K

*Explained in detail below (see p. 6). We also ^{need to} establish with Region IV staff that this alternate-year scenario coupled to test fishing funds is feasible.

SHELLFISH MANAGEMENT OPERATIONS

This increment pays for seasonal personnel and operating costs required to collect and process basic fishery data on a few of the most valuable fisheries around the state. The data to be collected by dock-side samplers and on-board observers include catch numbers, weight, length, sex composition, incidental catch of other species, effort, and other information necessary to establish fishery regulations.

in A-4

Region I	\$59.4 K
Region II	\$12.4 K
Region III	\$0.0 K
Region IV	\$202.0 K
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Total	\$273.8 K

SHELLFISH MANAGEMENT INVESTIGATIONS

In addition to routine data collection activities (stock assessment surveys, onboard catch observation and dock-side sampling), the Department of Fish and Game requires other information to set regulations (e.g., appropriate fishing season dates, size limits, and gear restrictions) which promote optimum harvest of shellfish resources. This increment would provide a modest program to allow the department to collect data and conduct analyses necessary to establish these regulations. Through this funding, we will be able to slowly correct the problem caused by the fact that many present management regulations have no scientific basis and are publically indefensible.

Im A-4

Region I	\$0.0 K
Region II	\$10.0 K
Region III	\$0.0 K
Region IV	\$40.0 K
HQ - Shellfish	\$9.0 K
Uncommitted	\$113.0 K*
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Total	\$172.0 K

*Uncommitted funds are to be used to conduct studies of top priority in establishing statewide shellfish regulations and to assist regional management investigation studies. These are explained in greater detail below (see p. 9).

GRAND TOTALS FOR THREE GF INCREMENTS BY REGION
(Not Including Present Vessel Funds and Proposed CIP)

Region I	\$103.7 K	
Region II	\$56.3 K	(plus \$28.0 K for micro's. in FY-89 from Uncommitted Funds)
Region III	\$92.8 K	in even fiscal years
Region IV	\$423.0 K	in odd fiscal years
	or \$330.2 K	in even fiscal years
HQ - Shellfish	\$9.0 K	
Uncommitted	\$113.0 K	(except for \$28.0 K for Region II micro's. for FY-89)
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Total	\$705.0 K	

GRAND TOTALS FOR PRESENT FUNDS, CIP AND GF INCREMENTS BY REGION

Region I	\$126.2 K	
Region II	\$126.3 K	(plus \$28.0 K for micro's. in FY-89 from Uncommitted Funds)
Region III	\$92.8 K	in even fiscal years
Region IV	\$491.8 K	in odd fiscal years
	or \$399.0 K	in even fiscal years
HQ - Shellfish	\$9.0 K	
Uncommitted	\$113.0 K	(except for \$28.0 K for Region II micro's. for FY-89)
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Total Funds	\$886.3 K	

PROPOSED GENERAL FUND INCREMENTS: DETAILSHELLFISH ASSESSMENT SURVEYS

This increment purchases the vessel charters required to assess major shellfish stocks which cannot be covered with test-fishing funds. The test fishing program, while very useful for defraying costs in a number of situations, cannot be applied to some shellfish surveys for the following reasons: (1) in some cases population abundances are low and survey catch would be too small to cover the cost of the survey; (2) some stocks are so depressed that any harvest would be politically and/or biologically unacceptable; and (3) due to distributional patterns, some shellfish populations must be assessed at times of the year when product quality is unacceptable or markets are unavailable.

Managing the valuable shellfish resources of Alaska for the well-being of the state and its economy requires data on the status of stocks. Assessment surveys are necessary to set annual harvest quotas and dates of fishery openings/closures which are both responsive to changes in stock status and provide for sustainable, lucrative shellfish fisheries. Without the information that these stock assessment surveys would provide overfishing or underfishing is inevitable, because lacking abundance estimates makes it nearly impossible for the Department to achieve the critical balance between abundance, stock production, natural mortality and commercial harvest which maximizes the benefits (e.g., employment, personal income, revenues, etc.) obtained from these fisheries. Without survey data, the Department of Fish and Game prefers to manage most conservatively (e.g., low harvest quotas and short fishing seasons) to reduce risks of irreversible adverse fishery impacts on the stocks. On the other hand, less conservative management results in overharvest. Either outcome leads to long-term declines in economic benefits received from these fisheries. The \$259.2 requested in this increment is the cost associated with assessing the several major shellfish stocks, and represents a small fraction of the economic value of these fisheries to the state. The total gross receipts received by fishermen for Alaskan shellfish in 1986 was \$182 million. Gross receipts received by processors for shellfish products are expected to approximate \$300 million for 1986.

