RC 4

Options for Emergency Regulation for GMU 13 Tier II hunt scoring system for 2008/2009 regulatory year Prepared by:

Alaska Department of Fish and Game and Department of Law for the Alaska Board of Game July 2, 2008

Please note: the Department of Fish and Game and the Department of Law offer the following as options for emergency action by the Board of Game to address the court judgment in *Ahtna Tene Nene' Subsistence Committee vs. Alaska Board of Game.* The Board may opt to take emergency action at its July 2, 2008 meeting and more comprehensive action at the later meeting.

Option 1. Drop the income question from scoring applications for GMU 13 Tier II hunts and use the point system in place for other Tier II hunts (5 AAC 92.070) to score Tier II applications for GMU 13 hunts. This entails dropping the income question from scoring for Tier II hunts in GMU 13.

Applications would be scored as follows:

Question 14.	Number of years of use by applicant:	50 points
Question 15.	Number of years of use, any household member:	10 points
Question 16.	Number of days spent hunting and fishing in unit:	25 points

Total for Factor A (customary and direct dependence) 85 points

Question 17.	Cost of food:	25 points
Question 18.	Cost of gasoline:	30 points

Total for Factor B (ability to obtain food) 55 points

Percentage of points, Factor A: 60.7% (85 of 140) Percentage of points, Factor B: 39.3% (55 of 140)

Option 2. Drop the income question from scoring applications for GMU 13 Tier II hunts, and use household income to modify awarding of points for cost of food (Q 17) and cost of gasoline (Q 18).

Tables 1 through 4 are examples of how this procedure might work. Households with incomes at or below the federal poverty guidelines would receive full points for cost of food and cost of gasoline. For households above the federal poverty guidelines, the difference between the score for income and the potential maximum score for income (20 points) would be subtracted from the cost of food and cost of gasoline points for the community of residence of the applicant.

(Please note that there are other options for how to deduct points based on household income, such as deducting a fraction of the difference between the maximum total income score and the applicant's actual income score or deducting this difference from the combined points for cost of food and cost of gasoline rather than from each separately.)

Table 1 provides examples of scores for the cost of food question for selected communities based on a range of household incomes for a family of 4, from the federal poverty guideline of \$26,500 to 230% of the federal poverty guideline of \$60,950 (the cut-off for points on the income question).

For example, the present scoring system awards 5.26 points to an applicant who purchases food in Chistochina, regardless of income (unless the applicant's household income is 230% or more above the federal poverty guideline). Under option 2, if this applicant's household income is \$33,390, 4 points would be deducted from the score of 5.26 points, because this household would have received 16 points had the income question been included and scored, 4 less than the maximum of 20.

Table 2 provides examples for cost of gasoline.

Table 3 compares potential scores for Factor B questions for applicants from 8 selected communities under 3 scoring scenarios:

- 1) the scoring system adopted by the Board in March 2007 and amended slightly in January 2008;
- 2) Option 1, above, which applies the non-GMU 13 Tier II scoring system to GMU 13 Tier II hunts (this entails dropping the income question and increasing the potential points awarded for cost of food and cost of gasoline); and
- 3) Option 2, as described above.

Example results: Under the current scoring procedure or under Option 1, households purchasing food and gasoline in Kenai/Soldotna, and whose household income is less than 230% above the federal poverty guideline, receive points for Factor B questions. Using the current scoring procedure, a Kenai/Soldotna household would receive at least 4.58 points until its income reached \$60,950, at which point its score would be zero. Under Option 1, a Kenai/Soldotna household would receive 7.56 points for Factor B questions regardless of its income.

Using the Option 2 method, a Kenai/Soldotna household's score would be zero for all Factor 2 questions, once the household income increases much above the federal poverty guideline; at a household income of \$36,835, for example, the household's score is zero. This is the situation for most communities, except those with high scores for the cost of food and cost of gasoline questions, such as Skwentna and Nenana (Table 3).

Table 4 uses Copper Center as an example to illustrate the differences in scoring for Factor 2 questions for the 3 scenarios as a household's income increases.

