

EASTERN CONNECTICUT CONSERVATION DISTRICT, INC.

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Amos Lake and Avery Pond, Preston

CT2205-00-1-L3_01	Lyme)	East Lyme.	52.41	Information	Information
CT3002-02-1-L2_01	Amos Lake (Preston)	East of Rte 164, Preston.	112.42	Fully Supporting	Not Supporting
CT3002-04-1-L1_01	Avery Pond (Preston)	East of Rte 164, north of Rte 2, Preston.	45.62	Fully Supporting	Fully Supporting

What data supports that Amos Lake is non-supporting for recreation? The Last Green Valley Volunteer Water Quality Monitoring Program in partnership with the Amos Lake Association have been collecting water quality data from Amos Lake since 2013. The Amos Lake Beach Club assesses the lake for *E. coli*, although I don't believe that data has been shared with CT DEEP. I am not aware of any exceedances of *E. coli* at the beach club at the south end of the lake. The lake parameters for spring/summer nutrient concentrations, secchi depth and Chlorophyll A have been averaging in the mesotrophic range (data submitted to DEEP).

There is a concern focused on the spread of variable milfoil in Amos Lake. The milfoil may be consuming nutrients which in turn led to decreases in cyanobacteria concentrations in summer., There have been no reported cyanobacteria blooms in the lake in recent years. Since 2018, The Last Green Valley has been supporting the Amos Lake Association by using assessment techniques as outlined by the US EPA Cyanobacteria Monitoring Collaborative. Is the variable milfoil issue bumping up the status Amos Lake from mesotrophic to eutrophic? Recent evidence shows the original infestation has spread from near the boat launch to many different areas of the lake.

Avery Pond volunteers, in partnership with The Last Green Valley Volunteer water quality monitoring program has been participating in the EPA Cyanobacteria Monitoring Collaborative program in 2020 and 2021. Cyanobacteria blooms have been documented in the lake and reported to the CMC via the BloomWatch app, and water samples assessed for microcystin levels in a cyanobacteria film along the western shoreline of the lake. These values were just below the threshold for safe recreation. Previously, summer sampling analysis for TP, TN, secchi depth and Chlorophyll A data was collected and submitted to CT DEEP. These data suggest the lake trophic status parameters in Avery Pond to be crossing into the Highly Eutrophic range in 2014 and 2015. We believe additional monitoring in Avery Pond by CT DEEP is warranted. See image in Figure 1 below for representation of a cyanobacteria bloom recorded on September 30, 2022.

