

SPECIAL COUNCIL MEETING  
PUBLIC HEARING – WATER INTAKE PROJECT  
MONDAY, MARCH 23, 2015 - 6:00 PM

President Hach called the Public Hearing to order in Courtroom #1, requested visitors please turn off their cell phones and other electronic devices.

City Council convened in a Special meeting in Council Chambers, with the following in attendance: Paul Hach, Lori DiNallo, Jim Fodor, Mike DeLeone, City Manager Anthony Carson, Assistant City Manager Doug Lewis, Finance Director Andy Unetic, Water Superintendent George Ginnis, and Clerk of Council Tara Diehl. Councilmembers Katie Jenkins, Andrew Flock, and Tom Fitzgerald were not present.

Mr. Hach opened the Public Hearing and welcomed all our visitors. He stated that by request of the Ohio EPA, our Water Superintendent, George Ginnis, has scheduled this Public Hearing to discuss possible financing of the design, construction and implementation of a new water intake project. Mr. Hach stated the format for the evening: A presentation by Mr Ginnis followed by questions from Council & Administration and then the public.

Mr. Ginnis gave a PowerPoint presentation to Council on the Raw Water Intake Project. (*See Attachment #1*). He also provided Council and the public with a copy of the fact sheet that has been posted on the website for the last 30 days regarding the Raw Water Intake Project. (*See Attachment #2*).

Members of Council had comments and questions for Mr. Ginnis.

Mr. DeLeone asked what the life expectancy of the new system will be. Mr. Ginnis responded approximately 50 years minimum.

Mr. Fodor asked if the pipe will be seated in clay? Mr. Ginnis responded yes, it will be engineered deep enough to be embedded in clay instead of sand to avoid joint separation.

Mr. Hach asked what material the new lines will be made out of. Mr. Carlson from Burgess & Niple responded “concrete”.

Mrs. DiNallo asked if there will be any additional requirement for the loan in 5, 10 or 20 years that we have not been informed about. Mr. Ginnis stated there are no additional conditions or surprises for the City or residents in regards to this loan.

Mr. Fodor asked for clarification on the number of intakes we will have. Mr. Ginnis explained we will have 2 - the new intake once it is built and the current intake will be our back up system.

Mr. Fodor then asked about reverse flow through the intake. Mr. Carlson stated yes it will have the ability to reverse flow to backwash and will have many features built in to prevent frazil ice. Mr. Ginnis stated the design of the crib will be different and split in two in order to lower the velocity of the water contained within the crib structure.

Mr. Hach asked if there are any other communities trying to take advantage of this loan. Mr. Ginnis stated yes, but we are much further along in the process than most communities were. We were one of the first to jump on this opportunity. Contingency is being put into the funding for the possibility of boring vs. open cutting due to environmental concerns.

Mrs. DiNallo reiterated her concerns of the EPA changing their requirements down the road. Mr. Ginnis assured the EPA cannot.

Mr. Hach stated at this time the audience will be given the opportunity to comment on the presentation. If a member of the audience would like to speak, please raise your hand at this time to be recognized. When called upon, please use the podium and clearly state your name and address for the record. Please limit your comments to three minutes.

Mr. Arthur Shamakian, owner of the Steele Mansion, asked what the benefit the City has of owning their own water plant.

Mr. Ginnis explained the EPA has a review process which asked specific questions on the feasibility of the water plant is and what would be the best alternatives to Painesville. Our rates are significantly lower than surrounding areas. Municipalities are not allowed to make significant profit from their utilities.

Mr. Carson stated if we sold our plant, residents would be paying an increase to the new company for their expense of purchasing our system.

Mr. Angelo Cimaglio of 477 Owego Street questioned where the \$10-12 million is coming from for the new water intake and do we really need our own water system. Will Grand River and Concord be around in the future to utilize our water? Is the \$8.00 fee going to remain to pay for this project?

