REPORT

R.M. SCHAHFER GENERATING STATION
CCR LANDFILL
RUN-ON AND RUN-OFF CONTROL SYSTEM PLAN

Wheatfield, Indiana Pursuant to 40 CFR 257.81

Submitted to:

Northern Indiana Public Service Company
2755 Raystone Drive
Valparaiso, IN 46383

Submitted by:

WSP USA Inc.

5957 McKee Road, Suite 7, Madison, Wisconsin USA 53719

31406779.6909

September 25, 2026

Certification

Professional Engineer Certification Statement [40 CFR 257.81(c)(5)]

I hereby certify that, having reviewed the attached documentation and being familiar with the provisions of Title 40 of the Code of Federal Regulations Section 257.81 (40 CFR Part 257.81), I attest that this Run-On and Run-Off Control System Plan is accurate and has been prepared in accordance with good engineering practices, including the consideration of applicable industry standards, and with the requirements of 40 CFR Part 257.81.

WSP USA Inc.

Signature

September 25, 2026

Date of Report Certification

John Puls, P.E.

Name

PE12000338

Professional Engineer License Number

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APPENDIX A

1.0 INTRODUCTION

1.1 Background

The Northern Indiana Public Service Company (NIPSCO) Rollin M. Schahfer Generating Station (RMSGS, Site or Facility) is a 847 megawatt (MW) capacity coal-fired, steam turbine electric generating plant in Wheatfield, Jasper County, Indiana (see Figure 1). RMSGS began operations in 1976 and occupies an area of approximately four square miles centrally located at 2723 E 1500 N Road in Wheatfield, Jasper County, Indiana. The station includes an electric substation, coal storage and handling operations, bottom ash/boiler slag ponds, a dry ash landfill, cooling towers, cooling water intake and discharge structures, infrastructure and roadways, train tracks and other support facilities.

1.1.1 Landfill

NIPSCO was given approval for a minor modification to their operating permit from the Indiana Department of Environmental Management (IDEM) to operate a Type I, Restricted Waste Landfill (RWS I) at RMSGS on May 27, 2020 (Operating Permit 37-01). The active portions of the CCR Landfill take dry fly ash and other approved coal combustion wastes from the RMSGS Units, Michigan City Generating Station Units, and from CCR closure projects. The landfill is located east of the generating station and has a total permitted area (closed, active, and future) of waste placement of approximately 170 acres. As shown on Figures 1 and 2, the current landfill footprint is divided into nine phases. Phases I, II, III, and IV were closed prior to the effective date of the CCR Rule. Phases V and VI are lined and have been closed. Phase VII construction was completed in 2018 and is not actively receiving CCR and currently has a temporary cover in place. Phase VIII construction was completed in 2023, approved for waste placement by IDEM and is actively receiving CCR. No date has been set for the construction of Phase IX as of this time. Phases V, VI, VII, and VIII have a soil/geosynthetics floor liner with a 3 horizontal to 1 vertical (3H:1V) perimeter containment berm with a crest elevation of approximately 667 feet above mean sea level (amsl). The 3H:1V perimeter containment berm is currently approximately 13,000 feet long, measured along the crest. The maximum height of the closed portion of the landfill is approximately 726 feet amsl.

NIPSCO has determined that Phases V, VI, VII, and VIII of the landfill are subject to the CCR Rule requirements as being active as of the effective date of the CCR Rule. As such, this analysis pertains to Phases V, VI, VII, and VIII. Phase V is approximately 18 acres, is located in the southwestern corner of the landfill footprint, and was closed in 2017. Phase VI is approximately 15 acres, is located directly to the north of Phase V, and was closed in 2021. Phase VII is approximately 14 acres and is located north of Phase VI. Phase VIII is approximately 14 acres and is located north of Phase VII. As of the timing of this report, waste placement activities were only occurring within Phase VIII and Phase VII had intermediate cover placed within its entire cell boundary.

Leachate Collection System

The landfill collects leachate within each of the lined landfill phases through a layer of granular material in combination with a series of perforated pipes placed beneath the ash and on top of the composite base liner system. The leachate is conveyed outside the landfill footprint through a network of solid piping where it is pumped through a series of manhole lift stations to the onsite leachate collection pond. Leachate remains in the pond until the level in the pond becomes too high to accept additional flow and it is pumped into water trucks and then sprayed on the active landfill area for dust control. Based on discussions with NIPSCO personnel and review of the site operation plan, stormwater that comes in contact with landfilled ash within the active phase is managed and treated as leachate.

Surface Water

The overall surface water run-off from the non-active areas of the landfill is collected in onsite drainage ditches located around the perimeter of the landfill. These ditches convey drainage to an onsite stormwater pond (Landfill Run-Off pond) located northwest of the landfill footprint. The Landfill Run-Off pond discharges through Outfall 003S (East Stormwater Outfall), regulated under the site's current NPDES permit (No. IN0053201, dated October 1, 2020). Outfall 003S discharges into Stalbaum Ditch (when the valve is opened) and ultimately to the Kankakee River.

The landfill is protected from run-on from the surrounding areas by the perimeter stormwater drainage ditches and a compacted fill perimeter dike that provides grade separation between the surrounding grade and the landfill floor.

1.2 Purpose

The purpose of the Run-On and Run-Off Control System Plan (Plan) is to provide a basis for the certification required by 40 CFR 257.81 Run-On and Run-Off Controls for Landfills. 40 CFR 257.81(a) requires the owner or operator of an existing or new CCR landfill or any lateral expansion of a CCR landfill to design, construct, operate, and maintain the following:

- A run-on control system to prevent flow onto the active portion of the CCR unit during the peak discharge from a 24-hour, 25-year storm.
- A run-off control system from the active portion of the CCR unit to collect and control at least the water volume resulting from a 24-hour, 25-year storm.
- Handle run-off from the active portion of the CCR unit in accordance with the surface water requirements under 40 CFR 257.3-3.

2.0 RUN-ON AND RUNOFF CONTROL SYSTEM

To meet the requirements of 40 CFR 257.81(a), the run-on and run-off control system must prevent flow onto the active portion of the CCR unit during the peak discharge from a 24-hour 25-year storm and collect and control at least the water volume resulting from a 24-hour 25-year storm. The 24-hour 25-year storm depth is 5.22 inches as provided in Appendix A – Rainfall Data. Run-off from the active portion of the CCR unit must be handled in accordance with the surface water requirements under 40 CFR 257.3-3.

