Some animals that thrive because of riparian areas include:

Mink, black bear, beaver, muskrat, raccoon, deer, river otter, bald eagle, pileated woodpecker, ducks, bobcat, fox, fisher cat, ducks, amphibians, reptiles and many bird species.

### HOW DO RIPARIAN BUFFERS WORK?

The trees, shrubs, and grasses in riparian buffers each play an important role protecting our beautiful rivers and streams and the living creatures that rely on them.

The deeper roots of trees and shrubs hold the soil and stabilize the banks which:

- Reduces soil erosion and sedimentation in high water events, improving water quality
- rises the vegetation slows the water's

The grasses and leaf litter slow the velocity of water entering the stream which:

- Reduces flooding, more water is absorbed into the soil
- Removes pollutants and sediment, improving water quality

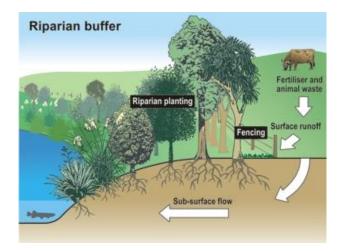
Riparian buffer vegetation provides critical habitat for aquatic and terrestrial wildlife.

Town of Whitingham

# Town of Whitingham

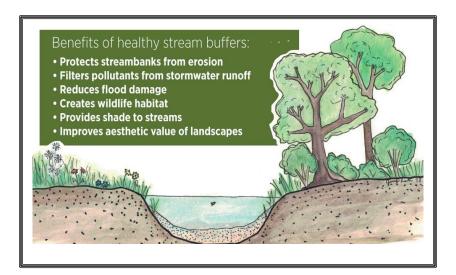
# **RIPARIAN BUFFERS**

A riparian buffer or stream buffer is a vegetated area near a stream, usually forested, which helps shade and partially protect the stream from the impact of adjacent land uses. It plays a key role in increasing water quality in associated streams, rivers, and lakes, thus providing environmental benefits. (Wikipedia)



#### **IMPORTANCE OF RIPARIAN BUFFERS:**

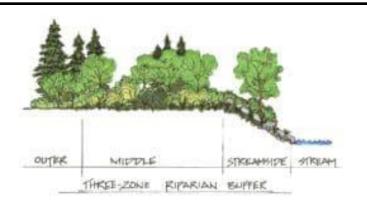
- Vital to many fish and wildlife species
- Provides nesting and foraging sites for birds
- Provides cover from predators
- Important component of fish habitats
- Reduces sediment and nutrient inputs into our rivers and lakes by filtering and absorbing runoff from residential areas and farms
- Root structure improves bank stability
- Tree crowns create shade and help maintain cool temperatures
- Older trees create habitat when they die and fall into the stream



#### **BENEFITS OF RIPARIAN BUFFERS:**

- Natural shoreline provides wildlife habitat
- Narrow footpath to water causes less chance of erosion
- Low maintenance native plants provide buffer
- Trees keep the water cool with view maintained
- No docks allow natural water flow

Many people are aware of the value of our large rivers for their scenic beauty, their recreational opportunities, and their wildlife habitat. However, our year-round and smaller streams that run only part of the year are also valuable for fish and wildlife. Riparian buffers provide vital habitat along both large rivers and smaller streams. Trees growing along the water's edge shade and cool the water, improving fish habitat. Streamside riparian areas contain a rich mixture of plants and animals, provide shelter and food for insects and fish, which in turn provide food for mammals and birds. Many familiar mammals inhabit the wooded land adjacent to rivers and streams. Riparian buffers also provide protective travel corridors for animals moving from drier upland areas to richer riverside bottomlands.



## THINGS WE CAN DO TO PROTECT OUR RIVERS AND STREAMS:

- Leave existing riparian vegetation in place
- Create/enhance riparian buffers by planting native trees and shrubs
- Keep livestock fenced out of waterways and away from riparian buffer
- Keep piles of manure, salt, soil, and fertilizers away from riparian buffer
- Avoid using heavy equipment in the riparian buffer

#### THINGS TO AVOID:

- Bare shoreline increases runoff and erosion
- Paved paths increase runoff pollution
- Removal of natural vegetation eliminates pollution filter and shade
- Permanent docks alter natural water flow and cause erosion elsewhere.

### What can a property owner do?

Although the Whitingham Zoning Regulation does not regulate riparian buffers or river corridors at this time, it is important for property owners to be aware of and stay away from these areas to allow the many benefits of these areas to thrive.

The State of Vermont does regulate rivers and shorelines on many lakes. Contact the State Permit Specialist before starting any projects in these areas at (802) 279-4747.