Chapter 3.0 Affected Environment & Environmental Consequences

3.1 Introduction

This chapter of the Environmental Assessment (EA) describes the resources that may be affected by the Preferred Alternative and the No Action Alternative. This chapter also presents an analysis of the reasonably foreseeable direct, indirect, and cumulative impacts of the Preferred Alternative when compared with those of the No Action Alternative, as well as mitigation measures to avoid or minimize such impacts. Each resource category listed below includes first a summary of the regulatory setting and then an analysis of the topic relative to the Preferred Alternative and the No Action Alternative, as well as any suggested mitigation plans. **Table 3-3 Mitigation Summary of the Preferred Alternative** at the end of this chapter provides a summary of impacts and mitigation associated with the Preferred Alternative.

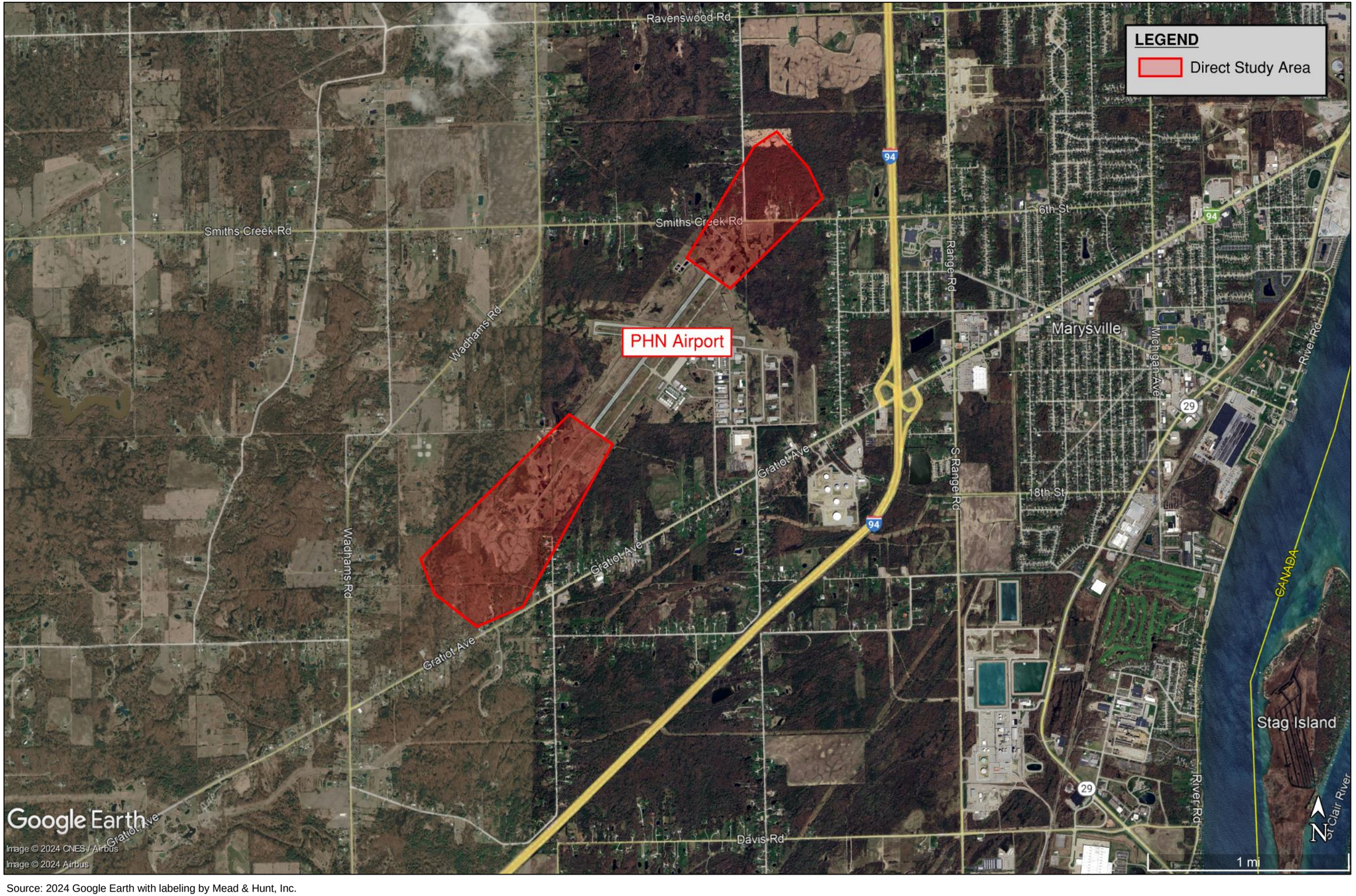
To help identify measures to first avoid, then minimize, and lastly mitigate impacts of the Preferred Alternative, the St. Clair County International Airport (Airport or PHN), the Michigan Department of Transportation Office of Aeronautics (MDOT AERO), and various other regulatory agencies with jurisdiction or permitting authority over a particular resource category in the project area provided guidance.

