

A photograph of two beavers in a pond. The beavers are dark brown and are positioned near the edge of the water, surrounded by dry, yellowish-brown grass. In the background, there is a patch of snow on the ground. The text 'Management of beavers and their habitats' is overlaid on the image in a stylized, orange-brown font with a black outline.

Management of beavers and their habitats

**By
Michel Leclair**

Présentation de Michel Leclair

- 1976-78 LAVÉRENDRIE PARK ,guide hunting and fishing
- Conservation Officer 1979-86 C.C.N., GATINEAU PARK
- 1996-99 OUTFITTER MIJOCAMA: owner
- 1986-2025 S.O.S. WILDLIFE: consultant, trapping wild animals in urban zones. (Gatineau park, Outaouais and Laurentian).
- 2007-2025 ECO-ODYSSEY: Setting up and operations of tourist attraction



Gatineau River

Gatineau Park

Hull

Ottawa River

Ottawa

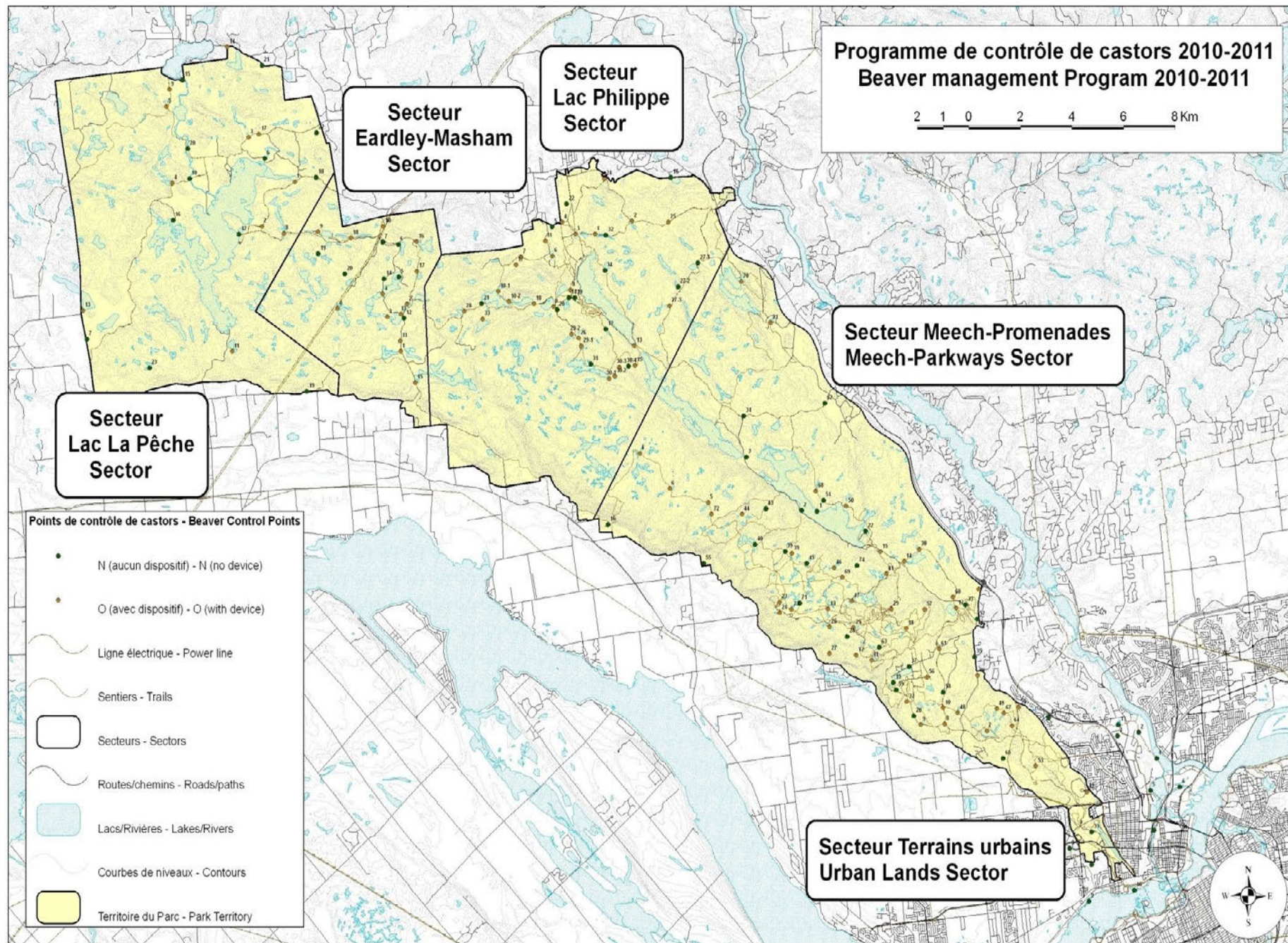
Gatineau Parc

- 15 minutes from the Parliament Hill
- 361 square kilometres
- 2.7 million visitors/year
- 350 kilometres of trails
- 200 kilometres of roads
- 1980: 385 beavers colony, 2024: 288

Gatineau Parc

Beaver control program

- 167 monitoring points
- 97 with control devices
- 164 beaver dams with devices
- 208 water control devices
- 51 tubulars or beaver fences
- 26 diversion dams



- From the beginning of the colony fur trade was an economic appeal
- 1700-1800 the century fur
- In 1750 an estimated 2 million beavers were already killed
- Up to 200,000 beaver pelts for a good year
- A large beaver skin can make 18 hats

