



PROCEDURE MANUAL

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This Procedure Replaces:

Previous procedure "Harvest Allocation", January 1, 2007.

Staff, Organizations Directly Affected:

Wildlife Management Staff
Regional Managers
Director
Resident Hunters
Guide Outfitters

Policy Cross-Reference:

Ministry Policy Manual, Volume 4, Section 7

Subsections:

- 01.01 Allowable Harvest
- 01.03 Harvest Allocation
- 01.04 Permit Allocation – Non-Resident (Canadian and Alien) Hunting
- 01.05 Quota Allocation – Guided Hunting
- 01.06 Limited Entry Hunting
- 01.10 Resident Hunter Priority
- 01.11 Commercial Hunting Interests
- 01.12 Allocation of Previously Unopened Hunts
- 01.13 Under-Harvest of Allocated Share

Other Cross-References:

- Appendix A
- Appendix B
- Ministry Procedure Manual, Volume 4, Section 7
 - 01.05.1 Quota
 - 01.05.2 Administrative Guidelines
 - 01.06.1 Limited Entry Hunting

Purpose:

To outline the process to be followed by the director in determining the allocation shares for category A species in each region.

PREPARED BY		AUTHORIZATION	
NAME Kristin Lunn	NAME Tom Ethier	Original signed by Tom Ethier SIGNATURE	
POSITION Senior Wildlife Policy Analyst, Fish & Wildlife Branch	POSITION Director, Fish & Wildlife Branch		
		DATE EFFECTIVE March 29, 2007	REVISION NO. 3



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Definitions:

“**allocation**” – means the division of the annual allowable harvest (AAH) remaining after the legal rights of First Nations have been recognized and provided for, between resident hunters and guided hunters.

“**allocation period**” – means the five year period to which an allocation share applies.

“**annual allowable harvest (AAH)**” – means the optimum number of animals that can be harvested annually by hunters from a herd or population which will be replenished through the population’s natural reproduction to meet management objectives.

“**category A species**” – means a big game species, population, or class for which guided hunters’ harvest is limited by quota in any portion of a region.

“**director**” – means director as defined in the *Wildlife Act*, RSBC 1996 c.488.

“**guided hunter**” – means a hunter guided by a licensed guide outfitter, excluding resident clients in possession of a limited entry hunting authorization and resident clients hunting open season species.

“**hunter group**” – means resident hunters or guided hunters.

“**limited entry hunting authorization (L.E.H. authorization)**” – means limiting entry hunting authorization as defined in the *Wildlife Act*, RSBC 1996 c.488.

“**Management Unit (M.U.)**” – means a specific and legally designated land area denoted by the initials M.U. and a hyphenated number e.g. M.U. 3-18. (B.C. Reg. 64/96)

“**percentile**” – means each of 100 equal groups into which a population can be divided according to the distribution of values of a particular variable.

“**regional manager**” – means regional manager as defined in the *Wildlife Act*, RSBC 1996 c.488.

“**relative importance**” – means relative importance as defined in Step 2 of this procedure.

“**resident hunter**” – means a hunter who is a resident as defined in the *Wildlife Act*, RSBC 1996 c.488, with the exception of a resident who hires the services of a guide outfitter to hunt in a season for which the resident would otherwise require but does not have a limited entry hunting authorization.

“**utilization**” – means the number of successfully harvested category A species as a percentage of the total number of a category A species allocated to a hunter group.

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Procedure:

The director should determine the allocation shares for each category A species based on the process outlined in Appendix A.

The regional manager should apply the allocation shares determined by the director as outlined in Appendix B.

APPENDIX A: PROCEDURE FOR MAKING ALLOCATION DECISIONS

The regional manager of each region should maintain a complete list of category A species in their region and forward this list to the director as changes are made.

The director may use the “allocation calculator” to assist in determining allocation shares for each category A species. The allocation calculator automatically performs the steps outlined below upon insertion of the necessary data.

STEP 1 – APPLY INITIAL ALLOCATION

The director should assign an **initial allocation** of 75% of the allowable harvest to resident hunters and 25% to guided hunters for each category A species in each region.

STEP 2 – ALTER INITIAL ALLOCATION ACCORDING TO RELATIVE IMPORTANCE

For each category A species in each region, the director should then alter the initial 75/25 allocation according to the relative importance of that category A species to each hunter group.

