

2016 Gulf of Alaska Pink Salmon Fishery Disaster Relief

November 20, 2019

On January 18, 2017, the U.S. Secretary of Commerce declared the 2016 Gulf of Alaska pink salmon fishery a disaster under the Magnuson-Stevens Fishery Conservation and Management Act. Following this declaration, Congress appropriated \$56.3 million to Alaska to address losses to the seven management areas in the Gulf of Alaska affected by the fishery failure: Kodiak, Prince William Sound, Chignik, Lower Cook Inlet, South Alaska Peninsula, Southeast Alaska, and Yakutat.

On July 1, 2019, NOAA approved a \$53.8 million distribution plan to mitigate losses from the 2016 Gulf of Alaska pink salmon fishery disaster. These funds will support research and provide payments to fishermen, crew and processors in the affected regions. **The distribution of funds will be administered by the Pacific States Marine Fisheries Commission (PSMFC).**

The PSMFC is currently working with NOAA's National Marine Fisheries Service to identify a process for distributing \$2.4 million in disaster relief funds to municipalities affected by the disaster.

Frequently Asked Questions

1. How will the disaster funds be used?

The approved distribution plan allocates funds to three categories: fishery permit holders and crew (\$31.8 million), and processors (\$17.7 million), municipalities (\$2.4 million), and research (\$3.63 million). See attachments to this document for more details on all categories.

2. Who is eligible to receive disaster funds?

CFEC permit holders in Southeast, Prince William Sound, Kodiak and South Alaska Peninsula and Annette Island Reserve fishery participants, fishing crew, processors and processing workers that landed or processed pink salmon and can show a documented loss in 2016 and meet specific criteria will be eligible to receive a payment. The PSMFC will use permit holder, fishery landings, and value data from ADF&G and CFEC to determine payment eligibility for CFEC permit holders.

IMPORTANT: As part of the application for a disaster payment, each skipper **must** submit the name, address, and crew share percentage for each deckhand who participated in the 2016 pink salmon fishery.

See attachments for additional criteria and payment calculation information.

3. How Do I Apply?

PSMFC will mail application materials to those determined to be eligible on the following schedule:

CFEC Permit Holders: Early August 2019

Annette Island Fishing Participants: Annette Islands Fishery participants may submit an application and harvest records to PSMFC before January 31, 2020.

Crew Members: Skippers must be eligible for the program and identify crew members on their application. The PSMFC will send applications to all crew identified by their skippers in late November, 2019. Crew members have until January 31, 2020 to submit their applications or to appeal if they did not receive an application.

Processors: Early August 2019

4. What if I think I'm eligible for a payment and I don't receive an application?

Appeals for CFEC permit holders and processors must be submitted by November 15, 2019.

Appeals for fishing crew must be submitted by January 31, 2020.

Please check the PSMFC fisheries disaster web page for any new information <https://www.psmfc.org/fishery-disaster-programs> or call **1-888-517-7262**.

5. What is the deadline to apply?

CFEC Permit Holders: October 31, 2019; appeals November 15, 2019

Processors: October 31, 2019; appeals November 15, 2019

Crew: January 31, 2020; appeals January 31, 2020

Annette Island Fishing Participants: January 31, 2020

6. How will payments to CFEC permit holders and their crew be calculated?

Each qualified fishing area will receive a percentage of the disaster funds based on the five even year average pink salmon exvessel value; those monies will be distributed to eligible participants in each area according to established formulas.

For instance, **CFEC permit holders that meet the eligibility criteria** will receive a minimum payment of \$300 (before deductions for crew), plus a percentage payment. CFEC permit holder's percentage payment formula is based on the proportion of their loss compared to the total loss of all eligible CFEC permit holders in the same management area, multiplied by the remaining funds available in each management area after minimum payments are deducted.

Payments to **crew** will be deducted from the CFEC permit holder's total disaster payment **based on the crew shares** provided in the CFEC permit holder's application.

See the attachments for more specific information.

7. When will eligible CFEC permit holders and crew receive a payment?

The PSMFC will review applications to verify eligibility for payment. Payments to eligible CFEC permit holders and crew will be distributed six to eight weeks following the crew application deadline of January 31, 2020.

8. What if I have a question about my payment amount?

Contact the PSMFC at **1-888-517-7262**.

