# State Revolving Fund Loan Programs

Clean Water, Drinking Water, Nonpoint Source

## ENVIRONMENTAL ASSESSMENT
## AND
## FINDING OF NO SIGNIFICANT IMPACT

# LaGrange County Regional Utility District

**Region C Wastewater Collection System – Phase II**

**SRF PROJECT WW 21 39 44 05**

**DATE: January 13, 2022**

**TARGET PROJECT APPROVAL DATE: February 14, 2022**

## 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 Wastewater 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 http://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: | **Region C Wastewater Collection System – Phase II**<br>LaGrange County Regional Utility District<br>116 East Wayne Street<br>LaGrange, IN 46761 |
| SRF Project Number: | WW 21 39 44 05 |
| Authorized Representative: | Adam Sams |

## II. PROJECT LOCATION

The expansion at the existing Region C WWTP is located in LaGrange County, Lima township on the LaGrange 24K Quad in 38N, 9E section 13. The pressure force main, sewer system and lift station is located in LaGrange County in Lima and Van Buren townships on the LaGrange 24K USGS Quadrangle in township 38N, range 9E and sections 23, 24, 25, 26, 27, 28 and 35. See **Figure 1**.

## III. PROJECT NEED AND PURPOSE

The LaGrange County Regional Utility District (LCRUD) will serve the residents around unincorporated areas at Twin Lakes, Still Lake, West Pigeon Lake and areas along SR 120 and CR 600N. The existing Region C wastewater treatment plant (WWTP) owned and operated by the LCRUD needs to be expanded in order to have sufficient capacity for the proposed flows.

Residents of the proposed service area have experienced problems with individual on-site septic systems as a means of wastewater treatment and disposal. Many of the septic systems are old and failing which results in the potential for serious health issues.

The residents within the proposed service areas rely on private wells for drinking water. Most of the lots around the service area are small and do not allow for proper separation between the septic system and the groundwater wells. If the current septic systems are not replaced the water quality will continue to get worse, resulting in potential of private water wells becoming contaminated.

## IV. PROJECT DESCRIPTION

The proposed service area will be regionalized with the existing Region C WWTP. A new pressure sewer system serving the project area will flow into a pump station located on the southeast side of North Twin Lake. The pump station will then convey the wastewater through a force main to a connection point with the existing force main along SR9 just north of Howe. The wastewater will then flow into the existing WWTP at SR9 & CR 700N.

The WWTP expansion will consist of an upgraded extended-aeration activated sludge WWTP and associated components, such as mechanical screening, sludge processing, UV disinfection, chemical dosing, and standby generator.

The majority of the collection system is planned to be constructed utilizing horizontal drilling. There may be few small segments that may be constructed via open excavation.

## V. ESTIMATED PROJECT COSTS, AFFORDABILITY AND FUNDING

A. Selected Plan Estimated Cost Summary

| | |
|---|---|
| **Construction Costs** | |
| Pressure Sewer System | $ 7,670,000 |
| Existing Region C WWTP Expansion | 1,927,000 |
| **Construction Sub-Total** | **$ 9,597,000** |
| **Non-Construction Costs** | **$ 2,210,000** |
| **Project Total Estimated Project Cost** | **$11,807,000** |

B. The total cost of these projects is estimated to be approximately $11,807,000. LaGrange County Regional Utility 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

The **"No Action"** alternative is not practical, environmentally sound nor economical. The District and LaGrange County have studied Pigeon Lake, Twin Lakes & Still Lake service areas over the years multiple times and until this point in time, there has not been a cost effective and affordable solution that would replace the existing septic systems. However, with the need for wastewater service becoming an acute issue, this alternate appears to be unfeasible.

**Gravity Collection System -** The gravity system consists of sewer lines installed at a specific grade based on the size of the pipe(s) to prevent deposition of solids at low velocities. The minimum gravity system line is 8" and typically installed at a depth of 5 to 30 feet depending on site topography. Additionally, manholes, typically spaced 350 to 400 feet, are necessary when there is a change in slope and/or direction, in addition to serving as an access point for maintenance. In general, a gravity system offers limited flexibility in construction as it requires slope and alignment be maintained. Change in either typically leads to additional manholes, etc.

The gravity sewer will also require pump stations and force mains to transport waste from low points of the gravity sewer to the next downstream sewer. The environmental impacts and restoration associated with construction of a gravity system is typically higher due to open-cut excavation method utilized for installation of gravity system due to added paving and restoration costs.

