Ohio Environmental Protection Agency

John R. Kasich, Governor
Mary Taylor, Lt. Governor
Craig W. Butler, Director

October 23, 2017

Issuance of A Limited Environmental Review
To All Interested Citizens, Organizations, and Government Agencies

City of Zanesville
Muskingum County

Water Tank Improvements
Loan Number FS391026-0021

The purpose of this notice is to advise the public that Ohio EPA has reviewed the referenced project and finds neither a Supplemental Study (SS) nor an Environmental Assessment (EA) is required to implement the project as discussed in the attached Limited Environmental Review (LER). Consequently, a Finding of No Significant Impact is being issued for this project.

The Water Supply Revolving Loan Fund program requires the inclusion of environmental factors in the decision-making process for project approval. Ohio EPA has done this by incorporating a detailed analysis of the environmental effects of the proposed action in its review and approval process. Environmental information was developed as part of the facilities plan, as well as through the facilities plan review process. A subsequent review by this Agency has found that the proposed action does not require the preparation of either an EA or an SS.

Our environmental review concluded that because the proposed project is limited in scope and meets all applicable criteria, an LER is warranted. Specifically:

- The proposed project will have no significant adverse environmental effect, nor will it adversely affect any specific resource type.
- It will not require extensive general or specific direct impact mitigation.
- It will not affect current design flow value or the existing service area.
- It is clearly cost effective.

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- It is not controversial.

- It will not result in an increase in the volume of discharge or loading of pollutants to receiving water or increase the withdrawal of additional water supplies.

The LER presents additional information on the proposed project, costs and the basis for our decision. Further information can be obtained by calling or writing the contact person listed on the back of the LER.

Upon issuance of this determination, loan award may proceed without being subject to further environmental review or public comment, unless information is provided which determines that environmental conditions on the proposed projects have changed significantly.

Sincerely,

Jerry Rouch

Jerry Rouch, Assistant Chief
Division of Environmental & Financial Assistance

Attachment

LIMITED ENVIRONMENTAL REVIEW
For
City of Zanesville

Water Tank Improvements
Loan Number FS391026-0021

Applicant: **Honorable Jeff L. Tilton, Mayor**
City of Zanesville
401 Market Street
Zanesville, Ohio 43701

Project Summary/Background

The City of Zanesville, located in Muskingum County, Ohio, owns, operates and maintains the potable water system that serves 11,196 customers. The system includes a 14.5 million gallon per day (MGD) groundwater-sourced drinking water treatment facility, wellfield with 12 active wells, pump stations, transmission lines, fire hydrants and multiple storage tanks and raised water tanks. Despite regular maintenance, the 87-year old Putnam raised water tank is beyond its functional life and needs to be replaced. The Heritage raised water tank has several structural and safety issues which must be addressed to allow it to continue to function in its capacity. In an effort to provide safe, potable and cost-effective drinking water to Zanesville's service area, the proposed Zanesville Water Tank Improvements project includes the replacement of the Putnam raised water tank, and repairs and improvements to the Heritage raised water tank to allow continued safe drinking water to all locations within Zanesville's service area. The proposed project would allow Zanesville to provide better water quality, and ensure system pressures and fire protection to its customers. The project, to be financed through an Ohio Water Supply Revolving Loan Account (WSRLA) loan, has a total estimated capital cost of $2,398,700. The approximate construction schedule is January 2018 through January 2019.

Existing Conditions

Pittsburg Tank and Tower Maintenance Company, Inc. performed a maintenance inspection of the tanks in 2014 and found extensive deficiencies that need to be addressed. The 750,000-gallon Putnam tank is of multi-column elevated storage tank design, was constructed 87 years ago, and is in critical need of extensive maintenance and repairs to allow it to remain functional. This work would include abrasive cleaning and repainting of the interior and exterior surfaces, repairs to the tank's sidewall, bowl, saucer, roof and overflow pipe, installation of a new tank vent, and modifications to the roof, sidewall ladders and fall prevention system. The excessive thinning of the tank's metal, the extent of the maintenance currently needed, and the need for substantial continued maintenance makes repair of the tank not cost-effective, and has brought the tank to the end of its functional life. The 1,000,000-gallon Heritage tank is of hydropillar design, was constructed 45 years ago, and is in need of various maintenance and improvements ensure water quality and for worker safety. This work would include abrasive cleaning and repainting of the interior and exterior surfaces, repairs to the tank's sidewall and roof, and modifications to the roof, sidewall ladders and fall prevention system.

Alternatives Analysis

To address drinking water storage needs, Zanesville considered the following alternatives.

