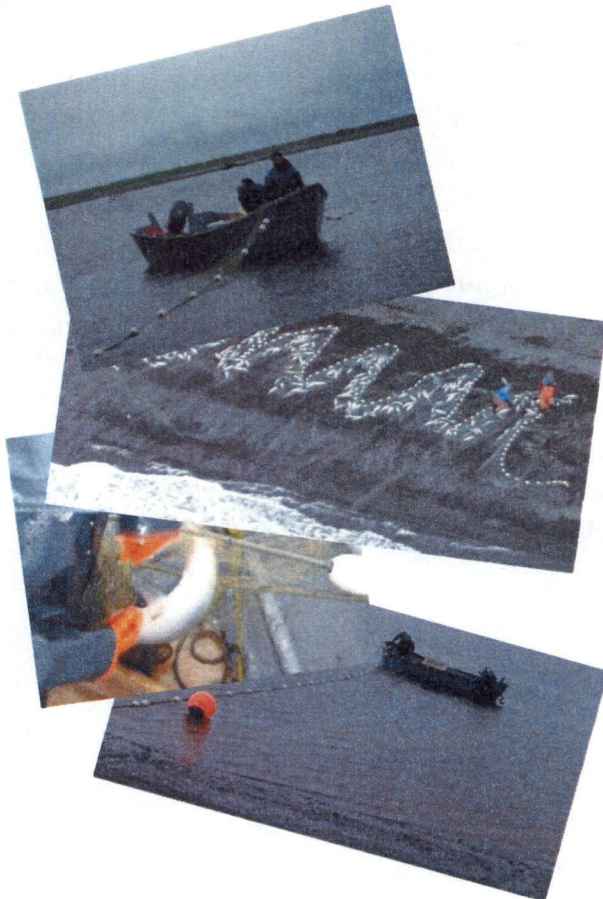


# Bristol Bay Set Gillnet Permit Stacking



CFEC Report No. 12-02-N  
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Alaska Commercial Fisheries Entry Commission  
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*Submitted by BBEDC*

## *Abstract*

In December of 2009, the Alaska Board of Fisheries met for the Bristol Bay Finfish meeting. Proposal 17 in this meeting included provisions for the stacking of limited entry permits in the Bristol Bay set gillnet fishery. As written, the proposal sought to allow a permit holder the opportunity to use a second permit to double the maximum amount of net he or she can deploy when fishing. The stacking proposal passed and a new regulation went into effect in 2010, but it contained a sunset clause which would cause the regulation to expire at the end of 2012. Multiple proposals were submitted for the December 2012 Board of Fisheries Bristol Bay Finfish meeting to remove the sunset clause, thereby allowing permit stacking to remain. In this paper, I quantitatively explore the effects of permit stacking in the Bristol Bay set gillnet fishery by observing participation, real earnings, permit prices, and landings. Discussed are topics such as changes in permit distribution, the use of emergency transfer permits, changes in the permit price, and how this regulation affects the proportion of landings among resident classes.

Cover photos courtesy of Marcus Gho and Tim Sands

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The opinions and any errors in this paper are the responsibility of the author.

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## *Introduction*

In 2002, the Alaska Legislature passed House Bill 286, amending Alaska Statute 16.43.140 (c). This new law allows individuals the ability to concurrently hold two salmon limited entry permits in the same permit fishery. The law specifies that individuals who hold two salmon limited entry permits are allowed to fish only one of the two permits. This prohibition, however, was supplanted under specific circumstances by House Bill 251, which was passed in 2006. HB 251 provided the Alaska Board of Fisheries the authority to grant fishing privileges to the second permit held by an individual, otherwise known as permit stacking. Although much of the initial interest in presenting the bill was centered on fishing activity in Bristol Bay, the bill was introduced as applicable to all CFEC limited entry permits. By the time the bill was signed into law the same year, it was modified to apply to salmon permits only.

The Board of Fisheries (Board) allowed for permit stacking in the Kodiak salmon set gillnet fishery starting in 2008. The 2008 Kodiak regulations included a 2010 sunset provision; when the Board met on the subsequent cycle, in December of 2010, they chose to allow the sunset regulation to prevail removing the stacking option. Regulations for the Cook Inlet salmon set gillnet fishery allow for permit stacking; however, no sunset provision was included in the Cook Inlet regulations.

In December of 2006, the Board met to discuss regulations relating to Bristol Bay. Among the topics discussed was Proposal 15 which requested that individuals who hold either two Bristol Bay set (S04T) or drift gillnet (S03T) permits the option to permit stack. The Alaska Department of Fish & Game (ADF&G) indicated a neutral stance; however, they expressed concerns in written comments regarding adjacent S04T permit holders being affected by an additional compliment of gear, quality of catch for those stacking permits, and restrictions regarding the maximum distance that set gillnet gear may be fished relative to shore. The proposal was tabled to the Board restructuring committee with possible action for the next cycle.

