

### **Appendix C: Community Analysis Supplemental Information (5/29/15)**

Three newly developed supplemental tables for Appendix C: Community Analysis provided here are intended to augment the community-level impacts discussion in that document (Section 4 of Appendix C).

The first two of these tables contain information on non-fishing employment and wage and salary income for halibut permit holders in Area 4 halibut dependent communities.

- Appendix C: Supplemental Table 1 provides employment and wage and salary income (non-fishing) for Area 4 halibut permit holders for Alaska Area 4 halibut dependent communities for the years 2008-2013.
- Appendix C: Supplemental Table 2 provides annual average 2008-2013 employment and wage and salary income (non-fishing) for Area 4 halibut permit holders for Alaska Area 4 halibut dependent communities and a percentage comparison to the total Area 4 halibut ex-vessel gross revenues for catcher vessels owned by residents of those same communities.

The purpose of these two tables is to provide additional information for the employment plurality discussion, whereby halibut permit holders in a number of communities often use multiple sources of employment and income to make a living over the course of a year, with the proportion of total personal income derived from the halibut fishery varying between communities. It is understood that ex-vessel gross revenue values are not directly comparable to wage and salary income, as the net revenues accruing to the permit holder would necessarily reflect deductions from gross revenues for vessel owner, skipper, and crew shares, as relevant, as well as vessel expenses. Nevertheless, as shown in the table, non-fishing wage and salary income of halibut permit owners substantially exceeds halibut ex-vessel gross revenues for all community resident-owned vessels in some communities, while in other communities the opposite is true.

The third supplemental table provided, Appendix C: Supplemental Table 3, provides information on the distribution of pounds gained by community for each 100,000 pound increase in area halibut harvest, assuming patterns of harvest present over 2008-2013 remain constant. The purpose of this table is to provide more quantitative information on the relative distribution by community of potential beneficial impacts that would result from increases in Area 4 halibut harvest (regardless of the source of that increase, whether through BSAI halibut PSC limit revisions or through other factors, noting that a BSAI halibut PSC limit reduction would not equate pound for pound with an increase in halibut target fishery harvest).

Appendix C: Supplemental Table 1

Employment and Wage and Salary Income (non-fishing) of Area 4 Halibut Permit Holders, Alaska Halibut Dependent Communities, 2008-2013

