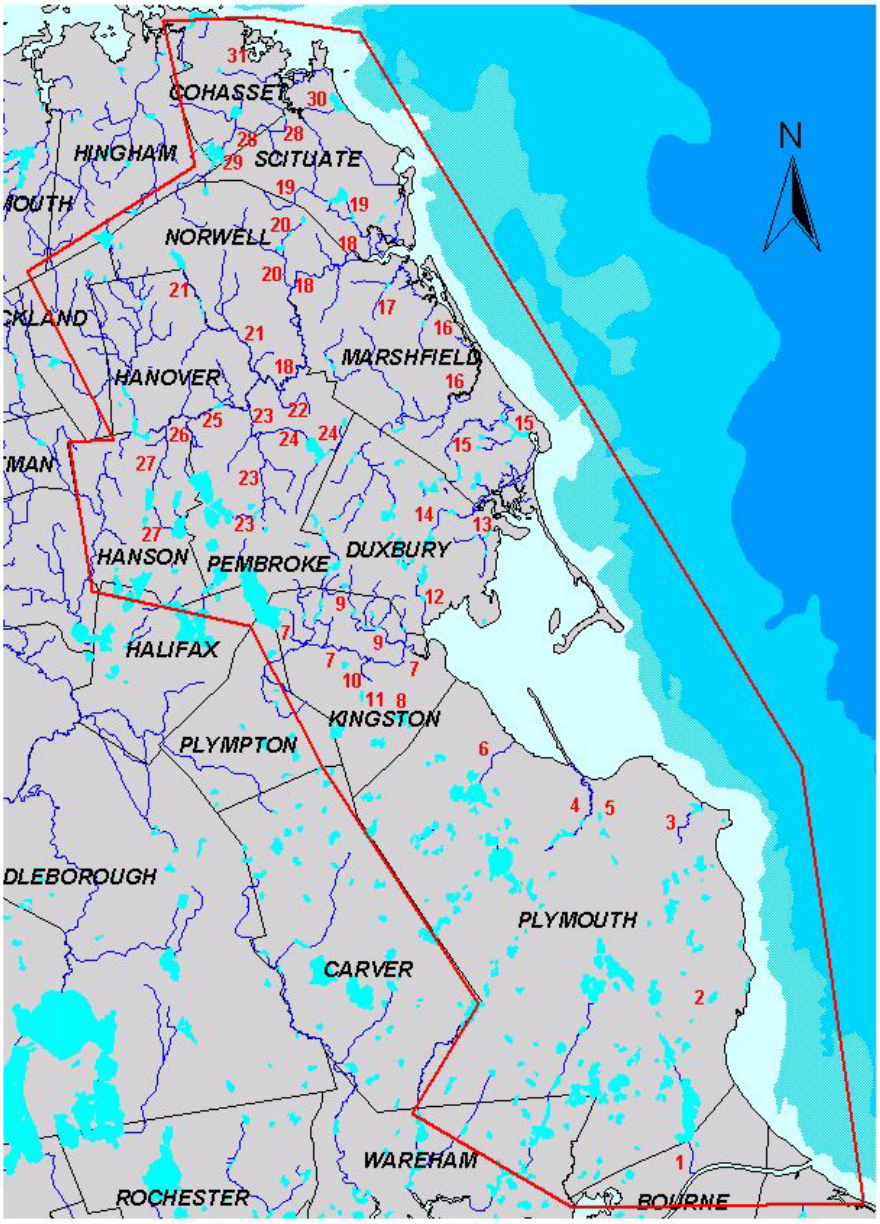
SOUTH SHORE WATERSHEDS



Area outlined in red represents the towns included in the South Shore Watersheds report.

Stream Names:

1 - Herring (Monument) River
2 - Savery Pond
3 - Beaver Dam Brook
4 - Eel River
5 - Howland Pond
6 - Town Brook
7 - Jones River
8 - Smelt Pond
9 - Halls Brook
10 - Furnace Brook
11 - Russells Pond
12 - Island Creek
13 - Bluefish River
14 - West Brook
15 - Green Harbor River
16 - South River
17 - Macombers Creek/Bares Brook
18 - North River
19 - First Herring Brook
20 - Second Herring Brook
21 - Third Herring Brook
22 - Robinson Creek
23 - Herring Brook
24 - Pudding Brook
25 - Indian Head River
26 - Rocky Run
27 - Indian Head Brook
28 - Bound Brook
29 - Aaron River Reservoir
30 - Musquashcut Brook
31 - Little Harbor

South Shore Watersheds

Monument (Herring) River Bourne, Plymouth

Stream Length (mi)	Stream Order	pH	Anadromous Species Present
3.7	First	7.1	Alewife, blueback, white perch

Obstruction # 1 Canal culvert Bourne

River Mile	Type	Material	Spillway W (ft)	Spillway H (ft)	Impoundment Acreage	Year Built	Owner	GPS
0.0	Culvert	Concrete	2.0	5.0	0.0	1938	U.S. Army Corps of Engineers	41º 16’ 17.684” N 70º 33’ 47.899” W

Cape Cod Canal culvert at low tide

Fishway Present (in 4 sections)

Design	Material	Length (ft)	Inside W (ft)	Outside W (ft)	# of Baffles	Baffle H (ft)	Notch W (ft)	Pool L (ft)	Condition/ Function
Weir-pool	Concrete with wooden baffles	114.2	Varied (2.4, 3.4)	Varied (2.4, 3.4)	6	Varied (0.7)	-	Varied (0.7)	Fair Inefficient passage

Fishway, continued

Design	Material	Length (ft)	Inside W (ft)	Outside W (ft)	# of Baffles	Baffle H (ft)	Notch W (ft)	Pool L (ft)	Condition/ Function
Weir-pool	Concrete with wooden baffles	45.0	2.5	3.3	8	1.5		Avg. 6.2	Fair Inefficient passage

Lower section of fishway to Herring Run Motel Pool

Notched weir-pool	Concrete with metal slots and wooden baffles	364.0	8.1	10	7	1.4	~2.5	59.5	Fair Passable

Long section of fishway

Fishway, continued

Design (ft)	Material W (ft)	Length W (ft)	Inside Baffles	Outside H (ft)	# of W (ft)	Baffle L (ft)	Notch Function	Pool	Condition/
Notched weir-pool	Concrete and wood	171.0	4.0	6.3	8	1.0	Varied (3.4, 4.6)	Varied ~(9-10)	Poor Passable

End of fishway and pool at Herring Run Motel

Obstruction # 2 Benoit's Pond Dam Bourne

River Mile	Type	Material	Spillway W (ft)	Spillway H (ft)	Impoundment Acreage	Year Built	Owner	GPS
0.2	Dam	Concrete with wooden boards	8.8	5.7	4.9	1943	-	41º 46’ 23.719” N 70º 33’ 43.666” W

Benoit’s Pond Dam (with ladder)

Fishway Present

Design	Material	Length (ft)	Inside W (ft)	Outside W (ft)	# of Baffles	Baffle H (ft)	Notch W (ft)	Pool L (ft)	Condition/ Function
Weir-pool	Concrete and wood	82.6	4.1	5.6	9	4.0	-	10.0	Good Passable

Obstruction # 3 Beal's Pond Dam Bourne

River Mile	Type	Material	Spillway W (ft)	Spillway H (ft)	Impoundment Acreage	Year Built	Owner	GPS
0.5	Dam	Concrete and stone	9.5	5.7	2.6	-	Town of Bourne	41º 46' 34.525" N 70º 33' 45.369" W

Beal's Pond Dam

Fishway Present

Design	Material	Length (ft)	Inside W (ft)	Outside W (ft)	# of Baffles	Baffle H (ft)	Notch W (ft)	Pool L (ft)	Condition/ Function
Notched weir-pool	Stone, concrete and wood	357.0	8.0	14.0	18	Varied (1.3-2.4)	Varied. ~1-3	Varied (20.0-41.3)	Poor Inefficient passage

Fishway at Beal's Pond Dam

Remarks:

This system supports one of the Commonwealth's most productive river herring populations. The stream flows from Great Herring Pond (413 acres) and Little Herring Pond (80.7 acres), forms a small impoundment at Benoits Pond (4.9 acres) and empties into the Cape Cod Canal. DMF has monitored this run for 20 years using electronic and visual counts to estimate population size, which has ranged from 91,000 fish in 1980 to 672,000 in 2000. Because of its size and accessibility, this population is the primary source of mature adult alewives for DMF's stocking program.

The first obstruction on the stream is actually the Cape Cod Canal and the elevation change it caused when the canal's construction intercepted the stream's natural channel. This is overcome by a series of weir-pool and notched weir-pool fishways which are integrated within the stream's artificial channel. The fishway structures have begun to show some deterioration and this in combination with the difficulties caused by the tidal fluctuations in the canal causes less than efficient fish passage through this section.

The second obstruction, a dam at Benoits Pond, is surmounted by a relatively efficient weir-pool ladder. A third ladder at the Carter-Beale Conservation Area passes fish adequately but a millrace provides competing attraction flow and needs to be fitted with a barrier dam to prevent fish from moving into this dead end channel. From this point fish are free to enter the headwater ponds although stop logs are occasionally inserted at their outlets to control pond levels and need to be checked frequently during the migration periods.