L'arrivée des européens: la traite des fourrures



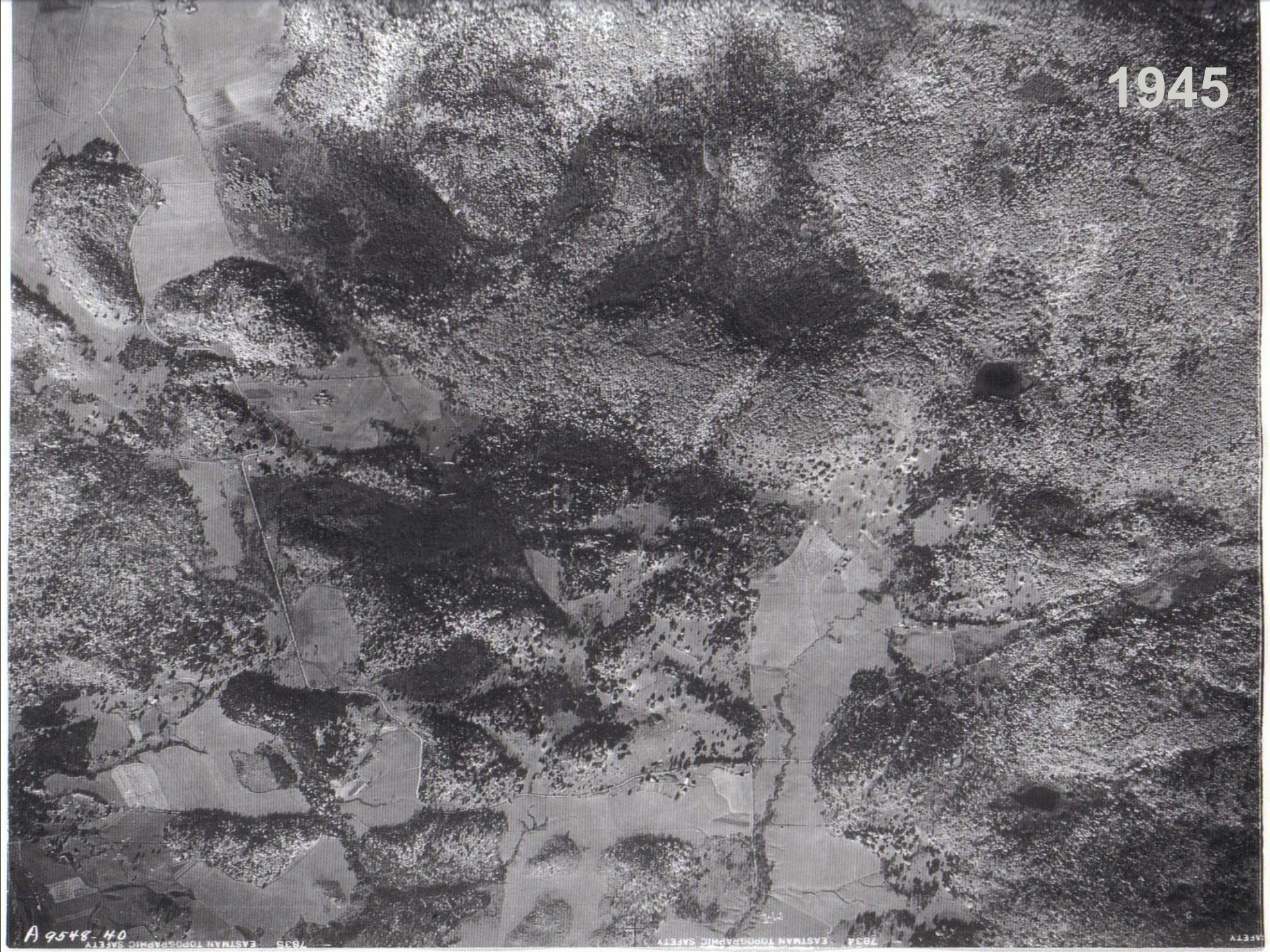
Beaver decline and almost disappearance

- Beaver disappearance in many regions of the United States and Canada
- 1934, Quebec passed a law to protect the beaver for 10 years
- Fluctuations in the price of beaver skin:
 - - 1917 = 12 \$ (156 \$)
 - - 1928 = \$ 30 (329 \$)
 - - 1932 = 13 \$ (172 \$)
 - - 1945 = 52 \$ (567 \$)
 - - 2000 = \$ 30 (Federation of Quebec Trappers)
 - - 2025 = 50 \$ (North Bay auction)

1975 le castor devient l'emblème du Canada



1945



A 9548-40

EASTMAN TOPOGRAPHIC SAFETY

1805

EASTMAN TOPOGRAPHIC SAFETY

7834

SAFETY

1969

A30187-100

1978

1983



07

2004

Chemin Glacé

3581 pieds

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Date des images satellite : 11 juin 2004 45°38'03.02"N 75°52'09.52"O élév. 650 pieds Altitude 12425 pieds