In December of 2009, the Board again met to discuss Bristol Bay regulations. This time, there were four proposals in favor of permit stacking in the set gillnet fishery. ADF&G took a neutral stance for each of these proposals.

There were 33 written comments submitted for Proposal 17 from the public; two-thirds of the comments were in favor of the new regulations. Some of these comments included petitions signed by multiple individuals. Comments in favor of permit stacking generally indicated a desire to allow permit holders the ability to 'make a living wage.' With the exception of the Kvichak Setnetters Association, all of the comments in favor of permit stacking were made by individuals. Proponents for Proposal 17 suggested that no

harm would occur as the permits that would be used to add the complement of gear were already being fished. Many comments, whether they were in favor or opposed to permit stacking, indicated a desire to keep permits local to the Bristol Bay watershed and to help fishing families. Generally, those against permit stacking were opposed to restructuring the fishery. Opponents included individuals but also included other organizations such as the Aleknagik Traditional Council, Choggiung Limited, and the Bristol Bay Economic Development Council (BBEDC). There were also concerns that allowing for permit stacking would drive up the value of the permit price and therefore make it more difficult for locals to buy permits. BBEDC expressed concerns that permit stacking will disfavor locals, their argument being that locals have less access to capital.

Record copies submitted during the meeting included strong opposition to the permit stacking proposals. All of the Advisory committees were opposed to permit stacking due to concerns with how it would negatively affect local watershed residents. Other concerns that were raised in committees include: stacked permits limiting adjacent set gillnetters ability to catch fish, lower quality of fish due to higher volume of harvest and less access to capital by locals.

Based on a review of comments and testimony, permit stacking was indeed a contentious issue. No action was taken on Proposals 16, 18, or 19; however, proposal 17 passed but was amended to include a three-year sunset clause.

In 2012, 11 proposals were submitted to repeal the sunset clause of set gillnet permit stacking. Two of the proposals came from set net associations, and the other nine proposals came from fishermen.



## *Methods*

Data was selected from the CFEC permit file, ADF&G fish tickets, and the CFEC census file. Both the CFEC permit file and ADF&G fish ticket files are organized by year. Residency was determined from merging the CFEC permit file and CFEC census file. Information on declaration of residency, address fields, and how fees were paid were used to determine Alaska residency. The first priority utilized to determine Alaska residency was the residency declaration, the second priority considered was the mailing address, and third was the fee payment. For this paper, three residency classes were defined:

- **Local** – permit holders who reside within the Bristol Bay ADF&G management area;
- **Nonlocal** – permit holders who live in Alaska but are not local to Bristol Bay; and
- **Nonresident** – permit holders who do not reside in Alaska.

Permit ownership was tracked by creating a unique row of data for each permit and each day of the year. An owner was defined by the unique CFEC person identifier. Permit ownership included holders of permanent permits or holders of permits received by emergency transfer, as both types of permit holdings are allowed in permit stacking. ADF&G fish ticket landings were aggregated by landing day for each individual using the CFEC person identifier. The fish ticket and permit files were merged by the person identifier, date, and permit number. The resulting table was limited to individuals who made landings. On days in which landings were made, the CFEC permit file was queried to determine if a second permit was owned by the same person. If a second permit was identified, then the individual was considered to have stacked his/her permits that year.

For the redistribution due to permit stacking section, all individuals who made landings in both 2008 and 2011 were considered. The stacking year of 2011 was selected as it has the most recent cohort of stacked permit operations for which there is landing data. 2008 was selected as the pre-regulation year to compare fishing activity. Permit operation type (stacked/single permit operation) was further classed based on residency for the 2011 year. Counts of fish landed were considered for each class in both years.

Permit price modeling used regression results of real (adjusted for inflation) permit prices from the quantity of pounds caught using S04T permits along with the world production of farmed Atlantic salmon, and a binary variable used to indicate the presence of permit stacking or not. Information on permit values for this report included only arm-length transactions from the CFEC transfer survey file. The S04T permit values were adjusted for inflation using the U.S. Bureau of Labor Statistics CPI data by month, with the month of sale used to adjust for inflation with a base price of January 2012. Values of the transactions are depicted in Appendix C in a boxplot so as to maintain confidentiality. Total harvest pounds caught by the S04T fishery are an aggregate of all commercially-caught pounds of fish as documented in the ADF&G fish tickets. Production of Atlantic