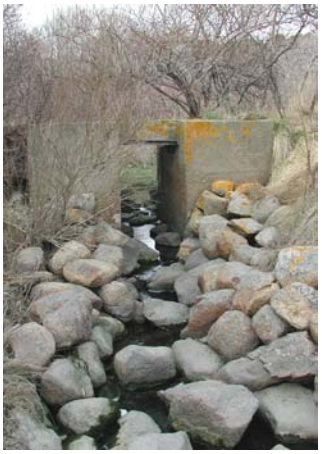
A unique feature of this herring run is its proximity to an extremely active striped bass sport fishery in the Cape Cod Canal. The migrating herring attract concentrations of large striped bass to the stream's outlet, which in turn attracts large numbers of fishermen. The pressure placed on this resource as a bait source has caused a number of difficult problems for the Town of Bourne, which manages the fishery through Section 94 of Chapter 130 of the General Laws. DMF has worked with the town to develop a management plan that adequately protects the river herring population while allowing reasonable utilization of this population by the public. While not without its drawbacks, this plan seems to be functioning to the satisfaction of most parties.

Savery Pond — Plymouth (Ellisville)

Stream Length (mi)	Stream Order	pH	Anadromous Species Present
0.9	First	5.9	Unknown

Obstruction # 1 — Old Control Structure at top of Salt Pond — Plymouth (Ellisville)

River Mile	Type	Material	Spillway W (ft)	Spillway H (ft)	Acres	Year Built	Owner	GPS
0.5	Elevation change	Concrete	-	~2.2	0.1	-	-	41° 50’ 38.526” N 70° 32’ 26.734” W



Old control structure at head of Salt Pond

Fishway None

Obstruction # 2 Savery Pond Dam Plymouth (Ellisville)

River Mile	Type	Material	Spillway W (ft)	Spillway H (ft)	Impoundment Acreage	Year Built	Owner	GPS
0.9	Dam	Concrete with wooden boards	2.5	0.9	32.0	-	-	41º 50’ 48.345” N 70º 32’ 51.160” W

Savery Pond control structure

Fishway None

Remarks:

The stream which flows from this 32 acre pond is obstructed by two cranberry bog structures which are controlled by stop logs. The greatest impediment to passage at this site is the lack of flow from the headwater pond.

Indian Brook Plymouth

Stream Length (mi)	Stream Order	pH	Anadromous Species Present
1.0	First	6.0	Unknown

Obstruction # 1 Indian Brook Pond Dam Plymouth

River Mile	Type	Material	Spillway W (ft)	Spillway H (ft)	Impoundment Acreage	Year Built	Owner	GPS
0.5	Dam	Wood	13.7	8.0	8.1	1930	Mass.-DPW	41º 53’ 13.509” N 70º 32’ 14.261” W

Indian Brook Reservoir Dam

Fishway None

Remarks:

This small stream has little potential for anadromous fish development due to the passage difficulties that would be encountered at the mouth and the fact that numerous cranberry bogs would have to be negotiated before any significant habitat was reached.

Beaver Dam Brook Plymouth

Stream Length (mi)	Stream Order	pH	Anadromous Species Present
2.6	First	6.0	Unknown

Outlet of Bartlett Pond into Cape Cod Bay

Obstruction # 1 Bog reservoir sluice Plymouth

River Mile	Type	Material	Spillway W (ft)	Spillway H (ft)	Impoundment Acreage	Year Built	Owner	GPS
1.8	Bog sluice	Corrugated metal	4.4	9.0	0.0	-	-	41º 54’ 58.869” N 70º 34’ 11.974” W

Bog sluice on Beaver Dam Brook

Fishway None

Remarks:

Beaver Dam Brook drains two headwater ponds with a combined area of 91 acres. Just before entering Cape Cod Bay the stream forms a low salinity body of water called Bartlett Pond. The outlet at the beach is passable and river herring have an opportunity to spawn in this 62 acre pond. Further development is questionable due to the need to insure passage through an extensive bog system in order to reach additional habitat.

Eel River Plymouth

Stream Length (mi)	Stream Order	pH	Anadromous Species Present
3.9	Third	6.9	Alewife, blueback, smelt, tout, lamprey, tomcod

Obstruction # 1 Hayden Mill Pond Control Plymouth

River Mile	Type	Material	Spillway W (ft)	Spillway H (ft)	Impoundment Acreage	Year Built	Owner	GPS
2.2	Dam	Corrugated metal pipe with wooden boards	4	13	20.5	1900	Hayden Mill Trust	41º 55’ 26.832” N 70º 37’ 17.105” W

Hayden Mill Pond spillway

Fishway Present

Design	Material	Length (ft)	Inside W (ft)	Outside W (ft)	# of Baffles	Baffle H (ft)	Notch W (ft)	Pool L (ft)	Condition/ Function
Denil	Concrete with wooden baffles	126.0	3.0	4.6	39	1.3	-	-	Good Passable

Fishway at Hayden Mill Pond

Obstruction # 2 Russell Millpond Dam Plymouth

River Mile	Type	Material	Spillway W (ft)	Spillway H (ft)	Impoundment Acreage	Year Built	Owner	GPS
2.8	Dam	Earth and stone	12	21	42.2	1900?	Private	41º 55' 02.235" N 70º 37' 36.737" W

Russell Mill Pond Dam

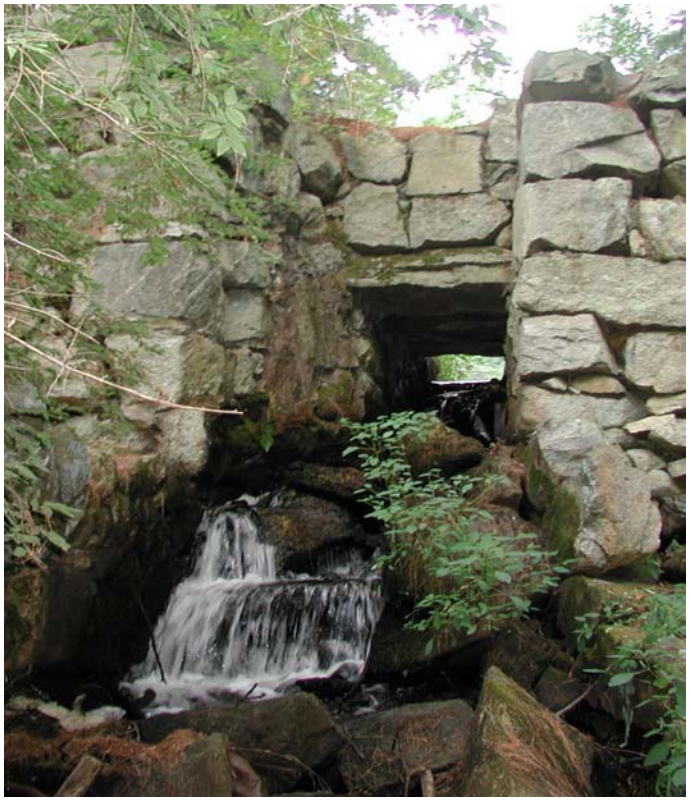
Fishway Present

Design	Material	Length (ft)	Inside W (ft)	Outside W (ft)	# of Baffles	Baffle H (ft)	Notch W (ft)	Pool L (ft)	Condition/ Function
Weir-pool	Concrete with wooden baffles	272	3.0	4.3	24	Varied (0.4-4.2)	-	8	Poor Not passable

Russell Mill Pond fishway entrance (left) and fishway (right)

Obstruction # 3 Sawmill Pond Dam Plymouth

River Mile	Type	Material	Spillway W (ft)	Spillway H (ft)	Impoundment Acreage	Year Built	Owner	GPS
3.7	Dam	Stone and concrete with wooden boards	4.0	14.5	0.6	-	Town of Plymouth	41º 54’ 40.680” N 70º 38’ 26.066” W



Sawmill Pond Dam

Fishway None

Remarks:

The primary spawning habitats on this stream are 20.5 acre Hayden Pond and 42.2 acre Russell Millpond. In 1980 a dilapidated fishway at Hayden Pond was replaced by DMF with a concrete and wooden Denil ladder. This ladder is in good condition and functions well. At Russell Millpond, however, a weir-pool fishway was allowed to be shut down at the request of the dam owner due to the possibility of further damage to the already unsafe dam. Since that time, the Town of Plymouth has planned repair work to both dams and has agreed to include fishway restoration in the plans. At this writing funds are being sought to construct a new ladder and provide access to the larger of the two impoundments.

Smelt eggs have been observed in the stream immediately below Route 3A. Due to the unstable nature of the streambed caused by shifting beach sand, it is unlikely that this will ever be a significant population.

Atlantic tomcod have also been reported spawning in the stream below and just above the Rt. 3A crossing.

Shingle Brook Plymouth

Stream Length (mi)	Stream Order	pH	Anadromous Species Present
2.1	Second	6.4	Alewife

Obstruction # 1 Howland Pond Dam Plymouth

River Mile	Type	Material	Spillway W (ft)	Spillway H (ft)	Impoundment Acreage	Year Built	Owner	GPS
0.3	Dam	Concrete with wooden boards	8.0	5.0	6.7	1900	Town of Plymouth	41º 55’ 33.774” N 70º 36’ 48.901” W

Howland Pond Dam

Fishway None

Remarks:

This tributary to the Eel River drains a series of small impoundments, each with an impassable dam. While small numbers of river herring currently reach the base of the first dam, at Clifford Road, this stream is a low priority due to the number of fishways required to reach significant spawning acreage and the more important need to direct funding resources to passage issues on the Eel River mainstem.