| City of AKFIN Record<br>(Area 4 Halibut Dependent<br>Communities Only) | Total<br>Unique<br>Area 4<br>Halibut<br>Permit<br>Holders<br>2008-2013 | 2008  |  | 2009  |  | 2010  |  | 2011  |  | 2012  |  | 2013  |  |
|--|--|---|--|---|--|---|--|---|--|---|--|---|--|
|  |  | Number of<br>Employed<br>Halibut<br>Permit<br>Holders | Total Wage<br>and Salary<br>Income<br>(non-<br>fishing) of<br>Employed<br>Halibut<br>Permit<br>Holders | Number of<br>Employed<br>Halibut<br>Permit<br>Holders | Total Wage<br>and Salary<br>Income<br>(non-<br>fishing) of<br>Employed<br>Halibut<br>Permit<br>Holders | Number of<br>Employed<br>Halibut<br>Permit<br>Holders | Total Wage<br>and Salary<br>Income<br>(non-<br>fishing) of<br>Employed<br>Halibut<br>Permit<br>Holders | Number of<br>Employed<br>Halibut<br>Permit<br>Holders | Total Wage<br>and Salary<br>Income<br>(non-<br>fishing) of<br>Employed<br>Halibut<br>Permit<br>Holders | Number of<br>Employed<br>Halibut<br>Permit<br>Holders | Total Wage<br>and Salary<br>Income<br>(non-<br>fishing) of<br>Employed<br>Halibut<br>Permit<br>Holders | Number of<br>Employed<br>Halibut<br>Permit<br>Holders | Total Wage<br>and Salary<br>Income<br>(non-<br>fishing) of<br>Employed<br>Halibut<br>Permit<br>Holders |
| Adak*  | --   | --  | --   | --  | --   | --  | --   | --  | --   | --  | --   | --  | --   |
| Akutan   | 8  | 6   | \$103,177  | 6   | \$123,765  | 5   | \$121,130  | 6   | \$113,067  | 6   | \$122,239  | 7   | \$241,218  |
| Atka   | 6  | 5   | \$101,608  | 5   | \$117,903  | 5   | \$74,551   | 4   | ND   | 6   | \$47,105   | 4   | ND   |
| Chefornak  | 36   | 32  | \$592,982  | 31  | \$499,679  | 31  | \$520,829  | 29  | \$668,796  | 29  | \$657,092  | 25  | \$409,828  |
| Dutch Harbor**   | 6  | 3   | ND   | 3   | ND   | 3   | ND   | 3   | ND   | 3   | ND   | 3   | ND   |
| Hooper Bay   | 18   | 14  | \$267,455  | 15  | \$196,823  | 17  | \$233,943  | 15  | \$254,195  | 14  | \$289,314  | 13  | \$265,395  |
| Kipnuk   | 38   | 32  | \$340,504  | 32  | \$494,088  | 33  | \$657,398  | 35  | \$528,127  | 34  | \$580,234  | 26  | \$644,236  |
| Mekoryuk   | 39   | 37  | \$605,287  | 35  | \$501,398  | 35  | \$533,846  | 32  | \$528,656  | 32  | \$580,892  | 30  | \$622,330  |
| Newtok   | 18   | 16  | \$210,068  | 12  | \$239,501  | 14  | \$248,911  | 11  | \$235,203  | 11  | \$203,384  | 10  | \$210,662  |
| Nightmute  | 14   | 14  | \$141,836  | 13  | \$146,262  | 14  | \$175,916  | 13  | \$185,546  | 14  | \$176,106  | 13  | \$229,318  |
| Nome   | 15   | 11  | \$226,024  | 9   | \$266,556  | 6   | \$275,947  | 7   | \$316,133  | 6   | \$332,528  | 6   | \$360,949  |
| Quinhagak  | 18   | 15  | \$225,921  | 15  | \$260,142  | 14  | \$281,005  | 13  | \$308,699  | 13  | \$385,016  | 13  | \$488,181  |
| St. George Island  | 11   | 10  | \$179,918  | 9   | \$206,544  | 11  | \$277,576  | 10  | \$302,461  | 10  | \$306,458  | 9   | \$240,048  |
| St. Paul Island  | 25   | 17  | \$588,794  | 18  | \$618,041  | 18  | \$662,461  | 15  | \$548,704  | 16  | \$659,299  | 14  | \$840,177  |
| Savoonga   | 24   | 18  | \$410,298  | 21  | \$356,710  | 18  | \$145,616  | 19  | \$96,289   | 15  | \$158,390  | 15  | \$183,998  |
| Toksook Bay  | 55   | 43  | \$656,064  | 43  | \$760,807  | 42  | \$783,800  | 39  | \$871,473  | 38  | \$982,106  | 44  | \$889,182  |
| Tununak  | 41   | 32  | \$461,692  | 33  | \$527,605  | 31  | \$544,264  | 31  | \$486,018  | 28  | \$535,998  | 27  | \$730,397  |
| Unalaska***  | 14   | 10  | \$587,309  | 10  | \$637,759  | 9   | \$573,024  | 8   | \$529,401  | 8   | \$673,391  | 9   | \$804,988  |
| Adak/Akutan/Atka/St. George  | --   | --  | --   | --  | --   | --  | --   | --  | --   | --  | --   | --  | --   |
| Hooper Bay/Quinhagak   | 36   | 29  | \$493,376  | 30  | \$456,965  | 31  | \$514,947  | 28  | \$562,894  | 27  | \$674,329  | 26  | \$753,577  |

\*\* Note: Adak not included in the permit holder and wage data supplied.

\*\*Note: Dutch Harbor supplied separately from Unalaska in this dataset; as a result, totals for permit holders and wages shown for Unalaska underrepresent the community total.

ND: Non-Disclosable

Source: Employment and wage data from Department of Labor, Research and Analysis Section (special data run by request of Northern Economics); annual ex-vessel gross revenues derived from Appendix C, Table 2-6b.

Appendix C: Supplemental Table 2

Annual Average Employment and Wage and Salary Income (non-fishing) of Area 4 Halibut Permit Holders and Comparison to Halibut Ex-Vessel Gross Revenues, All Community Resident-Owned Catcher Vessels, Alaska Area 4 Halibut Dependent Communities, 2008-2013

| City of AKFIN Record<br>(Area 4 Halibut Dependent<br>Communities Only) | Total Unique<br>Area 4<br>Halibut<br>Permit<br>Holders 2008-<br>2013 | Annual Average<br>2008-2013                           |   | Annual Average<br>2008-2013   |   |
|--|--|---|---|---|---|
|  |  | Number of<br>Employed<br>Halibut<br>Permit<br>Holders | Total Wage<br>and Salary<br>Income (non-<br>fishing) of<br>Employed<br>Halibut<br>Permit<br>Holders | Average Ex-<br>Vessel Gross<br>Revenues from<br>Area 4 Halibut,<br>All Community<br>Resident-<br>Owned Vessels* | Percentage<br>Comparison of<br>Total (non-<br>fishing) Wage<br>and Salary<br>Income of<br>Halibut Permit<br>Holders to Total<br>Area 4 Halibut<br>Ex-Vessel Gross<br>Revenues |
| Adak**   | --   | --  | --  | ND  | --  |
| Akutan   | 8  | 6   | \$137,433   | ND  | --  |
| Atka   | 6  | 5   | \$56,861  | ND  | --  |
| Chefornak  | 36   | 30  | \$558,201   | \$68,678  | 12%   |
| Dutch Harbor***  | 6  | 3   | ND  | ND  | --  |
| Hooper Bay   | 18   | 15  | \$251,187   | ND  | --  |
| Kipnuk   | 38   | 32  | \$540,765   | \$53,172  | 10%   |
| Mekoryuk   | 39   | 34  | \$562,068   | \$373,619   | 66%   |
| Newtok   | 18   | 12  | \$224,622   | \$28,125  | 13%   |
| Nightmute  | 14   | 14  | \$175,831   | \$78,245  | 45%   |
| Nome   | 15   | 8   | \$296,356   | \$308,517   | 104%  |
| Quinhagak  | 18   | 14  | \$324,827   | ND  | --  |
| St. George Island  | 11   | 10  | \$252,167   | ND  | --  |
| St. Paul Island  | 25   | 16  | \$652,913   | \$2,863,583   | 439%  |
| Savoonga   | 24   | 18  | \$225,217   | \$153,454   | 68%   |
| Toksook Bay  | 55   | 42  | \$823,906   | \$406,472   | 49%   |
| Tununak  | 41   | 30  | \$547,662   | \$82,666  | 15%   |
| Unalaska***  | 14   | 9   | \$634,312   | \$1,654,855   | 261%  |
| Adak/Akutan/Atka/St. George  | --   | --  | --  | \$867,574   | --  |
| Hooper Bay/Quinhagak   | 36   | 29  | \$576,015   | \$30,871  | 5%  |