Alternative 1, a "no-action alternative," would maintain current practices and not adequately address the public health threat related to the deteriorated condition of the

existing elevated water tanks. This alternative has the potential to compromise water quality, allow structural failures, and leave Zanesville with inadequate pressure for fire protection and safe water pressure.

Alternative 2 involves extensive repairs to both existing elevated water tanks. The Heritage tank is of an age and condition that repairs would be cost effective. However, the Putnam tank, based on inspections of the tank and recommendations for its repair, is in extremely poor condition, with excessive rust, thinning metal, and holes in its roof, and would require extensive safety upgrades. Furthermore, continual and significant repairs to the Putnam tank would need to take place due to its age and condition. These repairs would continue to add to the expense of maintaining this structure and would quickly become unfeasible due to continued weakening of the tank's primary framework.

Alternative 3 involves construction of a 1,000,000-gallon, multi-column elevated storage tank, of like height and configuration, at a location adjacent to the existing Putnam tank. The Heritage water tank would undergo internal and external painting, as well as various maintenance and improvements ensure water quality and for worker safety. The proposed project would allow Zanesville to provide better water quality, and ensure system pressures, storage volume, and fire protection to its customers. It would also remove an aged elevated tank which is continually becoming a greater public health and safety threat due to deterioration of the structure, and which allows foreign material to enter the tank and contaminate the stored water.

Selected Alternative

Based on its effectiveness in addressing structural and water storage issues, and providing safe drinking water to its customers, Zanesville selected Alternative 3. The area of excavation for the new Putnam tank is on a vacant lot approximately 140 feet, on center, northeast of the location of the existing tank. This portion of the project includes: construction of a 1,000,000-gallon, multi-column elevated storage tank, piping, water connections, electrical work, and installation of an access drive and fencing. Following construction, demolition, removal and disposal of the existing, aged tank will take place. Maintenance and improvements of the Heritage tank include: cleaning, priming and painting interior and exterior tank surfaces, installation of ladders, railings and fall protection equipment, repairs of leaks, pipe replacement, repairs/improvements to the dry riser roof access tube manway and vacuum/pressure vent, and installation of a water tank mixer.

Implementation

The total estimated cost of the proposed project is $2,398,700, and borrowing that amount over 30 years at the current market rate of 3.25 percent would cost Zanesville $3,773,000. However, Zanesville is expecting to receive a grant from the Community Development Block Grant (CDBG) program in the amount of $500,000 to assist in funding this project. Assuming Zanesville receives the CDBG grant that it has applied for, the outstanding balance for the project is $1,898,700. Zanesville qualifies for the standard WSRLA below-

market interest rate on 30-year loans, which is adjusted monthly to reflect market conditions, and is currently 1.95 percent. Borrowing $1,898,700 at 1.95 percent will save Zanesville approximately $470,000 over the life of the loan compared to the current market rate of 3.25 percent. Under the water rates that are effective in 2017, the residential water bill in the project area will be $21.89 per month, or $262.68 per year, based on current average water usage. This is 1 percent of the median household income of $26,268, which falls well within affordability guidelines.

Conclusion

The proposed project meets the project type criteria for a Limited Environmental Review; namely, it is an action within an existing public water system, which involves the functional repairs and upgrades to, and replacement of, existing mechanical structures. Furthermore, the project meets the other qualifying criteria for a LER; specifically, the proposed project:

- *Will have no adverse environmental effect and will require no specific impact mitigation,* as there are no known sensitive environmental resources within the proposed project area. The proposed project activities include demolition of an existing, deteriorated elevated water tank and replacement with a new elevated water tank, and repairs and upgrades to a second existing elevated water tank. There will be no significant adverse effects as a result of project implementation or the need for any additional mitigation measures beyond typical erosion control and construction best management practices;

- *Will have no effect on high-value environmental resources,* as construction will take place within a vacant lot, adjacent to the existing elevated water tank plant where excavation has previously taken place; and in an existing, gated facility of an elevated water tank, and where no high-value resources are present;

- *Is cost-effective,* as there are no meaningful alternatives to the proposed action, and the project will be financed through the WSRLA, saving approximately $470,000 in interest payments over conventional financing;

- *Is not a controversial action,* as there is no known opposition to the proposed project and the cost of the project is not overly burdensome to ratepayers;

- *Does not create a new, or relocate an existing, discharge to surface or ground waters, and will not result in substantial increases in the volume of discharge or loading of pollutants from an existing source or from new facilities to receiving waters,* since the project primarily involves demolition and replacement of an existing elevated water tank, and repairs and improvements to a second existing elevated water tank, and involves limited ground disturbances;

- *Does not create a new source of water withdrawals from either surface or ground waters, or significantly increase the amount of water withdrawn from an existing water source,* since the project primarily involves demolition and replacement of an existing elevated water tank and repairs to another tank, and does not affect water sources or withdrawal amounts, and;

- *Will not provide capacity to serve a population substantially greater than the existing population,* since the project is not related to serving new growth or increasing capacity at the drinking water treatment facility.