For additional information:

Attachment 1 CFEC Permit Holders

Attachment 5 Processing Workers

Attachment 2 Annette Island Fishery

Attachment 6 Municipalities

Attachment 3 Crew Members

Attachment 7 Research Projects

Attachment 4 Processors

Attachment 1

CFEC PERMIT HOLDERS

I am a CFEC permit holder, how do I know if I am eligible for a payment?

The PSMFC will use permit holder, fishery landings, and value data from ADF&G and CFEC to determine payment eligibility for CFEC permit holders. The PSMFC will mail application materials to CFEC permit holders determined to be eligible in early August 2019.

The disaster payment application form details the eligibility criteria, documentation requirements, and the total projected payment amount prior to the deduction for crew payments. *The application deadline for CFEC permit holders is October 31, 2019.*

All eligible CFEC permit holders will be required to submit a complete and timely application to PSMFC to receive a payment.

As part of the application process, each CFEC permit holder must submit the name, address, and crew share percentage for each crew member who participated in the 2016 pink salmon fishery.

Eligibility Criteria

CFEC permit holders that meet the following criteria will be eligible for a payment:

- a) Must have held a CFEC permit card for salmon in 2016
- b) Must have fished for pink salmon in the affected areas in 2016
- c) CFEC permit holders in Southeast, Prince William Sound, Kodiak and South Alaska Peninsula must have documented ADF&G fish ticket landings equal to or greater than 1,000 pounds of pink salmon landed in 2016. Participants in Yakutat, Lower Cook Inlet and Chignik must have a minimum of one pink salmon landing in 2016.
- d) CFEC permit holders must have a demonstrated loss of 2016 pink salmon exvessel revenue (value) compared to their average pink salmon exvessel value during the most recent five even years from 2006 through 2014 as calculated from ADF&G and CFEC landings and value data.

How will payments to CFEC permit holders be calculated?

Funds allocated to fishery participants are calculated based on the loss of pink salmon exvessel value to each management area as compared to the area's five even year average exvessel value. For each management area, disaster funds will be distributed such that each area's fishery value is equal to 70.56% of their respective five even year average exvessel value. The last column in the table below shows the amount of money available for each management area to achieve a total fishery value of 70.56% of the area's five even year fishery value.

Area	2016 Final Estimated Exvessel Value	Adjusted 5 Year Average Exvessel Value (2006-2014)	2016 Decrease in Value Relative to Adjusted 5 Year Average Value	Dollar Difference Between 2016 Final and Adjusted Five Even Year Average	70.56% of Adjusted Five Year Average	Funds Needed to Reach 70.56% of Adjusted Five Year Even Average
Southeast	\$22,009,366	\$31,444,125	-30%	\$9,434,759	\$22,185,792	\$176,427
Yakutat	\$22,650	\$90,273	-75%	\$67,623	\$63,693	\$41,043
Lower Cook Inlet	\$80,575	\$499,798	-84%	\$419,223	\$352,639	\$272,063
Prince William Sound	\$12,945,266	\$49,647,290	-74%	\$36,702,024	\$35,029,261	\$22,083,995
Kodiak	\$4,721,528	\$16,672,069	-72%	\$11,950,541	\$11,763,185	\$7,041,656
South Alaska Peninsula	\$997,205	\$3,872,833	-74%	\$2,875,628	\$2,732,525	\$1,735,320
Chignik	\$126,455	\$854,627	-85%	\$728,172	\$602,993	\$476,538

Total \$31,827,042

To be eligible for a disaster payment, CFEC permit holders must meet all eligibility criteria, including the requirement to have a demonstrated loss in the 2016 pink salmon fishery as calculated by ADF&G and CFEC landings and value data, adjusted for inflation. The demonstrated loss is the CFEC permit holder's five even year average exvessel value from 2006 through 2014 minus the exvessel value of their 2016 landings. CFEC permit holders that meet the criteria will be eligible for a minimum payment of \$300 (before deductions for crew). An eligible CFEC permit holder's total disaster payment is the minimum payment plus their percentage payment.

Each CFEC permit holder's percentage payment is based on the proportion of their loss compared to the total loss of all eligible CFEC permit holders in the same management area multiplied by the remaining funds available in each management area after minimum payments are deducted. Payments to crew will be deducted from the CFEC permit holder's total disaster payment based on the crew shares provided in the CFEC permit holder's application and the CFEC permit holder will receive the amount remaining after the deductions. The table below shows the total loss to all eligible permit holders in each management area and the total remaining funds in each area for the percentage payments after minimum payments that will be used to calculate each permit holder's percentage payment.

