

Select species and fishway annual counts and shad population (estimated CTDEEP) 1967 to current

Year	Atlantic Salmon	American Shad	American Shad	Blueback Herring	Sea Lamprey	Shortnose Sturgeon
	(All facilities)	(population estimate)	(Holyoke only)	(Holyoke only)	(Holyoke only)	(Holyoke only)
1967	0	637,000	19,484	356	46	
1968	0	410,000	24,693	(not counted)	(not counted)	
1969	0	591,000	45,349	10,000	(not counted)	
1970	0	488,000	65,751	188	(not counted)	
1971	0	583,000	52,719	302	(not counted)	
1972	0	485,000	25,572	188	(not counted)	
1973	0	613,000	25,104	302	(not counted)	
1974	1	372,000	53,147	504	(not counted)	
1975	3	598,000	110,000	1,600	23,000	5
1976	2	740,000	346,725	4,745	32,050	3
1977	7	323,000	202,997	32,492	51,808	0
1978	90	710,670	145,136	40,765	45,103	1
1979	58	632,820	255,753	39,895	30,872	3
1980	175	759,420	376,066	197,950	34,312	0
1981	529	909,270	377,124	419,734	53,105	4
1982	90	939,330	294,842	586,808	25,684	4
1983	39	1,574,000	528,185	454,247	29,263	4
1984	92	1,231,000	496,884	482,954	21,619	10
1985	310	728,000	487,158	632,255	40,301	6
1986	318	748,000	352,122	517,521	20,000	13
1987	353	588,000	276,835	358,607	22,553	3
1988	95	648,000	294,158	343,361	15,911	4
1989	109	979,000	354,180	286,537	15,343	4
1990	263	816,000	363,725	392,157	22,421	5
1991	203	1,196,000	523,153	412,344	40,904	0
1992	490	1,628,000	721,764	312,863	27,567	4
1993	198	749,000	340,431	103,465	22,786	6
1994	326	326,000	181,038	31,843	29,958	1
1995	188	304,000	190,295	112,124	15,095	1
1996	260	667,000	276,289	55,011	44,917	16
1997	199	659,000	299,448	63,945	32,377	0
1998	300	651,000	315,810	11,146	97,277	11
1999	154	475,000	193,780	2,699	20,217	1
2000	77	427,000	225,042	10,587	21,036	0
2001	40	773,000	273,206	10,602	49,306	4
2002	44	687,000	374,534	1,939	74,979	0
2003	43	527,000	286,814	1,392	53,030	0
2004	69	351,000	191,555	151	59,461	0
2005	186	226,000	116,511	534	28,134	1
2006	214	294,667	154,745	21	17,636	1
2007	141	243,755	158,807	75	39,933	5
2008	141	276,864	153,109	84	57,049	3
2009	75	321,338	160,649	39	18,996	0
2010	51	279,000	164,439	76	39,782	0
2011	111	387,000	244,177	138	19,136	3
2012	54	778,462	490,431	39	14,089	5
2013	92	623,757	392,967	976	22,092	6
2014	32	588,105	370,506	647	22,136	3
2015	22	687,760	412,656	87	22,245	1
2016	5	643,217	385,930	137	35,249	*79
2017	20		537,249	875	21,526	85
2018	2		275,232	1,060	10,238	91
Sums	6,271		13,984,276	5,937,307	1,430,304	

*Unique fish

American Shad upstream passage, select fishway counts

	Holyoke Dam Passed	Turners Falls Dam Passed	Vernon Dam Passed	Farmington River, Rainbow Dam Passed	Westfield River, W. Springfield Dam Passed
1955	4,900				
1956	7,700				
1957	8,800				
1958	5,700				
1959	15,000				
1960	15,000				
1961	23,000				
1962	21,000				
1963	31,000				
1964	35,000				
1965	34,000				
1966	16,000				
1967	19,000				
1968	25,000				
1969	45,000				
1970	66,000				
1971	53,000				
1972	26,000				
1973	25,000				
1974	53,000				
1975	111,000				
1976*	346,725			1,189	
1977	202,997			804	
1978	145,136			1,053	
1979	255,753			514	
1980	376,066	298		480	
1981	377,124	200	97	167	
1982	294,842	11	9	737	
1983	528,185	12,705	2,597	1,565	
1984	496,884	4,333	335	2,289	
1985	487,158	3,855	833	1,042	
1986	352,122	17,858	982	1,206	
1987	276,835	18,959	3,459	792	
1988	294,158	15,787	1,370	378	
1989	354,180	9,511	2,953	215	
1990	363,725	27,908	10,894	432	
1991	523,153	54,656	37,197	591	
1992	721,764	60,089	31,155	793	
1993	340,431	10,221	3,652	460	
1994	181,038	3,729	2,681	250	
1995	190,295	18,369	15,771	246	
1996	276,289	16,192	18,844	668	1,413
1997	299,448	9,216	7,384	421	1,012
1998	315,810	10,527	7,289	262	2,292
1999	193,780	6,751	5,097	70	2,668
2000	225,042	2,590	1,548	283	3,558
2001	273,206	1,540	1,744	153	4,720

Year	Holyoke Dam Passed	Turners Falls Dam Passed	Vernon Dam Passed	Farmington River, Rainbow Dam Passed	Westfield River, W. Springfield Dam Passed
2002	374,534	2,870	356	110	2,762
2003	286,814		268	76	1,957
2004	191,555	2,192	653	123	913
2005	116,511	1,581	167	8	1,237
2006	154,745	1,810	133	73	1,534
2007	158,807	2,248	65	156	4,497
2008	153,109	4,000	271	89	3,212
2009	160,649	3,813	16	35	1,395
2010	164,439	16,422	290	548	3,449
2011	244,177	16,798	46	267	5,029
2012	490,431	26,727	10,386	174	10,300
2013	392,967	35,293	18,220	84	4,900
2014	370,506	39,914	27,706	536	4,787
2015	412,656	58,079	39,771	316	3,383
2016	385,930	54,069	35,513	151	5,940
2017	536,670	48,727	28,682	613	6,000
2018	275,232	43,146	31,725	342	5,752
Mean	315,393	17,447	8,462	483	3,596
SD	131,877	18,514	12,114	461	2,211
Low	116,511	11	9	8	913
High	721,764	60,089	39,771	2,289	10,300

**Holyoke shad passage summary statistics only for the period 1976-2018*

NOTE – Fishway facilities have in many cases been repeatedly modified in design and operations to improve performance. In addition, fishway effectiveness for passage is altered dramatically by variable river flow conditions (within and among years) and power operation, which also has changed over time. As a consequence, caution in interpreting changes in these counts over time and among facilities is required. One example is the identification and correction to a fishway issue at Vernon Dam prior to the 2012 season, which as the data shows dramatically altered annual shad passage.