Brian Mayne
6/9/2017
Oregon Abroad

Insufficient Flow: An Economic History of the Eugene Millrace

The millrace of Eugene Oregon is a rather small creek with a significant past. First created in 1851 by Hilyard Shaw, who connected two sloughs from the Willamette River that had diverged into property controlled by the city of Eugene. It was here that Shaw, supposedly, foresaw a great industrial rise in the city, making Eugene an economically viable city. [1] However, based on the available evidence, the millrace was never very economically prosperous. While it did house many of Eugene's early industries, few of these businesses supplied anything more than local demands or catered to the state's agricultural economy, while the constant conflicts with property owners and the risk of flooding made even these ventures less profitable than they could have been. By the early 20th century only a few businesses remained near the millrace, by which point the race had become more of a recreational area than a business or industrial center. Given the information at hand, with the exception of its earliest years the millrace in Eugene Oregon was never a very strong industrial or economic base, even if it was the strongest in the city. Also, due to the millrace's slow infrastructural deterioration over the decades, especially of its water source systems, and its complicated legal status, it would be unfeasible and unwise to attempt to renovate it today for purely economic motives. During the mid. to late 19th century and the early 20th century, the millrace was a useful means of generating business for the city of Eugene, but as the flow of water decreased through this stream, so did the flow of revenue it once generated for businesses.

---

[1] Gill, Jerry, Sharon Otremva, Judith Rees, and Grace Wingfield. "Eugene Millrace, A History." *Published by the City of Eugene, Housing and Community Conservation Department*, May 6, 1979. pg. 2

During the 19th century, shortly after Oregon's founding as an official state in the United States, Oregon was well known as a center of grain growing. Grain served as the primary crop of the state, and the highly fertile soil that allowed this plant to grow so well brought many settlers to Oregon even prior to its establishment as a state. But many were concerned that an intensive focus on agriculture would not only deplete the soil, but also stifle the area's long term economic growth. In order to flourish, Oregon had to start producing the things it was importing; the state had to develop industry. [2] In the city of Eugene, this would be accomplished by Hilyard Shaw, who, as stated before, connected two sloughs that branched from the Willamette River into one stream that would serve as the city's millrace, a source of flowing water that could be used to turn industrial purpose mills, in 1851. Shaw himself had a sawmill and a gristmill built along the race, and it wasn't long before another business owner had a flourmill built alongside these buildings. Other industries began building on land nearby the race, land which would be unified to the millrace itself in 1877, and which allowed these business owners to start making improvements and modifications to the millrace so as to increase their industrial output. By this time, the millrace was supplying almost a dozen separate industries in the city of Eugene, including "a lumber mill, produce cannery, sash and door factory, cider and vinegar plant, furniture factory, excelsior plant, ice plant, woolen mill, tannery, and flour mill." [3] Up through the 19th century, and into the early 20th century, industries in Eugene were able to conglomerate around the millrace and draw power from it for their mills. It is believed by many, including

---

[2] Robbins, William G. *Landscapes of promise: the Oregon story, 1800-1940*. Seattle: U of Washington Press, 1997. Print. pg. 105-106

[3] Willingham, William F., PH.D. "A Historical Context for the Eugene Millrace and Intake Structures." February 26, 2010, https://scholarsbank.uoregon.edu/xmlui/bitstream/handle/1794/18653/EugeneMillraceIntakeStructures_HistoricalContext_20100226.pdf?sequence=1. pg. 1-2; Thomas, Bob, Gordon Brunton, and Priscilla McKeigue. *A Research Report: The Eugene Millrace*. Eugene, OR: The Metropolitan Civic Club, 1966. pg. 2

some of the later business owners who used the race, that the millrace and the industry it attracted was largely what enabled the city to grow larger than, and of course become separate from, nearby Springfield. [4]

However, shortly after this period, and even during it to a more limited degree, the millrace began to show problems for its economic future. As early as 1870, the use of water to power mills and other machinery had begun to decline. The various businesses which operated around the millrace also had problems with periodic flooding, floods and other high water events damaging equipment in 1890, 1891, 1902, and 1904. In 1890 various structures were added to the dam to better control the race's flow, but as is evident by the later floods these measures were unsuccessful. [5] Floods continued to plague the millrace into the 1940s, when the dam enabling flow to the race was destroyed, and long after businesses had abandoned the area. This demonstrating that fixing this problem was either impossible or unreasonable during this time. [6] In addition to flooding damaging the equipment, fires would also cause damage and economic loss, though this would have hardly been a unique problem for millrace industries. Nonetheless, these sorts of problems combined to make business on the millrace less than profitable for the companies that used it, and were a major factor in the shutting down or relocation of these industries along the millrace. [7]