Area	Total loss to all eligible permit holders	Number of eligible permit holders	Minimum Payments	Total remaining funds in management area for percentage payment
Southeast	\$14,377,846	464	\$139,200	\$37,227
Yakutat	\$60,402	76	\$22,800	\$18,243
Lower Cook Inlet	\$411,614	26	\$7,800	\$264,263
Prince William Sound	\$40,641,897	325	\$97,500	\$21,986,495
Kodiak	\$12,132,609	238	\$71,400	\$6,970,256
South Alaska Peninsula	\$2,592,691	105	\$31,500	\$1,703,820
Chignik	\$806,020	63	\$18,900	\$457,638

In the example below, a CFEC permit holder participated in the Kodiak pink salmon seine fishery in all five even years from 2006 through 2014 and had an adjusted average exvessel value for pink salmon of \$100,000 for those years and an exvessel value of \$60,000 in 2016.

Permit holder's five even year adjusted exvessel value (2006-2014):	\$100,000		
Permit holder's 2016 exvessel value:	-\$60,000		
Demonstrated loss:	\$40,000		
Total loss to all Kodiak permit holders:	\$12,132,609		
Permit holder's loss as a proportion of the total Kodiak loss:	0.003297		
Remaining Kodiak area funds after minimum payments:	\$6,970,256		
Permit holder's percentage payment:	\$22,980		
Minimum payment:	+\$300		
Permit holder payment (before payments to crew):	\$23,280		
		Crew Share	Crew Payment
		Crew 1: 7%	\$1,630
		Crew 2: 10%	\$2,328
		Crew 3: 10%	\$2,328
		Crew 4: 11%	\$2,561
		Total: 38%	\$8,846
		Permit holder's final payment:	\$14,434

The permit holder's demonstrated loss is their adjusted five even year average minus the value of their 2016 pink salmon fishery (\$40,000). The permit holder's proportion of the total loss (0.003297) is their demonstrated loss divided by the total loss of all eligible Kodiak CFEC permit holders (\$12,132,609). This proportion is multiplied by the remaining funds available in the Kodiak area after minimum payments are deducted (\$6,970,256) to determine the CFEC permit holder's percentage payment of \$22,980. The percentage payment is added to the \$300 minimum payment to determine the permit holder's total payment before crew payments are deducted. The CFEC permit holder had four crew members in 2016 that earned total crew shares of 38%: one crew member earned a crew share of 7%, two crew members earned crew shares of 10% and one crew member earned a crew share of 11%. Total crew payments of \$8,846 (\$23,280 x 0.38) would be deducted from the CFEC permit holder's total disaster payment and the CFEC permit holder would receive a payment of \$14,434. Each crew member that submits a complete and timely application would receive payment calculated from their crew share.

Fishery participants do not need five even years of pink salmon history from 2006 to 2014 to qualify. The

average pink salmon exvessel value of the CFEC permit holder's even year participation between 2006 and 2014 will be the basis for comparison to the CFEC permit holder's pink salmon exvessel value for 2016. For example, if a participant fished 2010 through 2016, their average pink salmon exvessel value would be calculated for 2010, 2012 and 2014 and this average would be compared to their pink salmon exvessel value for 2016 to determine if they had a demonstrated loss.

A CFEC permit holder that fished in 2016 and fished in only one year from 2006 through 2014 would not have an average value for the most recent five even years. To determine if the CFEC permit holder had a demonstrated loss, their 2016 pink salmon exvessel value will be compared to the pink salmon exvessel value in the year fished from 2006 through 2014.

A CFEC permit holder that only fished in 2016 would have no fishing history to determine whether a demonstrated loss occurred. In the absence of pink salmon fishery participation prior to 2016, a new participant's eligibility will be determined based on a comparison of their 2016 exvessel value to the management area's gear-specific five even year average exvessel value. If a participant's 2016 exvessel value is less than the management area's gear specific five even year average exvessel value, they will have a demonstrated loss and be eligible for a disaster fund payment.

The table below lists the gear specific five even year average exvessel value for each management area.

