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MAR 22 2016

Public Service
Commission

D. Berry Baxter

John M. Berry (1900-1991)

Of Counsel: John M. Berry, Jr.

March 21, 2016

Public Service Commission of Kentucky
211 Sower Blvd.
P.O. Box 615
Frankfort, KY 40602-0615

RE: Case No. 2016-00080: Henry County Water District No. 2

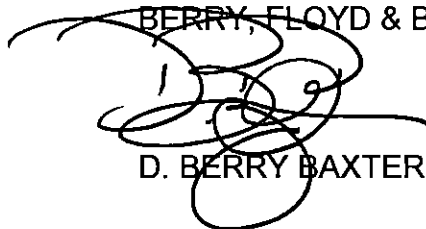
To whom it may concern:

Enclosed you will find a letter from the Energy and Environment Cabinet dated March 7, 2016 styled Finding of No Significant Impact along with the Environmental Assessment regarding the above project. Please consider this information as needed relative to this matter.

Please advise if you require any additional information.

Very truly yours,

BERRY, FLOYD & BAXTER, P.S.C.

A handwritten signature in black ink, appearing to be "D. Berry Baxter", written over the printed name of the firm and the name of the signatory.

D. BERRY BAXTER

DBB:dbb

enc.

cc: James Simpson w/o enc.

C:\Users\Berry\My Dropbox\HCWD #2\PSC ltr US 42 tank 032116.wpd



MATTHEW G. BEVIN
GOVERNOR

CHARLES G. SNAVELY
SECRETARY

ENERGY AND ENVIRONMENT CABINET
DEPARTMENT FOR ENVIRONMENTAL PROTECTION
DIVISION OF WATER
WATER INFRASTRUCTURE BRANCH
200 FAIR OAKS LANE, 4TH FLOOR
FRANKFORT KENTUCKY 40601

March 7, 2016

James T. Simpson, Chief Operating Officer
Henry Co. Water District 2
PO Box 219
Campbellsburg, KY 40011

RE: Finding of No Significant Impact
US 42 Tank
Henry Co. Water District 2
Henry and Trimble Counties, Kentucky
AI ID: 1846; PLN20150001

Dear Mr. Simpson:

The Department for Environmental Protection, Division of Water (DOW) has reviewed the environmental document entitled *US 42 Tank*, dated November 24, 2015. This document has been determined to meet the requirements of the Kentucky State Environmental Review Process.

Approval of the environmental information is hereby given based on the attached Finding No Significant Impact (FONSI) and Environmental Assessment (EA) issued by this Department on February 3, 2016, which has undergone review by the Kentucky State Clearinghouse SAI#KY20140729-0879. This approval is subject to any conditions and mitigative measures presented in Section F of the EA or in the State Clearinghouse review comments.

Any questions may be directed to our office at (502) 564-3410 or by e-mail to cindy.mcdonald@ky.gov.

Sincerely,

Cindy McDonald, Supervisor
Wastewater Planning Section
Water Infrastructure Branch

CM/d
Attachments

Cc: Mr. Tom Green, TetraTech, Inc.



MATTHEW G. BEVIN
GOVERNOR

ENERGY AND ENVIRONMENT CABINET
DEPARTMENT FOR ENVIRONMENTAL PROTECTION
DIVISION OF WATER
WATER INFRASTRUCTURE BRANCH
200 FAIR OAKS LANE, 4TH FLOOR
FRANKFORT KENTUCKY 40601

CHARLES G. SNAVELY
SECRETARY

FINDING OF NO SIGNIFICANT IMPACT (FONSI)
US 42 Tank Project
Henry County Water District #2
Henry and Trimble Counties, Kentucky
AI ID: 1846; PLN20150001

The Department for Environmental Protection, Division of Water (DOW) has conducted a review of the above proposed project in accordance with the procedures contained in the State Revolving Fund Operating Agreement between the Environmental Protection Agency Region IV and the Commonwealth of Kentucky. Based on a review of the *Henry County Water District #2 (HCWD)– US 42 Tank* submitted by the applicant and other supporting documents, the DOW has determined the above referenced proposed project will not have a significant impact on the environment and is issuing a Finding of No Significant Impact (FONSI).