Figure 3.0 Direct Impacts Study Area provides a map of the study area used to determine the direct impacts from the implementation of the Preferred Alternative. Direct impacts are defined as effects occurring at the same place and time as the proposed project. Direct impacts can be caused by activities such as earth moving activities or obstruction removals.

Figure 3.1 Indirect Impacts Study Area provides a map of the study area used to determine indirect impacts from the implementation of the Preferred Alternative. Indirect effects are caused by actions that occur later in time than the proposed project or are farther removed in distance but are still reasonably foreseeable. Stormwater runoff over time degrading local water resources is an example of indirect impacts.

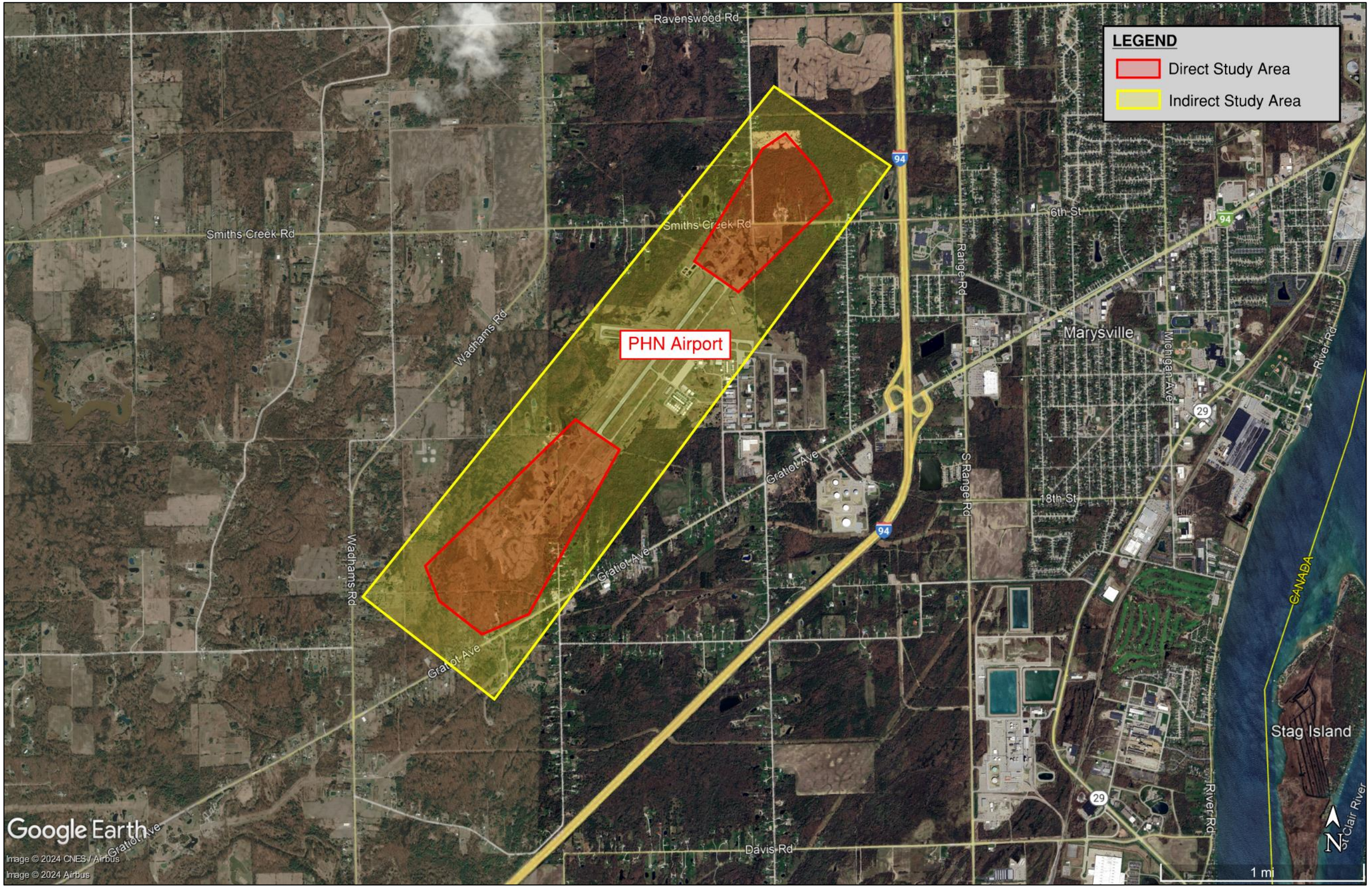
Tree obstructions to various imaginary surfaces in the approaches of Runway 4/22 require removal to comply with Federal Aviation Administration (FAA) guidance. As described in previous chapters, the Airport is proposing to clear and grub obstructions in the runway approaches in upland areas, and only clear obstructions with no ground disturbance with understory trees remaining in wetland areas, to enhance the safety and utility of PHN. For a detailed discussion of the Preferred Alternative, see **Chapter 2.0 Alternatives Considered**. For additional details and justification for the project, see **Chapter 1.0 Purpose and Need**.