In summary, the planning activities for the project have identified no potentially-significant adverse impacts. The project is expected to have no significant short-term or long-term adverse impacts on the quality of the human environment, or on sensitive resources (surface water, ground water, air quality, floodplains, wetlands, riparian areas, prime or unique agricultural lands, aquifer recharge zones, archaeologically or historically significant sites, federal or state-designated wild, scenic or recreational rivers, federal or state-designated wildlife areas, or threatened or endangered species). Typical construction impacts, such as noise, dust, and exhaust fumes, will be short-term and addressed through the use of standard construction best management practices.

The following agencies reviewed this project's planning information:

Ohio Environmental Protection Agency
Ohio Department of Natural Resources
U.S. Fish and Wildlife Service

The proposed project is a cost-effective way to address the necessary replacement of an existing and deteriorated elevated water tank, and repairs and improvements to a second elevated water tank. Once completed, the elevated water tanks project will allow Zanesville to ensure the quality of its treated drinking water in storage, thereby protecting public health, and benefit public safety by ensuring system pressures for customers and fire protection. Also, by using WSRLA low interest financing, Zanesville has minimized the project cost.

For further information, please contact:

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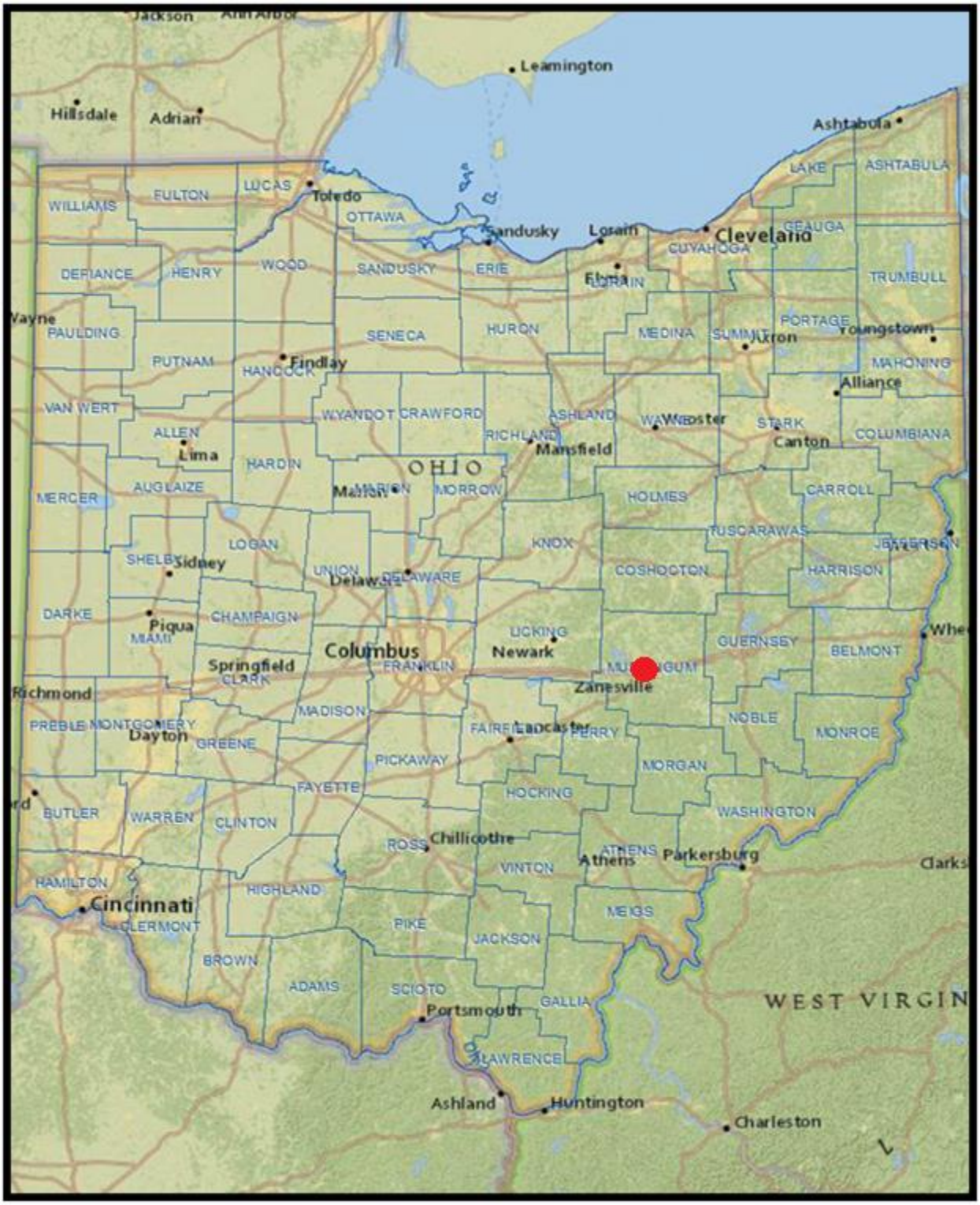

Figure 1: General project area (in red).

