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Mr. Fred Ayer
Low Impact Hydropower Institute
34 Providence Street
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Dear Fred;

Our Putnam, Connecticut hydro plant has been LIHI certified, as you know, and I would also like to get LIHI certification for our Blackstone River plant in Pawtucket, Rhode Island. Like Putnam, Pawtucket is a small, low head facility originally developed long ago but it has an issue regarding the history of anadromous fish. There is no proof there ever were fish runs above the natural falls at tidewater although it has been widely assumed, and stated by government agency staff among others, that fish runs did exist. It is very difficult to prove a negative; in this case that there were no historic populations of anadromous fish migrating upriver.

The Rhode Island Department of Environmental Management (DEM) has since 2000 been promoting a plan to develop anadromous fish passage for herring and shad on the Blackstone River. In response to early questions from hydro operators the DEM commissioned and worked with a professor and graduate student at the University of Rhode Island (URI) to produce in 2001 the "Historical Assessment of Anadromous Fish on the Blackstone River" by Nixon and Buckley. This flawed document, a copy of which is attached, is not an assessment developed using accepted academic standards but is a misleading attempt to promote their program goals. Unfortunately it has now itself become a reference used to show historical fish passage, and in an astonishing demonstration of academic standards is used as a footnoted reference by the DEM itself (see attached). I wrote a short critique of this "assessment", which is attached, as is a paper I wrote examining the several 1700's Petitions to and Acts by the Rhode Island Assembly regarding fish passage. The examples in my criticism are not exhaustive but are illustrative of the problems with this presentation of purported evidence.

The DEM and other groups or organizations promoting fish passage insist, and have widely stated to the public, that there is ample evidence of anadromous fish on the Blackstone. When pressed to show primary source historical records proving this, however, they have made some disclaimers regarding their position and produced nothing conclusive. They point to the series of 1700's petitions involving the fish passage issue, which are discussed more fully in my paper on them but are evidence only that fish passage has been an issue of concern and did not exist when the petitions were written. Although the Petitions and Acts are primary source records they are not evidence of historical fish passage. Another item which the DEM has cited is that there is a pond in far northeastern Rhode Island, at the headwaters of a Blackstone tributary, shown on a 1795 (75 years after dams were built) map as Herring Pond. This pond is over 25 river miles

above tidewater in Pawtucket and there is no record of herring caught in the pond or anywhere downstream in tributaries or the river main stem, or caught anywhere else in the entire river system for that matter, yet its name alone is put forth as evidence that herring historically migrated up the Blackstone. Whether it was named for a local farmer named Herring, because perhaps someone thought it shaped like a herring, or from some fish identification error is unclear, but that this is the best evidence which can be produced speaks for itself. Dozens of unsupported, unfootnoted, citations can be found, and many have been produced, stating that anadromous fish once existed but these were all written long after the period in question and have no foundation in fact.

There is probably agreement on the following:

- Fish passage on the Blackstone has been raised as an issue since the eighteenth century. There is now a widely circulated belief (or myth, depending how one views it) that anadromous fish runs once existed.
- The Blackstone has been filled, dammed and channelized over the years beginning in the early 1700s but there has always been a natural falls at tidewater in Pawtucket. The river drops fifty feet in its first two miles.
- Herring and shad always came to the base of Pawtucket falls where they were caught by Native Americans, colonists, and in the 1800's local inhabitants until pollution drove them out. They return annually in significant numbers today and just as historical records say there is a fishery at the base of the falls.
- There is suitable herring habitat above the fourth dam some 1.5 miles upstream. That they could spawn there is not disputed.
- The language of available historical records is not all as clear as we would like but nothing specifically documents the existence of fish runs.

It appears that people have always seen and caught fish below the falls in Pawtucket and assumed, today and 250 years ago, that they must be blocked from going upstream by human development.

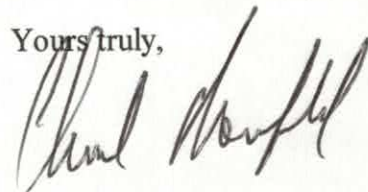
No conclusive evidence of fish runs has been produced after extensive research by myself and others. It is unlikely that any definitive statements documenting fish passage will ever be found.