**Pressure Collection System -** The pressure system consists of prefabricated grinder pump station units installed on each or every other property. These units are equipped with an electrically powered grinder pump that receives gravity flow from the building sewer, grinds the wastewater with special rotating cutter blades, and forces the liquid slurry under pressure through a small diameter pressure main network that typically ranges from 1.25" to 6". A pressure system is a more cost-effective means of wastewater collection from the areas not easily accessible by other collection system alternatives.

A pressure system is technically feasible and reliable and can be implemented. Since the pressure system can be installed using directional drilling method, the environmental impacts and restoration associated with construction of this system are minimized as it results in reduced street paving and restoration costs. *This is the selected collection system alternative.*

**Regionalization with Region C Wastewater System -** At the intersection of SR9 and 700 N, is the existing Region C WWTP. The District currently owns and operates the facility which is designed to process 0.200 MGD. The facility is directly adjacent to the proposed service area. For this option, the wastewater collected from the Twin Lakes service area would be conveyed through pressure sewer for the Still Lake area and a pump station and force main for the remaining areas to the points of connection to the District's existing Region C Phase 1 gravity interceptor sewer network, where flow will then continue to the WWTP Lift Station. In order to treat flow from the Phase 2 areas, the WWTP will need to be expanded. *This is the selected treatment alternative.*

**Wastewater Treatment – New WWTP –** A new WWTP could be constructed to treat the flow from the Phase 2 areas, and an alternative was developed. A new WWTP would cost more to construct than using the existing WWTP and would require more operation and maintenance costs.

## VII. Environmental Impacts of the Feasible Alternatives

### A. Direct Impacts of Construction and Operation

Pigeon Lake/Northwest Side - A short segment of pressure sewer will cross a river and through a portion of undeveloped land and adjacent to farmland to reach the service area of northern South Twin Lake.

The pressure sewer will be installed using the directional drill method of installation, which will minimize land disturbance activities. It is anticipated that there will be excavations at each crossover connection point along the pressure sewer, service lateral connection point, each manhole structure (junction points, end of lines and air release valve locations).

**Disturbed/Undisturbed Land**: Projects of this nature and scale involve land-disturbing activities. The project will be designed to keep as much of the pipeline as possible within the previously disturbed roadway rights-of-way. Where possible, the project improvements will be located within the pavement limits, or within the right of way.

**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 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 2):** The proposed pressure sewer crosses through existing wetlands along the east side of Pigeon Lake and just north of SR120. It is anticipated that the sewer corridor width will be less than 30 feet in width. Total wetland disturbance is anticipated to be less than 0.1 acre. The disturbed wetland area will be restored with native plantings appropriate for the wetland area.

For the remainder of the project, construction activity in or near wetlands will be avoided. Some wetlands do exist adjacent to the proposed force main. The use of horizontal directional drill method of installation will greatly reduce the disturbed areas in general and allow the force main to be installed adjacent to wetlands without disturbing the wetlands. During the early design phase of the project, the Engineer will coordinate with the appropriate agencies to identify areas

of concern. Once identified specific area near or adjacent to wetlands will be identified on the design drawings as no work or no staging zones. See Figure Set 4 for the wetland maps.

**Floodplain (Figure 3):** The project will not include dredge or fill in the floodway without a permit from IDNR Division of Water. No change in grade will occur within the floodplain.

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

**Plants and Animals**: The majority of the project elements will be installed within the existing pavement. The project is expected to have minimal to no impact to plants and animals during construction and no impact afterwards.

**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, as the majority of the project will be constructed via directional drilling.

**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 District's Preliminary Engineering Report (PER) states: *The District, through the authority of its Board, local planning commission, health department or other means, will ensure that future development, as well as future collection system and/or treatment works projects connecting to the State Revolving Funds (SRF) funded facilities will not adversely impact archaeological/historical/structural resources, wetlands, wooded areas, or other sensitive environmental resources. The District will, to the extent possible under its limited authority, strive to require that new development and treatment works projects 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 is the first correspondence with the United States Fish and Wildlife Service, the Department of Natural Resources Environmental Unit, and the Natural Resources Conservation Service regarding this project.

