An underwater photograph showing a school of fish, likely river herring, swimming in a body of water. The water is filled with numerous small, light-colored particles, possibly plankton or food, which are illuminated by light filtering through the water. The fish are silvery and elongated, with some showing darker spots on their sides. The overall scene is dynamic and captures a natural aquatic environment.

Diadromous Fish in Massachusetts 2025 updates

River Herring Network – Lowell, October 23, 2025

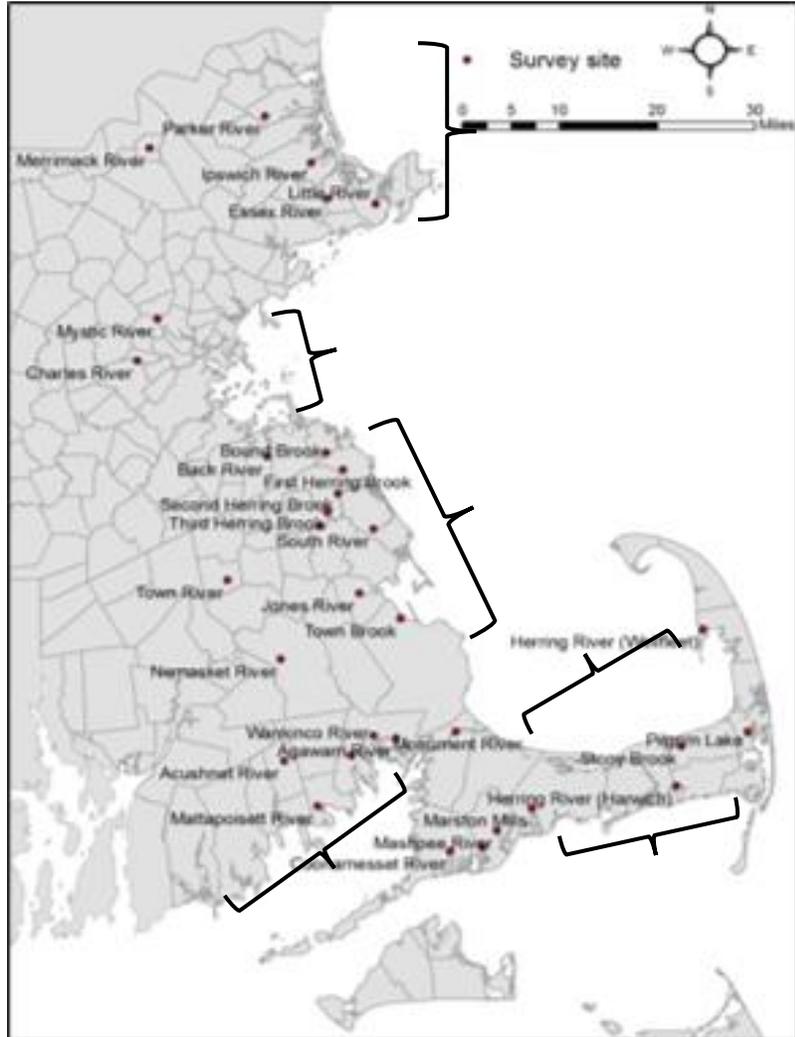
Joe Holbeche – MA Division of Marine Fisheries

Diadromous Fish Monitoring and Restoration updates - 2025

- River Herring Spawning run counts
- North Shore Region
- Diadromous Fish Restoration projects



River Herring counting locations



- 45 rivers with river herring counting
- 21 with 'census' level quality
- 8 stations sample biological data

Electronic and Video Counter Stations in Massachusetts

Smith Root Electronic

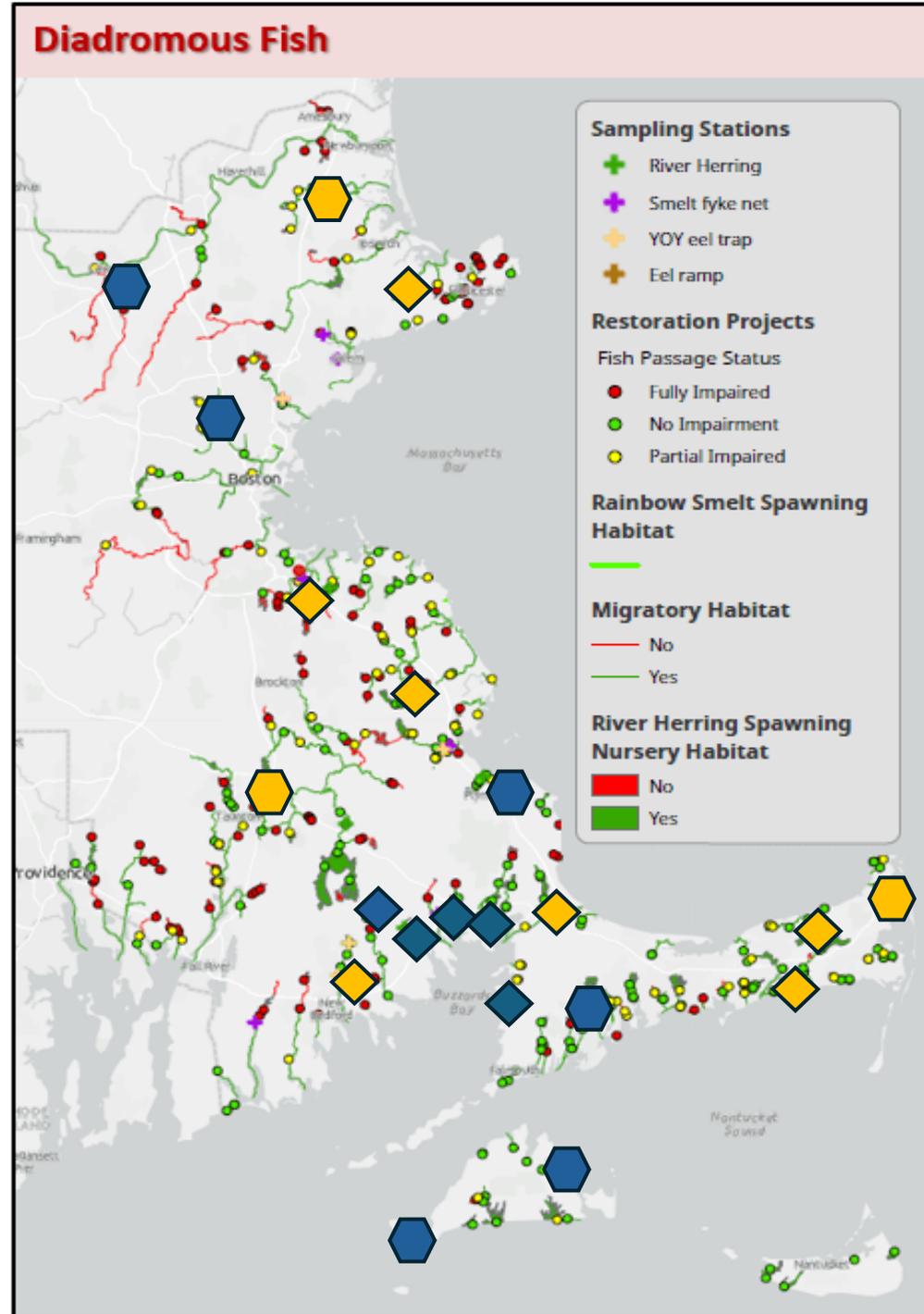
DMF  7 multi-tube counters

Buzzards Bay  5 single tube counters

Video

DMF  3 video stations

Local Partners  6 video stations





Massachusetts River Herring Run Counts Summary Results (2025)

Stream	Drainage	Method	2025 Count	2024 Count	Status
Connecticut	Connecticut	Fish Lift	144	723	Decrease
Merrimack	Merrimack	Lift/Video	35,933	35,312	Increase
Shawsheen	Merrimack	Visual	429	1,042	Decrease
Concord	Merrimack	Video	0	0	No Change
Parker	North Coastal	Video	27,741(P)	86,330	TBD
Little	North Coastal	Visual	79	799	Decrease
Ipswich	North Coastal	Visual	317	498	Decrease
Essex	North Coastal	Visual	10,541	36,682	Decrease
Horn Pond (Aberjona R.)	Boston Harbor	Visual	6,948	37,469	Decrease
Mystic	Boston Harbor	Visual	815,926	649,688	Time Series High
Charles	Boston Harbor	Visual	297,315	227,560	Increase
Back	Boston Harbor	Counter	280069(P)	245,034	Increase
Third Herring Brook	South Coastal	Visual	410	N/A	N/A
Herring Brook (Pembroke)	South Coastal	Visual	200,679	201,331	Decrease
Herring Brook (Pembroke)	South Coastal	Counter	478,000(P)	444,075	Increase
South	South Coastal	Visual	5,844	158	Increase
Furnace Brook	South Coastal	Visual	86	239	Decrease
Town Brook	South Coastal	Visual	119,820	202,851	Decrease
Beaver Dam Brook	South Coastal	Visual	126	1,785	Decrease
Monument	South Coastal	Counter	343,008 (P)	267,451	Increase
Mill Creek (Sandwich)	Cape Cod North	Visual	209	308	Decrease
Scargo Lake (Sesuit Creek)	Cape Cod North	Visual	1,140	2,904	Decrease
Bound Brook (Quivett Creek)	Cape Cod North	Visual	542	2,576	Decrease
Stony Brook	Cape Cod North	Visual	91,163	69,731	Increase
Herring Brook (Eatham)	Cape Cod North	Visual	1,551	2,857	Decrease
Herring (Eastham)	Cape Cod North	Visual	233	468	Decrease
Herring (Wellfleet)	Cape Cod North	Visual	8,559	19,781	Decrease
Herring (Harwich)	Cape Cod South	Counter	281,900 (P)	452,643	Decrease
Parkers	Cape Cod South	Visual	5,034	3,311	Increase