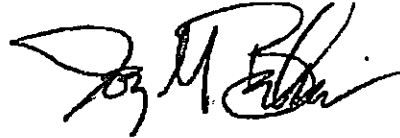
The *HCWD - US 42 Tank* project includes the replacement of an undersized and aging water storage tank. Based on the evaluation of alternatives, the selected alternative is to replace the aging 200,000 gallon water storage tank with a 1.0 million gallon storage tank. The existing tank is in need of repair and painting at an additional maintenance cost and the storage capacity is undersized and will not meet the future demands of the District or to allow for future regionalization in the area. The selected alternative has a projected cost of \$ 3,254,000.

Attached is an Environmental Assessment containing detailed information supporting this proposed action. It includes the following sections: A) Summary, B) Existing Environment, C) Existing Facilities, D) Need for Project, E) Alternatives Analysis, F) Environmental Consequences, Mitigative Measures, G) Public Participation and User Rates, and H) Sources Consulted.

This FONSI and Environmental Assessment will be available for review and comment for thirty (30) calendar days. Interested persons are encouraged to submit comments within thirty days of the issue date.

The DOW will take no action on this project until after the review and public comment period has ended, and will evaluate all comments before a decision is made to proceed with approval of the US 42 Tank project or awarding of SRF funds for this project. Written comments supporting or disagreeing with the proposed action should be sent to Cindy McDonald, Supervisor, Wastewater Planning Section, Water Infrastructure Branch, Division of Water, 200 Fair Oaks Lane, 4th Floor, Frankfort, Kentucky, 40601, or by e-mail to cindy.mcdonald@ky.gov.

Sincerely,

A handwritten signature in black ink, appearing to read "Peter T. Goodmann". The signature is stylized and cursive.

Peter T. Goodmann, Director
Division of Water

CM/d

ENVIRONMENTAL ASSEMENT
US 42 Tank
Henry County Water District
Henry and Trimble Counties, Kentucky
AI#1846; PLN20150001

A. Summary

Project Summary

The Henry County Water District (HCWD) has applied for a Drinking Water State Revolving Fund (DWSRF) loan to fund a project to construct a new 1.0 million gallon water storage tank to replace the existing 200,000 gallon water storage tank that will be taken out of service.

Funding Status

The total estimated funding amount for the proposed project is \$3,254,000 and will be funded in part by the DWSRF (F15-014). The remaining funds will be provided through local sources and from Shelby Energy.

B. Existing Environment

Topography and Geology

The proposed project is actually located in Trimble County just north of the boundary with Henry County. Trimble County is located in the north-central region of Kentucky in the Outer Bluegrass physiographic region which is characterized flat-topped ridges and some steep slopes, especially near the Ohio River and the Little Kentucky River; the two major river systems located within the county. The Little Kentucky River runs along the southeastern corner of the county and the Ohio River runs along the northern and western borders of the county.

The topography of Trimble County generally appears flat with moderately steep hillsides with broad ridgetops and shoulder slopes. The area is dissected by several small intermittent streams. Sinkholes may appear on the larger flat-topped ridges near the center of the county. The average upland elevation ranges from 750 ft. in the west to 850 ft. in the east. The highest elevations occur in the center of the county at 970 ft. north of Bedford on Fishers Ridge. The lowest elevation occurs in the alluvial areas along the Ohio River at 470 ft. near Wise Landing. Bedford, the county seat, sits at 910 ft. The elevations associated with the Little Kentucky River basin occur around 686 ft. and the river valley is cut at an average depth of 200 to 250 ft.

The new water storage tank is located just north of the Trimble – Henry County line and is proposed to be located adjacent to the existing 200,000 gallon water storage tank that will be decommissioned after the new tank is put into operation. This area is located in the uplands approximately 4.0 miles south of Bedford where the major land uses are farming and pasture land.

