RAW WATER INTAKE IMPROVEMENTS PROJECT SUMMARY

Project Summary:

- The Ohio County Water District provides potable water service to customers in Ohio, Daviess, Breckinridge, McLean, and Grayson Counties including three wholesale customers including Cities of Beaver Dam, Centertown, and Fordsville.
 - Over 6,120 connections, serving a population of almost 23,000 people
- Our 4 MGD treatment plant in Cromwell exclusively utilizes the Green River for our communities' source of water. Our intake is <u>vital</u> in the providing our customers a sufficient water supply.
- As part of the 2011 plant improvements, the existing raw water intake pumps and electrical gear were replaced but the original intake structure and pipes were not modified.
- Raw water from the Green River is drawn through two screens that go into a single 16" ductile iron pipeline that discharges to the pump well. The two vertical turbine pumps, pump water from the wetwell to the water treatment plant 5,925 feet away located on HS Hwy 231. It is approximately 225' from the riverbank to the wet well.
- The intake is the only facility we use to transport water to the water treatment plant.
- In September of 2019, divers from Green River Commercial Diving conducted their normal annual inspection of the raw water intake screens and wet-well. The divers found a large number of rocks and debris inside the wet-well, later finding an opening in the piping system downstream of the screens.
- The presence of large rocks in the wet well is indicative of a serious problem that may continue to worsen over time, causing pump damage, pump failure, and/or loss of water supply.
- Additionally, there is slope failure at the riverbank that could cause pipe separation by acting as a pulling force. This could lead to a catastrophic failure of the intake in a short time period.
- A pipe failure, supply line clog or pump failure caused by any of the concerns would likely occur very quickly. A diesel powered back up pump would have to be mobilized in order to supply peak demand of our system. Costs estimated \$30,000/month for rental and operation. Timing would be critical to mobilize these on-site for by-pass pumping operations.
- Our engineer Wauford was brought on board early 2020. They provided two options to the District and the Board decided to proceed with:
 - o Connection to existing raw water line including valve wet-well, valves and fittings
 - o Rehabilitation of 90 linear feet of the existing 16" raw water line (from valve wet-well to intake wet-well
 - o 45' deep 14' diameter concrete valve vault
 - o 210 linear feet of 20" ductile iron pipe with ball joints
 - o 240 linear feet of 20" restrained joint ductile iron pipe
 - o East line is 240', extends 85' into water
 - o West line is 220', extends 75' into water 15' deep normal pool
 - o 800 linear feet of 4" ductile iron pipe air backwash line with restrained joints
 - o 2 intake screen assemblies in the Green River
 - o 2 micropile foundations for intake screening assemblies
 - Mobilization for marine work
- The plans are finalized and we have received Kentucky Division of Water Permits and United States Corp of Engineers permit.

Community Development Block Grant History:

- This CDBG application process began in February of 2021.
- In March 2021, Ohio County Water District (OCWD) personnel completed 70 door-to-door public surveys to determine if our service area met the Low to Moderate Income requirement for the CDBG application of which it did.
- Multiple meetings held with GRADD, KIA, DLG, Engineer, and OCWD.
- Public hearing held on 7/27/21 and resolution adopted at the Fiscal Court meeting to apply for the CDBG. Advertised in the 7/14/21 newspaper.
 - o County Fiscal Court required to be the applicant.
 - o Resolution authorizing Judge Johnston to sign and submit the 2021 Community Development Block Grant (CDBG) Application to DLG for funding of the raw water intake project.
- Submitted application for CDBG in July 2021 for the full \$1,000,000.
- We were notified in April 2022, that we received the full \$1,000,000 CDBG
- Ohio County Fiscal Court approved the following resolutions on 9/13/22:
 - o Residential Relocation Resolution
 - Professional Services Resolution
 - o Procurement Code Resolution
 - Cost Overrun Resolution
 - o Budget amendment showing the \$1,000,000
- 9/22/22 Governor Beshear presented us with the \$1,000,000 grant award check at the Community Center.
- 1/5/23 GRADD approved the project to go out for bid
 - o Advertise for Bids Thursday February 1, 2023
 - o Pre-Bid Meeting Tuesday February 7, 2023 at 10 am
 - o Bid Opening Thursday February 16, 2023 at 2 PM
- Three bids were received:
 - o Garney Construction \$5,237,000
 - o Haren Construction \$6,082,000
 - o Morgan Contracting \$12,353,150
- Wauford recommended moving forward with the lowest and most responsive bid Garney Construction
- The OCWD Board of Commissioners awarded the Raw Water Intake bid to Garney Construction through resolution on 3/27/23
- I requested additional funding through GRADD and DLG due to the large discrepancy of estimated project cost of \$2,500,000 and the low bid we received. DLG awarded an additional \$1,000,000 which from GRADD Staff said has never been completed before.
- I submitted an additional \$2,000,000 funding request to Congressman Guthrie and Senator McConnell early March. I provided support letters from Judge Johnston, Representative Scott Lewis, Senator Stephen Meredith, and Commissioner Reid Haire. Congressman Guthrie selected our project for Federal Funding and made a recommendation to the House Appropriations Committee. The funding request has made it through the Committee and the House, it only needs Senate approval at this time. However, they decrease it from \$2,000,000 to \$1,000,000.
- PSC Application for a Certificate of Public Convenience and Necessity was filed by attorney Damon Talley on June 9th
 - o 494-page application
- PSC issued a No Deficiency Letter on June 12th for the application, assigned it Case No. 2023-00192 and is under review.

• PSC approved the project on 7/31/23.

This is a huge financial accomplishment for the Ohio County Water District and the over 6,100 customers we serve.

- We currently have two bonds and two KIA loans for past project debt that is equivalent to \$10,840,200 in debt service we owe.
- o Annually, OCWD pays \$836,620 towards principle, interest and fees associated with our debt service.
- o \$1,000,000 grant lessens the cost burden on our rate payers.

Eric Hickman, P.E. General Manager