The Run-on and Run-off Control System Plan was developed by assessing the 2017 Minor Permit Modification Drawings (Weaver Consultants Group, 2017), the 2018 Phase VII Construction Drawings (Weaver Consultants Group, 2018), and the 2023 Phase VIII Construction Drawings (Weaver Consultants Group, 2023) for a probable grading scenario that could be modeled with the 24-hour 25-year storm event to document certification pursuant to 40 CFR 257.81. As discussed above, at the writing of this Plan, Phase VII has intermediate cover in place throughout the cell boundary, and only Phase VIII is currently active. Therefore, this plan discusses the run-on control system for Phase VIII.

2.1 Run-on Design Verification

Phase VIII is surrounded by a perimeter dike that provides protection from run-on into the active area. The permanent perimeter dike is 10 feet wide at the top with 3 horizontal to 1 vertical (3H:1V) exterior sideslopes and 4H:1V interior sideslopes. The lowest crest elevation for this permanent perimeter berm is approximately 670-ft

msl. The perimeter dike is constructed from compacted fill and provides approximately 3 to 5 feet of grade separation between the surrounding grade and the top of the dike around the northern and western limits of Phase VIII. In addition, on the outside toe of the northern and western perimeter dike, there is a 10-foot wide, trapezoidal –shaped, grass-lined perimeter ditch to collect and divert potential run-on away from the active area. At its current configuration, surface water run-on from the adjacent closed phases and phases with temporary cover is controlled, separated, and diverted from the active Phase VIII. The eastern and northern limit of Phase VIII is piggy-backed over the existing Phase III and IV sideslopes and are therefore treated as contact stormwater and managed as active area leachate.

Run-on to the active portions of the Landfill is controlled using two methods. The first method, as described above, is a perimeter berm around the landfill that creates a barrier that does not allow stormwater to enter the active areas. A drainage channel (approximately 6.75 ft bottom width with 2H:1V slopes and 12.0 feet deep) exists on the outboard slope of the permanent perimeter berm that collects stormwater from the adjacent areas and directs it towards the site's existing stormwater basin northwest of the landfill footprint. The invert elevation of the western ditch is approximately 657.2 ft msl.

The second method is positive grading away from the active areas so that run-off from closed areas and areas with intermediate cover (non-contact water) is not diverted into the leachate collection system. Phase VII has intermediate cover in place, and run-off from Phase VII is diverted around Phase VIII with temporary berms to the perimeter channels

2.1.1 Run-on Calculations

The current 24-hour, 25-year storm run-on volume calculation assumes that the contributing run-on areas for Phase VIII include the closed areas of Phase II, III, IV, V, and VI, the temporary cover area of Phase VIII, and the areas that are unconstructed to the north. Run-on from Phases I and IV was not included in this volume assessment as the stormwater from these areas is collected and conveyed to the stormwater retention pond and therefore does not contribute to the active area run-on volume.

Based on point precipitation frequencies compiled by the National Oceanic and Atmospheric Administration (NOAA), the 24-hour, 25-year storm event in Wheatfield, Indiana is anticipated to generate 5.22 inches of precipitation (see Appendix A). The analysis conservatively assumes that all of the 5.22 inches of precipitation from the design storm is uniformly applied across the site and no infiltration or evapotranspiration occurs (i.e., all precipitation/stormwater that falls on Phases II, III, IV, V, VI, VII, and the watershed area that are unconstructed to the north were assumed to contribute to the run-on volume). The analysis conservatively evaluated if the run-on volume could be maintained within the stormwater ditches around the perimeter of Phase VIII.

The results of the analysis indicated that the run-on stormwater volume would fill the western ditch to an elevation of approximately 662.38 feet (5.18-feet depth of water) and the northern channel north of Phase VIII to an elevation of approximately 658.64 feet (0.64-feet depth of water). This elevation corresponds to leaving approximately 7.6 feet of freeboard for the western side of Phase VIII and 11.36 feet of freeboard for the northern side of Phase VIII. **Based on this analysis, the run-on from the 24-hour, 25-year storm will not flow into the active areas and thus satisfies the requirements of 40 CFR 257.81.**

Table 1: 25-Year, 24-Hour Storm Run-on Summary

Channel	24-hr, 25-yr In-Flow (cfs)	Highest 24-hr, 25-yr Flow Elevation (ft)	Lowest Perimeter Berm Elevation (ft)	Minimum 24-hr, 25-yr Freeboard (ft)	Meets 40 CFR 257.81 Requirements?
West Channel	159.32	662.38	670.0	7.62	Yes
North Channel	7.08	658.64	670.0	11.36	Yes

Note: Elevations provided are in feet above mean sea level. Run-on calculations were performed in HydroCAD version 10.20.

2.2 Run-Off Engineering Design Verification

To satisfy the requirements of 40 CFR 257.81(a)(2), the run-off control system must control flow from the active portion of the CCR unit resulting from a 24-hour, 25-year storm. In addition, the run-off from the active portion of the CCR unit must be managed in accordance with the surface water requirements under 40 CFR 257.3-3. As discussed previously, at the writing of this Plan, only landfill Phase VIII is currently active. Therefore, this plan discusses the run-off control system for Phase VIII.

Based on discussions with NIPSCO personnel and review of the active Operation Plans, we understand that precipitation that falls in the active portions of the facility and comes in contact with landfilled material, will percolate into the leachate collection system and be managed as leachate. Therefore, the active area run-off control system is actually the Phase VIII leachate collection system and the run-off is operationally managed as leachate, not stormwater (surface water) run-off.

The floor of Phase VIII was constructed with a series of peaks and valleys running north to south. Perforated leachate collection pipes are located in the valleys and drain to the north or south of the phase. A layer of granular leachate collection soil is placed over the floor of the phase. A perforated leachate collection system header runs along the northern or southern edge of the phase. The collection header drains to the west, and discharges through a solid header pipe, beneath the perimeter dike and ultimately to a leachate lift station manhole. From each leachate manhole lift station, leachate is pumped to a leachate loadout structure and ultimately to the onsite leachate collection pond. Leachate is removed from the pond and applied to the active landfill face as necessary to ensure sufficient storage capacity is maintained in the pond for leachate collection. The Operation Plan indicated that daily leachate application on the landfill is required until the liquid level in the leachate collection pond is within 12 inches of the pond bottom.