Mr. Carson reiterated the advantages of owning our own water system and we have contracts in place with the County for services other areas. There are safeguards in place in those contracts. We do not anticipate anyone wanting to come in and purchase our service area outside of the City. This is one of the main factors the EPA will be evaluating for this loan if we are able to service residents in any other way. The EPA 0% loan will be fronting the money for the project and paid back over 20 years, which will utilize a portion of the \$8.00 service fee. Ms. Diehl had to search for the minutes from all previous Council meetings where the fee was discussed and provide them to Mr. Ginnis for the EPA. They are very strict in their requirements.

Mr. Fodor stated we generate \$1.2 million per year from this fee. \$500,000 will go towards the loan, \$700,000 will go towards the repair of the water lines. Outside companies also charge fees for water lines and infrastructure replacement schedules.

Mrs. DiNallo stated we would not have as much power or control if we went with an outside system. It is important to realize every utility company has to keep equipment updated.

Mr. DeLeone wants what the best is for our residents. He would like to see a comparison chart. Why would we change services without a purpose and cost our residents more money?

Mr. Fodor stated we are not in a “seller’s position”.

Mr. Carson stated when there is an opportunity for us to combine services such as stormwater, IT, and telephone, we do. Mrs. DiNallo agreed that the administration does advise Council of such things.

Mr. Hach stated hindsight is 20/20 and back in 1968 when these issues began with the water intake, planning should have begun back then. This fairly new Council is trying to put things into motion to take care of these issues that were neglected for 20 - 30 or more years.

Mr. DeLeone stated we are putting a plan in effect that will carry us through the next 50 years minimum.

Mr. John Murphy (did not state his address for the record) wanted to see a comparison in the numbers for the City of Painesville’s water rates vs. surrounding areas. He feels we pay higher than the rest of the County.

Mr. Fodor stated we are one of the ten lowest in the State and are competitive. Mr. DeLeone stated this is an independent source rating the whole State for electric. It is not us making this statement.

A Point of Order was called by Councilwoman DiNallo when Mr. Murphy deviated from the topic of the Water Intake and tried to discuss the power cost adjustment.

Mr. Ray Sternot provided his comments in writing to Council and read them to Council. (*See Attachment #3*).

Mr. Carson responded that there is no funding better than a 0% loan. This type of opportunity does not come along often. He referred him to the Website for Stormwater planning and to look for information. Mr. DeLeone stated all of this information and projects are located in the Council minutes. This project’s timing has come to fruition. Mrs. DiNallo indicated the City was almost “project ready” and qualify for this 0% loan because we have been planning ahead for this project.

Mr. Hach closed the Public Hearing.

Motion to Adjourn made by Mr. DeLeone seconded by Mrs. DiNallo. All members answered “yes”. Motion carried. The meeting was adjourned at 6:56 p.m.

# PAINESVILLE WATER DIVISION

RAW WATER INTAKE LINE AND CRIB  
PUBLIC MEETING  
MONDAY, 6:00 PM, MARCH 23, 2015

# RAW WATER INTAKE WATERLINE & CRIB STRUCTURE

- ◆ BRIEF HISTORY
- ◆ PROJECT DESCRIPTION
- ◆ MOTIVATION
- ◆ COST/SAVINGS

# HISTORY

## ➤ PAINESVILLE WATER HAS 2 RAW WATER INTAKE LINES

- 24" RAW WATER INTAKE LINE WITH A CRIB STRUCTURE
  - BUILT IN 1929 (86 YEARS OLD)
  - DECOMMISSIONED IN 2010.
  
- 36" RAW WATER INTAKE LINE WITHOUT A CRIB STRUCTURE
  - BUILT IN 1951 (64 YEARS OLD)
  - WATER INTAKE LINE IS IN APPROXIMATELY 8' WATER
  - 36" CONCRETE PIPE WAS ORIGINALLY DESIGNED TO BE PLACED 4000' FROM SHORE IN A WATER DEPTH OF 26' ENCASED IN RECTANGULAR STEEL BOX INTAKE CRIB STRUCTURE.
  - PROBLEMS WITH INTAKE WATERLINE PIPING BEGAN IN THE LATE 1950's AND EARLY 1960's. DIVERS WERE HIRED AND LOCATED MULTIPLE LEAKS AT THE OUTLYING LOCATIONS.
  - ENGINEERS RECOMMENDED UTILIZING AN INSPECTION PORT FOR THE PAINESVILLE WATER PLANT'S RAW WATER SOURCE AT THAT TIME.