2A) DETERMINE RELATIVE IMPORTANCE TO RESIDENT HUNTERS

- 1) For each category A species in each region:
 - a. Determine the **number of applicants**, defined as the average annual number of hunters who apply to the limited entry hunting (L.E.H.) draw using the most recent five year period.
 - b. Determine the **number of authorizations**, defined as the average annual number of L.E.H. authorizations issued using the most recent five year period.
 - c. Determine the **number of licenced hunters**, defined as the average annual number of successful L.E.H. applicants who purchase species licenses using the most recent five year period.
 - d. Determine the **actual participation rate**, defined as the number of licenced hunters divided by the number of authorizations.
 - e. Determine the **potential number of hunters**, defined as the actual participation rate multiplied by the number of applicants.
- 2) Determine the **total potential number of hunters**, defined as the sum of all the individual potential number of hunters for each category A species in each region.

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- 3) Calculate a **relative importance value** for each category A species in each region by dividing each hunt's potential number of hunters by the total potential number of hunters.
- 4) List **all** of the relative importance values for **all** category A species and region combinations in ascending order.
- 5) Categorize the values in the list generated in 4) based on the percentile to which they belong, as follows:
 - 0 – 10th percentile = Category 1
 - 11 – 20th percentile = Category 2
 - 21 – 30th percentile = Category 3
 - 31 – 40th percentile = Category 4
 - 41 – 50th percentile = Category 5
 - 51 – 60th percentile = Category 6
 - 61 – 70th percentile = Category 7
 - 71 - 80th percentile = Category 8
 - 81 – 90th percentile = Category 9
 - 91 – 100th percentile = Category 10

2B) DETERMINE RELATIVE IMPORTANCE TO GUIDE OUTFITTERS

- 1) For each category A species in each region:
 - a. Determine the **number of guided hunters**, defined as the average annual number of guided hunters using the most recent five year period based on Guide Declaration information.
 - b. Determine the **average hunt price**, defined as the average price that a guided hunter pays to a guide outfitter for the sole purpose of hunting a particular category A species at a given time and location.
 - c. Determine the **individual hunt values**, defined as the number of guided hunters multiplied by the average hunt price.
- 2) Determine the **total guided hunt value**, defined as the sum of all the individual hunt values for all species and regions.
- 3) Calculate a **relative importance value** for each category A species in each region by dividing each individual hunt value by the total guided hunt value.
- 4) List **all** of the relative importance values for **all** category A species and region combinations in ascending order.
- 5) Categorize the values in the list generated in 4) based on the percentile to which they belong, as follows:
 - 0 – 10th percentile = Category 1
 - 11 – 20th percentile = Category 2
 - 21 – 30th percentile = Category 3
 - 31 – 40th percentile = Category 4
 - 41 – 50th percentile = Category 5
 - 51 – 60th percentile = Category 6
 - 61 – 70th percentile = Category 7
 - 71 - 80th percentile = Category 8
 - 81 – 90th percentile = Category 9
 - 91 – 100th percentile = Category 10

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2C) ALTERNATIVE MEASURES OF RELATIVE IMPORTANCE

If a category A species is not managed by a L.E.H. season in a region, the director should disregard Steps 2A) 1) and substitute the number of hunters hunting that species in that region for the **potential number of hunters** in 1) in the formulas in 2) and 3).

2D) COMPARE RELATIVE IMPORTANCE AND ALTER INITIAL ALLOCATION

The director will then directly compare the relative importance categories for each category A species in each region between hunter groups.

The director should alter the initial 75/25 allocation according to the matrix below. The unshaded cells represent increases to resident hunters, while shaded cells indicate increases to guided hunters.

Relative Importance Categories – Guided Hunters

	1	2	3	4	5	6	7	8	9	10
1	No change	+2	+4	+6	+8	+10	+12	+14	+16	+18
2	+2	No change	+2	+4	+6	+8	+10	+12	+14	+16
3	+4	+2	No change	+2	+4	+6	+8	+10	+12	+14
4	+6	+4	+2	No change	+2	+4	+6	+8	+10	+12
5	+8	+6	+4	+2	No change	+2	+4	+6	+8	+10
6	+10	+8	+6	+4	+2	No change	+2	+4	+6	+8
7	+12	+10	+8	+6	+4	+2	No change	+2	+4	+6
8	+14	+12	+10	+8	+6	+4	+2	No change	+2	+4
9	+16	+14	+12	+10	+8	+6	+4	+2	No change	+2
10	+18	+16	+14	+12	+10	+8	+6	+4	+2	No change