2.2.1 Run-off Calculations

To verify that the leachate collection system is sufficiently designed to control run-off during a 24 hour, 25 year storm event over the active area, a conservative analysis of the leachate collection and control system was performed as described below.

Based on point precipitation frequencies compiled by the National Oceanic and Atmospheric Administration (NOAA), the 24-hour, 25-year storm event in Wheatfield, Indiana is anticipated to generate 5.22 inches of precipitation. The runoff volume from the 24-hour, 25-year design storm event was calculated using HydroCAD version 10.20 software. The purpose of the calculation was to evaluate if the runoff from the 24-hr, 25-year storm event for Phase VIII could be contained entirely within the granular leachate collection soil layers and leachate

collection piping associated with each area. We recognize that there is additional storage capacity for the leachate collection system within the leachate collection pond, but this analysis conservatively omits this additional volume in the pond. The analysis for the active area for Phase VIII is summarized below.

Run-off from active portions of the Landfill is controlled within the active landfill cells. Precipitation that comes in contact with CCR infiltrates within the unit and is collected in leachate pipes, where it is then pumped from a sump to the leachate storage pond. The run-off control system was developed with one active area watershed of approximately 24.5 acres and utilizes the currently open portion of Phase VIII for storage of contact water.

Phase VIII was modeled with topography that was surveyed by DLZ Industrial, LLC in 2017, 2022 and 2023. The volume of runoff from the 24-hour 25-year storm event was modeled in HydroCAD version 10.20, and the runoff in Phase VIII is contained by the landfill perimeter berms and thus satisfies the requirements of 40 CFR 257.81.

The runoff calculations are summarized in Table 2.

Table 2: 24-hour 25-year Storm Run-off Summary

Dry Ash Landfill Area	Total Effective (6-inch depth max.) Storage Capacity of Leachate Collection Layer (cubic feet)	Volume of Run-off (cubic feet)	Minimum Berm Elevation (feet)	Peak Water Elevation (feet)	Meets 40 CFR 257.81 Requirements?
Phase VIII	300,181	265,716 (6.1 acre-feet)	668.9	667.9	Yes

Notes: Elevations provided are in feet above mean sea level. Run-off calculations were performed in HydroCAD version 10.20.

3.0 PLAN REVISION AND RECORDKEEPING

Per 40 CFR 257.81(c)(2): “The owner or operator of the CCR unit may amend the written run-on and run-off control system plan at any time provided the revised plan is placed in the facility's operating record as required by §257.105(g)(3). The owner or operator must amend the written run-on and run-off control system plan whenever there is a change in conditions that would substantially affect the written plan in effect.”

Per 40 CFR 257.81(c)(4); “The owner or operator must prepare periodic run-on and run-off control system plans required by paragraph (c)(1) of this section every five years. The date of completing the initial plan is the basis for establishing the deadline to complete the first subsequent plan. The owner or operator may complete any required plan prior to the required deadline provided the owner or operator places the completed plan into the facility's operating record within a reasonable amount of time. In all cases, the deadline for completing a subsequent plan is based on the date of completing the previous plan. For purposes of this paragraph (c)(4), the owner or operator has completed a periodic run-on and run-off control system plan when the plan has been placed in the facility's operating record as required by §257.105(g)(3).”

Per 40 CFR 257.812(d); “The owner or operator of the CCR unit must comply with the recordkeeping requirements specified in §257.105(g), the notification requirements specified in §257.106(g), and the internet requirements specified in §257.107(g).”

4.0 REFERENCES

DLZ Industrial LLC, “Existing Topographic Survey Drawing,” July 31 2025.

Sargent & Lundy, Operation and Management Plan for Flue Gas Desulfurization (FGD) Product Disposal, Rollin M. Schahfer Generating Station, March 1984.

Bonnin et al., “Point Precipitation Frequency Estimates,” NOAA Atlas 14, Volume 2, Version 3, National Oceanic and Atmospheric Administration, Silver Spring, Maryland, 2006.

Burns & McDonnell Engineering Company, Inc., Phase III – FGD/Fly Ash Landfill Construction Drawings, R.M. Schahfer Generating Station, April 1996.

Burns & McDonnell Engineering Company, Inc., Rule 5 Construction Plan and Stormwater Pollution Preventions Plan (SWP3), R.M. Schahfer Generating Station, Phase V Fly Ash Landfill Project, January 2011.

Burns & McDonnell Engineering Company, Inc., Phase V of the Fly Ash Landfill Construction Drawings – Conforming to Construction Records, R.M. Schahfer Generating Station, January 17, 2012.

Burns & McDonnell Engineering Company, Inc., Operation Plan for Phase V of the Fly Ash Landfill, R.M. Schahfer Generating Station, January 2012.

Sargent & Lundy, Phase VI Flay Ash Landfill Construction Contract Drawings – For Client Review, R.M. Schahfer Generating Station, January 29, 2014.

Sargent & Lundy, Operation Plan for Phase VI, R.M. Schahfer Generating Station Fly Ash Landfill, Revision 1, November 21, 2014.

IDEM (Indiana Department of Environmental Management), Permit Renewal and Minor Modification Approval, R.M. Schahfer Generating Station RWS I FP 37-01, October 20, 2014.

USEPA (US Environmental Protection Agency). 2015. Disposal of Coal Combustion Residuals from Electric Utilities; Final Rule. 40 CFR Part 257. Effective Date October 19, 2015.