Given the facts of this case and evidence available, what would the position of the LIHI be if Pawtucket applied for certification and stated that there is no record of anadromous fish on the Blackstone? It is likely the DEM would dispute our saying this and produce their "Historical Assessment of Anadromous Fish on the Blackstone River" as evidence.

I would be happy to discuss this and answer any questions you or your Board may have.

Please let me know if any further information would be helpful.

Yours truly,



Charles Rosenfield
Pawtucket Hydro

Critique of "An Historical Assessment of Anadromous Fish on the Blackstone River" by Betty Buckley & Scott Nixon

By C. Rosenfield

There is no clear historical evidence that salmon, shad, or herring once migrated up the Blackstone River. The position that these fish once did go up the Blackstone is a matter of opinion, not historical record, and examination of the purported evidence produced by Nixon and Buckley is necessary.

I do not believe that the position Nixon & Buckley repeatedly state and attempt to support, that several species of anadromous fish historically migrated up the Blackstone, is demonstrated. Their paper makes some incorrect statements, includes false quotations, and uses misleading language the most obvious examples of which are addressed below. Along with errors and language which could mislead the reader, the problem with this document is that it presents as historical evidence recirculated opinions from sources far removed in time from the events in question. Most of these opinions are unsupported. The arguments are even weaker upon examination because many of these unsupported opinions are used in support of further unsubstantiated claims presented as if fact. For example, the essay by Gary Kulik is mentioned as an important source, has material quoted from it, and is footnoted nine times. But this document is a 1980's interpretive essay, not a historical source! Such an essay may be of interest but cannot be treated as a source of fact. Kulik's work can be criticized for his own errors but his essay used the works by Grieve (written 1897) and Benedict (written 1853-1864) among others as sources on events in the 1700's. Grieve had used Benedict as a source and with truly circular logic, the present DEM Historical Assessment cites Kulik, Grieve, and Benedict all as independent sources of historical fact.

Primary source information should be the basis for making conclusions on history and the primary source 18th century information from the Rhode Island Assembly Petitions and Acts does not provide evidence salmon, herring and shad actually all had runs up the river. Some quotations by Nixon & Buckley are inaccurate and there are important omissions and misstatements used to influence the conclusion the authors are supporting. Citing many later opinions shows a belief to have been widely held but does not demonstrate its basis in fact.

The following is an illustrative, but certainly not exhaustive, discussion of some of the material purported to be evidence of fish passage.

On page 3 it is written that by around 1870 "there were few anadromous fish left in the river". This unsupported statement implies there were some migratory fish in the 1870's remaining from earlier populations, but by then the river was fully dammed and there is no way there could have been. Certainly no reliable records (and by 1870 there were plenty) support the conclusion that any population of anadromous fish existed above Pawtucket in the later 19th century. This statement is unattributed and not footnoted.

The discussion of other rivers in New England is not relevant to the history of the Blackstone; records either exist for the Blackstone or they don't. One should also ask why, when records exist for other rivers on which fish did migrate, they don't exist for the Blackstone. What is different about the Blackstone? The answer is that none of the other examples is a river which has a natural falls at tidewater and drops fifty feet in the first few miles. It is also misleading to use salmon as an example of the ability of all anadromous fish to pass falls or obstacles. The salmon is a much stronger fish and able to leap obstacles that shad and herring cannot; salmon also can overcome higher velocity flows than herring and shad. This is an important point to consider in examining what reaches of the river might have been accessible to various species of fish. The use of salmon anecdotes as evidence to show herring or shad passage is inaccurate and misleading.

There is no primary source material, archeological finds, or other evidence of Native Americans catching anadromous fish on the Blackstone River above the falls in Pawtucket. Any amount of conjecture can and has been made about this, as demonstrated by this report, but the fact is that no evidence exists showing that Native Americans caught migratory fish in the upper Blackstone.

