ENVIRONMENTAL ASSESSMENT
AND
FINDING OF NO SIGNIFICANT IMPACT

Harrison County Regional Sewer District
Berkshire WWTP and Effluent Line
SRF PROJECT WW 21 30 31 01

DATE: October 13, 2021

TARGET PROJECT APPROVAL DATE: November 15, 2021

I. INTRODUCTION

The above entity has applied to the Clean Water State Revolving Fund (SRF) Loan Program for a loan to finance all or part of the Clean 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 in color at www.in.gov/ifa/srf.

II. PRELIMINARY FINDING OF NO SIGNIFICANT IMPACT (FNSI)

The SRF Clean 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 5-1.2-3, 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
Environmental Review Coordinator
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: Berkshire WWTP and Effluent Line
Harrison County Regional Sewer District
P.O. Box 266
Corydon, IN 47112

SRF Project Number: WW 21 30 31 01

Authorized Representative: Tom Tucker, President

II. PROJECT LOCATION

The proposed Wastewater Treatment Plant (WWTP) expansion project is in Harrison County,
Jackson township, Crandall 24 K USGS Quadrangle, township 2S, range 4E and section 21. See Figure 1.

III. PROJECT NEED AND PURPOSE

The existing treatment facility is undersized for current peak flows, resulting in sanitary sewer
overflows (SSOs) at the WWTP. Additionally, growth is expected to result in daily average flows
exceeding the current facility rating in the near future. The proposed project will construct a new
WWTP with expanded equalization capabilities, and a new effluent forcemain to eliminate SSOs and
treat projected 20-year flows.

IV. PROJECT DESCRIPTION

Due to the immediacy of the needed improvements, the project will be divided into two (2)
phases. The Berkshire WWTP Project includes:

- Installation of a new 6-inch effluent forcemain and appurtenances, approximately 2,800
  LF in length, parallel to the existing effluent forcemain (Phase I);
- Replacement of the existing steel package plant treatment system with new influent
  screening, Aeromod package plant in concrete tankage, and ultraviolet disinfection
  located on the existing facility site (Phase II);
- Conversion of existing treatment tankage to flow equalization (Phase II);
- Demolition of original package plant tankage (Phase II).
V. ESTIMATED PROJECT COSTS, AFFORDABILITY AND FUNDING

A. Estimated Project Costs

<table>
<thead>
<tr>
<th>Description</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>WWTP effluent force main</td>
<td>$186,700</td>
</tr>
<tr>
<td>Contingency</td>
<td>$9,300</td>
</tr>
<tr>
<td><strong>Construction Sub-Total</strong></td>
<td><strong>$196,000</strong></td>
</tr>
<tr>
<td>Non-Construction Costs</td>
<td>$4,000</td>
</tr>
<tr>
<td><strong>Total Estimated Project Cost</strong></td>
<td><strong>$2,000,000</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Description</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>WWTP Improvements</td>
<td>$1,800,000</td>
</tr>
<tr>
<td>Contingency</td>
<td>$90,000</td>
</tr>
<tr>
<td><strong>Construction Sub-Total</strong></td>
<td><strong>$1,890,000</strong></td>
</tr>
<tr>
<td>Non-Construction Costs</td>
<td>$241,000</td>
</tr>
<tr>
<td><strong>Total Estimated Project Cost</strong></td>
<td><strong>$2,331,000</strong></td>
</tr>
</tbody>
</table>

B. The total cost of this project is estimated to be approximately $2,331,000. The Harrison County Regional Sewer District will finance the project with a loan from the State Revolving Fund Loan Program for a term and annual fixed interest rate to be determined at loan closing. The actual loan amount will depend on the bids received. Monthly user rates and charges may need to be analyzed to determine if adjustments are required for loan repayment.

VI. DESCRIPTION OF EVALUATED ALTERNATIVES

Effluent Forcemain:
- There is no viable option related to the replacement of the existing WWTP effluent force main other than to replace it along its current alignment.

Plant Expansion:
- The “No Action” alternative is not practical, environmentally sound nor economical.
- Expand existing plant with additional package plant treatment units. This alternative would expand the existing facility, providing the needed additional treatment capacity. This alternative was rejected based on longevity and operability concerns.
- Replace existing plant with Aeromod treatment system. This is the selected alternative.

VII. ENVIRONMENTAL IMPACTS OF THE FEASIBLE ALTERNATIVES

A. Direct Impacts of Construction and Operation

**Disturbed/Undisturbed Land:** The new plant will be constructed next to the existing plant; the new effluent forcemain will be installed next to the existing effluent forcemain.