farmed salmon is aggregated from the Food and Agriculture Organization of the United Nations (FAO) FishStat. At the time of this publication, FAO data extends only through 2010. For 2011, several sources indicate an excess of 1,600 kiloton production of farmed Atlantic salmon; the North Atlantic salmon Conservation Organization level was selected as a more conservative figure, and also due to the fact that other year's counts of Atlantic salmon are comparable to that of FAO FishStat data. Additional variables were considered such as the Japanese yen exchange rate and the world production of farmed salmonids including: Chinook, chum, coho, rainbow trout, and sockeye from the FAO FishStat dataset. The following variables measuring harvest were considered: the total harvest pounds from fish tickets; average ex-vessel value; the aggregate ex-vessel value; the number of fish landed; and the number of permit sales. The additional and substitute variables were eliminated using the Akaike information criterion to derive the most parsimonious and robust model possible given the data used. Please note that S04T permit price for this paper was modeled but the price of sockeye was not analyzed. The model was tested for homoscedasticity using the White test, and for autocorrelations with a Durbin-Watson parameter. Due to the presence of autocorrelation, the model was adjusted with a lag of 4. When the presence of autocorrelations is ignored, the biased stacked value is higher. Several reasons might explain a lag of four, such as memory of previous harvests which would influence expectation for return on investment, costs due to capitalization, memory of recent catch history, and so forth.



## Number and Distribution of Permit Holdings

Year-end distribution of Bristol Bay salmon set gillnet (S04T) permit holders across years provides annual snapshots to help identify trends. Starting in 2010, when permit

stacking regulations came into effect, the count of individuals who held two permits at year-end rose substantially, especially among nonresidents and nonlocals. It should be noted that these figures do not include emergency transfer (ET) permits, as these permits revert back to the permanent permit holder at the end of each year. As it is a year-end snapshot, mid-year permit holdings are not reflected.

**Figure 1. Year-end Distribution of Individuals With Two S04T Permits**

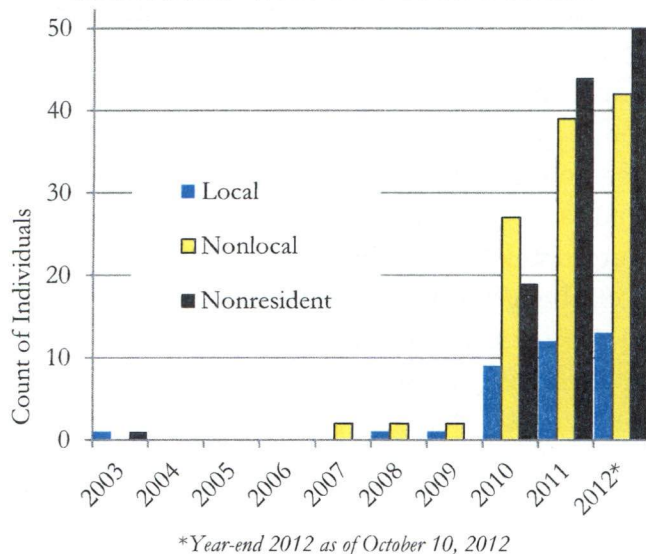


Table 1 provides counts of year-end permit holdings. For example, in 2011, 95 of 886 individuals (10.7%) held two S04T

permits at year end. Among the Alaska nonlocals, 39, or 27.8% of all Alaska nonlocals, held two S04T permits.

**Table 1. Number of S04T Permit Holders with Two Permits at Year-end**

Year	Total Permit Holders	Permit Holders with Two Permits		Local		Nonlocal		Nonresident	
				Count	Percent	Count	Percent	Count	Percent
2003	993	2	0.2%	1	0.3%	0	0.0%	1	0.3%
2004	983	0	0.0%	0	0.0%	0	0.0%	0	0.0%
2005	983	0	0.0%	0	0.0%	0	0.0%	0	0.0%
2006	982	0	0.0%	0	0.0%	0	0.0%	0	0.0%
2007	980	2	0.2%	0	0.0%	2	1.9%	0	0.0%
2008	976	3	0.3%	1	0.3%	2	0.8%	0	0.0%
2009	979	3	0.3%	1	0.3%	2	2.1%	0	0.0%
2010	927	55	5.9%	9	2.6%	27	18.5%	19	6.4%
2011	886	95	10.7%	12	3.6%	39	27.8%	44	15.8%
2012*	874	105	12.0%	13	3.9%	42	16.0%	50	18.2%

Percent is a percentage of holdings for all permit holdings of the residency class.