In correspondence dated November 15, 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 October 18, 2021, for the above indicated project in Howe, LaGrange Township, Marion County, Indiana.*

*In regard to buildings and structures, we have identified the following properties within the probable area of potential effects, and we believe that they may meet the criteria of eligibility for inclusion in the National Register of Historic Places:*

*Howe Military School Historic District, Site # 087-336-06001-06032*

*John and Elizabeth Keefus House, 5980 N. CR 210 W, Site # 087-336-05016*

*Steubens Cole House, 1815 W CR 650 N, Site # 087-336-05022*

*House and Tourist Cabins, 5319 N CR 290 W, Site # 087-336-05063*

*Additionally, we have identified the following properties listed in the National Register of Historic Places within the probable area of potential effects:*

*Saint James Memorial Chapel, NR-1595, listed September 16, 2001*

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

*In terms of archaeological resources, we concur with the report that site 12L261 does not appear eligible for inclusion in the National Register of Historic Places. It appears that no significant, intact archaeological deposits of site 12L211 appear to be within the proposed project area. Therefore, no further archaeological investigations appear necessary.*

*It is our understanding that Oaklawn Cemetery is adjacent to the proposed project area but that the proposed project activities should not impact any known graves. Provisions of relevant state statutes regarding cemeteries (including IC 23-14 and IC 14-21-1) must be adhered to.*

*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.*

## VIII. MITIGATION MEASURES

LaGrange County Regional Utility District's PER states:

*The project will be subject to the conditions set forth in erosion control measures requirements of the project plans and specifications. The contractor will be required to comply with the terms and conditions of the permits.*

*The contractor will be required to utilize trenchless pipe installation techniques for most of the project with limited ability and/or locations to utilize conventional open-excavation methods. This will significantly reduce the number of land-disturbing activities.*

## IX. PUBLIC PARTICIPATION

A properly noticed public hearing was held on March 10, 2021 at 6:00 pm at Hanes Lodge and via a Zoom meeting to discuss the PER. No written comments were received during the 5-day comment period following the hearing.

