

CONSTRUCTION AND CLEARING FOR A GOOSE POND OR CORRIDOR

BEST ENVIRONMENTAL MANAGEMENT PRACTICES

These best environmental management practices aim at proponents undertaking a project under the Hunting, Fishing and Trapping rights of the James Bay and Northern Quebec Agreement. Construction of a goose pond or goose corridor incurs, in several cases, impacts on the environment. Implementing best practices listed in this document will help mitigate impacts.

POTENTIAL IMPACTS OF THE ACTIVITIES OR WORKS

Brush cutting / tree clearing

Brush cutting/tree clearing around the goose pond and in the goose corridor can lead to some impacts:

- Loss of wildlife habitat;
- Disturbance of wetlands when goose ponds are built in them;
- Soil erosion or compaction;
- Risk of oil spills through the use of motorized equipment (i.e. loader, chainsaw, small wood chipper, snowmobile and ATV).

Construction of goose pond

Embankment of small intermittent streams or small wetlands, use of abandoned borrow pits and embankment of coastal marshes to construct the goose pond can lead to some impacts:

- Changes in water flow pattern;
- Possible overflow of the pond during the spring flood can damage the retaining structure and cause soil erosion leading to burying of fish spawning sites;
- Disturbance of waterbodies and plant communities;
- Risk of oil spills into the water through the use of motorized equipment (i.e. chainsaw, small wood chipper, snowmobile and ATV).

CONSERVING THE ENVIRONMENT AND WILDLIFE HABITAT

Activities and work that you undertake to construct a goose pond or a goose corridor may affect the environment. Several components are sensitive and need to be preserved.



Fauna and flora

Some areas or ecosystems, whether legally protected or not, must be preserved when work is undertaken due to their unique features and because they fulfill an important function for animal and plant communities.

Soil and water quality

Soil and water sustain life. Protecting their quality is essential in order to avoid any negative effects on human health and direct impacts on fish and other living organisms.

Fish spawning sites

Fish spawning sites are fragile and eggs can be buried and destroyed by eroded soil particles settling in the water. Encroachment on spawning sites can affect future productivity of fish.

Wetlands

Wetlands are special ecosystems that carry out essential functions regarding flood control, fauna preservation and water quality improvement. Wetlands sustain particular plant and animal communities that can only thrive in them since they represent transitional ecosystem with both terrestrial and aquatic features.