The geology of the county consists of consolidated sedimentary rocks from the Ordovician and Silurian ages and the alluvial areas consist of unconsolidated sediments from the Quaternary Age. During the late Ordovician age the seas were warming up and becoming shallower allowing for mud and sediments to be deposited. During the Silurian age the limestones and dolomites were formed and they were deposited on the rocks formed during the Ordovician age. The Quaternary sediments were being deposited along the rivers and streams in the alluvial areas during both of these time periods.

Soils

The proposed water tank is located in an upland, woody area behind a residence. The primary soil group located in the proposed project area is the Beasley-Nicholson group. This group is characterized by deep, well drained, erodible soils that have clayey or loamy subsoil and are located in the upland areas, mainly on ridgetops, sideslopes, and hillsides.

Beasley silt loam: These soils are the only soil type occurring in the proposed project area and they are well drained sloping soils from 6% to 20% located on steep hillsides and are very erodible. They have a moderate to rapid runoff with a high water capacity. Bedrock is located 40" to 60" below ground surface (bgs). Slope is a limiting factor to most urban uses. The Beasley 6-12% slope soils are considered farmland of statewide importance; however soils with a 12-20% slope are not considered prime farmland.

Nicholson silt loam: These soils are not located in project area but do occur in the south western part of the county. These soils occur on hilltops, sideslopes, and some toe slopes with a slope of 2% to 12%. These soils are typically gently sloping, well-drained to moderately drained soils and are usually eroded. They have the characteristics of slow to moderate permeability and runoff with a high water capacity.

The alluvial areas in the county are comprised of Stendal silt loam soils and are occasionally flooded due to the occurrence in nearly level areas (0-2% slope). These alluvial soils are formed from soil washed from the uplands. These soils have a high water capacity and are poorly drained and runoff is slow with moderate permeability.

Surface Waters

The project area is located within the Little Kentucky River, Bedford (HUC #051401010) and the Patton's Branch, Westport (HUC #05140101130) watersheds; both are part of the Salt-Licking River Basin Management Unit. The proposed water storage tank is located on the boundary of both watersheds. No streams will be impacted from this project because the proposed tank location is in an upland area. There are no impaired waters listed in the *2012 Integrated Report to Congress on the Condition of Water Resources in Kentucky* for these two watersheds. There are no Special Use Designated Waters, i.e. Exceptional Waters, Reference Reach Waters, or Outstanding National Resource Waters, located in the project area. The proposed water storage tank will be constructed in a Source Water Area Protection Program (SWAPP) zone for Louisville Water Company.

Groundwater

The water source for HCWD #2 is the Ohio River Alluvium Aquifer where they own a well field of six groundwater wells. These wells are located in Trimble County along the Ohio River from milepoint (MP) 572 to 573 MP. The source water is then pumped to the water treatment plant located in Campbellsburg in Henry County. Public water is provided to approximately 90 percent of Henry and Trimble County residents. The Ohio River Alluvium Aquifer is good source water for domestic use. Drilled wells produce several hundred gallons per minute and most can produce in wells less than 100 ft. deep. Groundwater in Henry and Trimble Counties flows through the Drakes Formation which is made up of shales and limestones which results in hard water and may contain salt in wells drilled in the river valleys but overall of good quality. The Drakes Formation can yield enough water to supply domestic wells but not commercial/industrial supplies. Water movement occurs in the fractures, joints, or faults.

The project area has a moderate groundwater sensitivity rating due to the amount of shale in the subsurface. Higher amounts of shale can impede infiltration of precipitation. The project area is located in a karst prone area. The well field has been deemed a Wellhead Protection Area affording the groundwater source certain protections and this also allows for continued monitoring of the susceptibility of contamination infiltration into the groundwater. The proposed project is not expected to have any adverse direct impacts to groundwater quality.