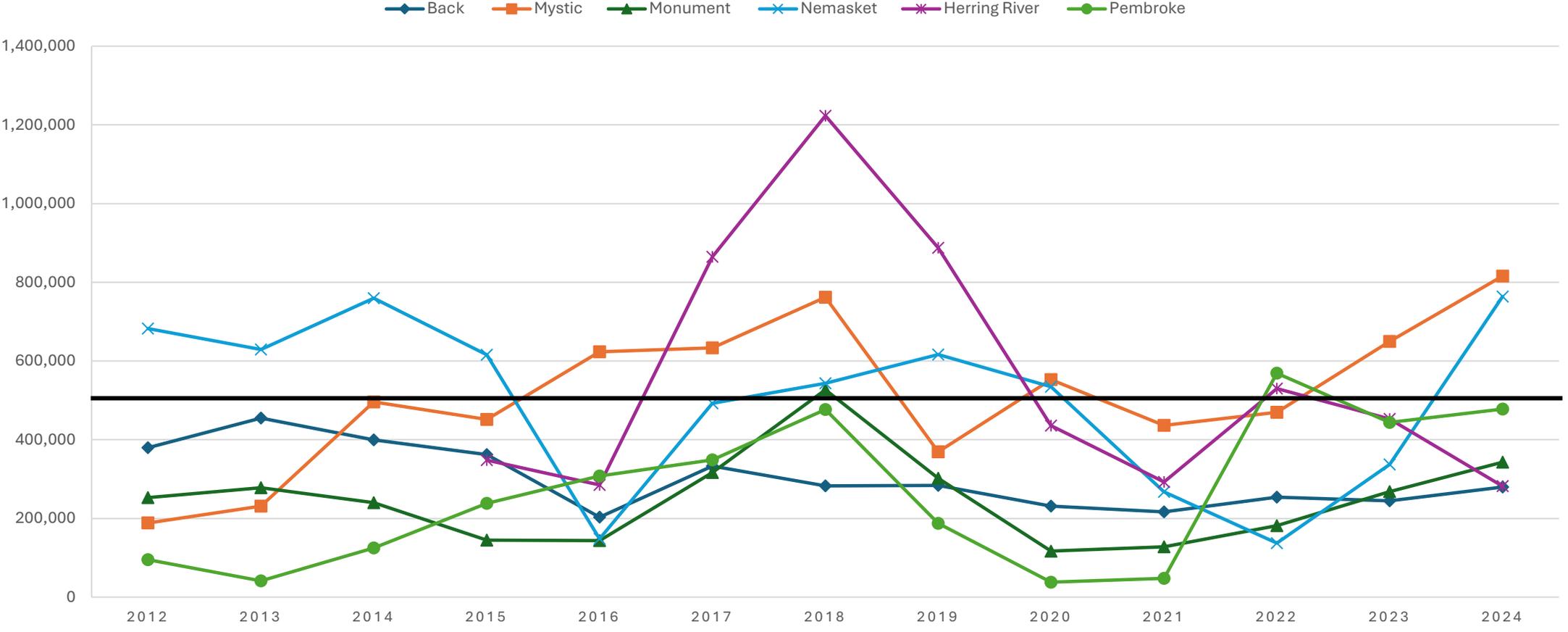
Massachusetts River Herring Run Counts Summary Results (2025)

Mill Creek (Yarmouth)	Cape Cod South	Visual	823	N/A	**
Red Lily Pond (Centerville)	Cape Cod South	Visual	17	52	Decrease
Marstons Mills (Mill)	Cape Cod South	Visual	63,161	42,121	Increase
Marstons Mills (Middle)	Cape Cod South	Visual	46,205	40,399	Increase
Mashpee	Cape Cod South	Visual	98,136	155,251	Decrease
Coonamessett	Cape Cod South	Visual	5,811	7,898	Decrease
Oyster Pond (Trunk)	Cape Cod South	Visual	26,095	57,398	Decrease
Herring Creek	Cape Cod South	Video	13,164	11,543	Increase
Pilgrim Lake	Cape Cod South	Visual	968	5,362	Decrease
Cedar Lake	Buzzards Bay	Counter	1,059	437	Increase
Agawam	Buzzards Bay	Counter	139,563	40,138	Time Series High
Wankinco	Buzzards Bay	Counter	28,851	8,029	Time Series High
Sippican (Hathaway)	Buzzards Bay	Counter	1,900	448	Time Series High
Sippican (Leonards)	Buzzards Bay	Counter	1,537	45	Time Series High
Mattapoissett	Buzzards Bay	Counter	4,254	9,353	Decrease
Acushnet	Buzzards Bay	Counter	7,480	7,002	Increase
Nemasket	Taunton	Visual	763,939	336,880	Increase
Mill River	Taunton	Video		17,370 (P)	TBD

** First season counting

P - Preliminary Results

Half-Million Club

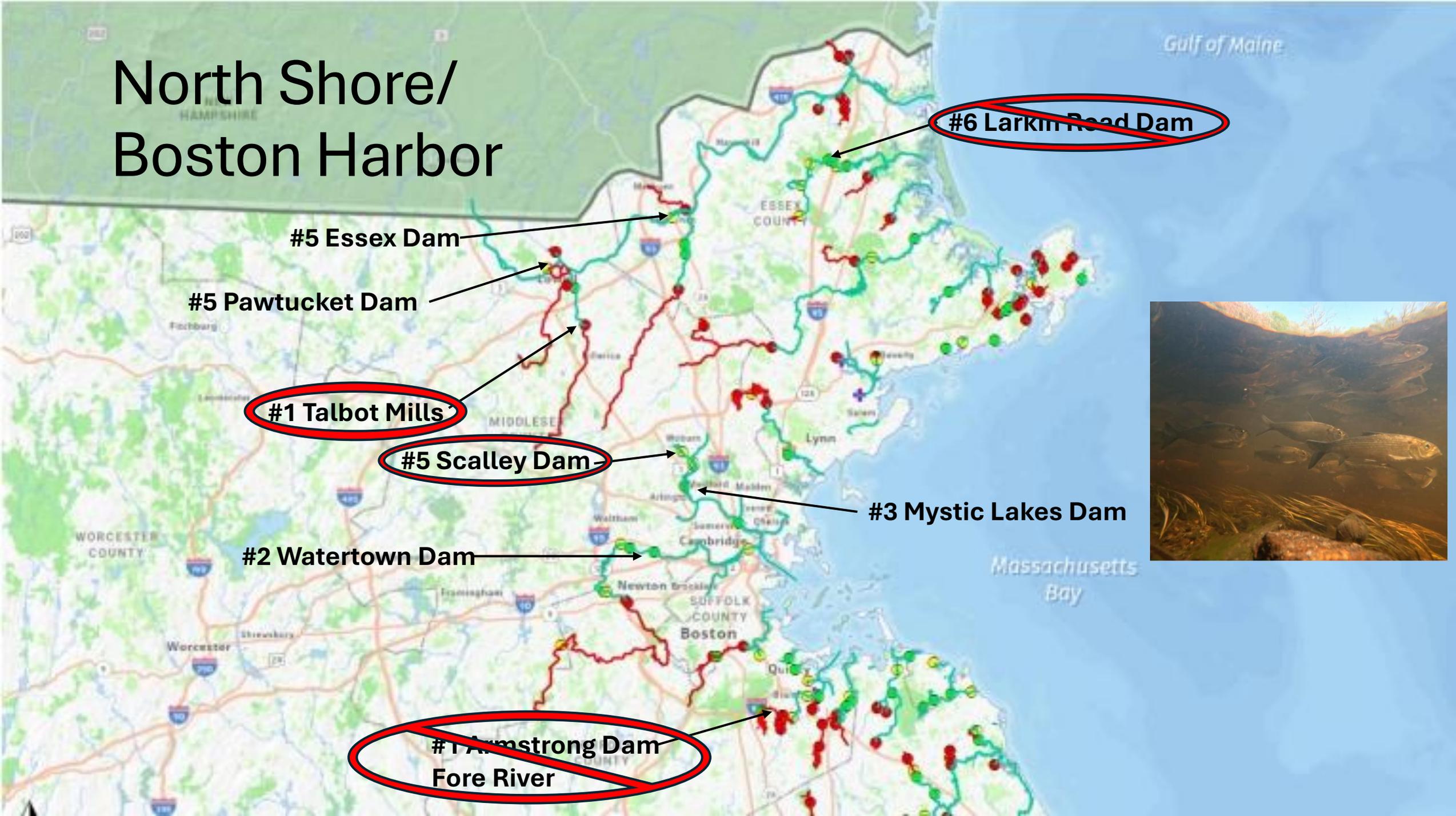


North Shore Region

- No Herring Wardens
- Beavers
- Priorities in progress
 - #1 Talbot Mills Dam – Concord River
 - #5 Scalley Dam – Woburn, Mystic River - NLF ladder coming soon
 - #5 Pawtucket dam – Lowell, Merrimack River – ongoing relicensing
 - #5 Essex dam – Lawrence, Merrimack River – ongoing relicensing
 - #6 Larkin Dam – Parker River – Removal ongoing
 - #6 Howlett Brook – Fish Ladder complete!
 - #10 Willowdale Dam – Ipswich River – Improved Passage ongoing