# HISTORY

After the completion of the 36-inch intake line in 1953, the original 24-inch intake inlet pipe was more or less abandoned primarily to be used as an alternate backup supply source, or to supply raw water to the plant in emergencies. Both the 36-inch and 24-inch intake pipelines run in a parallel Northwest direction and are approximately 300 feet apart. See Figure A.

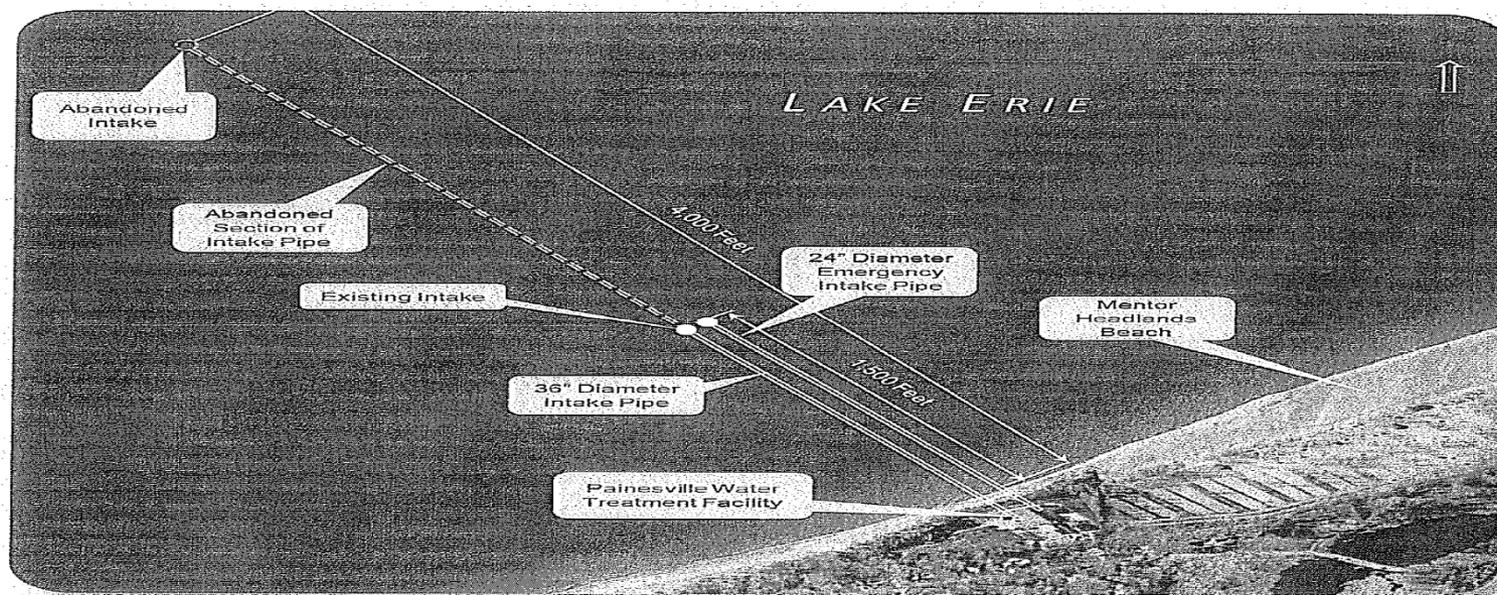


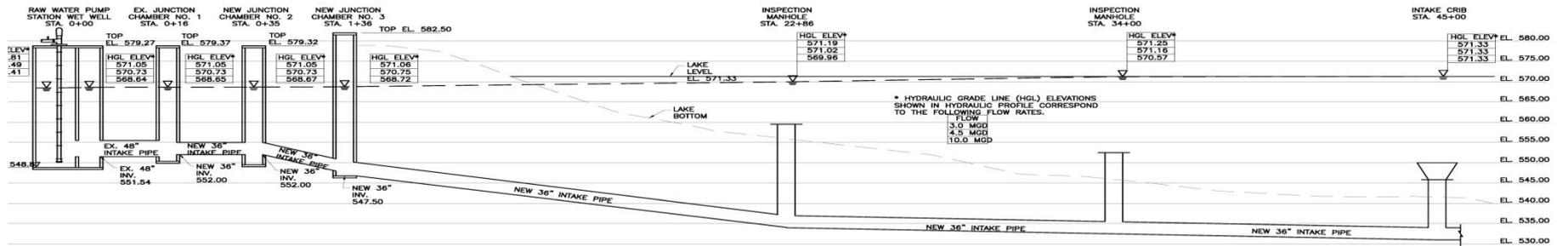
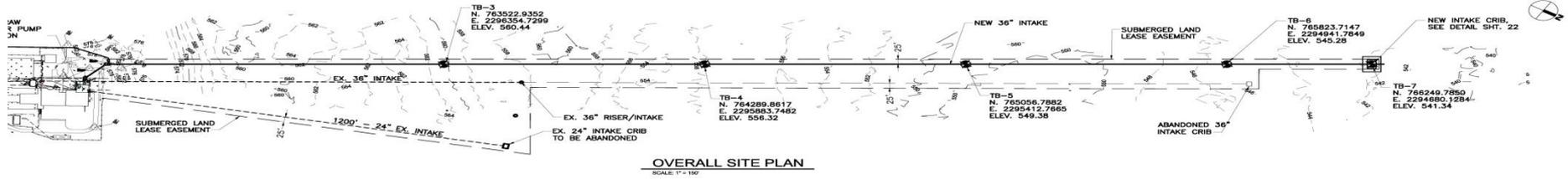
Figure A



# PROJECT DESCRIPTION

## ➤ RAW WATER INTAKE LINE AND CRIB STRUCTURE

- NEW 36" RAW LINE WILL BE EXTENDED 4500' FROM THE WATER PLANT INTO LAKE ERIE
  - CRIB STRUCTURE WILL BE PLACED AT THE END OF THE WATERLINE TO PROTECT THE INTAKE PIPING.
  - THE INTAKE PIPING WILL BE AT A WATER DEPTH OF ROUGHLY 21' AND THE CRIB STRUCTURE WILL BE SECURED IN THE GROUND (APPROXIMATELY 27'-29' OF WATER)
  - COORDINATION FROM ENVIRONMENTAL GROUPS HAS BEEN INITIATED .
  - OHIO EPA'S STAFFING IS CURRENTLY REVIEWING BURGESS & NIPLE'S PLANS FOR THE INTAKE PIPING AND CRIB STRUCTURE.



