



State Revolving Fund Loan Programs

Drinking Water, Wastewater, Nonpoint Source

ENVIRONMENTAL ASSESSMENT AND FINDING OF NO SIGNIFICANT IMPACT

BBP WATER CORPORATION Supply and Treatment Improvements Project SRF PROJECT DW 15 13 60 01

DATE: October 20, 2015

TARGET PROJECT APPROVAL DATE: November 20, 2015

I. INTRODUCTION

The above entity has applied to the Drinking Water State Revolving Fund (SRF) Loan Program for a loan to finance all or part of the drinking water project described in the accompanying Environmental Assessment (EA). As part of facilities planning requirements, an environmental review has been completed which addresses the project's impacts on the natural and human environment. This review is summarized in the attached EA, which can also be viewed at <http://www.in.gov/ifa/srf/>.

II. PRELIMINARY FINDING OF NO SIGNIFICANT IMPACT (FNSI)

The SRF Drinking Water Program has evaluated all pertinent environmental information regarding the proposed project and determined that an Environmental Impact Statement is not necessary. Subject to responses received during the 30-day public comment period, and pursuant to Indiana Code 4-4-11, it is our preliminary finding that the construction and operation of the proposed facilities will result in no significant adverse environmental impact. In the absence of significant comments, the attached EA shall serve as the final environmental document.

III. COMMENTS

All interested parties may comment upon the EA/FNSI. Comments must be received at the address below by the target approval date above. Significant comments may prompt a reevaluation of the preliminary FNSI; if appropriate, a new FNSI will be issued for another 30-day public comment period. A final decision to proceed, or not to proceed, with the proposed project shall be effected by finalizing, or not finalizing, the FNSI as appropriate. Comments regarding this document should be sent within 30 days to:

April Douglas
Senior Environmental Manager
State Revolving Fund
100 N. Senate Ave. IGCN 1275
Indianapolis, IN 46204
317-234-7294; adouglas@ifa.in.gov

ENVIRONMENTAL ASSESSMENT

I. PROJECT IDENTIFICATION

Project Name and Address: **Supply and Treatment Improvements Project**
BBP Water Corporation
265 West Clay Street
Spencer, IN 47460

SRF Project Number: DW 15 13 60 01

Authorized Representative: Leland Rentschler, Board President

II. PROJECT LOCATION

BBP Water Corporation proposes to install a water supply well, raw water main, and an expanded water treatment plant in Owen County, Washington Civil Township, in the Spencer USGS Quadrangle in T10N, R3W, Section 29; see Figure 1.

III. PROJECT NEED AND PURPOSE

The addition of a new water supply Well 4 is needed to provide increased water supply; the current production capacity from water supply Wells 1, 2, and 3 is not adequate to meet projected water demand. Well 4 is also needed to reduce reliance on Well 2 which has developed a level of Perchlorate (PERC) that exceeds safe drinking water standards. In addition, new well pumps and VFD controls are needed at the existing wells to optimize pumping control.

Expanding the Water Treatment Plant (WTP) from 2.0 MGD to 4.0 MGD is needed to increase water treatment capability to a level that will meet projected water demand, and will allow maintenance on existing water treatment components. Additionally, the proposed treatment will provide softening to address water hardness.

IV. PROJECT DESCRIPTION

The proposed Well 4 will be installed on the west side of the existing well field, and will include a raw water main to connect to the current facility. New well pumps and VFD controls will be installed in the three existing wells.

The water treatment facility expansion will include reverse osmosis units. The expansion requires a new concentrate water outfall pipe to be installed via open cut, which will be approximately 250 feet long and 12 inches in diameter.