Region I

Red king crab survey - partial survey each year to alternate coverage over 2 year period	\$20.3 K
Brown King crab survey - partial survey each year to alternate coverage over 2 year period	\$24.0 K
<hr/> Region I Total	<hr/> \$44.3 K

Region II

Add 5 days to Prince William Sd. Tanner crab survey to increase coverage	\$5.4 K
10 days for Prince William Sd. shrimp stock assessment	\$10.8 K
Add 10 days to PWS Dungeness survey to set annual opening and closure dates	\$10.2 K
Add 1 MM to Lee Hammarstrom (from 10 to 11 MM)	\$4.5 K
Add 1 MM Seasonal	\$3.0 K
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Region II Total	\$33.9 K

Region III

Norton Sound red king crab survey FY-90 (July 1989) and even fiscal years	\$92.8 K
no survey in odd fiscal years	0.0 K
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Region III Total	average \$46.4 K

Region IV

FY-89 and odd fiscal years:

Kodiak trawl survey (Tanner and king crabs)	\$141.0
Conversion of S. Peninsula/Chignik to trawl survey	\$40.0
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Region IV Total in Odd Fiscal Years	\$181.0

FY-90 and even fiscal years:

Dutch Harbor Pot Survey	\$28.2
General Funds to partially fund Adak test fish survey (king crabs)	\$60.0
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Region IV Total in Even Fiscal Years	\$88.2

Region IV Total	average \$134.6
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SHELLFISH MANAGEMENT OPERATIONS

This increment pays for seasonal personnel and operating costs required to collect and process basic fishery data on a few of the most valuable fisheries around the state, including: (to be filled-in later). The data to be collected by dock-side samplers and on-board observers include catch numbers, weight, length, sex composition, incidental catch of other species, effort, and other information necessary to establish fishery regulations.

Success in managing these crab fisheries toward sustained harvest and long-term economic impact depends upon the collection of these data. In most of the fisheries covered by this increment, observer and dock-side data are the only sources of information upon which regulations are based. As with insufficient survey data, without the knowledge that the observer and dockside data would provide, the Department of Fish and Game attempts to manage more conservatively (e.g., low harvest quotas, short seasons) to minimize the risks of overharvest at the cost of reduced economic impact from these fisheries. On the other hand, should less conservative measures actually be applied, revenues will increase over the short-term, but then decline rapidly and remain low over the long-term after stocks collapse. The Department's role is to manage for the delicate balance between these two scenarios, which provides for the maximum benefits to the state and its economy. This balance cannot be achieved in the absence of these minimal data purchased by this increment.

Region I

2 observers (FT-III's) @ 4 MM ea. for Brown king crab	\$40.0 K
2 observers (FT-III's) @ 2 MM ea. for Dungeness crab	\$19.4 K
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Region I Total	\$59.4 K

Region II

Lower Cook Inlet Tanner crab samplers	\$12.4 K
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Region II Total	\$12.4 K

Region III

NA

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Region III Total	\$0.0 K

Region IV

1 observer (FB-I) @ 1 MM for BS blue king crab monitoring	\$14.0 K
2 observers (FB-I) @ 2.5 MM for BS Tanner crab catch sampling	\$57.3 K
2 observers (FB-I) @ 2.5 MM for BS Tanner crab monitoring	\$54.1 K
2 observers (FB-I) @ 0.5 MM for BS Red king crab catch sam.	\$10.3 K
2 observers (FB-I) @ 0.5 MM for BS Red king crab monitoring	\$9.5 K
1 observer (FB-I) @ 3 MM for Aleutians Crab catch sampling	\$28.4 K
1 observer (FB-I) @ 3 MM for Aleutians Crab monitoring	\$28.4 K
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Region IV Total	\$202.0 K

SHELLFISH MANAGEMENT INVESTIGATIONS

In addition to routine data collection activities (stock assessment surveys, onboard catch observation and dock-side sampling), the Department of Fish and Game requires other information to set regulations (e.g., appropriate fishing season dates, size limits, and gear restrictions) which promote optimum harvest of shellfish resources. Unfortunately, many shellfish regulations are based upon scanty data. Three major areas of concern have been identified.

