

## Connecticut River Basin Fishway Passage Counts

Connecticut River Migratory Fish Restoration Cooperative  
 Vermont Department of Fish and Wildlife, New Hampshire Fish and Game Department,  
 Massachusetts Division of Fisheries and Wildlife, Connecticut Department of Energy and Environmental Protection  
 U. S. Fish and Wildlife Service and National Oceanic and Atmospheric Administration Fisheries

8/2/2024



This report is compiled by the U.S. Fish and Wildlife Service, CT River Fish and Wildlife Conservation Office using fishway count data provided by several agencies as well as power companies and is dependent in most cases on the review of video counts, that have an associated time lag for updates. Please visit <http://www.fws.gov/r5crc> for more information.

Fishway, River - State	Data as of:	American Shad	Alewife	Blueback Herring	Atlantic Salmon	American Eel	Sea Lamprey	Striped Bass	Gizzard Shad	Shortnose Sturgeon	Other/ comment
Rogers Lake-CT	5/28		13,545								Mary Stuebe passed
Mary Steube, Mill-CT	5/28		27,415								
Mill Pond, Falls -CT	5/28		500								
Moulson Pond, Eightmile-CT	5/28		6	1			30				
Leesville, Salmon-CT	open						453				SL based nest counts
StanChem, Mattabesset-CT	final		642	4							
Rainbow, Farmington-CT	closed										will not be operated
W. Springfield, Westfield-MA	6/21	4,516					2,801				582 white suckers
Holyoke, Connecticut-MA	7/12	433,009		723			53,616	442	73	23	
Easthampton, Manhan-MA	open										passing sea lamprey
**Turners Falls-Gatehouse, Connecticut-MA	7/15	70,908					21,177				partial count data; 5/23 to 5/29
Vernon, Connecticut-VT	5/26	24,755					3,017				5/11-5/14 data issues
Bellows Falls, Connecticut-VT	open										passing sea lamprey
<i>Total to basin, only first barrier counts</i>		437,525	28,063	728	0	0	56,900	442	73	23	
<i>Last year totals</i>		279,840	8,026	2,228	0	11,039 <sup>A</sup>	22,681	116	60	64	

\* CTDEEP will not operate the Rainbow Fish Ladder due its documented poor performance and the lack of suitable downstream fish passage protection measures at the Stanley Works owned dam/project. Fish passage at this project has been the responsibility of the CTDEEP, due to FERC legal rulings.

\*\* Spillway Fish Ladder - ; Cabot Station Ladder, base of canal, . Note that at Turners Falls Project (Dam/Canal) fish must use one of these two fishways first before having the opportunity to pass the final required ladder (Gatehouse).

A - total collected from 3 eel ramp/traps at Holyoke in 2023

There has been substantial work done by the many state agency and power company biologist to continue to process digital image fishway counts at many facilities since the last report at the end of June. Some notable updates include the still provisional American Shad passage count from Steve Leach at the Gatehouse Ladder. The current number represents ~16% of the total passed at Holyoke which would make this an exceptional passage season as that value in the past decade has commonly been in the ~10% range. We have also seen the commonly observed increase in Shortnose Sturgeon passage at Holyoke during the summer. We have experienced climate change driven conditions in July - intense, high precipitation events that have spiked the river discharge in mid July, coupled with extreme heat. The spill events at Turners Falls Dam from these events resulted in two Shortnose Sturgeon becoming stranded in pools below the dam, as the fish had moved up to this barrier. Both fish were reported to the agencies and FirstLight Power (FLP), both fish were removed, PIT tagged, and released thanks to Conte Lab's Micah Keiffer and Steve Leach with other FLP staff. The following page also includes a table that represents a lot of work to obtain spawning history results for Blueback Herring. Thanks to our two interns and Jacke Stephens - this year's results are notable as a deviation from typical virgin rates (often 80%) much more on these assessment data and results in the future (much more work to go with aging of these fish via otoliths).

