NS DEPARTMENT OF ENVIRONMENT AND LABOUR (NSDEL)/ NS DEPARTMENT OF NATURAL RESOURCES (NSDNR)

BEAVER DAM REMOVAL CODE OF PRACTICE

Beaver dams need to be removed or breached periodically to protect, maintain or construct infrastructure or to avoid the flooding of private or public land. The removal of a beaver dam may not prevent future beaver activity in the area. In these cases other beaver management methods may be necessary.

This code of practice has been identified to ensure that beaver dams are safely removed to minimize the impact of beaver dam removal on aquatic resources due to loss of pool/pond habitat and the discharge of excessive amounts of sediment and water. If a beaver dam is not carefully removed significant adverse effects can result downstream and may result in enforcement action by NSDEL.

The removal of beaver dams and beaver debris from a watercourse does not require an Approval from NSDEL, providing there is no alteration of the watercourse such as modifications to the bed or banks of the brook.

The "Beaver Dam Removal Guidelines" contained herein are designed to ensure the watercourse and any fish habitat is not adversely effected and must be followed to ensure the work is done properly.

Recommendations:

Before beaver dam removal can be undertaken, attempts should be made to remove the beavers in compliance with all acts and regulations. Nuisance Wildlife Operators and licensed trappers are to be contacted in this regard.

Beaver dams are **not** to be removed when:

- 1. property damage is not demonstrated;
- 2. the dam is on the outlet of a lake, unless it can be demonstrated that the lower water level will be beneficial to wildlife and all property owners are supportive of the action;
- 3. the impoundment has established a wetland that is being utilized by breeding waterfowl. Removal can only take place after the waterfowl broods have left;
- 4. the "Beaver Dam Removal Guidelines" cannot be met.

Beaver Dam Removal Guidelines:

- 5. The removal of the beaver dam or clearing of a culvert blocked by beaver activity will be limited to the debris of the structure. The original watercourse bed and bank material may not be removed or disturbed. If an alteration to the bed or bank is planned, a watercourse alteration Approval must be obtained from NSDEL prior to undertaking the work.
- 6. Drainage of the beaver ponds must take place between June 1st and September 30th, when water is at lower flow levels. Beaver dam removals outside these dates require prior authorization from Department of Fisheries and Oceans Canada (DFO).
- 7. Impounded water will be released over an extended period so as to minimize silt flushing from the impounded area and minimize the potential for channel erosion downstream. Due to the increased discharge and water velocities, the following practices are necessary:
 - a. The width of the opening will be no greater than the width of the watercourse downstream. The downstream water depth will not rise more than 10 cm (4 inches) during the removal of the structure. It is recommended that the maximum allowable depth of water spilling over the structure at the drainage point is 10 cm (4 inches).
 - b. In the case of dammed culverts, the pond should be drained by pumping down or siphoning. This results in a reduced potential for resuspension of sediment. If pumping down or siphoning is used, water should be returned to watercourse downstream of the dam.
 - c. Any silt laden water from work shall be directed to heavily vegetated areas, settling ponds, or other filtering devices for treatment.
- 4. When dismantling beaver dams the work should be performed using hand tools, removing only enough debris to start the flow of water running under controlled discharge.
- 5. If using machinery, grapple equipment should be utilized. The machinery shall:
 - a. operate from the watercourse banks in a manner that minimizes disturbance to the banks.
 - b. be clean and inspected for leaks with necessary repairs made prior to working adjacent to water.
 - c. be washed and refueled away from the water to prevent any deleterious substances from entering the water.

An emergency spill kit should be on site in case of any accidentally released contaminants. Should it be necessary to operate machinery in the watercourse, an Approval must first be obtained from NSDEL.

- 6. All debris removed from the beaver dam will be placed at a location above the high water mark so as not to re-enter the watercourse.
- 7. Any fish that become trapped in isolated pools or stranded in newly flooded areas shall be

relocated to the main channel of the watercourse. Contact DFO for directions or assistance for relocating fish.

- 8. Any areas disturbed by equipment shall be re-vegetated by seeding and planting trees, shrubs or grasses. Cover areas to be re-vegetated with mulch to prevent soil erosion and to help seeds germinate. If there is insufficient time in the growing season to germinate seeds, exposed soil must be stabilized to prevent erosion and re-vegetated the following spring.
- 9. In areas where dams are recurring problems, it is recommended that culvert protectors/culvert guards be used in small to medium size culverts.
- 10. Beaver may only be destroyed or removed as authorized under a Nuisance Wildlife Permit issued by NSDNR.
- 11. Should there be adverse effects to the watercourse at the point of beaver dam removal or downstream due to careless removal practices, enforcement action by NSDEL may result.