

Public Meeting
Bernhart's Dam
Wednesday, September 18, 2019
6 pm
Chabad Center - 2030 Hampden Blvd.

Members Present: Elected Officials from Reading & Muhlenberg, Sen. Schwank, Representatives from Rep Rozzi and Caltagirone offices, officials from PA DEP, US EPA, Exide, City Public Works Director, and City's Dam Assessment Consultant

Call to Order

City Council President Jeff Waltman called the meeting to order and stated that the purpose of this meeting is to first educate those attending about Bernhart's Dam and Park followed by public comment and questions.

Mr. Waltman explained that while Muhlenberg officials worked jointly with the City to organize this meeting, any and all decisions regarding the future of the dam and the park will be made by the Reading City Council. Before making all decisions, City Council will consider all input provided from the public, other elected officials along with the City administration and staff. He recognized that this Reading owned park property is located in Muhlenberg and is used by people from multiple areas.

City Councilor Donna Reed agreed with the importance of obtaining public input on this issue from all affected citizens and asked those attending to limit their comments to three (3) minutes to allow ample time for all who wish to speak. She stated that those present look forward to a lively and civil interaction.

City Councilor Goodman-Hinnershitz stated that this property was originally used as a City water source and after a time it evolved into a passive recreation park. She noted the need for City Council to consider all opinions and input and also consider how the area has evolved over time.

City Councilor Twyman welcomed everyone to the meeting and noted the value of hearing all input about the future of this park property.

City's plan to address safety concerns identified by the PA DEP – PW Director/ City's Consultant

Mr. Johnson stated that he first wants to clarify that there has been no DEP order for any specific action at this point in time, but instead the DEP issued a directive to lower the water level in the lake to allow the evaluation of the dam breast.

Mr. Johnson stated that there have been 3-4 dam breast improvements on the site since its inception during the late 1700s when the dam was first installed to power a private mill operation. The last 2 improvements were done to enlarge the lake for water source uses. He noted that the former water filtration plant still exists and sits in the sloped wooded area located across from the Exide Plant. The filtration plant is now owned by the owner of the former Lucent/AT&T/convention center for storm water purposes.

Mr. Johnson reiterated that the DEP has instructed the City to lower or the drain the lake for safety purposes which will allow for the evaluation/assessment on the condition of the dam breast. He explained that the original piping installed in the dam breast which would allow the reduction of the water level is not functional and the City evaluated various alternatives and techniques to lower the water level of the lake. However, the best option and most effective solution is to gradually remove the spillway and drain the lake.

Mr. Johnson noted the inundation map on display showing the area that would be impacted if the dam failed. He note that the area extends from the park property downstream to the Schuylkill River. He explained that the DEP considers this dam a high hazard dam due to certain standards and factors. He stated that the dam is considered unsafe using today's standards. The stability of the concrete core is unknown and the spillways are inadequate, leaving a dam that is unpermitted.

Mr. Johnson stated that while some believe that the dam has held up during all the vicious storms that have occurred over the past summer and over the past few decades, the engineering reports have identified problems with dam that leaves him with the personal belief that we are living on borrowed time. He stated that old City records show that the problems with this dam were first identified in the 1970s.

Mr. Johnson explained that various storms dump varying amounts of rain in certain areas and leave others unscathed. He described the storm that took Angelica Dam out in 2001– Tropical Storm Allison.

Mr. Johnson stated that Reading was also directed to drain Egleman's Dam; however the piping at this dam was found to be functional, due to the continued work of the Isaac Walton League at this property. This lake was drained last fall.

Mr. Johnson stated that it will cost the City approximately \$300,000 to remove the spillway at Bernhart's Dam. The range to rebuild the dam falls between \$2,700,000 and \$6,000,000. A more accurate estimate cannot be provided until the dam breast is evaluated, after the water is drained from the lake. He further explained that the projected cost to install a passive recreation park if the dam is not rebuilt will cost approximately \$3,700,000 due to the need to address the leftover sediment and silt at the floor of the lake and make adjustments to the

slopes. He added that currently the City pays \$130,000 annually to insure this park property, due to the condition of the dam.

Mr. Johnson expressed the belief that this park is more heavily used by Muhlenberg and Laureldale residents than by Reading residents and that will play a factor in the City's decision to repair/rebuild the dam. He stated that the City owns a great deal of park properties that they struggle to maintain.