V. ESTIMATED PROJECT COSTS, AFFORDABILITY AND FUNDING

A. Selected Plan Estimated Cost Summary

<u>Construction Components</u>	<u>Costs</u>
1,000 gpm Water Supply Well w VFD's for existing wells	\$ 487,300
1,400 gpm Reverse Osmosis Water Treatment Plant	1,798,500
Contingency	<u>212,200</u>
Total Estimated Construction Cost	\$2,578,000
<u>Non-Construction Costs</u>	
Engineering Fees	\$ 345,000
Labor Standards Administration	10,000
Bond Issuance Cost	<u>50,000</u>
Total Non-Construction Cost	\$ 405,000
Total Estimated Project Cost	\$2,903,000

B. Total cost of this project is estimated to be approximately \$2,903,000. BBP Water Company will finance the project with a loan from the SRF Loan Program for a 20-year term at an annual fixed interest rate to be determined at loan closing. Monthly user rates and charges may need to be analyzed to determine if adjustments are required for loan repayment.

VI. DESCRIPTION OF EVALUATED ALTERNATIVES

Water Supply Well Alternatives:

- The “**No Action**” alternative is not practical, environmentally sound nor economical.
- **Development of a new well field** - Locating, purchasing and developing a new well field takes a significant amount of time to research, test and acquire property. If contamination becomes worse in the future, this alternative may be more reasonable.
- **Constructing a new water supply well** at the existing well field is the selected alternative. The proposed water supply well will be designed to address future water demand and to avoid potential PERC contamination. The water supply well will supplement the existing production wells while providing additional water supply in the event any of the other wells need to be placed off-line.

Treatment Plant Improvement Alternatives:

- **Expansion of the water treatment plant** is the selected alternative. The expansion will provide water treatment capability to meet projected water demand, and will allow adequate redundancy. The proposed reverse osmosis treatment units will provide water softening, which is compatible with the current treatment operation.
- The “**No Action**” alternative is not practical, environmentally sound nor economical. Under currently conditions, the utility must carefully schedule maintenance shut-downs during non-peak conditions. Failure to address the need for additional water treatment capacity now could threaten supply to customers during peak demand. The alternative to do nothing would result in BBP operating in a manner that could cause loss of water supply and pressure due to inadequate supply. This is not a satisfactory alternative for public water supply.

VII. ENVIRONMENTAL IMPACTS OF THE FEASIBLE ALTERNATIVES

A. Direct Impacts of Construction and Operation

Disturbed/Undisturbed Land (Figure 2): Construction of the water treatment facility expansion shall occur within previously disturbed areas of the existing water treatment facility.

Construction of the new 1,000 gpm Water Supply Well on the west side of the existing well field, and an outfall line for the proposed water treatment plant expansion will take place on a portion of undisturbed land that has been archeological surveyed.

Structural Resources (Figure 3): The Owen County Interim Report does not identify any structures near the project areas. The proposed project will have no impacts on any historic structures and all cemeteries will be avoided.

Construction and operation of the project will not alter, demolish or remove historic properties. If any visual or audible impacts to historic properties occur, they will be temporary and will not alter the characteristics that qualify such properties for inclusion in or eligibility for the National Register of Historic Places. The SRF's finding pursuant to Section 106 of the National Historic Preservation Act is: "*no historic properties affected.*"

Surface Waters: Fall Creek will be temporarily affected by the replacement of a 24-inch storm outfall with a larger 48-inch storm outfall. The project will not adversely affect outstanding state resource waters listed in 327 IAC 2-1.3-3(d), exceptional use streams listed in 327 IAC 2-1-11(b), Natural, Scenic and Recreational Rivers and Streams listed in 312 IAC 7-(2), or Salmonid Streams listed in (327 IAC 2-1.5-5(a)(3) or streams on the Outstanding River List for Indiana.

Wetlands (Figure 4): The BBP Well Field is located along the White River. The proposed new well construction and connecting water main will be constructed in the well field, adjacent to the White River. The proposed new outfall will discharge into the White River. Preliminary planning and coordination has been performed with the IDEM Industrial NPDES Permits Section regarding Preliminary Effluent Limitations for discharge of the membrane filtration reject water to the White River.