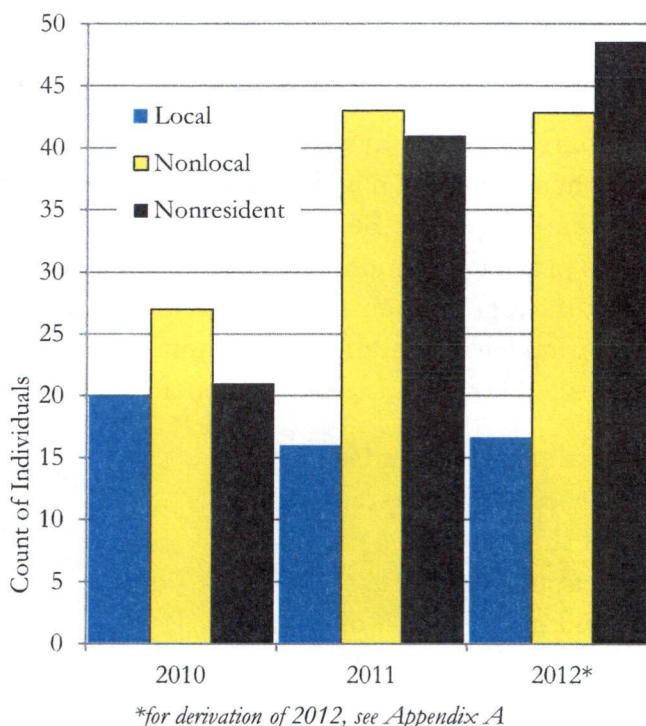
Permits held by DCCED/CFAB are not considered in this table.

\* 2012 year-end data is as of October 10, 2012



Rather than looking at year-end counts, Figure 2 depicts counts of individuals who held two permits and made a landing at some point during the year. Due to the ease of transferability of CFEC permits, permits change hands throughout the year which contributes to the higher counts in Figure 2. The difference between permit holdings, as reflected in Figure 1 and Figure 2, ranges between 70% and 80%. Table 2 includes both permanent and ET permits. An important aspect of permit stacking is the number of individuals whose second permit is an ET permit, which reverts to the original owner at year-end. As with Figure 1, Figure 2 clearly indicates substantial increases in the number of individuals who held two permits. In 2010, the first year of permit stacking, approximately the same number was held among all resident classes; however, in the two years following counts of multiple permit holders decreased among locals while there was substantial growth among nonlocals and nonresidents.

**Figure 2. Permit Stacking In-season**



**Table 2. S04T Permit Stacking In-season Counts**

	Local	Nonlocal	Nonresident	Total
2010	20	27	21	68
2011	16	43	41	100
2012*	17	43	49	109

*Only fished permits are included in this table*

*\*for derivation of 2012 values, see Appendix A*

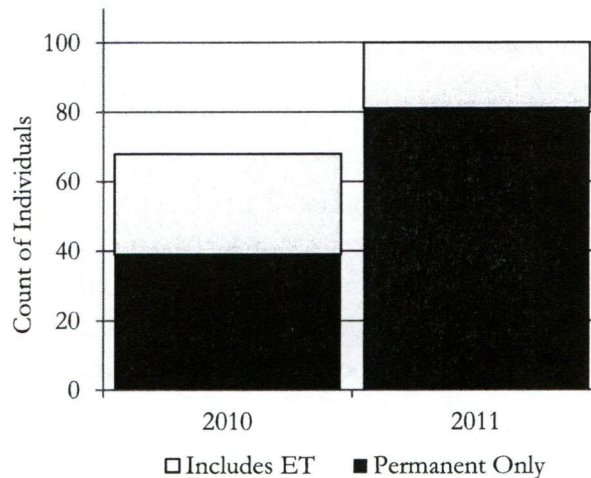
While this report may provide comprehensive data for the years 2010 and 2011, it should be noted that future trends are not projected. Likewise, had there been no sunset provision in the permit stacking regulation, the amount of participation in permit stacking may have been significantly different.

## *Background on the Second Permit in Two Permit Operations*

There are two ways in which a set gillnetter can transition to a stacked permit operation: either by using an additional permanent permit or an ET permit. While comments submitted to the Board did not discuss the use of ET permits as part of permit stacking, this provision found inclusion into the regulation. CFEC collects data from a survey each time a permanent transfer occurs. While less information on ET's is gathered, other information such as address and name data from the permanent permit owner and ET recipient can shed insight as to who is benefiting from ET permits.

The use of ET permits is an important aspect of permit stacking. In 2010, 29 of the 68 (42.6%) permit stacking operations used at least one ET permit, and in 2011, 19% of stacked operations utilized ET permits. Before permit stacking was allowed, if an individual had to ET their permit they had to find an able bodied, willing individual who did not already have a permit. By allowing the use of ET permits in permit stacking, rather than finding an individual without a permit one simply had to identify one of the many individuals who were fishing that wished to use an additional complement of gear.

**Figure 3. Use of Emergency Transfer Permits in Stacked Operations**



**Table 3. Use of Emergency Transfer Permits in S04T Stacked Permit Operations**

Year	Total Stacked Permit Operations	Permanent Only	Includes ET
2010	68	39	29
2011	100	81	19

Appendix B provides substantial detail as to the utilization of ET and Permanent permits by year and resident class.

During discussions about implementing stacked permit operations, there was a substantial amount of discussion on both sides of the issue regarding the importance of