Figure 3.0 Direct Impacts Study Area



Source: 2024 Google Earth with labeling by Mead & Hunt, Inc.

Figure 3.1 Indirect Impacts Study Area



Source: 2024 Google Earth with labeling by Mead & Hunt, Inc.

As described in **Chapter 1.0 Purpose and Need**, the Airport's proposed project includes the following major development items:

- Removal of approximately 86 acres of forested land located in the Runway 4/22 approaches for current and future obstructions.
- Acquisition of avigation easements over 21 private parcels to allow for current and future obstruction removals in the Runway 4/22 approaches.

3.2 Early Agency and Public Coordination

Resource agencies and Native American tribes with potential jurisdiction over or interest in the proposed action were contacted at the beginning of the project and given the opportunity to provide comment. A copy of the distribution list, early coordination letters, and maps sent to each agency and tribe, and documentation received including response letters, are found in **Appendix A – Early Agency Coordination**. Specific information and direction received from responding organizations is noted and addressed in the appropriate resource sections below where applicable.

Upon issuance of the Draft EA, the document was made available for public and agency review and comment for over 30 days. Following the public review period, a Public Meeting was advertised in two newspapers (print and online editions) and held. Written comments from the regulatory agencies and the public were considered and incorporated into the Final EA where appropriate. See **Appendix J – Public and Agency Comments on the Draft EA** for details of the Public Meeting, public and agency comments received, and Airport responses.

3.3 Current Airport Environment and History

PHN is a general aviation airport in St. Clair County in Michigan's Thumb region, three miles west of Marysville, five miles southwest of Port Huron, and 54 miles northeast of Detroit. Owned and operated by St. Clair County, PHN straddles the boundary between Kimball Township on the north and St. Clair Township on the south. See **Figure 1.0 Location Map** and **Figure 1.1 Vicinity Map** in **Chapter 1.0 Purpose and Need** for maps illustrating the location of the Airport.

3.3.1 Airport History

The history of St. Clair County International Airport begins in the mid-1940s. The St. Clair County Chamber of Commerce endorsed a plan to create a new airport in St. Clair County in 1943 at the site of a small existing air strip called Weeks Field. It is unclear how long Weeks Field had been in existence prior to its acquisition by the County, but it does appear on a 1928 U.S. Geological Survey map.

In 1944, the St. Clair County Board of Supervisors purchased 785 acres of land for a new airport to serve the County and presented a conceptual plan for the Airport. The actual construction of an improved airport facility was purposefully delayed until after the conclusion of World War II, so as not to tie up labor and funds needed for the war effort. However, the existing dirt airfield was repaired and maintained, with the local Civil Air Patrol using a building on site.

After the war, two local men rented the airfield for use as a flying school. The field had three small runways with two hangars and the old Civil Air Patrol building. By 1946, plans were finalized for several airport improvements, including extending and improving the runways and constructing a new administration building and hangars. Construction of the new runways began in 1949 and was completed by 1950; the administration building was finished in 1951. The U.S. Department of the Treasury designated the Airport as an international airport in 1954.

The Airport later provided commercial service via North Central Airlines to Detroit and Sandusky, Ohio, for several years. Although outbound commercial flights have since been halted, the Airport still possesses the infrastructure to accommodate smaller commercial inbound flights. Today, the Airport primarily serves general aviation (GA) traffic including flight training, charter flights, and corporate operations.

In 1977, an 80-acre Michigan Certified Business Air Industrial Park was constructed adjacent to the Airport, bringing new aviation-related and non-aviation-related businesses to the region. Later in 1994, an Instrument Landing System (ILS) was installed for Runway 4/22, which enabled more charter and corporate flights to use the Airport. It also solidified the Airport and surrounding region as places to do business.

As the Airport has grown over the years, continual improvements have been made to the runways and taxiways. These improvements have allowed the Airport to continue to serve as an economic engine for the surrounding region.