North Shore/ Boston Harbor



~~#6 Larkin Road Dam~~

#5 Essex Dam

#5 Pawtucket Dam

#1 Talbot Mills

#5 Scalley Dam

#3 Mystic Lakes Dam

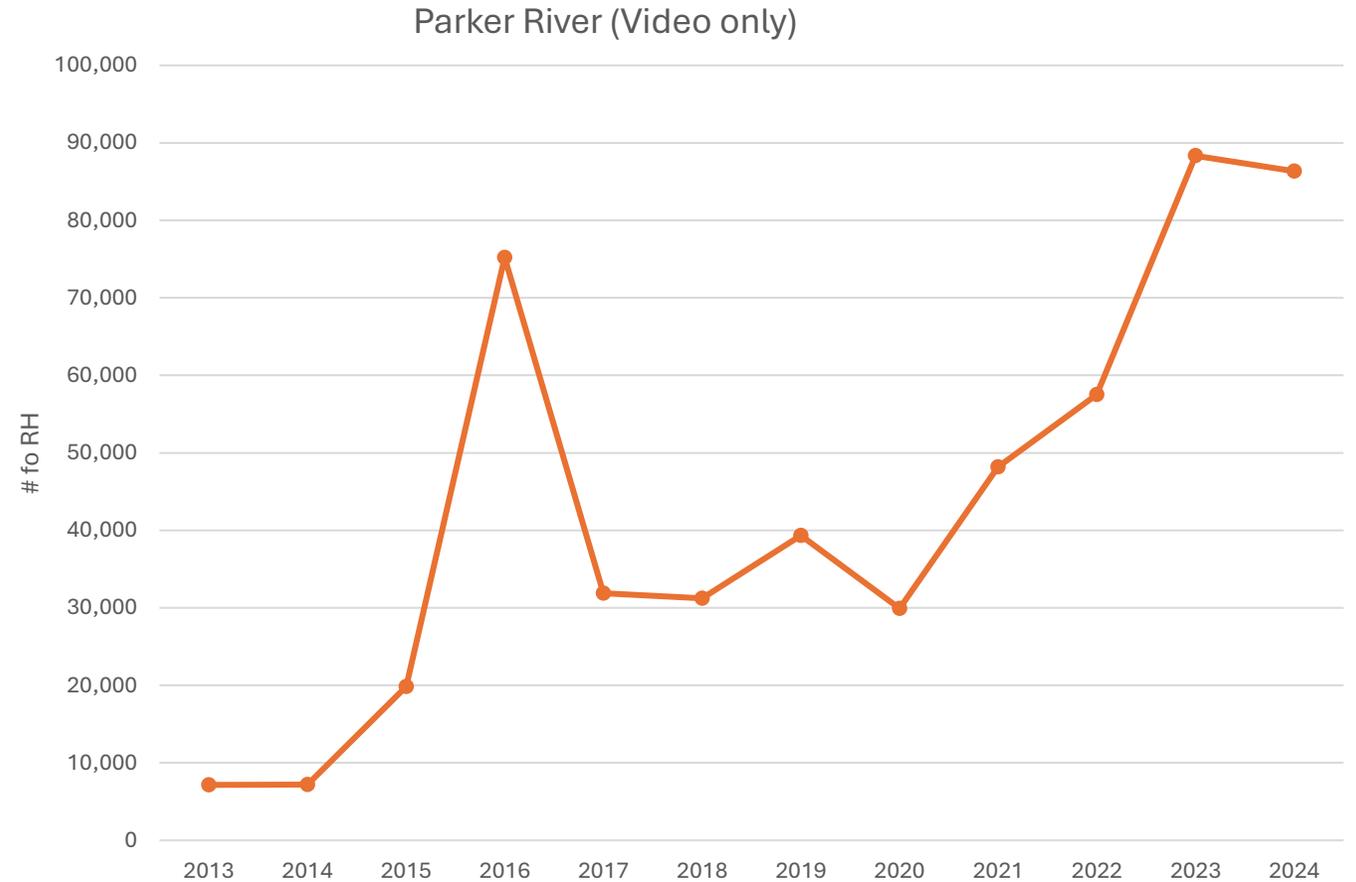
#2 Watertown Dam

~~#4 Armstrong Dam
Fore River~~



Parker River Watershed

- 6 dams with structural fishways – Down to 5!
- Larkin Dam removal underway
- Little to no River Herring make it to the spawning ponds in Pentucket (89 acres) and Rock ponds (57 acres)