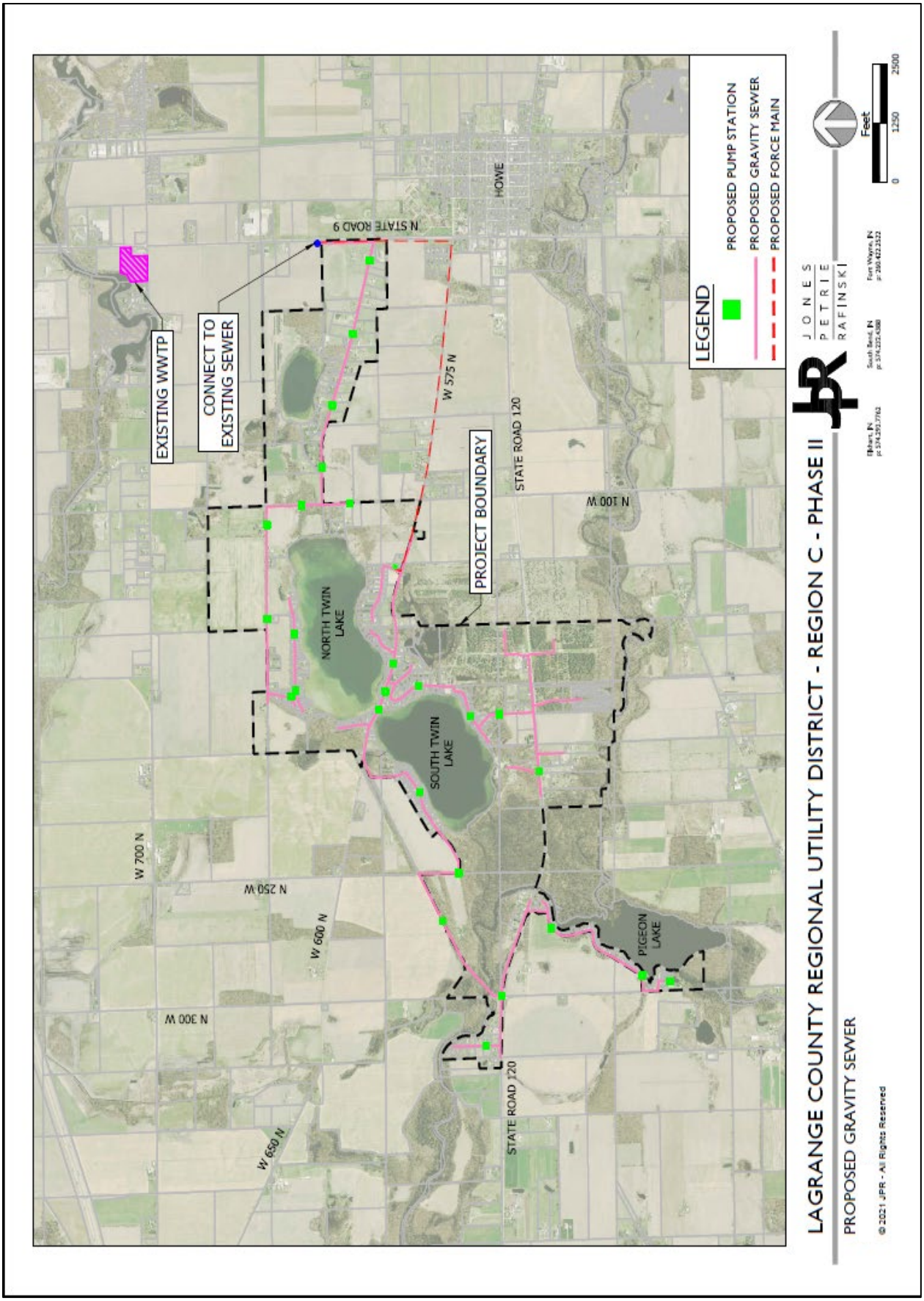


**Figure 1** – Proposed project

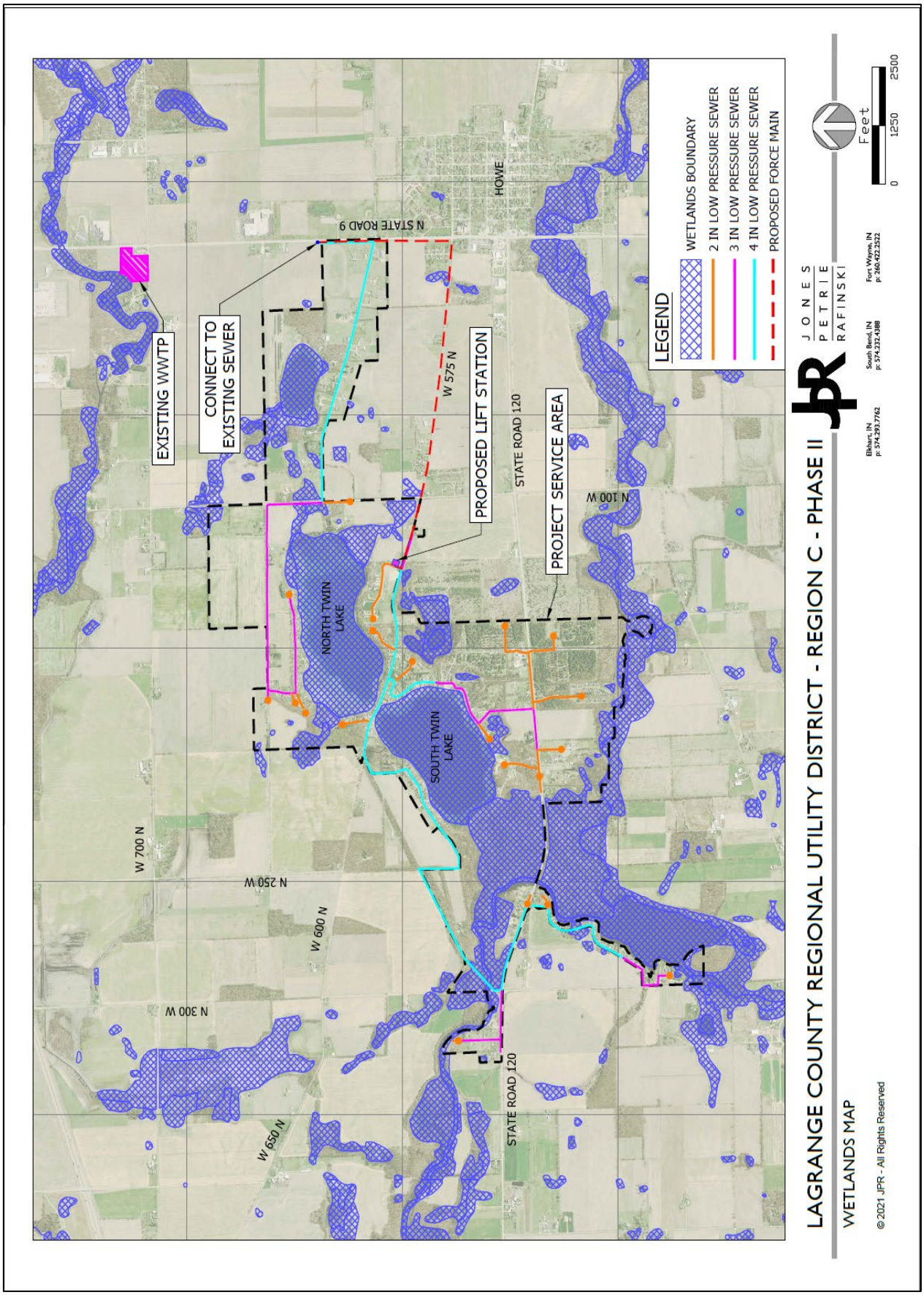