2009

eco-odyssee

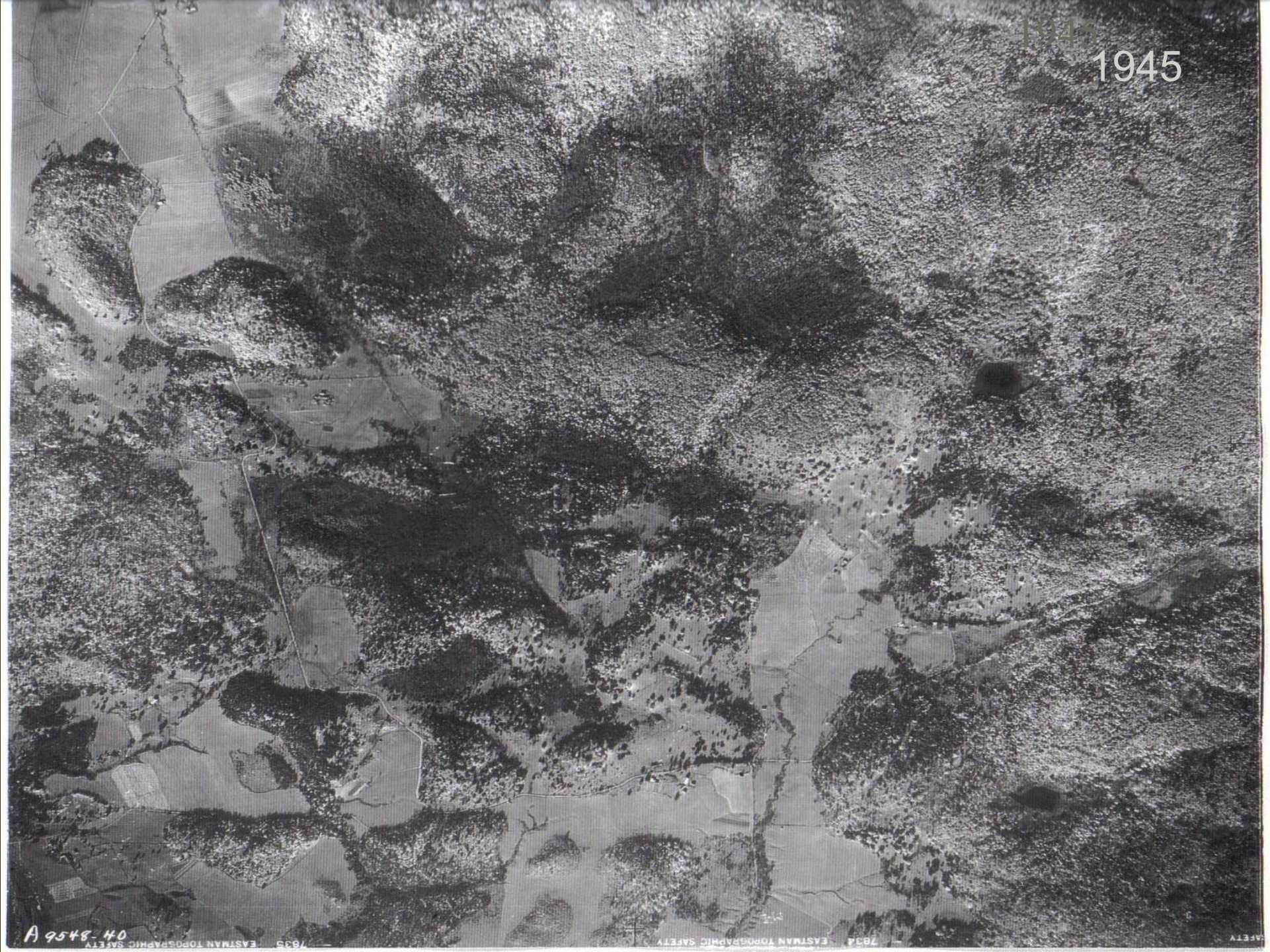
2807 pieds

Image © 2011 GeoEye
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Dates des images satellite : 21 sept. 2009 - 16 oct. 2009 lat 45.639167° long -75.871231° élév. 641 pieds Altitude 10136 pi