Parker River Watershed



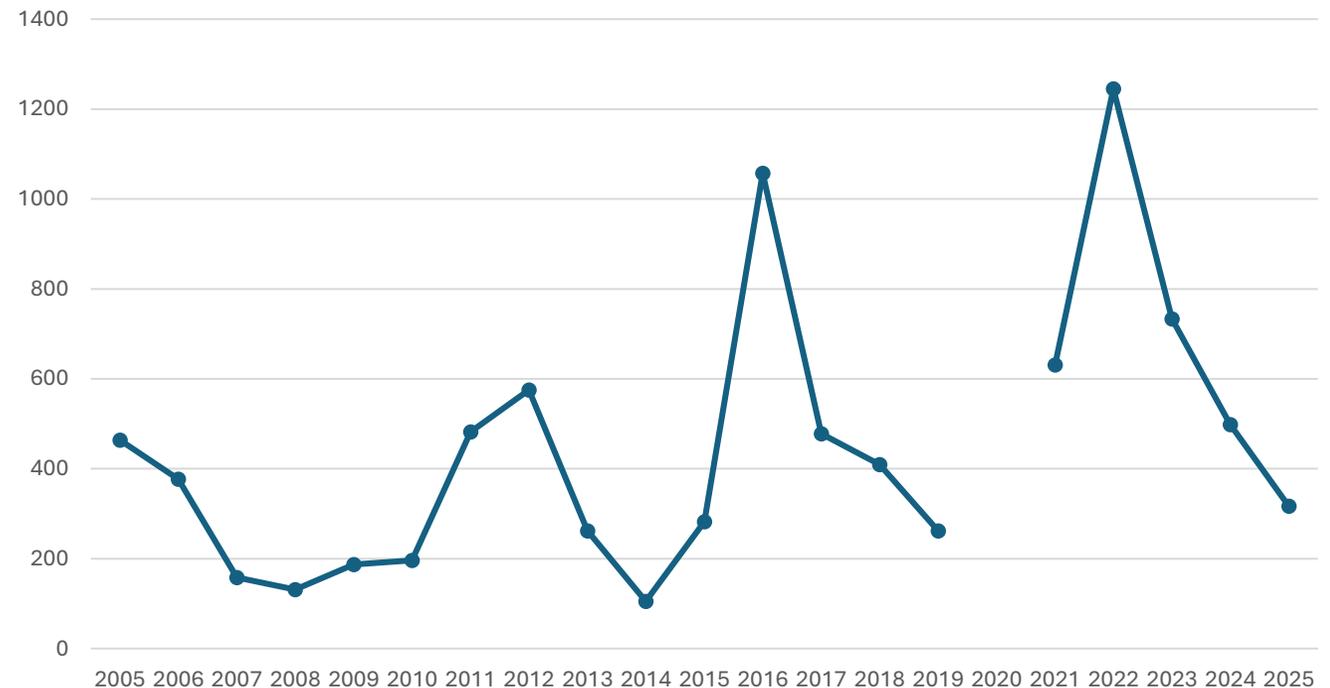
N
1:72,224
1 km
3000 ft

Ipswich River

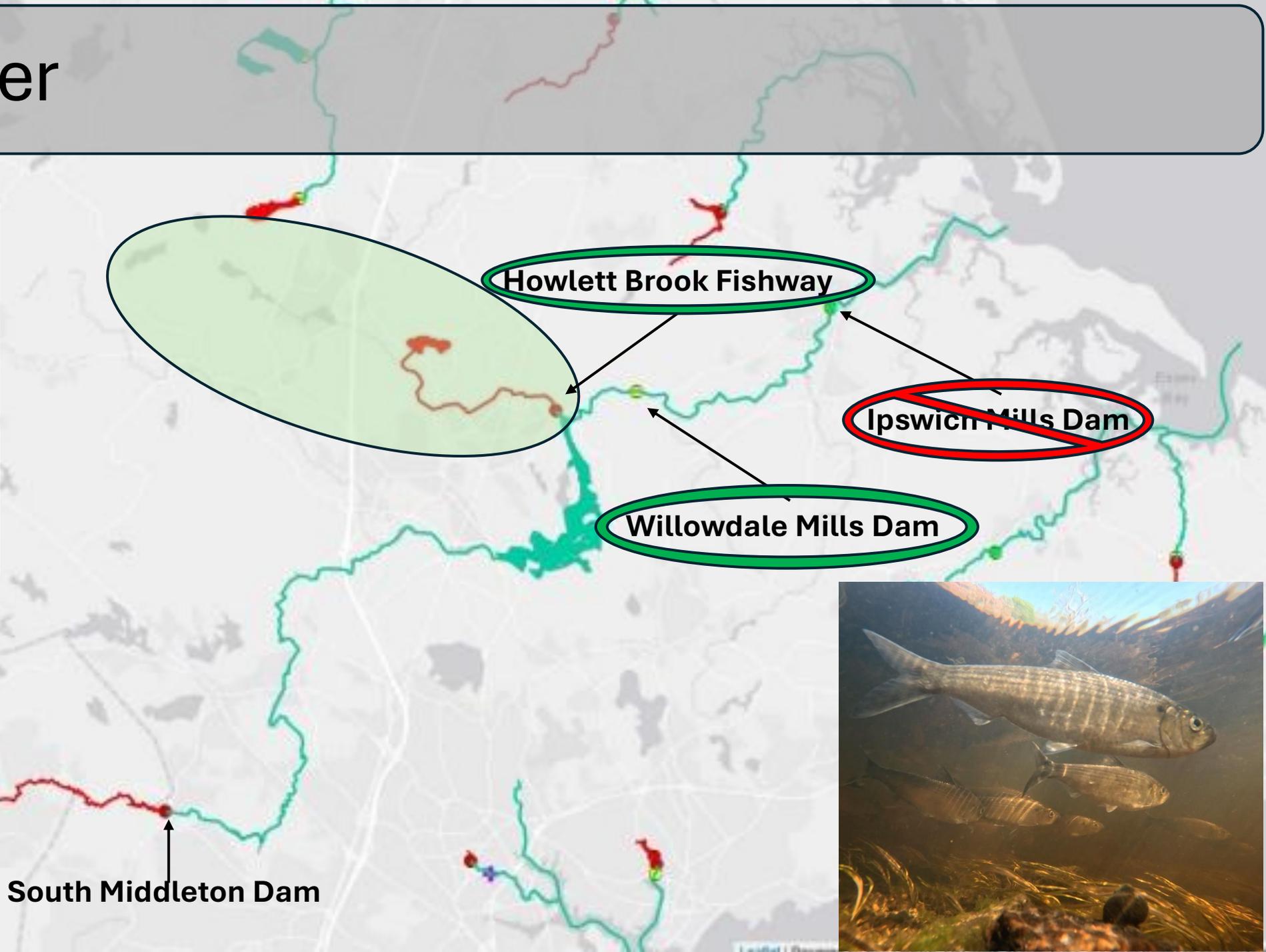
- 3 mainstem dams
- Ipswich mills dam
 - In the permitting and development phase for removal
- Willowdale Dam
 - In the permitting and development phase for a new improved fishway
- South Middleton dam (57 miles of upper watershed)
 - In the permitting and development phase for removal.
- Howlett Brook
 - Completed new fishway
- Many Culvert improvements



Ipswich River



Ipswich River



Howlett Brook Fish Ladder



Chebacco Lake watershed (Alewife Brook)

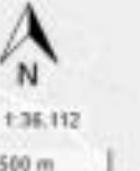
- No Dams! Still has problems
- Stream Maintenance plan submitted and accepted in 2024
- 2024 coordinated stream cleanup at Apple street.
 - Regional Priority #7



Chebacco Lake Watershed



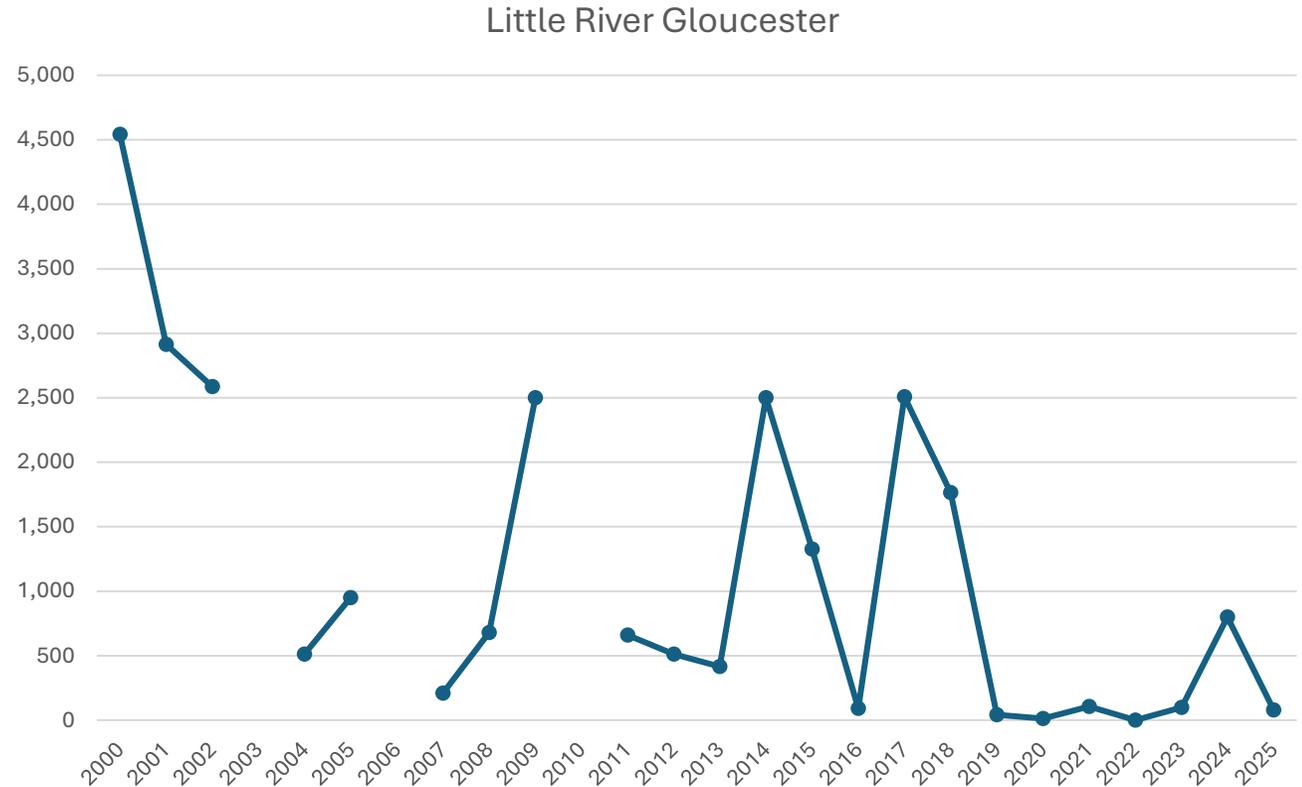
Apple Street elevation change



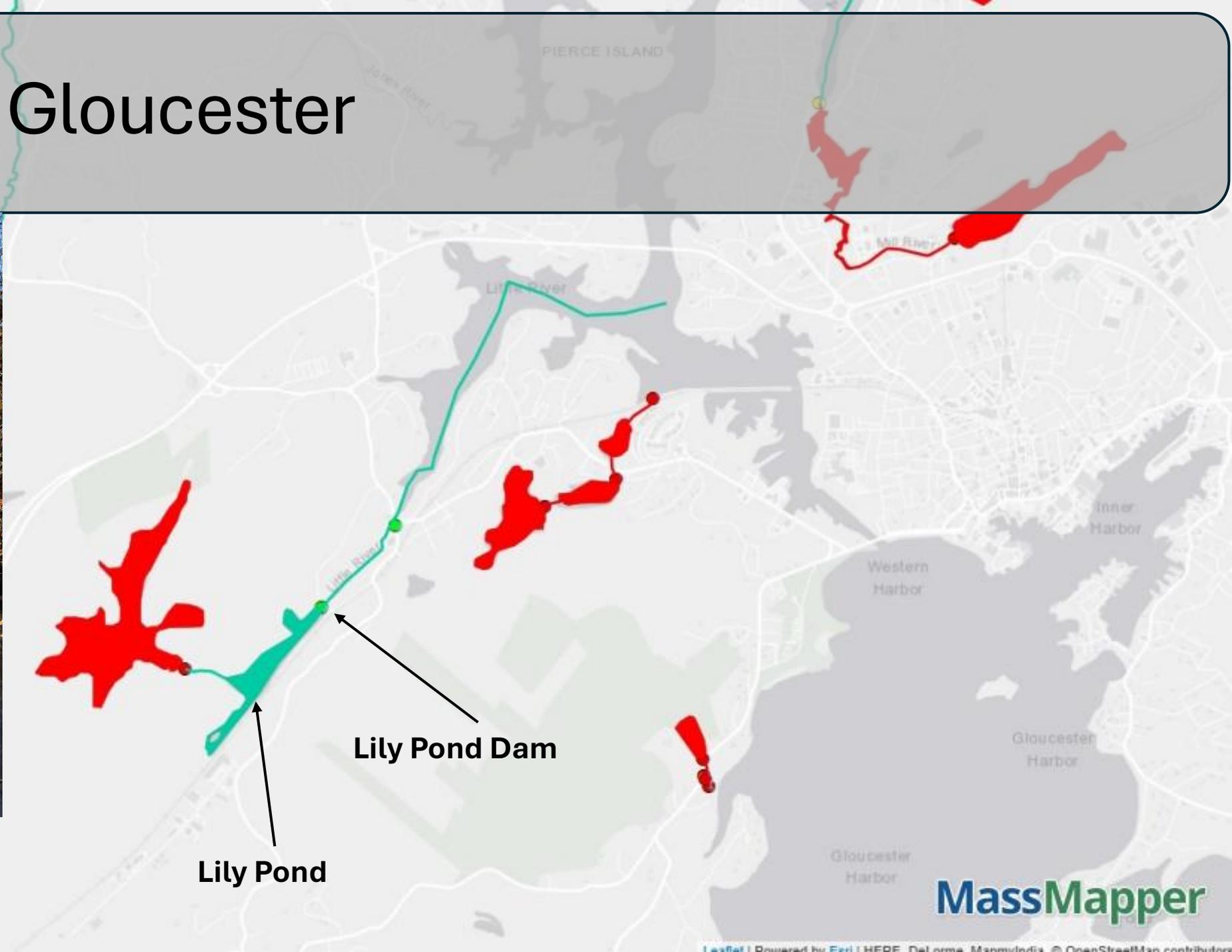


Little River Gloucester

- Lily Pond
- New wooden fish ladder installed in 2022 for improved passage under low flow conditions.
- Replaced an aluminum Alaskan steep pass