The construction of the proposed projects will not adversely affect waters of Limited Use or Outstanding State Resource Waters listed in 327 IAC 2-1.5-19, Limited or Exceptional Use Waters listed in 327 IAC 2-1-11, Natural, Scenic and Recreational Rivers and Streams listed in 312 IAC 7-2, Salmonid Waters listed in 327 IAC 2-1.5-5(a)(3), or the Natural Resource Commission's Outstanding Rivers List for Indiana per Information Bulletin #4 (16 IR 1677). All comments from the USFWS and IDNR will be incorporated into the construction plans.

Floodplain (Figure 4): The proposed new 1,000 gpm Water Supply Well project is located within the 100-year floodplain. The new well and other proposed improvements will be constructed in a manner to meet all floodplain construction requirements.

Groundwater: The proposed project will not affect groundwater. Dewatering is not expected. The project will not impact a sole source aquifer.

Plants and Animals: Minor tree removal may be needed for the installation of the proposed outfall.

Prime Farmland: The project will convert prime farmland.

Air Quality: Construction activities may generate some noise, fumes and dust, but should not significantly affect air quality.

Open Space and Recreational Opportunities: The project will neither create nor destroy open space or recreational opportunities.

Lake Michigan Coastal Program: The project will not affect the Lake Michigan Coastal Zone.

National Natural Landmarks: Construction and operation of the proposed project will not affect National Natural Landmarks.

B. Indirect Impacts

The town's Preliminary Engineering Report (PER) states: *The utility will ensure that future drinking water infrastructure projects connecting to SRF-funded facilities will not adversely affect wetlands, wooded areas, steep slopes, archaeological/historical/structural resources, or other sensitive environmental resources. The utility will require new drinking water infrastructure projects to be constructed within the guidelines of the U.S. Fish and Wildlife Service, IDNR, IDEM, and other environmental review authorities.*

C. Comments from Environmental Review Authorities

This document serves as the first notice to State Historic Preservation Officer, United States Fish and Wildlife, and Indiana Department of Natural Resources Environmental Unit.

In correspondence dated May 23, 2013 the Natural Resources Conservation Service stated:

In a letter dated July 13, 2015, the USDA NRCS determined that the project will cause a conversion of prime farmland. Erosion control mitigation measures will be implemented as required by necessary permits.

VIII. MITIGATION MEASURES

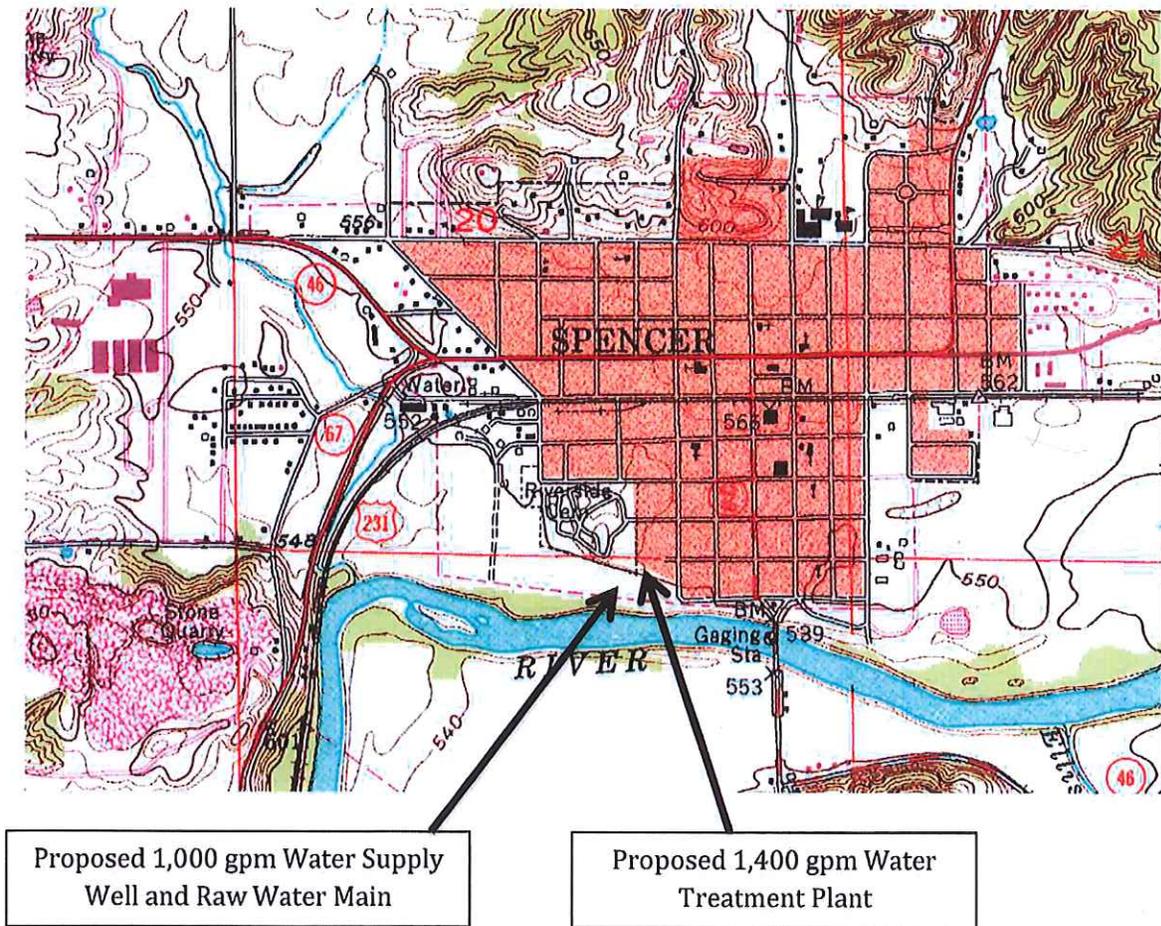
BBP's PER states:

Precautions shall be taken during construction to prevent erosion and sediment transport. Project plans shall include requirements for construction sequencing and both temporary and permanent erosion control measures. All disturbed areas shall be restored to their pre-construction condition. All vegetated land shall be permanently seeded and maintained as necessary until vegetation growth is established.

A Rule 5 permit may be required through IDEM for Construction/Stormwater Pollution Prevention. If required, this plan shall be approved by the Owen County Soil and Water Conservation District (SWCD) and recommended for approval by IDEM. The County SWCD will routinely inspect the construction area to insure that appropriate measures are taken to minimize erosion and sediment transport off-site. All mitigating measures recommended by reviewing authorities shall be implemented for this project.

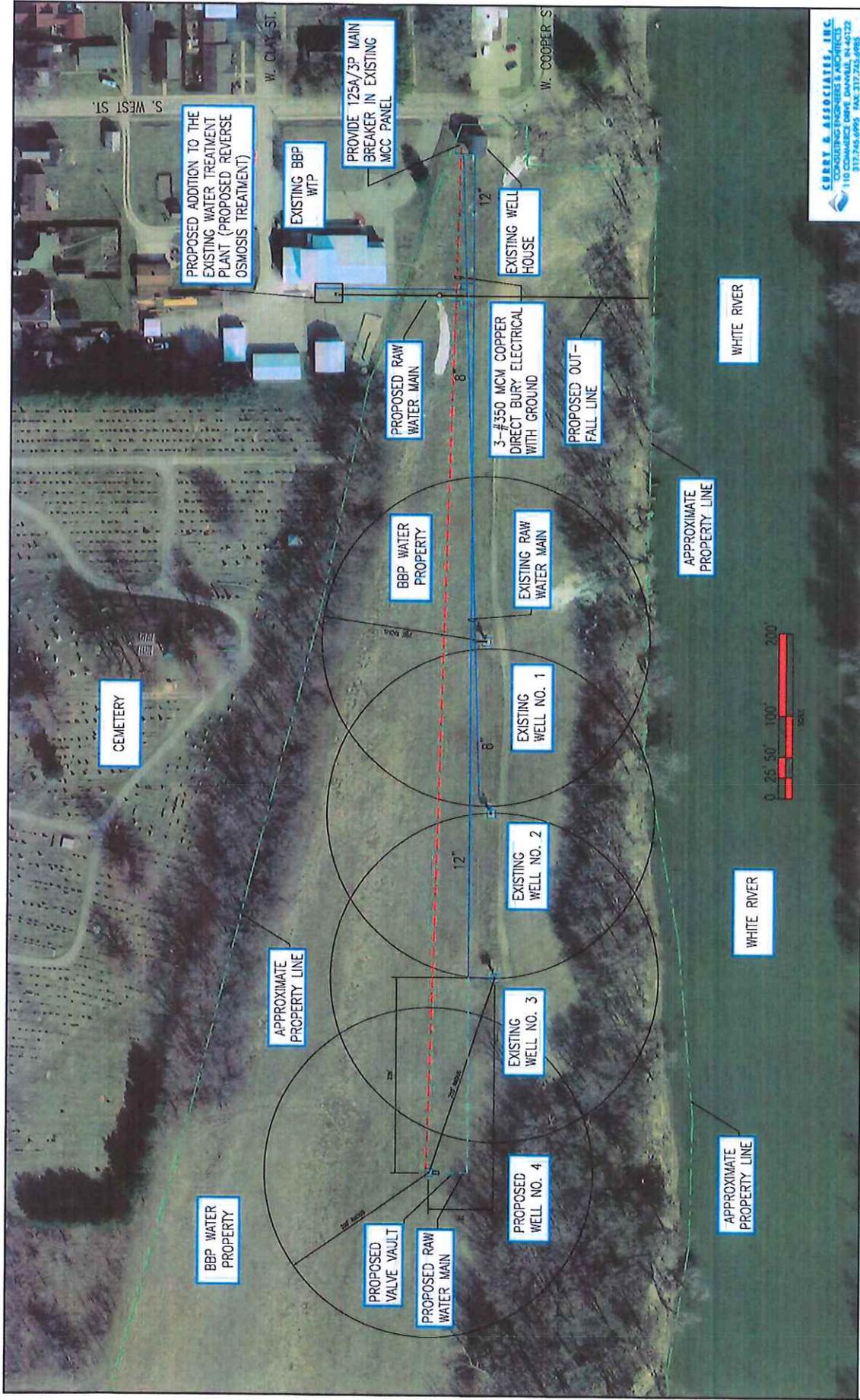
IX. PUBLIC PARTICIPATION