C. Existing Facilities

Drinking Water

Currently, the HCWD serves customers in Carroll, Henry, Oldham, Shelby, and Trimble Counties and serves approximately 6,400 customers with an estimated population of over 14,000. HCWD provides water at wholesale rates to Eminence Water Works, New Castle Water Works, and West Carroll Water District - Carrollton on a permanent basis. HCWD owns and operates a groundwater treatment facility constructed in 1998 with a capacity of 4.0 million gallons per day (MGD), an average distribution of 1.9 MGD, and an estimated water loss of approximately 23%. The distribution system owned and serviced by the HCWD includes approximately 520 miles of distribution and transmission lines, six pump stations, and eleven water storage tanks.

Wastewater

This project is located south of Bedford and west of Campbellsburg in a rural farming area. This area is not included in the wastewater service areas of either city so most of the area is serviced by on-site septic systems. This proposed project area does occur within the Bedford Wastewater Treatment Plant planning area but there are no projects proposed to extend sewer service to this area.

D. Need for Project

The proposed project includes replacing the existing 200,000 gallon water storage tank with the new 1.0 million gallon tank. By increasing the storage capacity, the District will be able to prepare for potential regionalization with an adjoining water district and meet the future needs of its customers. The existing tank is in need of repair and painting at an additional maintenance cost of \$200,000; eliminating this tank will result in a significant savings. The new, larger tank will also allow more water to be gravity fed rather than pumped allowing for an additional cost savings of approximately \$3,000 to \$4,000 per month in electricity use.

E. Alternative Analysis

Alternatives were considered to determine the most cost-effective method for providing a more reliable water supply to the entire service area.

- ***No Action***

If this option is chosen the District would rehabilitate the existing 200,000 gallon water storage tank at the expense of approximately \$200,000. This will not allow for the needed storage capacity in the area. Another disadvantage to this alternative is that the District would be paying more electricity costs because of the additional pumping.

- ***Construct New Water Storage Tank***

This alternative includes replacing the 200,000 gallon water storage tank with a new 1.0 million gallon tank. This project is part of the District's Capital Improvement Plan and comes two years after the installation of the new 20" water main that extends from the water treatment plant to the US 42 storage tank (\pm 4 miles). The larger diameter water main coupled with the larger storage capacity for the tank will increase in the system's reliability and efficiency. This increase in storage capacity will not only provide more reliable water service to the District but also to the neighboring District, as well as for possible future regionalization.

Selected Alternative

The selected alternative includes the replacement of the aging and undersized water storage tank along US 42 in Trimble County located approximately 4.0 miles south of the Water Treatment Plant in Bedford. A 1.0 million gallon water storage tank is proposed to replace the existing 200,000 gallon tank. This alternative shows a significant cost savings in the energy use per month. This alternative will also provide a more reliable service to the western section of the District plus allow for regionalization with neighboring districts due to the increase in water storage capacity. This alternative addresses existing and future system demand and provides the most cost-effective and responsible option for the customers of the Henry Count Water District #2.

F. Environmental Consequences; Mitigative Measures

The applicant solicited government agency review through the Kentucky State Clearinghouse (#KY20140729-0879) and from applicable federal agencies. Best management practices will be employed in all areas of construction. Indirect impacts of the project will be limited and do not outweigh the benefits to the customers of the HCWD.

Historic Properties and Archaeological Sites

The Kentucky Heritage Council (KHC) was solicited for comments by correspondence dated July 2, 2015, regarding potential impacts to historic artifacts and cultural resources. KHC responded by correspondence dated July 20, 2015, stating that an archaeology survey will be performed for this site. A Phase I Archaeological Survey entitled, *A Phase I Archaeological Survey for the Proposed Water Tank in Trimble County, Kentucky* was completed and submitted July 29, 2015. There were no archaeological findings in the survey area which included the areas where the US 42 Tank and the temporary access road (for construction purposes only) are proposed. The report recommends no further archaeological work conducted on this site. On August 24, 2015, KHC responded and agreed with the recommendations of the Phase I Archaeological Survey Report that additional survey work is not needed and that there are "no new historic or prehistoric archaeological sites were recorded."