Relative Importance Categories - Resident Hunters

STEP 3 – ALTER ALLOCATION ACCORDING TO DEGREE OF UTILIZATION

After determining the relative importance of each category A species to each hunter group and altering the allocation accordingly, the director should consider the degree to which each hunter group is likely to use their allocated shares of the harvest according to the following procedure:

3A) DETERMINE DEGREE OF UTILIZATION

For each category A species in each region, divide (i) the average annual number of those animals harvested by resident hunters by (ii) the average annual number of those animals allocated to resident hunters, using data from the most recent five year period. Repeat for guided hunters.

3B) ALTERNATIVE MEASURE

If a species has not previously been allocated, or insufficient data have prevented a precise assessment of the average degree of utilization as required by Step 3A), it should be assumed that on average resident hunters were allocated a 75% share in a region and guided hunters were allocated a 25% share.

3C) RANK

The director should rank the average regional degree of utilization for each category A species according to the following:

- 0-10% of the allocated share = Category 1
- 11-20% of the allocated share = Category 2
- 21-30% of the allocated share = Category 3

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- 31-40% of the allocated share = Category 4
- 41-50% of the allocated share = Category 5
- 51-60% of the allocated share = Category 6
- 61-70% of the allocated share = Category 7
- 71-80% of the allocated share = Category 8
- 81-90% of the allocated share = Category 9
- 91-100% of the allocated share = Category 10

3D) ALTER ALLOCATION BASED ON COMPARISON OF UTILIZATION

The director should then compare the degree of utilization of each hunter group for the species in question and alter the allocated shares determined in Step 2D), according to the matrix below. The unshaded cells represent increases to resident hunters, while shaded cells indicate increases to guided hunters.

Degree of Utilization Categories – Guided Hunters

Degree of Utilization Categories - Resident Hunters

	1	2	3	4	5	6	7	8	9	10
1	No change	+2	+4	+6	+8	+10	+12	+14	+16	+18
2	+2	No change	+2	+4	+6	+8	+10	+12	+14	+16
3	+4	+2	No change	+2	+4	+6	+8	+10	+12	+14
4	+6	+4	+2	No change	+2	+4	+6	+8	+10	+12
5	+8	+6	+4	+2	No change	+2	+4	+6	+8	+10
6	+10	+8	+6	+4	+2	No change	+2	+4	+6	+8
7	+12	+10	+8	+6	+4	+2	No change	+2	+4	+6
8	+14	+12	+10	+8	+6	+4	+2	No change	+2	+4
9	+16	+14	+12	+10	+8	+6	+4	+2	No change	+2
10	+18	+16	+14	+12	+10	+8	+6	+4	+2	No change

STEP 4 – MINIMUM SHARES

4A) RESIDENT HUNTER MINIMUM SHARE

If, for any reason, the above steps (1-3) lead to an allocation share in which resident hunters are allocated less than a specified minimum share, the director shall increase the resident hunters' share of the AAH to that specified minimum share and decrease the guided hunters' share accordingly. The minimum shares for resident hunters are as follows:

- ⇒ 60% for allocated sheep, goat, and grizzly bear hunts;
- ⇒ 98% for allocated antlerless hunts; and
- ⇒ 70% for all other category A species.

4B) COMMERCIAL HUNTER MINIMUM SHARE

If, for any reason, the above steps (1-3) lead to an allocation share in which guided hunters are allocated less than a specified minimum share, the director shall increase the guided hunters' share of the AAH to that specified minimum share and decrease the resident hunters' share accordingly. The minimum shares for guided hunters are as follows:

- ⇒ 20% for allocated sheep and goat hunts; and
- ⇒ 10% for all other category A species.

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STEP 5 – DETERMINE THE ALLOCATION

Informed by Steps 1 through 4, the director should determine the allocation shares for each category A species. This allocation share shall be effective until the director determines a new allocation share at the beginning of a new allocation period.

APPENDIX B: PROCEDURE FOR APPLYING ALLOCATION DECISIONS

Unless otherwise specified by the director, the regional manager should apply the allocation share specified by the director to each M.U. with an allocated hunt.

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