Little River Gloucester



Lily Pond Dam

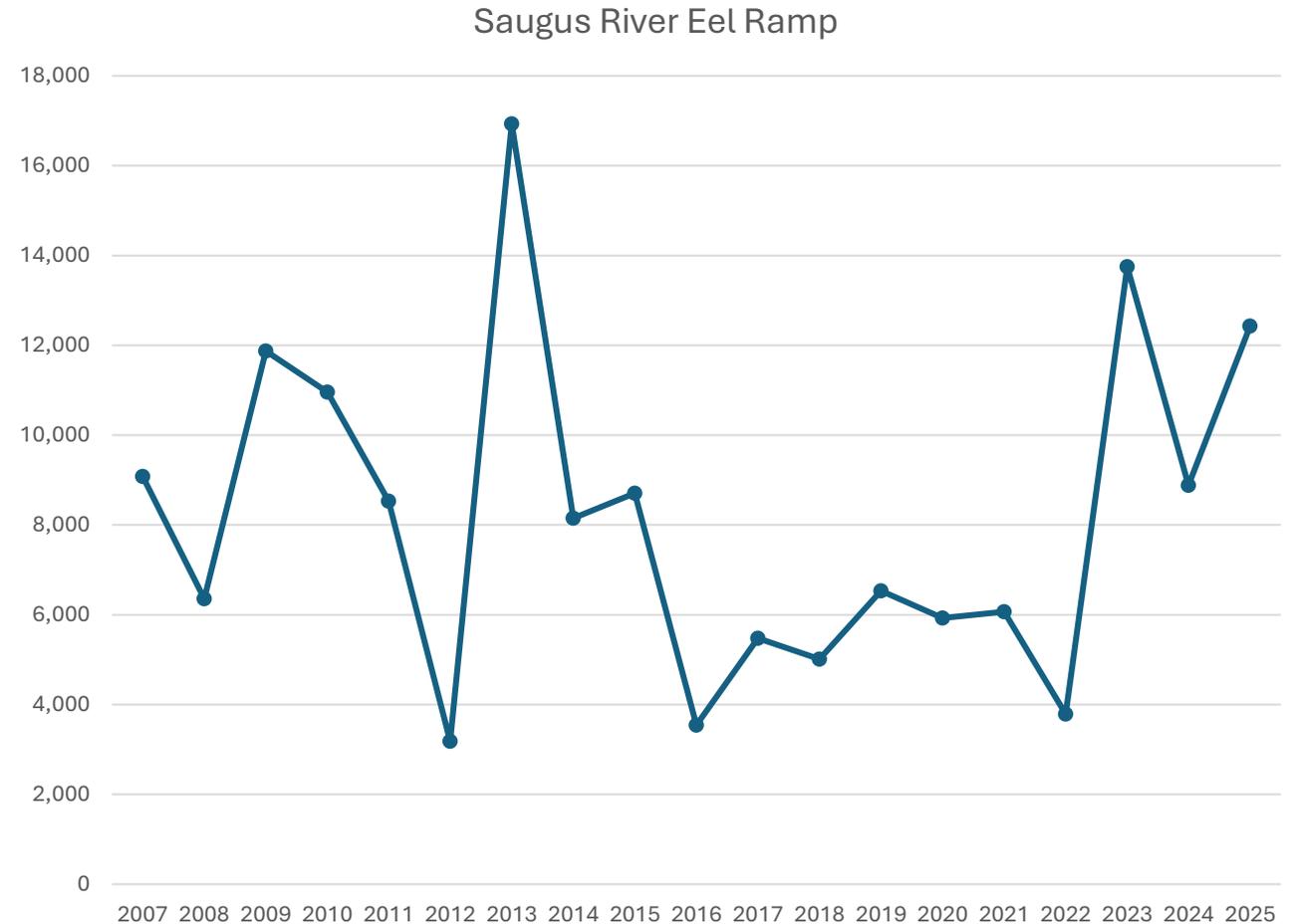
Lily Pond

MassMapper

Leaflet | Powered by Esri | HERE | DeLorme, Mapbox, Mapbox, © OpenStreetMap contributors

Saugus River Watershed

- No RH count data
 - DMF interest in learning more about RH and the possibility for restoration and monitoring
- Upcoming Smelt project at the Saugus Iron Works National Historic Site
- First accepted Indices of Abundance for age 1+ eels in the state (tied for first in New England with NH)



Saugus River Watershed

LWSC Dam – Eel Ramp

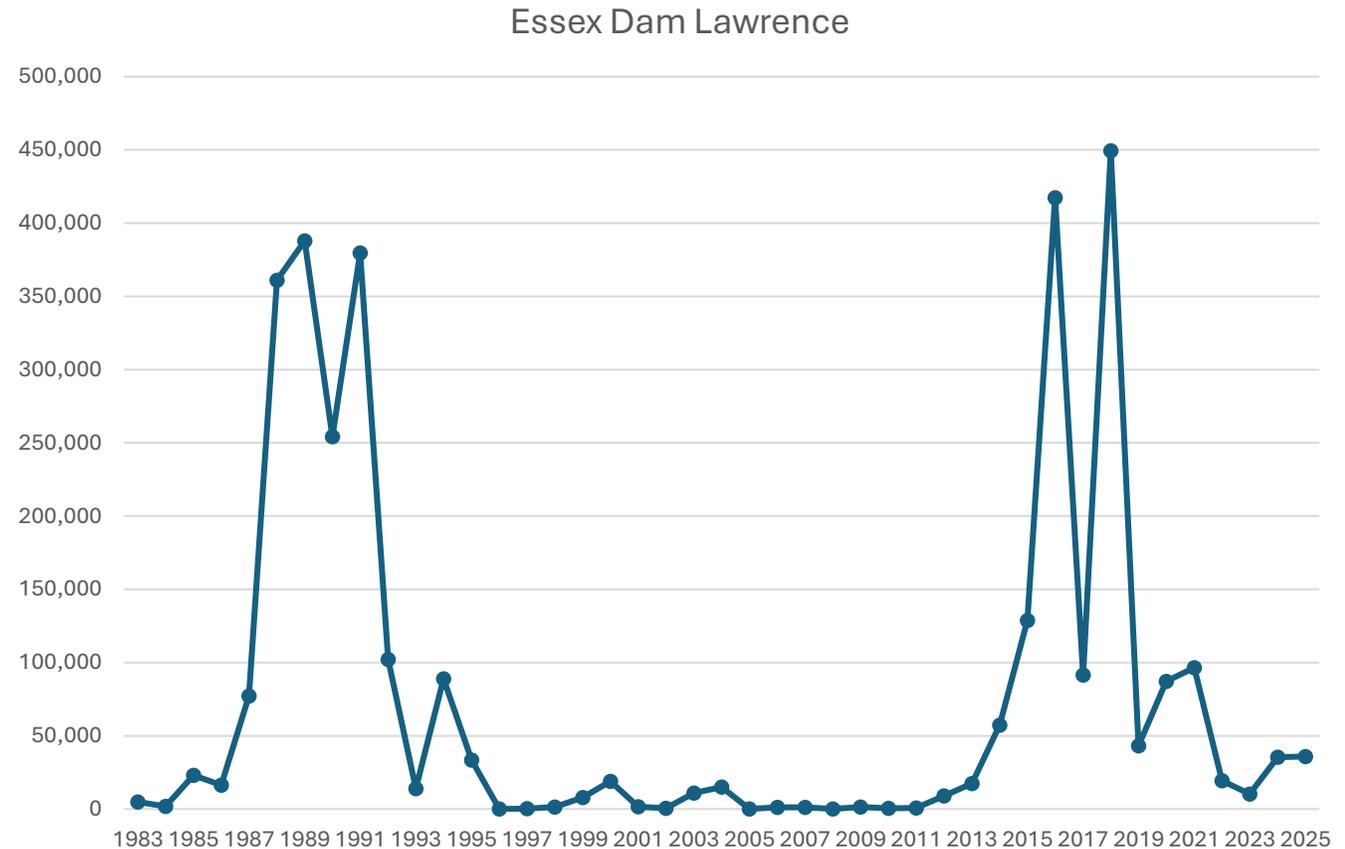


NPS Iron Works



Merrimack River

- Ongoing relicensing in the region
- Merrimack river comprehensive plan
- Essex Dam – Lawrence
- Pawtucket Dam – Lowell
 - Signed settlement agreement for Lowell that includes a fish ladder replacement for the lift.

