

# VOLUME III ENVIRONMENTAL ATLAS

### Mid-States Corridor Tier 1 Environmental Impact Statement

Prepared for

Indiana Department of Transportation

Mid-States Corridor Regional Development Authority

April 2, 2022 Updated APRIL 5, 2023

Prepared by

Lochmueller Group, Inc.







# **TABLE OF CONTENTS**

Introduction	
Master Map Legend	3
Mid-States Corridor Study Area	
Proposed Alternatives	A - 1
Physiographic Regions	
Natural Sub-Regions	
Environmental Justice Communities	
Alternative B	
Forests	B1 – B2
Agriculture and Prime Farmland	B3 – B4
Wetlands	B5 – B6
Karst	B7 – B8
Cultural Features	B9 – B10
Atlas Sheet Index	B11
Map Pages (1 - 12)	B12 – B23
Alternative C	
Forests	C1 – C2
Agriculture and Prime Farmland	
Wetlands	C5 – C6
Karst	C7 – C8
Cultural Features	
Atlas Sheet Index	C11
Map Pages (1 - 13)	
Alternative M	
Forests	M1 – M2
Agriculture and Prime Farmland	M3 – M4
Wetlands	M5 – M6
Karst	M7 – M8
Cultural Features	M9 – M10
Atlas Sheet Index	M11
Map Pages (1 - 20)	M12 – M31
Alternative O	
Forests	
Agriculture and Prime Farmland	
Wetlands	
Karst	07 – 08
Cultural Features	
Atlas Sheet Index	
Map Pages (1 - 18)	
Alternative P	
Forests	
Agriculture and Prime Farmland	
Wetlands	
Karst	
Cultural Features	
Atlas Sheet Index	
Map Pages (1 - 18)	P12 – P29
Alternative RPA P	DD4 D4
Forests	
Agriculture and Prime Farmland	
Wetlands	
Karst	
Cultural Features	
Atlas Sheet Index	
Map Pages (1 - 18)	KPA P12 – P29



			_		_
Δ	lte	rns	sti:	4	R

Automative it	
Forests	
Agriculture and Prime Farmland	
Wetlands	R5 – R6
Karst	R7 – R8
Cultural Features	R9 – R10
Atlas Sheet Index	
Map Pages (1 - 13)	R12 – R24
Spatial Data Descriptions	

**Master Map Legend** 

## MID-STATES CORRIDOR

### **ENVRIONMENTAL ATLAS**

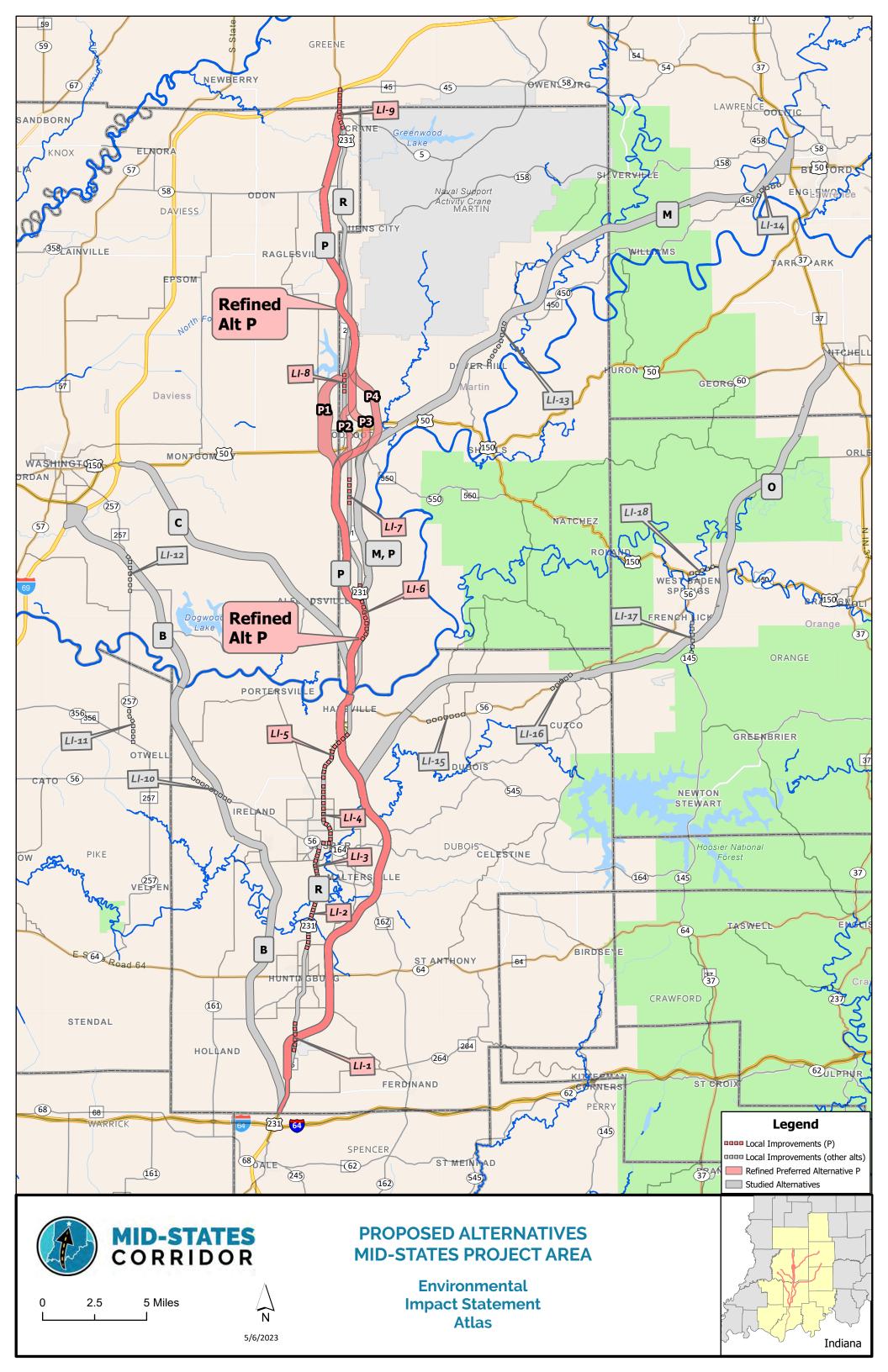
### INTRODUCTION

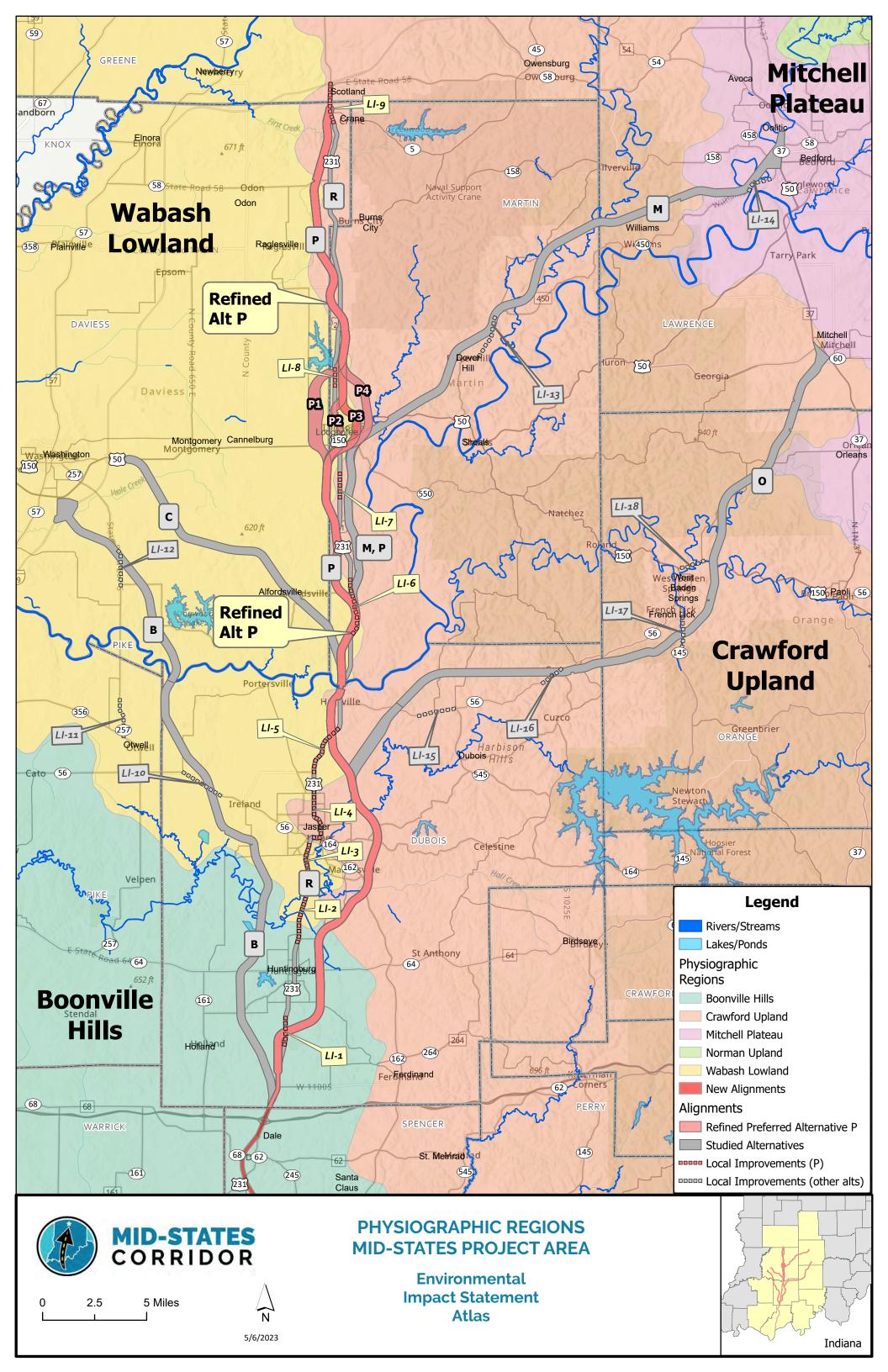
The Environmental Atlas is a supplement to the information provided in the Mid-States Corridor Study: Tier 1 Draft Environmental Impact Statement (DEIS). As issues are discussed within the DEIS, this atlas may be used to gain a visual perspective of those issues and a better understanding of possible impacts at large. Because existing US 231 in Section 1 and SR 37 in Section 3 will not be impacted by any construction activities (other than at interchanges on SR 37 with Routes M and O), they are excluded from discussion in DEIS Chapter 3 analysis and therefore not included in this atlas.

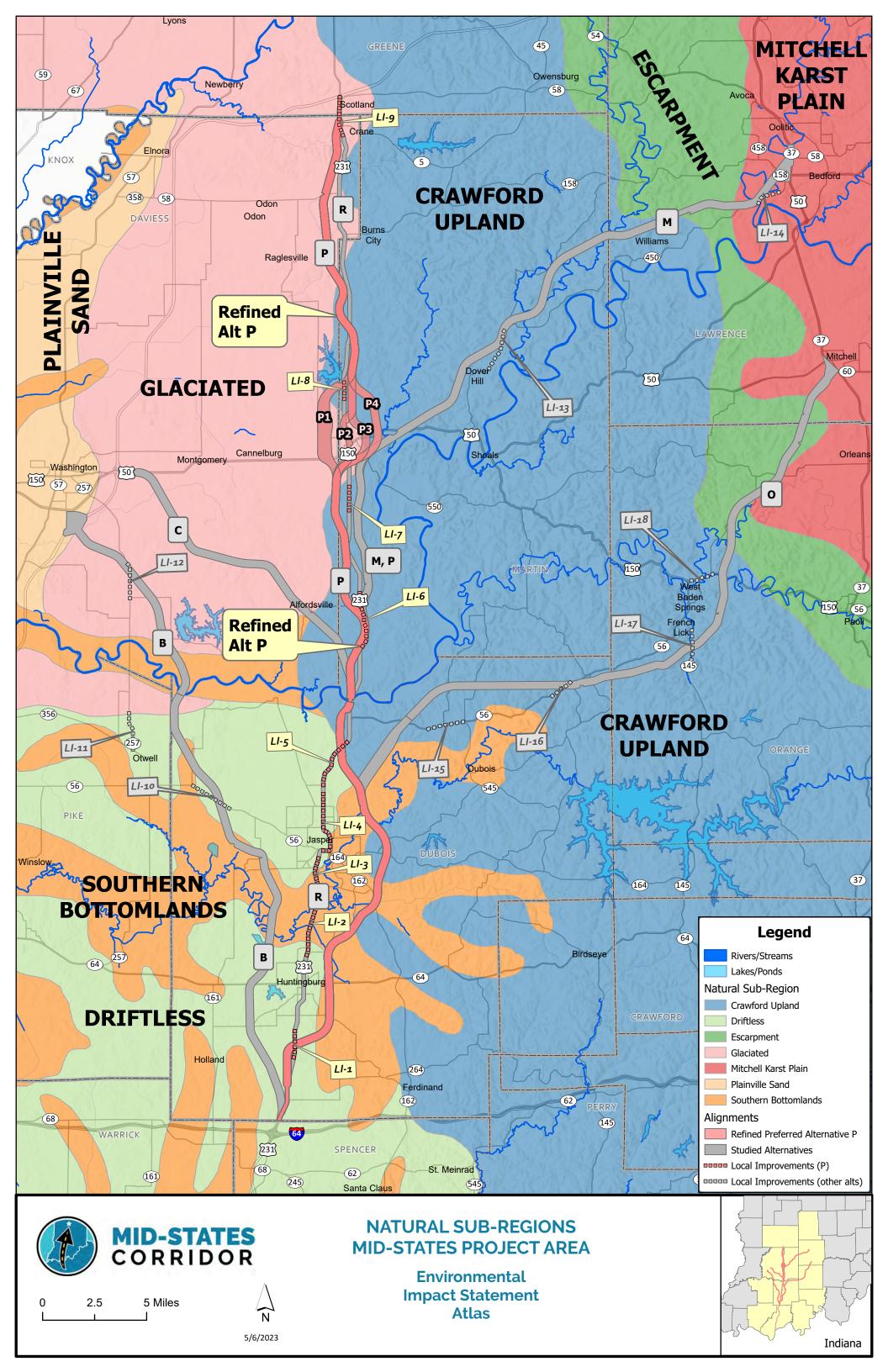
The first chapter includes information about the spatial resources used to create the atlas, maps of resources best understood in the context of the entire project study area and an index of chapters. Each following chapter depicts a combination of alternative(s) and sections for the proposed Mid-States Corridor. Each chapter begins with maps that depict various issues across alternative(s) and section of the study area. Then, the alternative(s) is shown at a scale of 1:18,000 (1 inch = 1500 feet) in a series of sheets progressing from south to north. To make navigation clear, the alternative index should be used to identify where each sheet is located along the alternative and section. The last chapter of this atlas contains a summary table that describes and compares each alternative across a selection of potential environmental issues.

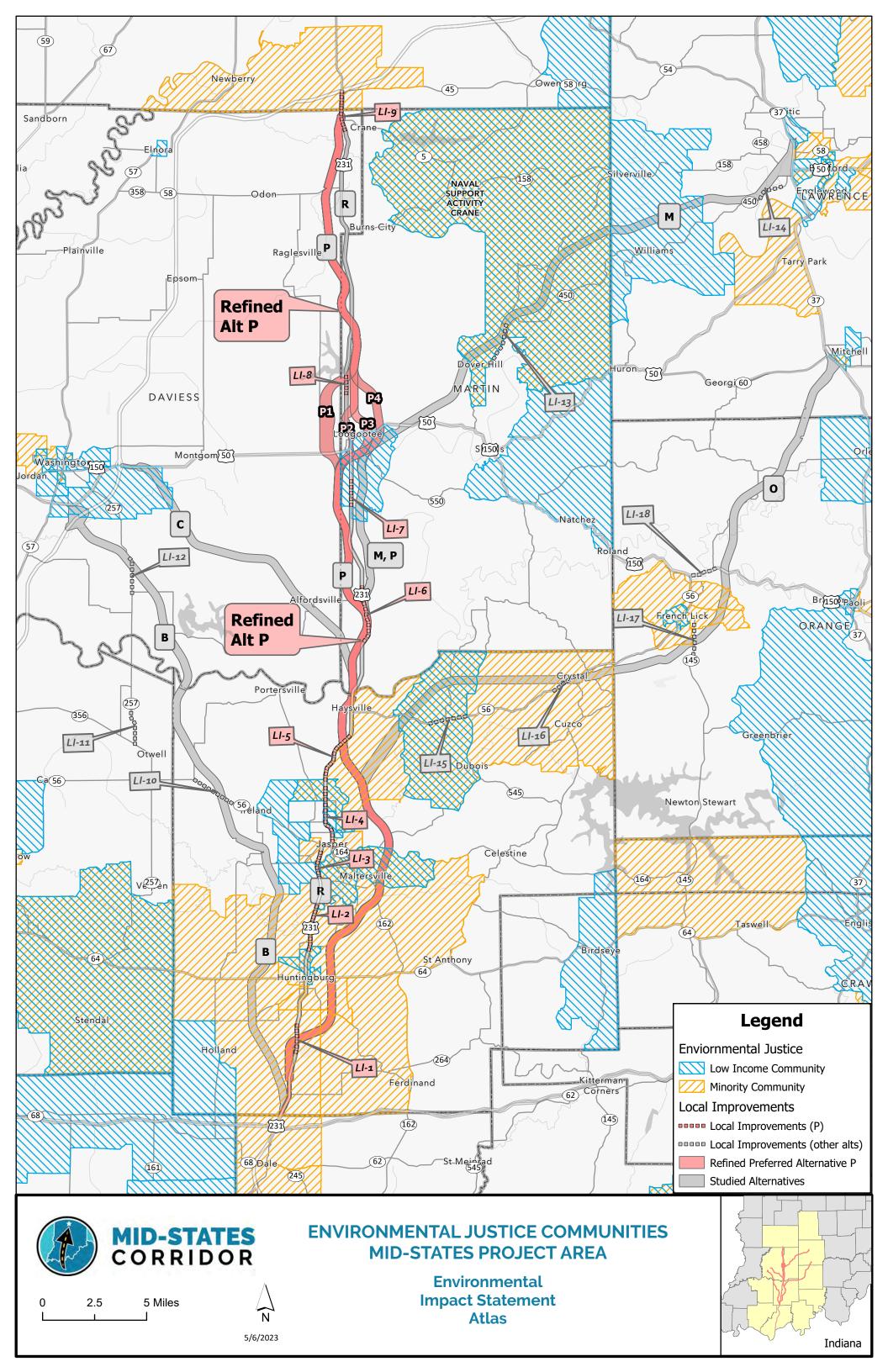
This atlas was created in GIS using digital spatial data created and compiled from sources described following the maps in this atlas. It is important to recognize that spatial layers came from many different sources and were created for use at different scales. Some data was created for use at large scales (1:5000), while others were intended for small scales (1:250,000). The mapping scale of the atlas is 1:18,000. Therefore, data created at a smaller scale may have positional inaccuracy in this application. Also, it is essential to consider the time sensitivity of a layer under consideration. Data is only accurate up to the date that it was last collected or updated and highly dynamic layers may have changes that are not represented. Although data used was the most up-to-date, reasonable, and appropriate available; data investigation has shown that many cannot be expected to be wholly comprehensive or complete. With this awareness, it is important that users view this atlas in the appropriate context, which is a model of what may be encountered in the area today. This atlas does not replace fieldwork. Changes and corrections should be expected. The value of this representation is that it will provide an efficient and acceptably accurate means to compare proposed alternative corridors. Map users are strongly urged to review the description of layers before drawing any conclusions based on a data layer.