On page 11 it is stated as if a fact that "Alewives from the Blackstone were sold at 2s. a thousand in 1646". However the source of this, which was written in 1854, makes no mention of the Blackstone or any river at all. The 1854 document actually quotes an earlier source which states that men from Pawtucket had license to "set up a weir upon the cove" and were bound to sell their alewives at 2s a thousand. Mention of the "cove" indicates that the weir was set up below Pawtucket falls, but in any case this is an example not only of the use of secondary sources as if fact but embellishing source material. Following this passage is a quotation by a man named Erastus Richardson saying "Aged people have informed me that before the construction of dams upon the river, salmon were so plentiful..." According to the footnote this was written in 1876, and since we know there were several dams constructed on the river by the mid 1700's these would have been really aged people, yet the statement is presented as if a valid primary source.

Further on page 11 an undated quote is attributed to "Eighteenth century historian" Goodrich stating that shad and alewives spawned near Woonsocket but Goodrich wrote this in the late 1870's. David Benedict, who wrote his reminiscences in the 1850's, is also described as an "eighteenth century historian" when quoted (although the quote includes "it is said to have been a fact..." identifying itself as hearsay) on the existence of anadromous fish. This is 19th, not 18th, century material although as it is described a reader would understandably think it was from primary 18th century sources.

Deeper discussion is required of the 1748 Furnace Unity matter and it is more fully addressed in my paper on it and the other Rhode Island Assembly Petitions. But note that on page 12 Nixon & Buckley say "legislative records also convinced us of the historical existence of anadromous fish farther up the Blackstone" and go on to quote claims made before a justice of the peace. That claims were made is apparently correct although the

footnote and quote are from Gary Kulik, a recent source. What the authors neglect to say is that these claims (described as "malicious" in a petition for relief) were found inadequately persuasive and the justice's action voided. Neglecting to provide this information is intentionally misleading and changes the entire meaning and significance of the Furnace Unity story.

On page 16 it is stated that a "Grant of Privilege" was made in 1741 to dig a trench around the falls. The only mention of this is in a 1786 Petition to the Assembly. There is no record of such a grant in the land records, no mention of it in the 1761 petition to the Assembly, and no mention of it anywhere else in the forty-five years preceding the writing of the 1786 petition. What new trench is referred to? The 1786 petition does say that fish passed up the trench, but nothing corroborates this. Most strongly bearing on the reliability of the information in the 1786 Petition is the fact that no action was taken by the Assembly on it. These petitions were not sworn testimony or law; it was up to the Assembly to determine their merit. That this 1786 petition did not result in an Act or any other action by the Rhode Island Assembly considerably detracts from its value as the "powerful evidence" described by Nixon & Buckley

The quote attributed to residents upstream of Furnace Unity, that "the furnace's dam hindered the passage of fish", does not exist in the footnoted Rhode Island Archives Petition Vol. 7,#2. In fact, this 1748 RI Assembly petition was written by the Furnace Unity dam owners, not upstream residents objecting to the dam. This false quotation completely misrepresents that episode. The dam owners said in their petition that the dam had existed for fifteen years "unmolested" and that "malicious persons" brought this to the Justices "under a pretense that the fish was hindered". The petition says "it is well known no fish from the Sea could pass through the Said Damm altho the Damm were broken as it is desired". Finally, they ask "Seeing the said Damm does not hinder the passing of any Salt water fish into the said River that the Judgement of the Justices be made void and that your petitioners may have leave to use the Damm as heretofore". The General Assembly granted this Petition October 28th, 1748 and the Justice's order to open the dam was voided. Nixon & Buckley avoid mentioning this very important fact, from a primary source period record, which is strong evidence against the case they are straining to make.

The last sentence on page 16 states that fishways had been built on both sides of the river by 1774. This statement is unsupported. There is no evidence today and no existing map, description, or property record of any trench or fishway on the east side of the river.

Many of the conclusions drawn by Nixon & Buckley regarding the Petitions and Acts to the RI Assembly are not well supported by these records, which are discussed in more detail in the C. Rosenfield paper on them. The one thing the old documents are is proof that fish were not passing up river when they were written.