There was also another factor which may have rendered business along the millrace less than desirable, and that was the conflicts generated with residence owners who also lived along the race. It is known, for example, that at least one industry owner along the race, the Chambers power company, was willing to make the necessary changes to the millrace so as to increase its

---

[4] Tweedell, Bob. "Millrace History." *Eugene Register Guard*, 1949. pg. 10
[5] Willingham, William F., PH.D. "A Historical Context for the Eugene Millrace and Intake Structures." pg. 5-6
[6] Thomas, Bob, Gordon Brunton, and Priscilla McKeigue. *A Research Report: The Eugene Millrace*. pg. 3
[7] Tweedell, Bob. "Millrace History." *Eugene Register Guard*, 1949. pg. 7-8, 12

flow for power generation in 1910. However, in the course of building operations many residents complained that the increased flow was causing flooding in their basements, while many others were upset that workers, in their efforts to clear the race, were shoveling mud into their yards. The residents took their case to court and, after six long years of litigation, the court eventually ruled in favor of Chambers in 1916, though they did forbid the company from expanding the race more than 50 feet across and also from shoveling up mud into homeowner's yards. Of course, by this time the company had wasted not only time but also a lot of money in this court case, much of the land the company having access to near the race being taken up by other businesses or residents in the meantime. By 1917, only the woolen mills and excelsior company were left operating buildings along the race, no new industries moving to the area since the 19th century. In 1928, a final flood damaged the headworks of the race, while electricity had by this point become so cheap it seemed more reasonable for the companies to reinvest in new property powered by electricity than to repair flood prone buildings. [8] It was in this year that mill powered industry along the millrace ceased forever.

Of course, even during the millrace's beginning it cannot be said that the industry established along its banks ever could have brought Eugene out of its status as a part of the Oregon economy, which was agricultural. This can be inferred simply by observing what kinds of industries surrounded the millrace. For the most part, one sees that most of the companies along the race, including the sawmill and other lumber companies, flour and grist millers, tannery, woolen mill, and the food canneries, were designed to process the agricultural and horticultural goods produced by the state of Oregon itself. While this was certainly an enterprise in industry, these businesses were entirely reliant on Oregon's status as a primarily agriculturally

[8] Willingham, William F. pg. 11-15; Thomas, Bob. pg. 2-3

oriented economy, and would not have broken the state's dependence on agriculture as its chief means of economic production. [9] Later in the millrace's career, as other companies took over, some less agriculturally oriented industries did set up shop along the waterway, but even these cannot be said to have been extremely economically successful, due to the aforementioned flooding and property disputes but also due to the small size of these operations. For example, in 1902 there was near the millrace a machine, pattern, and looper shop, but due to its size in comparison to the nearby woodshed buildings it can safely be said that this industry rarely would have supplied much beyond local demand. A group of repair shop, foundry, and electricity supply storage buildings were also to be found along the race at this time, but their size and the nature of their businesses, repairing machines and supplying power, suggests that these too were businesses meant to supply local demands, rather than bring a strong industrial economy to Eugene. [10] Based on this evidence, even if the millrace did help Eugene grow and provided for local needs, its economic potential as a means of fueling a truly industrial economy in the city, let alone the state, was never very great. The most vibrant industries established along the millrace were only ever an extension of Oregon's agrarian economy.

Since this time, there have been plans put forward with the goal of re-establishing the millrace's economic potential. Many of these plans have focused less on industry and more on business and meeting local needs, such as using the race as a scenic point to attract businesses to the area, or going back to the location's previous use by restaurants and canoe rental facilities. [11]

---

[9] Willingham, pg. 3-5.

[10] Sanborn Maps. 1902, Eugene, Oregon. Provided by http://sanborn.umi.com.libproxy.uoregon.edu/splash.html from the University of Oregon.