Town Brook — Plymouth

Stream Length (mi)	Stream Order	pH	Anadromous Species Present
1.7	First	6.9	Alewife, blueback, smelt, trout

Obstruction # 1 — Water Street Dam — Plymouth

River Mile	Type	Material	Spillway W (ft)	Spillway H (ft)	Impoundment Acreage	Year Built	Owner	GPS
0.0	Dam	Stone	18	3.5	0.4	-	Town of Plymouth	41º 57’ 21.978” N 70º 39’ 42.942” W

Water Street Dam (the notch in center is considered the fishway)

Fishway — Present

Design	Material	Length (ft)	Inside W (ft)	Outside W (ft)	# of Baffles	Baffle H (ft)	Notch W (ft)	Pool L (ft)	Condition/ Function
Notched weir-pool	Granite blocks	-	16.0	16.0	1	Varied (tidal)	2	-	Good Inefficient passage

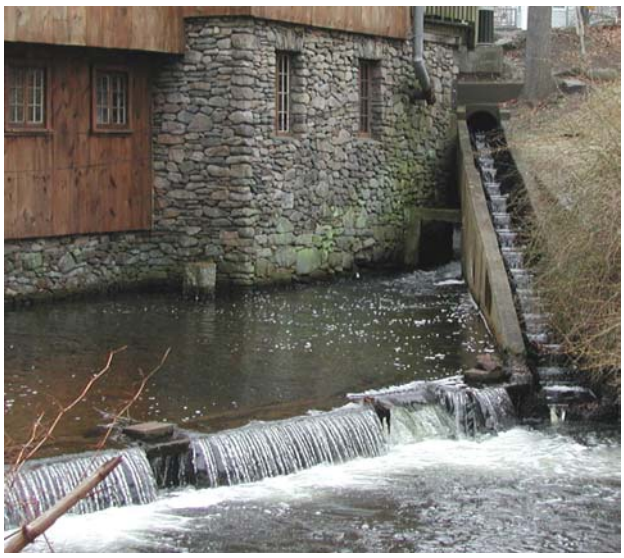
Obstruction # 2 Jenny Grist Mill Dam Plymouth

River Mile	Type	Material	Spillway W (ft)	Spillway H (ft)	Impoundment Acreage	Year Built	Owner	GPS
0.3	Dam	Stone and concrete with wooden boards	5.0	8.4	4.6	1636	Town of Plymouth	41º 57’ 12.584” N 70º 39’ 54.866” W

Jenny Grist Mill and Dam

Fishway Present

Design	Material	Length (ft)	Inside W (ft)	Outside W (ft)	# of Baffles	Baffle H (ft)	Notch W (ft)	Pool L (ft)	Condition/ Function
Notched weir-pool	Concrete	65.0	2.0	3.0	15	1.2	0.6	4.0	Fair Inefficient passage



Fishway at Jenny Grist Mill

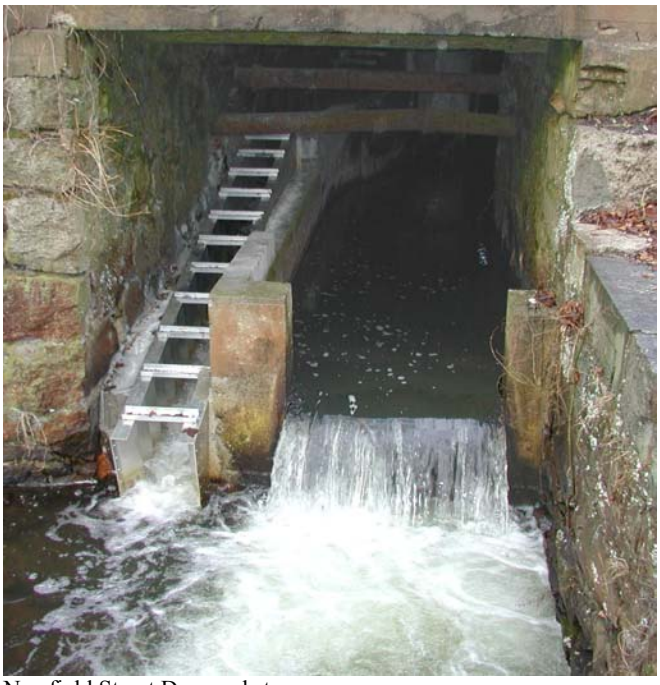
Obstruction # 3 Newfield Street Dam Plymouth

River Mile	Type	Material	Spillway W (ft)	Spillway H (ft)	Impoundment Acreage	Year Built	Owner	GPS
0.5	Dam	Concrete and metal with wooden boards	7.7	5.2	2.2	1900	Plymouth, Park and Rec.	41º 57’ 09.445” N 70º 40’ 07.750” W

Newfield Street Dam

Fishway Present (in three sections)

Design	Material	Length (ft)	Inside W (ft)	Outside W (ft)	# of Baffles	Baffle H (ft)	Notch W (ft)	Pool L (ft)	Condition/ Function
Alaskan Steeppass	Aluminum	30	2	2		-	-	-	Good Passable



Newfield Street Dam and steeppass

Design	Material	Length (ft)	Inside W (ft)	Outside W (ft)	# of Baffles	Baffle H (ft)	Notch W (ft)	Pool L (ft)	Condition/ Function
Denil	Concrete with fiberglass baffles	202.0	2.0	3.8	75	0.8	-	-	Good Passable

Mid-section of Newfield St. Denil fishway

Weir-pool	Concrete with wooden baffles	78.0	2.0	3.6	4	1.4	-	6.0	Fair Inefficient passage

Upper fishway at Newfield Street

Obstruction # 4 Off Billington Street Dam Plymouth

River Mile	Type	Material	Spillway W (ft)	Spillway H (ft)	Impoundment Acreage	Year Built	Owner	GPS
0.9	Dam	Concrete with wooden boards	6.0	3.9	1.2	-	Town of Plymouth	41º 56’ 56.238” N 70º 40’ 27.067” W

Off Billington Street Dam and ladder

Fishway Present

Design	Material	Length (ft)	Inside W (ft)	Outside W (ft)	# of Baffles	Baffle H (ft)	Notch W (ft)	Pool L (ft)	Condition/ Function
Weir-pool	Concrete	47.5	2.0	4.5	10	0.8	1.0	4.6	Poor Inefficient

Obstruction # 5 Plymco Dam (Standish Mill Pond Dam) Plymouth

River Mile	Type	Material	Spillway W (ft)	Spillway H (ft)	Impoundment Acreage	Year Built	Owner	GPS
1.1	Dam	Concrete with wooden boards and steel culvert	3.9	9.0	1.0	1900	Swan Realty	41º 56’ 47.666” N 70º 40’ 26.001” W

Plymco Dam, spillway and leak

Fishway Present

Design	Material	Length (ft)	Inside W (ft)	Outside W (ft)	# of Baffles	Baffle H (ft)	Notch W (ft)	Pool L (ft)	Condition/ Function
Notched weir-pool	Concrete	116.0	2.2	3.7	14	3.2 (2.0 notch H.)	1.1	4.3	Fair Inefficient passage

Fishway at Plymco Dam

Obstruction # 6 Morton Park bog sluice Plymouth

River Mile	Type	Material	Spillway W (ft)	Spillway H (ft)	Pond Acreage	Year Built	Owner	GPS
1.5	Bog sluice	Concrete with wooden boards	5.7	1.9	269.0	1920 (on structure)	Town of Plymouth	41º 56' 32.935" N 70º 40' 43.777" W

Morton Pond bog sluice

Fishway None

Remarks:

Fish passage in this stream is impacted by six obstructions. A seventh, a dam at Billington Street, was removed in 2002. The first is a dam at the head of the tide which prevents salt water from entering the lower stream. A notch in the granite blocks, which form the crest of the dam, allows herring to pass on high tidal stages. The second, at Jenny Grist Mill, is functional but of a poor, notched weir-pool design which operates under a very limited range of flows. A dam at Newfield Street is bypassed by a combination of aluminum steeppass, Denil, and weir-pool ladders which was most recently modified by DMF in 2001 and now functions adequately. The stream is impounded by a fourth dam at Off Billington Street. This dam is equipped with an obsolete, notched weir-pool fishway similar to that at Jenny Grist Mill. A fifth dam is surmounted by a notched weir-pool ladder built by DMF in 1987. Fish tend to bypass the ladder entrance making the addition of a barrier dam desirable. The final obstruction is a bog flume, which is passable when adjusted properly, allowing fish to access the 269 acres available in Billington Sea.

This stream has been the subject of an ongoing restoration effort involving local, state and Federal agencies. To date this program has resulted in improvements to one fishway, adult stocking in the headwater pond and removal of an impassable dam. Future work should be directed toward improving fish passage efficiency at the Jenny Gristmill dam and the Off Billington Street dam possibly by using aluminum steeppass inserts at those ladders.

Smelt and smelt eggs have been observed in the lower reaches of the stream.