Some obvious contradictions in the report are not addressed or explained. An example of this is the page 18 statement that by 1830 there was roughly one dam per river mile, yet

the authors say that fish were somehow passing upstream at that time and even later in the nineteenth century.

The paragraph on restocking is another example of embellishing citations in an attempt to mislead. Nixon and Buckley write regarding fish stocking "The first efforts were sponsored... in 1825". The source of this supposedly factual statement is a pamphlet printed in 1930, which has no supporting references at all, but more important is that what is actually written in it is that the idea (emphasis added) of stocking originated in 1825. Nowhere in the source is it written that there were actual efforts to stock in 1825 or even that this 1825 idea was directed at the Blackstone. This was added by Nixon & Buckley. They go on to say that official attempts to establish runs began in 1868; the pamphlet does say that salmon were put into rivers but the effort failed. Herring and shad are not mentioned as even attempted wherever this was done. There is no mention that this effort was on the Blackstone although as written by Nixon & Buckley one would assume that it was.

It is misleading to say that there were reports of fish caught "in the Blackstone" in the nineteenth and early twentieth century. Fish were caught below the lower dam, as the report acknowledges, but this is the tidal Seekonk River and any fish caught there have not passed up the river at all.

I have not done a complete review of all the sources but examination of the ones mentioned above demonstrates considerable overreaching by the paper's authors in their attempt to prove that herring and shad historically went up the Blackstone. There is simply no historical record that these fish did so.

Addendum 5/03:

Comments on conclusion-

In their concluding paragraph the authors say "The historical record clearly documents extensive runs of anadromous fish in the Blackstone River". Looking over what they have presented as evidence, what, exactly, is the clear documentation of extensive fish runs?

Illustrating that this "Historical Assessment" is not intended to be a true evaluation of the historical record but rather the justification of a DEM promoted initiative, the authors close by saying that "Restoring the spawning migrations of species that historically used the Blackstone and other New England Rivers is an ecologically and culturally desirable goal". Statements like this are an opinion. To add them on to a purportedly factual document like this is a further attempt to mislead (members of public should decide what are desirable cultural goals themselves) and promote an agenda.

Petitions and RI Assembly Acts relating to fish passage in Pawtucket

C. Rosenfield 2002

Anadromous fish passage on the Blackstone has been brought up as an issue for centuries. Fish historically came to the base of the falls in Pawtucket and there is no doubt that migratory fish have always been valuable in rivers they do use to travel inland. It was long ago (over ten generations) when European colonists first started affecting the environment in the Blackstone Valley and we have no way to know what it was like before then. What is clear is that even a few years after the first man-made changes to the river in Pawtucket people looked at the fish below the falls, looked at the falls, and make the logical leap that fish once did, and should in the future, swim upstream. That they ever did so is not demonstrably true but as time has gone by the legend has become established.

Pawtucket was settled early and was an important place for crossing the Blackstone River and reaching the far side of Narragansett Bay. The first bridge and an improved dam in Pawtucket were constructed around 1713-1718. In 1719 a Rhode Island Assembly Act was passed enabling towns to prevent obstruction to fish but this did not mention the Blackstone. There is no record of this 1719 Act being applied to the Blackstone but Sargents Trench around the falls was built circa 1714-1718 and may have been constructed to satisfy the Act's requirements (Book Notes of S. Rider, 1894). The falls that the river was confined to after the 1713-1718 construction were impassable (see old drawings, anecdotes, and present day conditions for evidence) and after 1730 there were mill dams on Sargents Trench. There had always been fish below the falls but there is no evidence that even prior to 1718 there actually were fish migrating further upriver. Unfortunately limited period records are available and no one would have made the effort to note something that did not exist.

The Rhode Island Assembly Petitions and Acts are primary source historical information, not conjecture or recirculated opinions, and the following discusses them.