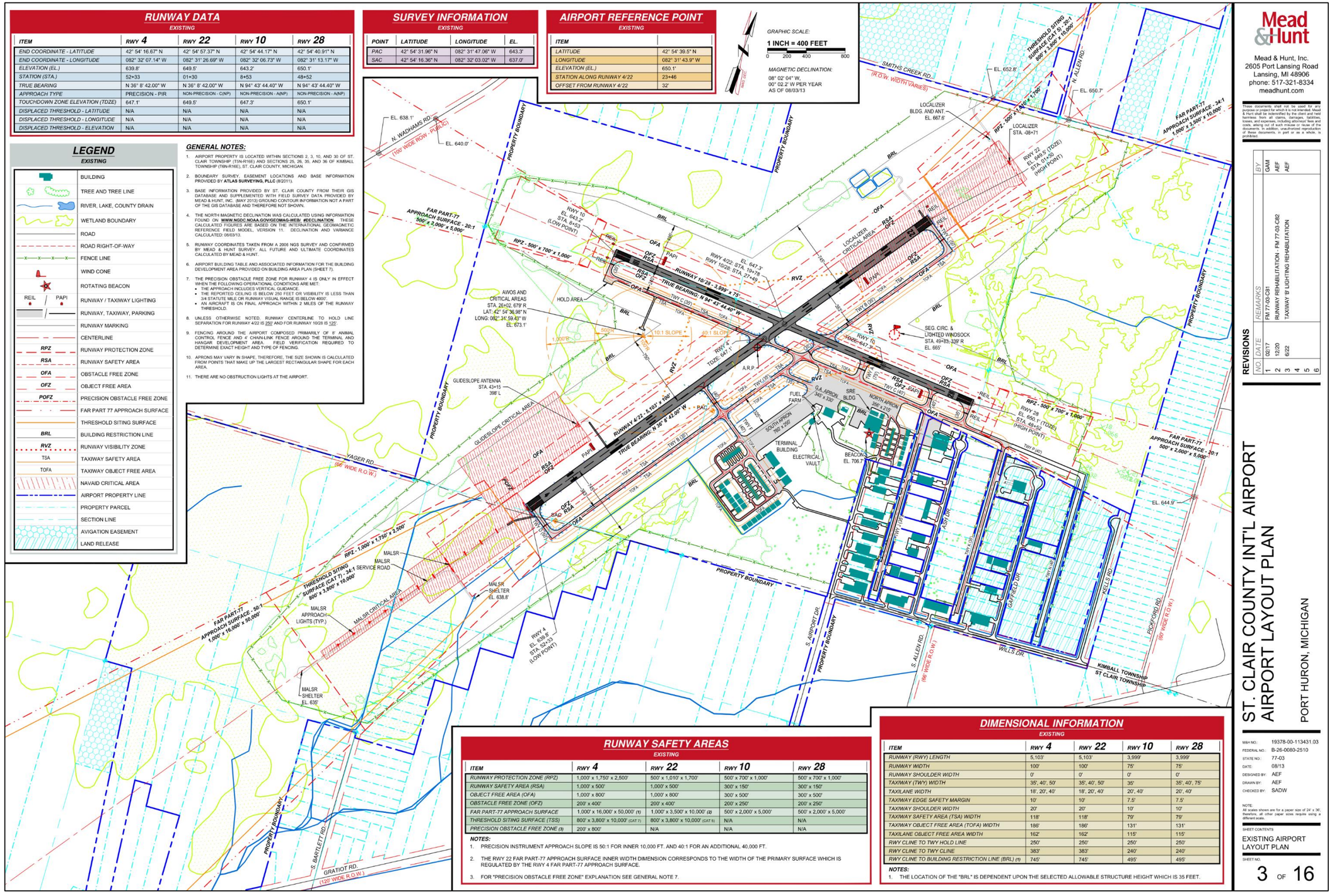
3.3.2 Existing Airport Facilities

The discussion of existing facilities includes both airside and landside infrastructure that is critical to supporting aviation activity at PHN. Major facilities at the Airport include runways, taxiways, a GA terminal building, aprons, hangars, a fixed base operator (FBO), a fuel farm, a Snow Removal Equipment (SRE) building, and Navigational Aids (NAVAIDs). See **Figure 3.2 Existing Airport Layout Plan** for a graphic representation of airport facilities and their locations on Airport property.

PHN is equipped with two asphalt runways. The primary runway, Runway 4/22, is 5,104 feet long, 100 feet wide, and oriented in a northeast-southwest direction. Runway 10/28 is the crosswind runway and is 4,000 feet long, 75 feet wide, and oriented in a generally east-west direction.

The taxiway system at the Airport consists of a full parallel taxiway for each runway, two taxiways that give access to the Air Industrial Park, and several connector taxiways. Taxiway B is a full parallel taxiway for Runway 4/22 and gives access to the south T-hangar complex, the South Apron, and the GA Apron. Taxiway C, the second full parallel taxiway, serves Runway 10/28. Taxiway C connects to the GA Apron, North Apron, and Taxiways J and K, which provide access to the Air Industrial Park.

Figure 3.2 Existing Airport Layout Plan



Source: Mead & Hunt, Inc.

To maintain day-to-day airport activities, support facilities are an important part of airport operations. The GA terminal building is at the northern end of the South Apron. The Airport-operated FBO is immediately northeast of the terminal building and has a lounge / snooze room, restrooms, and showers. FBO services offered include fuel (100LL and Jet A), aircraft parking (ramp and tie-downs), hangars, hangar leasing / sales, and rental cars. The Airport's fuel farm is west of the FBO near the intersection of the South and GA Aprons, while the SRE building is adjacent to the North Apron. Multiple hangars for aircraft storage are also provided.