The first of these is the influence of capture and handling on survival of female and sublegal male crabs. Studies on crustacean fisheries in other parts of the world have clearly demonstrated the adverse effects of capture upon the mortality of those individuals returned to the sea. Data on the mortality rates on incidentally-caught individuals are essential to establish management measures which might mitigate these adverse effects and increase yield to fishermen. Although the collapse of some shellfish fisheries may be related to such causes, the Department has no information on this problem.

Secondly, gear designs (e.g., mesh sizes, escape tunnels, door sizes) need to be evaluated to determine configurations which both limit the catch of non-target individuals (e.g., female or small males crabs) or prohibited species in directed fisheries. Losses in yield to fishermen through incidental catch mortality costs millions of dollars each year.

The third major area of investigation includes biological information (e.g., size at maturity and molting period) which are needed to establish size limits and fishing seasons. For example, the size limits established for the brown king crab fishery may not result in optimal harvest of these crab resources because size at maturity is unknown. Also, because good data are lacking on molting periodicity of Dungeness crabs, millions of dollars in revenues are lost each year due to mortality of soft, unmarketable Dungeness crabs caught incidentally. Good data could be used to establish appropriate dates of the fishing season which mitigate these losses.

Under healthier economic periods the Department of Fish and Game would

prefer to mount substantial research efforts to resolve numerous regulatory questions. To trim costs this increment addresses only the above major regulatory issues, and their costs are spread over a number of years through several small, multi-year projects. If funded over four years, this increment will help resolve the three regulatory issues described above for a number of shellfish fisheries. These were given high priority, because loss of yield due to these management problems greatly exceed funding costs of these projects.

Region I

NA

Region I Total	\$0.0 K
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Region II

molting, mating and handling studies on Prince William Sound Dungeness crab to be coupled to annual surveys	\$10.0 K
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Region II Total	\$10.0 K
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Region III

NA

Region III Total	\$0.0 K
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Region IV

King and Tanner crab recruitment study	\$40.0 K
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This \$40.0 purchases a modest monitoring program which should lead to improved management through more rapid acquisition of information about fishery and management effects on stock production. It will buy both the development and implementation of methodology to monitor the relative abundance of young-of-the-year king and Tanner crabs at selected sites in Chiniak Bay on Kodiak Island. Abundances of young crabs will be routinely monitored using passive collection gear already developed and used successfully for other invertebrate species elsewhere. Trends in abundance will be used to help distinguish biological, environmental, and fishery effects well in advance of recruitment of legal-sized crabs to the commercial pot gear. Without such a sampling program it is very difficult to evaluate effects of management decisions on stock productivity in a timely manner, because king and Tanner crab progeny are not recruited to the fishery as adults until 5-9 years or more after mating. This time lag and the relatively short data series from

stock assessment surveys limit attempts to evaluate causes for the declines in crab fisheries and alternative management strategies which might have mitigated these losses. Once the methodology is calibrated, forecasts of recruitment and future fishing success could also be provided to the industry 7-8 years in advance of the fishery rather than 1-2 years now possible.

This project will be conducted in Kodiak through the Division's Westward regional office under the direction of Bill Donaldson (PCN 1213). The cost breakdown is: line 100 - \$5.8 K, line 200 - \$2.0 K, line 300 - \$10.0 K, line 400 - \$5.0 K, and line 500 - \$17.0 K.

Region IV Total	\$40.0 K
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Headquarters Shellfish

travel (present travel @ only \$3.5 K for 2 statewide positions)	\$4.0 K
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mainframe computer account	\$1.5 K
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3 MM MM FB-I Seasonal	\$3.5 K	<i>10.5</i>
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HQ Total	\$9.0 K
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Uncommitted Funds Dispersed through HQ

studies of handling, gear design, size limits, fishing seasons, stock identification and others used to establish management regulations	\$113.0 K
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In FY-89 this \$113 K might be used as follows (in order of priority):

\$28 K for 2 microcomputers and 1 microcomputer upgrade for the Region II shellfish program

\$40 K to complete red king crab stock identification study using electrophoretic techniques found to be successful with previous \$10 K study.