In 1735 an Act was passed by the Rhode Island Assembly which prohibited any dam existing without fish passage on any stream or river in Rhode Island between April 10th and May 20 annually. This Act applied to every "*River, Brook, or Course of Water where any fish usually pass*". The Act allowed any citizen to complain to a Justice of the Peace if he thought fish passage was insufficient and the Act specified procedures for the Justices to take action ordering the dam opened if appropriate. Penalties were also in the law. Although I have not checked the source, Gary Kulik cites that the 1735 Act was the result of efforts by men from Scituate, whose concern was the upper Pawtucket River.

This Act does not specifically mention the Blackstone River, or any other stream by name, but as written in 1735 clearly applies to all streams in Rhode Island "*where any fish usually pass*" which means ones with anadromous fish runs. The record of events in the 1748 case, an attempt to exercise this law on the Blackstone River, and its outcome is important evidence in the search for truth about the existence of anadromous fish on the Blackstone.

In the early 1730's a dam was built at Manville (not far below Woonsocket) for the Furnace Unity Iron Works. Some fifteen years later, in 1748, a complaint was made to a Justice of the Peace regarding fish passage at this dam. There were statements made that fish passage was hindered by the dam and the Justice ordered that the next April the dam was to be opened in an apparent application of the 1735 Act.

Following this complaint and action by the Justice, later in 1748 the owners of the dam filed a petition (RI Petitions Vol. 7, 2) to the General Assembly requesting relief in the form of voiding the Justice's recent order and keeping the dam as it had been. They said in their petition that the dam had existed for fifteen years "*unmolested*" (most of which time the 1735 Act had been in place) and that "*malicious persons*" brought this complaint to the Justices "*under a pretense that the fish was hindered*". The petition says "*it is well known no fish from the Sea could pass through the Said Damm altho the Damm were broken as it is desired*". Finally, the Petitioners ask "*Seeing the said Damm does not hinder the passing of any Salt water fish into the said River that the Judgement of the Justices be made void and that your petitioners may have leave to use the Damm as heretofore*". The General Assembly Granted the Petition October 28th, 1748 and the Justice's order to open the dam was voided.

So, when the 1735 Act was applied on the Blackstone it was overturned after petition was made that if in fact the dam was opened, no anadromous fish would pass up the river anyway. As any intact dam would have been an obstacle to herring and shad which were migrating up the river these fish must not have been there.

Statements, or testimony, which were the basis of a Justice's decision that the Rhode Island Assembly, a superior legal authority, found reason to void are not credible evidence. Upon examination, the statements made to the Justice must have been found to be inadequately factual or his decision unsupported by law. As in the Furnace Unity case the 1735 law would have supported the Justice's decision if the complainant's statements were true we must assume they were not. The dam owner's petition is a primary source historical document and the granting of it by the Assembly was after evaluation of the 1748 situation and events at that time, not decades or centuries later

The first Petition to the Rhode Island Assembly and legislative Act specifically addressing fish at Pawtucket was in 1761. The language of the 1761 Act supports that there always were plentiful fish below the falls and people have always believed it would be a good thing if they could get upriver although they have not. The Petitioners and the Act said "*Whereas...a great number of fish of several kinds, come into the river called Seaconck River, as far as the Falls, well known by the name of Pawtucket Falls; by which their passage further up the river, is obstructed, and thereby the Country above deprived of considerable Advantages that would arise from the fish passing the said Falls*". This unembellished description appears more accurate than later ones and obviously at the time this was written in 1761 migratory fish were not present above the falls. Also, since 1761 was still within living memory of 1718 if there had been migratory fish existing before 1718, when the dam and bridge blamed for blocking fish were built, it surely would have been mentioned. There is no indication that the discussed obstruction by the falls was

caused around 1761 or even could be placed in time; if it was related to specific human action it is probable the writers would have said so. The writer of the petition was apparently not familiar with the river upstream as he states that the river extended "*almost one hundred miles back into the country*" with no obstruction when in fact the upper limit of headwaters was less than fifty miles and the natural falls in Woonsocket less than ten miles upriver. The 1761 Act allowed a lottery to raise money for constructing fish passage but there is no record of any action being taken. It is interesting to note that there is no mention of Sargents Trench or passing fish by going around the falls in this petition or Act.