#### Legend Water Wells **Alternatives Karst Features** Water Wells Local Improvements Karst Springs Infrasturcture New Alignments Karst Sinkholes Antennas >200Ft Counties Karst Sinking Areas Sinkhole Area **Airports** Cities Sinking Stream Basin ≠ Active Railroads Hydrology Cemeteries Power Plant Lakes/Ponds (NWI and NHD) Electric Substation Cemetery Rivers/Streams (NHD) **Pipelines** Cemetery Wetlands (NWI: Emergent, **Electric Lines** Forested, and Scrub-Shrub) **Historic Structures** Minerals Streams (NHD) National Register Listed Perennial Stream Industrial Minerals National Register Eligible - - Intermittent Stream Abandoned Quarries & Pits National Register Historic Canal/Ditch Districts Active Coal Mining **Unclassified Streams** National Register Eligible Petroleum Wells 100-Yr Floodplain Districts Oil & Gas Wells Floodplain Community Features Test & Other Wells Floodway Environmental Religious Centers Conservation, Concern Recreation, and Police **Defense Lands** Fire Stations and EMS NPDES, USTs, Waste, Cleanup, VRP, Brownfields Hospitals and Medical Care ---- Trails Landfills, Institutional \*\*\* Planned Trails Education (Schools, Controls, Coal Combustion Preschools, Colleges, Waste Nature Preserves Museums, Libraries) **Confined Feeding Operations** Managed Lands Recreational Facilities