Mr. Pinciotti, consultant from AECOM explained that dams receive 1 of 3 classifications: Significant Hazard, High Hazard or Low Hazard. Bernhart's is classified as High Hazard as a biblical level (Noah's Ark) flood will cause the dam to fail. While many believe this situation is unlikely, it could occur. He explained that there is no longer the need for the dam to have a tower and the spillways are too small based on current specifications. He suggested that the City consider rebuilding a smaller dam with an updated image to retain the water feature at a reduced cost.

Mr. Pinciotti stated that while the lead contamination in the park was remediated, the island and the steep sloped areas were not remediated as they viewed as inaccessible due to the lake. That will change with the drainage of the lake and those areas will be reevaluated. He added his belief that the sediment below the lake will not require additional remediation based on the sampling that occurred when the entire park property was evaluated by the EPA in the early 2000s.

Mr. Johnson noted that the Army Corp of Engineers only works on federal projects such as Blue Marsh Dam.

PA DEP Dam Safety Background

Mr. Reisinger, Chief Engineer from DEP Dam Safety, provided background on the dam safety program. He explained that:

- In 1889, the South Fork Dam failed decimating Johnstown and other downstream communities. (*Note in 1862, a portion of this dam culvert collapsed causing a portion of the dam to be washed out. Afterwards, the South Fork Fishing and Hunting Club became the new owner and the dam was repaired, but not to a properly engineered state – the reported dam leaks were not repaired.*)
- In 1911 the Freeman Run Dam failed and the town of Austin, PA located in Potter County, was destroyed, after which Pennsylvania enacted its first dam regulations.
- In 1977 the Laurel Run Dam (a dam built in 1918 to replace a dam near Johnstown) had an overtopping failure during a 500 year storm, caused by the inadequate size of the spillway. The 2 mile long valley was engulfed destroying homes in Tanneryville.
- In 1979 the State legislature enacted the dam regulations and standards that remain in place today.

The Laurel Run Dam was owned by the Greater Johnstown Water Authority when it failed and the Authority was aware for over a decade that the spillway was inadequate. Mr. Reisinger stated that Bernhart's spillway is also inadequate at only 24% (current standards require a 50% rating) and coupled with the inundation zone shown on the map, the dam receives a High Hazard classification. For that reason the DEP is requiring the rehabilitation or removal of the dam. Any action will require permitting from the DEP. He added that the DEP has not issued any order at this time.

EPA Reassessment re Lead Exposure Risk

Mr. Dao, Project Manager for the Bernhart's remediation project, stated that the remediation of the park property was completed in 2011 making it safe for recreational use. He noted that a reassessment will be required when and if the reservoir is drained, as new access areas will be exposed.

Mr. Dao explained that safe lead standards for recreation properties is 650 ppm (parts per million). During the initial evaluation of the property the sediment was tested and found to have levels falling between 298 and 470 ppm. He stated that the park property was contaminated by lead falling from the sky. When the lead lands on the lake surface it is then carried through the spillway and out of the park. He noted that lead does not sink through water.

State Funding Available

Senator Schwank stated that she represents the surrounding municipalities and she is pleased that Reading and Muhlenberg worked together to hold this meeting to educate residents about this issue. She described the various State grants and funding available to assist with the costs associated with this project. She suggested that Reading and Muhlenberg work together to seek funding. She also noted that she may also be able to cover some of the project cost through an allocation in the DEP Capital Projects budget.

Senator Schwank described how joint municipal/county assistance was obtained for the Antietam project almost two decades ago.

Public Comment

A citizen who has resided across from the park for many years inquired about how the drainage of the lake will affect the wildlife at the park. He asked the City to consider repairing the dam so the lake is not permanently lost.

Mr. Johnson stated that Public Works staff is consulting with the Fish and Boat Commission and similar organizations to address the issues with the wildlife. He noted that as the lake levels will be slowly reduced, the majority of the fish in the lake will simply travel downstream. He added that the fowl and other wildlife will most likely relocate to other

areas.

A citizen questioned the meaning of the word “spillway”. Mr. Johnson explained that the spillway is the concrete area located under the bridge. He stated that in this case there is the original spillway and the auxiliary spillway added at a later time. Spillways are also known as overflow channels.