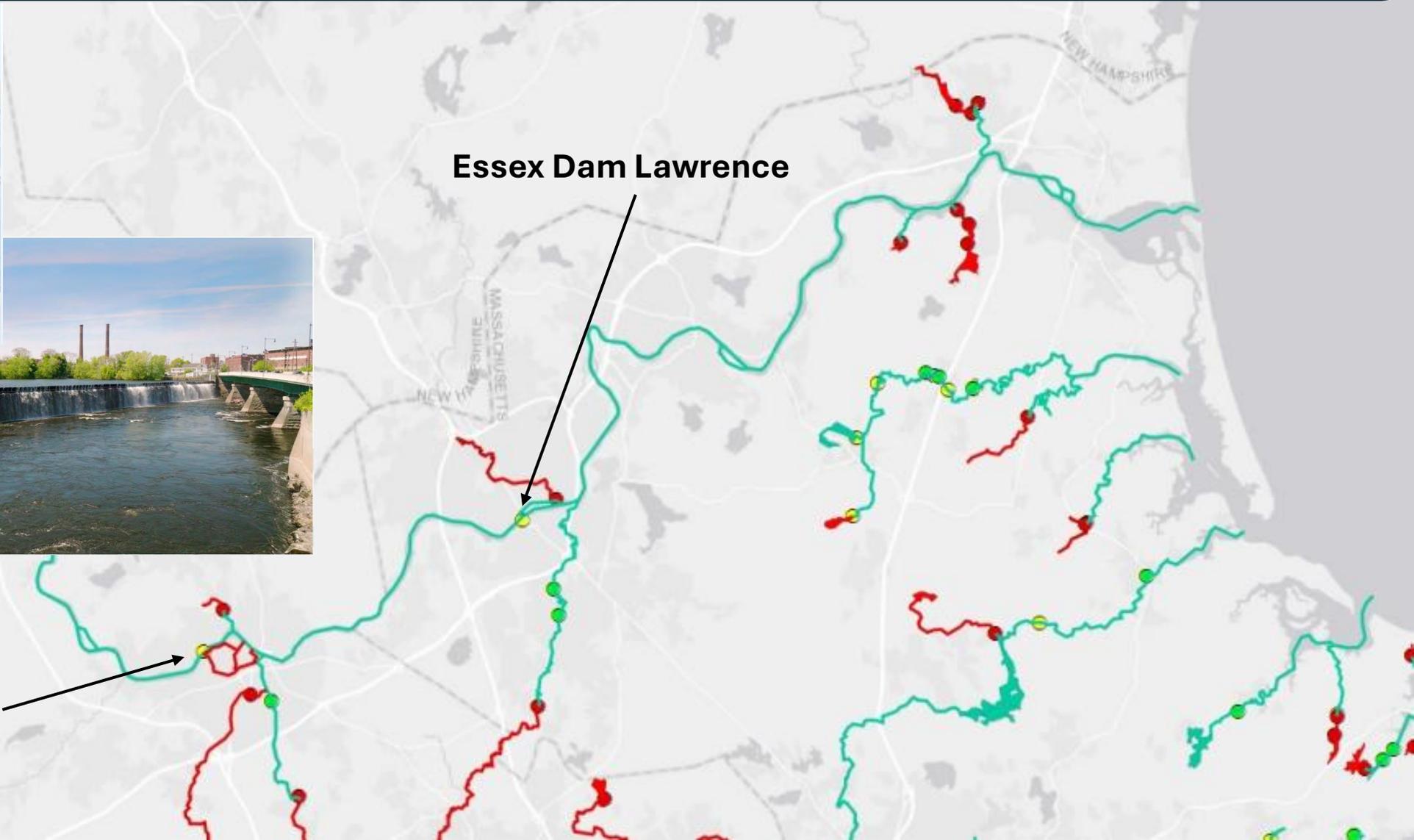


Merrimack River



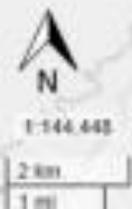
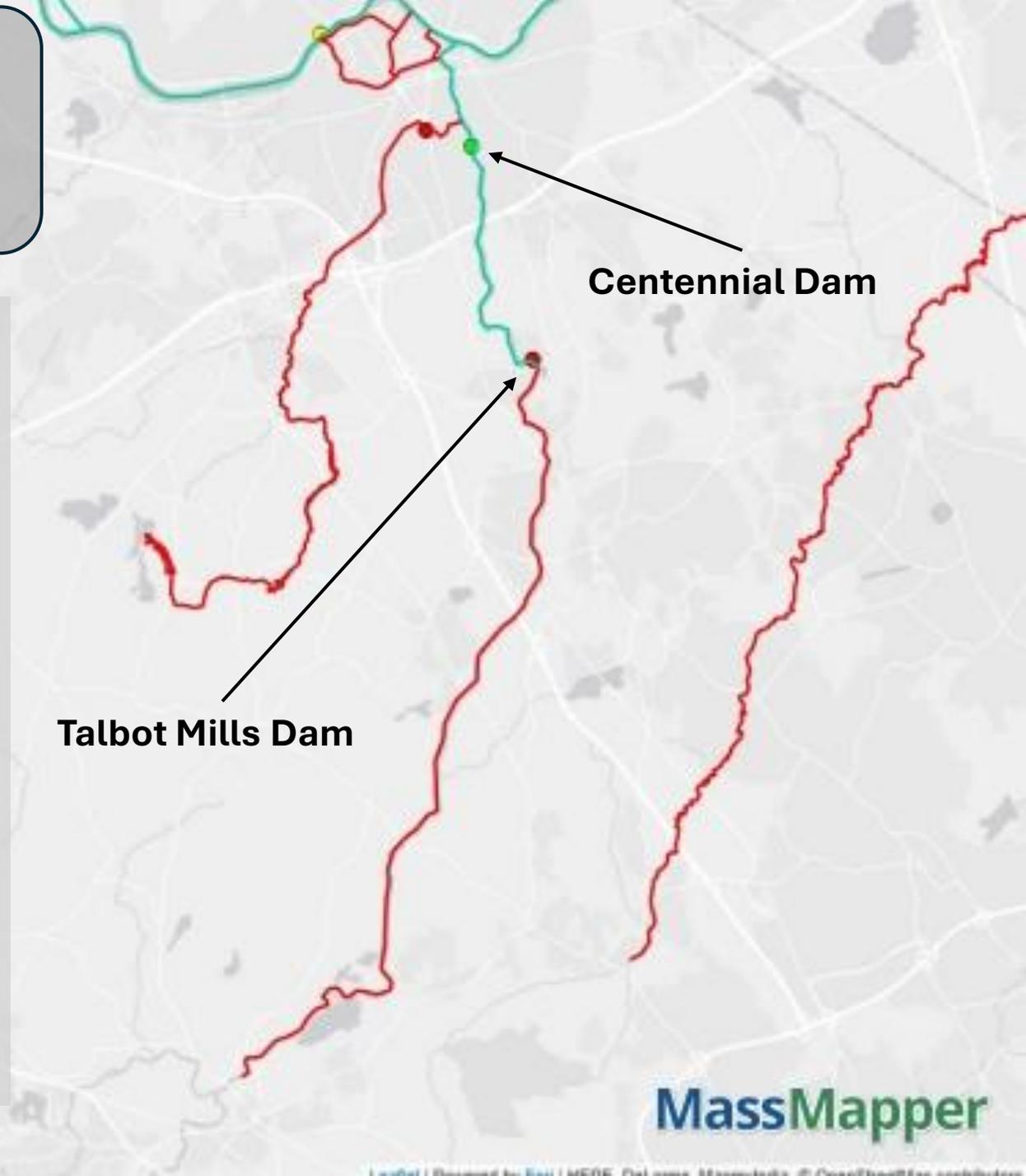
Essex Dam Lawrence

Pawtucket Dam Lowell



Concord River

- New NLF in the planning and development stage for Centennial Dam
- Talbot Mills Dam – Permitting and development for removal
 - #1 priority for the region
 - One of the single largest diadromous fish habitat restoration efforts in Massachusetts
 - Opening access to over 35 miles of habitat on mainstem rivers,
 - Plus, more than 100 miles of tributary habitat
 - At least 260 acres of spawning and rearing habitat in lakes and ponds



