



THE FLIGHT OF THE PHOENIX

The Newsletter of the McNeill Street Pumping Station Preservation Society

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Museum Budget Rescued

Your Spring newsletter brought the bad news that the State had ordered immediate steep spending reductions in the museum program state-wide. Since 2011, most state museums including the Shreveport Water Works Museum (SWWM), have been open three days per week at State expense (recall that the Preservation Society was helping with money to boost this to five), but as a result of the cutback, the schedule was set to be reduced to only one day per week starting in mid-April.

To avoid being practically shut down at one day this past spring, the McNeill Street Pumping Station Preservation Society entered into an agreement with the State to provide \$3,449 in order to keep the museum open three days weekly instead of just one during May and June. The State also asked the Preservation Society to pay for yard service during May and June since they were “broke”, which cost about another \$1200 - \$1600. Unhappy collateral damage from this situation was the retirement of a State employee, David Slack, who has been working on maintenance at SWWM for the previous two years.

In the meantime while the above stopgap measures were being taken during the current fiscal year, the Louisiana Legislature was in its annual session considering what to do about a \$1.6 billion shortfall in a \$24 billion budget for the next fiscal year beginning July 1, which is a bigger problem than it seems because much of the budget is fixed by the constitution and can't be changed. The Governor's budget plan that was the starting point for the Legislature's work cut museum funding from \$3.5 million to only \$1.79 million. The effect of this reduced funding would have been to continue the one-day-per-week operation into the upcoming fiscal year. Even worse, the Preservation Society would not have been able to come to the rescue this time because the State would have required \$25,000 from us to stay open three days per week. This would be better than only one day, but still not very good and too expensive for us.

The SWWM was not alone in this plight, and the threat to the State's museums did get some public attention, but things were nevertheless looking grim at the Legislature in Baton Rouge. There is somewhat good news to report, though, as the Legislature was able to cobble together a package to balance the budget and meet the Governor's “no new taxes” demand. The package at the last minute included an amendment to restore the \$1.7 million in museum funding that had been cut.

The amended budget will put funding back like it was before the April cuts and return SWWM to three days per week at State expense, which is good in comparison to just one, but still not really what is wanted. The Preservation Society board will soon be talking with the State about another agreement similar to the one that we had pre-April for extra payroll expenses (about \$7000 last year) and try to get the museum back to five days per week.

The State's fiscal situation is heavily dependent on the oil and gas economy, and many of the fixes incorporated in the current budget plan are strictly temporary, so another money crisis could strike at any time, but for now the outlook for operating the SWWM seems to be manageable.

Special Gifts

The McNeill Street Pumping Station Preservation Society has received several donations honoring people special to the donor as follows:

Renee Rodi has made a gift in honor of her father, James Mohr. James has been a strong supporter of preserving the Pumping Station for many years and is currently volunteering his time to serve on the board of directors of the Preservation Society, as well as volunteering his time in other ways by lending his technical expertise toward projects at the site and being a tour guide for visitors.

Peggy Wisner and husband Rory have made a gift in memory of Peggy's father, Jim Nuttall. Jim was one of the Pumping Station's biggest fans and donated many hundreds of manhours toward a multiplicity of projects

on site, perhaps most visibly the electric drive system that has put one of the massive crank-and-flywheel water pumps into motion for museum visitors. Jim passed away in 2011 and is greatly missed.

Becky Nuttall has also made a gift in memory of Jim Nuttall, her father.

The Preservation Society is very grateful to all these generous donors for their thoughtful honorariums. If you have a special person you would like to remember in this way, just send your donation using the form in this newsletter and include a note explaining your gift.

VISITORS

The Kansas City Southern Railroad Historical Society held its annual meeting in Shreveport this year and included in the meeting activities was an outing to the Shreveport Water Works Museum and Railroad Museum. This group is dedicated to preserving the history of the KCS and are also fans of the railroad. The KCS railroad and its corporate predecessors played a surprisingly robust part in the development of the southcentral area of the United States. For example, the KCS founded Port Arthur Texas as well as quite a few other cities in western Louisiana and Arkansas. You can read the details online at www.kcshs.org.



More than 50 Society members turned out to tour the Railroad Museum and the Water Works Museum. It was great to be able to show these fans of steam engines for transportation the big stationary steam engines in the pumphouse.

Steam Engines 101

In the 1800's when the Shreveport Water Works was established, unless you had a water wheel available, steam engines furnished the mechanical power needed to operate everything. They were found not only in the railroad locomotives that get nostalgic attention nowadays, but in ships, machine shops, factories of all sorts, in tractors, farm applications like cedar shake splitters, and the list goes on. However, we have noticed that it is not unusual nowadays to encounter a blank look when we tell younger museum visitors (and some older ones) that "steam engines" pumped the water.