# MOTIVATION

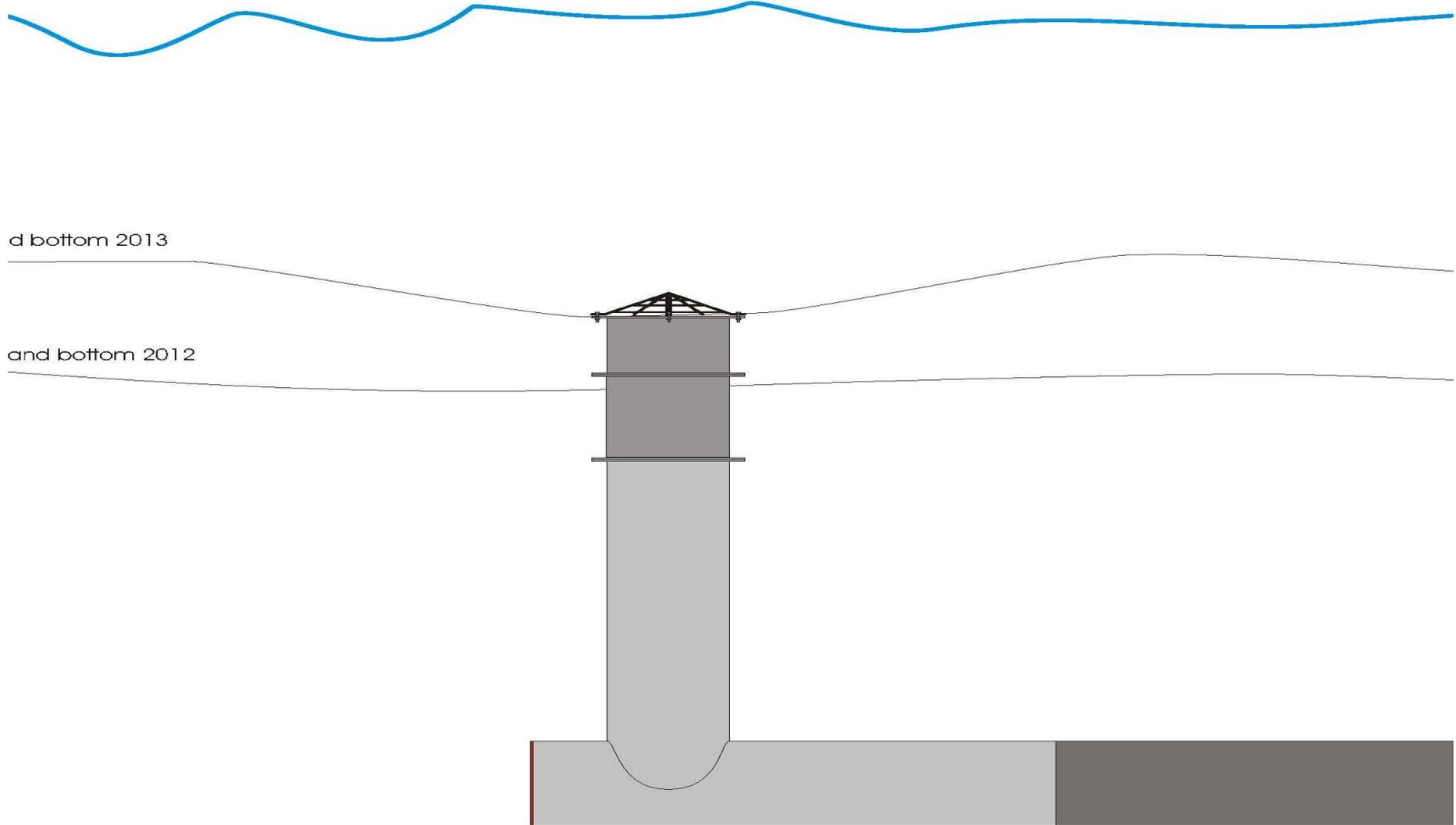
## ➤ ISSUES WITH THE CURRENT INTAKE INCLUDE:

- Harmful Algae Blooms (HAB) HAB'S ARE AN INCREASING CONCERN FOR ALL LAKE ERIE WATER SYSTEMS
  - BLUE-GREEN ALGAE FORMS HAB'S AND HAS BEEN KNOWN TO PRODUCE A VARIETY OF NEUROTOXINS, LIVER TOXINS, CELL TOXINS, AND SKIN IRRITANTS.
  - OVER THE PAST FEW YEARS, TWO WATER SYTEMS HAVE SHUT DOWN DUE TO THE INCREASED TOXIN LEVELS IN THEIR POTABLE WATER.
  - HABS' TYPICALLY ARE LOCATED AT OR NEAR THE SURFACE OF THE WATER.
  - **THEREFORE THE DEEPER THE INTAKE, THE LESS PROBABILITY OF AN HAB!!!**
  - PAINESVILLE WILL HAVE THE ABILITY TO ACCESS RAW WATER FROM 2 RAW WATER INTAKES
- FRAZIL ICE- CONDITION OCCURS WHEN A COLLECTION OF LOOSE, RANDOMLY ORIENTED NEEDLE SHAPED ICE CRYSTALS FORM.
  - OCCURRED 3 OUT OF LAST 4 WINTERS.
  - LACK OF ENGINEERING DESIGN TO PREVENT
  - VELOCITY IS A MAJOR FACTOR IN THE FORMATION OF FRAZIL ICE/THEREFORE HAVING A BACK-UP RAW WATER INTAKE WOULD ALLOW THE FRAZIL ICE TO UNFRETZE WITHOUT AFFECTING CUSTOMER SERVICE.
  - CURRENTLY THE COST TO RENT PUMPS, HIRE DIVERS, AND/OR MOBLIZE STAFFING DURING THE FRAZIL ICE EVENTS RANGE FROM \$10,000.00 TO \$15,000.00 DEPENDING ON THE DURATION.

