

The Shoreline : Retaining Wall



Retaining wall is good for:

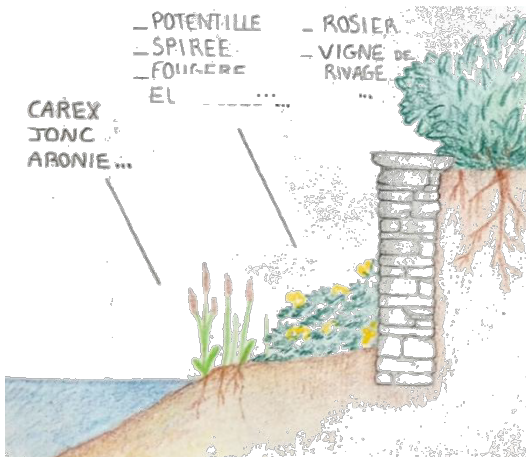
- ✓ Limiting erosion and to stabilize a slope

But a bare retaining wall without vegetation:

- ✓ Turns a natural and diversified bank, into a sterile environment barely capable of supporting life. It damages part of the shore and fish habitat.
- ✓ The rock and concrete store heat from the sun, warming the water around: causes a decrease in water quality.
- ✓ Requires maintenance and repair
- ✓ Can accelerate erosion of neighbouring shores

Natural stabilization tends to become stronger than a wall, as long as the plants grow and spread.

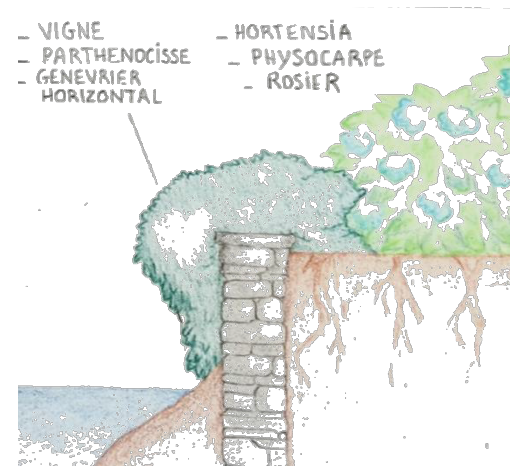
How to restore vegetation on a retaining wall



Case 1: Wall with natural beach

We can plant shrubs and vines in front and above. At the beach front, we select plants that like to have their feet in the water or who can survive temporary flooding.

(Roses, shore vines, spirea, bull rushes)



Case 2: Wall without natural beach

The base of the wall being in the water permanently or for a long time, we cannot plant there. Replanting must then take place on top of the wall. We can install climbing plants that fall down the length of the wall. We can also plant larger shrubs further away from the wall

We propose these species, you are free to select others. Good practice is to use plants:

- Native (no exotic plants)
- Coming from a local nursery
- With a deep root system
- Containing multi pots or bare root
- Offering a source of food and shelter for wildlife

Do not use fertilizer !! the-fertilized lakes are gradually invaded by aquatic plants

It is possible to plant only shrubs so as not to close the view of the lake, or on the contrary taller trees such as red cedar or ash to close open land.

When to Plant

In the spring shortly after the snow melts while plants are dormant, or in September/ October

Is it better to remove the wall?

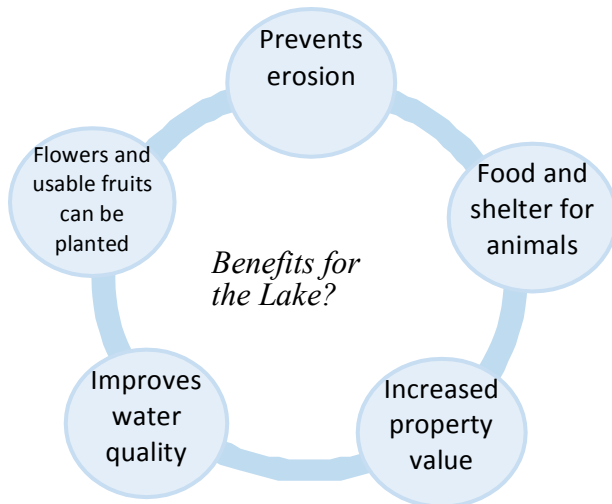
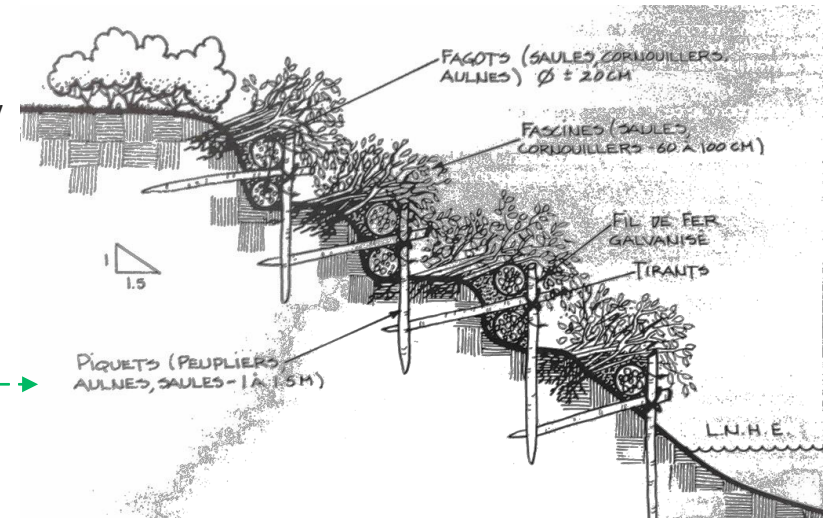
In some cases, it is better to remove a wall that is not conducive to vegetation, particularly when:

- The base of the wall is submerged in water (no beach in front)
- The wall is high (more than about 1m20)
- The wall has no cracks or spaces (E.g. concrete)

Other methods can be used in this case:

- Create a shelf
- Stabilize with pickets and faggots

Consult with the Municipality to see if a permit is required to remove a wall.



Before



1 Year later



To learn more :

- Shoreline protection policy : www.mddep.gouv.qc.ca/eau/rives
- www.banderiveraine.com : With this interactive site, one can see different schemes depending on the nature of the ground and use animation to see the details of how to go about the planting.
- Le guide du RAPPEL « Rives et nature : Guide de renaturation » : <http://www.rappel.qc.ca/IMG/pdf/listedesvegetaux2006-3.pdf>
- Fisheries and Oceans Canada: guide to shorelines: www.dfo-mpo.gc.ca/regions/central/pub/shorerivages-on/pdf/shore-rivages-on_f.pdf