A citizen stated that he has resided across from the park for 76 years and that he feels unheard when he approaches City officials about the condition of the dam and the park. He stated that he performs litter removal at the park as he is able. He noted that the dam held during Agnes and other storms. He stated that a plate and pipe system was once installed to offshoot water from the spillway, which he believes helped the dam weather Tropical Storm Agnes.

Mr. Johnson stated that some of that plate and pipe system is still in place, but most of it is missing. Reestablishing that system was considered, but eventually rejected.

A citizen questioned the depth of the lake. Mr. Johnson expressed the belief that the lake is 30’ at its deepest level. The citizen countered that he believes that the lake is only 18’ due to the buildup of sediment.

A citizen questioned how the turtle population will be accommodated and he expressed the belief that without the proper conditions, they will not survive the winter months. He added that many turtles on the property are quite robust. He suggested that the City create a turtle pond on the property so the turtles can easily relocate there. He also suggested that the City place historical information on the property if the park and dam are not rebuilt.

A citizen expressed the belief that the park is widely used by citizens from all municipalities, not merely Muhlenberg citizens. She stated that her property located on the eastern side of the dam has been in her family for decades. She expressed concern that property values for homes near the lake will fall if the dam is eliminated. She also expressed concern for the affected wildlife.

Mr. Johnson stated that City Council is also concerned about the impact these decisions will have on the value of residential properties.

Mr. Waltman noted the amount of money the City spends annually to invest in infrastructure inside and outside of Reading’s boundaries that supports the citizens of Reading and other municipalities.

A citizen stated that it is amazing that a facility with such a beautiful and serene rural

atmosphere is located 5 minutes from the City. He questioned how the City will address insects that will be attracted to standing water.

Mr. Johnson stated that the City will be required to comply with Muhlenberg regulations.

A citizen inquired if the park will be closed when the spillway is removed due to the exposure of property that is contaminated with lead.

Mr. Johnson stated that the City is still considering its options; while the entire park property will not be closed, certain areas of the property may be closed or gated.

A citizen thanked the City and Muhlenberg for holding this meeting, as the information provided leaves those who attended with a better understanding about this issue. She stated that her property on the eastern side of the dam has been in her family for many years. She also expressed concern for the effect of the wildlife and property values. She questioned when the work to remove the spillway will begin.

Mr. Johnson estimated that the work will begin in around 6 months' time.

Mr. Pinciotti explained that work to partially remove the weir (stonewall) will occur one level at a time. After a level is removed the wall be provided with time to settle before another level is removed. He expressed the belief that the wedge wall located under the bridge will remain in place.

A citizen expressed the belief that the removal of the dam will cause the flooding of Bernhart's Creek creating new downstream problems. He expressed the belief that this dam was mismanaged with the application of Band-Aids for many years and questioned why the dam was constructed as it is.

In response Mr. Krall, an engineer on the City's Public Works staff who worked in the dam and storm water management industry for 40 years, stated that current staff cannot explain why the dam was designed as it was and that staff must now adapt to the issues at hand.

Mr. Pinciotti and Mr. Krall explained that the auxiliary spillway was added to further secure the dam structure. The last 2 modifications to the dam breast were performed for water supply purposes. Mr. Krall noted that storm water management will not be impacted by the removal of the spillway.

A citizen requested that the City create an area on its website with information about the dam and this project so citizens can easily be informed and updated.

Rabbi Lipsker stated that the Chabad Center was happy to act as the bridge for this meeting and he stated that they will open the doors for future sessions. He described how the Chabad Center community walks from the Chabad Center to the park to pray on each High Holiday.

Muhlenberg Commissioner Kevin Lerch stated that Muhlenberg officials recognize the importance of this project for all residents of multiple municipalities. He expressed the belief that he and his fellow Commissioners will continue to be good stewards by working with the City on this and other projects. He noted that while the final decision about the future of this park and dam rest with the City, Muhlenberg officials will support whatever decision is made.

In response to a question, Mr. Lerch stated that Muhlenberg does not have the financial resources to purchase this property.

Mr. Johnson and Ms. Goodman-Hinnershitz thanked Rabbi Lipsker for his hospitality and they thanked everyone for attending and commenting.

Respectfully submitted by Linda A. Kelleher CMC, City Clerk