

# Hoosic River Watershed Association

Dedicated to the Restoration, Conservation, and Enjoyment of the Hoosic

## **2024 Watershed Report Card**

#### Introduction

This report card on the water quality of the Hoosic River was prepared by Cole Ecological, Inc. for the Hoosic River Watershed Association (HooRWA), a private, non-profit 501(c)(3) organization dedicated to restoring, conserving, and promoting the enjoyment of the Hoosic River. As part of its mission, HooRWA conducts regular evaluations of river water quality to complement existing data from the Massachusetts Department of Environmental Protection (MA DEP) and the Vermont and New York Departments of Environmental Conservation (VT DEC and NYSDEC). These assessments provide valuable information for public education, water supply planning, recreational resource evaluation, and habitat protection across the watershed.

#### Evaluation of stream biological communities

Evaluating biological communities offers a practical and cost-effective method for assessing water quality. Attributes of stream biotic communities, such as the number of unique taxa, tolerance to pollutants, and similarity to a regional reference stream, provide valuable insights into overall ecological conditions in freshwaters. Among the biological communities assessed in freshwater streams, benthic macroinvertebrates (aquatic insects, crustaceans, snails, etc.) are particularly useful. These organisms are abundant in most streams, relatively simple and affordable to sample, and range in their sensitivity to various environmental stressors.

Benthic macroinvertebrates serve as reliable indicators of overall ecological condition, integrating the combined effects of pollutant discharges, sediment pollution, thermal pollution, and non-chemical habitat impacts. Accordingly, these communities can be used for determining a stream's overall water quality classification. In both New York and Massachusetts, water quality categories range from non-impacted and slightly impacted—considered supportive of aquatic life—to moderately and severely impacted, which indicate impaired conditions. This framework underscores the critical role of benthic macroinvertebrates in understanding and managing watershed health.

#### **Hoosic River Report Card**

This report card summarizes the 2024 stream biomonitoring results and provides a brief comparison of these results to previous data where applicable. 15 stations were sampled in 2024 following NYS DEC protocols for benthic macroinvertebrate collection and laboratory sample processing; 7 stations on the Hoosic mainstem, 1 on the North Branch Hoosic, 4 on the Green River, 1 on the West Branch Green River, and 2 on the Walloomsac River. 5 stations were also sampled in previous years, allowing for comparisons between 2024 and previous years' results. At 3 mainstem Hoosic River stations with multiple years of prior data collection, the 2024 BAP scores were within or above expected ranges, which suggests water quality remains similar across years. The 2024 sampling efforts consistently indicated that water quality conditions are non- to slightly impacted throughout the Hoosic River watershed. The following is a summary of water quality conditions based on the resident benthic macroinvertebrates collected at each station (see map).

Hoosic River Watershed Association membership supports the generation of these data. Please consider becoming a member of HooRWA to enable continued monitoring of the Watershed. For additional information regarding what you can do that to make a difference in the Hoosic Watershed, please visit: https://www.epa.gov/waterdata/hows-my-waterway

### Hoosic River Watershed Association

http://hoorwa.org/ P.O. Box 667 Williamstown, MA 01267 Phone: 413.458.2742 Email: office@hoorwa.org









Stream Name (Station, State) Water quality	2024 Stream Community Assessments
Hoosic River (HR63.30, MA) Slightly impacted	This station is located near Route 8S in Cheshire, MA, and downstream of the Harbor Rd. dam, under consideration for removal. Previous assessments conducted in this area by HooRWA between 2006 to 2023 indicated non or slightly impacted water quality, and BAP scores in 2024 indicated slightly impacted water quality.
Hoosic River (HR61.74, MA) Slightly impacted	This station is located downstream of the Grove St. Bridge, adjacent to the Old Stone Mill Center in Adams, MA. 2024 BAP scores indicated slightly impacted water quality.
Hoosic River (HR59.22, MA) Non-impacted	This station is located downstream of the Lime St. Bridge in Adams, MA, adjacent to the terminus of the Ashuwillticook Rail Trail. In 2024, BAP scores indicated non-impacted water quality.
Hoosic River (HR56.64, MA) Slightly impacted	This station is located downstream of the Hodges Cross Road (Route 8) bridge in North Adams, MA. Previous assessments in this area by HooRWA between 2006 to 2023 indicated non- to moderately impacted water quality. This station is located downstream from the Adams Sewage Treatment Plant which was built in 1971 and upgraded in 2005. BAP in 2024 indicated slightly impacted water quality.
Hoosic River (HR53.17, MA) Non-impacted	This station is located downstream of the flood chutes in North Adams, MA. In 2024, BAP scores indicated non-impacted water quality.
Hoosic River (HR46.97, MA) Non-impacted	This station is located just downstream of Lauren's Launch near Simonds Road in Williamstown, MA. The 2024 BAP scores indicated non-impacted water quality.
Hoosic River (HR42.56, VT) Slightly impacted	This station is located upstream of the Main Street bridge in Pownal, VT. Water quality in this area in 1984, 1985, and 1986 was moderately, moderately and slightly impacted, respectively. Previous HooRWA assessments conducted in this area between 2006 to 2023 ranged from non to slightly impacted. The 2024 assessment indicated slightly impacted water quality.
North Branch Hoosic River (NBH01.80, MA) Non-impacted	This station is located downstream of a small dam on the North Branch in North Adams, MA. Benthic macroinvertebrate sampling in 2024 indicated non-impacted water quality at this site.
Green River (GR09.07, MA) Non-impacted	This station is located upstream of Roys Road Bridge in New Ashford, MA, and 2024 benthic macroinvertebrate sampling indicated non-impacted water quality.
Green River (GR05.01, MA) Non-impacted	This station is located off of Green River Road (Rt. 43), upstream of "Sucker Hole" in Williamstown, MA. 2024 BAP scores indicated non-impacted water quality.
Green River (GR02.72, MA) Non-impacted	This station is located off of Green River Road (Rt. 43) in Williamstown, MA, and 2024 BAP scores indicated non-impacted water quality.
Green River (GR00.68, MA) Slightly impacted	This station is located just upstream from the Route 2 bridge in Williamstown, MA, adjacent to the East Lawn Cemetary. This 2024 assessment, as well as the HooRWA assessments conducted in this area in 2022 and 2023 and a MA DEP assessment conducted in 2007, determined water quality as slightly impacted.
West Branch Green River (WBG01.14, MA) Non-impacted	This station is located on the West Branch Green River off of Old Mill Road in Williamstown, MA, and 2024 BAP scores indicated non-impacted water quality.
Walloomsac River (WA14.40, VT) Non-impacted	This station is located upstream of the confluence with Roaring Branch in Bennington, VT, and in 2024, BAP scores indicated non-impacted water quality.
Walloomsac River (WA10.05, VT) Non-impacted	This station is located downstream of the Henry covered bridge in Bennington, VT. This area has been previously assessed by NYS DEC in 1984, 1985, 1991, and 2003. Water quality was assessed as slightly, slightly, non-, and non-impacted respectively. Previous HooRWA assessments in 2022 and 2023 indicated non-impacted conditions, and this 2024 assessment also indicated non-impacted water quality.
Summary	This study determined that 2024 water quality of the Hoosic River based on stream macroinvertebrate communities ranged from non- to slightly impacted. BAP scores in 2024 were similar to previous years at stations with prior sampling efforts (HR63.30, HR56.64, HR42.56, GR00.68, WA10.05), suggesting similar water quality conditions across years.