Endangered Species and Critical Habitats

The United States Fish and Wildlife Service (USFWS) was solicited for comments on October 27, 2014, regarding potential impacts to threatened or endangered species. On June 8, 2015, HCWD #2 entered into a Conservation Memorandum of Agreement with the USFWS to mitigate for the loss of the Indiana bat (*Myotis sodalis*) and the Northern long-eared bat habitat (*Myotis septentrionalis*). The HCWD chose to enter into the MOA with the USFWS because the proposed project would result in the direct loss of 0.9 acres of forested habitat; the HCWD contributed \$4,252.50 to the Imperiled Bat Conservation Fund administered by the Kentucky Natural Lands Trust. Through the MOA entitled, *Forest-Dwelling Bat Conservation Memorandum of Agreement Between the U.S. Fish and Wildlife Service and Henry County Water District #2*, the USFWS describes the recovery-focused conservation benefits to the Indiana bat and the Northern long-eared bat through the implementation of minimization and mitigation measures. The requirements of Section 7 of the Endangered Species Act of 1973 have been fulfilled for the project.

Wetlands and Streams

The U.S. Army Corps of Engineers (USACE) was solicited for comments by correspondence dated July 7, 2015, concerning possible impacts to "waters of the U.S.". USACE commented by correspondence dated August 17, 2015, stating if the "it does not appear that a Department of the Army permit will be needed under the provisions of Section 404 of the Clean Water Act... If the project would necessitate the discharge of dredged or fill material into 'waters of the U.S.', including wetlands, plans should be submitted to our office for review".

KDFWR also commented concerning impacts to aquatic resources through the Clearinghouse process, recommending stream erosion control measures are in place prior to construction.

Prime Farmland or Farmland of Statewide Importance

The USDA Natural Resources Conservation Service (NRCS) was solicited for comments on July 7, 2015, regarding potential impact to "prime farmland" or farmland of statewide importance within the proposed project area. NRCS has not provided a response.

Floodplains

The Kentucky Division of Water (DOW) ascertained, in clearinghouse comments dated August 29, 2014, a floodplain construction permit is not required since the project will not occur in a floodplain.

Air Quality

No negative comments were received during the Clearinghouse interagency review process regarding air quality. Contractors should use best management practices to limit ambient air quality issues during construction.

Miscellaneous

If the construction area is equal to or greater than 1 acre, the applicant must apply for a Kentucky Pollutant Discharge Elimination System (KPDES) stormwater discharge permit.

A Groundwater Protection Plan may be required by the Division of Water, per Clearinghouse comments dated August 29, 2014 if the activities associated with the construction of the project warrant it.

No major civil rights impacts are anticipated as a result of the implementation of the proposed project.

With the exception of noise generated during construction, new noise is not anticipated as a direct result of the proposed project. Construction noise will be temporary in nature and kept to regulated levels.

No sole source aquifers are known to exist within or down gradient of the project area.

There will be no adverse effects to the National Wild and Scenic River System as identified by the National Rivers Inventory.