[11] Millrace Commission (Ken Morin, Gordon Brunton, et al.), "Interim Plan for the Maintenance of the Millrace", Office of the President Robert D. Clark Records, Box 29, Folder 10, pg 1, University of Oregon Knight Library Archives; Hugh Pressman, "University Centennial, August 12, 1974", Office of the President Robert D. Clark Records, Box 132, Folder 10, University of Oregon Knight Library Archives.

Of course, as one can plainly see now, these businesses no longer grace the millrace with their presence, probably due in large part to a lack of sufficient water flow to provide for a more scenic and less stagnant stream. The previous gravity flow intake system being damaged in the floods of 1943 and 1945; this system was replaced with an electric pump which is operated by the Physical Plant, though the pipe itself is only about 30 inches in diameter and isn't used to its full potential. [12]

However, even meeting this basic requirement would cost more than may be justifiable for reinvigorating the race's economy. The building of a 42 inch culvert along the Willamette River to increase water flow to the race, for example, would cost about $220,000 (accounting for the cost of $35,000 in the 1970's), as well as a self-regulating engine whose costs were not estimated in the source; even taking into account a lack of maintenance costs with this plan, the city, or the university, would be hard pressed to raise this amount. [13] Other plans are even less financially feasible than this one, however, with the installation of a second pump estimated to cost around $130,000 to install, plus more than $600 a month to operate (from $20,000 and $100 per month in 1970), in addition to the maintenance costs of the first pump. [14] Lastly, the costs of reestablishing a natural gravity flow system to the race would also cost a considerable amount, J.I. Hunderup's company estimating that the installation of the various pipes and concrete structures in the millrace needed to increase its flow, and prevent the episodic floods from damaging the race's infrastructure, would cost anywhere between 3.7 and 4.6 million dollars

---

[12] Millrace Commission (Ken Morin, Gordon Brunton, et al.), "Interim Plan for the Maintenance of the Millrace", Office of the President Robert D. Clark Records, Box 29, Folder 10, pg 4-6, University of Oregon Knight Library Archives

[13] Millrace Volunteers, Febuary 1971, Office of the President Robert D. Clark Records, Box 29, Folder 11, pg 29-30, University of Oregon Knight Library Archives

[14] Larry Bissett, November 30, 1970, Office of the President Robert D. Clark Records, Box 59, Folder 10, University of Oregon Knight Library Archives

today (from $585,000-$726,000 in 1974); while this system would eliminate monthly maintenance fees, the initial spending would be difficult to justify. [15] It must also be kept in mind that this would have been the cost of such renovations in the 1970's, when the millrace's degradation hadn't reached the level it has now. Costs for increasing the water flow of the millrace would probably be even higher now given its current condition. With these figures in mind, it seems difficult to justify the renovation of the millrace for the purposes of attracting business given these initial costs.

The problems with renovating the millrace do not stop at the costs for increasing water flow, unfortunately. Just one of these costs would be the installation and maintenance of a (or several) grease trap(s), due to the millrace's current use as a part of the city of Eugene's storm drainage system. While the building of such traps might initially be cheap, depending on their design, they would require constant maintenance and cleaning due to their very nature, possibly costing as much as $3,200 a year to keep clean (from $500 in 1970). [16] In order to make the millrace more amenable for businesses, it would also need to be cleaned of much of its debris which is not only unsightly, but also impedes water flow. Removing this and performing a general cleanup of the millrace would require a great amount of labor, as well as another $32,000 (from $5,000 in 1970), assuming that volunteer labor would be unavailable. [17] But before even any of this could be done, a series of surveys and studies would have to be conducted on the quality of the millrace's water, its elevation points, the necessary amount of water flow needed to

[15] J.I. Hunderup, April 5-17, 1974, Office of the President Robert D. Clark Records, Box 111, Folders 21-22, University of Oregon Knight Library Archives

[16] Millrace Volunteers, Febuary 1971, Office of the President Robert D. Clark Records, Box 29, Folder 11, pg 28, University of Oregon Knight Library Archives; Larry Bissett, December 29, 1970, Office of the President Robert D. Clark Records, Box 59, Folder 8, University of Oregon Knight Library Archives

[17] Larry Bissett, December 29, 1970, Office of the President Robert D. Clark Records, Box 59, Folder 8, University of Oregon Knight Library Archives

meet acceptable standards without increasing the risk of flooding, and the mapping of the area with regards to property ownership so as to avoid legal confrontation. This study on its own, according to Fred E. Harem's, the Director of Water Engineering, findings, would cost at least $96,000 (from $15,000 in 1973). Attracting business to this area would also require advertising, further adding to these costs. [18] Despite the long term economic benefits to be derived from fixing up the millrace, there is no guarantee things would work out well, and due to the costs implicit in such a venture it would represent a serious fiscal loss if the race were to be cleaned and repaired only to fail in attracting significant business for Eugene.