Under the present scoring system, using Option 1, an applicant who purchases food and gasoline in Copper Center does not receive 0 points for Factor B questions until his/her household income

reaches 230% of the federal poverty guideline. Under Option 2, 0 points are awarded when the household income exceeds about \$37,000 (about 40% above the poverty guideline). Under Option 1, all households purchasing food and gasoline in the same location receive the same number of points, regardless of income.

Some observations about Option 2:

- In this option, household income plays a strong role in determining an applicant's score, as is the case with the scoring system adopted by the Board of Game in March 2007.
- A consequence of this procedure is that households with incomes above the federal poverty guidelines more quickly "zero out" their score for questions measuring Factor B than is the case with the present scoring system. It is likely that most applicants will receive 0 points for Factor B questions, and their responses to Factor A questions will determine who receives Tier II permits.
- In this option, income is not adjusted for cost of living but continues to play a strong role in determining an applicant's score.

Option 2A. (Used in analysis) Adjust scoring to maintain approximate 60%/40% split between questions measuring Factor A and factors measuring Factor B.

Option 2B. Retain scoring of points for Q 17 (15) and Q 18 (20) as presently allocated in regulation for GMU 13 Tier II hunts. This results in 85 of 120 points (70.8%) allocated to Factor A and 35 of 120 points (29.2%) allocated to Factor B.

<u>Option 3</u>. Adjust scoring of income question to account for cost of living measures in addition to cost of food and cost of fuel.

A comprehensive, comparative study to develop an index of the cost of living for Alaska communities, or for Alaska regions, has not been done since 1985, the last year that a cost of living differential study was conducted by the State of Alaska upon which to base salaries for state employees (The McDowell Group and Alaska Attitudes Inc. 1985). In its 2008 session, the Alaska Legislature appropriated funds to update this study, but results will not be available until June 2009 at the earliest (Neal Fried, Alaska Department of Labor, personal communication).

In order to adjust household income for cost of living in the Tier II scoring process using more up to date information, a comparative index of the cost of living in Alaska communities would need to be developed. This would entail identifying the components of the index and sources of costs for each component, and developing a method to weight each item for the index.

The only current comprehensive cost of living index that includes any Alaska communities is published by the American Chamber of Commerce Researchers Association (ACCRA) (http://www.coli.org). The only Alaska communities included are Anchorage, Fairbanks, Juneau, and Kodiak. The index is intended for middle management relocations. It is based on a price survey of approximately 60 items in 6 major categories: grocery items, housing, utilities, transportation, health care, and miscellaneous goods and services. How much the price of each

item contributes to the index is determined by the distribution of consumer expenditures among the categories in the index.

Another measure of cost of living is the Consumer Price Index, produced by the U.S. Department of Labor's Bureau of Labor Statistics. Anchorage is the only Alaska place for which the CPI is calculated. This index is intended to measure the inflation rate within specific localities. It is not intended as a measure of cost differences between locations. For Anchorage, components of the CPI calculations and weighting factors are as follows (Fried and Robinson 2007:14):

Housing	43.9%
Transportation	18.7%
Food and beverage	12.4%
Recreation	6.9%
Medical care	6.3%
Education and communication	5.4%
Other goods and services	3.7%
Apparel	2.7%

The Cooperative Extension Service at the University of Alaska Fairbanks conducts quarterly price surveys in approximately 18 Alaska communities. These include food, electricity, heating oil, gasoline, lumber, and propane (http://www.uaf.edu/ces/fcs/index.html). This survey is the basis of the Tier II scoring procedures for cost of food and cost of fuel. Potentially, other items in the survey could be used as part of a cost of living index, but a procedure to weight these components in the index would need to be developed, based upon spending patterns in different communities and regions.

References cited

Fried, Neal and Dan Robinson. 2007. The Cost of Living in Alaska. Alaska Economic Trends October 2007, pp 12 – 20.

The McDowell Group and Alaska Attitudes Inc. 1985. Alaska Geographic Differential Study. Prepared for the State of Alaska, Department of Administration, Division of Labor Relations. Juneau and Anchorage.