The next legislative action was in 1773 with an Act passed allowing the breaking down of rocks at Pawtucket Falls. This Act repeats some language from the 1761 Act "*Whereas a great number of fish, of several kinds, come into the river called Seaconck River, as far as the Falls, well known by the name of Pawtucket Falls, by which Falls their passage further up the river was, before the year of our Lord 1761, wholly obstructed*". Although there is no record of any action taken in 1761, the 1773 Act said that what was done as a result of the 1761 Act "*proved of Public utility*" and the new Act made it lawful to further blow up the falls.

Several issues are apparent: a) If any work in 1761 actually had been effective for fish passage there would have been no need for further action and the passage of fish would have been noted. b) If fish passage actually had taken place the Act would have specifically said so, not just that the 1761 work was of utility and will "*with a very little more Expence and Labour be very advantageous*" c) There is no mention of Sargents Trench and no explanation of why fish passage was being pursued again in 1773.

In June 1774, only nine months later, another Act was passed appointing a committee to review the blowing up of any rocks in Pawtucket and forbidding any action taken on the falls except by their permission. It is not clear what took place as a result of the 1773 Act, but the 1774 Act said that "*through a misunderstanding of which Act many disadvantages have happened*". Obviously the 1773 Act did not have whatever benefits were expected. Following the Act in 1774 there was no further legislative activity involving the falls at Pawtucket or mention of fish passage for several years.

The next time the fish issue was brought before the Rhode Island Assembly was twelve years later with a petition (RI petitions Vol. 27, 83.4) in June 1786. This petition says that in 1741, some forty-five years earlier, a "*Grant of a Privalege*" was made "*to dig a trench round Pawtucket Falls*" for fish passage, however, no evidence of any such Grant can be found in the land records and there was no mention of it in the 1761 petition or in the previous forty-five years since 1741. Given that Sargents Trench had been constructed around 1718 this make little sense, and the 1786 petition further claims that as a result of this trench dug in 1741 "*...they received great benefit, as said river and its branches afforded plenty of fish that passed up said trench*". Reliability of this is doubtful because the 1761 petition states that fish "*cannot pass*" the falls. The 1786 petition states that a dam was put across the trench whereby the fish were obstructed but it does not give the date of this dam's construction. As Sargents Trench had been dammed for power use since 1730, and fish passage would have been impossible at least since then, it is not clear what

this petition refers to or if it is accurate. By 1786 there would have been no living memory of pre-1718 conditions. The Assembly did not pass an Act or otherwise take affirmative action upon this petition and the refusal of the Assembly to grant the request of the petitioners is negative commentary on its reliability.

There clearly was considerable public discussion about this issue because on September 28, 1786 (RI Petitions Vol. 27, 83.2) the local mill owners wrote a petition to the Assembly stating that many citizens have expressed desire for creating fish passage and that the citizens think it can be done by modifying the present ditch. They wrote that the citizens think this will be beneficial and can be done without harming the Works on the trench; the mill owners expressed their conditional support based on this. The mill owner writers were obviously doubtful about the practicality of the scheme or that it could be done without harming their water powered works. Unless this was the case they would not have felt the need to write the petition which requests no action of the Assembly but was apparently just to make a record. This petition is further evidence that for whatever reason fish were not going upstream past Pawtucket in the 18th century.

In May 1787 another petition (RI petitions Vol 27, 83.1) was sent to the Assembly asking for fishing regulations in the "*trench or watercourse that is to be dugg round Pawtucket Falls so call'd, for the purpose of letting the fish pass and repass up the same. As we conceive it will be a great advantage and benefit to the public...*" This language shows that whatever work the writers were planning to do for fish passage had not been done at the time of the petition and the words "*as we conceive it will be a great advantage*" demonstrate the central point that the writers at that time only imagined it would be good in the future if fish went upstream. People still saw the fish coming to the river below the falls and caught them there, as they always had, and thought it would be a great thing if the fish could go upriver but had never seen them do so (and over two hundred years later little has changed!). This petition resulted in a May 1787 Act regulating fishing but this Act refers to the trench as having been built. As both the petition, which says "*to be dugg*", and Act are dated May 1787 there must be some error. It is not clear if the petition writers were referring to the dammed Sargents trench or if the Assembly was mistaken as to what the works in Pawtucket were. The Act describes regulations to protect any fish that might come to be in the trench but it offers no evidence that any fish went up it. It is interesting that the petition words "*we conceive it will...*" are not in the 1787 Act as they indicate the hopeful, but not fact based, nature of the petition. Neither this petition nor the 1787 Act on fishing regulations offer any evidence that migratory fish ever swam up the river past the falls.