Visual NAVAIDs at PHN include:

- A lighted wind indicator
- A segmented circle
- A rotating beacon
- High Intensity Runway Lights (HIRL) for Runway 4/22
- Medium Intensity Runway Lights (MIRL) for Runway 10/28
- A Medium Intensity Approach Lighting System with Runway Alignment Indicator Lights (MALSR) at the approach end of Runway 4
- A 4-light Precision Approach Path Indicator (PAPI) at both ends of Runway 4/22 and Runway 10/28
- Runway End Identifier Lights (REILs) at the approach end of Runway 22 and both ends of Runway 10/28

In addition to visual NAVAIDs, the Airport is also equipped with electronic NAVAIDs to help pilots navigate in inclement weather. Existing electronic NAVAIDs include an ILS approach for Runway 4, a Non-Directional Beacon (NDB) approach for Runway 4, and Area Navigation (RNAV) Global Positioning System (GPS) approaches for both ends of Runway 4/22.

3.4 Air Quality

An air quality analysis measures the air's composition in terms of pollutant concentrations. The government regulates air quality out of concern for human health (especially the health of children, the elderly, and those with certain health conditions). Poor air quality can also affect crops and vegetation, as well as buildings and other facilities. The United States Environmental Protection Agency (EPA) regulates air quality under the Clean Air Act (CAA) described in 42 U.S.C. §§ 7401- 7671q. The EPA regulates six common air pollutants under the CAA, referred to as criteria pollutants, to permissible levels via standards called National Ambient Air Quality Standards (NAAQS). In addition to the EPA, the Michigan Department of Environment, Great Lakes, and Energy (EGLE) and the Southeast Michigan Council of Governments (SEMCOG), the Metropolitan Planning Organization for the Southeast Michigan region, also address air quality in the project area.

Areas that have ambient concentrations of criteria pollutants below the NAAQS are designated as "attainment areas." Areas with ambient criteria pollutant concentrations above the NAAQS are designated as "nonattainment areas." Nonattainment areas must have an applicable State Implementation Plan (SIP) that establishes mitigation measures and timelines required to lower pollutant levels below the NAAQS. In

addition, aviation-related federal projects planned for nonattainment areas must conform to the applicable SIP, known as “General Conformity.”

3.4.1 Affected Environment

The Airport is located in St. Clair County. According to EGLE’s Attainment Status for the NAAQS map, St. Clair County is an ozone attainment / maintenance area, with the southern part of the County also designated as a nonattainment area for sulfur dioxide. The location of PHN on EGLE’s Attainment Status for the NAAQS map is shown in **Appendix B – Air Quality**. Also, according to the EPA’s Green Book National Area and County-Level Multi-Pollutant Information, St. Clair County is a maintenance area for PM-2.5 (2006) (see **Appendix B – Air Quality**).

Figure 3.0 Direct Impacts Study Area and **Figure 3.1 Indirect Impacts Study Area** define the affected environment for reasonably foreseeable direct and indirect air quality impacts potentially resulting from the No Action Alternative and Preferred Alternative.

3.4.2 Environmental Consequences

The proposed project would result in no change to the airside or landside capacity at the Airport, including its capacity to handle ground vehicle traffic. Therefore, no permanent increases in emissions are anticipated from the implementation of the proposed project.

The implementation of the proposed project is also listed as Presumed to Conform under the following sections of Federal Register Vol. 72, No. 145, *Federal Presumed To Conform Actions Under General Conformity*:

- II. Existing Exemptions, *2. Routine Maintenance and Repair Activities [40 CFR 93.153(c)(2)(iv)]*, pg. 41567
- II. Existing Exemptions, *5. Actions (or Portions Thereof) Associated With Transfers of Land, Facilities, Title, and Real Properties Through an Enforceable Contract or Lease Agreement Where the Delivery of the Deed Is Required To Occur Promptly After a Specific, Reasonable Condition Is Met, Such as Promptly After the Land Is Certified as Meeting the Requirements of Comprehensive Environmental Response, Compensation and Liability Act (CERCLA), and Where the Federal Agency Does Not Retain Continuing Authority To Control Emissions Associated With the Lands, Facilities, Title, or Real Properties [40 CFR 93.153(c)(2)(xix)]*, pg. 41568

Therefore, the Preferred Alternative is not anticipated to cause or contribute to any violation of the NAAQS. Temporary air quality impacts, such as the creation of dust from ground disturbing activities, may result from implementation of the Preferred Alternative, but long-term impacts are not expected. No impacts to air quality would result from implementation of the No Action Alternative.

Since no long-term impacts are anticipated, no specific mitigation is proposed. However, to further reduce the potential for temporary air quality impacts for both workers and the surrounding area, the following Best Management Practices (BMPs) should be considered where feasible during tree removal activities under the Preferred Alternative:

- Use low-sulfur diesel fuel (less than 0.05 percent sulfur).

