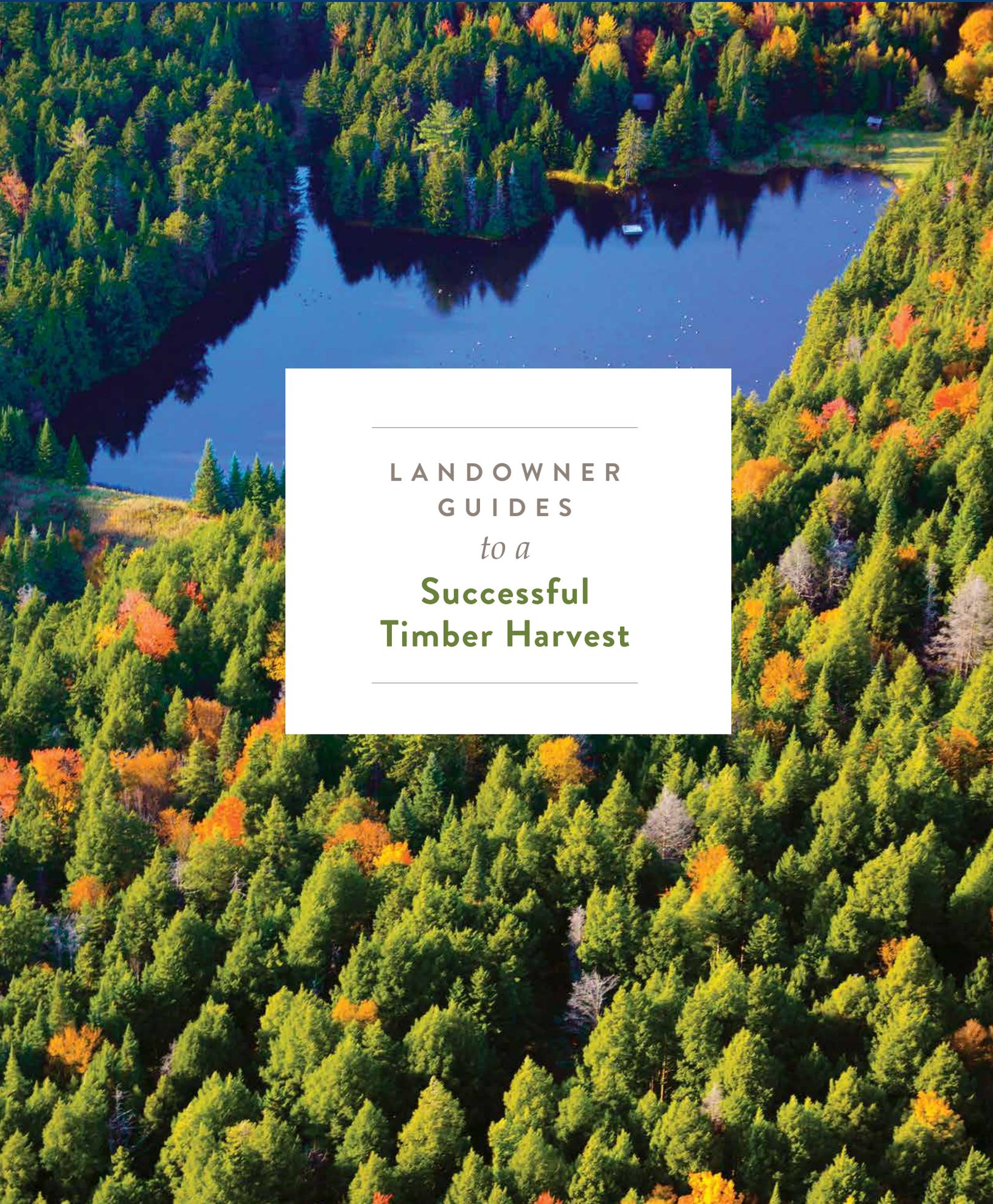
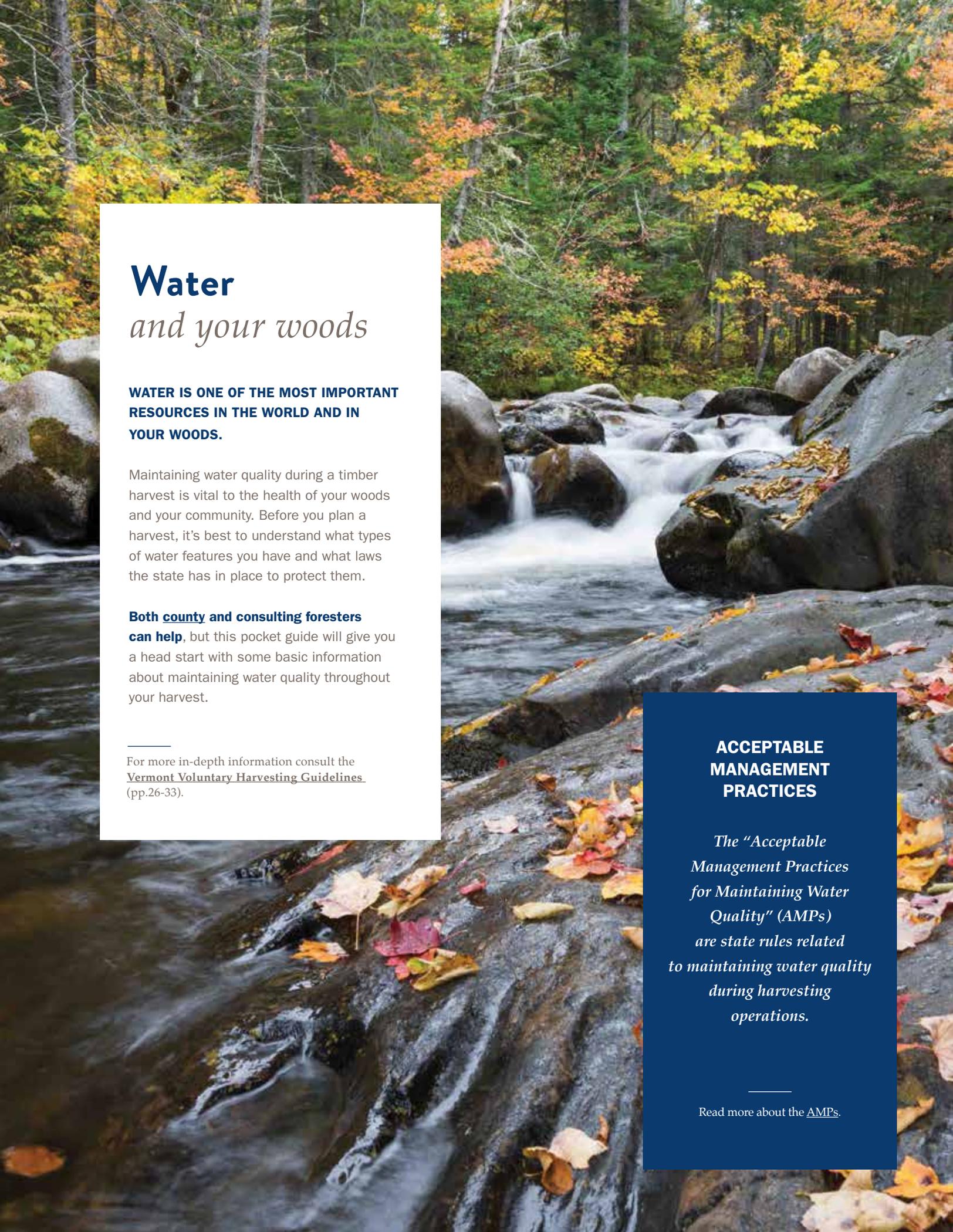