# MOTIVATION

## ➤ ISSUES WITH THE CURRENT INTAKE INCLUDE:

- IMPROVED WATER QUALITY
  - TURBIDITY (ANYTHING REFLECTS LIGHT) RANGES FROM 1.0- 300.0 NTU'S DUE TO THE LOCATION OF THE INTAKE BEING IN THE MUDLINE (OR SURF)
  - WITH THE INTAKE AT 25'-27' WATER DEPTH THE RAW TURBIDITY WILL BE CONSISTENTLY IN THE AVERAGE RANGE OF 1.0-10.0 NTU'S
  - **SIMPLY**...MORE TURBIDITY REQUIRES MORE CHEMICAL (ALUM)
    - MORE CHEMICAL ,MORE MONEY
    - THE ADDITION OF CHEMICAL (ALUM) ALSO INCREASES THE PLANT'S SLUDGE PRODUCTION ( AND COST FOR SLUDGE REMOVAL).
    - **AGAIN** ...MORE CHEMICAL, MORE SLUDGE, MORE MONEY
  
- LONGER LIFE ON EQUIPMENT
  - ANNUAL CLEANING OF CURRENT INTAKE PIPE IS REQUIRED DUE TO DEBRIS AND SAND ENTERING THE PIPING.
  - LESS SAND AND DEBRIS ENTERING INTAKE PIPING WILL EXPAND EQUIPMENT LIFE AND REQUIRE LESS ROUTINE CLEANING.







# COST/SAVINGS

## ➤ OHIO EPA WATER SUPPLY REVOLVING LOAN ACCOUNT (WSRLA)

- 20 YEAR-LOAN APPROXIMATELY \$10,000,000- \$12,000,000
  - 0% INTEREST
  - POTENTIAL SAVINGS FOR THE PAINESVILLE PROJECT LOAN APPLICATION BEING ACCEPTED FOR THE PROJECT IS \$3,000,000- \$4,000,000.

# QUESTIONS ?

# Painesville Raw Water Intake Project Fact Sheet

The City of Painesville appreciates your review of the following project fact sheet and is interested in hearing from you. If you have any questions, concerns, or comments on the information presented in this fact sheet, please attend the Raw Water Intake Public Meeting at 6:00pm Monday, March 23, 2015. Mr. George P. Ginnis, Superintendent/Executive Public Service Director, will respond to your questions/concerns. If you have additional questions please contact Mr. Ginnis at 440-392-9565 between the hours of 8:00am to 4:00pm. You may also send email to Mr. Ginnis at [gginnis@painesville.com](mailto:gginnis@painesville.com).

Upon completion of the Raw Water Intake Public Meeting, the minutes will be submitted to the Ohio EPA's Division of Environmental and Financial Assistance, and the City of Painesville will have met its responsibilities for notifying the public about the proposed project and the expected funding through the Ohio EPA's Water Supply Revolving Loan Account (WSRLA) program, as well as involving the public in its decision making process.

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Introduction- The Painesville Water Division is proposing to make improvements to its raw water intake with financial assistance from the Ohio EPA. The objective is to replace the 24-inch raw water intake that was built in 1913. This intake extends 1,200 feet into Lake Erie and has been out of service due to sand and zebra mussel infestation. The top of the crib structure is at a water depth of approximately 6 feet while the top of intake pipe is at a water depth of 8 feet. The 24-inch riveted steel intake pipe has a maximum capacity of 4 million gallons per day (MGD) and was abandoned in 2010.

The Painesville Water Division currently draws water from Lake Erie from a 36-inch raw water intake pipe that was built in 1951. The original 36-inch intake project design had piping extended 4,000 feet and a crib structure located at the end of the piping. After construction of the original 36-inch intake and piping, the Painesville Water Plant began having problems attempting to draw water into the plant in the late 1950's and early 1960's. Therefore in 1965-1968 divers were hired and began performing inspections to locate possible issues with the 36-inch raw water intake piping. In 1968, divers located multiple problems with the raw water intake piping. The problems detected were at distant locations (2000-4000 feet from shore) and were documented as pipe joints with 10-12 inches of separation, missing lengths of pipe, and scattered sections of pipe lying across the lake floor.