1945
1945



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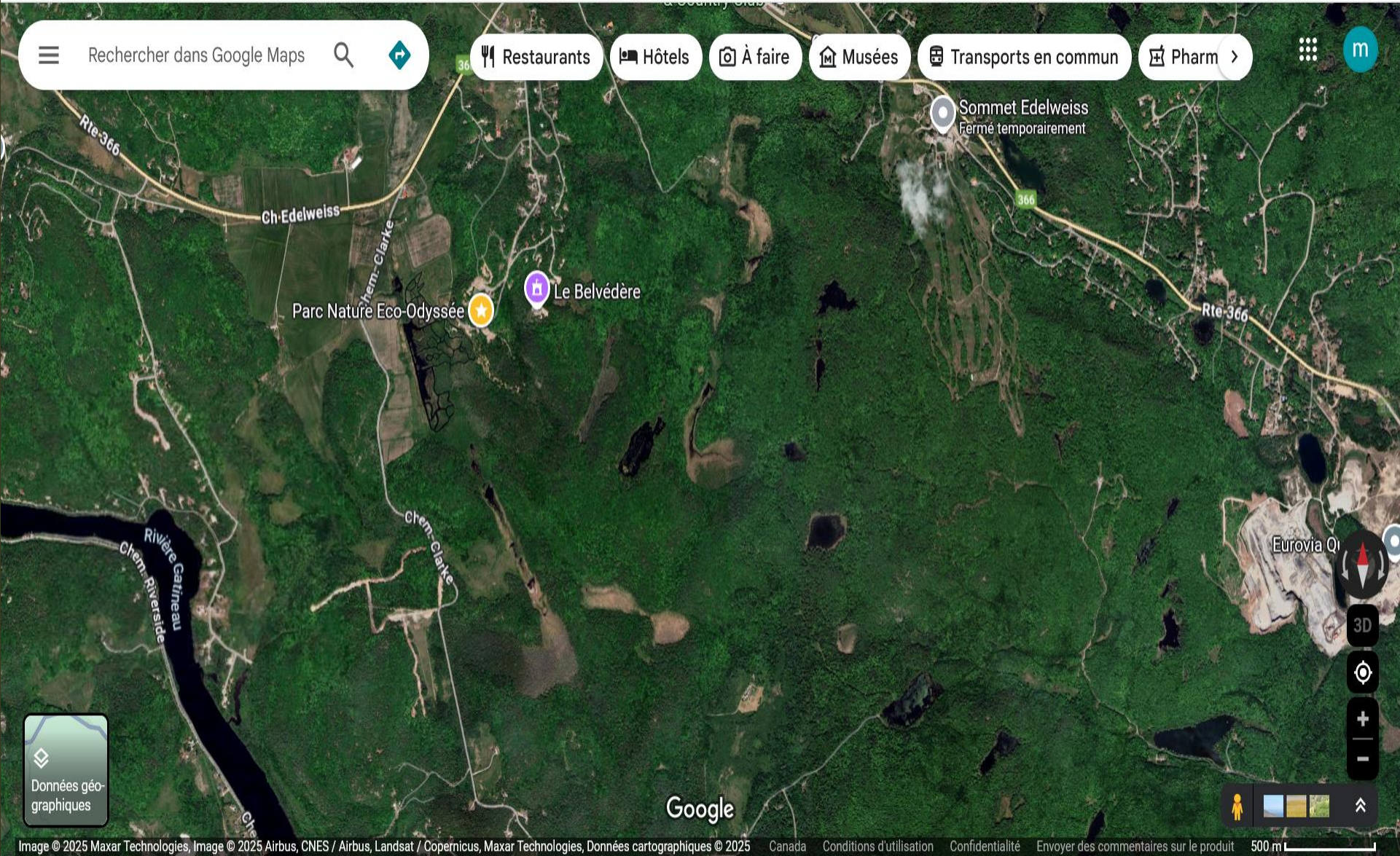
EASTMAN TOPOGRAPHIC SAFETY

1805

EASTMAN TOPOGRAPHIC SAFETY

783A

SAFETY



Données géographiques

The damages



2003 4 22





HABITAT

- **Cyclique 90%**
- **Permanent 10%**

Habitats









2003 10 28









Dams Construction: behavior, and palpation











2003 5 26













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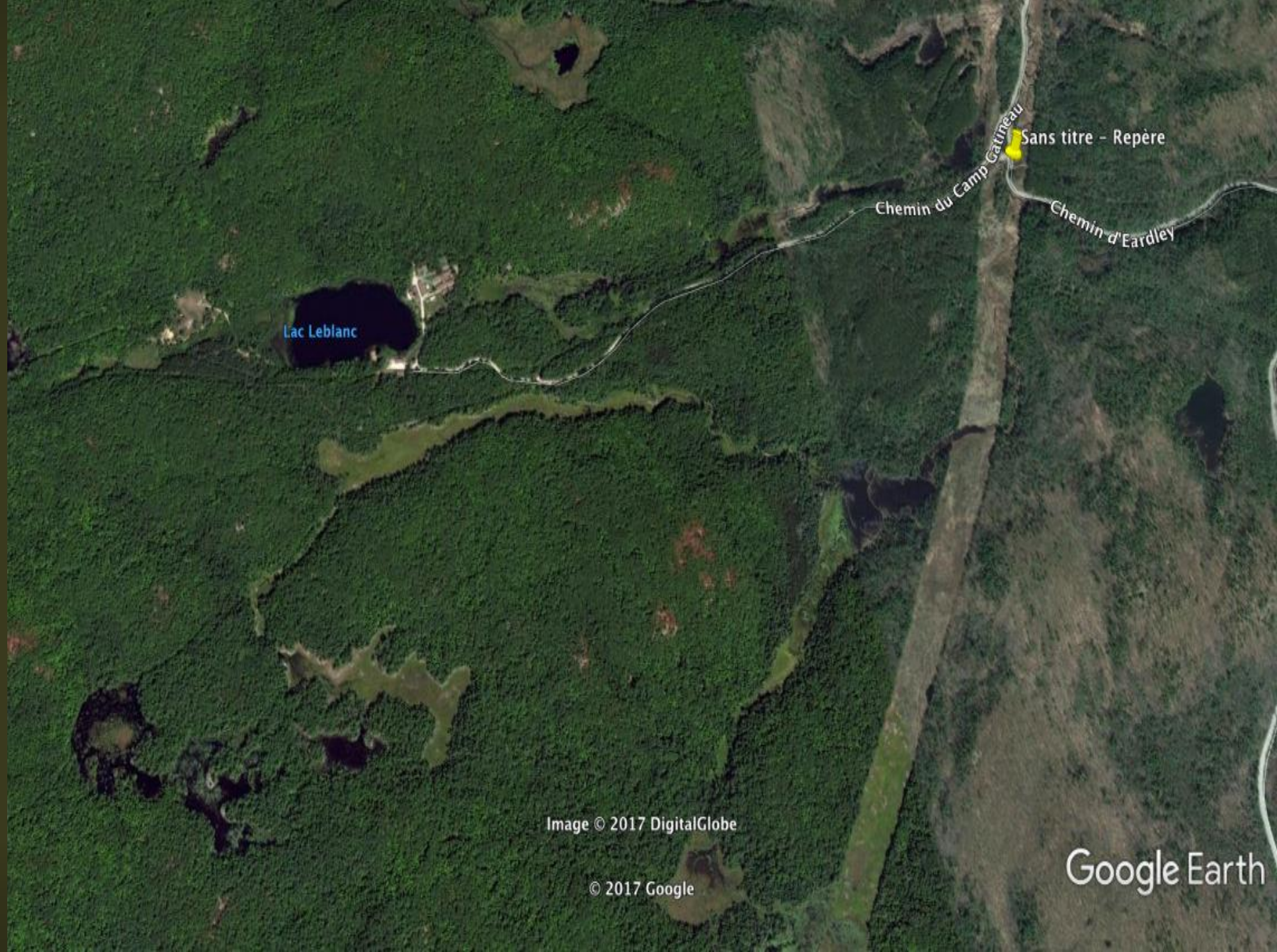