Jones River — Kingston

Stream Length (mi)	Stream Order	pH	Anadromous Species Present
7.4	Third	6.6	Alewife, blueback, American shad, smelt, white perch, tomcod, trout, lamprey

Obstruction # 1 — Elm Street Dam — Kingston

River Mile	Type	Material	Spillway W (ft)	Spillway H (ft)	Impoundment Acreage	Year Built	Owner	GPS
2.7	Dam	Concrete with wooden boards	29	8.6	4.4	1848	Town of Kingston	41º 59’ 26.723” N 70º 44’ 05.340” W

Elm Street Dam and fishway

Fishway — Present

Design	Material	Length (ft)	Inside W (ft)	Outside W (ft)	# of Baffles	Baffle H (ft)	Notch W (ft)	Pool L (ft)	Condition/ Function
Alaskan Steeppass	Aluminum	55.0	1.8	3.8		N/A	-	N/A	Excellent Passable

Obstruction # 2 Wapping Road Dam Kingston

River Mile	Type	Material	Spillway W (ft)	Spillway H (ft)	Impoundment Acreage	Year Built	Owner	GPS
3.7	Dam	Concrete with wooden boards	57	6.6	5.7	1900	Jones River Industrial Park Inc.	41º 59’ 35.078” N 70º 44’ 54.763” W

Wapping Road Dam

Fishway None

Obstruction # 3 Silver Lake Dam Kingston

River Mile	Type	Material	Spillway W (ft)	Spillway H (ft)	Impoundment Acreage	Year Built	Owner	GPS
7.4	Dam	Concrete with wooden boards	48.0	5.5	640.0	1900	City of Brockton	42º 00’ 47.092” N 70º 47’ 17.405” W

Silver Lake Dam

Fishway None

Remarks:

The Jones River has 640 acre Silver Lake as its headwater. Silver Lake is a water supply for the City of Brockton and very little if any water flows into the river. Consequently, the bulk of the system's river herring spawning occurs in its Furnace Brook tributary. Three obstructions including the Silver Lake dam impact fish passage. The first, at Elm Street in Kingston was formerly equipped with a deteriorating, obsolete notched weir-pool ladder. In 2001 this structure was fitted with an aluminum steeppass insert at the recommendation of DMF. River herring can now efficiently move beyond the dam. A second dam located at Wapping Road prevents any further movement up the Jones River and it is below this point that river herring turn into Furnace Brook.

The streambed below Elm Street has supported a large smelt run in past years and although it continues to do so the numbers have diminished. This has also been the location of a number of smelt research projects conducted by DMF. Shad have also been reported here but their presence has not been confirmed.

Smelt Brook Kingston

Stream Length (mi)	Stream Order	pH	Anadromous Species Present
2.3	First	6.7	Smelt

Obstruction # 1 Foundry Pond Dam Kingston

River Mile	Type	Material	Spillway W (ft)	Spillway H (ft)	Impoundment Acreage	Year Built	Owner	GPS
0.4	Dam	Stone	6	14	7.2	1848	-	41º 59’ 09.301” N 70º 42’ 35.618” W

Foundry Pond Dam

Fishway None

Remarks:

Smelt Brook originates in 44 acre Smelt Pond and flows to the Jones River estuary forming 7.2 acre Foundry Pond along its course. Although Smelt Brook offers a significant amount of habitat, the industrial development along the upper stream and the difficulties which would be encountered in establishing passage at Foundry Pond present significant challenges for development. Smelt spawning is known to occur in the area of Rt. 3A.

Halls Brook — Kingston

Stream Length (mi)	Stream Order	pH	Anadromous Species Present
4.1	Second	5.2	Smelt

Obstruction # 1 — Mill Pond Dam — Kingston

River Mile	Type	Material	Spillway W (ft)	Spillway H (ft)	Impoundment Acreage	Year Built	Owner	GPS
0.3	Dam	Concrete with wooden boards	3.5	8.5	0.1	-	-	41º 59’ 59.697” N 70º 43’ 34.971” W

Dam at Mill Pond

Fishway None

Remarks:

Halls Brook has its source in 7.6 acre Blackwater Pond. The stream is impounded by an 8.5 foot dam at its mouth. Fishway facilities or removal of the dam would allow fish to access the headwaters. The expense of this work must be weighed against the amount of habitat to be gained. Moderate densities of smelt eggs have been observed below the dam.

Laundry Brook Kingston

Stream Length (mi)	Stream Order	pH	Anadromous Species Present
0.1	Second	6.9	Smelt

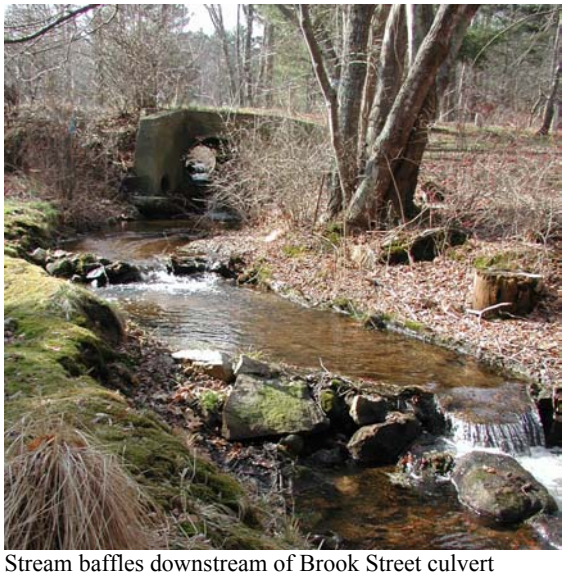
Obstruction # 1 Brook Street Culvert Kingston

River Mile	Type	Material	Spillway W (ft)	Spillway H (ft)	Impoundment Acreage	Year Built	Owner	GPS
0.1	Culvert, circular	Concrete with wooden boards	4.0	3.1	0.0	-	Private	41º 59’ 18.437” N 70º 43’ 45.739” W

Brook Street culvert

Fishway Present

Design	Material	Length (ft)	Inside W (ft)	Outside W (ft)	# of Baffles	Baffle H (ft)	Notch W (ft)	Pool L (ft)	Condition/ Function
Stream baffle	Stone	55	Varied (4.5-8)	Varied (4.5-8)	4	Varied (1.3-1.4)	-	Varied (14-24)	



Stream baffles downstream of Brook Street culvert

Obstruction # 2 Lucas Pond Dam Kingston

River Mile	Type	Material	Spillway W (ft)	Spillway H (ft)	Impoundment Acreage	Year Built	Owner	GPS
0.1	Dam	Concrete with wooden boards	5.4	3.7	2.1	1945	Private	41º 59’ 16.242” N 70º 43’ 46.355” W

Lucas Pond Dam

Fishway None

Remarks:

This small stream drains 2.1 acre Lucas Pond. The pond is inaccessible to river herring. Small numbers of smelt have been observed spawning in the lower reaches of the stream.

Furnace Brook — Kingston

Stream Length (mi)	Stream Order	pH	Anadromous Species Present
1.2	First	6.9	Alewife, blueback

Obstruction # 1 — Soule's Pond Dam — Kingston

River Mile	Type	Material	Spillway W (ft)	Spillway H (ft)	Impoundment Acreage	Year Built	Owner	GPS
0.9	Dam	Concrete with wooden boards	4.1	5.5	2.4	-	Town of Kingston	41º 58’ 57.002” N 70º 44’ 47.904” W

Soule’s Pond Dam and fishway

Fishway — Present

Design	Material	Length (ft)	Inside W (ft)	Outside W (ft)	# of Baffles	Baffle H (ft)	Notch W (ft)	Pool L (ft)	Condition/ Function
Weir-pool	Concrete	35.0	2.6	3.9	8	2.0	-	4.0	Excellent Passable

Obstruction # 2 Elm Street to Sylvia Place Road Kingston

River Mile	Type	Material	Spillway W (ft)	Spillway H (ft)	Impoundment Acreage	Year Built	Owner	GPS
1.0	Elevation change	-	-	-	0.0	-	-	41º 58’ 52.390” N 70º 44’ 51.082” W

Elm Street fishway

Fishway Present

Design	Material	Length (ft)	Inside W (ft)	Outside W (ft)	# of Baffles	Baffle H (ft)	Notch W (ft)	Pool L (ft)	Condition/ Function
Weir-pool	Concrete with wooden baffles	117.7	Varied (2.5-3.1)	6.8	12	Varied (0.9-1.3)	-	Varied (4.7-13.8)	Good Inefficient passage

Obstruction # 3 Sylvia Place Pond Dam Kingston

River Mile	Type	Material	Spillway W (ft)	Spillway H (ft)	Impoundment Acreage	Year Built	Owner	GPS
1.1	Dam	Concrete with wooden boards	3.8	2.0	1.2	1900	The Wildlands Trust	41º 58’ 50.343” N 70º 44’ 53.408” W

Sylvia Place Pond Dam and fishway

Fishway Present

Design	Material	Length (ft)	Inside W (ft)	Outside W (ft)	# of Baffles	Baffle H (ft)	Notch W (ft)	Pool L (ft)	Condition/ Function
Weir-pool	Concrete	18.0	1.9	3.6	5	2.1	-	4.1	Good Passable

Obstruction # 4 Wildlands Trust elevation change Kingston

River Mile	Type	Material	Spillway W (ft)	Spillway H (ft)	Acres	Year Built	Owner	GPS
1.1	Elevation change	-	-	-	0.0	-	The Wildlands Trust	41° 58’ 47.120” N 70° 44’ 56.244” W