**Structural Resources:** 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:** The project will temporarily affect surface waters by construction of a new outfall.

**Wetlands:** The project will not impact wetlands.
**Floodplain:** All proposed improvement areas are located outside of the 100-year floodplain limits.

**Groundwater:** The project will not impact a drinking water supply or sole source aquifer.

**Plants and Animals:** The project will not impact plants and animals.

**Prime Farmland:** The project should not 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 Preliminary Engineering Report (PER) states: “The HCRSD, through the authority of its council, planning commission or other means, will ensure that future development, as well as future wastewater 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 HCRSD will require new development and 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**

In correspondence dated September 20, 2021, the Indiana Department of Natural Resources Division of Historic Preservation and Archaeology stated:

*Pursuant to Indiana Code 5-1.2-10, Section 106 of the National Historic Preservation Act (54 U.S.C. § 306108), and 36 C.F.R. Part 800, the Indiana State Historic Preservation Officer (“Indiana SHPO”) is conducting an analysis of the materials dated and received by the Indiana SHPO on August 23, 2021, for the above indicated project in Jackson Township, Harrison County, Indiana.*

*Based on our analysis, it has been determined that no historic properties will be altered, demolished, or removed by the proposed project.*

*If any prehistoric or historic archaeological artifacts or human remains are uncovered during construction, demolition, or earthmoving activities, state law (Indiana Code 14-21-1-27 and 29) requires that the discovery must be reported to the Department of Natural Resources within two (2) business days. In that event, please call (317) 232-1646. Be advised that adherence to Indiana Code 14-21-1-27 and 29 does not obviate the need to adhere to applicable federal statutes and regulations, including but not limited to 36 C.F.R. 800.*

In correspondence dated September 22, 2021, the Department of Natural Resources Environmental Unit stated:
The Indiana Department of Natural Resources has reviewed the above referenced project per your request. Our agency offers the following comments for your information and in accordance with the National Environmental Policy Act of 1969.

If our agency has regulatory jurisdiction over the project, the recommendations contained in this letter may become requirements of any permit issued. If we do not have permitting authority, all recommendations are voluntary.

Regulatory Assessment: Formal approval by the Department of Natural Resources under the regulatory programs administered by the Division of Water is not required for this project.

Natural Heritage Database: The Natural Heritage Program's data have been checked. To date, no plant or animal species listed as state or federally threatened, endangered, or rare have been reported to occur in the project vicinity.

Fish & Wildlife Comments: Avoid and minimize impacts to fish, wildlife, and botanical resources to the greatest extent possible, and compensate for impacts. The following are recommendations that address potential impacts identified in the proposed project area:

1) Utility Line Crossings: Parts of the replacement system/lines will be placed along roads with adjacent forested habitat. Place any new or replacement lines within, or as close to, the cleared road right-of-way or previously disturbed area as possible to minimize impacts to forested areas.

We recommend that all creek or stream crossings be done using a trenchless method. The length of the bore should include any forested riparian areas along the creek to minimize impacts to forested habitat. Install erosion control measures such as silt fencing or other appropriate devices around directional drilling pits in order to prevent drilling mud from leaving the immediate area of the pit or entering the stream.

If the open-trench method is necessary and the only feasible option at any of the planned stream crossings due to the site conditions, then the following measures should be implemented:

a. Any open-trench stream crossing should be timed to coincide with the low-water time of year (typically mid- to late-summer).

b. Restore disturbed streambanks using bioengineering bank stabilization methods and revegetate disturbed banks with native trees, shrubs and herbaceous plants. Stream bank slopes after project completion should be restored to stable-slope steepness (not steeper than 2:1).

c. The cleared width through any forested area should be the minimum needed to install the line and no more than 20 feet wide through the forested area to allow the canopy to close over the line.

d. Use graded stone or riprap to protect the section of trench below the normal water level from scour or erosion (any stone or riprap fill in the streambed must not be placed above the existing streambed elevation to avoid creating a fish passage obstruction).

