

## Camp Wihakowi Dam Removal

The dam at Camp Wihakowi in Northfield, Vermont was constructed in the 1920s. Its purpose was to block Bull Run River and create a small pond area for the campers to swim. Over the years the camp's buildings have been revamped and renovated and are now being run as a retreat called Woods Lodge. However, the dam was drained in the 1970s and was no longer maintained. Over the years it had been damaged by major storms, and by the time the removal was being considered the structure was falling apart.



*Wihakowi Dam Before Removal*

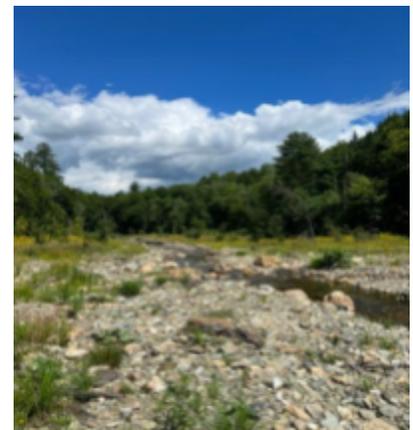
Once a dam starts to crumble it is important to take action. The dam could gradually fail or fail suddenly during a storm event. If it were to do so, it would quickly release a high volume and velocity of water downstream. Not only will water be transported but so will 100 years' worth, or roughly 8 feet, of sediment build up. If that large amount of sediment were to flow downstream it would once again drastically alter the hydrology, ecology and overall dynamics of the stream.

The creation of the dam changed the stream's dynamic. [\*Living in Harmony with Streams: A Citizen's Handbook to How Streams Work\*](#) states, "Because [dams] prevent larger sediments from moving down the channel, the released water carries less sediment than the stream can handle. This water has excess energy and is referred to as 'sediment hungry'". Sediment hungry water will then accumulate more sediment from the section below the dam, resulting in scouring of the stream. Along with issues regarding sediment, dams alter the life cycle patterns and movement of many wildlife species. Brook Trout are a common species found both upstream and downstream of Bull Run River from the dam. The dam blocks the movement of these fish, and many others, to spawning habitats, cooler upstream waters, and food. Removing this dam reconnected 26 miles of stream habitat.

The process of removing the dam was not an easy one. More than 15,000 dump truck loads of sediment were removed from the dam area and upstream. Not only was the goal to remove the dam, but also remove invasive species (i.e., Japanese Knotweed, Honeysuckle) and promote native vegetation in the riparian zone. An amazing 790 trees of various species were planted, and a meadow seed mixture of various perennials were spread around the area as well.



*Volunteers Helping with Tree Planting*



*Camp Wihakowi, Summer 2022*

Great thanks to Lisa and Jonathan Burr who own the property. Their wanting to preserve its beauty not only benefited themselves, but many others downstream, upstream and living in the stream.

Thanks to all those who made this happen:

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*The Burrs at the Dam Before Removal*

Other Parties; Town of Northfield, Disposal Site landowners (Dan and Ann Sivori), Regulators (ACOE, SHPO, Dam Safety, Act 250, DEC Wetlands, VFWD, DEC Stormwater)

Contractors; SLR, 106 Associates, Tico Wolff, Hilltop Construction, FluidState Consulting, Maja Design

Plant Providers; Trombly's Greenhouse, Vermont Wetland Plant Supply, Intervale Conservation Nursery

Tree-planting Volunteers; Cabot Creamery, ANR, National Life Group, Watersheds United Group, Friends of the Winooski River members, and all others who joined.