**Figure 2** - Wetlands map

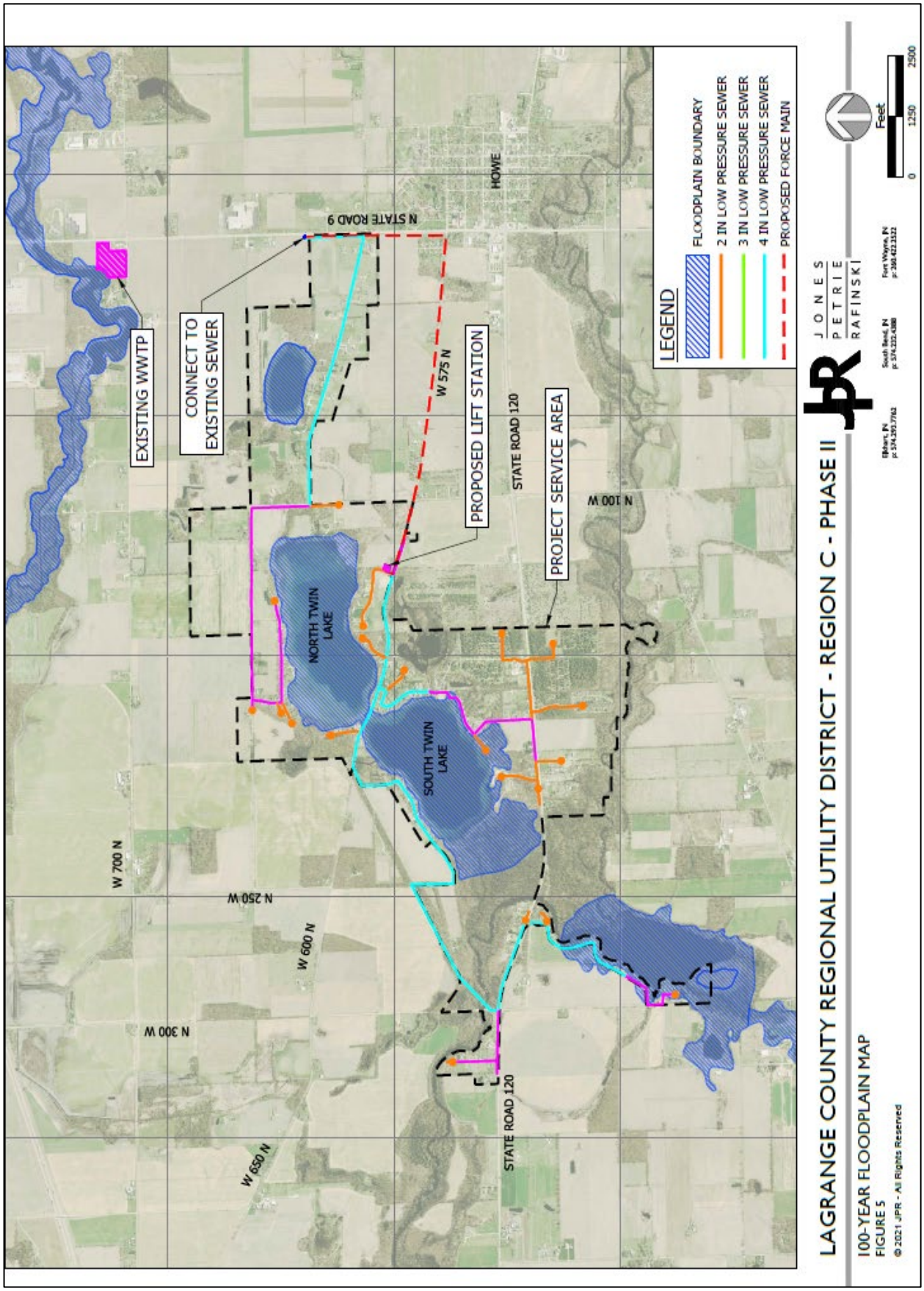


**Figure 3** - Floodplain map