At this point it was determined to test the intake pipe to establish a usable section of the intake pipe. Testing was performed and the final conclusion resulted in an inspection port being utilized as the current Painesville raw water intake. The inspection port is located approximately 1200 feet from the shore.

Project Description- The proposed project will provide a 36-inch diameter intake pipe and crib to be constructed adjacent to the existing 36-inch intake. The addition of the new 36-inch diameter intake pipe will be extended from the shoreline to approximately 4000 ft into Lake Erie. The proposed raw waterline will be constructed 100 ft from the existing intake waterline and the crib structure will be constructed at the termination of the raw waterline. The crib structure will be in water depth of roughly 27-28 ft.

Coordination and obtaining permits from review agencies such as the Army Corp of Engineers, Ohio Department of Natural Resources, the Ohio Historic Preservation office and the U.S. Fish & Wildlife Services has been initiated. The future water demand and population projections have also been calculated and factored into the project.

Additionally, potential potable and non-potable connections with surrounding water system have been evaluated but deemed too costly. The proposed project will enable the Painesville Water Division to safely draw water from one of two intakes when toxins levels exceed Ohio EPA standards.

Project Cost (Estimated) – \$10,000,000.00 - \$12,000,000.00

Advantages - Less susceptibility to Harmful Algae Blooms  
Redundancy - two viable sources of Raw Water  
Less susceptibility to Frazil Ice  
Improved raw water quality  
Reduced amount of chemicals required to treat raw water  
Reduced amount of sludge produced

Implementation Schedule- Upon completion of the detailed design review and project bidding process, this project will take 12-18 months to complete. Currently, the construction of these improvements should begin in the spring of 2016 and may be completed by 2017 or 2018.

Funding- Ohio EPA's Water Supply Revolving Loan Account (WSRLA) program that will provide a 0% interest loan for 20 years. The entire amount of the project will be funded by the WSRLA loan. The WSRLA loan will be paid by a combination of the Water Infrastructure Fee funds and the City of Painesville's Capital Improvement allocation from the water revenue funds.

Conclusion - The proposed project will provide an alternate 36-inch diameter intake pipe that will permit the consumers of the Painesville Water system to have uninterrupted raw water. The increasing probability of Harmful Algae Blooms developing in the shallow waters near Headlands beach is a mounting concern. The Algae Blooms are located predominately in the western basin but have been positioned over the last few summers in the Headlands Beach area. In the summer of 2012, the Lake County General Health District performed testing at Headlands Beach and posted warning signs about ingesting Lake Erie Water. Microcystin (toxin) testing near Painesville's current raw water intake piping and potable water ensured no plant shutdown was necessary at that time.

Comments to Painesville City Council  
March 23, 2015

Raymond F. Sternot  
346 Birchwood Lane  
Painesville, Ohio 44077

There is little question, given the infrastructure issues in Painesville, that this intake line isn't needed. But, there is certainly a question about the City's planning and budgeting for this project. It is taking dollars away from recently passed water line funding. Why wasn't this "known?" project part of that water department request for funding?

The question is whether the city can keep coming back to the well and saying, "Oh, by the way, we forgot about this funding need for this known project!" Will Council now come back to residents with a request for more water line funding in the future?

I think what this points to is what Mr. Fodor keeps asking and getting no real response from Council or the Administration about! Where are the short term and long term needs of the city identified? Where the visual/defined picture of these required projects and what is the status of the funding requirements for each? They seem to be "hidden in the budget" and not adequately presented either to council or residents!

The administration says they have plans! OK! Where are they? Where is the 5-7 Year Project List of short term/long term projects? What is the project funding status for these plans? Who is the project owner for each? (That is, who is the responsible staff administrator?) Who is looking ahead 5-7 years on options to fund these (known?) project requirements?

To me, the city needs to get a better handle on its needs and it needs to begin to run more like a private business where accountability for results is paramount! What residents in Painesville seem to be getting for their taxes is less than optimal performance results!

Ray Sternot