\*Note: These figures are Area 4 halibut total ex-vessel gross revenues for all community resident-owned catcher vessels. These include not only revenues that would accrue to permit holders, but also include revenues that would be used for vessel owner, skipper, and crew shares, plus revenues that would be used for vessel expenses.

\*\* Note: Adak not included in the permit holder/wage and salary data supplied.

\*\*\*Note: Dutch Harbor supplied separately from Unalaska in this dataset; as a result, totals for permit holders and wages shown for Unalaska underrepresent the community total.

ND: Non-Disclosable

Source: Employment and wage data from Department of Labor, Research and Analysis Section (special data run by request of Northern Economics); annual ex-vessel gross revenues derived from Appendix C, Table 2-6b.

Appendix C: Supplemental Table 3

Gain of Pounds of in Halibut Target Fishery by Alaska Halibut Dependent Community Per 100,000 Pound Increase in Area Halibut Harvest

| Region   | Area 4 Halibut Dependent Community | Area 4A  |   | Area 4B  |   | Area 4CDE  |   |
|--|------------------------------------|--|---|--|---|--|---|
|  |                                    | Distribution of Pounds Gained by Community for Each 100,000 Pound Increase in Area Halibut Harvest (from any source) | Number of Unique Vessels Active (at any time) 2008-2013 | Distribution of Pounds Gained by Community for Each 100,000 Pound Increase in Area Halibut Harvest (from any source) | Number of Unique Vessels Active (at any time) 2008-2013 | Distribution of Pounds Gained by Community for Each 100,000 Pound Increase in Area Halibut Harvest (from any source) | Number of Unique Vessels Active (at any time) 2008-2013 |
| Northwest Alaska   | Chefornak                          | -  | -   | -  | -   | 432  | 42  |
|  | Hooper Bay/Quinhagak (aggregation) | -  | -   | -  | -   | 166  | 39  |
|  | Kipnuk                             | -  | -   | -  | -   | 304  | 41  |
|  | Mekoryuk                           | -  | -   | -  | -   | 2,179  | 40  |
|  | Newtok                             | -  | -   | -  | -   | 163  | 20  |
|  | Nightmute                          | -  | -   | -  | -   | 420  | 14  |
|  | Nome                               | -  | -   | -  | -   | 1,884  | 15  |
|  | Savoonga                           | -  | -   | -  | -   | 855  | 23  |
|  | Toksook Bay                        | -  | -   | -  | -   | 2,302  | 64  |
|  | Tununak                            | -  | -   | -  | -   | 459  | 47  |
|  | All Other Communities in Region    | -  | -   | -  | -   | 188  | 35  |
|  | All Communities in Region          | -  | -   | -  | -   | 9,353  | 380   |
|  | Bristol Bay, Aleutians & Pribilofs | St. Paul   | 684   | 5  | ND  | 1  | 16,915  |
| Adak/Akutan/Atka/St. George (aggregation)                    |                                    | 3,121  | 7   | 4,493  | 8   | 761  | 6   |
| Unalaska & Dutch Harbor (plus ND Pounds from other rows)     |                                    | 12,019   | 20  | 3,387  | 5   | ND   | 1   |
| All Other Communities in Region (plus ND from the row above) |                                    | ND   | 1   | ND   | 1   | 1,109  | 45  |
| All Communities in Region                                    | 15,823                             | 33   | 7,880   | 15   | 18,785  | 72   |   |
| Other Alaska   | All Communities in Region          | 36,024   | 81  | 46,143   | 46  | 18,971   | 40  |
| Other States   | All Communities in Region          | 32,330   | 52  | 38,097   | 32  | 24,755   | 30  |
| All Regions Combined   | All Communities                    | 100,000  | 199   | 100,000  | 108   | 100,000  | 974   |

Source: Developed by NE based on data from AKFIN (Fey 2014).