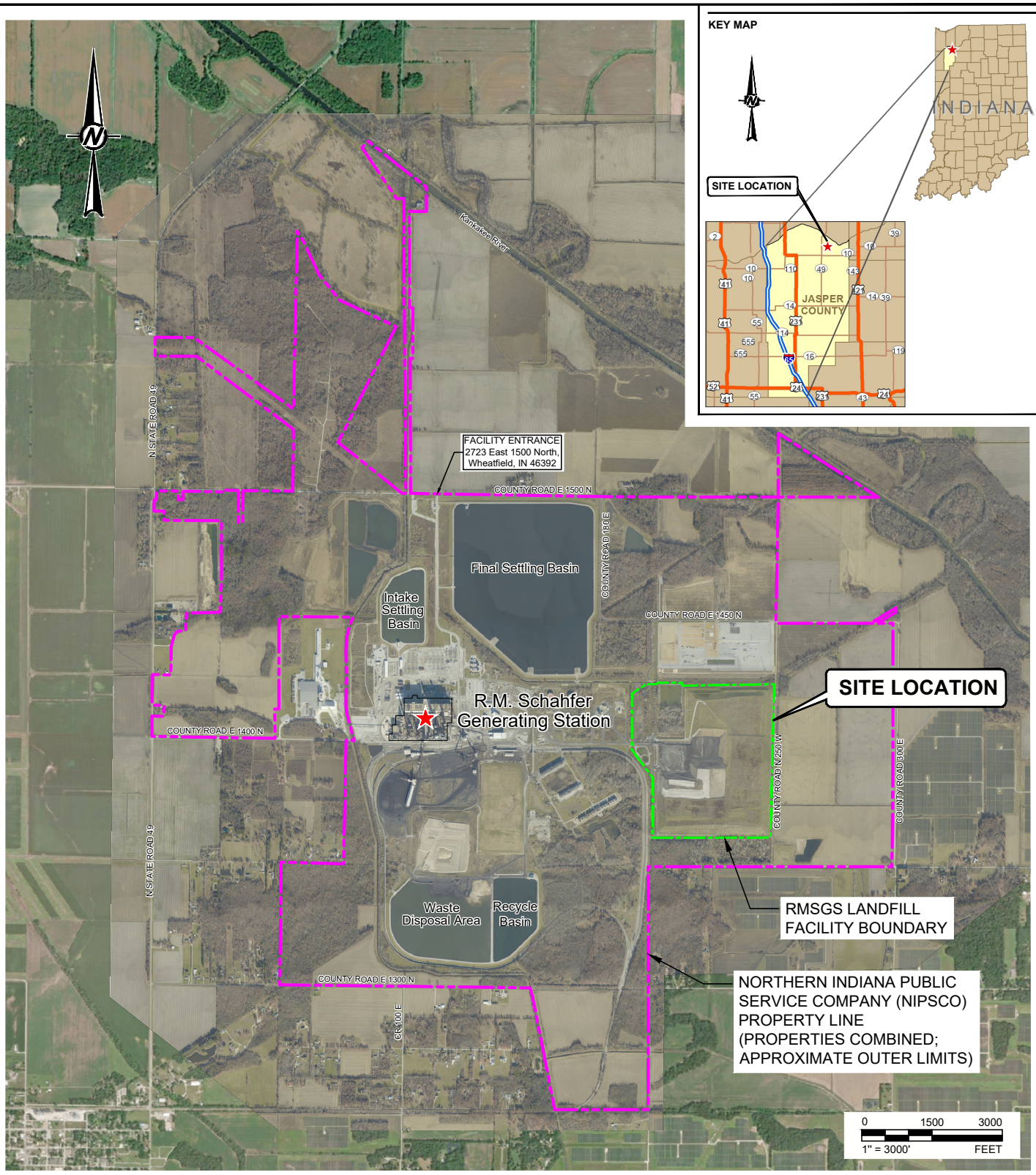
Weaver Consultants Group November 13, 2017. 2017 Minor Permit Modification and Drawings Phase VII/VII Fly Ash Landfill.

Weaver Consultants Group, April 26, 2018. Plans For the Phase VII Construction Fly Ash Landfill.

Weaver Consultants Group, March, 2023. Construction Drawings, Phase VIII Construction.

NOAA’s National Weather Service. August 2014. Hydrometeorological Design Studies. Precipitation Frequency Data Server (PFDS). http://hdsc.nws.noaa.gov/hdsc/pfds/. (Appendix A).

FIGURES



REFERENCES

1. AERIAL IMAGERY PROVIDED BY DLZ INDUSTRIAL, LLC, 316 TECH DRIVE, BURNS HARBOR, INDIANA 46304, PHOTO DATE NOVEMBER 23, 2025.
2. NIPSCO PROPERTY LINES ARE APPROXIMATE BASED ON JASPER COUNTY GOVERNMENT GIS DEPARTMENT PARCELS MAPPING DATA AS OF JUNE 2026.

LEGEND

- ★ R.M. SCHAHFER GENERATING STATION (RMSGS)
- NIPSCO PROPERTY LINE (APPROX. OUTER LIMITS OF PROPERTIES COMBINED)
- RMSGS LANDFILL FACILITY BOUNDARY