Permit Type	Five even year gear specific average
S05B	\$87
S15B	\$297
S01A	\$124,976
S03A	\$4,780
S04D	\$1,026
S01E	\$270,160
S03E	\$5,867
S04E	\$889
S01H	\$26,576
S04H	\$831
S01K	\$97,332
S02K	\$2,711
S04K	\$13,147
S01L	\$14,010
S01M	\$67,987
S03M	\$548
S04M	\$3,792

Questions regarding Fish Ticket catch information should be directed to ADF&G's Information Services at (907) 465-6133 or DFG.DCF.InfoServices@alaska.gov.

Individual Fish Ticket information and historical catch information is available upon request from ADF&G at <http://www.adfg.alaska.gov/index.cfm?adfg=fishlicense.requests>. Note that there is a \$55 fee for fish ticket data report requests.

How Do I Apply?

PSMFC will mail application materials to **CFEC Permit Holders**: Early August 2019

Note that you must identify on your application the names, addresses, and crew shares of all deckhands.

What is the deadline to apply?

Note that different types of eligible participants may have different application deadlines.

CFEC Permit Holders Application Deadline: October 31, 2019

Crew Member Application Deadline: January 31, 2020

What if I think I'm eligible for a payment and I don't receive an application?

Appeals must be submitted by November 15, 2019.

Please check the PSMFC fisheries disaster web page for any new information

<https://www.psmfc.org/fishery-disaster-programs> or call **1-888-517-7262**.

When will eligible CFEC permit holders receive a payment?

The PSMFC will review CFEC permit holder applications to verify eligibility for payment. Payments to eligible CFEC permit holders will be distributed six to eight weeks following the crew application deadline of January 31, 2020.

What if I have a question about my payment amount?

Contact the PSMFC at 1-888-517-7262.

Attachment 2

ANNETTE ISLAND FISHING PARTICIPANTS

Eligibility Criteria

Fishery participants in the Annette Island Reserve that do not hold a CFEC permit card must meet the following criteria to be eligible for a payment:

- a) Must have fished for pink salmon in the Annette Island Reserve in 2016 and had landings equal to or greater than 1,000 pounds of pink salmon.
- b) Annette Island Reserve participants must demonstrate a loss of 2016 pink salmon exvessel revenue compared to their average pink salmon exvessel revenue during the most recent five even years from 2006 through 2014.

How Do I Apply?

Applications are available on the PSMFC website for Fishery Disasters. Applications must include copies of harvest records and exvessel value of pink salmon landings from the qualifying years in order to determine eligibility.

What is the deadline to apply?

Annette Island Fishery Participants Deadline to Apply: January 31, 2020

Please check the PSMFC fisheries disaster web page for any new information <https://www.psmfc.org/fishery-disaster-programs> or call **1-888-517-7262**.

Attachment 3

CREW MEMBERS

I am a fishing crew member, how do I know if I am eligible for a payment?

Crew members for the 2016 salmon fishery in the affected areas and identified as fishing crew by an eligible CFEC permit holder will be eligible for payment if the CFEC permit holder is eligible to receive a disaster payment.

As part of the application for a disaster payment, each CFEC permit holder **must** submit the name, address, and crew share percentage for each crew member who participated in the 2016 pink salmon fishery. Crew members may wish to contact the 2016 CFEC permit holder to provide their mailing address. The PSMFC will distribute application materials to crew members to apply for their disaster payment after the October 31, 2019 deadline for CFEC permit holders. *The application deadline for crew members is January 31, 2020.*

If a CFEC permit holder is determined to be eligible for payment, each crew member listed on the CFEC permit holder application that submits a complete and timely application will receive a portion of the CFEC permit holder's total payment based on the crew share specified on the CFEC permit holder's application.

Eligibility Criteria

Crew members for the 2016 salmon fishery in the affected areas and identified as fishing crew by an eligible CFEC permit holder will be eligible for payment if the CFEC permit holder is eligible to receive a disaster payment.

How will payments to fishing crew be calculated?

Fishing crew members for the 2016 salmon fishery in the affected areas will be eligible for payment if the CFEC permit holder is eligible to receive a disaster payment. Each eligible crew member that submits a complete and timely application would receive a payment.

To be eligible for a disaster payment, CFEC permit holders must have a demonstrated loss in the 2016 pink salmon fishery as calculated by ADF&G and CFEC landings and value data. A CFEC permit holder's total disaster payment will be in proportion to their demonstrated loss in 2016. Payments to crew will be deducted from the CFEC permit holder's demonstrated loss based on the crew shares provided in the CFEC permit holder's application.