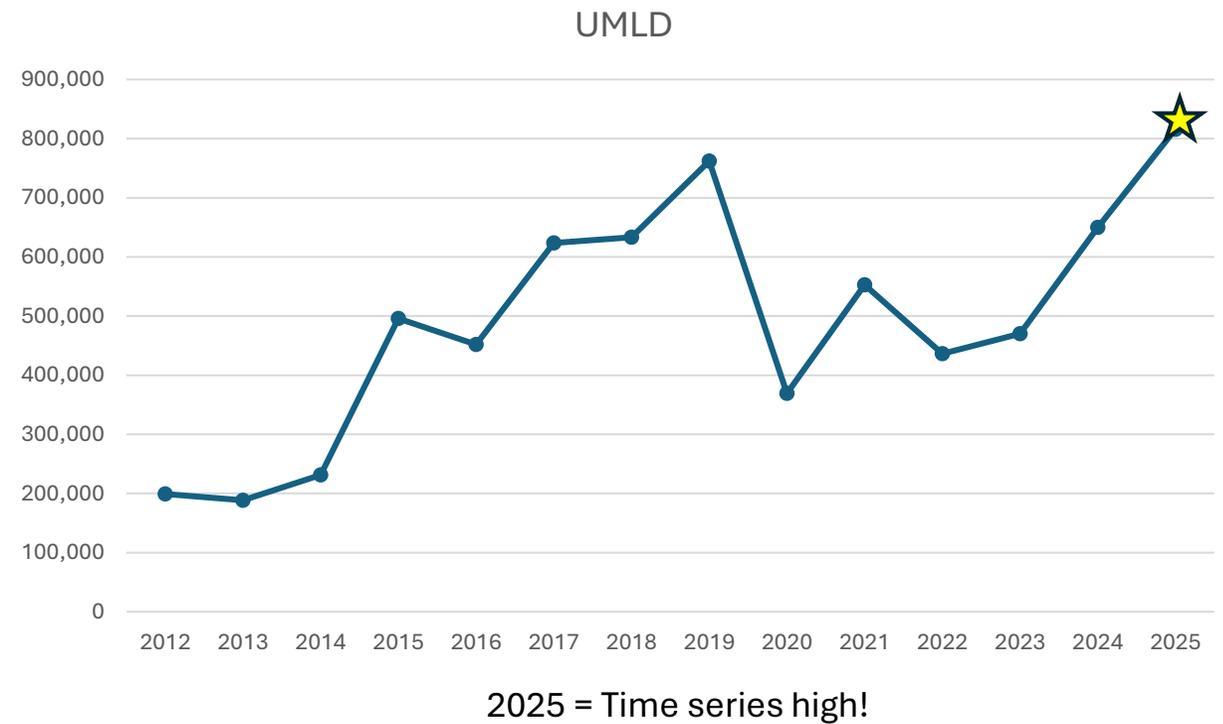
Mystic River Watershed

- **2011:** no fish passage into Mystic Upper Lake and the Aberjona River
- Fishway concept boosted by “bucket brigade” during 2005-2008
- Mass. Dept. of Conservation and Recreational rebuilds the Mystic Lakes Dam in 2012
- Fishway installed at the Center Falls Dam in Winchester in 2016 funded largely by EPA Superfund
- DMF makes modifications to Scalley Dam bypass at Horn Pond in 2018: herring pass into Horn Pond

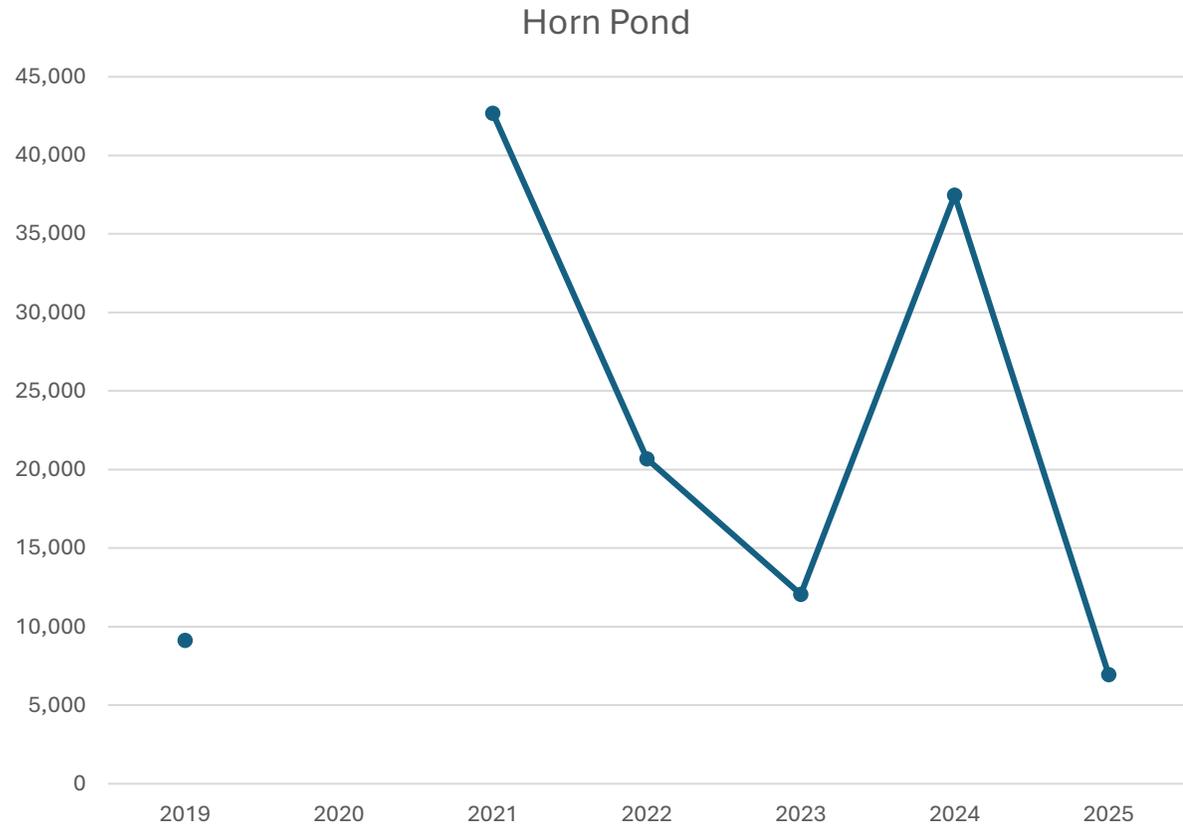


Mystic River Watershed

- #1 River herring run in the state
2 years running
- Scalley Dam fish passage into
Horn Pond – Under permitting
 - #5 on regional priority list
- Ongoing downstream passage
improvements



Mystic River Watershed



New Nature Like Fishway coming soon!



Mystic River Watershed

Combined 372 acres
of spawning habitat



Horn Pond 102 acres

Wedge Pond 21 acres

Upper Mystic lake 158 acres

Lower Mystic lake 91 acres

Scalley Dam (2018)

**Central Falls Dam
(2016)**

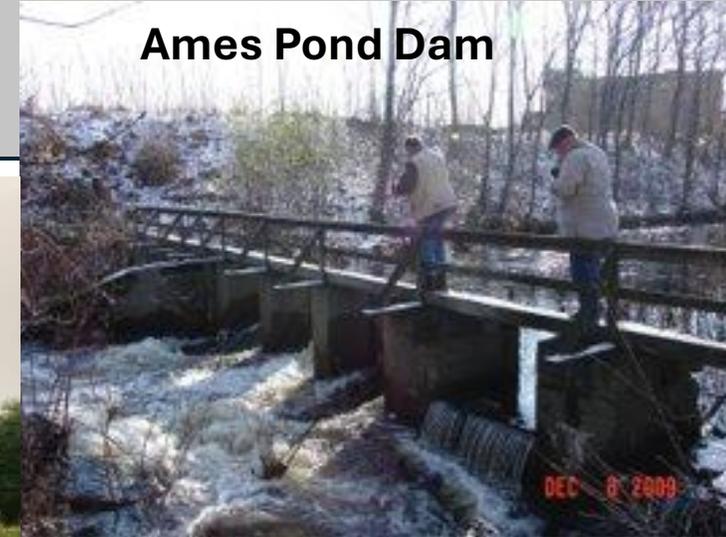
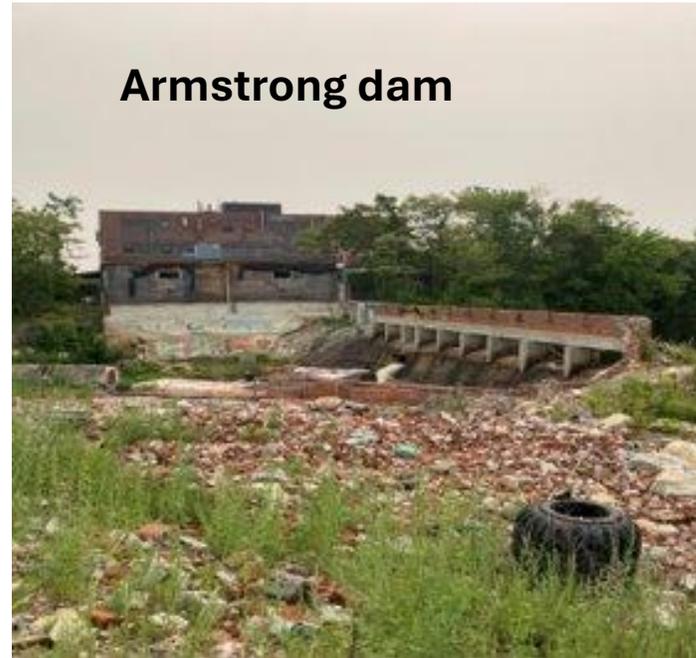
Upper Mystic Lakes Dam (2012)