This \$40.0 K would pay for a study to distinguish stocks of red king crabs using electrophoretic techniques. These techniques have been successfully developed from a previous \$10.0 K pilot study funded for FY-87. This new study would include red king crabs sampled from 9-15 locations around the state to determine stock boundaries. As with salmon fisheries, stock definition is a vital piece of information needed to manage fisheries. Because crab stocks do not intermingle during exploitable life stages, definition of stock boundaries for crabs has to be done only once. This increment would identify the stocks boundaries

of red king crabs. Similar future one-time studies are planned for Alaska's other major shellfish species. Stock definition for brown king crabs is probably the greatest problem confronting management of developing fisheries for them. We anticipate initiating a stock identification study for brown king crabs in FY-91, subsequent to the completion of this red king crab study.

\$20 K for regional crab handling studies

\$25 K to fund a graduate student to conduct studies on handling effects in conjunction with ADF&G. The location of the University of Alaska - Juneau in Region I would make it advantageous to coordinate these studies with southeast regional staff. For example, this student could evaluate mortality and growth effects of crab injuries of the sort typically observed in the fishery. Alternatively, these funds could be used for further regional studies.

In FY-90 we would probably use the majority of the \$113 K for pot mesh studies designed to reduce the catch of non-target individuals, and to continue handling studies. It would likely take a number of years to resolve gear design problems for all major species (e.g., red, blue and brown king crabs, both Tanner crab species, Dungeness crabs and shrimp species.

REGIONAL REQUESTS NOT FUNDED BY PRESENT FUNDS, CIP, NOR GF

Region I	\$26.0 K	1 brown king crab observer
	\$9.7 K	1 Dungeness crab observer
	\$15.5 K	pot shrimp sampling
	\$12.0 K	1 Tanner crab observer
	\$20.0 K	Analysis of necropsy samples
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	\$83.2 K	Total Region I
Region II	\$11.0 K	winter shrimp trawl survey in LCI
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	\$11.0 K	Total Region II
Region III	\$46.4 K	for surveys every year (average)
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	\$46.4 K	Total (average) Region III
Region IV	\$134.6 K	for surveys every year (average)
	\$28.6 K	1 BS Tanner crab catch sampler
	\$27.0 K	1 BS Tanner crab monitor
	\$20.5 K	4 BS red king crab catch sampler
	\$18.9 K	4 BS red king crab monitor

\$28.4 K 1 Aleutians crab catch sampler

\$28.4 K 1 Aleutians crab monitor

\$286.4 K Total (average) Region IV

POSSIBLE ADDITIONS OR DELETIONS

I would like to suggest the following additions or deletions to the above proposed budget, should more or less funds become available. These are listed in order of priority, with "1" being the first to include or exclude.

Additions

1. \$75.0 K (?) for statewide shrimp biologist and project to be located in Kodiak. This full-time FB-II or FB-III would be required to develop the expertise to analyze shrimp samples obtained from Region I, II, and IV. This biologist would work with regional and statewide staff in the design of surveys, catch sampling programs, and management investigational studies. Samples would be collected from each region and sent to this biologist for analysis. Total costs would include a minimum of \$15.5 K for catch sampling in Region I, and perhaps some additional funds for Region's II and IV would be necessary. With the exception of surveys, Region IV has cut their shrimp project. Region's I and II admittedly lack both expertise and time to analyze shrimp samples, especially in the determination of sex. Region I currently lacks a survey, yet possesses a substantial fishery for shrimp. Perhaps test fishing funds could be used to implement a survey there.
2. \$12.0 K for 1 observer (FT-III) for 2 MM to monitor the Tanner crab fishery in Region I.
3. Additional observers for Region IV.

Deletions

1. Cut Sea Duty (8 hr days for 7 days/week only) and scale back Region IV observers from FB-I's to FT-III's. Savings?
2. Cut Norton Sound red king crab survey for a savings of \$92.8 every other year. This fishery is small relative to others around the state. Also, the National Marine Fisheries Service surveys this area every three years. This survey information plus annual observer data could be used to manage this fishery. The survey increment could be cut by \$40.0 K and Region IV surveys alternated between the Kodiak trawl survey (\$141 K) one year and three surveys the next: South Peninsula trawl survey (\$40.0 K), Dutch Harbor pot survey (\$28.2) and \$72.8 of general funds to defray costs of test fishing survey for Adak.
3. Cut \$25 K for graduate student/regional projects from management investigations.

Ken Parker

-14-

August 5, 1987

4. Cut \$10 K for Region II molting/mating/handling studies of Dungeness crabs.

cc: Al Didier
Doug Eggers
Phil Mundy

Governor's request

A-4 259.2 Shell Surveys

273.8

172.0

179.0 shell fish

27.3.8 open