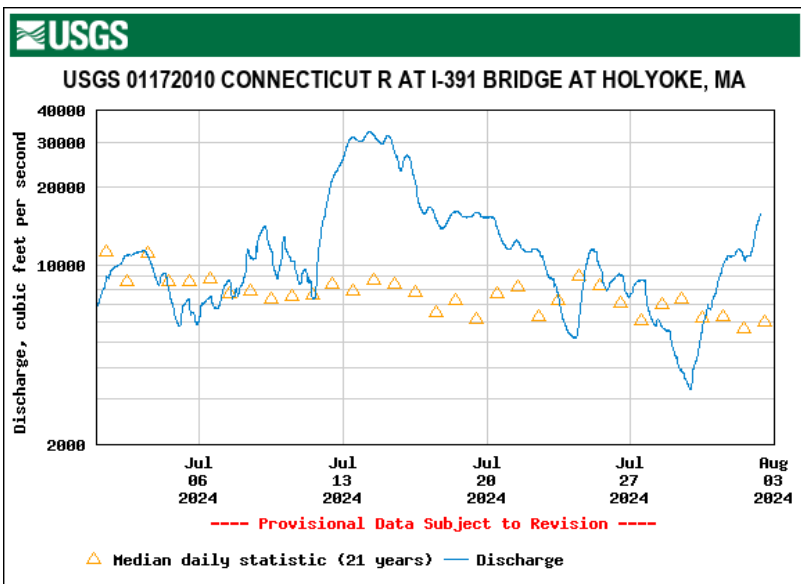


Figure 1. Daily river discharge at Holyoke, MA, 7/1 to 8/3.

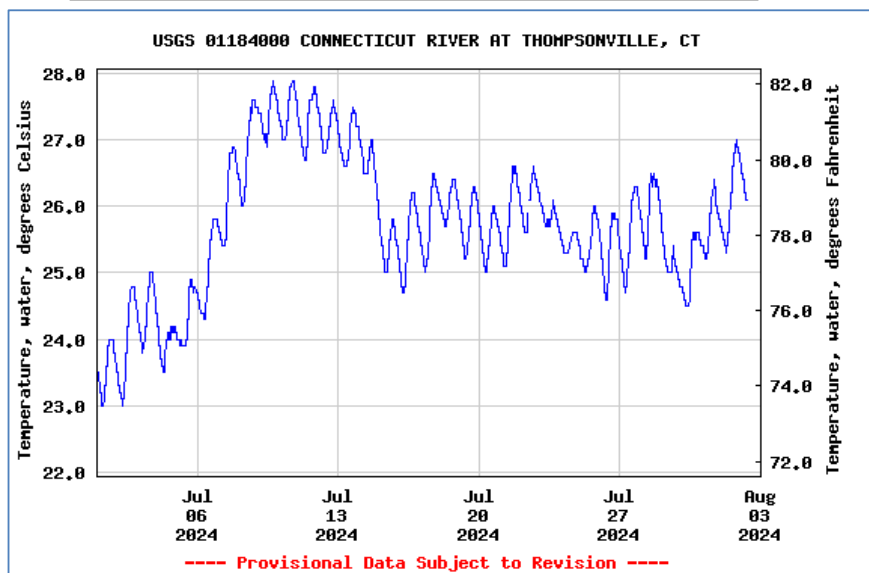


Figure 2. USGS water temp data for Thompsonville, CT, 7/1 to 8/3.

Table 1. Spawning history for 674 Blueback Herring subsampled April - June 2024 among 4 assessment sites. Independent and consensus read approach per USFWS developed procedures manual (Jackie Stephens).

Blueback Herring Spawning Marks - 2024									
Sex	0	%	1	%	2	%	3	%	
F	173	63.1	75	27.4	19	6.9	7	2.6	274
M	263	65.8	106	26.5	27	6.8	4	1.0	400
	436	64.7	181	26.9	46	6.8	11	1.6	674