- Retrofit engines with an exhaust filtration device to capture diesel particulate matter before it enters the construction site.
- Position the exhaust pipe so that the diesel fumes are directed away from the operator and nearby workers, thereby reducing the fume concentration to which personnel are exposed.
- Use catalytic converters to reduce carbon monoxide, aldehydes, and hydrocarbons in diesel fumes. These devices must be used with low sulfur fuels.
- Use climate-controlled cabs that are pressurized and equipped with high efficiency particulate air (HEPA) filters to reduce the operator's exposure to diesel fumes. Pressurization ensures that air is moved from the inside to the outside. HEPA filters ensure that any incoming air is filtered first.
- Regularly maintain diesel engines, which is essential to keeping exhaust emissions low, and follow the manufacturer's recommended maintenance schedule. For example, blue/black smoke indicates that an engine requires servicing or tuning.
- Reduce exposure through work practices and training, such as turning off engines when vehicles are stopped for more than a few minutes, training diesel operators to perform routine inspections, and maintaining filtration devices.
- Purchase new vehicles that are equipped with the most advanced emission control systems available.
- With older vehicles, use electric starting aids as block heaters to warm the engine to reduce diesel emissions.

3.5 Biological Resources

Biological resources include plants (vegetation), animals (wildlife), and the habitats where they occur. Habitats are the resources and conditions that support the continuous existence of plants or animals in any particular area. Together, biological resources form ecosystems, which are dynamic and respond over time to changes in the environment, whether natural or human induced. Biological resources provide aesthetic, recreational, and socioeconomic values to society, as well as being valuable in their own right. Accordingly, federal and state laws and statutes exist to protect certain species and habitats of special importance.

Early agency coordination with federal and state regulatory agencies with interest or jurisdiction over biological resources in the project area was conducted at the onset of this project. A list of agencies contacted, and their response letters are found in **Appendix A – Early Agency Coordination**. For in-depth analysis and details on the biological resources in the project area, including U.S. Fish and Wildlife Service (USFWS) and EGLE consultation, see **Appendix C – Biological Resources**.

3.5.1 Endangered and Threatened Species

The Endangered Species Act of 1973 (the Act, 16 U.S.C. §1531 et seq.) and subsequent amendments require the conservation of federally listed threatened and endangered plant and animal species, and critical habitats in which they are found. A species is considered endangered if it is in danger of extinction throughout all or a significant amount of its range. Threatened species are defined as those that are likely to become endangered in the foreseeable future. The USFWS administers the Act primarily for land and freshwater species and designates critical habitat for species protected under the Act. Section 7 of the Act requires all federal agencies to consult with the USFWS, as applicable, before initiating any action that may

affect a listed species or designated critical habitat. Candidate species, which may be listed as threatened or endangered in the future, are not provided any statutory protection under the Act but conservation efforts are encouraged.

At the state level, EGLE protects threatened and endangered species from being taken or harmed during project activities under Part 365 of the Natural Resources and Environmental Protection Act (NREPA), 1994 Public Act 451, as amended. An environmental review must be completed for the project area to identify whether any threatened and endangered species may be affected by project actions. EGLE may require permits if impacts are identified.

3.5.1.1 Affected Environment

To determine the presence of threatened and endangered species and evaluate the potential impacts from the proposed project at the federal and state level, qualified biologists conducted site visits on August 16 – 23, 2022; October 3 – 7, 2022; June 6 – 14, 2023; and September 25 – October 4, 2023 within a 442.74-acre Area of Interest (AOI) (shown in **Figure 3.3 Biological Resources Area of Interest)** associated with the approaches of Runway 4/22.