CLIENT
NORTHERN INDIANA PUBLIC SERVICE COMPANY, LLC
3001 LEONARD DRIVE
VALPARAISO, IN 46383

CONSULTANT
wsp

YYYY-MM-DD	2026-09-21
DESIGNED	JDP
PREPARED	SDA
REVIEWED	JDP
APPROVED	JDP

PROJECT
ROLLIN M. SCHAHFER GENERATING STATION
WHEATFIELD, INDIANA
LANDFILL RUN-ON AND RUN-OFF CONTROL SYSTEM

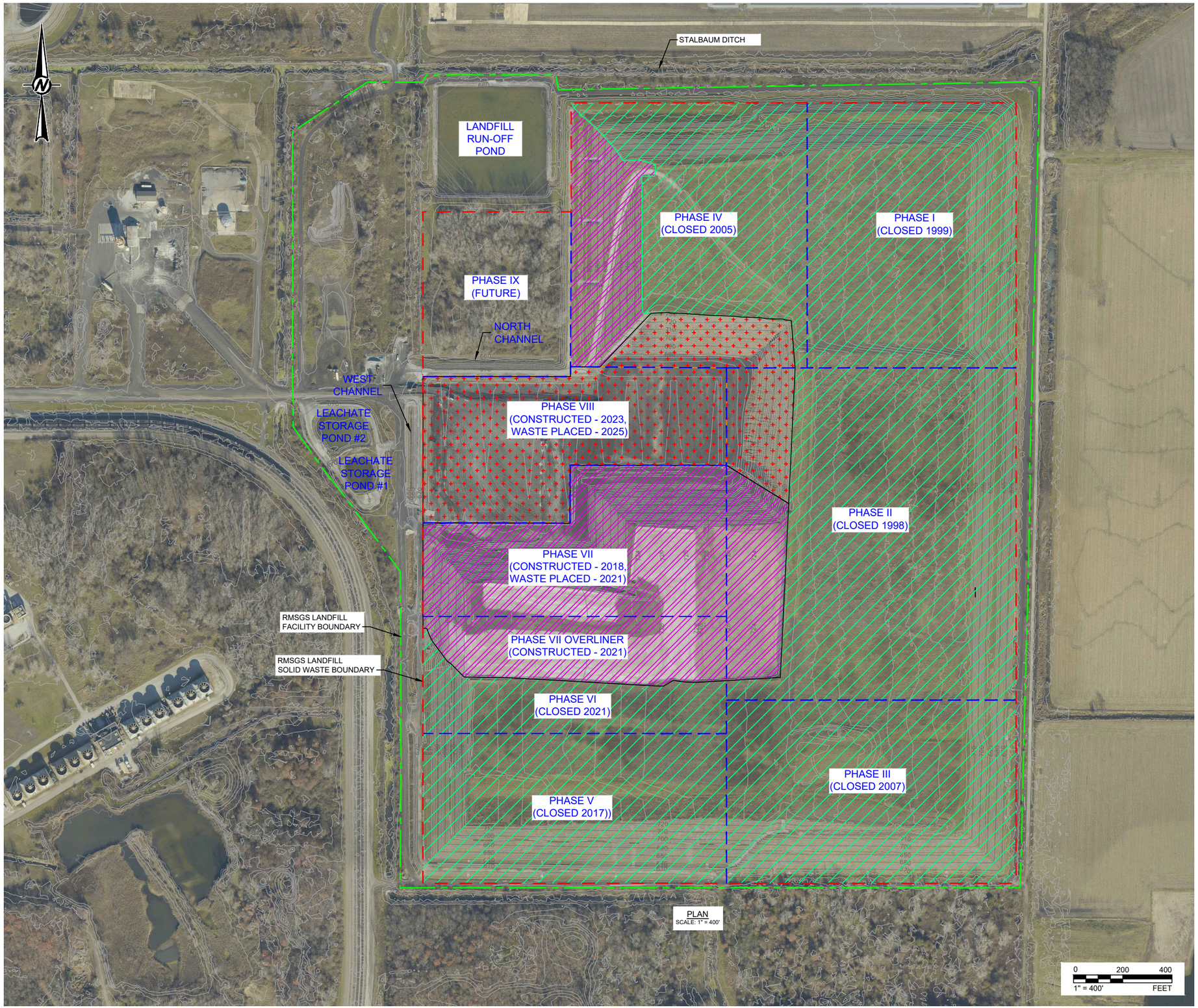
TITLE
SITE LOCATION MAP

PROJECT NO. 31406779.6909 | TASK 07.00 | REV. A

FIGURE 1

IF THIS MEASUREMENT DOES NOT MATCH WHAT IS SHOWN, THE SHEET SIZE HAS BEEN MODIFIED FROM: ANSI A

0 1 in



LEGEND

- EXISTING FACILITY BOUNDARY
- EXISTING SOLID WASTE BOUNDARY
- EXISTING PHASE BOUNDARY
- EXISTING GROUND ELEVATION CONTOUR - 10ft INTERVAL (SEE REFERENCE NOTE 5)
- EXISTING GROUND ELEVATION CONTOUR - 2ft INTERVAL (SEE REFERENCE NOTE 5)
- AREAS CLOSED WITH FINAL COVER
- AREAS UNDER INTERMEDIATE COVER
- AREAS OF CURRENT FILLING

REFERENCES

1. ELEVATIONS, HORIZONTAL COORDINATES, AND GRID LINES SHOWN ARE RELATIVE TO LOCAL PLANT DATUM PROVIDED BY THE NORTHERN INDIANA PUBLIC SERVICE COMPANY. PLANT DATUM CONTROL DATA PROVIDED WITHIN THE R.M. SCHAHFER GENERATING STATION - PHASE V FLY ASH LANDFILL CONTRACT DRAWINGS, REVISION G, ISSUED FOR CONSTRUCTION, SHEET C-0141 CONTAINING FOUR LOCAL CONTROL POINTS, OF WHICH THE ORIGIN IS UNKNOWN.

2. AERIAL IMAGERY PROVIDED BY DLZ INDUSTRIAL, LLC, 316 TECH DRIVE, BURNS HARBOR, INDIANA 46304, PHOTO DATE NOVEMBER 23, 2025.

3. COMPLETION LEVEL AND STATUS OF AREAS DEPICTED PROVIDED BY WEAVER CONSULTANTS GROUP ON JANUARY 23, 2025 VIA AUTOCAD DRAWING FILE "RMS0438.dwg", TITLED "QUARTERLY PLOT PLAN - 4Q 2024 329 IAC 10-28-8 (b)", DRAWING NO. "SHEET 1", DATED NOVEMBER 4, 2024.

4. EXISTING FACILITY, SOLID WASTE, AND PHASE BOUNDARY INFORMATION PROVIDED BY WEAVER CONSULTANTS GROUP ON JANUARY 23, 2025 VIA AUTOCAD DRAWING FILE "RMS0438.dwg", TITLED "QUARTERLY PLOT PLAN - 4Q 2024 329 IAC 10-28-8 (b)", DRAWING NO. "SHEET 1", DATED NOVEMBER 4, 2024.

5. TOPOGRAPHIC CONTOURS SHOWN PROVIDED BY WEAVER CONSULTANTS GROUP, RECEIVED JANUARY 23, 2025 VIA AUTOCAD DRAWING FILE "RMS0438.DWG". CONTOURS BASED ON 3D SURFACE MODEL "[SHELL] EXISTING TOPOGRAPHY" CONTAINED WITHIN THE DRAWING FILE DATED NOVEMBER 4, 2024. THIS 3D SURFACE MODEL DEVELOPED BASED ON THE FOLLOWING SOURCES:
   A. FIELD SURVEYS PERFORMED BY DLZ INDUSTRIAL, LLC:

PHASE V:	NOVEMBER 9, 2015, MARCH 7, 2017, AUGUST 15, 2017, AND MAY 20, 2022.
PHASE VI:	SEPTEMBER 25, 2019, OCTOBER 2, 2020, NOVEMBER 19, 2020, JANUARY 27, 2021, MARCH 4, 2021, MAY 19, 2021, JUNE 14, 2021, JUNE 16, 2021, DECEMBER 16, 2021, AND MAY 20, 2022.
PHASE VII:	APRIL 6, 2018, JANUARY 25, 2019, OCTOBER 7, 2022, OCTOBER 10, 2023, FEBRUARY 27, 2024, AUGUST 23, 2024, AND JULY 31, 2025.
PHASE VIII:	MARCH 31, 2017, OCTOBER 13, 2017, MAY 20, 2022, AND NOVEMBER 16, 2023.
OUTSIDE SOLID WASTE BOUNDARY:	NOVEMBER 6, 2017, MARCH 27, 2018, MARCH 28, 2018, OCTOBER 30, 2018, FEBRUARY 18, 2019, NOVEMBER 19, 2020, AND MAY 20, 2022.