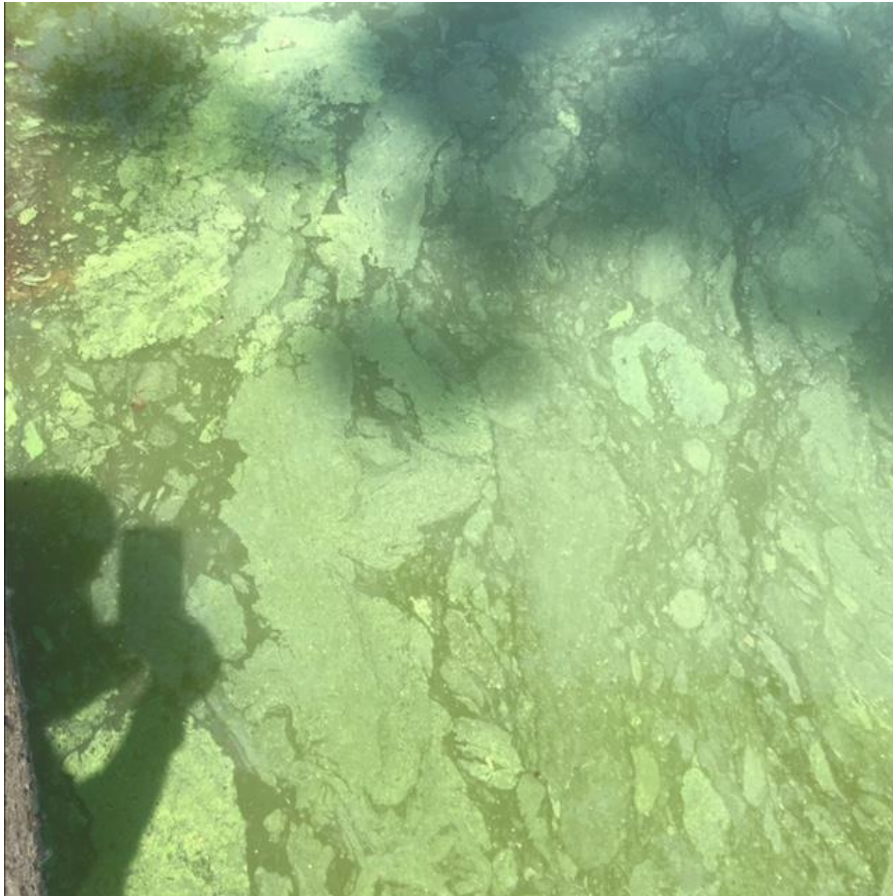


Figure 1 Close up image of a cyanobacteria bloom captured on the western shore of Avery Pond on September 30, 2021.

Bungee Brook and Still River, Woodstock

CT3200-01	Bungee Brook (Chaplin)-01	Chaplin, Chaplin	2.00	Supporting	Not Assessed
CT3201-00_01	Bungee Brook (Woodstock)-01	Mouth confluence Still River, Eastford, US to Bungee Lake (Witches Woods Lake) OUTLET dam (just US Route 198 crossing), Woodstock. INLET Lake Bungee just DS of Bungee Hill Road	5.56	Fully Supporting	Not Supporting
CT3202-00_01	Still River (Eastford)-01	Mouth confluence Bigelow Brook, above Natchaug River (on east side of Route 198 (Chaplin Road)), US to confluence Bungee Brook (just US of Brayman Hollow Road (Route 244) crossing), Eastford.	2.57	Fully Supporting	Not Supporting

Bungee Brook and Still River were assessed by The Last Green Valley Water Quality Monitoring Program volunteers in 2020 and the data submitted to CT DEEP was used to support the assessment that these rivers/streams are not meeting the recreational water quality standards. The above listings clipped from the draft 2022 IWQR report show the data was used to update the Recreation status of these two streams. However, these two streams are not listed in 2022 IWQR Reconciliation List of Impaired Waters (Delistings and Listings) as a new listing. The lowest number in that table is 4300 suggesting that maybe part of the table was omitted in the draft report that was posted online.

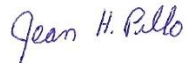
Indian Town Brook, Preston – altered flow regime

Prior to submitting evidence in a Town of Preston Inland Wetlands Commission public hearing regarding a development proposal, ECCD contacted the CT DEEP Fisheries staff for any recommendations regarding any potential environmental impacts from developing a campground

on the shore of Avery Pond and Indiantown Brook. Kevin Job, a Fisheries Biologist from CT DEEP expressed concerns over water withdrawals and use by the project. He reported that areas of the Indian Town Brook on the downstream side of Route 2 had been severely taxed by water withdrawals from existing uses. In 2020, water withdrawals for an agricultural operation “pumped the stream dry and prevented the emigration of juveniles [alewife] from late summer to well into the fall.” He suggested that if any additional surface or groundwater withdrawals from the stratified drift deposit associated with Avery Pond are planned, they must be carefully evaluated for conflicts with existing uses and with fish passage in late summer. ECCD has been working in partnership with CT DEEP Fisheries to restore the annual Alewife migration to their historic breeding grounds in Amos Lake. Pre-spawned alewife had been released in both Amos Lake and Avery Pond by CT DEEP Fisheries staff in advance of a planned fishway over the Shewville Dam in Ledyard. The success of the late summer migration of the juvenile fish down Indian Town Brook on their way to the Atlantic Ocean was impacted by the low flow in the brook at the most critical time of that downstream migration. Further investigation of this steam segment is warranted.

These comments were prepared on behalf of the Eastern Connecticut Conservation District by Jean Pillo, Watershed Conservation Project Manager and The Last Green Valley Volunteer Water Quality Monitoring Program Coordinator.

Yours respectfully,

A handwritten signature in cursive script that reads "Jean H. Pillo".

Jean Pillo, Watershed Conservation Project Manager
Eastern Connecticut Conservation District