

ORDER – Wildlife Habitat Areas
4-109 and 4-112
Great Blue Heron – Rocky Mountain Forest District

This order is given under the authority of sections 9(2) and 10(1) of the *Government Actions Regulation* (B.C. Reg. 582/2004) (GAR).

1. The Deputy Minister of Environment, being satisfied that
 - i. the following area contains habitat that is necessary to meet the habitat requirements for great blue heron (*Ardea herodias herodias*);
 - ii. the habitat requires special management that is not otherwise provided for under GAR or another enactment;orders that
 - a) the areas shown in the map set out in the attached Schedule As (4-109 and 4-112) and contained in the wildlife habitat areas (WHAs) spatial layer stored in the Geographic Warehouse (*twha_bc*) are established as wildlife habitat areas 4-109 and 4-112 for great blue heron. The centre point of the line on the attached Schedule As is what establishes the WHA boundary; and
 - b) if there is a discrepancy between the areas shown in the map set out in the attached Schedule A and the WHA spatial layer stored in the Geographic Warehouse (*twha_bc*), the areas as detailed in the WHA spatial layer will take precedent.

2. The Deputy Minister of Environment, being satisfied that
 - i. the general wildlife measures (GWMs) described below are necessary to protect and conserve the habitat of great blue heron; and
 - ii. GAR or another enactment does not otherwise provide for that protection or conservation;orders that
 - a) the GWMs outlined in Schedule 1 are established for WHAs 4-109 and 4-112.

Definitions

Words and expressions not defined in this order have the meaning given to them in the *Forest and Range Practices Act* (FRPA) and the regulations made under it, unless context indicates otherwise.

Ecosystem restoration: means the process of assisting with the recovery of an ecosystem that has been degraded, damaged or destroyed by re-establishing its structural characteristics, species composition and ecological processes.

Proper functioning condition for upland areas is defined as the proper balance between vegetation, soil surface, erosional processes, and biological cycling. For riparian and aquatic areas proper functioning condition is defined as adequate structure (vegetation, landform, or large woody debris) present to provide the following benefits applicable to a particular area:

- dissipation of stream energy associated with high waterflows (reducing the potential for erosion and leading to improved water quality)
- filtering of sediment, capture of bedload, and aid in floodplain development
- maintenance of natural floodwater retention and groundwater recharge
- root masses that stabilize streambanks against cutting action
- ponding and channel characteristics to provide the habitat and water depth, duration, and temperature necessary for fish production, waterfowl breeding, and other uses
- maintenance of habitats for native plants and animals.

Schedule 1 – General Wildlife Measures

Access

1. Do not construct (including blasting) access structures:
 - a) within the core area; or
 - b) within the management zone during the breeding season (February 15th to August 31st).

Harvesting and silviculture

2. Do not conduct timber harvesting:
 - a) within the core area; or
 - b) within the management zone during the breeding season (February 15th to August 31st).
3. Do not conduct silviculture activities:
 - a) within the core area, except for ecosystem restoration; or
 - b) that involve mechanized activities, which exceed noise or disturbance levels (including distance from colony) previously experienced, within the management zone during the breeding season (February 15th to August 31st).
4. Within the management zone, restocking and/or silvicultural techniques can be applied to enhance rapid development and protection of the stand.

Pesticides

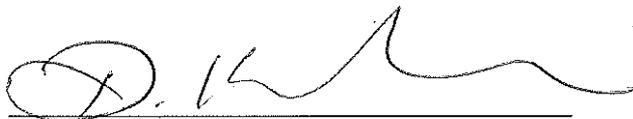
5. Do not use pesticides, except for the application of herbicides to control for invasive plants or noxious weeds.

Range

6. Maintain WHA in a proper functioning condition.
7. Control level of livestock use and implement grazing to ensure that the structural integrity of stands of emergent vegetation is maintained.

Recreation

8. Do not establish recreation sites or trails.



Signed this 18 day of May, 2010

Doug Konkin, Deputy Minister

Ministry of Environment

Appendix 1:

The following information is provided by the Ministry of Environment (MoE) as background information and support to the order establishing WHAs 4-109 and 4-112. This appendix is not part of the order.

1. **Activities to which the order does not apply:** Section 2(2) of the *Government Actions Regulation* states

An order under any of sections 5 to 15 does not apply in respect of

- (a) any of the following entered into before the order takes effect:
 - (i) a cutting permit;
 - (ii) a road permit;
 - (iii) a timber sale licence that does not provide for cutting permits;
 - (iv) a forestry licence to cut issued by a timber sales manager under section 47.6 (3) of the Forest Act;
 - (v) subject to subsection (3), a minor tenure,
- (b) a declared area,
- (c) areas described in section 196 (1) of the Act, and
- (d) areas referred to in section 110 of the Forest Planning and Practices Regulation.