For example, if a CFEC permit holder is eligible for a total payment of \$25,000, a fishing crew member listed as earning a 10% share on the CFEC permit holder's application would be eligible for a payment of \$2,500 ($\$25,000 \times 0.10$).

How Do I Apply?

PSMFC will mail application materials to **Crew Members** in late November, 2019. *The skipper must identify crew members on their application, so contact yours to make sure you're on the list.*

What is the deadline to apply?

Note that different types of eligible participants may have different application deadlines.

Crew Members Deadline to Apply: January 31, 2020

What if I think I'm eligible for a payment and I don't receive an application?

Appeals must be submitted by January 31, 2020.

Please check the PSMFC fisheries disaster web page for any new information
<https://www.psmfc.org/fishery-disaster-programs> or call **1-888-517-7262**.

When will eligible Crew Members receive a payment?

The PSMFC will review Crew Members applications to verify eligibility for payment. Crew should receive payments six to eight weeks after the application deadline of January 31, 2020.

What if I have a question about my payment amount?

Contact the PSMFC at 1-888-517-7262.

Attachment 4

PROCESSORS

How does a processor know if it is eligible for a payment?

The PSMFC will use fisheries landings and value data from ADF&G and CFEC to determine payment eligibility for processors. The PSMFC will mail application materials to processors determined to be eligible in early August 2019. The application form details the eligibility criteria and the total projected payment amount. *The application deadline for processors is October 31, 2019.*

All eligible processors will be required to submit a complete and timely application to PSMFC to receive disaster payments.

Eligibility Criteria

Processors that meet the following criteria will be eligible for a payment:

- a) Processed pink salmon in one or more affected area in 2016.
- b) Had 2016 pink salmon first wholesale value of \$10,000 or greater, determined based on Commercial Operator's Annual Report (COAR) data.
- c) Have a demonstrated gross first wholesale revenue (value) loss in 2016 compared to the five even year average gross first wholesale value from 2006 through 2014 as calculated from ADF&G and CFEC landings and value data.

How will payments to processors be calculated?

To be eligible for a disaster payment, processors must meet all eligibility criteria, including the requirement to have a demonstrated loss in the 2016 pink salmon fishery as calculated by ADF&G and CFEC landings and value data. A processor's total disaster payment will be in proportion to its demonstrated loss in 2016 and the total funds available for processors. A total of 15% of each eligible processing company's total disaster payment will be distributed equally to eligible processing workers (based on unique facility).

The demonstrated loss for each processor will be equal to its five even year average pink salmon gross first wholesale value from 2006 through 2014 minus its 2016 pink salmon gross first wholesale value. The total disaster payment will be based on the proportion of each processors' loss compared to the total loss of all eligible processors, multiplied by the funds available for processors.

Processors do not need five even years of pink salmon history from 2006 to 2014 to qualify. The average pink salmon gross first wholesale value of the processor's even year participation between 2006 and 2014 will be the basis for comparison to the processor's 2016 pink salmon gross first wholesale value. For example, if a processor processed pink salmon from 2010 through 2016, its average pink salmon gross first wholesale value would be calculated for 2010, 2012 and 2014 and this average would be compared to the processor's 2016 pink salmon gross first wholesale value to determine if it had a demonstrated loss in 2016.

A processor that only processed pink salmon in one year from 2006 through 2014 would not have an average pink salmon gross first wholesale value for the most recent five even years. To determine if the

processor had a demonstrated loss, its 2016 pink salmon gross first wholesale value will be compared its pink salmon gross first wholesale value for the one year it processed from 2006 through 2014.

Questions regarding Fish Ticket catch and COAR information should be directed to ADF&G's Information Services at (907) 465-6133 or DFG.DCF.InfoServices@alaska.gov.

Individual Fish Ticket, COAR, customized processor and buyer listings and historical production information is available upon request from ADF&G at <http://www.adfg.alaska.gov/index.cfm?adfg=fishlicense.requests>. Note that there is a \$55 fee for Fish Ticket and COAR data report requests.

How Do I Apply?

PSMFC will mail application materials to processors in early August 2019.

What if I think I'm eligible for a payment and I don't receive an application?

Appeals must be submitted by November 15, 2019.

Please check the PSMFC fisheries disaster web page for any new information <https://www.psmfc.org/fishery-disaster-programs> or call **1-888-517-7262**.