Table 1. Adjusted scores for Question 17, cost of food, under Option 2, for a family of 4, selected communities, compared to Option 1

		Adjusted points by Income ²										
	Unadjusted score: Option 1 ¹	\$26,500 (Base: Federal Poverty Guideline)	\$29,945 2 points	\$33,390	\$36,835	\$40,280	\$43,725	\$47,170	\$50,615	\$54,060	\$57,505	\$60,950 (230% above Federal Poverty Guideline) 20 points
Location		deducted	deducted	deducted	deducted	deducted	deducted	deducted	deducted	deducted	deducted	deducted
ANCHORAGE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CANTWELL	11.31	11.31	9.31	7.31	5.31	3.31	1.31	0.00	0.00	0.00	0.00	0.00
CHISTOCHINA	5.26	5.26	3.26	1.26	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CHITINA	5.26	5.26	3.26	1.26	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
COPPER CENTER	5.26	5.26	3.26	1.26	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CORDOVA	11.58	11.58	9.58	7.58	5.58	3.58	1.58	0.00	0.00	0.00	0.00	0.00
DELTA JCT	6.05	6.05	4.05	2.05	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00
DENALI PARK	11.31	11.31	9.31	7.31	5.31	3.31	1.31	0.00	0.00	0.00	0.00	0.00
FAIRBANKS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
GAKONA	5.26	5.26	3.26	1.26	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
GLENNALLEN	5.26	5.26	3.26	1.26	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
GULKANA	5.26	5.26	3.26	1.26	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
HAINES	7.51	7.51	5.51	3.51	1.51	0.00	0.00	0.00	0.00	0.00	0.00	0.00
HEALY	11.31	11.31	9.31	7.31	5.31	3.31	1.31	0.00	0.00	0.00	0.00	0.00
HOMER	7.66	7.66	5.66	3.66	1.66	0.00	0.00	0.00	0.00	0.00	0.00	0.00
JUNEAU	2.06	2.06	0.06	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
KENAI	5.31	5.31	3.31	1.31	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
KENNY LAKE	5.26	5.26	3.26	1.26	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
KODIAK	6.29	6.29	4.29	2.29	0.29	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LAKE LOUISE	5.26	5.26	3.26	1.26	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
MCCARTHY	5.26	5.26	3.26	1.26	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
MENTASTA LAKE	2.52	2.52	0.52	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
NELCHINA	5.26	5.26	3.26	1.26	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
NENANA	11.31	11.31	9.31	7.31	5.31	3.31	1.31	0.00	0.00	0.00	0.00	0.00
NORTH POLE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
PALMER	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SEWARD	3.46	3.46	1.46	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SILVER SPRINGS	5.26	5.26	3.26	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SKWENTNA	25.00	25.00	23.00	21.00	19.00	17.00	15.00	13.00	11.00	9.00	7.00	5.00
SLANA	2.52	2.52	0.52	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SOLDOTNA	5.31	5.31	3.31	1.31	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SOURDOUGH	5.65	5.65	3.65	1.65	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SUTTON	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
TALKEETNA	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
TAZLINA	5.26	5.26	3.26	1.26	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
TOK	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
TOLSONA	5.26	5.26	3.26	1.26	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
TONSINA	5.26	5.26	3.26	1.26	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
VALDEZ	3.96	3.96	1.96	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
WASILLA	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
WILLOW	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Maximum points = 25.

In this example, each income category increases by \$3,445; \$3,445 is 10% of the difference between the Federal Poverty Guideline and 230% of the guideline.