Amelia Earhart Dam



Fore River Restoration

- Fore River Restoration
- Removal of the Ames Pond and Armstrong Dams
- Fish now have access to the 180-acre Great Pond Reservoir
- Herring came up this river for the first time in the past few hundred years



Fore River Watershed, Braintree



Fish Passage Barriers



Great Pond Reservoir - 2023

Armstrong Dam - 2023



Rock Falls Fishway - 2025

Fore River Watershed, Braintree

With passage restored, DMF Fishway Crew has a list of improvements to tackle

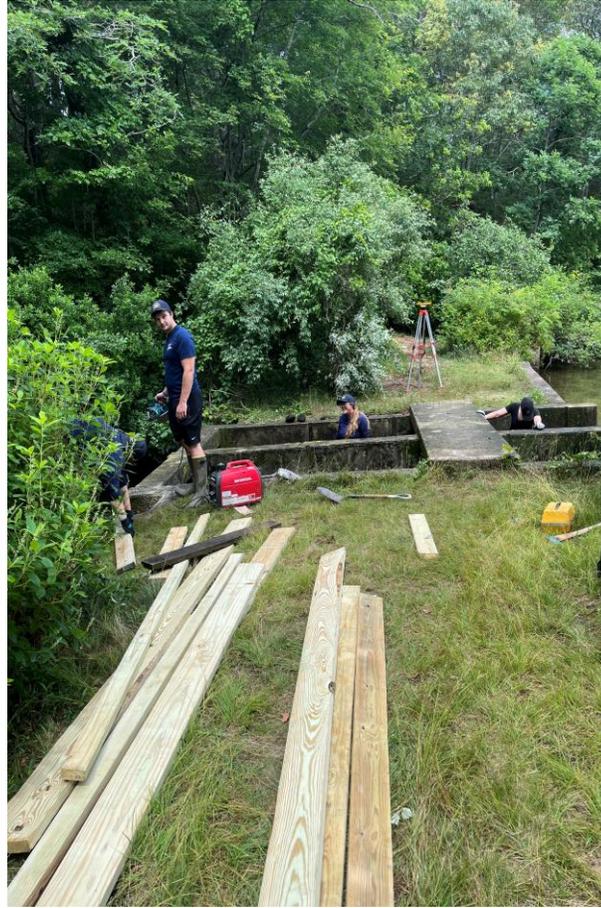
- Custom welded screen at Richardi Reservoir
- Custom welded trash rack at Rock Falls
- Install adjustable boards at Sunset Lake
- Projects pending for monitoring station, Cochato River dam passage and McCusker Drive culvert passage



DMF Fishway Crew - 2025



Third Mill Pond,
Pembroke



Hinckley's Pond
outlet, Harwich



Bourne Pond
Daylighting,
Falmouth (coop.
w/Town of
Falmouth)

Monument River, Cape Cod Canal, Bourne



Cooperative project with U.S. Army Corps of Engineers
Returned to replace three 1938 concrete weirs in 2025
and extensive repairs to connected Motel fishway

Sesuit Creek Culvert Replacement, Dennis

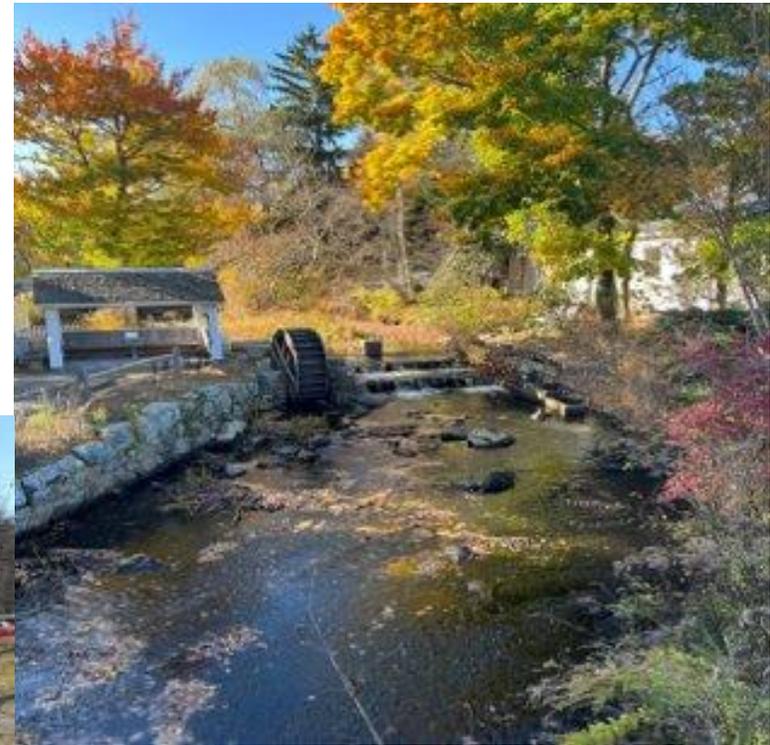


Mass DOT project contracted out to Robert Our Co. to replace two problematic culverts on Route 6A. Reoccurring passage blockages have caused significant impingement and predation mortality

South River, Marshfield

Veterans Park Nature Like Fishway

- Dam removal with weir-pool fishway integrated to water wheel and lagoon pond at park
- At least 6 diadromous fish species present
- Innovative bypass allowed spring migration in 2025.



Stony Brook, Brewster

- Iconic park with grist mill
- DMF Fishway Crew rebuild upstream weirs in 2011
- Cooperative project to fully reconstruct downstream fishway weirs in 2025
- Town of Brewster, NRCS, CCCD project under the Cape Cod Water Resources Restoration Project
- Spawning and nursery habitat assessment underway

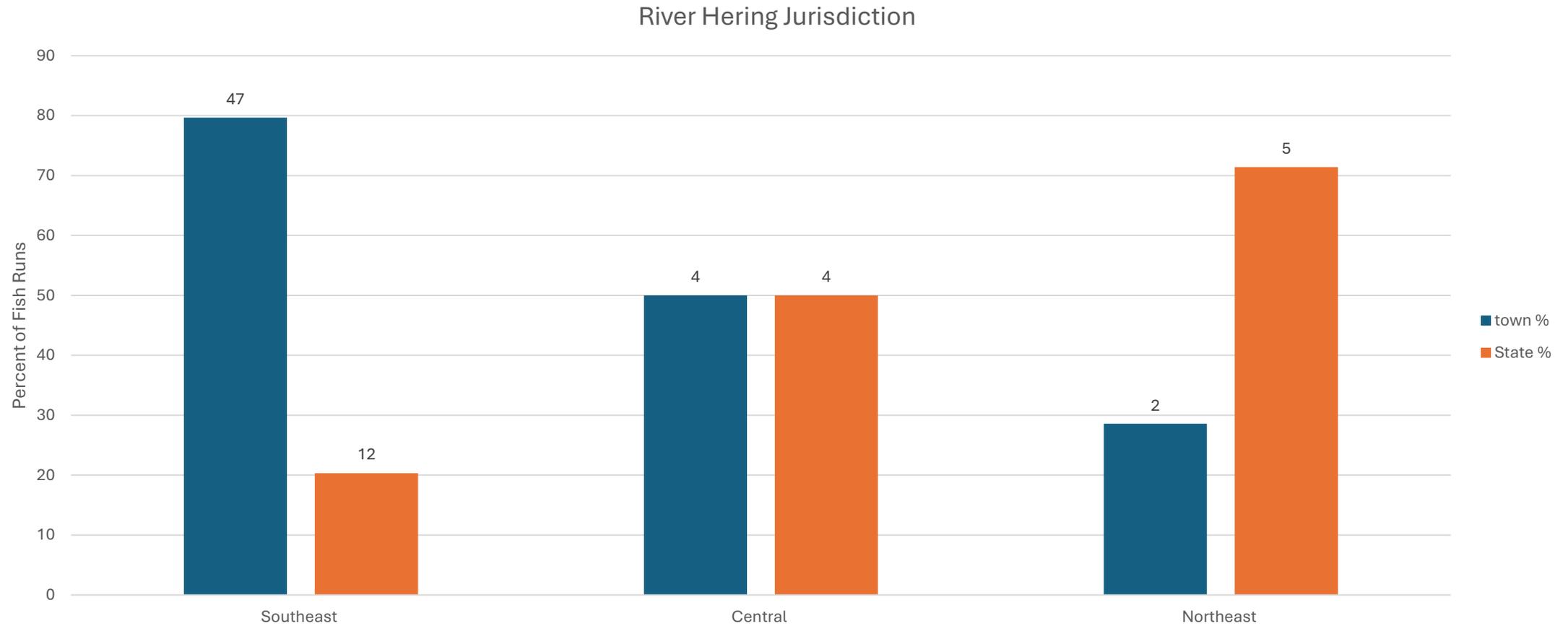


River Herring Harvest

- Pembroke Herring SFMP approval in 2025
- 5 Towns have requested DMF for harvest plans in the last 6 years.
 - Nemasket renewed in 2022
 - Herring River, Harwich approved in 2022



River herring Jurisdiction



Herring Wardens

- North Shore lacks Herring Wardens
- Originally were created to control and manage harvest for towns but since the harvest ban they have taken on more of a stewardship role
 - Help create relationships with dam owners
 - Provide on the ground O&M
- On the North Shore watershed association groups have, in some respects, filled the role of the wardens.
- Most groups are not as well suited for routine management of fish runs.