What is the deadline to apply?

Processors Deadline to Apply: October 31, 2019

When will eligible processors receive a payment?

The PSMFC will review processor applications to verify eligibility for payment. Distribution to processors will be done in two steps. Twenty-five percent of each eligible processor's total payment will be distributed six to eight weeks following the completed application being received by PSMFC.

The second installment of the payment is contingent upon each processor providing the PSMFC with an invoice which includes a list of eligible processing workers, the amount of funds that were distributed to each, date of distribution, and check number. This information must be received by PSMFC no later than January 31, 2020.

Once the PSMFC has the required information for processing workers, the second installment of the payment will be provided to the eligible processor. Payments to processing workers will be distributed by the processor. These funds are taxable; therefore, the processor is responsible for withholding any income taxes from the processing workers payments and reporting to the appropriate taxing authorities.

What if I have a question about my payment amount?

Contact the PSMFC at 1-888-517-7262.

Attachment 5

PROCESSING WORKERS

Eligibility Criteria

Eligible processing workers identified by an eligible processor will be eligible for an equal share of 15% of the processor's total disaster payment. An eligible processing worker:

- a) Was employed at an eligible plant, performing hourly work during any part of July and August of 2016 and listed as eligible for rehire.
- b) Worked a minimum of 100 hours and a maximum of 420 hours at the plant during the months of July and/or August 2016. (420 hours is equivalent to 47.6 hours/week for July and August of 2016).

How will payments to processing workers be calculated?

Payments to processing workers will be deducted from the processor's total disaster payment. A total of 15% of each eligible processor's total disaster funds will be distributed equally to eligible processing workers (based on unique facility) that meet the eligibility criteria. The portion allocated to processing workers is based on estimated labor cost of hourly processing workers and is derived from the labor cost for finished pink salmon as a percentage of the processor's total pink salmon conversion costs. These funds are taxable; therefore, the processor is responsible for withholding any income taxes from the processing workers payments and reporting to the appropriate taxing authorities.

The payment to each processing worker would be calculated by dividing the total amount of payments to processing workers by the number of eligible processing workers. For example, a processor's total disaster payment of \$1,200,000 would result in payments to processing workers of \$180,000 ($\$1,200,000 \times 0.15$). The processor had 100 eligible processing workers at its facility in Kodiak, and each eligible processing worker would receive a payment of \$1,800 ($\$180,000 / 100$) before taxes or other withholdings are deducted.

When will eligible processing workers receive a payment?

Once the PSMFC has the required information for processing workers the second installment of the payment will be provided to the eligible processor. **Payments to processing workers will be distributed by the processor.** These funds are taxable; therefore, the processor is responsible for withholding any income taxes from the processing workers payments and reporting to the appropriate taxing authorities.

What if I have a question about my payment amount?

Contact the PSMFC at 1-888-517-7262.

Attachment 6

MUNICIPALITIES

\$2.4 million in disaster relief funds will be distributed to municipalities that were affected by the disaster. The PSMFC is currently working with NOAA's National Marine Fisheries Service to identify a process for distributing the funds to municipalities.

Attachment 7

2016 Gulf of Alaska Pink Salmon Fishery Disaster Relief

Research Project Detail

Kodiak Pink Salmon Saltwater Marking Sampling Plan

The Kitoi Bay Hatchery (KBH) is focused on providing enhanced common property salmon fishing opportunities for Kodiak Management Area fishermen since 1976. The primary contribution of KBH is to the Kodiak commercial fishery, but it also contributes to subsistence and recreational fisheries in the area. KBH is located on the southeast coast of Afognak Island and is relatively isolated from the major pink salmon producing areas of the archipelago. Afognak Island wild pink salmon production is estimated to represent about 8% of wild pink salmon production of the Kodiak Management Area. KBH is managed and operated by the Kodiak Regional Aquaculture Association (KRAA).

The capability to apply and read saltwater otolith marks to pink salmon has recently been developed as part of collaboration between a private company, Southern Southeast Regional Aquaculture Association, the Sitka Sound Science Center, and KRAA. Pilot marking was completed at the KBH in 2017 and 2018, and the results of the marking to date are positive. Pilot testing indicates a reduction in annual costs to apply saltwater marks, as opposed to thermal marks, of approximately 90%. No thermal marking of pink salmon from KBH has been done to date. The more efficient, low cost saltwater markers make a baseline study on Kodiak pink salmon more feasible. KRAA plans to begin 100% saltwater marking of pink salmon beginning in 2019.