Table 2. Adjusted scores for Question 18, cost of gasoline, under Option 2, for a family of 4, selected communities, compared to Option 1

		Adjusted points by Income ²										
	Unadjusted score: Option 1 ¹	\$26,500 (Base: Federal Poverty Guideline)	\$29,945	\$33,390	\$36,835	\$40,280	\$43,725	\$47,170	\$50,615	\$54,060	\$57,505	\$60,950 (230% above Federal Poverty Guideline)
Location		0 points deducted	2 points deducted	4 points deducted	6 points deducted	8 points deducted	10 points deducted	12 points deducted	14 points deducted	16 points deducted	18 points deducted	20 points deducted
	0.00											
ANCHORAGE CANTWELL	0.00 7.28	0.00 7.28	0.00 5.28	0.00 3.28	0.00 1.28	0.00	0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00	0.00 0.00
CHISTOCHINA	7.28 7.28	7.28	5.28	3.28	1.28	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CHITINA	7.28 7.28	7.28	5.28	3.28	1.28	0.00	0.00	0.00	0.00	0.00	0.00	0.00
COPPER CENTER	7.28 7.28	7.28	5.28	3.28	1.28	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CORDOVA	7.26 12.01	12.01	10.01	8.01	6.01	4.01	2.01	0.00	0.00	0.00	0.00	0.00
DELTA JCT	8.08	8.08	6.08	4.08	2.08	0.08	0.00	0.01	0.00	0.00	0.00	0.00
DENALI PARK	7.28	7.28	5.28	3.28	1.28	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FAIRBANKS	0.33	0.33	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
GAKONA	7.28	7.28	5.28	3.28	1.28	0.00	0.00	0.00	0.00	0.00	0.00	0.00
GLENNALLEN	7.28 7.28	7.28	5.28	3.28	1.28	0.00	0.00	0.00	0.00	0.00	0.00	0.00
GULKANA	7.28	7.28	5.28	3.28	1.28	0.00	0.00	0.00	0.00	0.00	0.00	0.00
HAINES	8.40	8.40	6.40	4.40	2.40	0.40	0.00	0.00	0.00	0.00	0.00	0.00
HEALY	7.28	7.28	5.28	3.28	1.28	0.00	0.00	0.00	0.00	0.00	0.00	0.00
HOMER	3.32	3.32	1.32	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
JUNEAU	3.42	3.42	1.42	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
KENAI	2.25	2.25	0.25	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
KENNY LAKE	7.28	7.28	5.28	3.28	1.28	0.00	0.00	0.00	0.00	0.00	0.00	0.00
KODIAK	4.60	4.60	2.60	0.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LAKE LOUISE	7.28	7.28	5.28	3.28	1.28	0.00	0.00	0.00	0.00	0.00	0.00	0.00
MCCARTHY	7.28	7.28	5.28	3.28	1.28	0.00	0.00	0.00	0.00	0.00	0.00	0.00
MENTASTA LAKE	1.46	1.46	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
NELCHINA	7.28	7.28	5.28	3.28	1.28	0.00	0.00	0.00	0.00	0.00	0.00	0.00
NENANA	7.28	7.28	5.28	3.28	1.28	0.00	0.00	0.00	0.00	0.00	0.00	0.00
NORTH POLE	0.33	0.33	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
PALMER	3.28	3.28	1.28	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SEWARD	3.50	3.50	1.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SILVER SPRINGS	7.28	7.28	5.28	3.28	1.28	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SKWENTNA	30.00	30.00	28.00	26.00	24.00	22.00	20.00	18.00	16.00	14.00	12.00	10.00
SLANA	1.46	1.46	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SOLDOTNA	2.25	2.25	0.25	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SOURDOUGH	4.04	4.04	2.04	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SUTTON	3.28	3.28	1.28	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
TALKEETNA	3.28	3.28	1.28	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
TAZLINA	7.28	7.28	5.28	3.28	1.28	0.00	0.00	0.00	0.00	0.00	0.00	0.00
TOK	2.91	2.91	0.91	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
TOLSONA	7.28	7.28	5.28	3.28	1.28	0.00	0.00	0.00	0.00	0.00	0.00	0.00
TONSINA	7.28	7.28	5.28	3.28	1.28	0.00	0.00	0.00	0.00	0.00	0.00	0.00
VALDEZ	3.32	3.32	1.32	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
WASILLA	3.28	3.28	1.28	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
WILLOW	3.28	3.28	1.28	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Maximum points = 30.

In this example, each income category increases by \$3,445; \$3,445 is 10% of the difference between the Federal Poverty Guideline and 230% of the guideline.