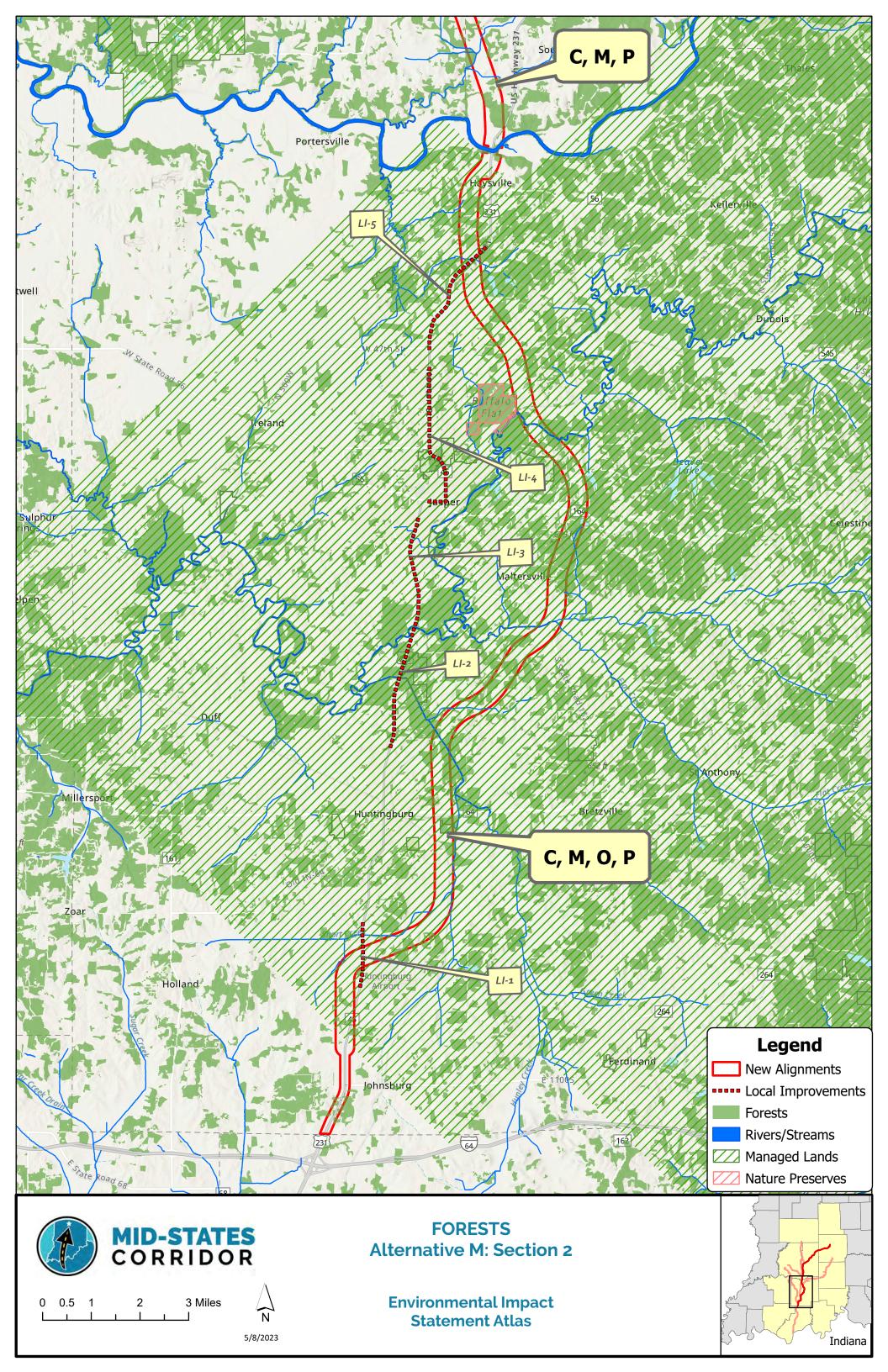


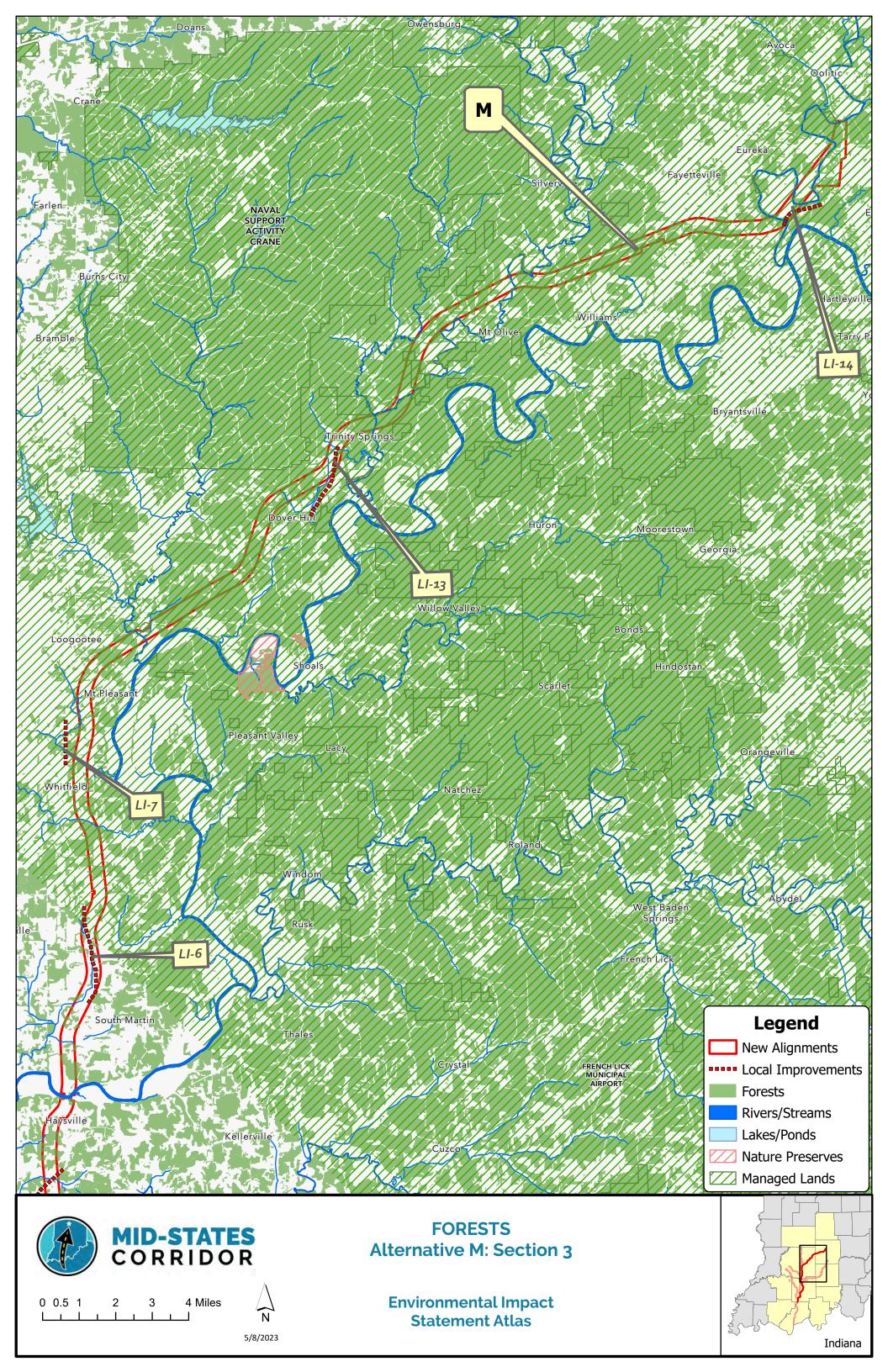


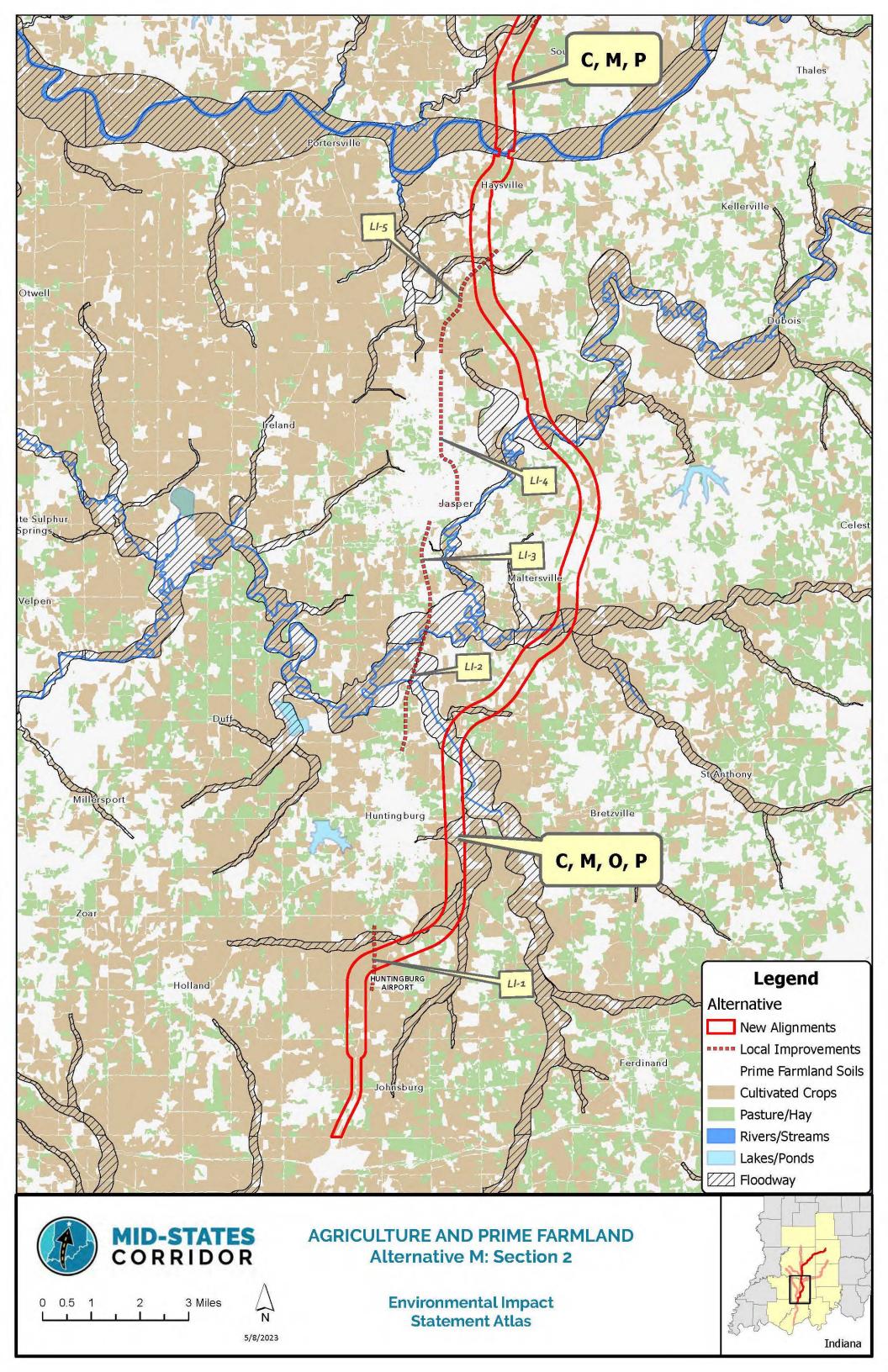


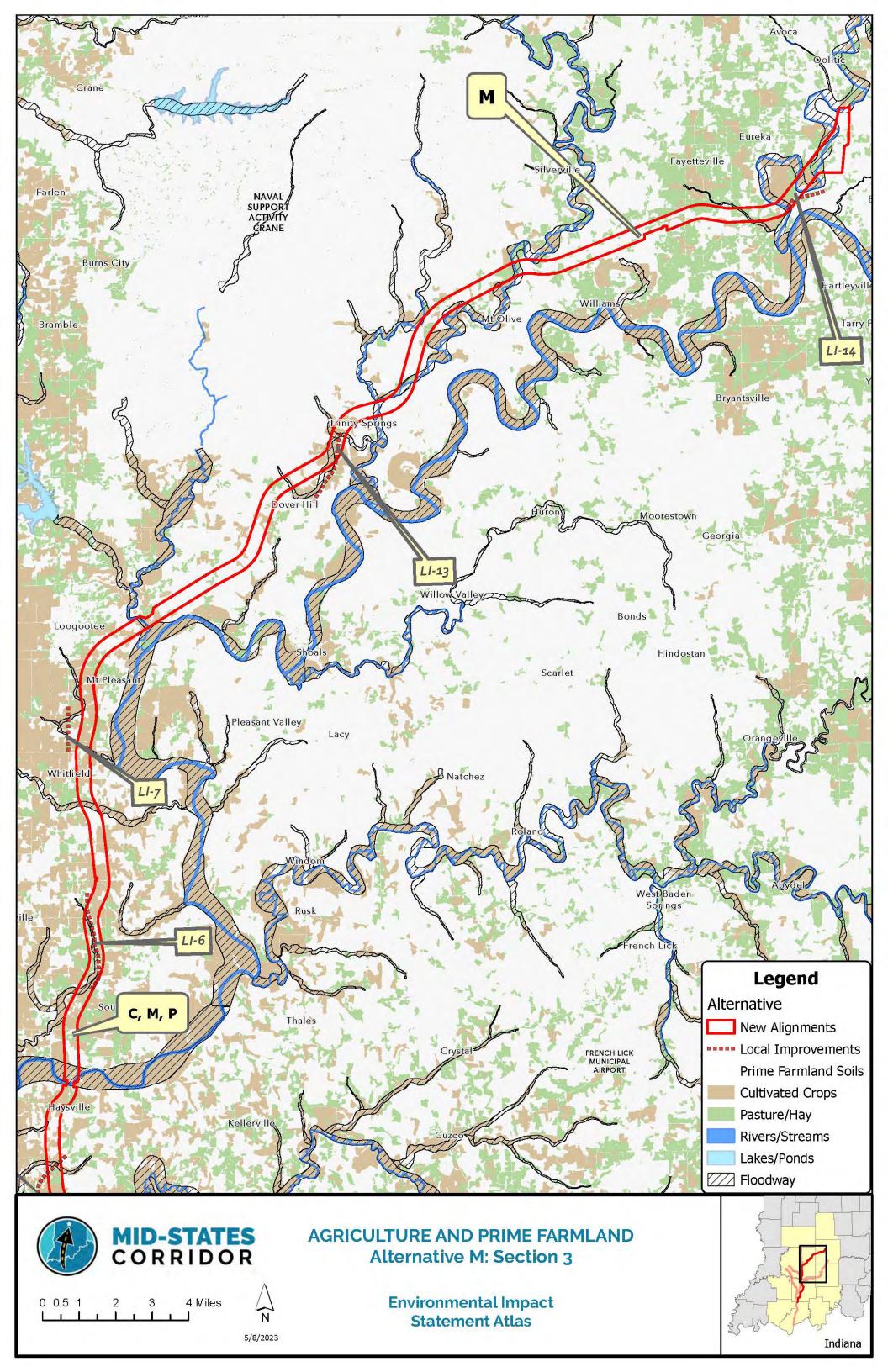
# **ALTERNATIVE M**

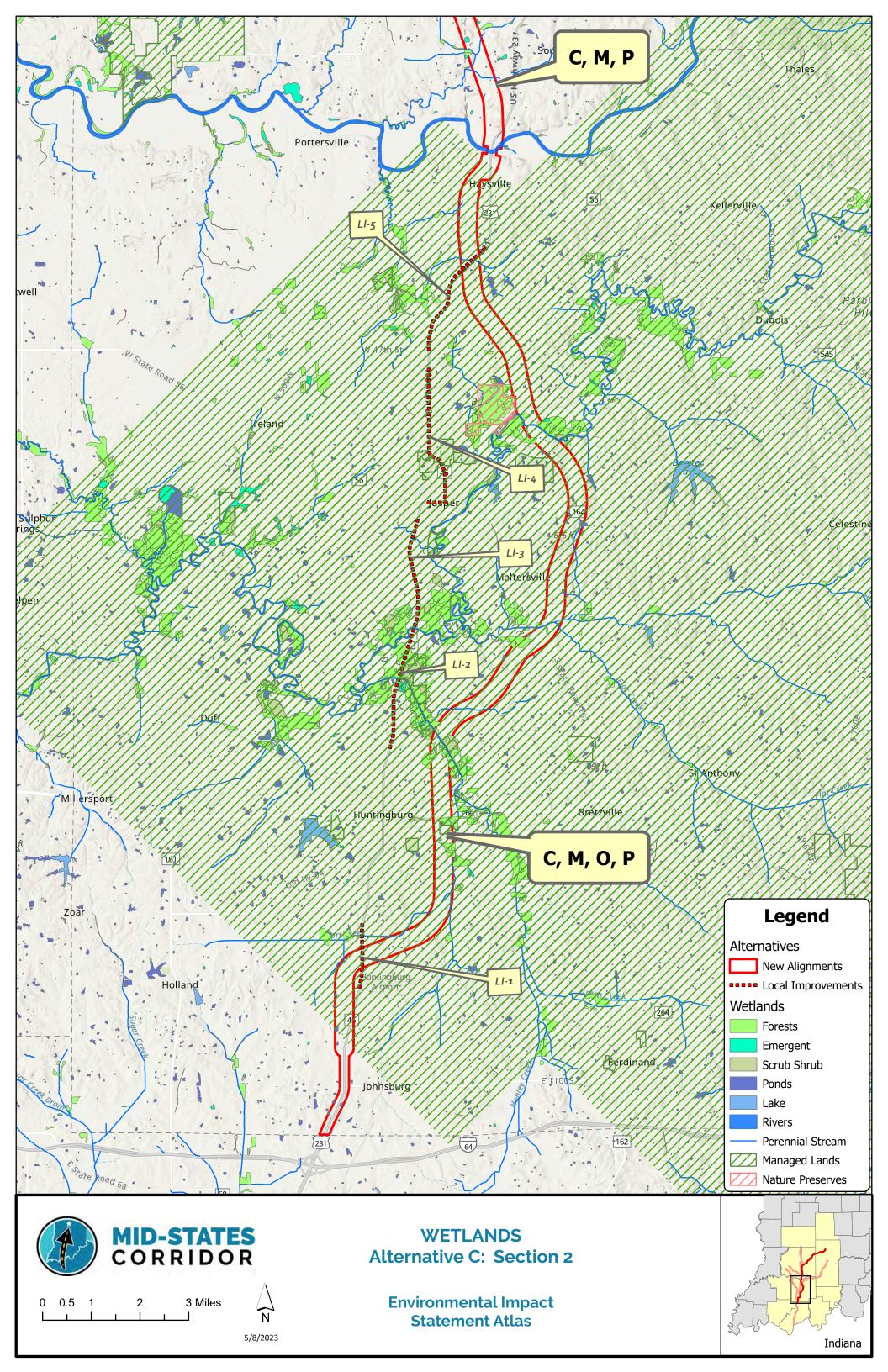
January 9, 2022 Page 7 of 9

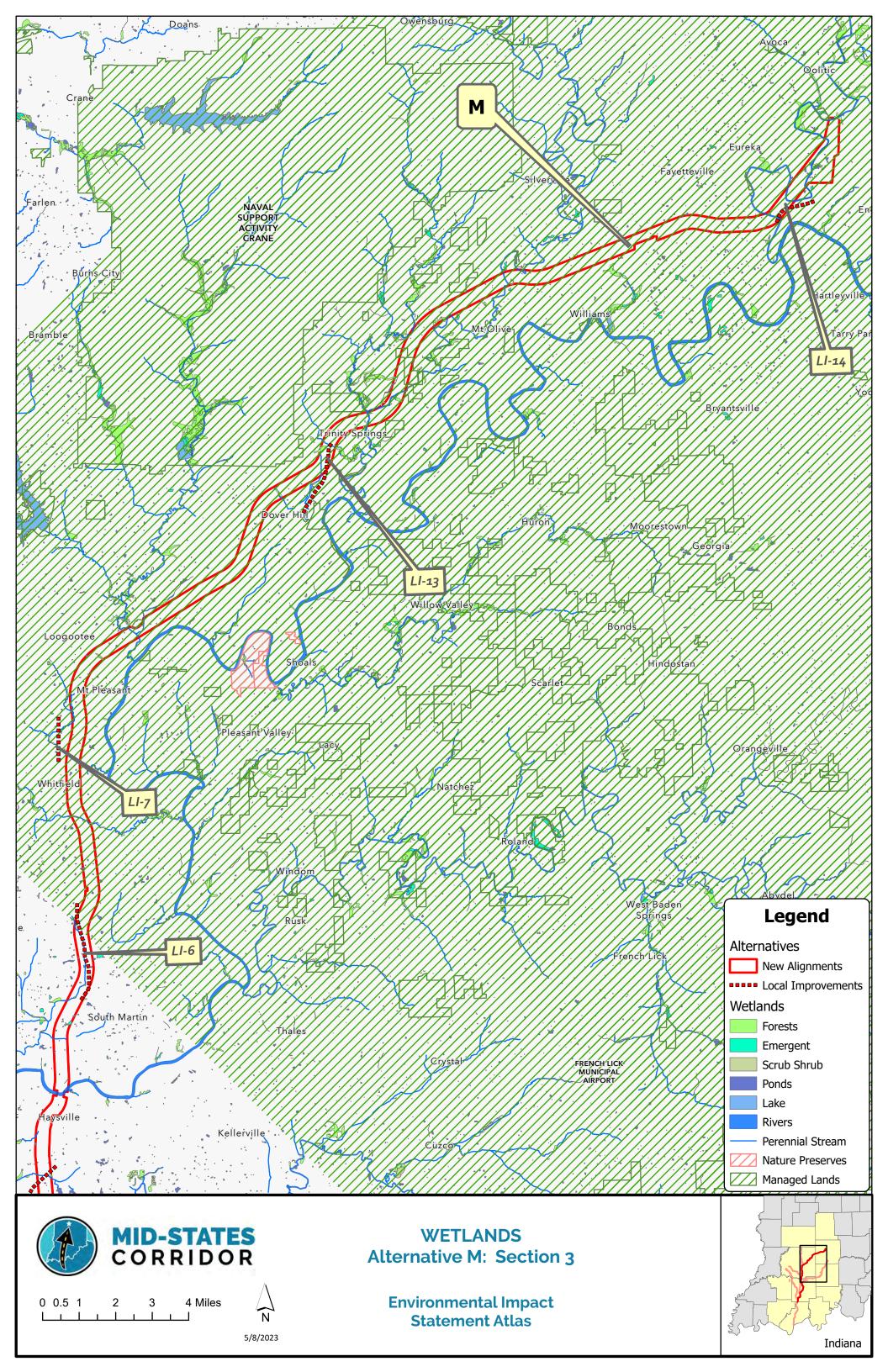


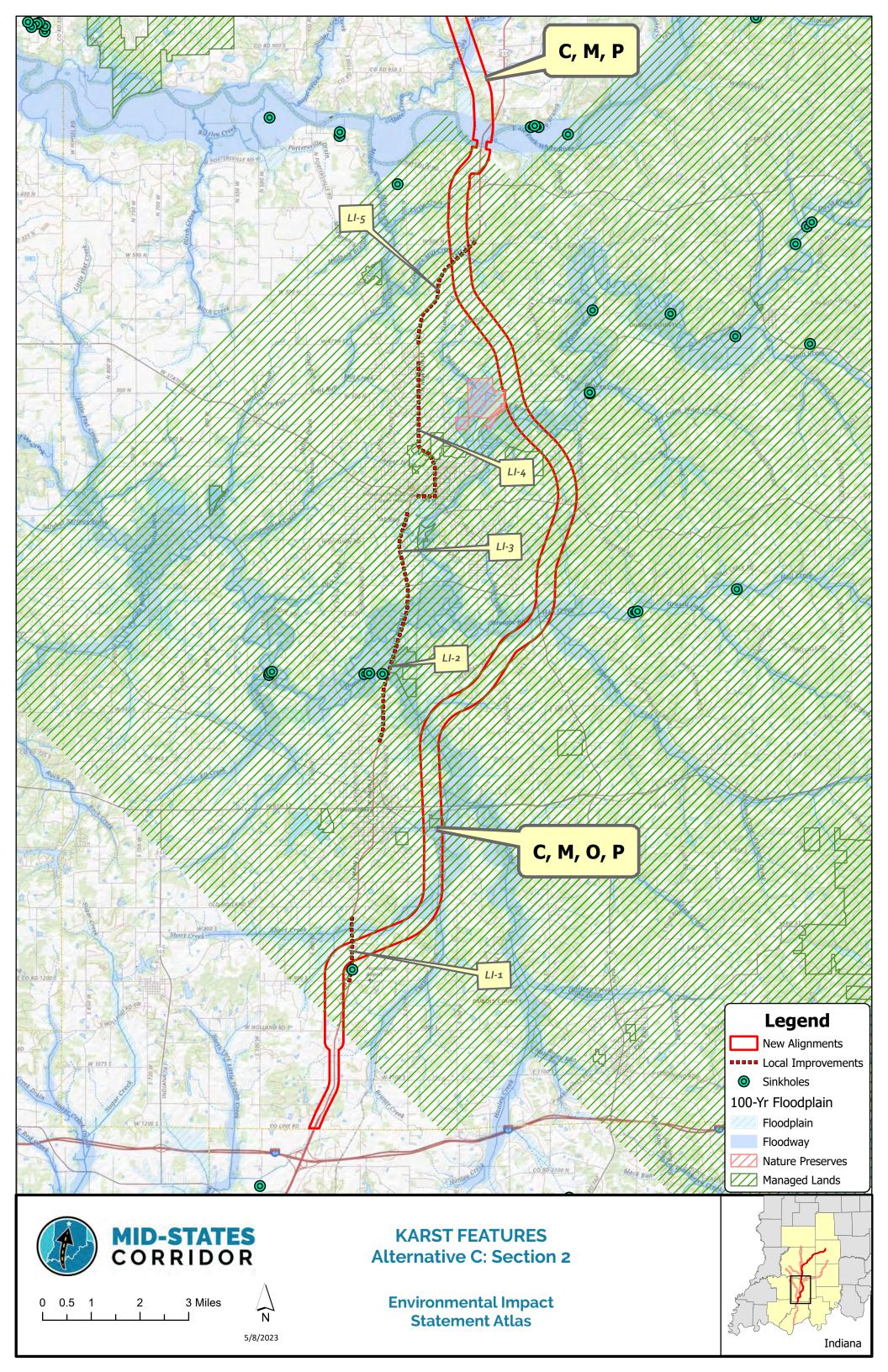


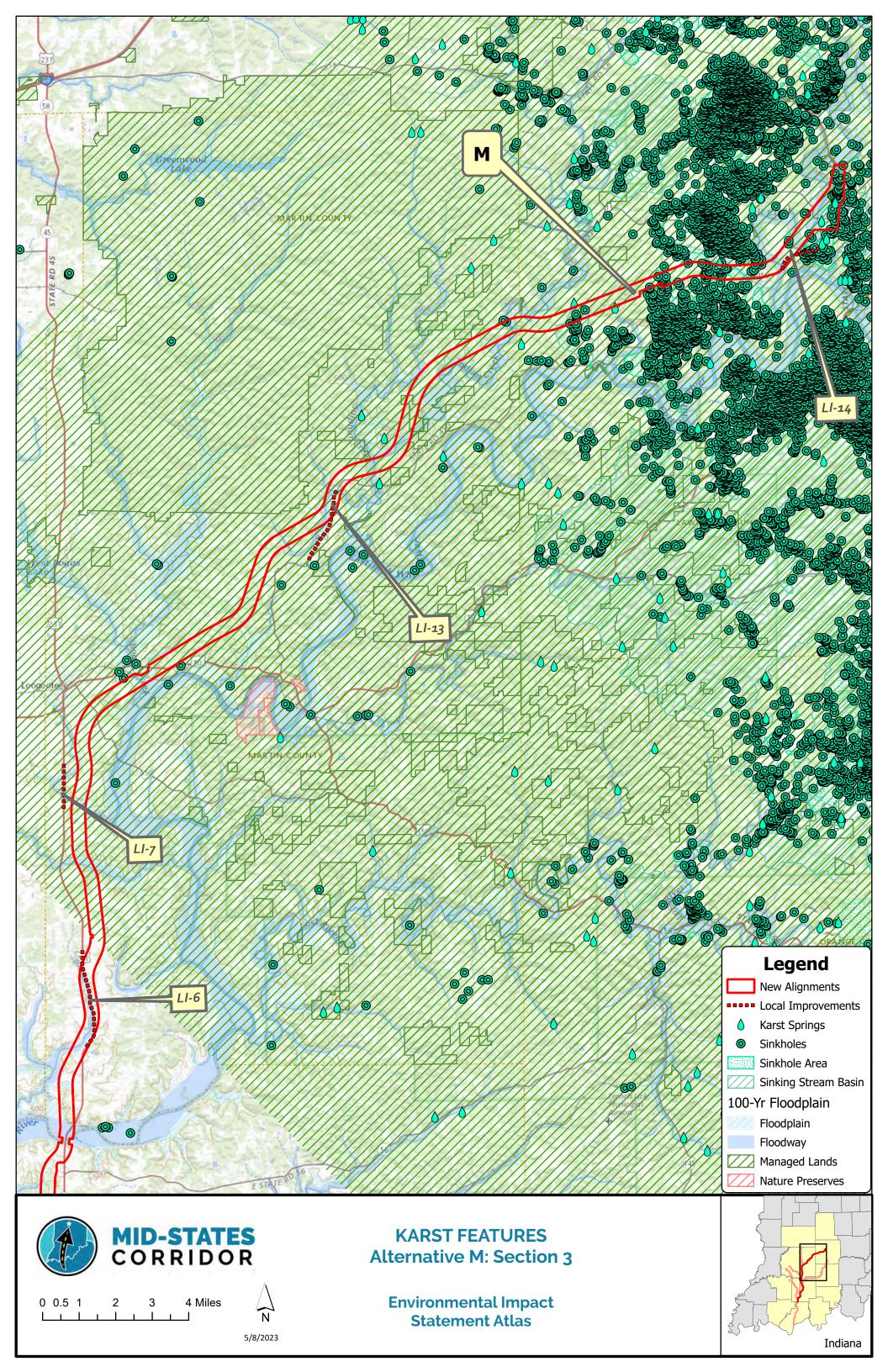


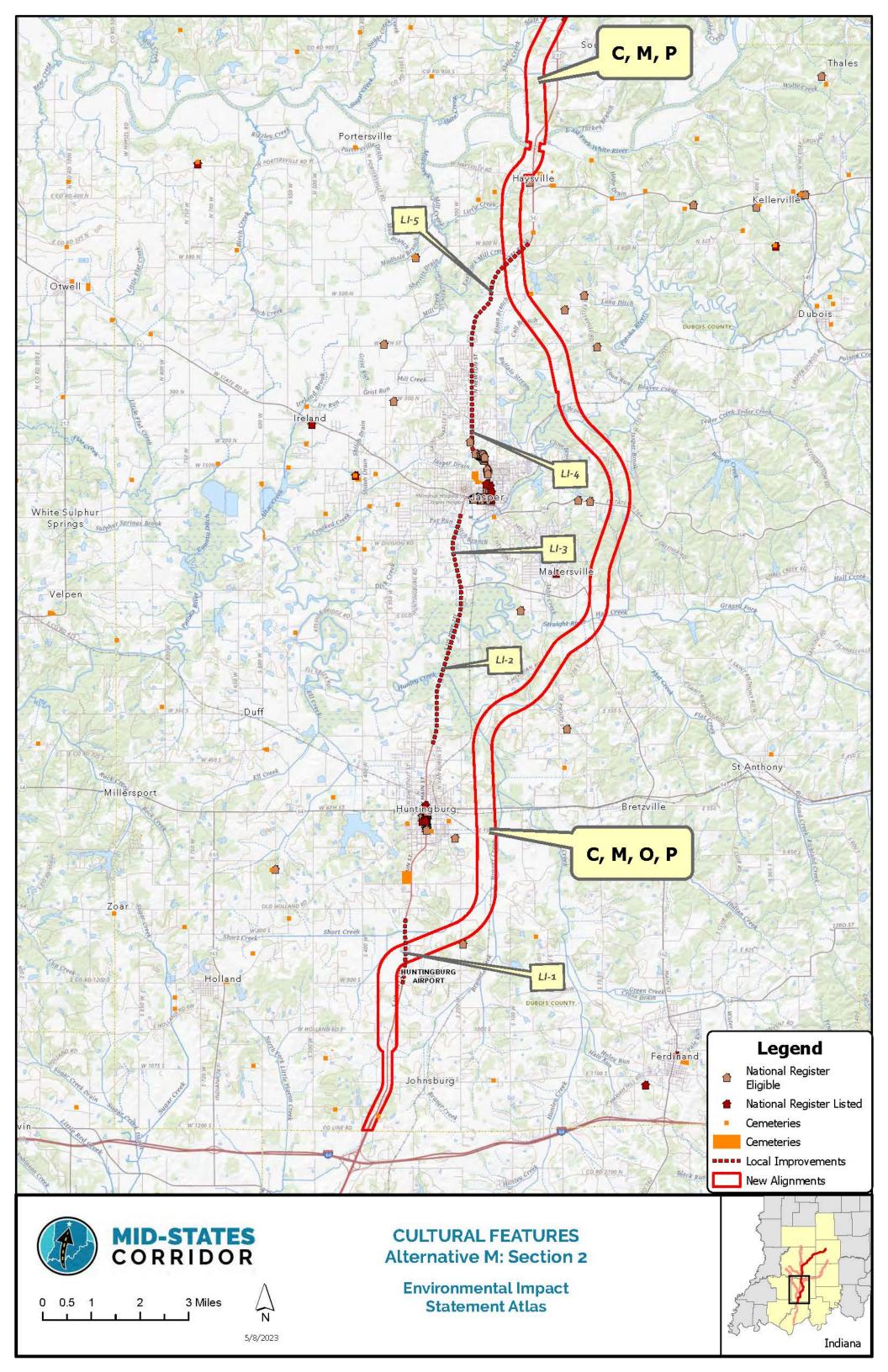


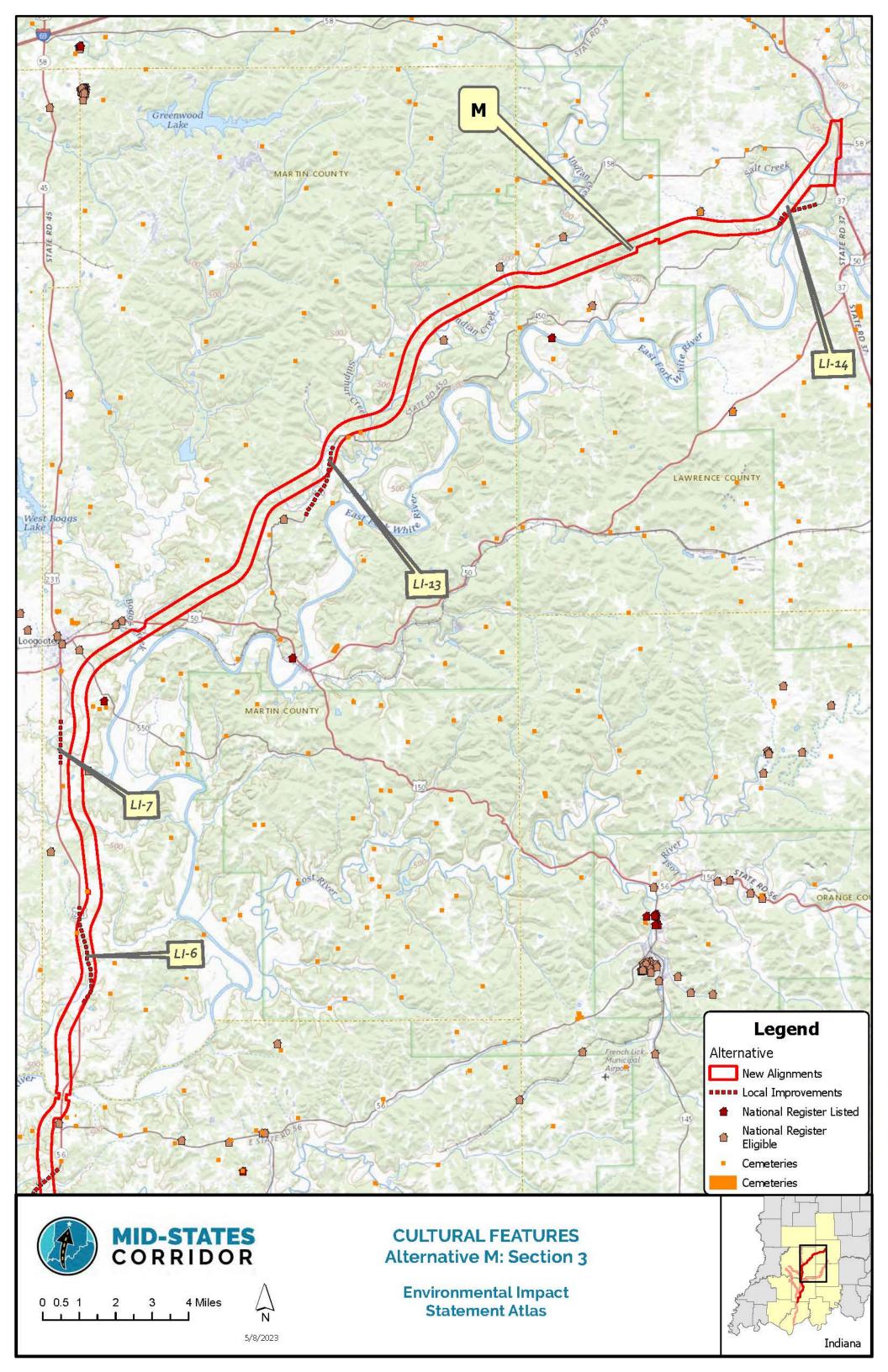


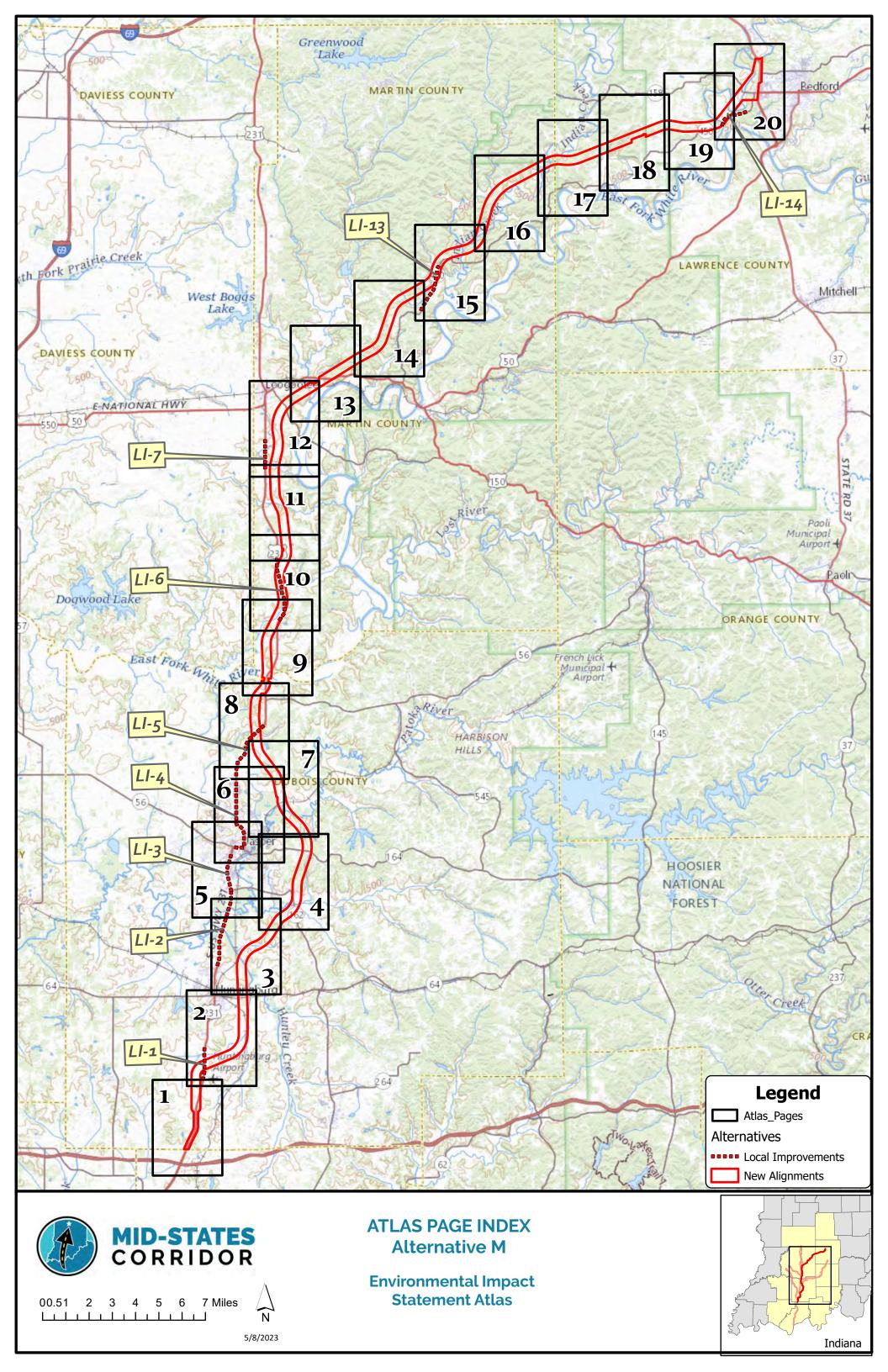


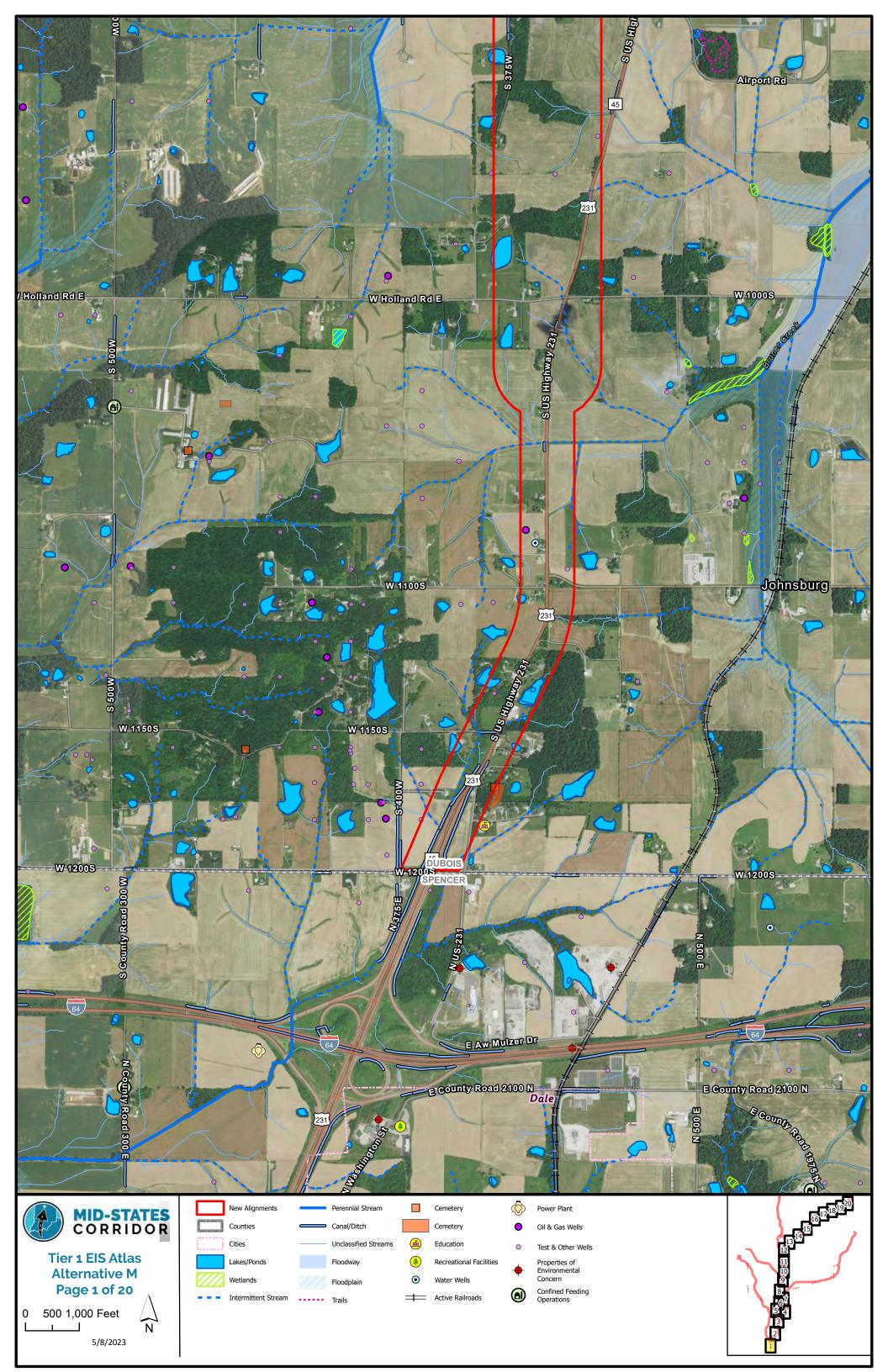


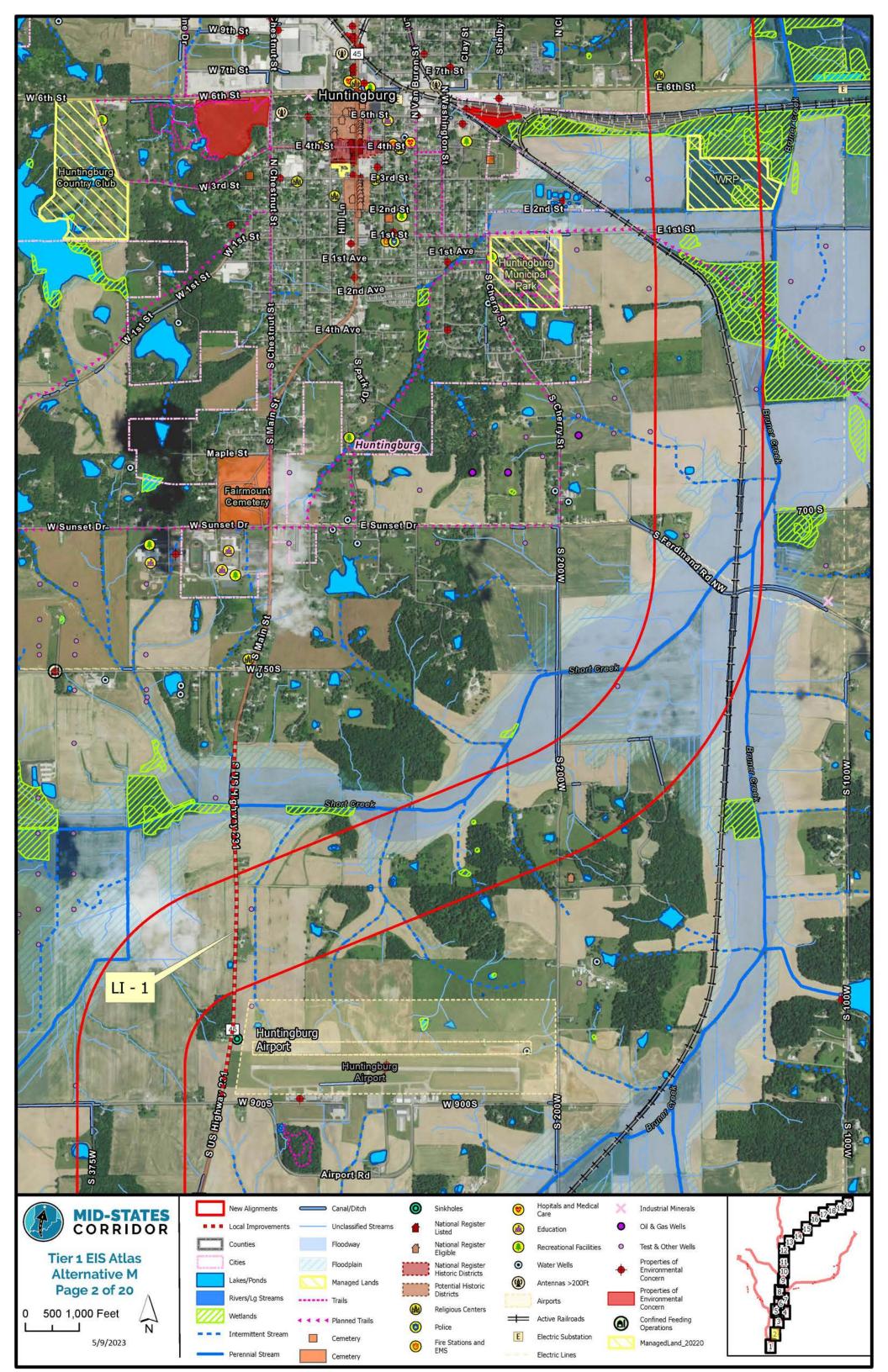


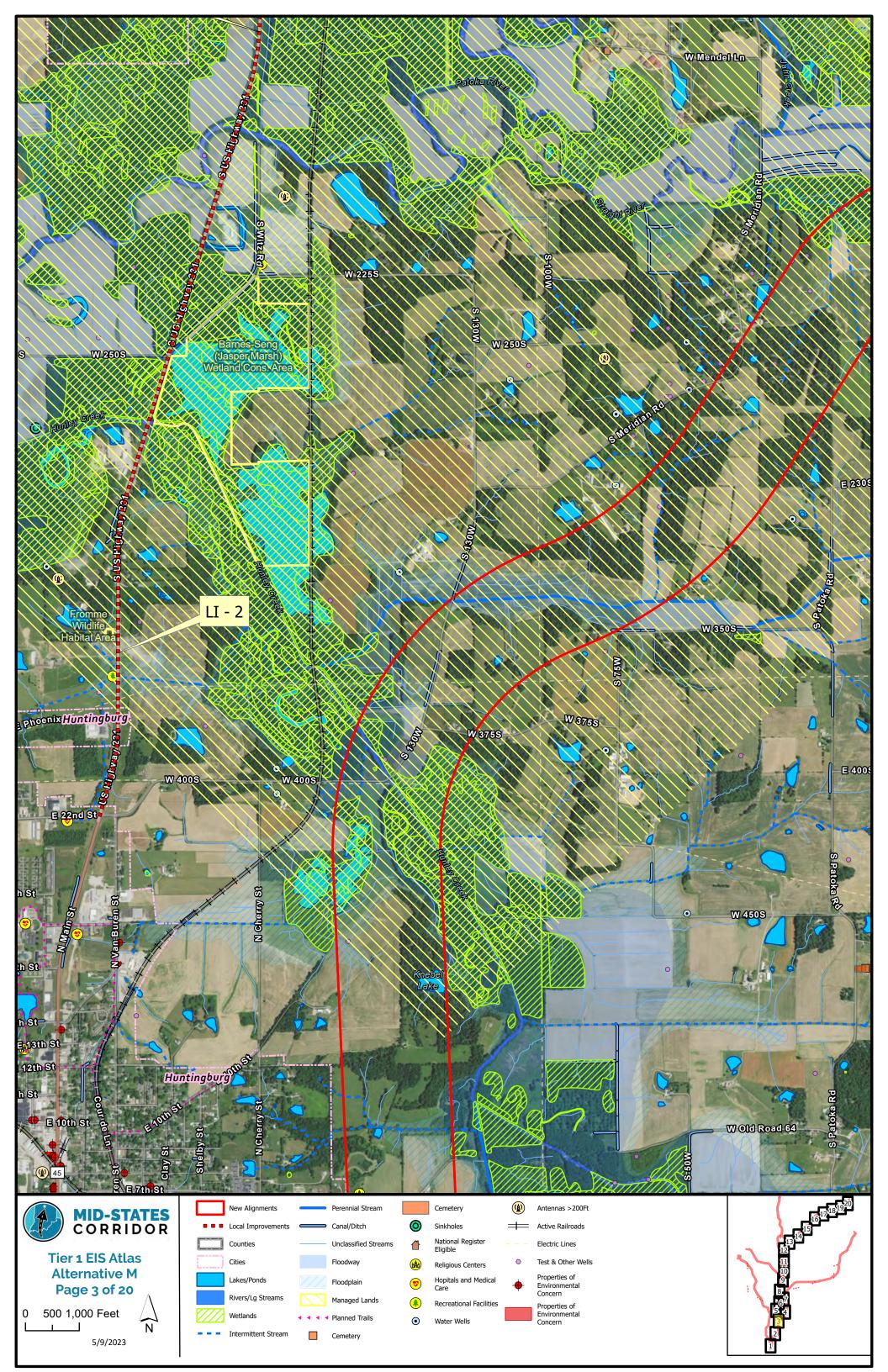


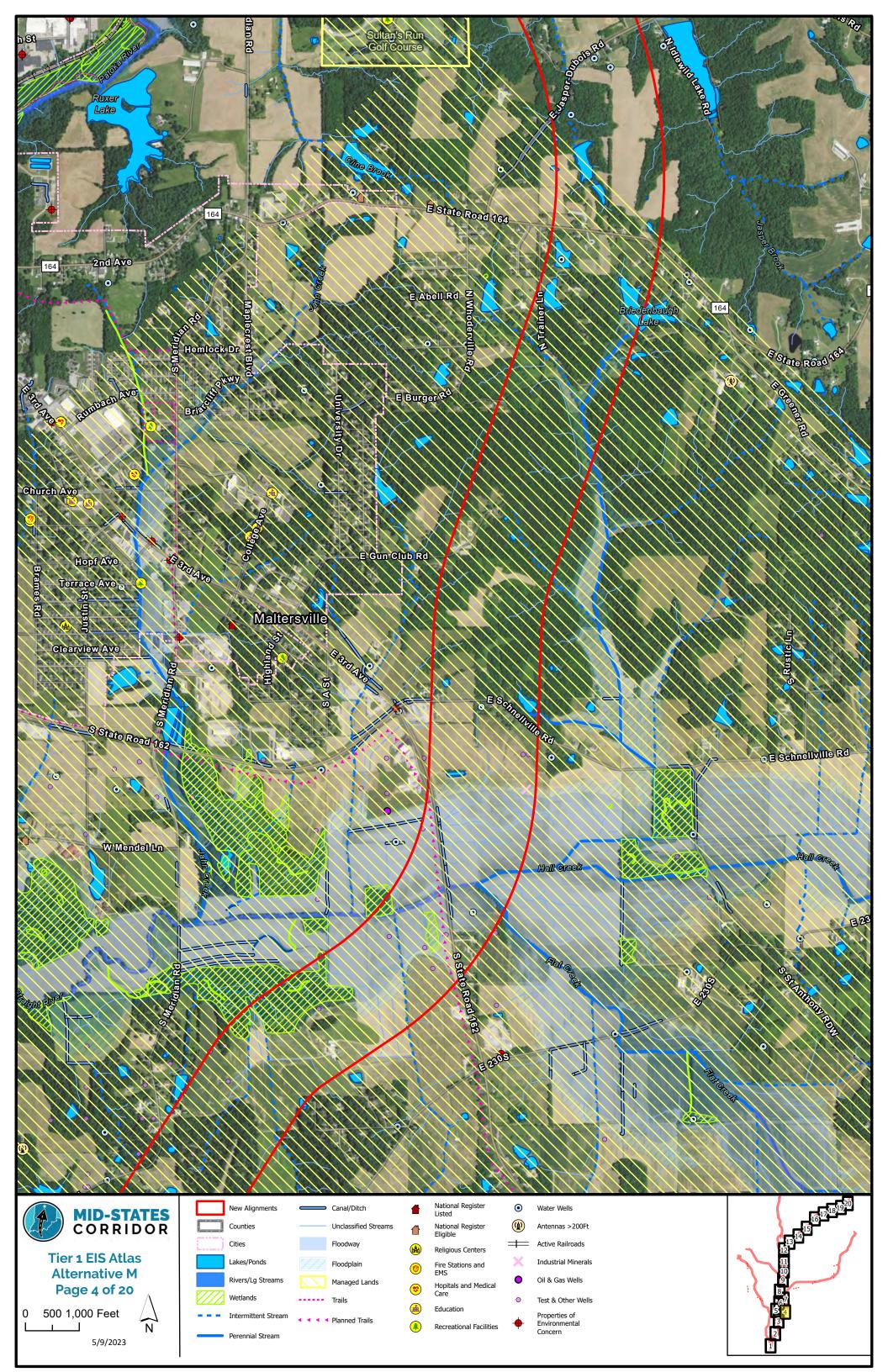


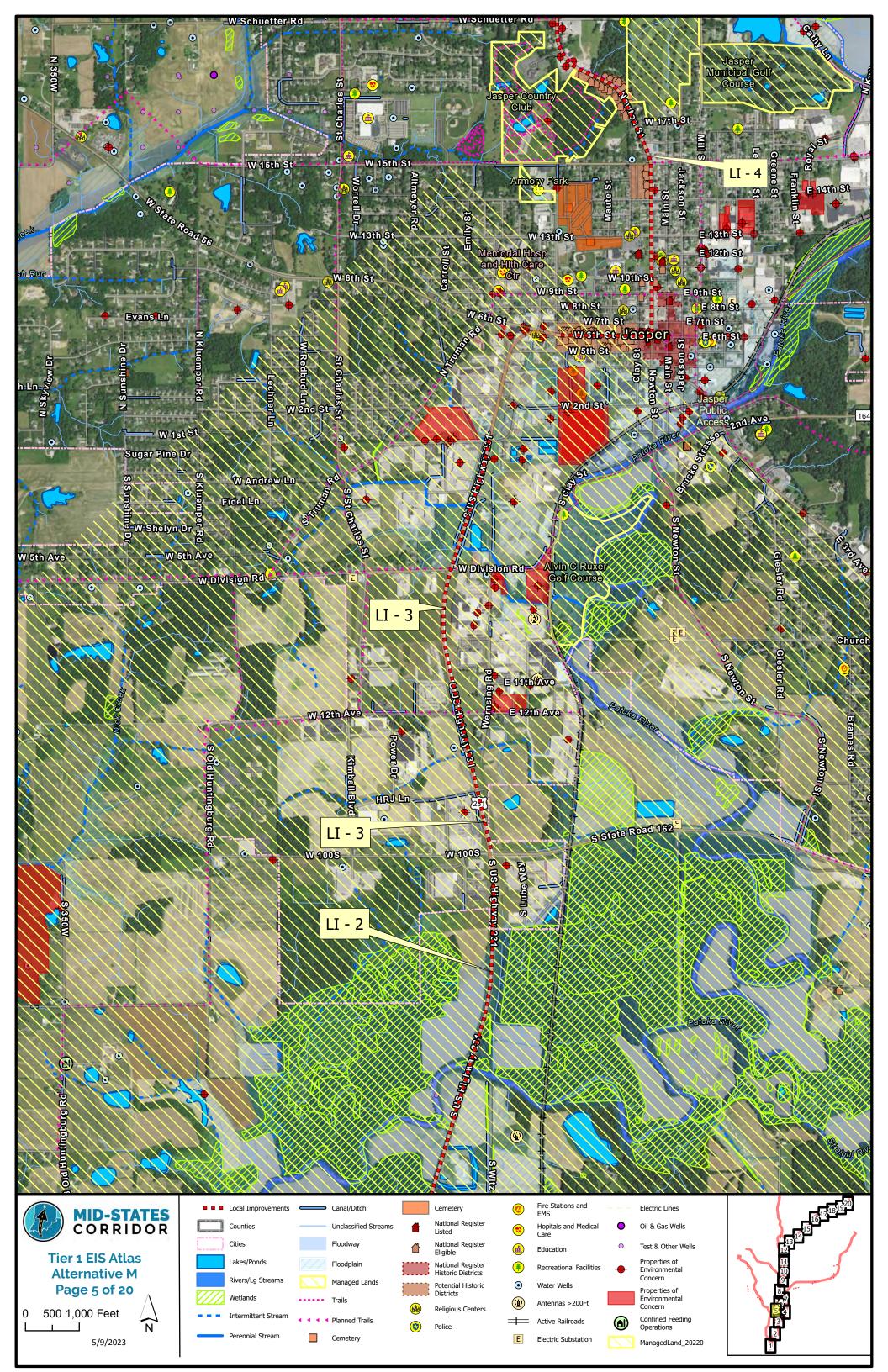


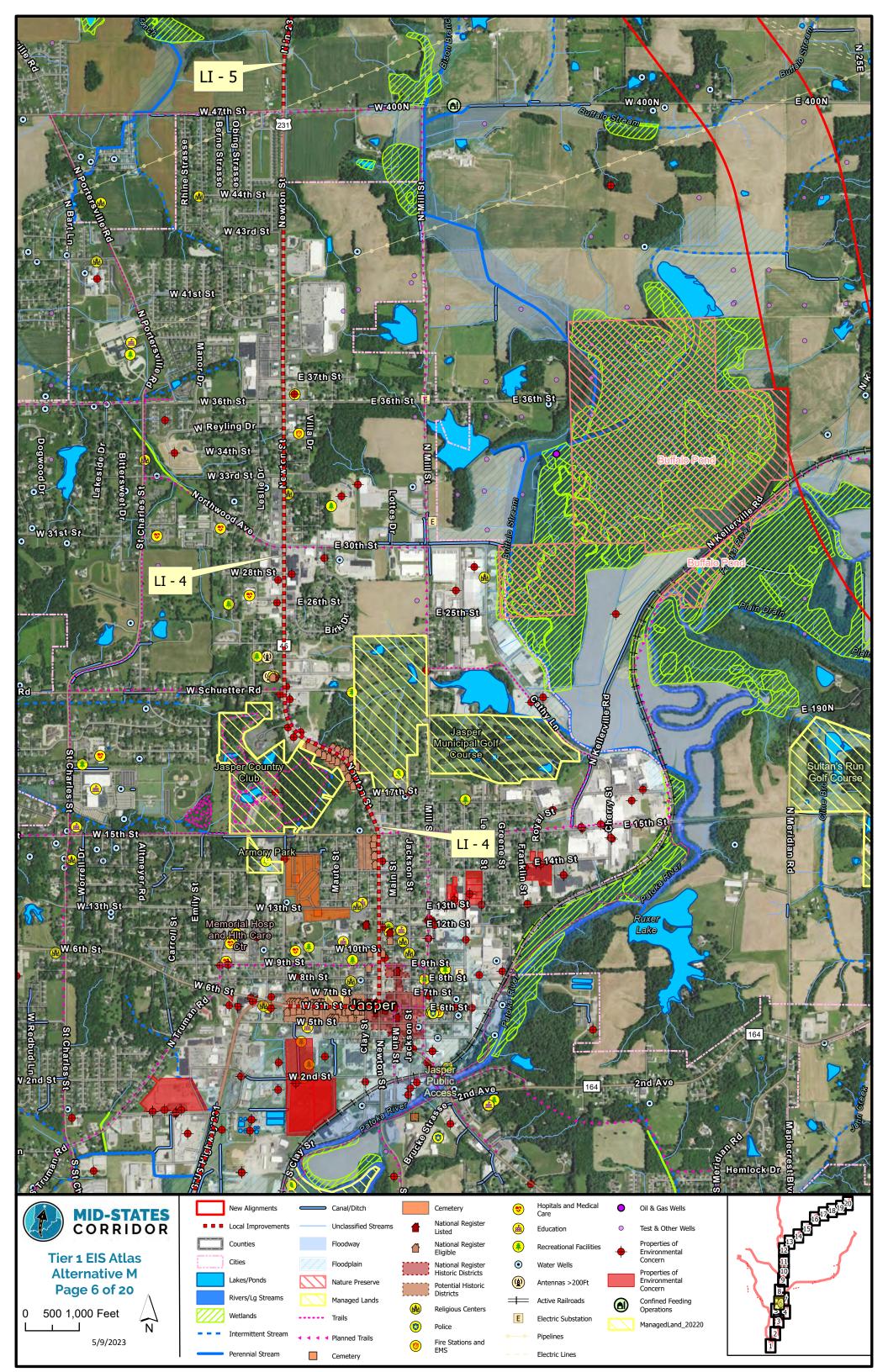


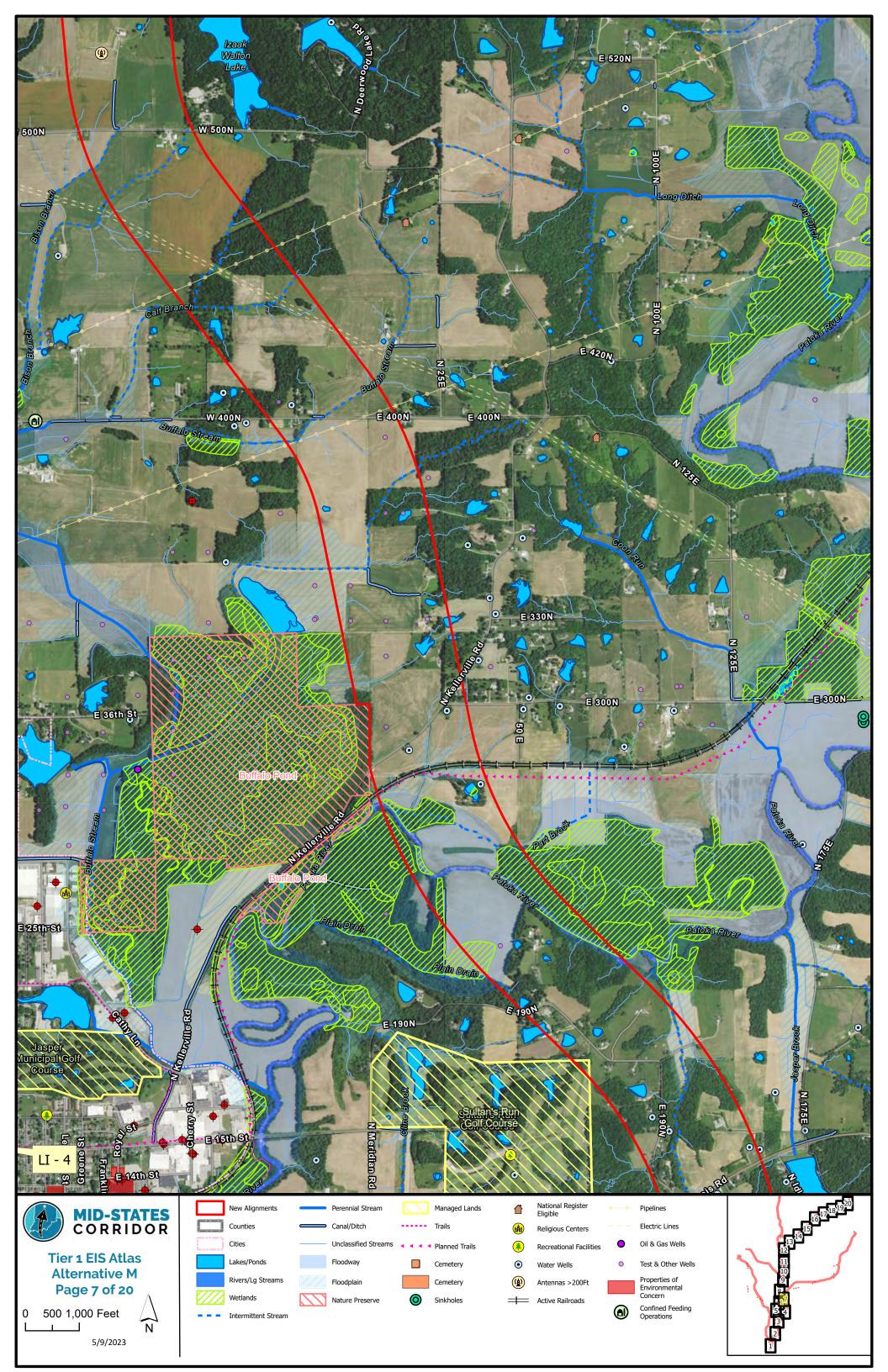


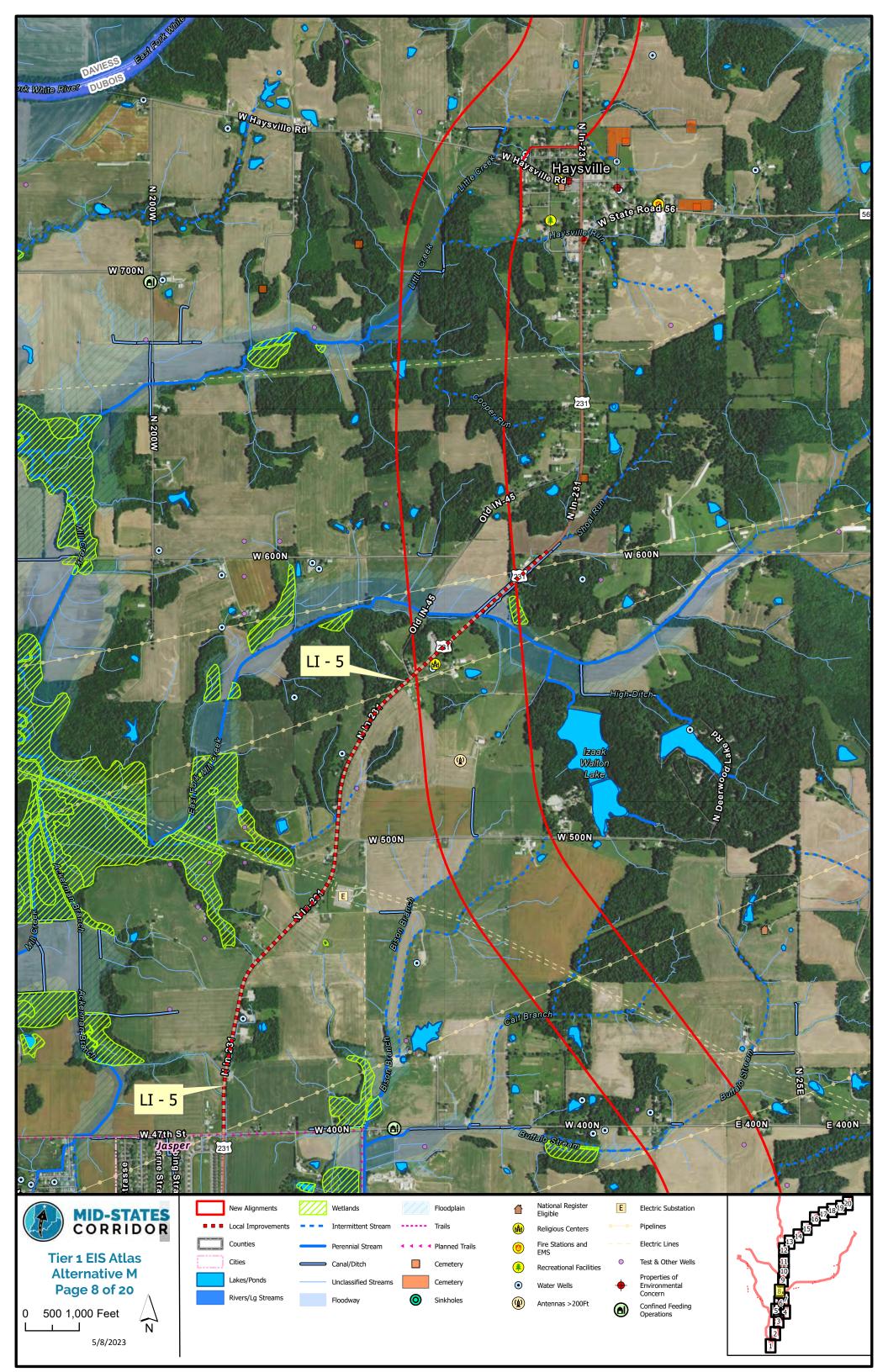




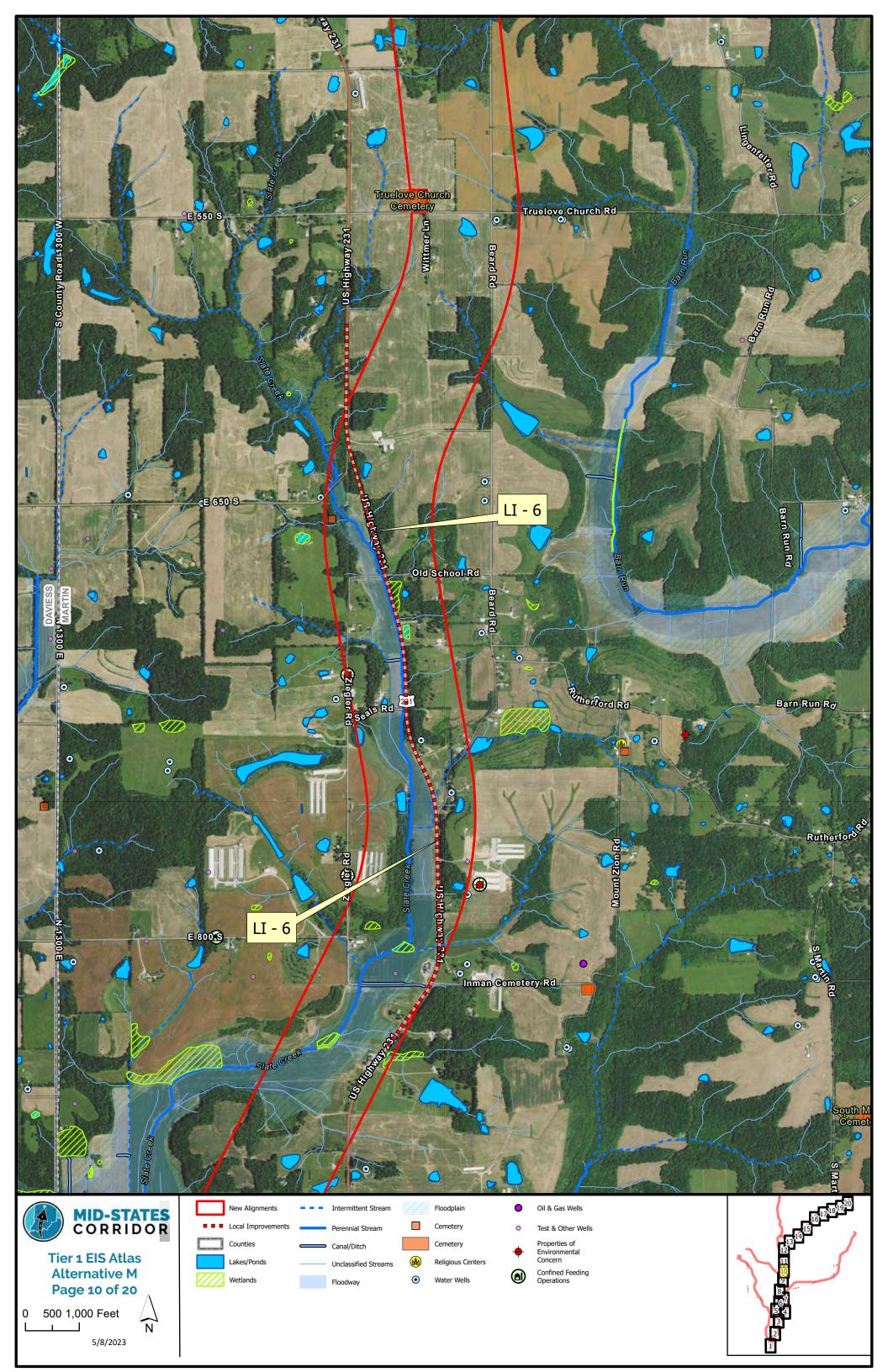


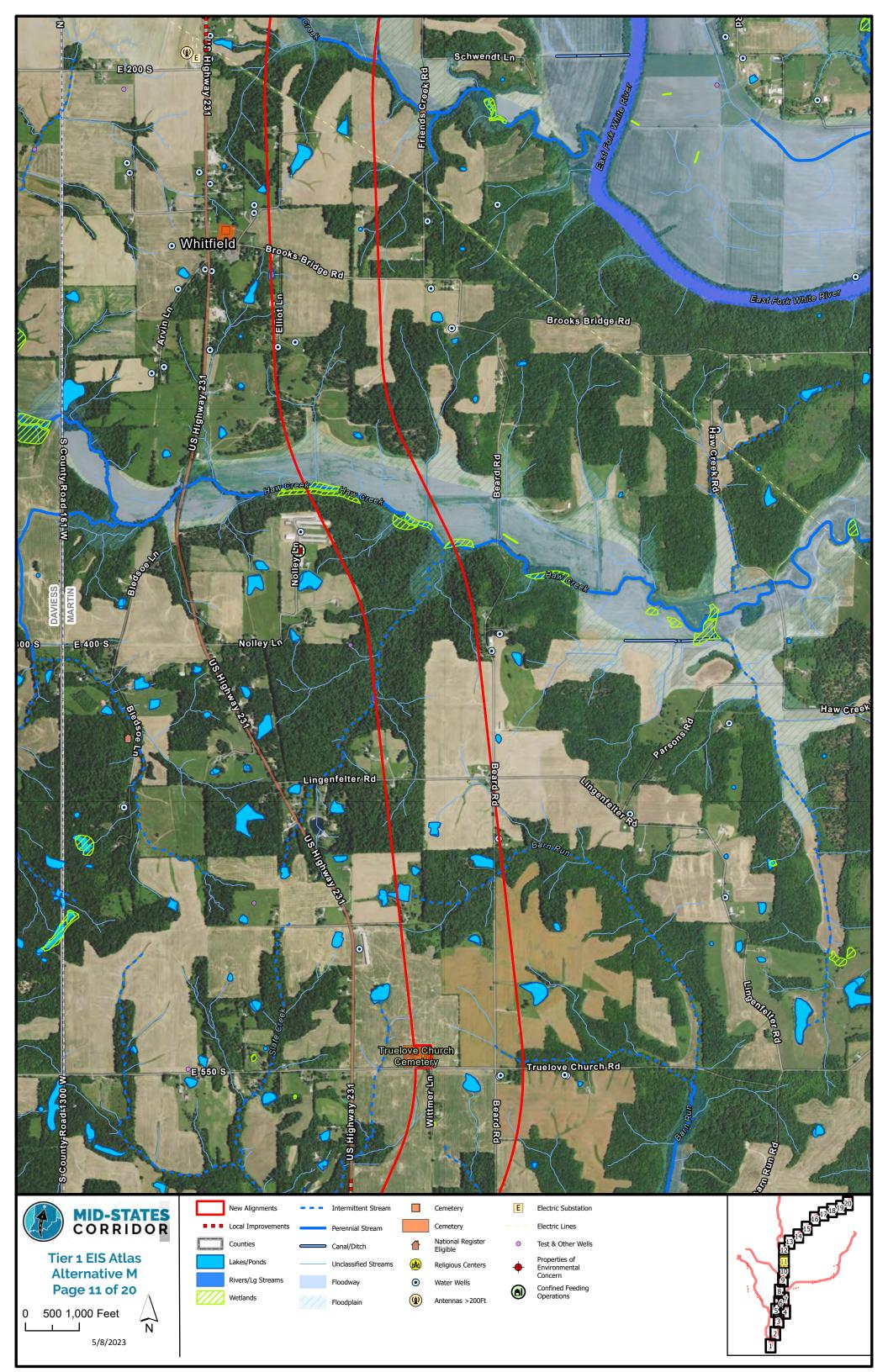


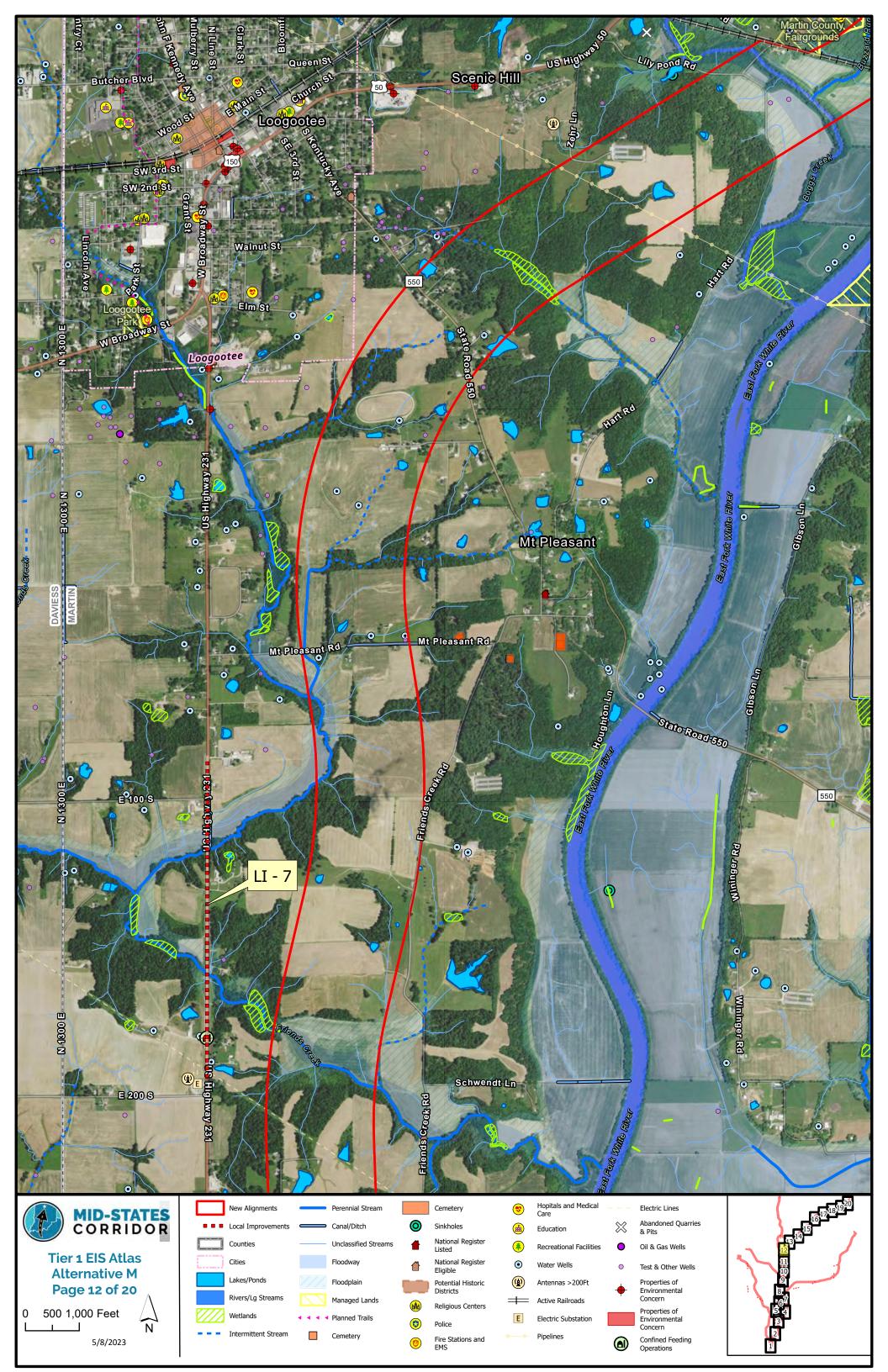


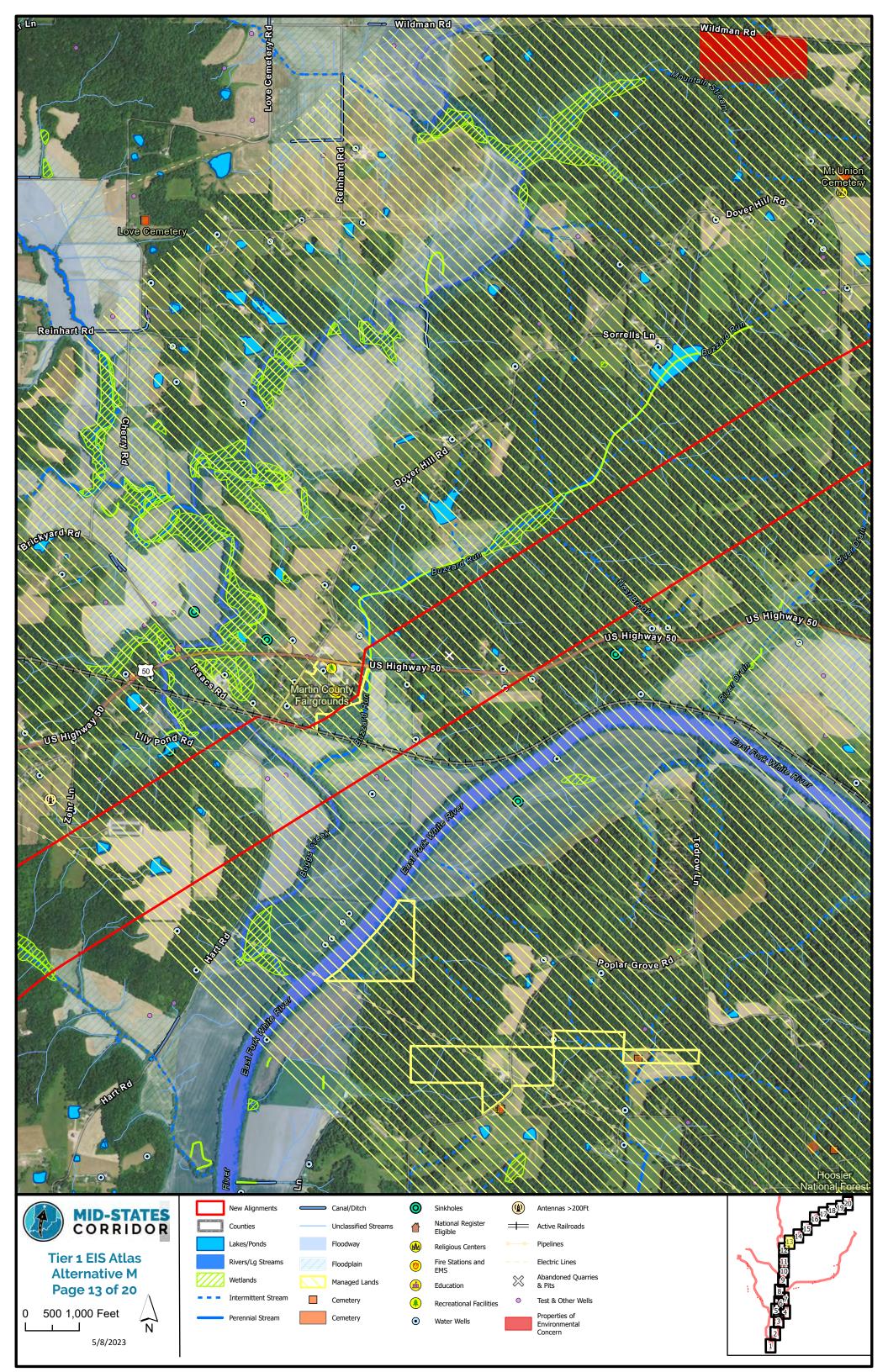


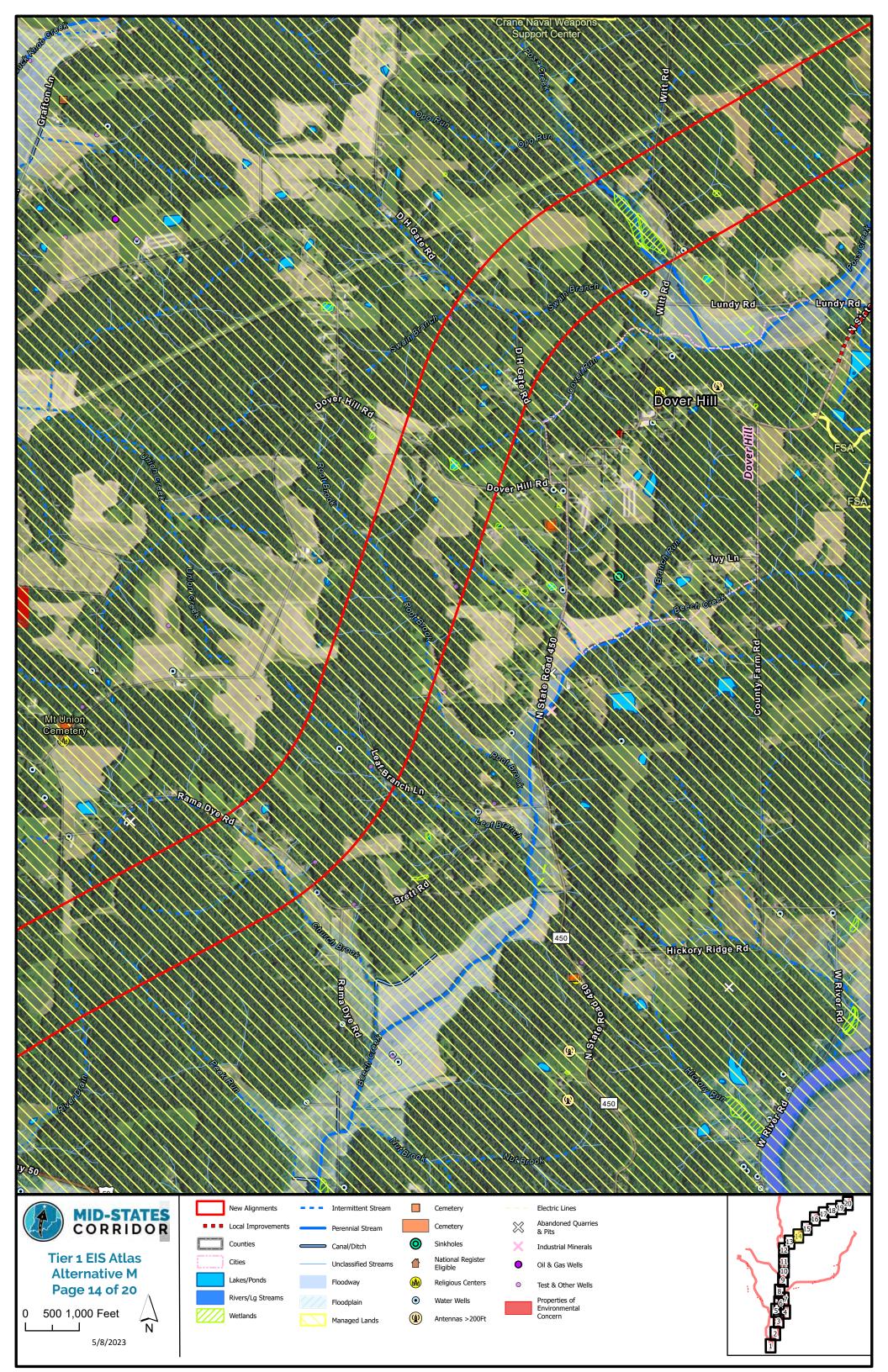


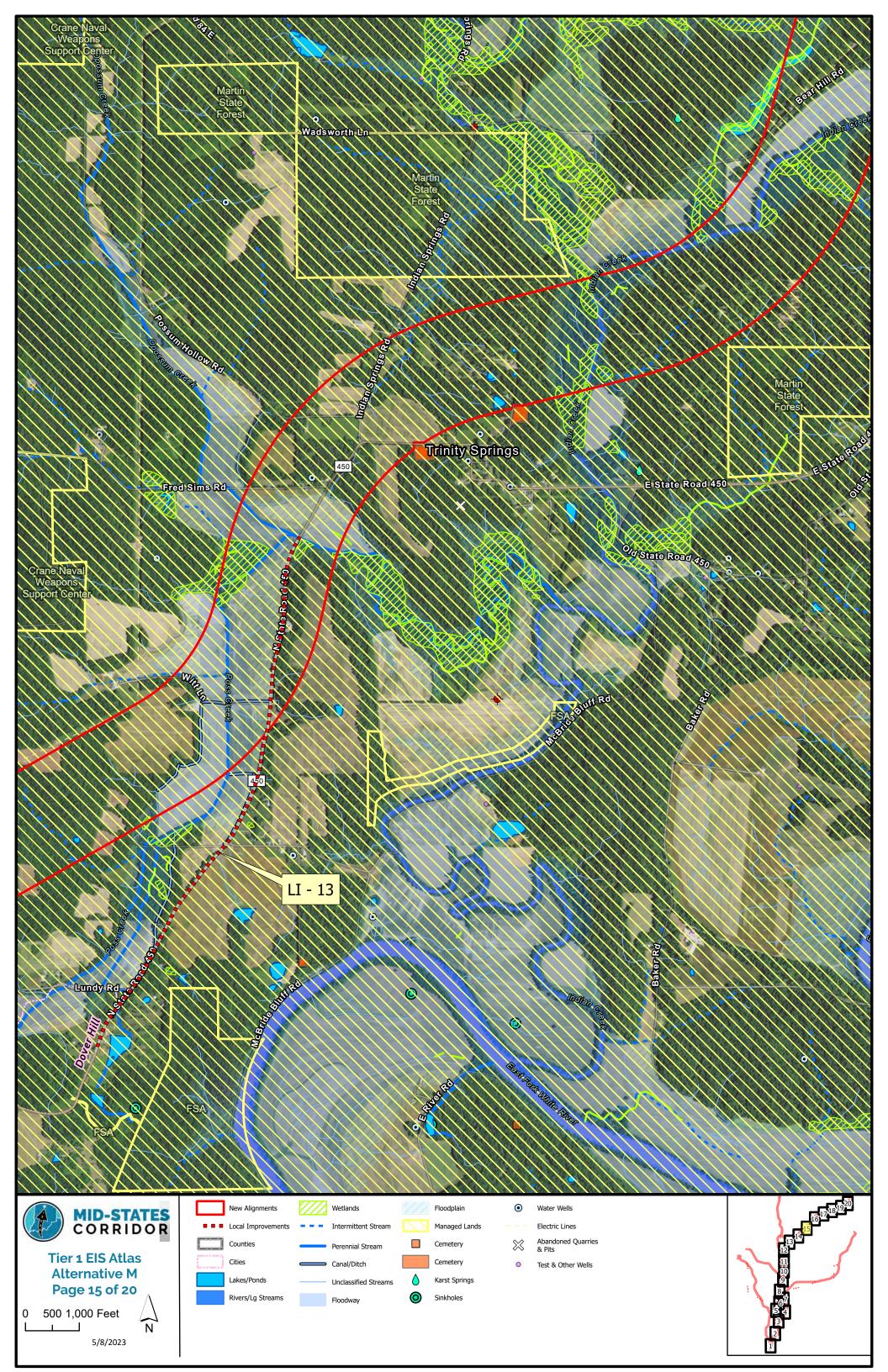


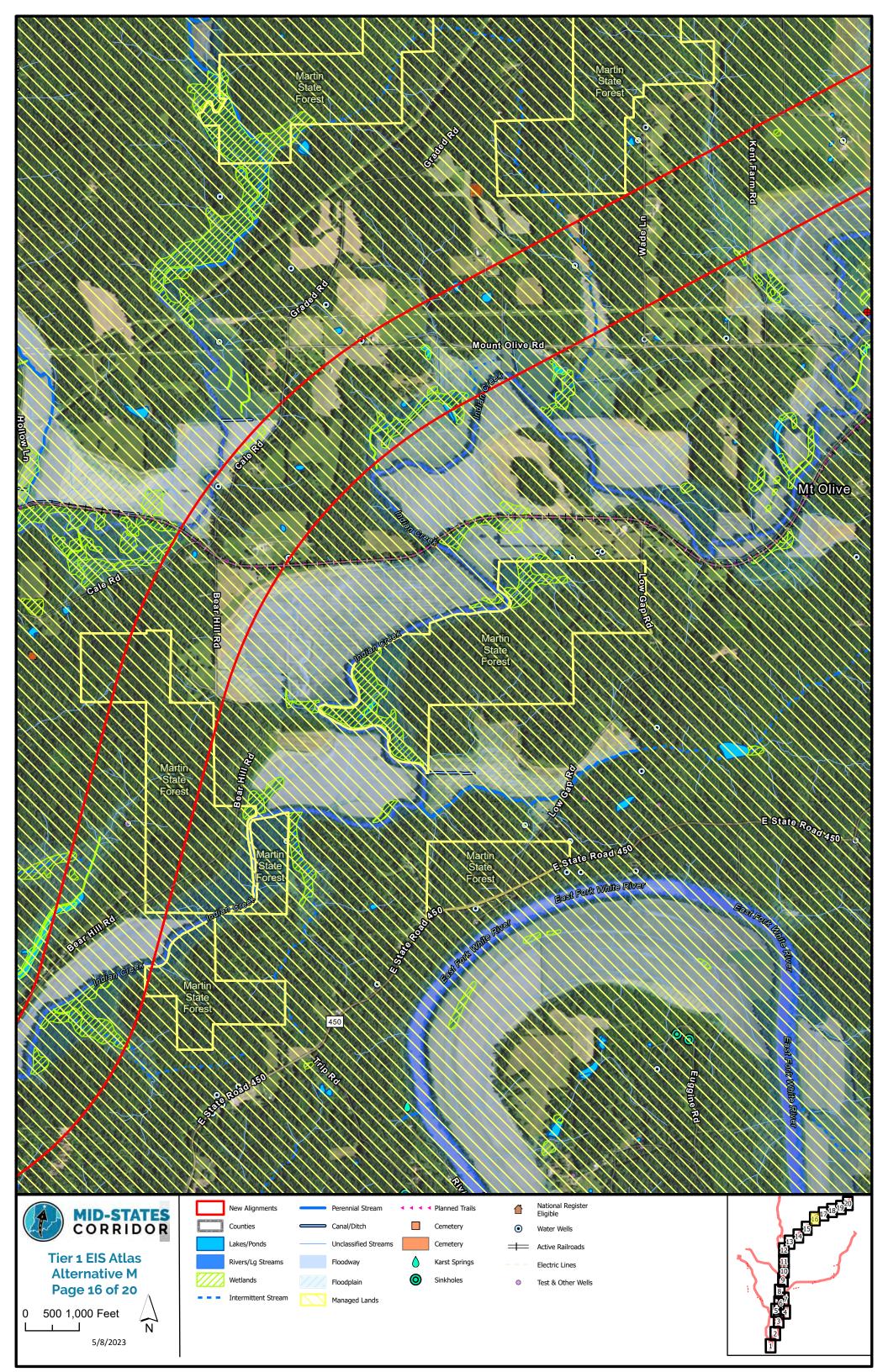


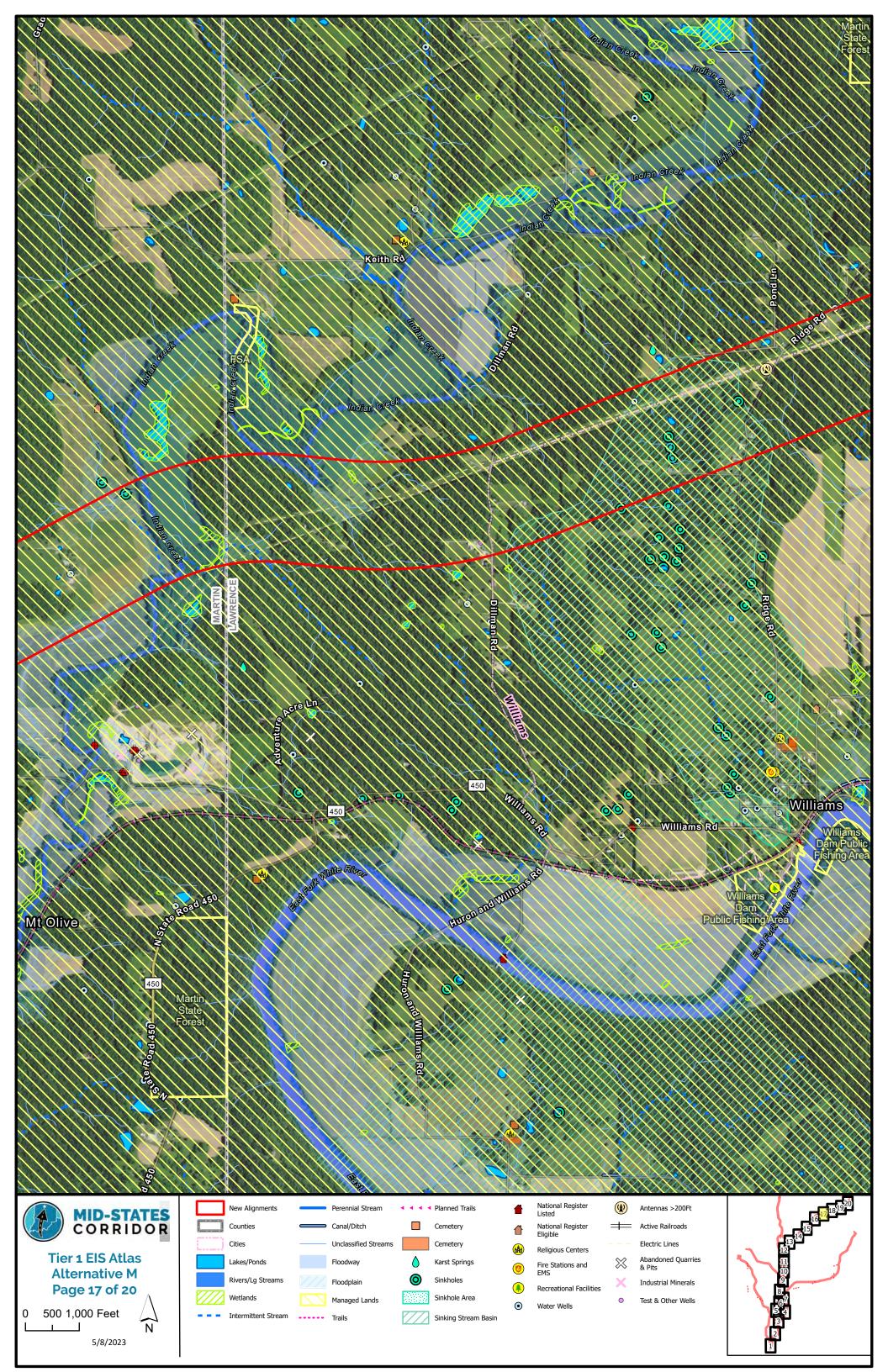


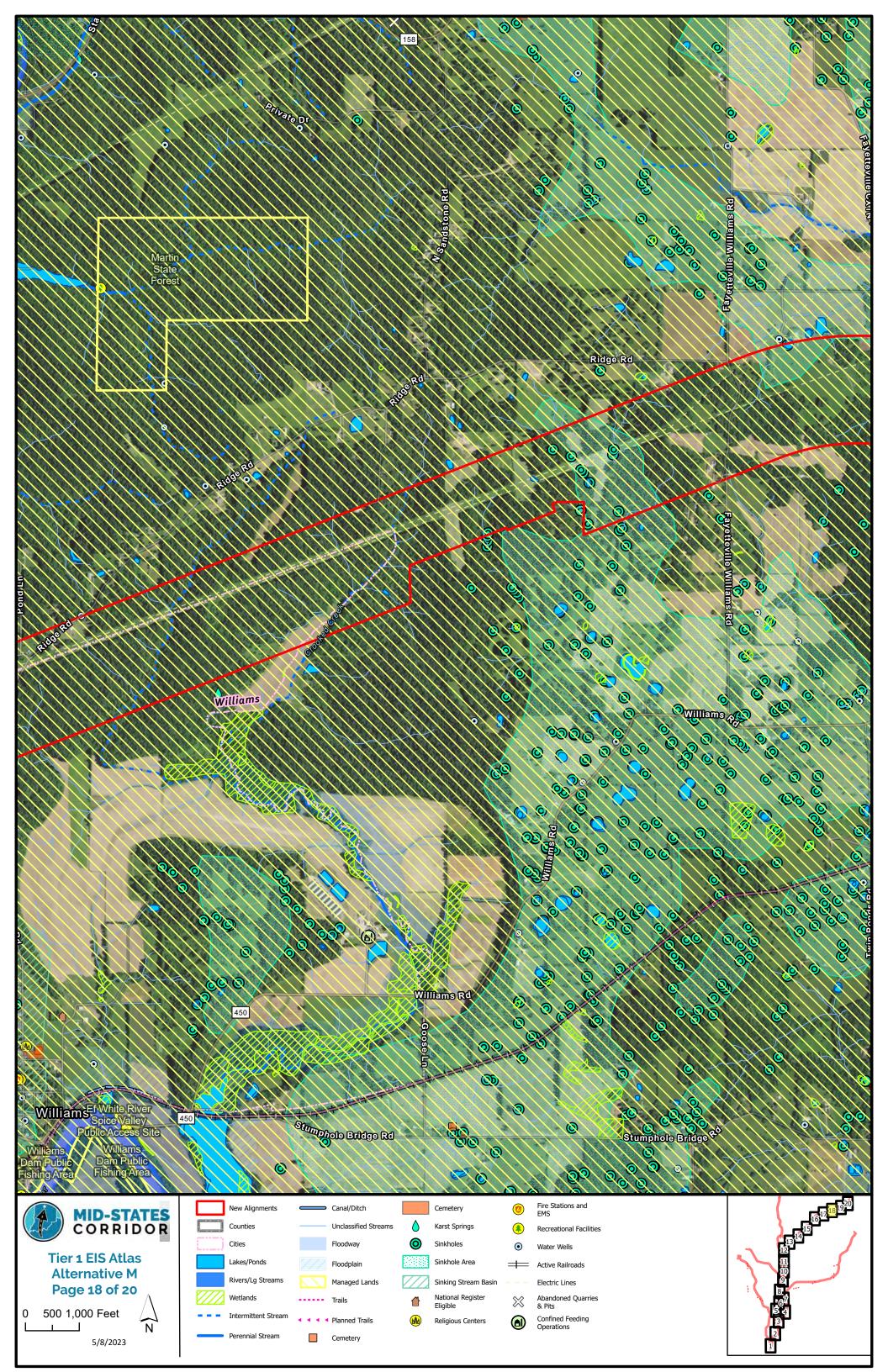


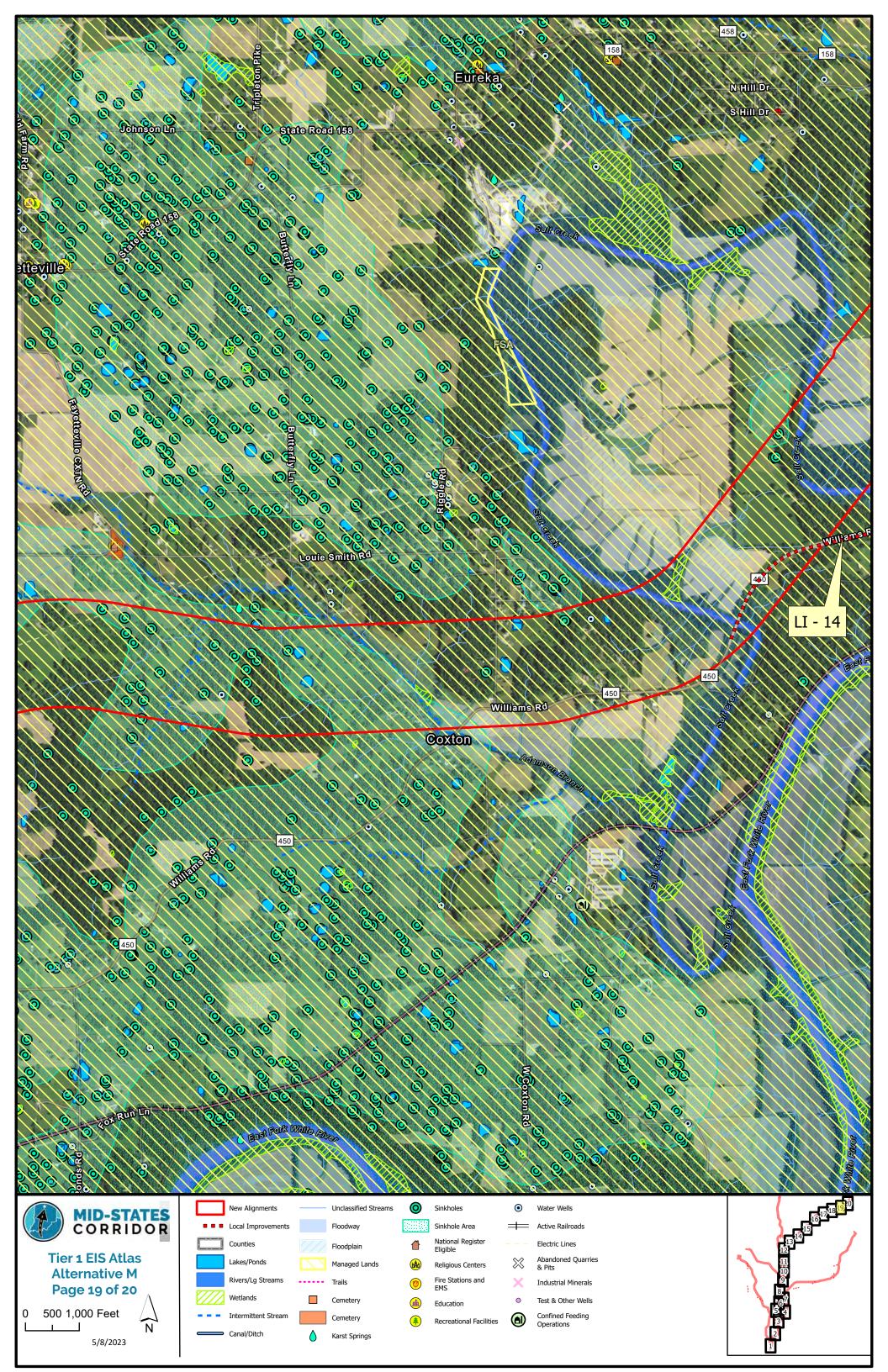


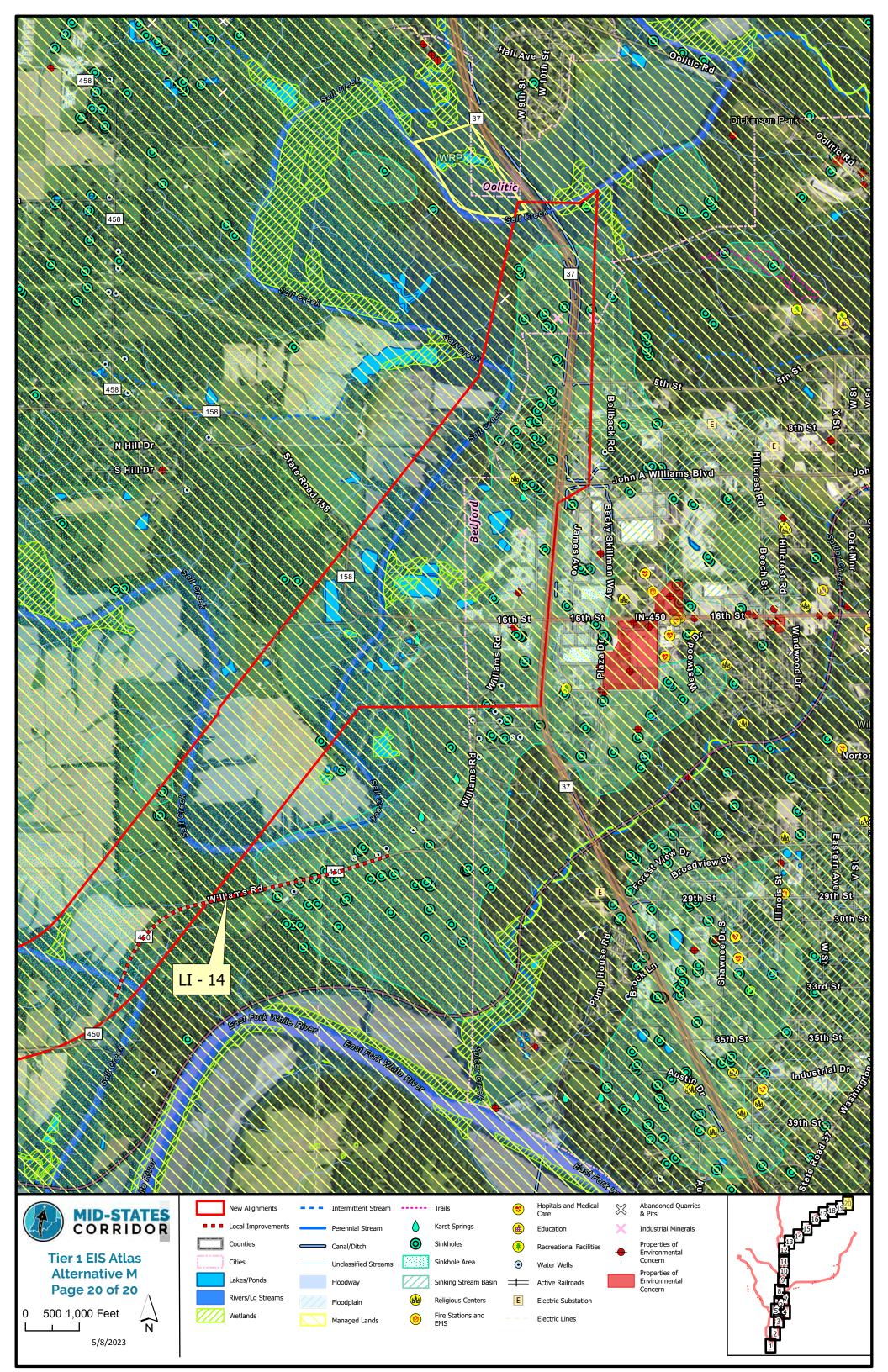






















### SPATIAL DATA DESCRIPTIONS

Aerial Photography: 2018 NAIP High Resolution (60 cm) Color Aerial Photography – 2 feet pixel resolution.

NAIP Imagery, (2018) - Shows imagery of the National Agriculture Imagery Program (NAIP) during the 2018 agricultural growing season in Indiana (from June 2018 through August 2018). This imagery has a cell size of 60 cm by 60 cm. Download: <a href="https://maps.indiana.edu/layerGallery.html?category=NAIP">https://maps.indiana.edu/layerGallery.html?category=NAIP</a>

#### Airports (Indiana Department of Transportation, 2005)

Shows public-use airports in Indiana, derived from data provided by personnel of the Indiana Department of Transportation (INDOT), Aeronautics Section. Personnel of INDOT obtained the data from the airport application/ FAA Master Record on file at the Indiana Department of Transportation, Aeronautics Section. Download: <a href="https://maps.indiana.edu/layerGallery.html?category=Airports">https://maps.indiana.edu/layerGallery.html?category=Airports</a>

Cemetery Areas (Indiana Department of Natural Resources, 2019 1:5,000) - Cemetery Site Areas in Indiana. Publication Date: April 11, 2019. Download: <a href="https://maps.indiana.edu/layerGallery.html?category=Facilities">https://maps.indiana.edu/layerGallery.html?category=Facilities</a>

Cemetery Sites (Indiana Department of Natural Resources, 2019 1:5,000) - Cemetery sites in Indiana, regardless of age, number of graves, or size of the cemetery. Publication Date: April 11, 2019. Download: <a href="https://maps.indiana.edu/layerGallery.html?category=Facilities">https://maps.indiana.edu/layerGallery.html?category=Facilities</a>