LANDOWNER
GUIDES
to a
**Successful
Timber Harvest**





Water

and your woods

WATER IS ONE OF THE MOST IMPORTANT RESOURCES IN THE WORLD AND IN YOUR WOODS.

Maintaining water quality during a timber harvest is vital to the health of your woods and your community. Before you plan a harvest, it's best to understand what types of water features you have and what laws the state has in place to protect them.

Both county and consulting foresters can help, but this pocket guide will give you a head start with some basic information about maintaining water quality throughout your harvest.

For more in-depth information consult the [Vermont Voluntary Harvesting Guidelines](#) (pp.26-33).

ACCEPTABLE MANAGEMENT PRACTICES

The "Acceptable Management Practices for Maintaining Water Quality" (AMPs) are state rules related to maintaining water quality during harvesting operations.

Read more about the [AMPs](#).



Water *quality*

Threats to *water quality*

- Sediment
- Debris
- Equipment
- Oil/Fuel
- Too much sunlight

**NATURAL BEAUTY.
ENJOYMENT OF WILDLIFE.
OUTDOOR SPORTS.
A WATER SOURCE.**

No matter how you use your land, maintaining the quality of the water on it and flowing through it matters, maybe more than you know. And when it comes to quality, a timber harvest is the most vulnerable time for water in the woods. **Erosion of banks**, the forest floor, logging roads or skid trails sends sediment downhill and downstream, changing drainage patterns and affecting water quality. **Woody debris** can cause blockages. **Equipment-caused ruts** can change water flow. **Oil and fuel can** spill and seep into surface or groundwater.

!

As part of a good forest management plan, timber harvests are a vital tool to keep your woods healthy while maintaining, and even improving, water quality.

Identifying water features

Understanding what kind of water features are on your land is critical to planning a successful harvest. While some, like ponds and rivers, are obvious most of the time, others may not be. In fact, water may not even be present all year, but you can still have a water feature. And different features have different regulations, so you should know before you start a harvest. Read below to get a sense of what may be on your land. Then talk with a consulting forester to be sure.