Still, there is the possibility of reducing the direct costs of improving the millrace to the city and the university through means of popular appeal. What this means is appealing to University of Oregon alumni to donate money to the cause of restoring the millrace, and using volunteer labor from Eugene and the university to help make said restorations, both of which would significantly cut down on costs and make economic restoration of this area much more feasible. In fact, multiple planners during the 1970's who were interested in restoring the millrace brought this forward as an idea, and to a certain extent it worked, with many alumni pledging whatever they could, $5 from some people and $100 from others (at pre-modern inflation value), for restoration of the millrace. [19] However, some conditions which were present at that time to make alumni and Eugene inhabitants willing to devote time and resources to the restoration of the millrace are no longer present today. For example, one woman, while unable to

[18] Fred E. Harem, Director of Water Engineering, March 27, 1973, Office of the President Robert D. Clark Records, Box 111, Folder 21, University of Oregon Knight Library Archives

[19] Millrace Commission (Ken Morin, Gordon Brunton, et al.), "Interim Plan for the Maintenance of the Millrace", Office of the President Robert D. Clark Records, Box 29, Folder 10, pg 21, University of Oregon Knight Library Archives; Millrace Volunteers, Febuary 1971, Office of the President Robert D. Clark Records, Box 29, Folder 11, pg 31, University of Oregon Knight Library Archives; Numerous alumni writing to the University during the presidency of Robert D. Clark, Office of the President Robert D. Clark Records, Box 90, Folder 5, University of Oregon Knight Library Archives

provide financial support for the restoration, did express her support of the project, but only because she had memories of swimming and canoeing in the millrace when she was a student, something few modern alumni could relate to. In fact, less and less students, both former and current, know much about Eugene's millrace at all, the spot which used to be such a central focus of student life for recreational canoeing and a variety of festivals having been unused for decades now. Even during the 1970's, when support was being raised for a renovation project, there was at least one unspecified individual who used to pledge $6,400 a year (from $1,000 in 1970) to the University of Oregon, presumably for the millrace, but who by the time of writing had stopped donating due to his or her lack of faith in the planners to actually ensure any results, because of past failures in the millrace's restoration. Given these facts, it would be unreasonable to expect a large outpouring of volunteers and donors for the millrace today, meaning that the costs of renovating the race would have to be met almost in full by the city and university. [20]

One more, very large problem with reestablishing the millrace's economic potential is the legal state of the millrace, at least where property rights are concerned. The main issue here is that the lower end of the millrace is completely owned by property owners who live along the race, which would mean that any sort of improvements to the entire millrace would require the University of Oregon or the City of Eugene to negotiate the improvement of these areas. [21] One possible solution to this problem would be a simple legal negotiation with the various property owners along the race so as to gain their written consent to build through these areas to improve

---

[20] Tweedell, Bob. "Millrace History." *Eugene Register Guard*, 1949. pg. 22-29; Numerous alumni writing to the University during the presidency of Robert D. Clark, Office of the President Robert D. Clark Records, Box 90, Folder 5, University of Oregon Knight Library Archives

[21] Erb Memorial Student Union to Doctor Flemming, November 3, 1965, Office of the President Jones and Flemming Records (1965-1966), Box 122, Folder 14, University of Oregon Knight Library Archives

the millrace's flow and overall scenic quality. [22]As was seen in the Chambers case, however, property owners along the millrace can be quite bothersome when it comes to development plans of any kind near their property. In the more distant past, at the beginning of the 20th century, there were even cases of private property owners along the millrace threatening student canoers to leave their property at gunpoint, and while such a situation may seem less likely today, this incident does show just how fervently this interest group is in maintaining its property rights and preventing damage to said property. [23] An additional problem would be that the city or university would need to negotiate with each individual property owner along the race to work out a deal, each of which may be different and varying in how unreasonable they are. Some form of collective bargaining with the entire community of millrace private property owners would certainly ease this issue, but it could also take months or even years to reach a consensus with so many interests involved, and in any case the renovation plans would have to compromise with this party, probably resulting in a less than total effort towards renovation in light of private property interests.