2. Authority to consider an exemption from these GWMs is provided in section 92(1) of the FPPR, section 79(1) of the *Woodlot Licenses Planning and Practices Regulation* and section 36(3) of the *Range Planning and Practices Regulation*. An exemption may be provided if the Minister's delegate is satisfied that the intent of the GWM will be achieved or that compliance with the provision is not practicable, given the circumstances or conditions applicable to a particular area.

An exemption application should be submitted to the Minister's delegate (Regional Manager – MoE, for the Region that the WHA is located) with a rationale describing the nature of the problem and options to integrate WHA conservation with proposed forest and/or range practices. This submission will assist in timely consideration of the matter, and will inform the conditions, if any, of the exemption that may be granted prior to commencement of activities. Upon receipt of a complete exemption application, a determination will normally be made within 14 days of arrival. Incomplete packages will be returned to the proponent for re-submission.

3. Where an exemption is provided to the requirements of GWM 1, consideration may be given to adding the following condition to the approval of the exemption:

- Limit access between February 15th and August 31st. Types and levels of use must not exceed levels that customarily occur during the breeding period.

4. With respect to GWM 7, the delegated decision maker may require fencing be established due to the extreme sensitivity to disturbance of great blue heron during the breeding season. Should it be determined that fencing is required, MoE and the Ministry of Forests and Range will work collaboratively with the range tenure holder to explore opportunities

for funding assistance and to determine areas of responsibility for fence construction and maintenance.

5. With respect to GWMs 6 and 7, the goal is to ensure there is adequate vegetation screening around active and potential nest trees within the core area and at nearby riparian foraging sites within the WHA and minimal disturbance near core nesting sites during April and May:

- Ideal screening in the nesting area is multi-storied and consists of dense shrub, sapling and mature tree layers. Dense screening prevents herons from detecting disturbances (including recreationists, wildlife and livestock) which cause them to flush from their nests possibly resulting in nest failure.
- Vegetative screening at nearby foraging areas (e.g., creek, river, lake and wetland margins) provide herons with security from predators, concealment from prey, and promotes healthy and productive aquatic habitats. Ensuring livestock browsing is managed to conserve and rejuvenate forest and riparian understory is key to protecting heron breeding habitat.
- Disturbance in core nesting areas during courtship and incubation (early April to late May) can cause herons to abandon nests and precipitate nest failure, hence it is critical to minimize all forms of disturbance, including livestock, at this time. The use of attractants and/or fencing to keep livestock away from core nesting areas is recommended.

6. WHA goals:

- Minimize disturbance during the breeding season (February 15th to August 31st) and between 1 November and 31 March for colonies that occupy areas year round.
- Maintain important structural elements for nesting and foraging (i.e., suitable nest trees, non-fragmented forest around nest trees, wetland characteristics for foraging if applicable, roost trees, and ground barriers to exclude mammalian predators).

7. Additional management considerations:

- Limit access on existing roads and trails between February 15th and August 31st. Types and levels of use must not exceed levels that customarily occur during the breeding period.
- Avoid disturbance within 500 m of colonies and adjacent foraging habitats between February 15th and August 31st. Some colonies may have become habituated to some levels of disturbance, in which case it may not be necessary to refrain from activities. In general, motorized, loud, or continuous activities are more disturbing than non-motorized activities. When incorporating barriers to minimize access or disturbance, it is better to use barriers that completely exclude humans than those that allow some intrusion (Carlson and McLean 1996).

- Where permanent activities or habitat modifications are planned, vegetative screening should be planted or maintained between the activity and the colony as close to the activity area as possible. Where possible, the trees/shrubs planted should be a mixture of deciduous and coniferous, and half should be of the same species currently used for nesting.
- Consider constructing a fence or other barrier between the activity and vegetative screening.
- Protect heron foraging resources, especially those within 4 km of colonies and in key wintering areas, from development, degradation, and pollution, particularly aquaculture operations and discharge of toxic effluents. Interior birds feed in marshes and along shallow shorelines of lakes and rivers; during winter they need areas of open (unfrozen) water.
- Maintain perch trees adjacent to major summer and winter foraging areas.
- Prevent further loss of important interior riparian mature/old-growth forest nesting habitat to urban/suburban and forest development.