Stream baffles downstream of Russell Pond

Fishway Present

Design	Material	Length (ft)	Inside W (ft)	Outside W (ft)	Notch W (ft)	# of Baffles	Baffle H (ft)	Pool L (ft)	Condition/ Function
Stream baffle	Stone	155	Varied (1.0-10.0)	~1-10 (stream width)	-	6	Varied (0.6-1.4)	Varied (13-53.5)	Good Passable

Obstruction # 5 Russell Pond Dam Kingston

River Mile	Type	Material	Spillway W (ft)	Spillway H (ft)	Impoundment Acreage	Year Built	Owner	GPS
1.2	Dam	Concrete and stone with wooden boards	2.4	13	10.4	1900	The Wildlands Trust	41º 58' 45.900" N 70º 44' 58.219" W

Russell Pond dam and fishway

Fishway Present

Design	Material	Length (ft)	Inside W (ft)	Outside W (ft)	# of Baffles	Baffle H (ft)	Notch W (ft)	Pool L (ft)	Condition/ Function
Stream baffle	Stone and concrete	155	Varied (1-10)	Varied (1-10)	8	Varied (0.6-1.4)	-	Varied (8-53.5)	Good Passable
Notched weir-pool	Concrete	97	2.5	4.3	21	1.4 (2.5 total)	1.0	4	Poor Not Passable

Remarks:

Furnace Brook provides the primary river herring spawning/nursery habitat for the Jones River system. With the 2001 restoration of the Elm St. fishway, the numbers of fish reaching the brook should increase significantly. Of the five fishways on the stream, three are in good condition and function adequately. The remaining two require repairs to maintain efficiency. The weir-pool ladder below Sylvia Place Road needs to have new baffles installed and the fishway at Russell Pond is badly deteriorated and must be completely replaced. To complicate matters, the Russell Pond dam is in poor condition and the question of removal has been raised. Since the 10.4 acre impoundment is the largest spawning area on the stream, removal could have a serious impact on this population.

Island Creek — Duxbury

Stream Length (mi)	Stream Order	pH	Anadromous Species Present
1.5	First	5.9	River herring, smelt

Obstruction # 1 — Mill Pond Fishway — Duxbury

River Mile	Type	Material	Spillway W (ft)	Spillway H (ft)	Impoundment Acreage	Year Built	Owner	GPS
0.8	Dam	Concrete	4.7	1	7.1	-	Town of Duxbury	42º 01’ 00.633” N 70º 42’ 38.443” W

Mill Pond fishway

Fishway — Present

Design	Material	Length (ft)	Inside W (ft)	Outside W (ft)	# of Baffles	Baffle H (ft)	Notch W (ft)	Pool L (ft)	Condition/ Function
Weir-pool	Concrete	75.0	5.6	8.5	14	Varied (0.7-1.8)	-	Varied (6-10)	Poor Not passable

Obstruction # 2 Natural Stream Obstruction Duxbury

River Mile	Type	Material	Spillway W (ft)	Spillway H (ft)	Pond Acreage	Year Built	Owner	GPS
1.3	Elevation change	large rocks	-	-	0.0	-	-	42º 01’ 21.521” N 70º 42’ 56.156” W

Downstream of Island Creek Pond (elevation change)

Fishway None

Obstruction # 3 Island Creek Pond Control Duxbury

River Mile	Type	Material	Spillway W (ft)	Spillway H (ft)	Pond Acreage	Year Built	Owner	GPS
1.4	Dam	Concrete and stone	2.6	5.6	45.0	-	-	42º 01' 22.106" N 70º 42' 56.487" W

Island Creek Pond control structure

Fishway None

Remarks:

Three obstructions block fish passage on this Duxbury stream and a railroad embankment culvert may form a fourth when clogged with debris. The culvert, which is downstream of Rt. 3A, must be cleaned on a regular basis during the spawning season to insure passage. The first dam at Mill Pond is provided with a weir-pool fishway that has become deteriorated and no longer functions properly. Restoration of the ladder would provide access to the 7.1 acre impoundment. The second obstruction is a natural elevation change in the form of a steep, rock strewn streambed that creates a difficult passage problem. A 1.6 foot high dam at the outlet of Island Creek Pond is the third obstruction. Although the headwater pond provides 45 acres of potential habitat, the problems that would be encountered in establishing passage here make this an unlikely project. Rainbow smelt have recently been observed in the section of the stream below the first dam.

Bluefish River Duxbury

Stream Length (mi)	Stream Order	pH	Anadromous Species Present
2.7	First	6.2	River herring

Obstruction # 1 Amory Dam Duxbury

River Mile	Type	Material	Spillway W (ft)	Spillway H (ft)	Impoundment Acreage	Year Built	Owner	GPS
1.6	Dam	Wood & earth	4.3	3.6	2.6	-	Private	42º 02' 17.568" N 70º 40' 32.983" W

Amory Dam (left) and fishway (right)

Fishway Present

Design	Material	Length (ft)	Inside W (ft)	Outside W (ft)	# of Baffles	Baffle H (ft)	Notch W (ft)	Pool L (ft)	Condition/ Function
Notched weir-pool	Wood	25.5	4.5	5.6	4	1.0	1.0	6.1	Good Passable

Remarks:

This small stream drains a series of very small impoundments. The dam at the first impoundment is fitted with a wooden weir-pool ladder that is capable of passing fish when properly adjusted. No further development is justified due to the lack of sufficient spawning area.

West Brook Duxbury

Stream Length (mi)	Stream Order	pH	Anadromous Species Present
3.8	First	4.8	Unknown

Obstruction # 1 North Hill Marsh bog sluice Duxbury

River Mile	Type	Material	Spillway W (ft)	Spillway H (ft)	Impoundment Acreage	Year Built	Owner	GPS
1.0	Bog sluice	Corrugated metal	2.5	8	43.2	1910	Private	42º 02’ 48.533” N 70º 42’ 22.934” W

Bog sluice at North Hill Marsh (left) and outlet (right)

Fishway None

Remarks:

West Brook flows from North Hill Marsh, a 43.1 acre bog reservoir, and forms a second 5.3 acre impoundment at Tremont Street. The culvert at Tremont St. is passable and access for spawning herring is available to the 8 foot drop culvert at the upper impoundment's outlet. Passage facilities at this point in combination with a water flow regulation protocol could result in a substantial river herring population in this stream.

Green Harbor River Marshfield

Stream Length (mi)	Stream Order	pH	Anadromous Species Present
6.6	Second	6.9	Unknown

Obstruction # 1 Green Harbor River Tide Gates Marshfield

River Mile	Type	Material	Spillway W (ft)	Spillway H (ft)	Impoundment Acreage	Year Built	Owner	GPS
0.6	Tide gate	Concrete, steel and wood	4.5	0.0	0.0	-	-	42º 05’ 10.980” N 70º 39’ 02.536” W

Tide gate at Green Harbor

Fishway None

Remarks:

River herring passage into this system through a set of tide gates was possible though restricted in the past. Although some herring have been observed in the upper river in recent years, the installation of a new set of gates appears to have further inhibited off fish migration. The difficulty in modifying the gates to improve fish passage and the lack of substantial freshwater habitat make this work a low priority.

South River — Scituate, Marshfield, Duxbury

Stream Length (mi)	Stream Order	pH	Anadromous Species Present
13.3	Fourth	6.2	River herring, American shad, smelt, trout

Obstruction # 1 — Veterans Memorial Park Dam — Marshfield

River Mile	Type	Material	Spillway W (ft)	Spillway H (ft)	Impoundment Acreage	Year Built	Owner	GPS
8.2	Dam, stepped	Stone and concrete with wooden boards	7.4	5.5		1654	Town of Marshfield	42º 05’ 41.532” N 70º 43’ 06.513” W

Veteran’s Memorial Park Dam and ladder (right)

Fishway — Being modified

Design	Material	Length (ft)	Inside W (ft)	Outside W (ft)	# of Baffles	Baffle H (ft)	Notch W (ft)	Pool L (ft)	Condition/ Function
Weir-pool	Stone and concrete	20.6	4.0	8.5	4	Varied (2.2, 2.6, 1.9, 2)	-	6	Poor Not passable

Obstruction # 2 Chandler's Pond Dam Marshfield

River Mile	Type	Material	Spillway W (ft)	Spillway H (ft)	Impoundment Acreage	Year Built	Owner	GPS
8.6	Dam	Concrete with wooden and aluminum stop logs	23	3.3	9.8	-	Plymouth County Wildlands Trust	42º 05' 34.427" N 70º 43' 20.835" W

Chandler's Pond Dam

Fishway None

Remarks:

The South River is a tributary to the North River estuary and joins it at the North River's outlet to Massachusetts Bay. It forms a series of small impoundments along its course, the second of which, 9.8 acre Chandler Pond, supplies the only substantial river herring habitat on the system. The first impoundment at Veterans Memorial Park in Marshfield has an impassable fishway that is in the process of being modified to allow access above that point. Passage facilities at Chandlers Pond should be considered once herring have efficient passage to that dam.