   B. ADDITIONAL TOPOGRAPHY FROM HEADWATERS AREA PLAN BY BURNS & MCDONNELL, NIPSCO DRAWING NO. C-0258, DATE OF DRAWING AUGUST 31, 2015.

   C. ADDITIONAL TOPOGRAPHY APPROXIMATED FROM 2011-2013 INDIANA STATEWIDE LIDAR, INDIANAMAP FRAMEWORK DATA, http://www.indianamap.org/.

CLIENT
NORTHERN INDIANA PUBLIC SERVICE COMPANY, LLC
3001 LEONARD DRIVE
VALPARAISO, IN 46383

PROJECT
ROLLIN M. SCHAHFER GENERATING STATION
WHEATFIELD, INDIANA
LANDFILL RUN-ON AND RUN-OFF CONTROL SYSTEM

TITLE
EXISTING CONDITIONS

CONSULTANT

YYYY-MM-DD	2026-09-21
DESIGNED	JDP
PREPARED	SDA
REVIEWED	JDP
APPROVED	JDP

PROJECT NO. 31406779.6909 | TASK 07.00 | REV. A

FIGURE 2

IF THIS MEASUREMENT DOES NOT MATCH WHAT IS SHOWN, THE SHEET SIZE HAS BEEN MODIFIED FROM: ANSI B

Path: \\corp.pbwan.net\US\Central\Data\US\MKE100\Complex\Data\NIPSCO\31406779.6909 RMSGS RCRA Updates - 2026 5-Year Reporting\PRODUCTION\07.00 LF Run-On and Run-Off Plan Figs\RMSGS-LF_Run-On_&_Run-Off_Plan-EXISTING CONDITIONS.dwg | File Name: RMSGS-LF_Run-On_&_Run-Off_Plan-EXISTING CONDITIONS.dwg

APPENDIX A

NOAA Precipitation Data for Wheatfield, Indiana

NOAA Atlas 14, Volume 2, Version 3
Location name: Wheatfield, Indiana, USA*
Latitude: 41.2149°, Longitude: -87.0116°
Elevation: 666 ft**
* source: ESRI Maps
** source: USGS

POINT PRECIPITATION FREQUENCY ESTIMATES

G.M. Bonnin, D. Martin, B. Lin, T. Parzybok, M.Yekta, and D. Riley

NOAA, National Weather Service, Silver Spring, Maryland

PF_tabular | PF_graphical | Maps_&_aerials

PF tabular

PDS-based point precipitation frequency estimates with 90% confidence intervals (in inches)[1]