Cemetery Parcels (IGIO, 2019) - Subset of locations of parcels associated with cemeteries (class code 690) according to land parcels data maintained by County Agencies in Indiana. This data set is the most recent compilation of county-based data from local government sources, as part of the ongoing Indiana Data Sharing Initiative (IDSI) program. Publication Date: April 11, 2019. Download: <a href="https://maps.indiana.edu/layerGallery.html?category=Land">https://maps.indiana.edu/layerGallery.html?category=Land</a>

**Coal Mine Active Permits (Lochmueller Group, 2020)** – Active permitted coal mines near the Mid-States proposed Tier 1 Alternatives. Digitized by Lochmueller group from the Coal Mine Information System.

https://indnr.maps.arcgis.com/apps/webappviewer/index.html?id=f30ca6a781cb4209b6e614789ca7185b

Controlled Feeding Operation (Indiana Department of Environmental Management, 2020) - Shows swine, chicken, turkey, beef or dairy agribusinesses that have large enough numbers of animals that IDEM regulates for environmental concerns, as defined by IC 13-18-10 of the Indiana Code. Provided by personnel of the Indiana Department of Environmental Management, Office of Land Quality. Data are current as of April 2, 2020. Download: <a href="https://maps.indiana.edu/layerGallery.html?category=Agribusiness">https://maps.indiana.edu/layerGallery.html?category=Agribusiness</a> Also a layer in the RFI template last updated on April of 2020 accessed from INDOT REST data services. Download <a href="https://www.in.gov/indot/engineering/environmental-services/environmental-policy/site-assessment-and-management/">https://www.in.gov/indot/engineering/environmental-services/environmental-policy/site-assessment-and-management/</a>

**County Boundaries** - A framework layer defining the county boundaries of Indiana in polygon format. The information is intended for geographic display or analysis at a scale of 1:24,000 or smaller. Publication Date: June 21, 2002. Download: <a href="https://maps.indiana.edu/layerGallery.html?category=PLSS">https://maps.indiana.edu/layerGallery.html?category=PLSS</a>

Fire and Emergency Medical Services (Homeland Security Infrastructure Foundation-Level Data (HIFLD), 2009) - Point dataset consisting of any location where emergency medical services (EMS) personnel are stationed or based out of, or where equipment that such personnel use in carrying out their jobs is stored for ready use. Ambulance services are included even if they only provide transportation services, but not if they are located at, and operated by, a hospital. If an independent ambulance service or EMS provider happens to be collocated with a hospital, it will be included in this dataset. The dataset includes both private and governmental entities. Publication date: June 29, 2009 Download: <a href="https://maps.indiana.edu/layerGallery.html?category=CriticalFacilities">https://maps.indiana.edu/layerGallery.html?category=CriticalFacilities</a>