Research is needed to make the KBH consistent with hatchery programs statewide; support certification to improve the Kodiak pink fishery and markets; and examine the proportion of hatchery fish in the harvest. This research project will evaluate saltwater marked otoliths, resulting in the following: 1) estimate of the proportion of hatchery pink salmon in the Kodiak fishery, 2) estimate of the proportion of hatchery salmon in streams, 3) better understanding and tracking of survival trends for pink salmon in the Kodiak area which may help identify factors related to survival, 4) information on migration which may be relevant to management strategies, and 5) test of saltwater marking methods that could provide significant cost savings statewide and effectively increase opportunity in the affected common property pink salmon fisheries. Thus, this research project is intended to both improve environmental and economic performance of the fishery affected by the disaster and improve fishery information.

This evaluation includes 1) stream sampling to detect the presence of hatchery-origin pink salmon in natural, pink salmon-producing streams; and 2) fishery harvest sampling to detect the presence and contribution of hatchery-origin pink salmon in selected Kodiak Management Area pink salmon fisheries. Results of otolith analysis will be informative on the spatial and temporal extent of stray hatchery pink salmon and will provide information to ADF&G management to test current assumptions about relative contributions of hatchery production to wild production. It is anticipated that once a baseline of information is collected, sampling can be substantially reduced to fishery harvest sampling only. This evaluation will be completed over a four-year period, 2019 through 2022. In 2019 and 2020, a partial sampling plan and otolith analysis will be completed to correspond to the pilot marking in 2017 and 2018. In 2021 and 2022, a full-scale sampling plan and otolith analysis will be completed to correspond to the

100% marking in 2019 and 2020.

Total cost for this four-year project to produce, collect, and evaluate saltwater marked pink salmon at KBH is \$885,000. The cost estimate of the evaluation component is \$680,000. KRAA will be responsible for capital and labor costs associated with development and production of marks, collection of samples, and otolith analysis, up to a total of \$435,000. ADF&G will collaborate with KRAA on the development of the sampling plan. Requested funds will go to KRAA. Disaster relief funds of \$450,000 will be allocated to fund the remaining costs of completing the project.

Alaska Hatchery Research Program

The Alaska Hatchery Research Program was established in 2011 to study the interaction of hatchery fish straying into wild systems for pink and chum salmon in Prince William Sound and for chum salmon in Southeast Alaska. The results of this ambitious project will examine genetic population structure among hatchery and natural fish, determine hatchery proportions in wild systems, and measure differences in fitness between hatchery- and natural-origin fish. This information is a critical element of assessing the impact of hatchery fish on wild production. Previous studies have been conducted on other Pacific salmon species with different life histories in locations where wild habitat has been compromised. This makes inferences from those studies to Alaskan circumstances tenuous and emphasizes the need for this research project.

To date the available funding (\$9.1M) has covered the first two components of this project: all the field work associated with the Prince William Sound and Southeast Alaska components. However, available existing funding is only sufficient for laboratory analysis in two of three generations at two of the five study streams in Prince William Sound. The program needs to complete the last generation at two streams and all generations for the three additional streams. Proposed work would support any fieldwork, laboratory analyses, statistical evaluations, and reporting necessary to complete this portion of the project. Disaster relief funds of \$2.5 million will be allocated to this project to complete the remaining work.

Southeast Alaska Coastal Monitoring Survey

The Southeast Alaska Coastal Monitoring (SECM) would survey juvenile pink salmon abundance in three annual surveys from June through August. Surveys focus on the primary seaward migration corridors of the Inside Northern Southeast region including Icy Strait and upper Chatham Strait.

The results are essential to reliably forecast Southeast pink salmon harvest. Previous surveys in this area have shown a strong relationship between juvenile pink salmon abundance and harvest the following year. Because the pink salmon harvest in Southeast has a high interannual variability (harvest has ranged from 3 to 95 million since 1960), information gained from the SECM project is essential in aiding seafood processors to form and prepare for harvest expectations the following year. It is also useful for ADF&G managers until inseason abundance indices are available.

Disaster relief funds of \$680,000 will be allocated to this project for vessel and ADF&G personnel costs to complete the survey.