Duration	Average recurrence interval (years)									
	1	2	5	10	25	50	100	200	500	1000
5-min	**0.385** (0.349-0.426)	**0.455** (0.413-0.503)	**0.536** (0.486-0.592)	**0.610** (0.552-0.671)	**0.697** (0.629-0.767)	**0.770** (0.693-0.848)	**0.839** (0.751-0.924)	**0.911** (0.812-1.00)	**1.01** (0.890-1.11)	**1.08** (0.951-1.19)
10-min	**0.598** (0.542-0.662)	**0.710** (0.644-0.785)	**0.834** (0.756-0.921)	**0.941** (0.853-1.04)	**1.07** (0.963-1.17)	**1.17** (1.05-1.28)	**1.26** (1.13-1.39)	**1.36** (1.21-1.50)	**1.48** (1.31-1.63)	**1.58** (1.38-1.74)
15-min	**0.734** (0.665-0.811)	**0.868** (0.788-0.960)	**1.02** (0.928-1.13)	**1.16** (1.05-1.28)	**1.32** (1.19-1.45)	**1.44** (1.30-1.59)	**1.57** (1.40-1.73)	**1.69** (1.51-1.86)	**1.85** (1.63-2.03)	**1.97** (1.73-2.17)
30-min	**0.971** (0.880-1.07)	**1.16** (1.06-1.28)	**1.40** (1.27-1.55)	**1.61** (1.46-1.77)	**1.86** (1.68-2.05)	**2.07** (1.86-2.27)	**2.27** (2.03-2.49)	**2.47** (2.20-2.72)	**2.74** (2.42-3.01)	**2.95** (2.60-3.25)
60-min	**1.18** (1.07-1.31)	**1.42** (1.29-1.58)	**1.76** (1.59-1.94)	**2.05** (1.85-2.25)	**2.41** (2.18-2.66)	**2.72** (2.45-3.00)	**3.03** (2.71-3.33)	**3.35** (2.98-3.68)	**3.78** (3.34-4.16)	**4.15** (3.64-4.57)
2-hr	**1.36** (1.23-1.50)	**1.65** (1.50-1.82)	**2.09** (1.90-2.30)	**2.49** (2.26-2.73)	**3.01** (2.72-3.29)	**3.46** (3.11-3.78)	**3.92** (3.51-4.28)	**4.41** (3.92-4.81)	**5.09** (4.49-5.55)	**5.67** (4.97-6.20)
3-hr	**1.47** (1.34-1.62)	**1.78** (1.62-1.97)	**2.26** (2.05-2.50)	**2.70** (2.45-2.97)	**3.28** (2.96-3.60)	**3.79** (3.40-4.16)	**4.31** (3.85-4.73)	**4.88** (4.33-5.34)	**5.67** (4.99-6.21)	**6.36** (5.55-6.97)
6-hr	**1.76** (1.59-1.95)	**2.12** (1.91-2.35)	**2.68** (2.42-2.98)	**3.21** (2.89-3.55)	**3.91** (3.50-4.32)	**4.53** (4.04-4.99)	**5.17** (4.60-5.70)	**5.87** (5.18-6.46)	**6.86** (6.00-7.56)	**7.73** (6.70-8.51)
12-hr	**2.04** (1.85-2.26)	**2.46** (2.22-2.72)	**3.09** (2.79-3.42)	**3.67** (3.32-4.06)	**4.46** (4.00-4.92)	**5.14** (4.60-5.66)	**5.85** (5.21-6.44)	**6.62** (5.86-7.28)	**7.69** (6.74-8.46)	**8.63** (7.50-9.50)
24-hr	**2.32** (2.14-2.54)	**2.82** (2.60-3.09)	**3.62** (3.33-3.96)	**4.28** (3.92-4.67)	**5.22** (4.76-5.68)	**6.01** (5.44-6.54)	**6.86** (6.16-7.47)	**7.78** (6.92-8.47)	**9.11** (7.97-9.94)	**10.2** (8.81-11.2)
2-day	**2.70** (2.51-2.93)	**3.26** (3.02-3.53)	**4.10** (3.79-4.43)	**4.78** (4.41-5.17)	**5.76** (5.28-6.23)	**6.57** (5.97-7.12)	**7.43** (6.69-8.07)	**8.34** (7.44-9.10)	**9.65** (8.46-10.6)	**10.7** (9.28-11.9)
3-day	**2.87** (2.67-3.10)	**3.45** (3.21-3.72)	**4.29** (3.98-4.62)	**4.97** (4.60-5.36)	**5.94** (5.47-6.41)	**6.74** (6.16-7.28)	**7.58** (6.87-8.21)	**8.46** (7.60-9.20)	**9.72** (8.60-10.6)	**10.8** (9.40-11.9)
4-day	**3.04** (2.84-3.27)	**3.64** (3.39-3.91)	**4.48** (4.17-4.82)	**5.16** (4.80-5.54)	**6.13** (5.67-6.58)	**6.91** (6.35-7.44)	**7.73** (7.05-8.35)	**8.58** (7.76-9.31)	**9.78** (8.73-10.7)	**10.8** (9.53-12.0)
7-day	**3.63** (3.41-3.88)	**4.32** (4.06-4.62)	**5.21** (4.90-5.57)	**5.93** (5.56-6.33)	**6.92** (6.46-7.39)	**7.70** (7.16-8.24)	**8.51** (7.86-9.13)	**9.34** (8.56-10.1)	**10.5** (9.49-11.3)	**11.4** (10.2-12.4)
10-day	**4.09** (3.85-4.36)	**4.85** (4.56-5.16)	**5.81** (5.46-6.18)	**6.60** (6.19-7.01)	**7.69** (7.17-8.18)	**8.57** (7.95-9.13)	**9.48** (8.73-10.1)	**10.4** (9.52-11.2)	**11.7** (10.6-12.7)	**12.8** (11.4-13.9)
20-day	**5.52** (5.24-5.85)	**6.52** (6.18-6.90)	**7.67** (7.26-8.11)	**8.58** (8.11-9.06)	**9.79** (9.22-10.3)	**10.7** (10.1-11.3)	**11.6** (10.9-12.3)	**12.6** (11.7-13.4)	**13.8** (12.7-14.7)	**14.7** (13.4-15.8)
30-day	**6.88** (6.55-7.23)	**8.09** (7.70-8.51)	**9.36** (8.90-9.84)	**10.3** (9.79-10.8)	**11.5** (10.9-12.1)	**12.4** (11.7-13.0)	**13.2** (12.5-14.0)	**14.0** (13.2-14.8)	**15.0** (14.0-16.0)	**15.7** (14.6-16.8)
45-day	**8.69** (8.30-9.09)	**10.2** (9.71-10.7)	**11.6** (11.1-12.1)	**12.6** (12.0-13.2)	**13.9** (13.2-14.5)	**14.8** (14.0-15.5)	**15.6** (14.8-16.4)	**16.4** (15.5-17.2)	**17.3** (16.3-18.3)	**17.9** (16.8-19.0)
60-day	**10.4** (9.93-10.9)	**12.2** (11.6-12.7)	**13.8** (13.2-14.5)	**15.0** (14.4-15.8)	**16.6** (15.8-17.4)	**17.6** (16.8-18.5)	**18.6** (17.7-19.6)	**19.6** (18.5-20.6)	**20.7** (19.5-21.9)	**21.4** (20.2-22.7)

[1] Precipitation frequency (PF) estimates in this table are based on frequency analysis of partial duration series (PDS).

Numbers in parenthesis are PF estimates at lower and upper bounds of the 90% confidence interval. The probability that precipitation frequency estimates (for a given duration and average recurrence interval) will be greater than the upper bound (or less than the lower bound) is 5%. Estimates at upper bounds are not checked against probable maximum precipitation (PMP) estimates and may be higher than currently valid PMP values.

Please refer to NOAA Atlas 14 document for more information.