The next round of activity regarding the falls and fish passage in Pawtucket began in 1792, at the same time as additional dam building, and had some different concerns. The issue of fish passage came up as part of complaints (RI Petitions Vol. 27, 83.5) about the raising of "*obstructions*" in the river. The lower dam had been raised up and the upper dam constructed. Fish passage was brought up as an issue but the obvious concern of the petition writers was the potential for flooding and damage to buildings from the raised lower dam. Although the raised lower dam was blamed by the petitioners for the loss of fish, their upstream passage could not have been affected by raising the lower dam

because the fish could not pass over the falls before the dam was raised. It is noteworthy that this petition refers to the valuable "*fishery at and below said falls*" which is where it was and always had been. As a result of this 1792 petition a Committee was appointed (RI Petitions Vol 27, 83.6) in November 1792 to report to the 1793 Assembly on the "*obstructions*". Demonstrating that in the 1790's the real issue was safety, not fish, a second petition was filed in February 1793 which echoes the concerns about safety but makes no mention of fish (RI Petitions Vol 27, 116.1). The petitioners may have felt their cause would get more legislative sympathy if they pitched it as a public issue regarding fish passage rather than an effort to get the legislature to protect private buildings against the acts of others, which would be more appropriate to the courts.

The 1793 Report to the Assembly says that it is the writers' opinion that fish could not pass over the falls with the additional dam recently built. They do not say, however, that the fish could pass over the falls without the recently built dam and we know that prior to its 1792 construction fish did not. The writers opine that a fishway might be built in the falls if the new dam was removed, which is confirmation that fish had not been passing before. Again, people saw the fish below the falls and wanted them to go upstream. The writers of the report are clearly very concerned about safety of the buildings and bridge and this is the reason given for requiring no further dam additions. The legislature passed an Act as a result of this report in February 1793. There is no mention whatsoever of fish in this Act, which went further than the report and required the "*said obstructions to be removed*". Again showing that the real concern at this time was safety from flooding at the lower dam, not fish passage, the upper dam was exempted from being removed as one of these "*obstructions*". It has been claimed that this exemption of the upper dam was the result of Moses Brown's mill owner influence, but there is no evidence of that and its exemption from the 1793 Act makes sense because that dam could have no effect on flooding immediately above Main Street in Pawtucket.

There are ample records that this was an issue people felt strongly about then as now. In spite of the beliefs some have, and had years ago on this, when the Petitions and Acts are read and examined in their entirety they are not evidence shad and herring ever passed upstream beyond Pawtucket. These fish were found in huge numbers in Narragansett Bay but do not necessarily return to their natal rivers. Whatever specific conditions existed in Pawtucket because of the size of the Blackstone, the size and shape of the Seekonk River, the location of other spawning grounds, tidal effects, etc, that attracted fish in spite of the fact they did not spawn upstream, the proof is that the fish appeared there in significant numbers until the early 20th century and are again there today. Shad and herring once swimming in large numbers up to Woonsocket from Narragansett Bay is a myth which over time has become accepted by many, but when the facts are examined it is no more than that: a myth.

The attached web page printout is an example of the unsupported and incorrect statements, presented and repeated as if fact by the Rhode Island Department of Environmental Protection (DEM) and others, regarding the history of anadromous fish on the Blackstone River.

The academic standards used the DEM and the University of Rhode Island are also noteworthy. They have footnoted their misleading and false statements about the historic record with their own recent document "An Historical Assessment of Anadromous Fish on the Blackstone River" by Nixon & Buckley. This speaks both to the quality of evidence available and the DEM's work.