

**HYDRAULIC CANAL AND DAM SAFETY DESIGN PROJECT
CITIZEN ADVISORY COMMITTEE (CAC)
THURSDAY, APRIL 25, 2024
500 PM to 630 PM
COMMISSION CHAMBER – 2nd FLOOR
201 WEST WATER STREET
PIQUA, OHIO 45356**

AGENDA

1. RECONVEYNE OLD CAC and ESTABLISH NEW CAC MEMBERS

- a. Introductions of CAC Members (old and new), Piqua Staff and Stantec Staff
 - i. Who has changed (Rob Kirkbride gone, new commissioners, Piqua Staff changes, CAC members gone/new)
 - ii. Document changes and records for future communications and meetings.
- b. Goals of this meeting and moving forward
 - i. Inform this group as an initial update that will be the basis for future Piqua wide information sharing on this subject.
 - ii. Sounding board of the issues at hand with a small group to help Piqua spread this information to a larger audience.
- c. Explain the mechanisms of these potential projects on the Hydraulic Canal and Dams
 - i. 2019 Inspections triggered ODNR to have Piqua do evaluations. Hydraulic Capacity issues have been noted for decades.
 - ii. Piqua hired Stantec to help find Engineering Solutions in response to ODNR request for more evaluations of the infrastructure.
 - iii. ODNR will have major impact on the potential approved Engineering Solutions
 - iv. Piqua is responsible for funding and implementation of ODNR approved Engineering Solutions
 - v. Piqua has a safety (canal and dam operations and maintenance) and financial obligation to all its residents and businesses.

2. SWIFT RUN LAKE DAM DECLASSIFICATION REQUEST

- a. Re-cap of what was requested (Class III)
 - i. Making crest height changes, removal of trees, repair to spillways #2 and #3, channel flow modifications for 25% of the PMP.
 - ii. The potential to retain current lake elevation and recreational use, keep drinking water supply, separate from the rest of the Hydraulic Canal and Dam.
 - iii. Financially this Class III work could have been done without raising rates or getting an external loan.
- b. ODNR Response letter
 - i. ODNR will not allow SRL Dam to be declassified to a Class III
 - 1. State Route language.
 - 2. Public Water Supply Language
 - 3. Condition and unknown design/construction of a 100-year-old concrete structure.
 - 4. Slope, seepage, and historical breach concerns mentioned.
 - ii. Could be de-classified to a Class II after Fall 2024 Inspection
 - 1. Currently it is still a Class I structure.
 - 2. Next round of five-year inspections will be this later summer to fall.

- 3. ODNR can re-classify the Swift Run Dam to a Class II in the inspection report.
- 4. Only Class I dams can get FEMA funding for evaluations/design/construction/demolition.
- c. Stantec's assessment of ODNR letter
 - i.
- d. What does Piqua need to do to make SRL Dam a Class II structure
 - i.
- e. Engineer's estimates
 - i.
- f. Computer renderings of what Swift Run Lake Dam would look like (if ODNR required work is done and SRL Dam is a Class II facility)

3. UPDATE ON CURRENT and UPCOMING EVALUATIONS AND GRANT PROCESS

- a. HHPD 2019 Grant Completed – MHGP 2019 Grant 95% completed.
 - i. Several extensions were requested and received on these Grants.
 - ii. COVID was used as the reasoning for the extensions.
 - iii. HHPD Grants seem to be slow in implementing details and there should be future rounds available.
 - iv. Note that they are only offered to Class I rated Dams. If Swift Run Lake Dam is changed to a Class II, it will not be eligible for this funding.
- b. HHPD 2022 Grant for Echo Lake Dam – just starting.
 - i.
- c. HHPD 2024 Grant's for Swift Run Lake Dam, Echo Lake Dam, Franz Pond Dam possible
 - i. Application sent into ODNR. Asked for \$333,333 for each of the three dams. Piqua to pay the 35% match, as in the other HHPD Grants.
 - ii. See spreadsheet.

4. UPDATE ON ECHO LAKE AND FRANZ POND DAMS

- a. Meeting Probable Maximum Precipitation (PMP) Requirements vs. Over-topping requirements
- b. PMP is a capacity and throughput engineering problem.
 - i. Another spillway needed in Echo Lake Area
 - ii. Canal and bridge points are bottlenecks to move high volumes of water through the system.
 - iii. Limited locations to convey water due to all the residential areas to the east of the canal and dams.
 - iv. These dams will always be rated Class I and will need to pass 100% of the PMP.
 - v. High costs for Engineering Solutions to pass 100% PMP.
 - vi. Widening of Canal, slope modifications, building new 300' spillway, new bridges, and proximity of residential units/businesses/roads/park are major concerns with any of these potential engineering solutions.
- c. Over-topping is a water management and risk-based issue.
 - i. Rebuild and fortification of existing levee and dam system.
 - 1. There will be rain events that will overtop these rebuilt structures and cause other water related issues.
 - a. Flooding concerns, basement infiltration, storm sewer capacities, sanitary sewer capacities and sanitary sewer overflows are potential issues.
 - ii. Slope issues and the knowledge that these are designed to overtop, and the human and infrastructure issues associated with overtopping.

5. GENERAL THOUGHTS FROM THE GROUP