Another solution could be for the city or university to simply buy much of this property. Many different planners and various individuals writing with advice advocated this as an option, such as the Mayor's Millrace Commission and the architect Stanley Bryan, showing how both experts and non-experts in construction felt that controlling this property would be quite important to millrace restoration. [24] There are obvious flaws to this plan, however, the first being that the city or university would face many of the same problems as if they had negotiated. Many

---

[22] A.L Ellingston, Director of the Erb Memorial Student Union, March 8, 1966, Office of the President Jones and Flemming Records (1965-1966), Box 122, Folder 14, University of Oregon Knight Library Archives

[23] Tweedell, Bob. "Millrace History." *Eugene Register Guard*, 1949. pg. 9-10

[24] Mayor's Millrace Commission, August 17, 1966, Office of the President Robert D. Clark Records, Box 29, Folder 10, pg. 5, University of Oregon Knight Library Archives; Stanley Bryan, February 18, 1966, Office of the President Jones and Flemming Records (1965-1966), Box 122, Folder 14, University of Oregon Knight Library Archives

property owners would probably be unwilling to part with their property and it would take much legal negotiation to ensure that any of them would agree to a sale. The next problem would be coming up with the money to pay for this land, most likely representing a large cost, just like many of the improvements. While buying up the private property would certainly solve the problem of building up the millrace in the long run, it's unlikely that the goal would be accomplished in any reasonable amount of time or for a cheap price.

One more proposed solution was to redirect the millrace so that it would run through university owned property. But due to the site of the campus, it would only be possible to do this by running the race through a different area currently under private ownership, specifically the Foster-Silva property, again necessitating a buyup of or negotiation for the property there. In addition to the various problems with such a plan mentioned before, such a redirection would also impact future building in those areas, would destroy the buffer created by the millrace between the University of Oregon and private property, and involve the costs of digging and building the infrastructure for a whole new stretch of the millrace. [25]

Regardless of the difficulty involved, of course, the legal recognition of the university's and/or city's rights to alter the millrace along this private property would be crucial in order to redevelop the millrace. Several past sources from the 1960's-1970's agreed that millrace development, including a proper cleaning of the race and the installation and repair of mechanisms necessary for controlling flow rate, required the easements of property rights from private property owners along the lower race. [26] It's known as well that the city of Eugene was

---

[25] Stanley Bryan, February 18, 1966, Office of the President Jones and Flemming Records (1965-1966), Box 122, Folder 14, University of Oregon Knight Library Archives

[26] Mayor's Millrace Commission, August 17, 1966, Office of the President Robert D. Clark Records, Box 29, Folder 10, pg. 5, University of Oregon Knight Library Archives; Office of Planning and Institutional Research, Office of the President Robert D. Clark Records, Box 59, Folder 8, University of Oregon Knight Library Archives; Stanley Bryan,

reluctant to make any improvements to the millrace or dedicate any money to such a project without first gaining property easements from the various property owners along the race. [27] While it is difficult to say with absolute certainty whether or not building and cleaning along this portion of the race is absolutely critical to economic development of any kind there, it would seem that many thought it was an important aspect to consider. It would also be inadvisable to spend money and time on any sort of development plan without first taking this sort of potential legal problem into consideration. Thankfully there would be some hope in gaining property easements in this area due to the precedent established in the Judge Dal King decision of 1951, which implied that property owners have no right to race water or to an open dry channel. [28] This decision would at least prevent property owners from filling in their portion of the race and destroying any potential for economic renovation, but it does little to grant the city or university the rights to build new infrastructure or undertake a cleaning program in these areas.