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Google Earth

Synthesis biology, habitats and dams

- The beaver is a large rodent responsible for creating numerous wetlands
- It creates a habitat for him and several other species
- Its habitat is characterized by dams and huts
- His behavior to build a dam is dictated by sound and water palpation

Problems interventions and solution

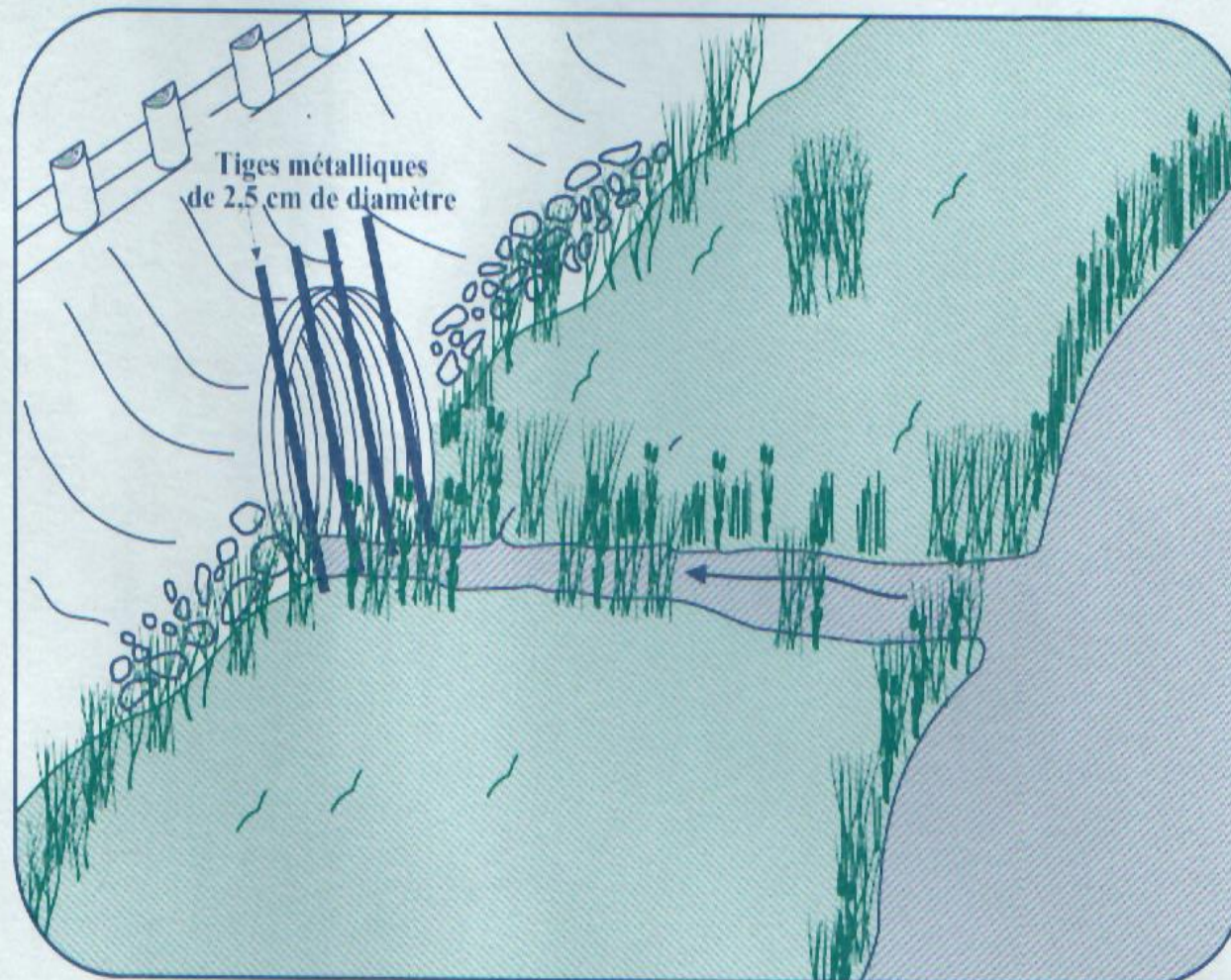


Problems, interventions and installations
visible problems: culvert



2003 6 9

Can we prevent culvert obstructions?



