

UNDERSTANDING FLOOD STORAGE AND FLOODPLAIN RESTORATION

Flood storage and floodplain restoration are about working with rivers, and **seeing the river as a partner in resilience** rather than an inanimate adversary that can be managed and controlled.

What is Flood Storage?

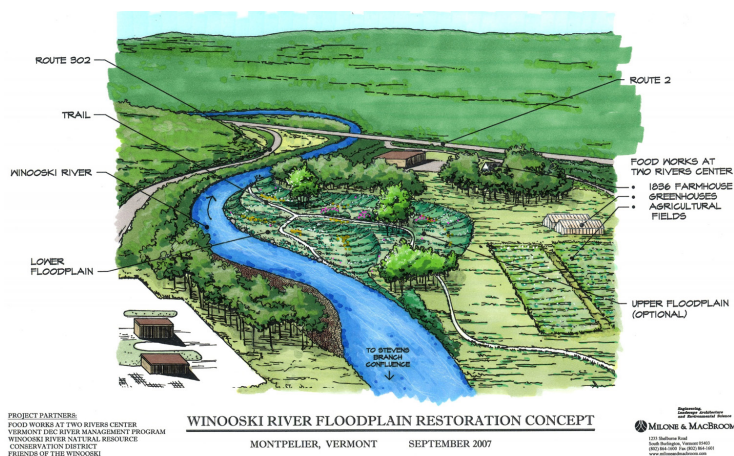
Flood storage refers to areas that **temporarily hold excess water** during storms, snowmelt, or other high-flow events. This helps **slow down the movement of water** and reduces downstream flooding.

Flood storage can help protect homes, roads, and communities from dangerous floodwaters.



Flooded floodplain

Lars Gange & Mansfield Heliflight,
August 31, 2011



What is Floodplain Restoration?

Floodplain restoration reconnects rivers to their **natural floodplains**, which are flat, low-lying areas next to rivers that historically absorbed floodwaters. Over time, many floodplains have been filled with development or cut off by levees, roads, walls, and buildings that confine a river's ability to move.

Restoration reverses that by:

- Lowering or setting back levees
- Removing fill and barriers
- Replanting native vegetation
- Removing infrastructure, buildings, and fill

Restored floodplains give rivers room to spread out safely, dropping sediment in an open field, and lessening the extent of damage from flood events downstream. Floodplain restoration can be paired with the creation of park or recreation space for community members to enjoy.

Why Does It Matter in Vermont?

With increasing frequency and intensity of floods, investment in resilience land use practices will reduce flood damages. **Flood storage and restoration are cost-effective, nature-based solutions that can:**

1. Reduce flood risk for downstream communities,
2. Improve water quality by filtering runoff,
3. Recharge groundwater supplies,
4. Create habitat for fish, birds, and wildlife, and/or
5. Offer recreational and cultural benefits.