Table 3. Scoring for Factor B for a household of 4 under 3 scoring scenarios, selected communities, GMU 13 Tier II hunts

	HH i	ncome: \$20	6,500	HH income: \$36,835			HH income: \$43,725			HH i	ncome: \$5	4,060	HH income: 60950		
	Present			Present			Present			Present			Present		
Community	System	Option 1	Option 2	System	Option 1	Option 2	System	Option 1	Option 2	System	Option 1	Option 2	System	Option 1	Option 2
Anchorage	20.00	0	0	14.00	0	0	10.00	0	0	4.00	0	0	0	0.00	0
Copper Center	28.01	12.54	12.54	22.01	12.54	1.28	18.01	12.54	0	12.01	12.54	0	0	12.54	0
Kenai/Soldotna	24.68	7.56	7.56	18.68	7.56	0	14.68	7.56	0	8.68	7.56	0	0	7.56	0
Nenana	31.64	18.58	18.58	25.64	18.58	6.59	21.64	18.58	1.31	15.64	18.58	0	0	18.58	0
Palmer/Wasilla	22.19	3.28	3.28	16.19	3.28	0	12.19	3.28	0	6.19	3.28	0	0	3.28	0
Seward	24.41	6.96	6.96	18.41	6.96	0	14.41	6.96	0	6.41	6.96	0	0	6.96	0
Skwentna	55.00	55.00	55.00	49.00	55.00	43.00	45.00	55.00	35.00	39.00	55.00	23.00	0	55.00	15.00
Valdez	24.59	7.28	7.28	18.59	7.28	0	14.59	7.28	0	8.59	7.28	0	0	7.28	0

Present system = entire score is 0 if income is 230% of poverty guideline. Cost of food up to 15 points; cost of gasoline up to 20 points; income up to 20 points. Option 1 = up to 25 points for cost of food and up to 30 for cost of gasoline. Income plays no role in scoring.

Option 2 = points for cost of food (up to 25) and cost of gasoline (30 points)reduced as income increases.

In each scenario, the maximum score for all Factor B questions is 55 points.

Table 4. Scores for a GMU 13 Hunt Tier II Permit, Factor B, for a Applicant Living in Copper Center with a HH size of four, 3 scoring scenarios

									Option 2:	Adjust sco	re based o	n income
	P	resent Sco	ring System	າ	Option 1:	Score as fo	r Non-GMl	J 13 Hunts	but no direct scoring of income			
		Q18: Cost			•	Q18: Cost				Q18: Cost		
	Q17: Cost	of	HH		Q17: Cost	of	HH		Q17: Cost	of	HH	ĺ
<u>Income</u>	of Food	Gasoline	Income	Total	of Food	Gasoline	Income	Total	of Food	Gasoline	Income	Total
\$26,500	3.15	4.85	20.00	28.01	5.26	7.28	NA	12.54	5.26	7.28	NA	12.54
										_		
\$29,945	3.15	4.85	18.00	26.01	5.26	7.28	NA	12.54	3.26	5.28	NA	8.54
\$33,390	3.15	4.85	16.00	24.01	5.26	7.28	NA	12.54	1.26	3.28	NA	4.54
\$36,835	3.15	4.85	14.00	22.01	5.26	7.28	NA	12.54	0	1.28	NA	1.28
\$40,280	3.15	4.85	12.00	20.01	5.26	7.28	NA	12.54	0	0	NA	0
\$43,725	3.15	4.85	10.00	18.01	5.26	7.28	NA	12.54	0	0	NA	0
\$47,170	3.15	4.85	8.00	16.01	5.26	7.28	NA	12.54	0	0	NA	0
\$50,615	3.15	4.85	6.00	14.01	5.26	7.28	NA	12.54	0	0	NA	0
\$54,060	3.15	4.85	4.00	12.01	5.26	7.28	NA	12.54	0	0	NA	0
\$57,505	3.15	4.85	2.00	10.01	5.26	7.28	NA	12.54	0	0	NA	0
\$60,950	0	0	0	0	5.26	7.28	NA	12.54	0	0	NA	0

In each scoring scenario, the maximum number of points allocated to Factor B questions is 55.