Nearly all the museum's visitors are impressed by the big boiler, but explaining what it does, why you need it, what a steam engine is, and how it works in a brief way to visitors uninitiated to steam engines has proved to be a challenge that hasn't been completely solved by our museum tour guides as yet. Everybody has seen the vapors rising from water boiling on the stove, but quickly describing how containing those vapors inside a closed vessel creates a pressured gas powerful enough to do some serious work is a bit hard to do. There is an animated video that helps somewhat by showing a cutaway of a steam engine in motion, but we're still working on the problem!

Nevertheless, the museum has some pretty impressive steam engines for both the initiated and uninitiated visitor to look at. Probably the star of the show is the No. 3 High Service Pump. This is a horizontal, duplex, compound, crank-and-flywheel pump manufactured by Worthington-Snow and installed new in 1921. The flywheel is 13'-6" in diameter, and it moves. Museum volunteers got the machine back in motion with an electric drive system ("rim drive") that was commissioned in 2008 after several years of part-time work to build it and get the machine lubricated and freed up again so it would move. Watching this machine and its Corliss valving in motion almost always elicits a "wow" from visitors.

The No. 4 High Service Pump is also a horizontal crank-and-flywheel machine similar to the No. 3, but manufactured by the Allis-Chalmers Co. in 1911 and installed at McNeill in 1927. It is slightly larger than No. 3 with a 22" high pressure cylinder (vs. 18") and a 46" low pressure cylinder (vs. 40"). Both could deliver about 5 million gallons per day into the city's water mains.

Also in the main pump room with these two high service pumps are two low service pumps (these pump in the raw water). No. 1 is a Worthington vertical, duplex, direct-acting, triple expansion machine installed at the water works in 1898. This is the oldest pump still in place here. Located adjacent to it is the No. 3 Low Service Pump, which is a very similar configuration but with differently sized cylinders. It was installed in 1921. The

water pumps themselves are located 45 feet below the engines in low service pump shafts. Both these machines were declared by the Smithsonian's Robert Vogel in 1980 to likely be the sole survivors of their type.

In the old high service pump room there is another likely sole survivor according to Vogel. This is the Worthington No. 1 High Service Pump installed in 1900. This machine is a horizontal, duplex, direct-acting, triple expansion configuration that could deliver about 3 million gallons per day of water to the city.

In addition to these five massive workhorses, there are multiple smaller auxiliary engines located around the pumphouse that powered boiler feed pumps, air pumps, and other pieces of equipment needed to make everything work.



ca. 1911 Low Service Pumphouse
Is there a steam pump in here?

A final intriguing note on the completion of steam engines is a low service pumping engine that is supposed to be there but can't be seen. In 1911 a horizontal, compound, duplex machine (yet another Worthington) was relocated to a new brick pumphouse/raw water well on the bank of Cross Bayou and floated on a raft in the water-filled pumphouse. The pumphouse is still there and the water is still there, but there is no sign of the pump. It reportedly is at the bottom of the well, but you'd have to be a fish to know for sure.



Worthington No.1 High Service Pump

The Smithsonian offered to move this one to Washington for display

Steamboat's A-Comin'

Since we're on the subject of steam engines, in New Orleans you can find a fun example of a real, working one. The steamboat Natchez is an authentic stern paddlewheel steamer like the ones that once plied navigable streams everywhere in America during the 1800's. She's the ninth steamboat to bear the name, and her predecessor, Natchez VII raced the Robert E. Lee in one of the most famous steamboat races ever.

This Natchez was built new in 1975 and is one of only two true steam powered sternwheelers left on the Mississippi. Her pair of powerful steam engines (and her tiller steering system) are much older as they were salvaged and reused from the sternwheeler Clairton, which was built for the U.S. Steel Corporation in 1925. The Clairton was a towboat that worked from Pittsburg to New Orleans. The engines are rated at 2000 horsepower combined and have a double expansion design with slide valves and a condenser that drive a 26 ton white oak paddlewheel.

Adding to the fun are a copper and steel steam whistle salvaged from a boat wrecked in 1908 and a 32-note steam calliope modelled after these music makers from the gilded age. The Natchez offers daily cruises from a wharf adjacent to the French Quarter, and the engine room is open to visitors.



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You Can Help.....Make A Donation!

The Preservation Society needs money for restoration and operation of the museum. Your donation can be put to good use!

Name _____

email _____
(If you provide your email address, we can send you occasional updates on activities)

Address _____

City _____ State _____ Zip _____

Mail to MSPSPS, P.O. Box 957, Shreveport, LA 71157. Checks payable to MSPSPS.