Fire Stations (Homeland Security Infrastructure Foundation-Level Data (HIFLD), 2009) - Point shapefile that contains locations of fire station, as developed for the Homeland Security Infrastructure Program (HSIP). The data were provided by personnel of Indiana Department of Homeland Security (IDHS) on June 29, 2009. Download: <a href="https://maps.indiana.edu/layerGallery.html?category=CriticalFacilities">https://maps.indiana.edu/layerGallery.html?category=CriticalFacilities</a>

**Fire Stations (POLIS, 2008)** Point shapefile that shows fire station facilities derived by The Polis Center as part of several "DMA2000 Multi-Hazard Mitigation Planning" (MHMP) projects, from data of the "Hazards U.S. Multi-Hazards" (Hazus-MH MR1, v 1.1) program (data from 2003) developed by the Federal Emergency Management Agency (FEMA). Currentness date: 2008 Download: <a href="https://maps.indiana.edu/layerGallery.html?category=CriticalFacilities">https://maps.indiana.edu/layerGallery.html?category=CriticalFacilities</a>

Floodplains (Indiana Department of Natural Resources, 2020) - The Indiana DNR Division of Water has undertaken a project to create and update traditional Flood Insurance Rate Maps, which are published by FEMA, to include many more stream reaches than are currently officially published in the National Flood Hazard Layer. "Best available" flood hazard data for Indiana, includes effective mapping with additional updates based on the Zone A mapping project data, DNR model reviews, and other floodplain data that is not FEMA approved but is considered "best available" by the Indiana Department of Natural Resources. Attributes indicate floodways. Data is current to February 2020. Download: <a href="https://www.in.gov/dnr/water/9846.htm">https://www.in.gov/dnr/water/9846.htm</a>

Historic Districts, National Register (Indiana Department of Natural Resources, Division of Historic Preservation and Archaeology, 2019, 1:5,000) - Historic Districts in Indiana that are included in the National Register of Historic Places Polygon Shapefile. Publication Date: April 11, 2019. Download: <a href="https://maps.indiana.edu/layerGallery.html?category=Facilities">https://maps.indiana.edu/layerGallery.html?category=Facilities</a>

Historic Structures, National Register (Indiana Department of Natural Resources, Division of Historic Preservation and Archaeology, 2019, 1:5,000) - Historic Districts in Indiana that are included in the National Register of Historic Places Polygon Shapefile. Publication Date: April 11, 2019. Download: https://maps.indiana.edu/layerGallery.html?category=Facilities