Matériaux requis



Coût



Installation



Entretien



Efficacité



Durabilité



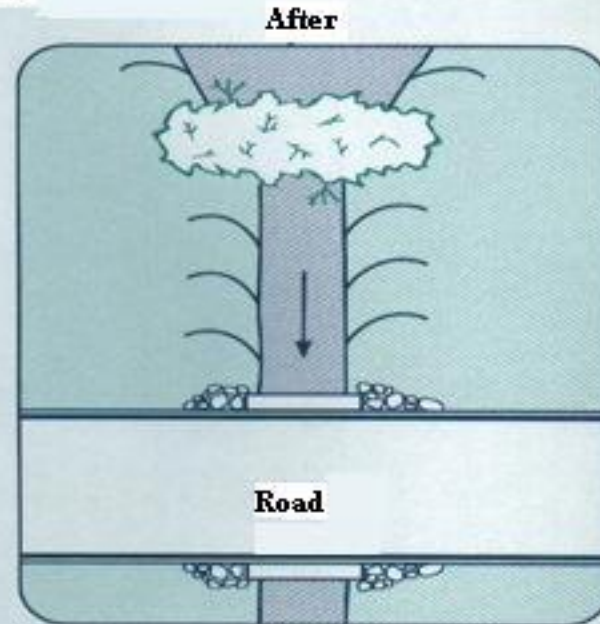
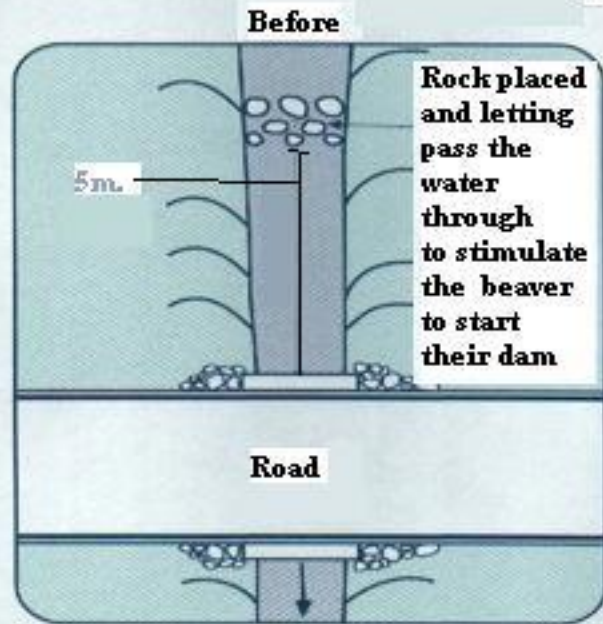