There also exists another potential legal problem with the millrace, though this is assuming water flow could be brought back up to a level that would make the race more aesthetically pleasing and that the property could be obtained by the city or university somehow. Assuming that these criterion are met, there is still the possibility of individuals drowning in the water. Newspapers from the late 19th century confirm that at this time, drowning in the millrace was a distinct threat. Whether it was due to drunken fights, poor driving, or simply playing in the water during a period of high water flow, the threat of drowning in the millrace was very real,

---

February 18, 1966, Office of the President Jones and Flemming Records (1965-1966), Box 122, Folder 14, University of Oregon Knight Library Archives

[27] Larry Bissett, November 30, 1970, Office of the President Robert D. Clark Records, Box 59, Folder 10, University of Oregon Knight Library Archives

[28] A.L Ellingston, Director of the Erb Memorial Student Union, August 3, 1966, Office of the President Jones and Flemming Records (1965-1966), Box 122, Folder 14, University of Oregon Knight Library Archives

even if it was rare. [29] Interestingly, such incidents are missing from any 20th century accounts, in spite of some of the rough-housing which often took place along the millrace by fraternity houses, including the "ducking stool" frat punishment and the annual canoe races which were held in the millrace by University of Oregon students. [30] This would imply that either the proper precautions were taken to avoid drownings by the 20th century, or simply that by this time the water flow of the race wasn't high enough to seriously threaten students with being drowned. In either case, and especially if the university or city planned on acquiring the legal rights to the millrace and to begin increasing water flow, it would also have to accept some of the responsibility of the risks associated in such a venture. For example, if a bar were built next to the millrace and someone were to fall in and drown due to too much drink, there is a distinct possibility of the owner of the millrace and the ones responsible for its heightened water level (ie. the university or city) facing some sort of litigation from the affected party. Even if such a case weren't brought against the university or city, the business owners would also face the risk of legal action, which would dissuade companies from setting themselves up near the millrace. Since this author is not an expert on such legal matters, I cannot say with certainty how probable such a scenario would be, but it is another legal consideration which must be taken into account should the millrace be renovated for economic purposes.

Based on the evidence provided, it would be unfeasible, from a fiscal and legal standpoint, to renovate the millrace for purely economic purposes. However, the availability of an open stretch of university owned land with running water does still provide some incentive for

---

[29] *New Northwest*, Portland Oregon, November 17, 1871. Human skeletal remains found in Eugene millrace; *Hillsboro Independent*, Hillsboro Oregon, August 25, 1893. Man drowned in the millrace after a fight; *Corvallis Gazette*, Corvallis Oregon, August 11, 1882. Man drove horse carriage into the millrace, almost drowning all of them; *Eugene City Guard*, Eugene Oregon, August 27, 1887. Two sons of H.S. Hollingsworth drowned in the millrace despite being strong swimmers.

[30] Tweedell, Bob. "Millrace History." *Eugene Register Guard*, 1949. pg. 16-17

redeveloping this area. Since the millrace has become overgrown with wildlife, and due to the race's location in the middle of an otherwise urbanized area, it does still have great potential as a scenic area, where University of Oregon students and other Eugene inhabitants could relax or go for scenic strolls without having to leave the city itself. [31] Such a redevelopment could also attract tourism, or even encourage application to the University of Oregon, though in all likelihood these benefits would be rather limited and in any case would still require a large amount of money in order to build up pathways, lighting, and other public infrastructure along the race. To be gained from such renovation would not be any economic benefits though, but instead the creation of an area that could help to link the city of Eugene together, giving it a common civic identity outside of our sports stadiums and helping to revive and renew interest in Eugene's history. [32] In this light, the inevitable issues of cost and legality which the university and city would need to confront to see renovation go ahead would seem somewhat less prohibitive. This would be because instead of considering millrace redevelopment in terms of how much money would need to be pumped in compared to how much could be gotten out of it, such a plan would be thought of more in terms of how the overall health and solidarity of the city would be affected by making this financial sacrifice. Many examples of infrastructure, such as the Eiffel Tower and the Statue of Liberty, to name a couple, have been built not so that they could generate revenue but as a means of defining a people and unifying them under a common symbol, or at least that's what they ended up being. The millrace will probably never gain international fame, but at least it can bind the people of Eugene together and help establish our identity as a city. Given that there's very little chance of turning a profit with the millrace if

---

[31] Thomas, Bob, Gordon Brunton, and Priscilla McKeigue. A Research Report: The Eugene Millrace. Eugene, OR: The Metropolitan Civic Club, 1966, pg 9-12

[32] U of O News Release, August 23, 1974, Office of the President Jones and Flemming Records (1965-1966), Box 132, Folder 10, University of Oregon Knight Library Archives

renovated for economic purposes, renovating the millrace for the sake of our city's culture and identity would be the only reasonable justification, the only hope, for a program such as this.

All calculations of modern money value compared with past value done on:

http://www.dollartimes.com/calculators/inflation.htm