

Important Aquatic Habitats Summary



BioFinder 4.0 2023

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Important Aquatic Habitats and Species Assemblages

The Rivers and streams portion of the Important Aquatic Habitats and Species Assemblages are a set of river and stream reaches with known concentrations of rare species or high species diversity, or which are good examples of aquatic habitat conditions. Collectively, they are representative of the full range of stream sizes, gradients, and temperature conditions in Vermont. The Lakes and Ponds portion of the Important Aquatic Habitats and Species Assemblages are lakes and ponds with known concentrations of rare species, exceptional species diversity, or which are examples of high-quality aquatic habitat.

Why is it Important?

Rivers and streams are a fundamental component of an ecologically functional landscape, and provide essential habitat for aquatic species, including fish, amphibians, reptiles, invertebrates, and plants. Particular river and stream reaches make exceptional contributions to Vermont's biological diversity, because of their unique physical characteristics arising from geology or topography, or because they are good examples of aquatic habitats. These places support many species and are crucial parts of Surface Waters and Riparian Areas network, but they also depend on the successful functioning of the entire aquatic network.

Lakes and ponds are essential habitat for many of Vermont's aquatic species, including fish, amphibians, reptiles, invertebrates, and plants. Some lakes and ponds make exceptional contributions to Vermont's biological diversity, because of their unique physical characteristics arising from their water chemistry and physical setting, or because they support concentrations of rare or uncommon species. These lakes and ponds are crucial parts of Surface Waters and Riparian Areas network, but they also depend on the successful functioning of the entire aquatic network.

How was it made?

This dataset was first created in 2015 for use in BioFinder and Vermont Conservation Design and was not changed for the 2023 version.

River and stream reaches that are targeted as Important Aquatic Habitats and Species Assemblages were selected using professional judgement to include; Lake Champlain tributaries upstream to the fall line, Large coldwater streams, High elevation coldwater streams, Upper Connecticut River: supports burbot, round whitefish, and coldwater fish communities, Connecticut River tributaries that are part of important wetland complexes, & Reaches representing the range of physical

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conditions in aquatic features, as categorized by stream size, gradient, and temperature setting, providing a coarse filter for capturing the habitat and needs of many aquatic species including invertebrates and aquatic plants.

Lakes and ponds that are targeted as Important Aquatic Habitats and Species Assemblages were selected using professional judgement to include; Lake Champlain, Lakes and ponds supporting round whitefish and/or naturally reproducing lake trout, High elevation ponds, & Wild brook trout ponds.

All features included in the Important Aquatic Habitats and Species Assemblages are *Highest Priority*

To get more technical information about the Important Aquatic Habitats and Species Assemblages Component, see the [2023 Technical Abstract](#)