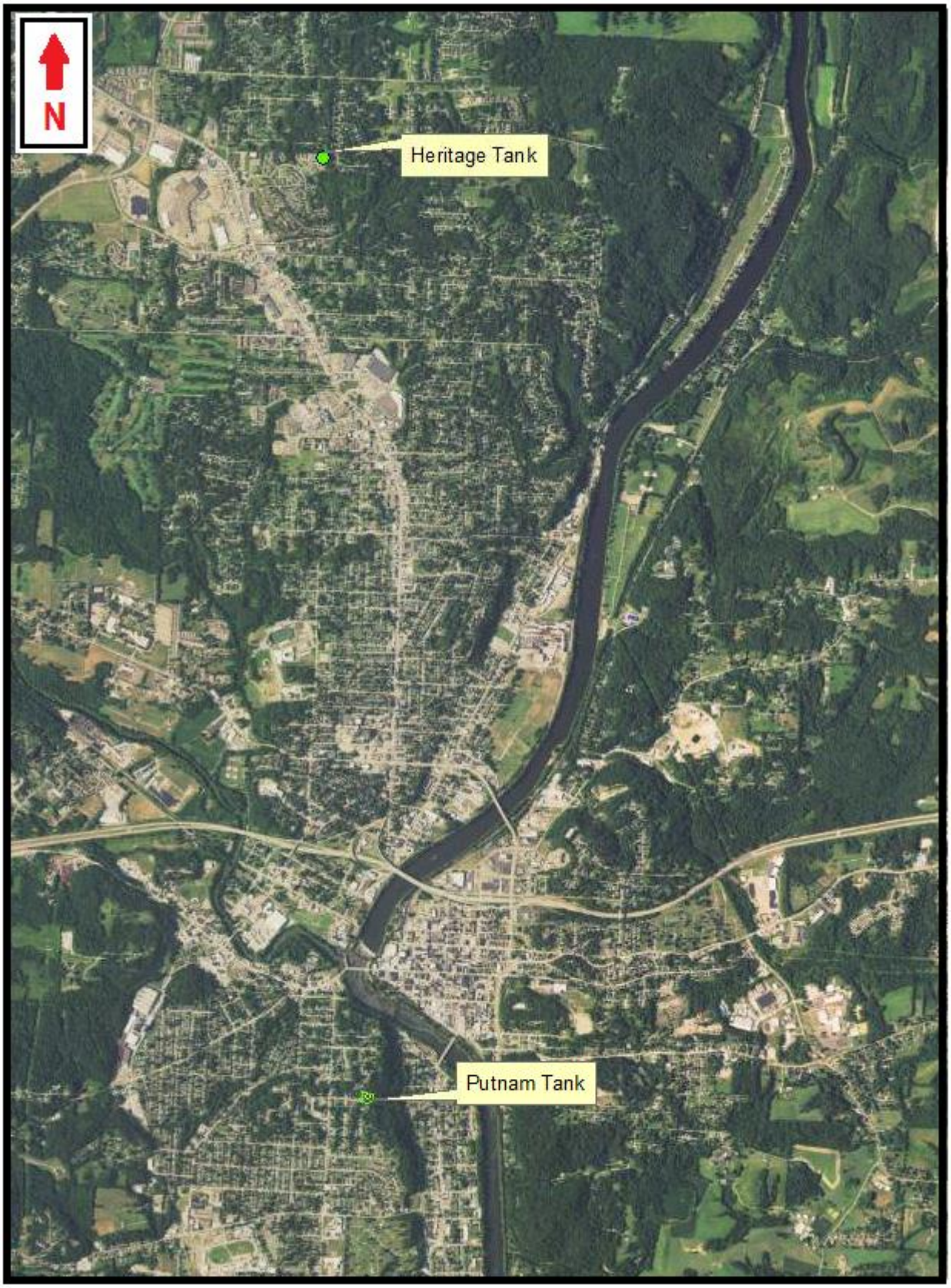

Figure 2: Project areas.