EMBANKMENT OF COASTAL MARSHES

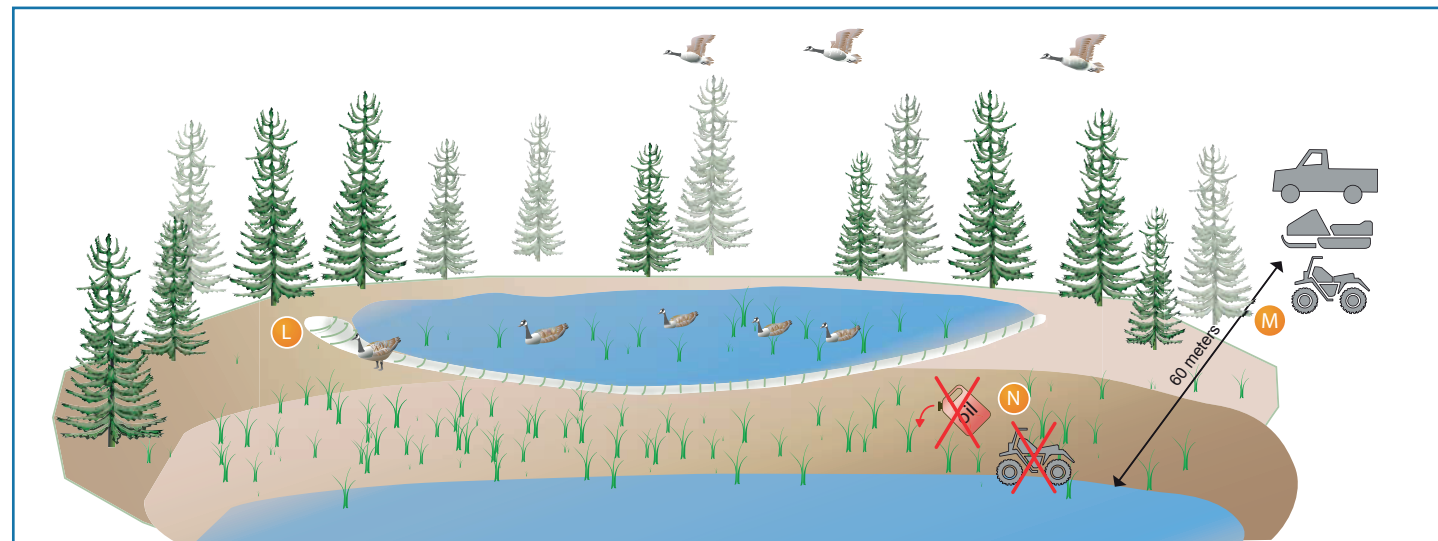
What to do

- Check the permit requirements for the kind of work you will conduct and obtain any necessary permits.
- Choose the site at the end of the summer rather than at the beginning, since in June the soil is still filled with ice pockets, which make the proper site location difficult;
- In order to make the goose pond more accessible during the goose hunting season, install it in the superior part of the coastal marsh where the spring melting starts; **L**
- In order to minimize impacts on existing vegetation and to increase dikes useful life, at the end of hunting season a few dikes could be removed to drain off excess water;
- Only construct a coastal goose pond through manual operations (low dikes);
- Make sure that the low dikes used to embank the coastal marsh are highly impermeable, large enough and stable to keep erosion from taking place in the spring or fall. For technical and aesthetic reasons, this can be done using geotextile bags filled with sand and by covering them with sods and rocks;

- Annually assess the stability of dikes to make sure that they are stable.

What to avoid

- Avoid all mechanical operations in coastal marshes; if heavy machinery is needed, contact your Local Niskamoon Coordinator or Forestry Programs Officer;
- If a permanent stream crosses the coastal marsh, it is highly recommended to avoid installing dikes across it since this approach leads to problems with the dikes stability during spring runoff;
- At all time, in or near any watercourse, wetland or the site of the goose pond, avoid leaving unattended motorized equipment or vehicles, avoid refuelling and avoid changing oil. Never wash any motorized equipment in or near a watercourse, wetland or the goose pond. Avoid oil spills in the ground or in the water. Never encroach on any watercourse or wetland when manoeuvring your motorized equipment or vehicles. **M N**

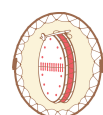


For more information, contact your Local Niskamoon Coordinator or your Forestry Programs Officer

Available best environmental management practices

- Construction or upgrading of trails
- Construction, upgrading and relocating of cabins
- Construction of boat ramps and boat landings
- Construction and clearing for a goose pond or goose corridor
- Restoration of abandoned roads

The leaflet has been produced by the Cree Nation Government the Forestry Programs Prioritization Committee and Niskamoon Corporation with the collaboration of Tecslut Inc.



CONSTRUCTION AND CLEARING FOR A GOOSE POND OR CORRIDOR



In order to keep works and activities from affecting the environment several practices have to be respected or avoided. These practices do not deal with the use of heavy machinery, if heavy machinery is needed to complete your project, please contact your Local Niskamoon Coordinator or your Forestry Programs Officer.