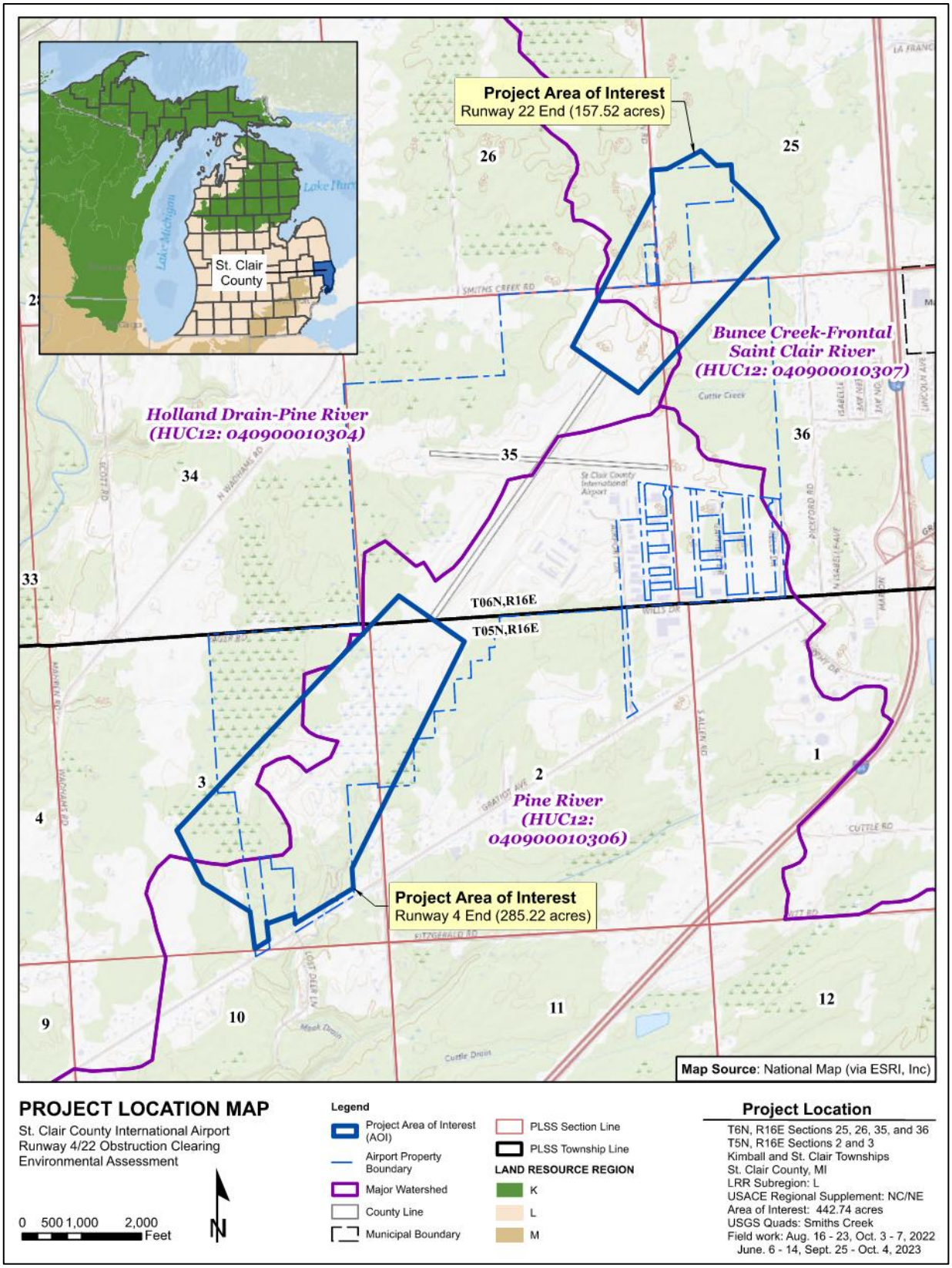
The Airport is located between the Pine River on the west and the St. Clair River on the east, with PHN situated approximately 1.5 miles east of the Pine River. The Pine River flows southerly eventually reaching the St. Clair River approximately 6.5 miles south of PHN in the City of St. Clair. No named streams are within the AOI.

The nearly level topography within Airport property has naturally undefined drainage. The gently rolling terrain occurs over an elevation range of less than 10 feet over most of the project area.

Two drains empty to the Pine River outside of the AOI: the Moak Drain, which flows southerly just south of Airport property, and the London Drain, which flows west of Wadhams Road outside the western property line of PHN. Several constructed ditches drain the southern half of the airfield to the Moak Drain in the Runway 4 AOI. Diffuse drainage through the Runway 22 AOI generally flows to the east through several ditches to Bunce Creek, which empties to the St. Clair River.

An area of regulatory floodplain is mapped along the Pine River to the west and south of the Airport. No mapped floodplains are found within the AOI.

Figure 3.3 Biological Resources Area of Interest



Source: *Biological Resources Report, Environmental Assessment for Runway 4/22 Approach Clearing, St. Clair County International Airport*, prepared by Mead & Hunt, Inc., February 2025

Soil unit boundaries within the AOI are highly complex units composed of two or more soil units mapped together as a single unit complex. Soil units have many knolls and shallow depressions and reflects the undulating topography formed in glaciolacustrine sediments. Seasonal water tables range from one foot above the surface to two feet below in undrained conditions.

Lands within the AOI consist of a mixture of managed areas and undeveloped lands. Managed areas within the perimeter fence are covered by a mixture of native graminoids and common forbs within an undulating lakeplain environment. Undeveloped lands consist of several large areas of moist upland woods, wetlands, and unmaintained grasslands.

Dominant herbaceous vegetation found in uplands within the AOI include fescues, Kentucky and flat-stem blue grasses, little blue stem, goldenrods, wild strawberry, bracken fern, Eastern teaberry, and Queen Anne's-Lace. Honeysuckle, glossy buckthorn, and autumn olive are found in the shrub layer while the tree stratum is dominated by black cherry, red maple, paper birch, white pine, witch-hazel, American hornbeam, both quaking and big tooth aspens, and red oak. Woody vines are limited except north of Smiths Creek Road where Oriental bittersweet is found in abundance.

Wetlands abound within the AOI and are highly reticulated and interconnected on the landscape. Several large wetland complexes are present within the AOI, the largest of which covers over 30 acres. In contrast, a number of wetlands occur in small, isolated depressions.

Emergent wetlands are concentrated in the regularly maintained portions of the AOI or are components of larger wetland complexes. Mowing operations limited to the edges of these larger complexes maintain portions of the complexes in emergent vegetation while woody growth over time in hard-to-maintain areas has advanced. Mowing operations are primarily limited by the amount of standing water present during the growing season.