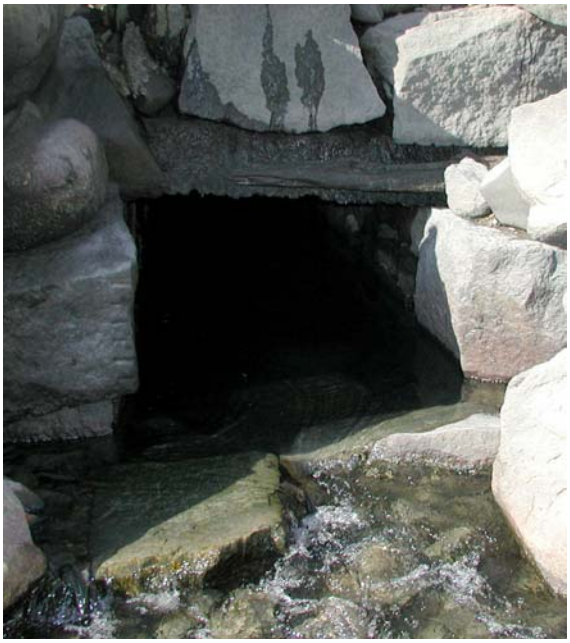
American shad and rainbow smelt have been observed spawning in the stream below the first dam. There is little opportunity to further develop these populations given the lack of additional spawning habitat.

Macomber Creek/Bares Brook Marshfield

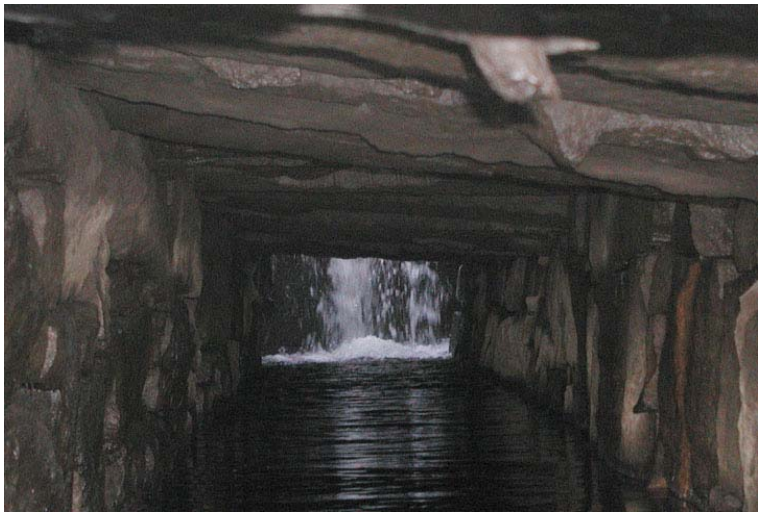
Stream Length (mi)	Stream Order	pH	Anadromous Species Present
2.3	First	6.0	Unknown

Obstruction # 1 Damon's Point Rd culvert Marshfield

River Mile	Type	Material	Spillway W (ft)	Spillway H (ft)	Impoundment Acreage	Year Built	Owner	GPS
1.4	Culvert, rectangular	Granite		4	6.6	-	-	42º 09’ 05.309” N 70º 43’ 42.556” W



Downstream view of culvert at Damons Point Rd.



Under the road to the pond drainage

Fishway None

Remarks:

Macomber Creek enters the North and South Rivers at their junction. Due to the relatively small size of the first and largest impoundment and the difficulty of providing passage at this structure, development of anadromous fish is not warranted here.

North River

Scituate, Norwell, Marshfield, Permbroke, Hanover

Stream Length (mi)	Stream Order	pH	Anadromous Species Present
12.1	Eighth	6.5	River herring, American shad, white perch

No photo available

No Obstructions

Fishway None

Remarks:

This large coastal stream is formed by the confluence of the Indian Head River and Herring Brook. It is essentially a riverine estuary with tidal influence extending to its upper reaches. There are no obstructions to fish passage and the river provides an unrestricted route to the many tributaries that provide spawning habitats to anadromous fish species.

First Herring Brook Scituate, Norwell

Stream Length (mi)	Stream Order	pH	Anadromous Species Present
4.1	First	6.2	Alewife, smelt

Obstruction # 1 Old Oaken Bucket Pond Dam Scituate

River Mile	Type	Material	Spillway W (ft)	Spillway H (ft)	Impoundment Acreage	Year Built	Owner	GPS
0.0	Dam	Concrete	12.2	4.9	8.5	1640	Town of Scituate	42º 10’ 39.404” N 70º 45’ 00.941” W

Old Oaken Bucket Pond Dam

Fishway Present

Design	Material	Length (ft)	Inside W (ft)	Outside W (ft)	# of Baffles	Baffle H (ft)	Notch W (ft)	Pool L (ft)	Condition/ Function
Weir-pool	Concrete, top baffle wood	124.5	3.0	4.4	8	Varied (1.6-3.8)	-	Varied (6.0-8.0)	Good Passable

Fishway at Old Oaken Bucket Pond

Obstruction # 2 First Herring Brook Reservoir Dam Scituate

River Mile	Type	Material	Spillway W (ft)	Spillway H (ft)	Impoundment Acreage	Year Built	Owner	GPS
0.7	Dam	Concrete	42	12	67.0	1969	Town of Scituate	42º 11’ 12.526” N 70º 45’ 13.014” W

Brushy Hill Pond Dam (First Herring Brook Reservoir Dam)

Fishway Present

Design	Material	Length (ft)	Inside W (ft)	Outside W (ft)	# of Baffles	Baffle H (ft)	Notch W (ft)	Pool L (ft)	Condition/ Function
Weir-pool	Concrete	110.0	3.2	4.7	19	2.0	-	3.8	Good Inefficient passage

Lower section of Brushy Hill Pond fishway

Upper section of fishway

Remarks:

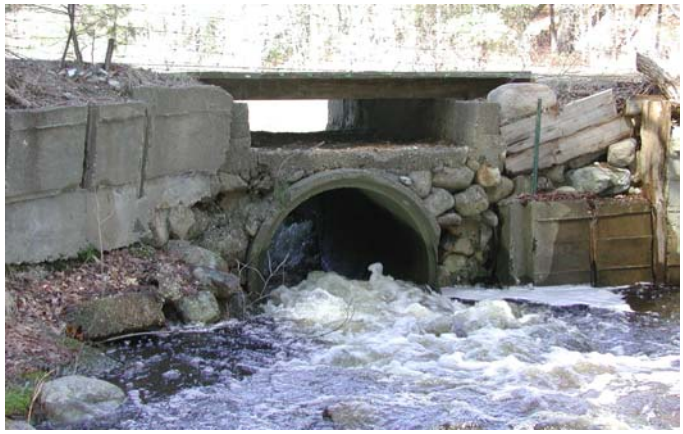
The Town of Scituate uses this system extensively as a water supply. A weir-pool ladder at Old Oaken Bucket Pond provides access for spawning adult river herring to that impoundment. Low water levels in the fall due to withdrawals make downstream migration of juveniles unlikely and it is not known if a population still exists in the system. A second weir-pool ladder was installed at the second dam, built in 1969, and is not functional due to its poorly designed exit elevation. Rainbow smelt eggs have been observed in the stream below the first dam but no recent reports of smelt presence have been received.

Second Herring Brook Norwell

Stream Length (mi)	Stream Order	pH	Anadromous Species Present
1.4	First	5.9	Alewife, smelt

Obstruction # 1 Gordon Pond Dam Norwell

River Mile	Type	Material	Spillway W (ft)	Spillway H (ft)	Impoundment Acreage	Year Built	Owner	GPS
0.3	Dam	Concrete	6.0	3.0	6.2	-	Trustees of Reservations	42º 09’ 04.692” N 70º 47’ 16.927” W



Left culvert at Gordon Pond Dam

Fishway None

Obstruction # 2 Norris Pond Dam Norwell

River Mile	Type	Material	Spillway W (ft)	Spillway H (ft)	Impoundment Acreage	Year Built	Owner	GPS
0.9	Dam and elevation change	Concrete and stone	30.0	4.9	2.1	-	Trustees of Reservations	42º 09’ 30.933” N 70º 47’ 21.660” W

Norris Pond Dam

Fishway None

Obstruction # 3 Torrey Pond Dam Norwell

River Mile	Type	Material	Spillway W (ft)	Spillway H (ft)	Impoundment Acreage	Year Built	Owner	GPS
1.4	Dam	Concrete with wooden boards	4.2	6.0	18.7	1941	Private	42º 09' 57.488" N 70º 47' 22.532" W


Torrey Pond culvert


Torrey Pond spillway

Fishway None

Remarks:

Second Herring Brook forms a number of small impoundments, the third and largest of which is 18.7 acre Torrey Pond. The need to construct three fishways in order to access this habitat gives the stream a low priority for development. Rainbow smelt spawn in good numbers below the first dam.

