

A landowner's guide to the Little Calfpasture River

From its headwaters in Great North Mountain to its confluence with the Maury River, the Little Calfpasture River a [beautiful river](#). Goshen Pass is located just below the confluence of the Calfpasture and Little Calfpasture, forming the Maury River. This 5 mile reach offers boaters a chance to paddle Class 3-4 whitewater, while calmer pools downstream are widely used for swimming in the summer. The Pass is a treasure to Rockbridge County residents and draws visitors from surrounding counties as well. Despite its beauty, biological monitoring has shown that the Little Calfpasture is not supporting a healthy and diverse population of aquatic life. A study of the river completed by the VA Department of Environmental Quality in 2009 revealed that excessive amounts of sediment was the most likely culprit. The primary source of sediment was identified as Lake Merriweather and the Goshen Dam. During the fall and winter months, the lake is drawn down for maintenance and flood control, leaving acres of mudflats exposed and thus highly susceptible to erosion. Eroded sediment is suspended in the water column and released downstream through the dam. In addition, runoff of sediment from pasture and cropland, and livestock access to the river upstream of the lake are also contributing to the problem. This plan has been developed in order to provide a [road map](#) to address these issues, working closely with landowners in the watersheds. A series of actions has been identified that will lead to restoration of the river. Examples include: excluding livestock from streams, implementing rotational grazing, altering the lake drawdown schedule and depth, lake shoreline stabilization, and targeted excavation of mudflats. It is expected to take about [ten years](#) to remove the river from the Commonwealth's impaired waters list.

Many of the actions included in this plan have the potential to not only benefit water quality in the streams, but also offer [economic gains](#) to landowners who implement them. These may include reduced veterinary bills for farmers with livestock, reduced lake maintenance costs, and an increase in opportunities for recreational use of Lake Merriweather. However, the cost of some of these actions is considerable. The estimated cost to remove the river from the impaired waters list is about \$4.5M. The good news is that a large portion of this money would be returned to the local economy through the use of local contractors to construct fences, install wells and plant trees and complete excavation projects at Lake Merriweather. [Outreach is critical](#) to increasing landowner adoption of these management practices



Corner Rapid, Goshen Pass on the Maury River

as well. It is estimated that one full time position will be needed in order to work with agricultural landowners and the National Capital Area Council of the Boy Scouts, who are the owners and operators of Lake Merriweather and the Goshen Dam. The Natural Bridge and Soil and Water Conservation District was identified as one organization that could house this position should funding be located. Outreach efforts could include field days on local farms to highlight best management practices, development of a display and brochures to be distributed at local events, and informational mailings and farm visits to landowners. In addition, support will be needed by the National Capital Area Council with respect to funding, design and implementation of lake management practices.

Successful implementation of this plan will depend on strong partnerships. Key partners include: the National Capital Area Council of the Boy Scouts, USDA Natural Resource Service, the Soil and Water Conservation Districts, and local landowners.

What is needed to restore the Little Calfpasture River?

The list of actions below is an estimate of what it would take to restore the biological community in the Little Calfpasture River. While the list is long and the extent of work needed is large, it is important to remember that if everyone makes small changes in their daily lives, it will make a **BIG** difference in the Little Calfpasture River.

Lake management practices needed:

- Reduce length of lake drawdown to 3 months during wet years and 4 months during dry years
- Reduce depth of lake drawdown to 8.2 feet during wet years and 6.1 feet during dry years
- Excavate 20 acres of exposed mudflats during drawdown
- 20 acres of annual vegetative stabilization of exposed mudflats
- Conduct clean ups at two illegal refuse dumping sites upstream of Lake Merriweather
- Stabilize emergency spillway and disposal area below dam (26.3 acres)



Photo: Jay Gilliam

Agricultural best management practices needed:

- 18.7 miles of livestock stream exclusion fence (includes length of fence on both sides of the stream)
- 3,057 acres of improved pasture management
- 81 acres of riparian (streamside) buffers
- 3,500 feet of streambank stabilization
- 10 acres of reforestation of highly erodible pasture
- 30 acres of cover crops (annual acreage)
- 19 acres of continuous no-till

For information on how you can help:

- Technical and financial assistance with agricultural best management practices
Natural Bridge Soil and Water Conservation District (Rockbridge County)
website: www.naturalbridgeswcd.com phone: (540)463-7124
Headwaters Soil and Water Conservation District (Augusta County)
website: www.headwatersswcd.org phone: (540)248-0148
- Information about water quality, citizen monitoring, and TMDL implementation
Virginia Department of Environmental Quality
website: www.deq.virginia.gov phone: (540)574-7850