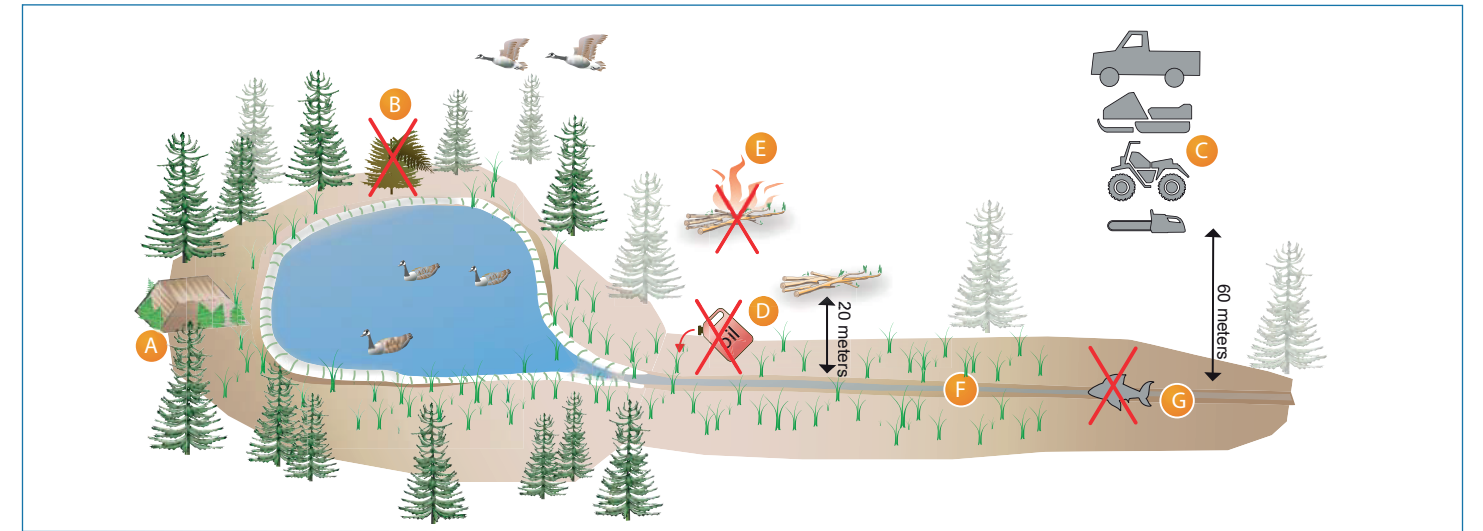
BRUSH CUTTING/TREE CLEARING

What to do

- Check the permit requirements for the kind of work you will conduct and obtain any necessary permits;
- In order to be more environmentally-friendly, restore an existing goose pond or corridor rather than build a new one;
- When selecting the site, if possible, choose a flat site with few trees and bushes (open area) and close to access roads or trails;
- Limit brush cutting / clear cutting;
- Cut only tall trees and leave shorter trees standing so as to allow for absorption to avoid erosion. The tree that have been cut down are to be used as fire wood;
- Pile small wood debris in a location close to the site; they can be reused for a hunter's blind or be used as shelter by small animals; **A**
- Keep wood debris from falling in a stream or lake. **B**

What to avoid

- Avoid selecting a site less than 500 meters (1667 feet) from a transmission line;
- At all time, in or near any watercourse, wetland or the future site of the goose pond, avoid leaving unattended motorized equipment or vehicles, avoid refuelling and avoid changing oil. Never wash any motorized equipment in or near a watercourse, wetland or the future site of the goose pond. Avoid oil spills in the ground or in the water. Never encroach on any watercourse or wetland when manoeuvring your motorized equipment or vehicles; **C D**
- Avoid piling wood debris within 20 meters (66 feet) of any stream, lake, wetland or the future site of the goose pond;
- Avoid removing rare plants or destroying habitats of rare wildlife species;
- Whenever possible, avoid clearing large standing hollow trees and mature trees as they often inhabited by birds and animals;
- Avoid burning small wood debris; they will be used as shelter by small animals; **E**
- Avoid smoking while brush cutting and tree clearing to reduce the risk of forest fire.



USE OF ABANDONED BORROW PITS

What to do

- Check the permit requirements for the kind of work you will conduct and obtain any necessary permits;
- If heavy machinery is needed, contact your Local Niskamoon Coordinator or Forestry Programs Officer;
- Make sure that the presence of water in the newly created pond will not generate erosion because of spring runoff and therefore bring soil debris to a river or stream;
- Make sure that the water level is always below the ground level. Building dikes can prevent overflowing; **H**
- Design the goose pond outside of a floodplain or of an area exposed to flooding;
- Seed grass (blend of native plants and introduced grasses such as Gramineae and Leguminous plants available on the market) around the pit in order to minimize erosion in its vicinity.

What to avoid

- Avoid selecting a site too close to a river or a stream; **I**
- At all time, in or near any watercourse, wetland or the site of the goose pond, avoid leaving unattended motorized equipment or vehicles, avoid refuelling and avoid changing oil. Never wash any motorized equipment in or near a watercourse, wetland or the goose pond. Avoid oil spills in the ground or in the water. Never encroach on any watercourse or wetland when manoeuvring your motorized equipment or vehicles. **J K**

EMBANKMENT OF SMALL INTERMITTENT STREAMS

What to do

- Check the permit requirements for the kind of work you will conduct and obtain any necessary permits;
- Use an intermittent small stream or a small wetland to create the goose pond; **F**
- Make sure that the low dikes used to embank the stream or wetland are highly impermeable, large enough and stable to keep erosion from taking place in the spring or fall. For technical and aesthetic reasons, this can be done using geotextile bags filled with sand and by covering them with sods and rocks;
- Annually assess the stability of dikes to make sure that they are stable and that the overflow of the stream is not going to create erosion and bring soil debris to a river or a stream.

What to avoid

- It is highly recommended to avoid using permanent streams to create the goose pond since this approach leads to problems with the dikes stability during spring runoff;
- Avoid selecting a stream that is known to be an important fish spawning site; **G**
- At all time, in or near any watercourse, wetland or the future site of the goose pond, avoid leaving unattended motorized equipment or vehicles, avoid refuelling and avoid changing oil. Never wash any motorized equipment in or near a watercourse, wetland or the future site of the goose pond. Avoid oil spills in the ground or in the water. Never encroach on any watercourse or wetland when manoeuvring your motorized equipment or vehicles. **C D**