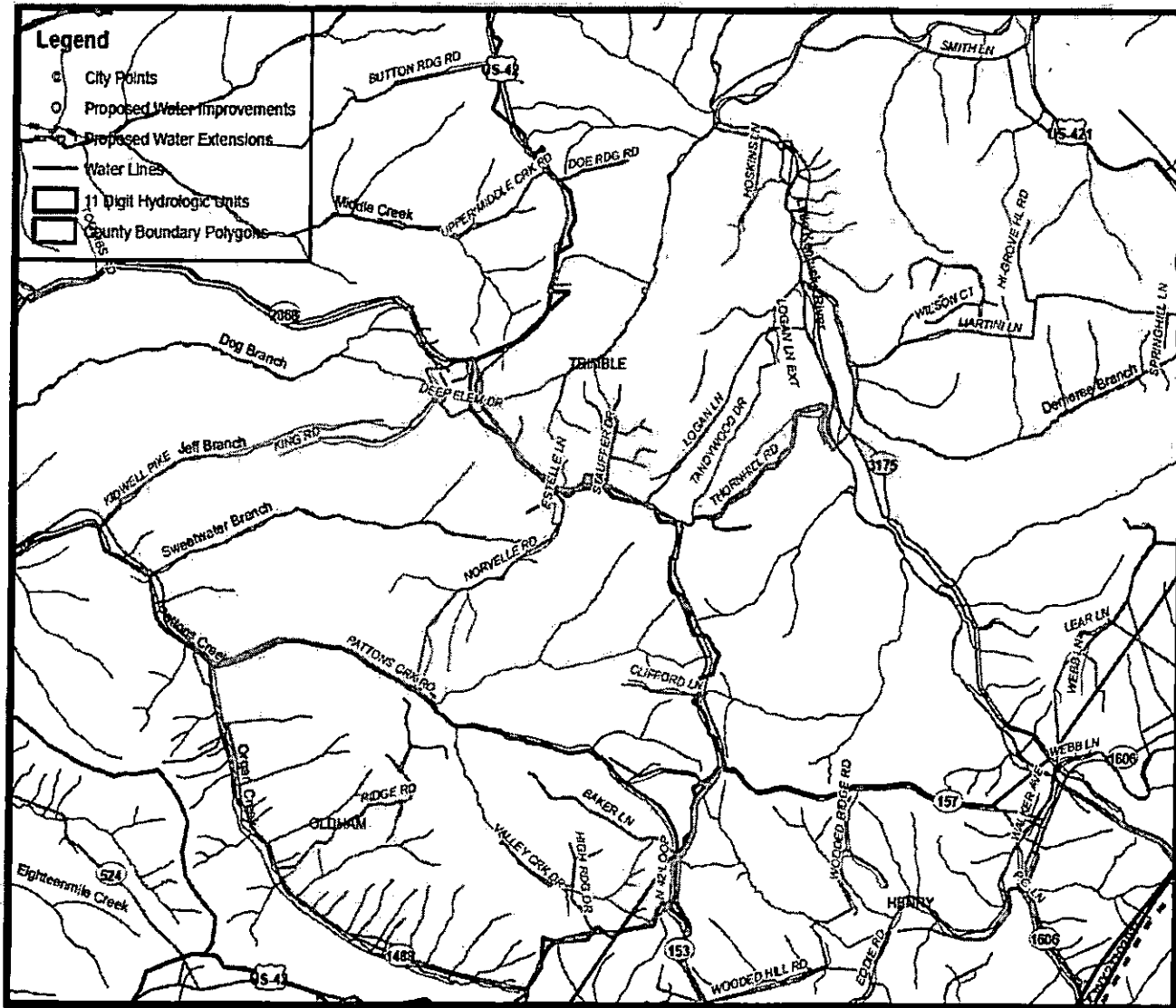
G. Public Participation and User Rates

The District conducted a public meeting on September 28, 2015 at 5:00 pm at the District Business Office in Hartford, Kentucky. The meeting notice was published in *The Time News* on September 2, 2015. The purpose of the meeting was to provide the public with an opportunity to attend and comment on such issues as economic and environmental impacts, project area, alternatives to the project, cultural and historical issues, or any other pertinent issues. No public comments were recorded.

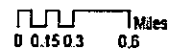
The average monthly customer rate is \$18.76 per 1,500 gallons. A rate increase occurred in 2010 to meet the needs of replacing aging infrastructure and the proposed projects under the Capital Improvement Plan. Finished water is sold at the wholesale rate to Eminence Water Works, New Castle Water Works, and West Carroll Water District - Carrollton for \$2.58 per 1,000 gallons.

H. Sources Consulted

Henry County Water District #2 website
Kentucky Department of Fish & Wildlife Resources
Kentucky Division for Air Quality
Kentucky Division of Water
Kentucky Heritage Council
Kentucky Geological Survey
Kentucky State Clearinghouse
Natural Resources Conservation Service
U.S. Fish & Wildlife Service
USDA Soil Conservation Service
U.S. Army Corps of Engineer
U.S. Geological Survey



HCWD #2 - US 42 Water Storage Tank



Map created utilizing data from KY EEC GIS Portal