Historic Structures, Windshield Survey Geodatabase (Lochmueller Group, December 2021 and April 2023) – Structures listed on the National Register or determined Eligible for listing on the National Register within the affected project area (APE). Data was created through windshield survey and positions edited with aerial photographs and other historic structure data.

Hospitals (Homeland Security Infrastructure Foundation-Level Data, 2009) - Point dataset including General Medical and Surgical Hospitals, Psychiatric and Substance Abuse Hospitals, and Specialty Hospitals (e.g., Children's Hospitals, Cancer Hospitals, Maternity Hospitals, Rehabilitation Hospitals, etc.). Other types of hospitals are included if they were represented in datasets sent by the state. Therefore, not all of the specialty hospitals in Indiana are represented in this dataset. Hospitals operated by the Veterans Administration (VA) are included, even if the state they are located in does not license VA Hospitals. Nursing homes and Urgent Care facilities are excluded because they are included in a separate dataset. Locations that are administrative offices only are excluded from the dataset. Published date: June 29, 2009 Download: <a href="https://maps.indiana.edu/layerGallery.html?category=CriticalFacilities">https://maps.indiana.edu/layerGallery.html?category=CriticalFacilities</a>

Hospitals, Clinics (Indiana State Department of Health, 2007) - Locations of hospitals included in a "Hospital Directory" that appears on a Web page of the Indiana State Department of Health (ISDH) (http://www.indiana.gov/isdh/regsvcs/acc/hospital/wdirhos.htm), as well as the

June 16, 2023 Page 2 of 6



locations of rural health clinics included in a "Rural Health Care Clinic Directory" that appears on the ISDH Web site (http://www.in.gov/isdh/regsvcs/acc/rhcdir/wdirrhc.htm). Publication date: May 2007

Hospitals, Medical Care Facilities – (POLIS, 2008) Most complete and spatially accurate health facilities file. Point shapefile that shows medical care facilities derived by The Polis Center as part of several "DMA2000 Multi-Hazard Mitigation Planning" (MHMP) projects, from data of the "Hazards U.S. Multi-Hazards" (Hazus-MH MR1, v 1.1) program (data from 2003) developed by the Federal Emergency Management Agency (FEMA). Local jurisdiction planning teams provided updated medical care facility location and attribute information to the Polis Center at IUPUI. The Polis Center used available aerial photography to place or adjust the locations of the facilities on top of the building rooftops. Currentness date: 2008 Download: <a href="https://maps.indiana.edu/layerGallery.html?category=CriticalFacilities">https://maps.indiana.edu/layerGallery.html?category=CriticalFacilities</a>