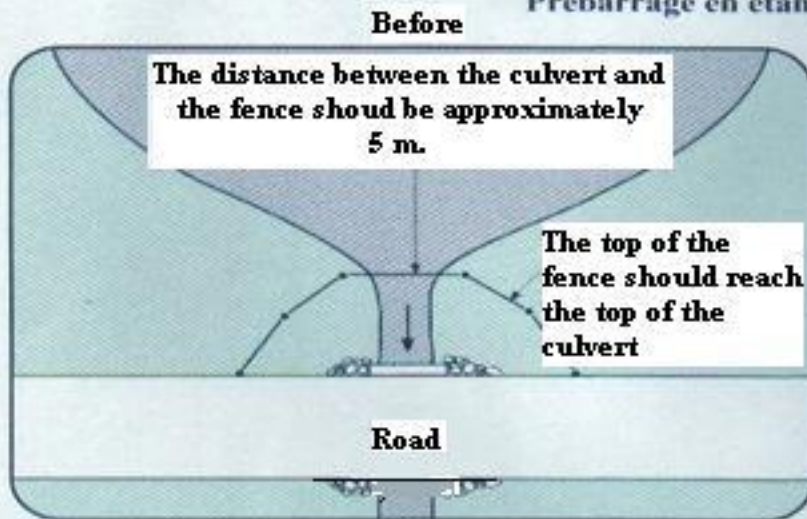
2003 10 28



Diversion dam



Prébarrage en étang avec clôture grillagée

























ASSESSMENT SITE



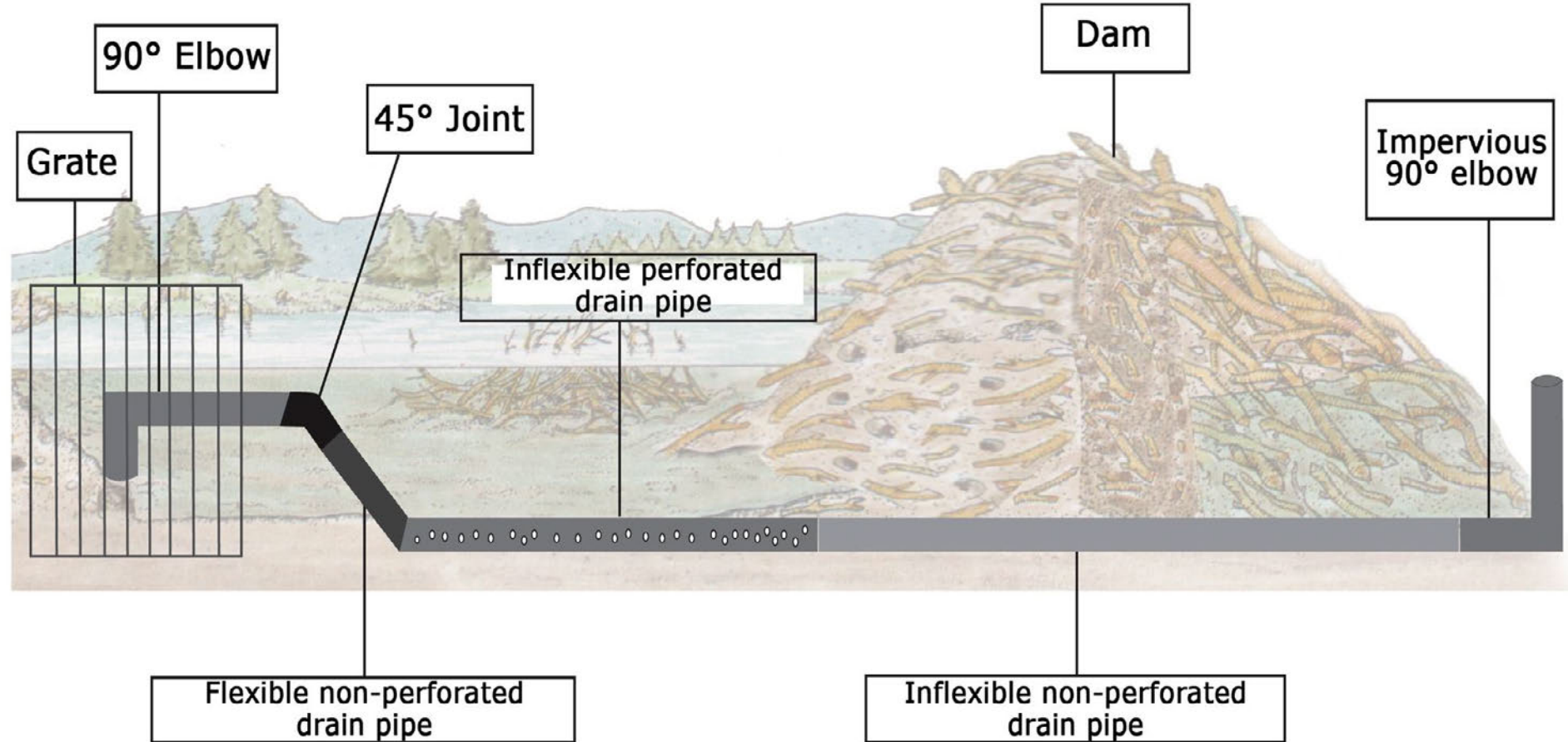


**Can we control the water level
In a beaver pond?**

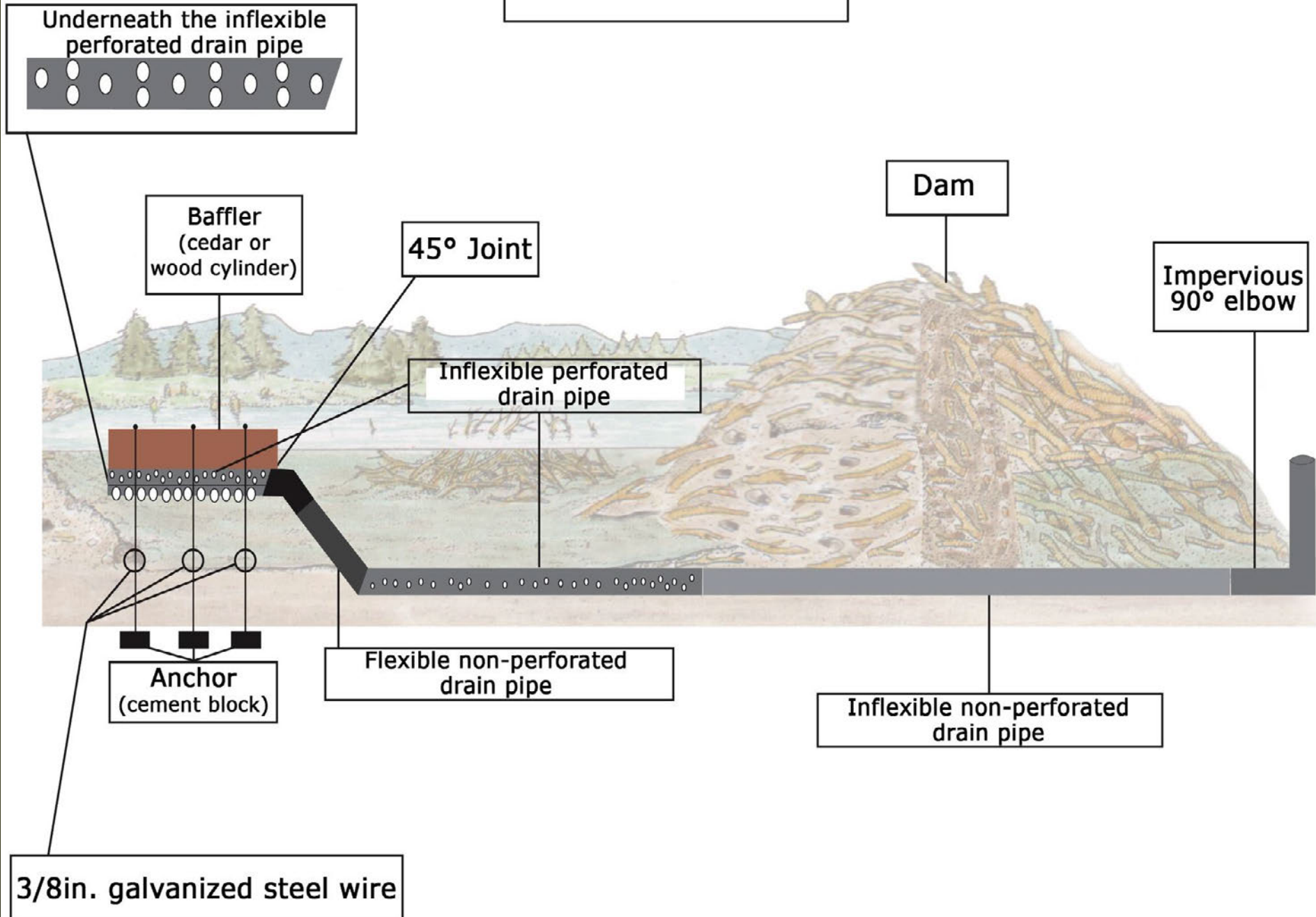


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THE LECLAIR TRIANGLE



THE LECLAIR BAFFLER

















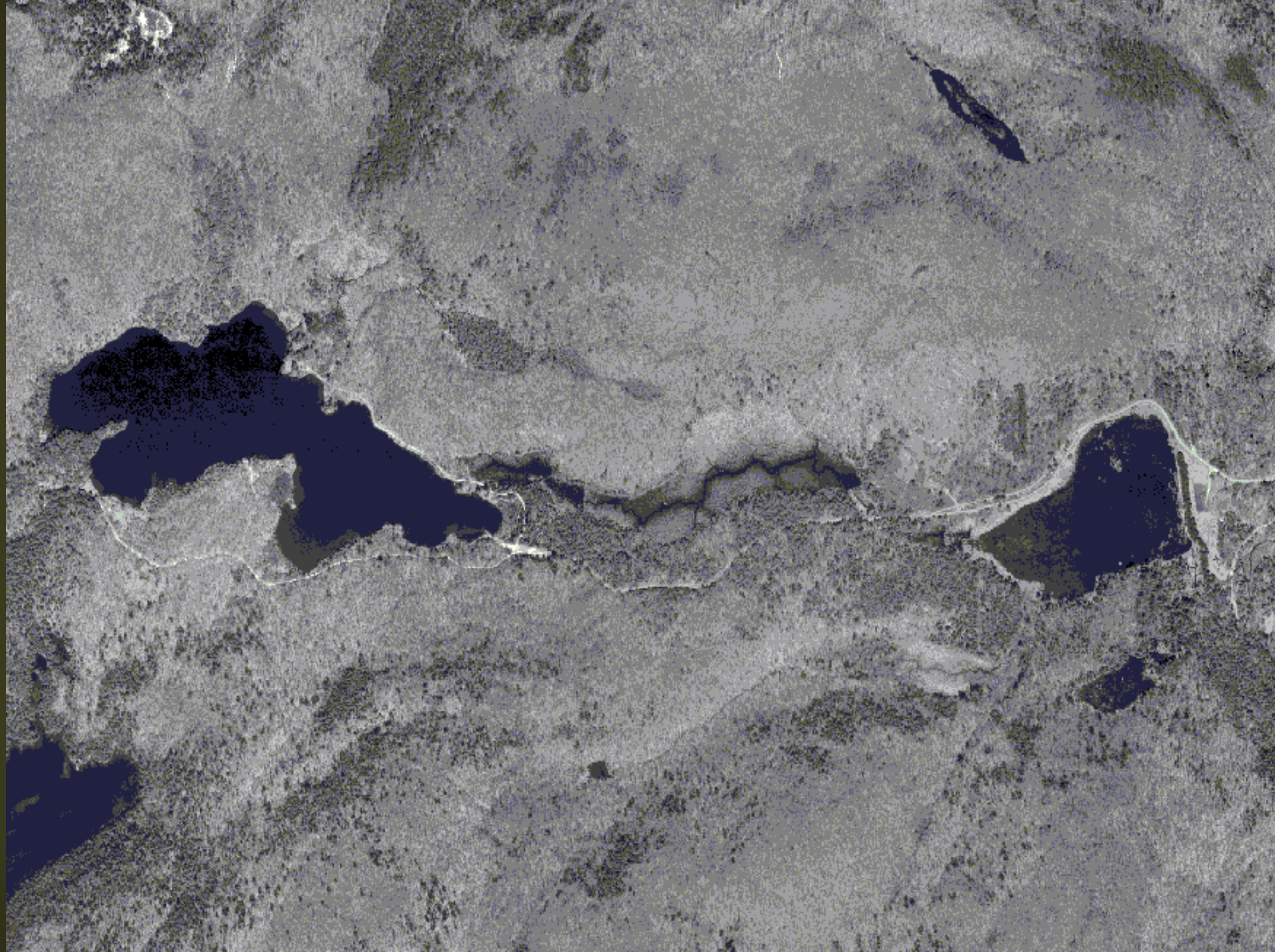














2285 pieds

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Planning for a new territory

- Legal dispositions
- Steps to develop a territory
- Reaction problem
- Depredation
- Inspection and site assessment
- Summary of the required services

Short term

- **Inventory of sites problems in the area (current and historical);**
- **Identify approaches and specific solutions for the sites;**
- **Estimate costs of materials and labor to do the work;**
- **Establish a framework for implementation of point solutions to solve problems;**
- **Training of staff concerned to develop the territory**
- **this is the only approach that is sustainable in the short, medium and long term.**

Medium term

- Evaluate the whole territory for sites that pose a potential risk to citizens and human infrastructure;; (eg new beaver activities, old unmaintained dam could collapse at increased rainfall.)
- Identify approaches and specific solutions for identified sites;
- Estimate costs of materials and labor to do the work;
- Establish a framework for implementation of point solutions to solve problems;

Long-term

- Assess the dynamics of beaver populations in the territory concerned;
- Develop a beaver management plan for the entire country that seeks population stabilization.