Third Herring Brook Norwell, Hanover

Stream Length (mi)	Stream Order	pH	Anadromous Species Present
5.3	Third	5.5	River herring, smelt

Obstruction # 1 Tiffany Pond (Tack Factory Pond) Norwell, Hanover

River Mile	Type	Material	Spillway W (ft)	Spillway H (ft)	Impoundment Acreage	Year Built	Owner	GPS
1.1	Dam	Concrete	50	5.8	3.1	1928	St. Colletta's Catholic School	42º 07' 21.669" N 70º 48' 32.744" W

Tiffany Pond Dam

Fishway None

Obstruction # 2 Mill Pond Dam Norwell, Hanover

River Mile	Type	Material	Spillway W (ft)	Spillway H (ft)	Impoundment Acreage	Year Built	Owner	GPS
3.7	Dam	Concrete	3.0	3.8	4.0	1890	South Shore YMCA	42º 08' 23.098" N 70º 50' 05.901" W

Mill Pond Dam downstream (left) and upstream (right)

Fishway None

Obstruction # 3 Peterson's Pond Dam Norwell, Hanover

River Mile	Type	Material	Spillway W (ft)	Spillway H (ft)	Impoundment Acreage	Year Built	Owner	GPS
4.0	Dam control structure	Concrete and stone	5.9	2.1	2.3	-	-	42º 08’ 46.446” N 70º 50’ 19.710” W

Peterson’s Pond Dam

Fishway None

Obstruction # 4 Upper Peterson's Pond Dam Norwell, Hanover

River Mile	Type	Material	Spillway W (ft)	Spillway H (ft)	Impoundment Acreage	Year Built	Owner	GPS
4.1	Dam control structure	Concrete	6.0	0.5	2.3	-	-	42º 08’ 48.936” N 70º 50’ 20.810” W

Upper Peterson’s Pond Dam

Fishway None

Obstruction # 5 Route 123 culvert Norwell

River Mile	Type	Material	Spillway W (ft)	Spillway H (ft)	Impoundment Acreage	Year Built	Owner	GPS
5.3	Culvert, circular	Concrete	5.0	0.8	0.0	-	-	42º 09’ 29.565” N 70º 50’ 48.627” W

Culvert at Route 123

Fishway None

Obstruction # 6 Jacob's Pond Dam Norwell

River Mile	Type	Material	Spillway W (ft)	Spillway H (ft)	Impoundment Acreage	Year Built	Owner	GPS
5.3	Dam	Concrete with wooden boards	16.1	2.3	55.0	1900	Town of Norwell	42º 09’ 29.870” N 70º 50’ 48.434” W

Jacob’s Pond control structure

Fishway None

Remarks:

This tributary to the North River has six obstructions to fish passage before its headwaters, 55 acre Jacobs Pond can be accessed. Although the second dam, at Mill Pond, is being considered for removal, the need for at least four fishways to provide passage to the headwaters reduce this system to a low priority site. Small numbers of smelt eggs have been observed in the stream just above its confluence with the North River.

Howland Pond Pembroke

Stream Length	Stream Order	pH	Anadromous Species Present
0.2	First	6.0	Blueback

Obstruction # 1 Howard Pond Dam Pembroke

River Mile	Type	Material	Spillway W (ft)	Spillway H (ft)	Impoundment Acreage	Year Built	Owner	GPS
0.1	Dam	Concrete with wooden boards	3.0	5.1	1.6	-	-	42º 05’ 56.874” N 70º 47’ 34.827” W

Howard’s Pond Dam

Fishway None

Remarks:

This small stream, a tributary to Robinson’s Creek, is fed by a 1.6 acre impoundment with a 5.1 foot dam. There is no potential for anadromous fish development.

Herring Brook Pembroke, Hanson

Stream Length (mi)	Stream Order	pH	Anadromous Species Present
5.6	Third	6.9	Alewife, blueback

Obstruction # 1 Barker Street Dam Pembroke

River Mile	Type	Material	Spillway W (ft)	Spillway H (ft)	Impoundment Acreage	Year Built	Owner	GPS
2.2	Dam	Concrete and stone	7.0	1.4	-	-	-	42º 04’ 32.359” N 70º 48’ 02.697” W

Barker Street Dam

Fishway Present

Design	Material	Length (ft)	Inside W (ft)	Outside W (ft)	# of Baffles	Baffle H (ft)	Notch W (ft)	Pool L (ft)	Condition/ Function
Stream baffle	Stone	338.0	Varied (3-5, 12)	Varied (3-12)	3	Varied (1.0-1.3)	-	Varied (19-166)	Fair Inefficient

Pembroke Herring Run

Obstruction # 2 1st Mill Ponds Fishway Pembroke

River Mile	Type	Material	Spillway W (ft)	Spillway H (ft)	Impoundment Acreage	Year Built	Owner	GPS
3.7	Dam	Concrete with wooden boards	6.8	3.1	-	-	-	42º 03’ 29.707” N 70º 48’ 03.177” W

First Mill Ponds Dam

Fishway Present

Design	Material	Length (ft)	Inside W (ft)	Outside W (ft)	# of Baffles	Baffle H (ft)	Notch W (ft)	Pool L (ft)	Condition/ Function
Notched weir-pool	Concrete	336.0	Varied (3.0-8.0)	Stream Edge	15	1.9	1.4	Varied (16, 17)	Poor Inefficient passage

First Mill Ponds fishway

Obstruction # 3 2nd Mill Ponds Dam Pembroke

River Mile	Type	Material	Spillway W (ft)	Spillway H (ft)	Impoundment Acreage	Year Built	Owner	GPS
3.8	Dam	Concrete with wooden boards	6.0	11.0	3.4	-	-	42º 03' 22.718" N 70º 48' 10.198" W

2nd Mill Ponds spillway

Fishway Present

Design	Material	Length (ft)	Inside W (ft)	Outside W (ft)	# of Baffles	Baffle H (ft)	Notch W (ft)	Pool L (ft)	Condition/ Function
Denil	Wood	8.0	1.5	2.2	8	2.4	-	-	Good Passable

2nd Mill Ponds fishway

Obstruction # 4 3rd Mill Ponds Dam Pembroke

River Mile	Type	Material	Spillway W (ft)	Spillway H (ft)	Impoundment Acreage	Year Built	Owner	GPS
4.1	Dam	Concrete with wooden boards	4.4	4.8	4.5	1991	-	42º 03' 14.985" N 70º 48' 25.778" W

3rd Mill Ponds Dam and fishway

Fishway Present

Design	Material	Length (ft)	Inside W (ft)	Outside W (ft)	# of Baffles	Baffle H (ft)	Notch W (ft)	Pool L (ft)	Condition/ Function
Denil	Wood	16.8	2.0	2.3	12	3.7	-	-	Good Passable

Obstruction # 5 Gorman Mill Pond Pembroke

River Mile	Type	Material	Spillway W (ft)	Spillway H (ft)	Impoundment Acreage	Year Built	Owner	GPS
4.6	Dam	Concrete with a wooden board	35.1	4.3	2.2	-	-	42º 03' 12.966" N 70º 48' 59.798" W

Gormon Mill Dam and fishway

Fishway Present

Design	Material	Length (ft)	Inside W (ft)	Outside W (ft)	# of Baffles	Baffle H (ft)	Notch W (ft)	Pool L (ft)	Condition/ Function
Denil	Wood	23.0	1.6	2.2	20	2.3	-	-	Fair Not passable

Remarks:

This stream provides the primary spawning habitat for river herring in the North River drainage. A total of 347 acres is available in the headwaters, Furnace and Oldham Ponds, and 10 additional acres are accessible in downstream impoundments. This system has not approached its potential production in recent years for a number of reasons. Five fishways are necessary to get herring to the headwater ponds. While the Town of Pembroke has made an effort recently to maintain these ladders, they were in varying stages of deterioration for some time, allowing the numbers of fish passing them to dwindle. Frequent maintenance of these structures is a prerequisite to the restoration of this population.

Perhaps the most damaging occurrence to this resource has been water withdrawals from Furnace Pond. In one case, a cranberry bog was diverting water for fall picking, resulting in stranding and impingement of large numbers of juveniles. This bog has recently been acquired by the town and water is no longer diverted. The second and most injurious withdrawal is by the City of Brockton, which diverts this water to its Silver Lake reservoir. This has been done without adequate screening or flow controls to prevent juvenile herring from entering the diversion system. It was not uncommon for thousands of young herring to be landlocked in Silver Lake. DMF, Pembroke and Brockton have been working on a screening system and diversion protocol to prevent these losses from the Herring River system.

Pudding Brook Pembroke

Stream Length (mi)	Stream Order	pH	Anadromous Species Present
4.0	Second	6.0	Unknown

Obstruction # 1 Mill Pond Dam Pembroke

River Mile	Type	Material	Spillway W (ft)	Spillway H (ft)	Impoundment Acreage	Year Built	Owner	GPS
2.8	Dam	Concrete with wooden boards	6.0	5.2	1.9	-	-	42º 04’ 49.968” N 70º 45’ 52.415” W

Mill Pond and Dam

Fishway None

Remarks:

Pudding Brook, a tributary to Herring Brook, drains two small impoundments with a combined area of 3.4 acres. Fishway construction is not justified here.