Hospitals, Urgent Care (Homeland Security Infrastructure Foundation-Level Data, 2009) - The delivery of ambulatory medical care outside of a hospital emergency department on a walk-in basis without a scheduled appointment. The Urgent Care dataset consists of any location that is capable of providing emergency medical care and must provide emergency medical treatment beyond what can normally be provided by an EMS unit, must be able to perform surgery, or must be able to provide recuperative care beyond what is normally provided by a doctor's office. In times of emergency, the facility must be able to accept patients from the general population or patients from a significant subset of the general population (e.g., children). The newest facilities may not be included. Entities that are excluded from this dataset are administrative offices, physician offices, workman compensation facilities, free standing emergency rooms, and hospitals. Urgent Care facilities that are operated by and co-located with a hospital are also excluded because the locations are included in the hospital dataset. ID# 10194253 is a "mobile" urgent care center that provides urgent care to private residences. This entity is plotted at its administrative building. Records with "-DOD" appended to the end of the [NAME] value are located on a military base, as defined by the Defense Installation Spatial Data Infrastructure (DISDI) military installations and military range boundaries. Publication date: July 17, 2009 Download: <a href="https://hifld-geoplatform.opendata.arcgis.com/datasets/urgent-care-facilities">https://hifld-geoplatform.opendata.arcgis.com/datasets/urgent-care-facilities</a>

Hydrology, Lakes and Reservoirs (National Hydrography Dataset, 2019, 1:2400) - Lakes, ponds, reservoirs, swamps and marshes. This layer is derived from the local-resolution (1:2,400) National Hydrography Dataset (NHD), and provides currently available data as of April 26, 2019. A layer symbology file and Fcode definitions file supplement this data. Source Download: <a href="https://maps.indiana.edu/layerGallery.html?category=WaterBodies">https://maps.indiana.edu/layerGallery.html?category=WaterBodies</a>

Hydrology, Classified Streams (National Hydrography Dataset, 2019, 1:2400) - Perennial and intermittent streams, rivers, canals, ditches, drainages, artificial paths, connectors, underground streams, and pipelines. The data is a Local-Resolution National Hydrography Dataset (1:2,400), created by the United States Geological Survey (USGS) and the United States Environmental Protection Agency (EPA). This data was last updated on April 26, 2019. A pdf of Fcode definitions and a symbology layer file supplements with this file. Source Download: https://maps.indiana.edu/layerGallery.html?category=WaterBodies

**Hydrology, Refined Classified Streams Query (Lochmueller Group, 2020 editing)** - classified streams source file selected for streams, rivers, and canals/ditches. Removed connectors, underground conduits, underground pipelines, and artificial streams that overlay the waterbodies NHD file. Small model artificial paths perpendicular to the river mainlines, within the Rivers polygon NHD file were removed within the Mid-states refinement boundary.

