

Practical Guide
for

DOCKS AND BOATHOUSES



2012 translated in 2019

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Shoreline and littoral zone

Rich biodiversity

These zones are important habitats for wildlife and plant species. They are very sensitive to disturbances.



Responsible development will ensure the:

- ▶ **Preservation of water movement** and the free circulation of fish;
- ▶ **Prevention of shoreline erosion** by maximizing the conservation of the natural conditions and vegetated area;
- ▶ Minimization of the structure's surface area over the littoral zone in order to **conserve existing natural habitats**.

shoreline

Where to build a dock or boathouse?

Minimizing impacts on the aquatic environment

When deciding upon the **location of the structure** to be built, it is important to consider the following:

- ▶ Topography;
- ▶ Depth of water;
- ▶ Flow of water and ice movement in winter;
- ▶ Aquatic vegetation.

Forsee water access structure that has:

- ▶ An opening with maximum width of **5 meters** when slope is smaller than 30%;
- ▶ An opening of minimal necessary width when slope is greater than 30%.

WARNING!!

Modifications of the littoral zone's natural state is **prohibited** (includes dredging, digging, backfilling, etc.). Many building activities and structures are **not permitted** on the shoreline as well.



impacts

Regulations

Municipal and provincial



The installation of structures must be completed before spawning seasons.

The **municipality** must be contacted in order to obtain permits for the following tasks:

- ▶ Construction;
- ▶ Maintenance;
- ▶ Repairs;
- ▶ Demolition.

In accordance with the Regulation respecting the water property in the domain of the State Watercourses Act, a **provincial permit** may be required if the structure:

- ▶ **Exceeds a 20m²** surface area;
- ▶ Takes up more than a **tenth of the total width** of the waterway.

Other prior authorizations may be required, like one from the Ministry of Forests, Wildlife and Parks when impeding on fish habitats (littoral zone).

regulations

Floating docks



Floating dock

floating

All floating structures should be removed from water bodies at the end of the summer.

ADVANTAGES:

- ▶ Slight impact on the littoral zone, wildlife and habitats;
- ▶ Low cost and easy to build;
- ▶ Adaptable to most shorelines;
- ▶ Easily installed at varying water depths.

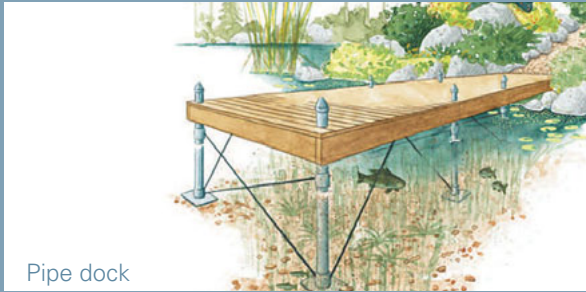
INCONVENIENCES:

- ▶ Decreased light penetrating the water column under the structure;
- ▶ Hydrological regime modified (flow of water and erosion);
- ▶ Not suitable for areas exposed to strong currents or waves.

NOTICE

These structures must be used for **water-related activities only** and cannot be used as a patio.

Pipe docks and docks on pillars



Pipe dock



Dock on pillars

ADVANTAGES:

- ▶ More stable and solid than floating docks;
- ▶ Slight impacts on the aquatic ecosystem (the structure allows for greater penetration of sunlight in the water column and causes less disturbances to the hydrological regime than floating docks).

INCONVENIENCES:

1. Pipe docks

- ▶ Because of their light weight, they are not suitable for areas exposed to strong currents and waves.

2. Docks on pillars

- ▶ Resuspension of sediments is possible during the installation of pillars;
- ▶ Shorter installation period.

pipe

Unique docks

Water and submerged lands undisturbed

PECULIARITIES:

- ▶ Less common and inexpensive;
- ▶ Requires good knowledge of installation techniques;
- ▶ Installation expertise is sometimes rare.

Dock on wheels



Cantilever dock



Suspended dock



Lift-up dock with hoist

Construction materials to use

The best material to use would be **UNTREATED WOOD** (**cedar, tamarack, hemlock**). It is very resistant to decomposition and contains natural preserving elements.

CONSTRUCTION MATERIALS TO AVOID

- ▶ **Treated wood**: contains toxic substances that can be harmful to aquatic organisms and human health.
- ▶ **Concrete** and **polystyrene materials**: not suitable for harsh winter conditions and wave action.
- ▶ **Metal barrels** and **tires**: may contain pollutants.

cedar
tamarack
hemlock

Ecological materials are favourable



Prohibited structures:

- ▶ Crib docks
- ▶ Docks on concrete pillars
- ▶ Concrete docks

Boathouses

Allows the vessel to be stored
out of water



Like docks, boathouses **must be** floating structures or on pillars.

- ▶ The boathouse can be attached to the dock.
- ▶ It cannot have side walls.
- ▶ The framework must be made of wood or metal.

PLEASE NOTE...

that boathouse structures resembling garages or sheds are not longer permitted in the littoral zone.



boathouses

REFERENCES

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