A properly noticed public hearing was held on June 15, 2015 at 7:00 pm at the BBP Water Office located at 256 West Clay Street. There were no questions during the hearing. No written comments were received in the 5-day period following the hearing.



**Figure 1. : Location of Proposed
1,000 gpm Water Supply Well and Raw Water Main
1,400 gpm Water Treatment Plant**

Source: USGS Topographic Map - Spencer Quadrangle



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 WELL NO. 4 SITE PLAN
 Prepared: 02/20/11



Robert E. Curry
 FIGURE 5.2.1

WELL NO. 4 SITE PLAN
Figure 2

NORTH

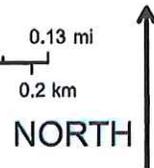
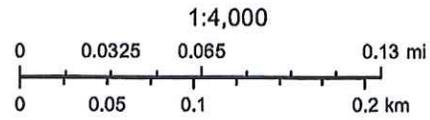
Figure 4 : BBP Proposed Improvements - Wetland and Floodplain Map



October 16, 2015

Floodplains - FIRM

- 0.2% Risk (aka 500-year Flood Zone)
- 1% Risk (aka 100-yr Flood Zone)
- Floodway
- Wetlands NWI (USFWS)
- Wetlands Project Metadata NWI (USFS)



U.S. Fish and Wildlife Service (USFWS), National Standards and Support Team, National Wetlands Inventory (NWI)
 Indiana Spatial Data Portal, UITS, ESRI
 Federal Emergency Management Agency (FEMA), Indiana Department of Natural Resources (IDNR)