For help identifying and understanding wetlands, contact the [Agency of Natural Resources Wetland Division](#)



WETLANDS

Areas saturated with ground water frequently enough to create a distinct ecosystem of plants and animals, including: Bogs, Fens, Marshes & Swamps. Vermont has three classes of wetlands with Class I & II being the most protected.



VERNAL POOLS

These Class II wetlands are temporary pools of water providing seasonal habitat for distinct plants and animals. Marking a pool's perimeter in spring protects it when you harvest in the dry seasons.



SEEPS & SPRINGS

Where groundwater comes to the surface, generally on slopes or bases of slopes. It's good to plan a harvest in spring or summer when seeps are most evident. Then conduct the harvest as things are drier or frozen.



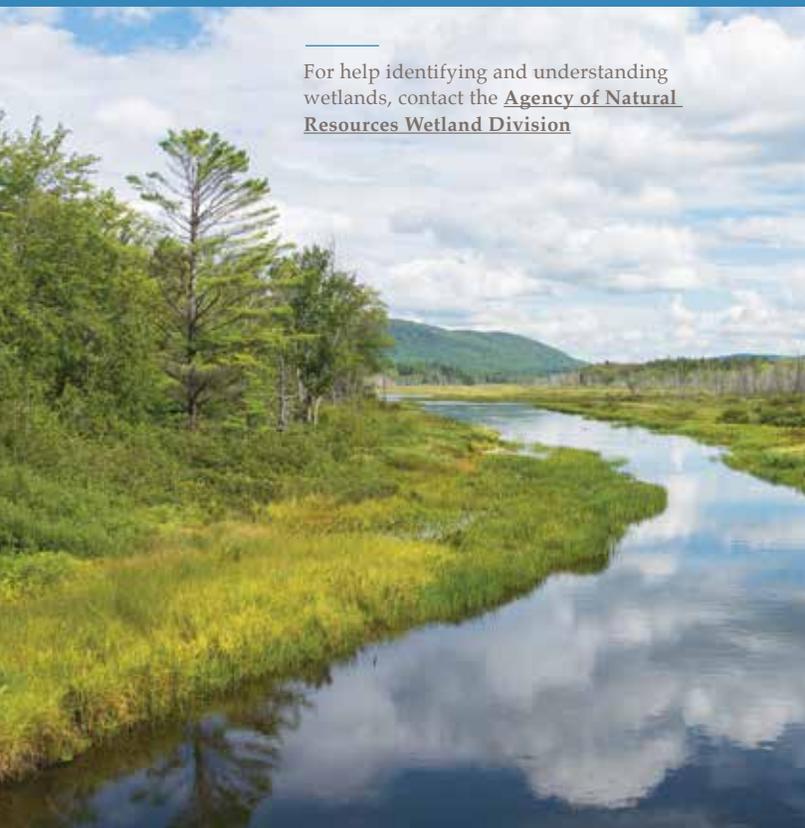
RIVERS, STREAMS & BROOKS

Any flowing water in a defined channel, can either be perennial (flowing continually) or intermittent (flowing only seasonally).



LAKES & PONDS

Lakes and ponds over ten acres are protected by the Vermont [Shoreland Protection Act](#) and need to be part of an approved [Forest Management Plan](#).



Buffers

WETLANDS

Class I wetlands require a 100-ft perimeter for harvesting. Class II require a 50-ft perimeter. This protects the upland vegetation that acts as a buffer for the wetland, stopping runoff and benefiting wildlife. During a harvest, limited disturbances are permitted within these zones. Your forester and contractor should understand those limits.

STREAMS

Within 50 ft of streams, more if the hills are steep, only limited harvesting should occur and no new roads should be built. No machinery is allowed to be driven within 25 feet of streams except at crossings. The buffer filters sediment from the water, provides habitat for wildlife, and is the simplest, best way to protect water.

Crossing Water

Stream crossings should be designed, built and maintained throughout your harvest to avoid blocking migration or movement of aquatic species and to keep sediment and debris to a minimum.

BRIDGES

Can be temporary or permanent, depending on land use. Portable skidder bridges are now available to rent as temporary protection without major construction. Permanent bridges need to meet requirements of [DEC River Management Engineers](#).

CULVERTS

Pipes or tubes placed in streams that allow ample water flow while a truck or skid trail passes over. See [AMPs](#) for sizing.

POLED FORDS

Temporary structures used primarily on smaller intermittent streams, constructed by laying logs parallel to the stream channel allowing water to continue to flow, while protecting the stream channel and stream bank.

BRUSHED-IN CROSSINGS (WINTER)

Created by placing poles into the stream channel and covering them with tree limbs and branches. This least-preferred, temporary method can be used only on frozen ground and must be removed after harvest.



For more about water and your woods visit
VTCutWithConfidence.com