2) Riparian Habitat: We recommend a mitigation plan be developed for any unavoidable habitat impacts that will occur. The mitigation site should be located preferably as close to
the impact site as possible and adjacent to existing forested riparian habitat. The DNR's Habitat Mitigation Guidelines (and plant lists) can be found online at:


Impacts to non-wetland forest of one (1) acre or more should be mitigated at a minimum 2:1 ratio. If less than one acre of non-wetland forest is removed in a rural setting, replacement should be at a 1:1 ratio based on area. Impacts to non-wetland forest under one (1) acre in an urban setting should be mitigated by planting five trees, at least 2 inches in diameter-at-breast height (dbh), for each tree which is removed that is 10” dbh or greater (5:1 mitigation based on the number of large trees) or by using the 1:1 replacement ratio based on area depending on the type of habitat impacted (individual canopy tree removal in an urban streetscape or park-like environment versus removal of habitat supporting a tree canopy, woody understory, and herbaceous layer). Impacts under 0.10 acre in an urban area may still involve the replacement of large diameter trees but typically do not require any additional mitigation or additional plantings beyond seeding and stabilizing disturbed areas. There are exceptions for high quality habitat sites however.

3) Karst Features: Construction activities that occur within the drainage area of active karst features could potentially cause significant impacts to sensitive karst ecosystems and biota. Sediment and erosion control methods appropriate for construction/excavation in karst areas need to be implemented to prevent sediment-contaminated runoff from entering active karst features. Construction should be avoided within 25’ of the topmost closed contour of any active karst features. Runoff from construction located outside of the drainage area of any karst feature and should be directed away from any karst features. Where construction within the closed contours of a karst feature is unavoidable, runoff should be filtered prior to discharge.

Backfilling a sinkhole should be done with materials that are compatible with the sensitive nature of karst systems and biota (not contributing suspended sediment or contaminants which native soil could do). Peat filters can be installed to remove pollutants from water entering the sinkhole which is a measure that should be evaluated for use in this instance.

The additional measures listed below should be implemented to avoid, minimize, or compensate for impacts to fish, wildlife, and botanical resources:

1. Revegetate all bare and disturbed areas with a mixture of native grasses, sedges, wildflowers, and also native hardwood trees and shrubs if any woody plants are disturbed during construction as soon as possible upon completion. Do not use any varieties of Tall Fescue or other non-native plants, including prohibited invasive species (see 312 IAC 18-3-25).

2. Minimize and contain within the project limits inchannel disturbance and the clearing of trees and brush.

3. Do not work in the waterway from April 1 through June 30 without the prior written approval of the Division of Fish and Wildlife.

4. Do not cut any trees suitable for Indiana bat or Northern Long-eared bat roosting (greater than 5 inches dbh, living or dead, with loose hanging bark, or with cracks, crevices, or cavities) from April 1 through September 30.

5. Use minimum average 6 inch graded riprap stone extended below the normal water level to provide habitat for aquatic organisms in the voids.
6. Appropriately designed measures for controlling erosion and sediment must be implemented to prevent sediment from entering the stream or leaving the construction site; maintain these measures until construction is complete and all disturbed areas are stabilized.

7. Seed and protect all disturbed streambanks and slopes not protected by other methods that are 3:1 or steeper with erosion control blankets that are heavy-duty, biodegradable, and net free or that use loose-woven / Leno-woven netting to minimize the entrapment and snaring of small-bodied wildlife such as snakes and turtles (follow manufacturer's recommendations for selection and installation); seed and apply mulch on all other disturbed areas.

As of this publication there was not a response from the United States Fish and Wildlife Service.

This is the first correspondence to the Natural Resources Conservation Service regarding farmland conversion. It is not anticipated that the project will cause a conversion of prime farmland.

VIII. MITIGATION MEASURES

Harrison County’s Preliminary Engineering Report states:

The project will be designed and implemented to minimize soil erosion and any mitigation measures cited in comment letters from governing agencies will be implemented. Erosion control measures including seeding, sodding, inlet protection, silt fence, stone construction entrance and dust control may be implemented in accordance with current soil erosion control practices at the time of construction to reduce/eliminate erosion of the soils.

To mitigate construction noises and the subsequent resident complaints, construction will only be allowed from 7:00 am to 5:00 pm, Monday through Friday. Appropriate erosion control measures will be implemented during construction to abate dust and airborne dirt particles. The contractor will be required to maintain all equipment in good working order to mitigate noise and air pollution caused by faulty operating equipment.

IX. PUBLIC PARTICIPATION

A properly noticed public hearing was held on June 18, 2021, at 8:30 am at the Harrison County Government Center, 245 Atwood St., Corydon, IN 47112 to discuss the PER. No written comments were received during the 5-day comment period following the hearing.
Figure 1 – Proposed Location of the Berkshire WWTP