Indian Head River — Hanover, Pembroke

Stream Length (mi)	Stream Order	pH	Anadromous Species Present
4.8	Third	6.4	Alewife, blueback, American shad, white perch, trout

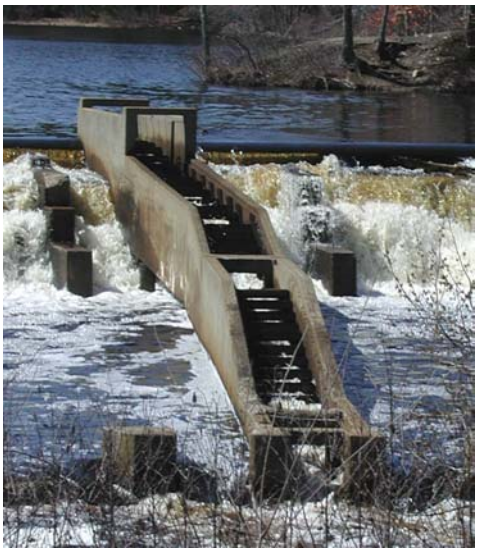
Obstruction # 1 — Elm Street Dam — Hanover, Pembroke

River Mile	Type	Material	Spillway W (ft)	Spillway H (ft)	Impoundment Acreage	Year Built	Owner	GPS
2.0	Dam	Concrete	102	7.4	10.8	1920, repaired 1979	Town of Hanover	42º 06’ 01.128” N 70º 49’ 26.429” W

Elm Street Dam (fishway is in center of structure)

Fishway — Present

Design	Material	Length (ft)	Inside W (ft)	Outside W (ft)	# of Baffles	Baffle H (ft)	Notch W (ft)	Pool L (ft)	Condition/ Function
Denil	Concrete and wood	109	2.6	4.4	33	Varied (5.0-5.8)	-	-	Good Inefficient passage



Fishway at Elm Street Dam

Obstruction # 2 State Street/Cross Street Dam Hanover, Hanson

River Mile	Type	Material	Spillway W (ft)	Spillway H (ft)	Impoundment Acreage	Year Built	Owner	GPS
3.5	Dam	Stone	52	4.0	3.2	-	-	42º 05’ 45.153” N 70º 50’ 56.357” W

State Street/Cross Street Dam

Fishway None

Obstruction # 3 Factory Pond Dam Hanover, Hanson

River Mile	Type	Material	Spillway W (ft)	Spillway H (ft)	Impoundment Acreage	Year Built	Owner	GPS
4.8	Dam	Concrete and stone	170	7.7	55.0	1943	Town of Hanson	42º 05’ 20.674” N 70º 52’ 03.787” W

Factory Pond Dam

Fishway None

Remarks:

The Indian Head River is unique in that it provides one of the few American shad, small stream sport fisheries in coastal Massachusetts. While most of the fishery occurs below the West Elm St. dam, the Denil fishway at that location successfully passes shad as well as river herring and a population has been established in the upper river. The dam at Cross St. prevents further upstream movement and a fishway or dam removal here could extend the shad spawning habitat. Access to 55 acre Factory Pond could significantly increase river herring habitat but dam safety and sediment contamination issues in that impoundment must be resolved before this can be considered.

Rocky Run

Hanson, Pembroke

Stream Length (mi)	Stream Order	pH	Anadromous Species Present
0.9	Third	5.6	Unknown

Obstruction # 1

Trout Pond Dam

Pembroke

River Mile	Type	Material	Spillway W (ft)	Spillway H (ft)	Impoundment Acreage	Year Built	Owner	GPS
0.3	Dam	Concrete and stone	80	12.7	3.4	1920	Private	42º 05’ 27.408” N 70º 50’ 41.209” W

Trout Pond Dam

Fishway

None

Remarks:

This small tributary to the Indian Head River flows from a 3.4 acre impoundment called Trout Pond. The limited potential habitat does not warrant fishway installation.

Indian Head Brook Hanson

Stream Length (mi)	Stream Order	pH	Anadromous Species Present
3.6	Third	6.7	Unknown

Obstruction # 1 Wampatuck Pond Dam Hanson

River Mile	Type	Material	Spillway W (ft)	Spillway H (ft)	Impoundment Acreage	Year Built	Owner	GPS
2.1	Dam	Concrete with wooden boards	12.6	7.0	63.7	1900	Town of Hanson	42º 03’ 55.442” N 70º 51’ 53.755” W

Wampatuck Pond Dam and sluiceway

Fishway None

Remarks:

Indian Head Brook flows from 119.5 acre Indian Head Pond, forms 63.7 acre Wampatuck Pond along its route and enters the Indian Head River above the Cross St. dam. If fish passage facilities are installed at Cross St., extension of the river herring habitat into this system should be considered.

Bound Brook — Scituate, Cohasset

Stream Length (mi)	Stream Order	pH	Anadromous Species Present
6.1	Third	6.5	Alewife, smelt

Obstruction # 1 — Hunters Pond Dam — Scituate, Cohasset

River Mile	Type	Material	Spillway W (ft)	Spillway H (ft)	Impoundment Acreage	Year Built	Owner	GPS
0.0	Dam	Concrete	66.0	5.5	1.3	-	-	42º 13’ 22.798” N 70º 47’ 19.747” W

Hunters Pond Dam

Fishway — Present

Design	Material	Length (ft)	Inside W (ft)	Outside W (ft)	# of Baffles	Baffle H (ft)	Notch W (ft)	Pool L (ft)	Condition/ Function
Notched weir-pool	Concrete	27.0	3.0	4.5	6	3.0	1.0	4.0	Poor Not passable

Fishway at Hunters Pond Dam

Obstruction # 2 Beechwood Street Dam Scituate, Cohasset

River Mile	Type	Material	Spillway W (ft)	Spillway H (ft)	Impoundment Acreage	Year Built	Owner	GPS
2.0	Dam	Concrete with aluminum stop logs	6.0	1.7	2.8	-	Town of Cohasset	42º 13’ 01.742” N 70º 48’ 39.655” W

Beechwood Street Dam and ladder

Fishway Present

Design	Material	Length (ft)	Inside W (ft)	Outside W (ft)	# of Baffles	Baffle H (ft)	Notch W (ft)	Pool L (ft)	Condition/ Function
Denil	Concrete with aluminum baffles	50.0	2.0	4.0	11	Varied (4.5 & 4.9)	-	1.3	Excellent Passable

Obstruction #3 Aaron River Reservoir Dam Cohasset

River Mile	Type	Material	Spillway W (ft)	Spillway H (ft)	Impoundment Acreage	Year Built	Owner	GPS
3.1	Dam	Concrete	184	17	132.9	1978	Town of Cohasset	42º 12’ 35.237” N 70º 49’ 28.705” W

Aaron River Reservoir Dam

Fishway Present

Design	Material	Length (ft)	Inside W (ft)	Outside W (ft)	# of Baffles	Baffle H (ft)	Notch W (ft)	Pool L (ft)	Condition/ Function
Denil	Concrete and aluminum	231.0	2.0	4.0		unknown	-	Unknown	Excellent Passable

Aaron River Reservoir ladder (covered)

Remarks:

Bound Brook is formed by the confluence of Aaron River and Herring Brook, which in turn flow from Aaron River Reservoir and Lilly Pond, water supplies for the Town of Cohasset. A poorly designed, deteriorating notched weir-pool ladder at Hunters Pond is impassable and should be replaced. Temporary modifications have been designed to provide some degree of function but have not been implemented to date. Relatively new fishways have been installed at the Beechwood St. dam and at Aaron River Reservoir, and should efficient passage be made available at the first dam, the river herring population has the potential to increase substantially. While DMF does not generally endorse the development of anadromous fish populations in public water supplies, the Town of Cohasset has expressed interest in maintaining such a herring resource in the reservoirs. In addition to river herring, rainbow smelt are known to spawn in the stream below Hunters Pond.

Musquashcut Brook Scituate

Stream Length (mi)	Stream Order	pH	Anadromous Species Present
1.2	First	7.4	Alewife

Obstruction # 1 Musquashcut Pond Tide Gate Scituate

River Mile	Type	Material	Spillway W (ft)	Spillway H (ft)	Impoundment Acreage	Year Built	Owner	GPS
1.2	Tide gate	Concrete and metal	15	6	70.2	-	-	42°13’31.113” N 70°45’34.019” W

Musquashcut Pond tide gate

Fishway None

Remarks:

This tidal stream flows into The Gulf from Musquashcut Pond, a salt pond in Scituate. Salinity in the pond is controlled by a tide gate, which prevents river herring access unless properly regulated. There is little potential here for further development.

Little Harbor Cohasset

Stream Length (mi)	Stream Order	pH	Anadromous Species Present
0.9	First	8.0	None known

Obstruction # 1 Little Harbor Tide Gate Cohasset

River Mile	Type	Material	Spillway W (ft)	Spillway H (ft)	Impoundment Acreage	Year Built	Owner	GPS
0.9	Tide gate	Concrete and metal with wooden boards	15	0.0	17.2	1957	-	42º 15’ 15.207” N 70º 48’ 37.263” W

Little Harbor tide gate

Fishway None

Remarks:

Although controlled with a tide gate, the salinities in this 17.2 acre inlet are too high to justify any development of anadromous fish.

South Shore Watersheds Recommendations

1. The fishway at Russell Millpond on the Eel River should be redesigned and replaced in order to restore access to that habitat.

2. Fishways at the Jenny Grist Mill and Off Billington St. Dam should be replaced or lined with aluminum steeppass sections.

3. A screening system for the Silver Lake diversion from Furnace Pond should be designed and installed and a diversion protocol developed to prevent loss of juvenile herring from the system.

4. Repairs should be made to deteriorating portions of the lower fishways on the Monument River.

5. A barrier dam should be installed at the Carter-Beale bypass on the Monument River to prevent herring from entering.

6. The fishway at Hunters Pond on Bound Brook should be redesigned and replaced.

7. The fishway below Sylvia Place Rd. on Furnace Brook in Kingston should be repaired.

8. The fishway at Russell Pond on Furnace Brook should be redesigned and replaced when the Russell Pond dam is repaired.