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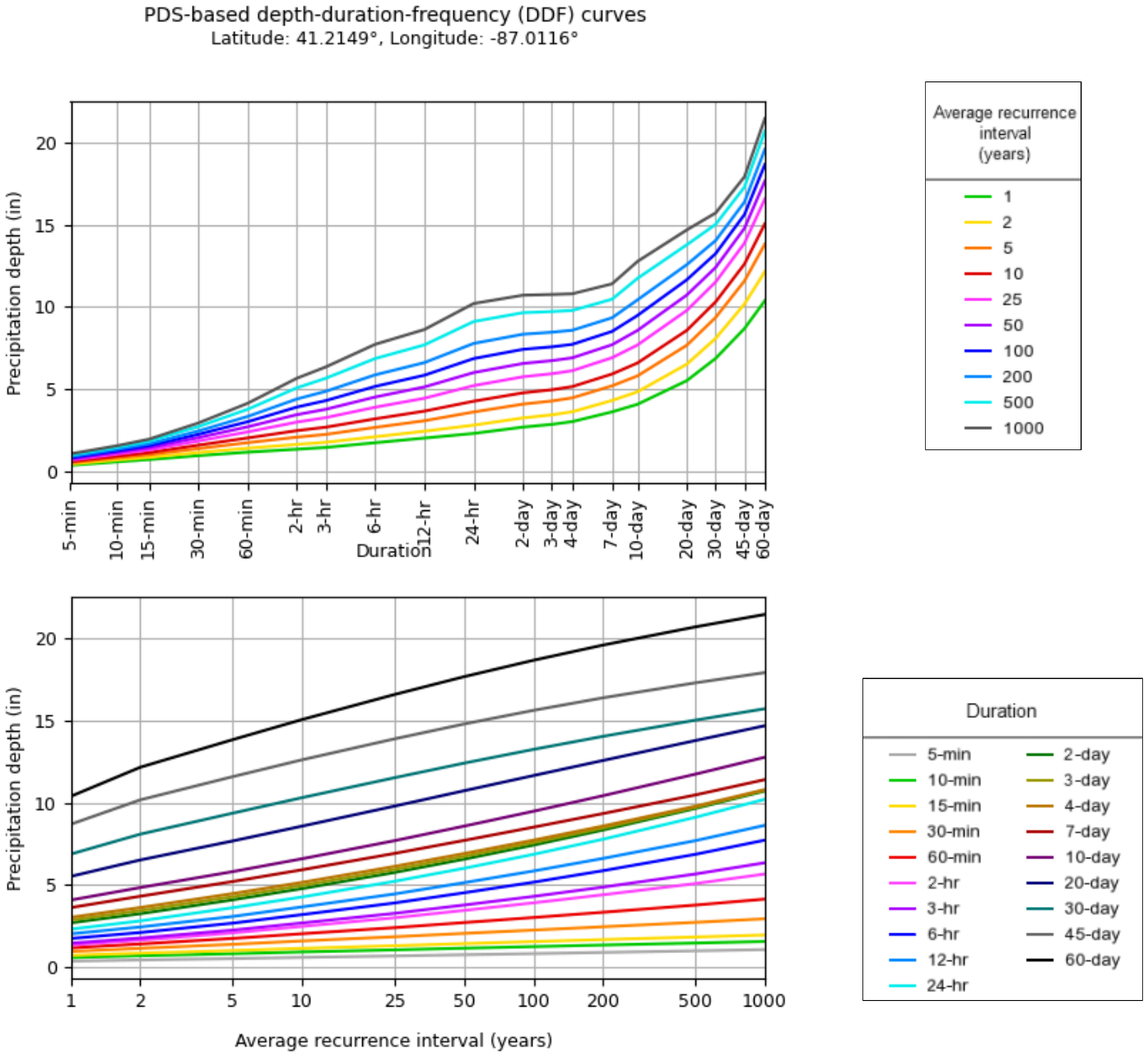
PF graphical



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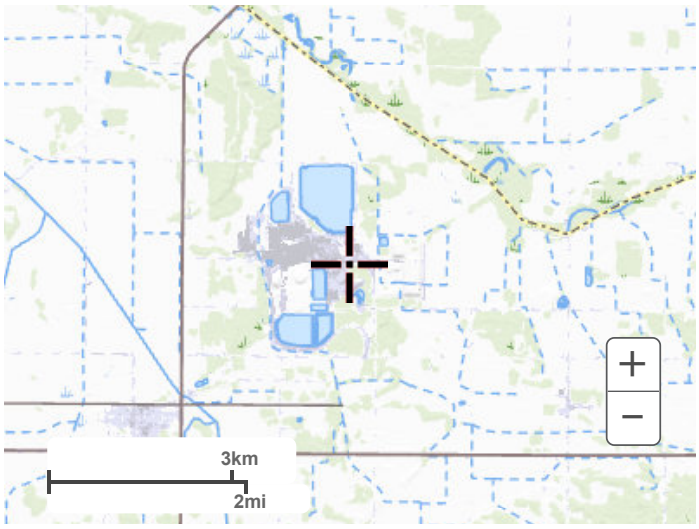
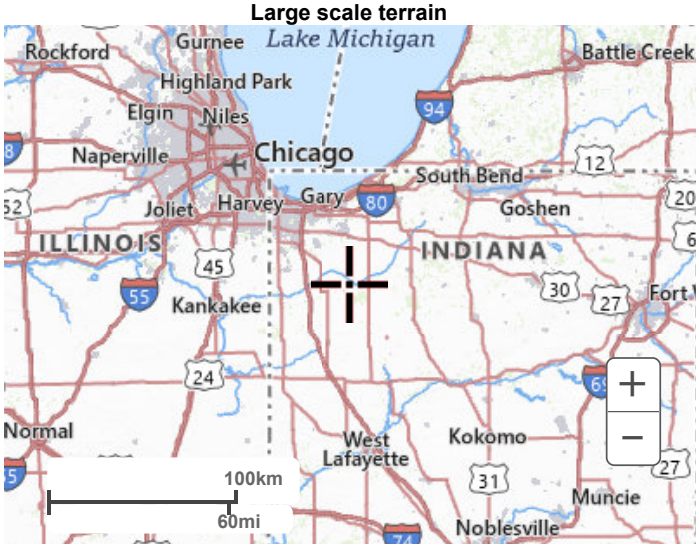
Maps & aerials

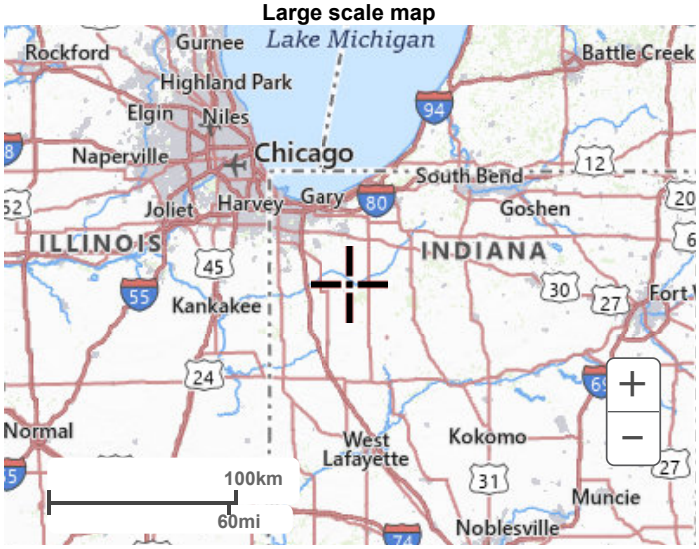
Small scale terrain



Large scale terrain



Large scale map



Large scale aerial

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