Hydrology, Unclassified Streams (National Hydrography Dataset, 2019, 1:2400) - Unclassified flow lines are drainage ways that may or may not have water present outside of a rain even, and may or may not exhibit channelization associated with streams. The data is a Local-Resolution National Hydrography Dataset (1:2,400), created by the United States Geological Survey (USGS) and the United States Environmental Protection Agency (EPA). All new flow lines resulting from the Indiana NHD local resolution upgrade project that could not be categorized were given a generically classified as "drainageway". This data was last updated on April 26, 2019. Source Download: <a href="https://maps.indiana.edu/layerGallery.html?category=WaterBodies">https://maps.indiana.edu/layerGallery.html?category=WaterBodies</a>

**Hydrology, Rivers (National Hydrography Dataset, 2019, 1:2400)** — Rivers, inundation areas, canals, ditches, submerged streams and other linear waterbody areas. This layer is derived from the local-resolution (1:2,400) National Hydrography Dataset (NHD), and provides currently available data as of April 26, 2019. A layer symbology file and Fcode definitions file supplement this data. Source Download: <a href="https://maps.indiana.edu/layerGallery.html?category=WaterBodies">https://maps.indiana.edu/layerGallery.html?category=WaterBodies</a>

Infrastructure, Antenna (Federal Communications Commission, 2017) - locations of antenna structures that are more than 200 feet in height or located near an airport. This file is an extract of the Antenna Structure Registrate (ASR). Distributed from Homeland Security Infrastructure Foundation-Level Data (HIFLD). Download: <a href="https://hifld-">https://hifld-</a>

 $\underline{geoplat form.open data.arcgis.com/search?collection=Dataset \& group Ids=65847c150c8449649bd33a74a0e1050beautorial.geoplat for a search and the search an$ 

Infrastructure, Electric Substations (Energy Information Administration, 2020) - Electric power substations primarily associated with electric power transmission as represented by facilities and equipment that switch, transform, or regulate electric power at voltages equal to, or greater than, 69 kilovolts. Substations with a maximum operating voltage less than 69 kilovolts may be included, depending on the availability of authoritative sources, but coverage of these features should not be considered complete. Publication Date: 1/13/2020; Download: <a href="https://www.eia.gov/maps/layer\_info-m.php">https://www.eia.gov/maps/layer\_info-m.php</a>

Infrastructure, Electric Transmission Lines (Energy Information Administration, 2020) - Includes lines operated at relatively high voltages varying from 69 kV up to 765 kV which can transmit large quantities of electricity over long distances. Underground transmission lines are included where sources were available. Publication Date: 1/13/2020; Download: https://www.eia.gov/maps/layer\_info-m.php

Infrastructure, HGL Pipelines (Energy Information Administration, 2019) - Major hydrocarbon gas liquids (HGL) pipelines. Data includes interstate trunk lines and selected intrastate lines. Based on publicly available data from a variety of sources (including company websites and media reports) with varying scales and levels of accuracy. Publication Date: 10/08/2019; Download: <a href="https://www.eia.gov/maps/layer\_info-m.php">https://www.eia.gov/maps/layer\_info-m.php</a>

Infrastructure, Natural Gas Pipelines (Energy Information Administration, 2019) - Natural gas interstate and intrastate. Based on a variety of sources with varying scales and levels of accuracy and therefore accuracy is directly affected. Publication Date: 10/08/2019; Download: <a href="https://www.eia.gov/maps/layer\_info-m.php">https://www.eia.gov/maps/layer\_info-m.php</a>

Infrastructure, Petroleum Product Pipelines (Energy Information Administration) - Major petroleum product pipelines. Layer includes interstate trunk lines and selected intrastate lines. Based on publicly available data from a variety of sources with varying scales and levels of accuracy. Download: <a href="https://www.eia.gov/maps/layer\_info-m.php">https://www.eia.gov/maps/layer\_info-m.php</a>

Infrastructure, Power Plants (Energy Information Administration, 2020) - Operable electric generating plants in the United States by energy source. This includes all plants that are operating, on standby, or short- or long-term out of service with a combined nameplate capacity of 1 MW or more. Publication Date: 1/13/2020 Download: <a href="https://www.eia.gov/maps/layer\_info-m.php">https://www.eia.gov/maps/layer\_info-m.php</a>

June 16, 2023 Page 3 of 6



Karst, Sinking Areas (Indiana Geological Survey, 2002, 1:126,720) - Shows sinkhole areas (SHA) and sinking-stream basins (SSB) associated with rocks of Silurian, Devonian, and Mississippian age in southern Indiana. Shows sinkhole areas larger than 80 acres. Some sinkholes may exist outside the delineated areas, and some sinkholes may exist within the areas designated as sinking-stream basins, but such areas are not shown in this layer. The data should not be used for site-specific data analysis. The layer was compiled from unpublished work maps of Richard L. Powell. Publication Date: July 17, 2002. Download: <a href="https://maps.indiana.edu/layerGallery.html?category=Karst">https://maps.indiana.edu/layerGallery.html?category=Karst</a>

**Karst, Sinkhole points (Indiana Geological Survey, 2011)** - Shows karst sinkhole inventory for southern Indiana and northern Kentucky. It was created by the Indiana Geological Survey to support a statistical regression analysis of potential sinkhole development areas. Publication Date: December 9, 2011. Download: <a href="https://maps.indiana.edu/layerGallery.html?category=Karst">https://maps.indiana.edu/layerGallery.html?category=Karst</a>

**Karst, Spring Points (Indiana Geological Survey, 1997, 1:126,720)** - Springs in and around the karst region of south-central Indiana. Publication Download: <a href="https://maps.indiana.edu/layerGallery.html?category=Karst">https://maps.indiana.edu/layerGallery.html?category=Karst</a>

Libraries – (Indiana State Library, 2020) - Locations of public and public branch libraries. Street addresses for each library were originally provided by personnel of the Indiana State Library. Attributes include the library name, branch name, address, city, telephone numbers, and Website URLs for each location. Published date: January 21, 2020 Download: <a href="https://maps.indiana.edu/layerGallery.html?category=Facilities">https://maps.indiana.edu/layerGallery.html?category=Facilities</a>

Managed Land Areas (Indiana Department of Natural Resources, 2022) — Public and private owned managed Lands in Indiana. Subset of the Indiana Natural Heritage Data Center (INHDC) managed areas dataset provided by IDNR. It includes natural and recreation areas which are owned or managed by private owners, state agencies, federal agencies, local agencies, and non-profit organizations. Verify the appropriate use of privately owned features in this layer in publicly displayed mapping. Publication Date: June 17, 2022.

Managed Land, Martin County Fairground (Martin County Parcel Layer, 2022) – The boundary of the fairground was created by tracing the parcels from a georeferenced screenshot of the Martin County GIS for the area.

Managed Land, Mitigation Properties, I-69 (Lochmueller Group, 2017) - Property boundaries of mitigation areas developed by Lochmueller Group to meet the requirements of environmental permitting for construction of I-69 from Evansville to Indianapolis. Verify the appropriate use of this layer in publicly displayed mapping. Currentness: November 8, 2017.

Managed Land, National Natural Landmark (Lochmueller Group, 2004) -- National natural landmarks in Indiana Midstates Study Area. Information regarding landmark significance, ownership, management, area, location, and concerns are included in the attribute table. Landmark boundaries were created by on-screen digitizing using digital versions of U.S. Geological Survey quadrangle maps. Boundaries were created by visual estimation from hardcopy U.S. Geological Survey quadrangle maps provided by NPS. The National Natural Landmarks Program recognizes and encourages the conservation of outstanding examples of our country's natural history. It is the only natural areas program of national scope that identifies and recognizes the best examples of biological and geological features in both public and private ownership. Verify the appropriate use of privately owned features in this layer in publicly displayed mapping. Publication date: August 4, 2004

Managed Land, Easement Areas (National Resource Conservation Service, 2020) - Aggregate layer of conservation easements received from each state used to identify, monitor, and enhance the spatial accuracy of restoration program polygons. U.S. Department of Agriculture, Service Center Agencies should be acknowledged as the data source. Verify the appropriate use of privately owned features in this layer in publicly displayed mapping. Publication Data: January 1, 2020. Download: <a href="https://gdg.sc.egov.usda.gov/GDGOrder.aspx?order=QuickState">https://gdg.sc.egov.usda.gov/GDGOrder.aspx?order=QuickState</a>

Managed Land, Protected Lands (GAP 2018) - The USGS Protected Areas Database of the United States (PAD-US) is the nation's inventory of protected areas, including public land and voluntarily provided private protected areas. Most are public lands owned in fee; however, long-term easements, leases, agreements, Congressional (e.g. 'Wilderness Area'), Executive (e.g. 'National Monument'), and administrative designations (e.g. 'Area of Critical Environmental Concern') documented in agency management plans are also included. Publication date: September 30, 2018 Download: <a href="https://www.usgs.gov/core-science-systems/science-analytics-and-synthesis/gap/science/pad-us-data-overview?qt-science\_center\_objects">https://www.usgs.gov/core-science-systems/science-analytics-and-synthesis/gap/science/pad-us-data-overview?qt-science\_center\_objects</a>

Minerals, Abandoned Quarries (Indiana Geological Survey, 1998) - Shows abandoned quarry locations that have locational information that is adequate to determine coordinate clues. Derived from information in Indiana Geological Survey Computer Database 2. Download: <a href="https://maps.indiana.edu/layerGallery.html?category=IndustrialMinerals">https://maps.indiana.edu/layerGallery.html?category=IndustrialMinerals</a>

Minerals, Abandoned Sand and Gravel Pits (Indiana Geological Survey, 1992) - Shows the locations of abandoned sand and gravel pits from the 'Abandoned Sand and Gravel Pit Database' of the Indiana Geological Survey. Derived from the following unpublished report: Industrial Minerals Section Memorandum Report 98, Indiana Geological Survey. Download: https://maps.indiana.edu/layerGallery.html?category=IndustrialMinerals

Minerals, Industrial Minerals Active Production Sites (Indiana Geological Survey, 2016) - Active Industrial Mineral Operations, 2016 - Shows the locations of industrial mineral operations that were active in 2016 in Indiana. These operations extracted and (or) produced the following commodities: cement, clay and shale, crushed stone, dimension limestone, dimension sandstone, gypsum, lime, peat, slag, and sand and gravel. Compiled by the Indiana Geological Survey as a publication named '2016 Directory of Industrial Mineral Producers in Indiana.' Download: <a href="https://maps.indiana.edu/layerGallery.html?category=IndustrialMinerals">https://maps.indiana.edu/layerGallery.html?category=IndustrialMinerals</a>

Minerals, Industrial Mineral Data (Indiana Geological Survey, 1989) - Shows the distribution of stratigraphic data for various industrial minerals in Indiana. Data were derived from cores, measured samples, mine samples, outcrops, quarries, and well logs. Download: <a href="https://maps.indiana.edu/layerGallery.html?category=IndustrialMinerals">https://maps.indiana.edu/layerGallery.html?category=IndustrialMinerals</a>

Museums – (Indiana Geological Survey, 2007) - Locations of museums. Using street addresses obtained from Web pages, a shapefile was created using the "Geocoding" tool in ESRI ArcMap 9.2 and street information licensed from Tele Atlas, Dynamap 2000, v. 17.0. Published date: May 31, 2007 Download: <a href="https://maps.indiana.edu/layerGallery.html?category=Facilities">https://maps.indiana.edu/layerGallery.html?category=Facilities</a>

Naloxone Providers (Indiana State Department of Health, 2018) - Produced from data that were harvested on February 26, 2018 from the "Overdose Prevention Therapy-Indiana Registry" website of the Indiana State Department of Health (ISDH). These data should not be considered completely current, as entities could potentially be added or removed from the registry since the last date of publication. For the most current information about naloxone entities, and other related online resources, please visit the ISDH optIN Registry website (https://optin.in.gov/). "Naloxone Entities" may include pharmacies, pharmacists or other non-pharmacy organizations, non-profit entities or individuals that are in a position to assist an individual who, there is reason to believe, is at risk of experiencing an opioid-related overdose. Publication date: February 26, 2018 Download: <a href="https://maps.indiana.edu/layerGallery.html?category=Facilities">https://maps.indiana.edu/layerGallery.html?category=Facilities</a>

**Petroleum Well Locations** - Petroleum Well Locations in Indiana. Created from data in the Indiana Geological Survey Petroleum Well Database, which is a component of the IGS Petroleum Database Management System (PDMS). The database includes records obtained from the IGS petroleum well files, which represent the most comprehensive collection of petroleum-related well records in the state. Publication Date: January 08, 2015. Download: <a href="https://maps.indiana.edu/layerGallery.html?category=Petroleum">https://maps.indiana.edu/layerGallery.html?category=Petroleum</a>

June 16, 2023 Page 4 of 6



Place Boundaries (TIGER 2019) – Legally incorporated places and census CDP concentrations. An incorporated place usually is a city, town, village, or borough, but can have other legal descriptions. CDPs are delineated for the decennial census as the statistical counterparts of incorporated places. CDPs are delineated to provide data for settled concentrations of population that are identifiable by name, but are not legally incorporated under the laws of the state in which they are located. Publication Date: June 6, 2019. Download: <a href="https://www.census.gov/cgi-bin/geo/shapefiles/index.php">https://www.census.gov/cgi-bin/geo/shapefiles/index.php</a>

Police Stations (POLIS Center, 2008): Point shapefile that shows police station facilities derived by The Polis Center as part of several "DMA2000 Multi-Hazard Mitigation Planning" (MHMP) projects, from data of the "Hazards U.S. Multi-Hazards" (Hazus-MH MR1, v 1.1) program (data from 2003) developed by the Federal Emergency Management Agency (FEMA). Currentness date: 2008 Download: <a href="https://maps.indiana.edu/layerGallery.html?category=CriticalFacilities">https://maps.indiana.edu/layerGallery.html?category=CriticalFacilities</a>

Police Stations, Local (Homeland Security Infrastructure Foundation-Level Data, 2009) - Point locations and tabular information pertaining to a wide range of law enforcement entities. Law Enforcement agencies "are publicly funded and employ at least one full-time or part-time sworn officer with general arrest powers". This is the definition used by the US Department of Justice - Bureau of Justice Statistics (DOJ-BJS) for their Census of State and Local Law Enforcement Agencies (CSLLEA). Federal level law enforcement agencies are excluded from this effort. The primary sources for this effort are the DOJ-BJS CSLLEA from 2008 and the previously mentioned 2009 feature class from Homeland Security Infrastructure Foundation-Level Data (HIFLD). Currentness date: 2009 Download: <a href="https://hifld-geoplatform.opendata.arcgis.com/datasets/local-law-enforcement-locations">https://hifld-geoplatform.opendata.arcgis.com/datasets/local-law-enforcement-locations</a>

Populated Places (USGS GNIS, 2020) -- Information about all communities throughout the United States that are described in the database. The Geographic Names Information System contains information about physical and cultural geographic features of all types. The database holds the federally recognized name of each feature and defines the feature location by state, county, USGS topographic map, and geographic coordinates. Update date: March, 2020 Download: <a href="https://www.usgs.gov/core-science-systems/ngp/board-on-geographic-names/download-gnis-data">https://www.usgs.gov/core-science-systems/ngp/board-on-geographic-names/download-gnis-data</a>

#### Properties of Environmental Concern (AP Engineering & Consulting, Inc., 2022)

Properties of environmental concern for potential Hazmat issues, located within 0.5 miles of the centerline of new alignments and local improvements. Exceptions are local improvements #3 and #4, whose study area was within 500 feet of the centerline of the local improvement. Sites were identified by a data and document review. Properties were given a concern level of low, medium, and high.

Properties of Environmental Concern (INDOT Red Flag Inventory (RFI) (Indiana Department of Transportation, 2022) – The Environmental Services Division of INDOT has developed the Site Assessment & Management Manual which details GIS methodology for determining hazardous materials concerns for a proposed project. The purpose of this investigation is to simply identify and highlight areas of concern which appear on publicly available standard sources that are near the proposed project. The Red Flag Inventory (RFI) investigation uses GIS data from numerous data sources. Most of the data are single point files and are intended to represent a facility. The location of the symbol within the GIS data is merely for reference, many facilities encompass large parcels, and some symbols may be incorrectly located. Further guidance can be found within the Site Assessment & Management Manual. The RFI template was last updated on April of 2020 and contains layers accessed from INDOT REST data services. Download <a href="https://www.in.gov/indot/engineering/environmental-services/environmental-policy/site-assessment-and-management/">https://www.in.gov/indot/engineering/environmental-services/environmental-policy/site-assessment-and-management/</a>

Railroad, Active (Indiana Department of Transportation, 2006, 1:1,200) - The active railroad system of Indiana. Recent 2006 edits include removal of abandoned rail lines and inclusion of ownership changes. Attributes include contact names, phone numbers, mailing addresses, and freight classifications. The data were derived from pre-existing INDOT basemap, the State of Indiana 2005 Rail System Map, and an old Indiana Rail System Map (showing abandoned rail lines). Provided to personnel of the Indiana Geological Survey (IGS) by Freight Rail Planner, Office of Railroads, Multi-Modal Transportation Division, Indiana Department of Transportation. Publication: August 8, 2006 Download: <a href="https://maps.indiana.edu/layerGallery.html?category=Railroads">https://maps.indiana.edu/layerGallery.html?category=Railroads</a>

Recreational Facilities (Indiana Department of Natural Resources, 2009) - Sites that have outdoor recreation facilities. It includes facilities managed by federal, state, and local governments, as well as non-government organizations, private and commercial entities, and schools. It does not include sites that are private and not open to the public. This layer is archival and no longer maintained. Points of interest must be verified. Currentness: February 26, 2009 Download: <a href="https://maps.indiana.edu/layerGallery.html?category=Recreation">https://maps.indiana.edu/layerGallery.html?category=Recreation</a>

Religious Centers (Bernardin, Lochmueller & Associates, 2007, 1:24,000) - This data set was compiled by personnel of Bernardin, Lochmueller & Associates (BLA) from the United States Geological Survey (USGS) Geographic Names Information System (GNIS), USGS topographic map review, and locating addresses found on various religious listing web sites. To find out more about the USGS, GNIS visit http://geonames.usgs.gov/domestic/index.html. Web sites used to obtain address listings for additional listings include - Dharma Web <a href="http://www.dharmaweb.org/index.php/Indiana">http://www.dharmaweb.org/index.php/Indiana</a>, Jewish Finder <a href="http://www.ujc.org/ir\_LL\_category.html?state=in">http://www.mormon.org/worshipwithus/1,20864,,00.html</a>.

Roads (Indiana Department of Transportation, 2015, 1:24,000) - Roads in Indiana, consisting of city streets, county roads, and U.S., state and interstate roads, and other roads. These data are from the Indiana County Log Line Inventory compiled by Road Inventory of the Indiana GIS Department of Transportation (INDOT). County Log line inventory is as of 2006-2015. Download: <a href="https://maps.indiana.edu/layerGallery.html?category=Streets">https://maps.indiana.edu/layerGallery.html?category=Streets</a>

Schools (POLIS, 2008) - School facilities with the exception of some universities. This data set was derived by The Polis Center as part of several "DMA2000 Multi Hazard Mitigation Planning" (MHMP) projects, from data of the "Hazards U.S. Multi-Hazards" (Hazus-MH MR1, v 1.1) program (data from 2003) developed by the Federal Emergency Management Agency (FEMA). Currentness: 2008 Download: <a href="https://maps.indiana.edu/layerGallery.html?category=CriticalFacilities">https://maps.indiana.edu/layerGallery.html?category=CriticalFacilities</a>

Schools, Child Care (Homeland Security Infrastructure Foundation-Level Data, 2019) - Locations of center based child day care locations (including those located at schools and religious institutes) and does not include group, home, and family based child day cares. All the data was acquired from respective states departments or their open source websites and only contains data provided by these sources. The TYPE attribute categorizes every child day care into Center Based, School Based, Head Start, or Religious Facility solely based on the type of facility where the child day care center is geographically located. Publication date: June 23, 2019 Download: <a href="https://hifld-geoplatform.opendata.arcgis.com/datasets/child-care-centers">https://hifld-geoplatform.opendata.arcgis.com/datasets/child-care-centers</a>

Schools, Colleges (Indiana Commission for Higher Education, 2007) - Locations of colleges and universities (including 2- and 4-year public institutions and independent institutions) listed on a directory obtained from the Indiana Commission for Higher Education (http://www.che.state.in.us/schools/interactivelist.shtml). Publication date: June 4, 2007 Download: https://maps.indiana.edu/layerGallery.html?category=Schools

Schools, Private (Homeland Security Infrastructure Foundation-Level Data, 2016) - Private elementary and secondary education facilities as defined by the Private School Survey (PSS, https://nces.ed.gov/surveys/pss/), National Center for Education Statistics (NCES,

June 16, 2023 Page 5 of 6



https://nces.ed.gov), US Department of Education for the 2015-2016 school year. This includes all prekindergarten through 12th grade schools as tracked by the PSS. Data Currentness: 2016 Download: <a href="https://hifld-geoplatform.opendata.arcgis.com/datasets/private-schools">https://hifld-geoplatform.opendata.arcgis.com/datasets/private-schools</a>

Schools, Public - (Homeland Security Infrastructure Foundation-Level Data, 2016) - All Public elementary and secondary education facilities as defined by the Common Core of Data(CCD, https://nces.ed.gov/ccd/), National Center for Education Statistics (NCES, https://nces.ed.gov), US Department of Education for the 2015-2016 school year. This includes all Kindergarten through 12th grade schools as tracked by the Common Core of Data. Included in this dataset are military schools referenced in the city field with an APO or FPO address. Data Currentness: 2016 Download: https://hifld-geoplatform.opendata.arcgis.com/datasets/public-schools

Trails – (Indiana Department of Natural Resources, 2022) Public, off-road recreation and transportation trails in Indiana. It includes trails managed by federal, state, and local governments, as well as non-government organizations. It includes trails that are open, under development, planned, and potential; please check the STATUS field. Updated February 02, 2022. Download: <a href="https://maps.indiana.edu/layerGallery.html?category=Recreation">https://maps.indiana.edu/layerGallery.html?category=Recreation</a>

Trails, City of Jasper – (City of Jasper, Indiana, 2022) Trails data provided by the City of Jasper for use in the March 2022 Jasper Trail Plan.

Wells – (Indiana Department of Natural Resources, 2019) Water Well Locations in Indiana. Publication Date: June 13, 2019. Download: <a href="https://maps.indiana.edu/layerGallery.html?category=WaterWells">https://maps.indiana.edu/layerGallery.html?category=WaterWells</a>

June 16, 2023 Page 6 of 6