Runway 22 AOI

At the Runway 22 end, drainage is diffuse and constructed drainageways are generally confined to roadside ditches. Land within this portion of the AOI is marked by shallow pockets with poor internal drainage and slight rises, seasonally collecting runoff in the low areas. Vegetation within maintained areas remains in a grassland/wet prairie state while unmaintained land north of Smiths Creek Road shifts to a closed canopy forest. Drainage within the forested area is diffuse but generally flows to the east toward the St. Clair River.

The Runway 22 end is situated at somewhat higher elevations compared with lower areas to the south and west. Topography within the Runway 22 AOI is relatively flat with topographic highs around 650 feet, dipping to 641 ft in the northeast corner of the AOI.

Vegetation within emergent wetlands in the Runway 22 AOI is dominated by graminoids with shrubs present in an arrested state due to regular mowing. The plant community here contains a mix of graminoids including *Carex pellita* (woolly sedge), *Carex flava* (yellow-green sedge), *Phragmites australis* (common reed), *Carex lupulina* (hop sedge), and *Cladium mariscoides* (smooth saw-grass) along with a mix of shrubs including *Salix petiolaris* (meadow willow), *Cornus amomum* (silky dogwood), and *C. racemosa* (gray

dogwood). *Onoclea sensibilis* (sensitive fern), *Athyrium angustum* (northern lady fern), and *Equisetum hyemale* (tall scouring-rush) comprise an abundant fern component, while dominant forbs present include *Iris virginica* (Virginia blue-flag) and *Prunella vulgaris* (selfheal).

Forested areas concentrated to the north of Smiths Creek Road contain a mature mix of *Acer rubrum* (red maple), *Ulmus americana* (American elm), green ash, *Quercus bicolor* (swamp white oak), *Tilia americana* (basswood), *Carpinus caroliniana* (American hornbeam), and cottonwood within wetlands on topography marked by shallow depressional areas and slight rises. Dominant understory species include *Carex cristatella* (crested sedge), *Carex vulpinoidea* (fox sedge), *Glyceria striata* (fowl manna grass), *Ribes cynosbati* (Eastern prickly gooseberry), *Doellingeria umbellata* (flat-topped white aster), and *Fragaria virginiana* (wild strawberry).

Runway 4 AOI

Present within the AOI, scrub-shrub wetlands are dominated by willows and dogwoods, or saplings of various tree species.

One large wetland complex covers approximately 30 acres both inside and outside the perimeter fence. The complex is dominated by a large phragmites shallow marsh with both scrub-shrub and emergent components as fringe plant communities in somewhat higher landscape positions. These fringe communities are dominated by *Populus tremuloides* (quaking aspen) in the tree stratum and *Alnus incana* (speckled alder) in the shrub stratum. Other species in the shrub stratum include *Frangula alnus* (glossy buckthorn) and shoots of *Fraxinus pennsylvanica* (green ash). Dominant understory species include sensitive fern, *Solidago rugosa* (wrinkle-leaf goldenrod), and *Pteridium aquilinum* (bracken fern).

This complex extends to the southwest outside of the perimeter fence and contains a large scrub-shrub wetland stretching over 9.6 acres in size. This wetland is emblematic of the glacial lakeplain topography underlying the project AOI, which is marked by shallow depressional pockets and slight rises, seasonally collecting runoff in the low areas. Some parts of this wetland have been hydrologically altered by ditches that drain on-airfield areas and are connected by culverts under two-track access roads located on sandier rises. Dominant shrub species in this wetland include young *Populus deltoides* (cottonwood) and green ash in the tree stratum and gray dogwood, *Cephalanthus occidentalis* (buttonbush), *Salix interior* (sandbar willow), and *Salix discolor* (pussy willow) in the shrub stratum. Speckled alder is also present in large stands in other areas of this wetland.

Extensive hardwood forest areas are present in the Runway 4 AOI as well. These wetlands are marked by a mature forest canopy with a relatively open understory. During the field visits, depressional areas within these wetlands were often found to be sparsely vegetated with little to no herbaceous layer due to seasonal ponding. Red maple is a prominent component of all of these wetlands along with *Acer saccharinum* (silver maple), green ash, cottonwood, swamp white oak, American hornbeam, quaking aspen, black willow, and *Quercus rubra* (red oak). American elm is a minor component of the tree stratum in many of these wetlands.

The shrub layer is often limited to saplings of the dominant trees. The herbaceous layer when present is dominated by *Carex intumescens* (bladder sedge), *Symphyotrichum lateriflorum* (Farewell-summer),

common reed, sensitive fern, *Carex crinita* (fringed sedge), hop sedge, *Osmundastrum cinnamomeum* (cinnamon fern), flat-topped white aster, fowl manna grass, wrinkle-leaf goldenrod, *Calamagrostis canadensis* (bluejoint), *Symphyotrichum lanceolatum* (white panicled American-Aster), *Ranunculus hispidus* (bristly buttercup), and *Thelypteris palustris* (eastern marsh fern).

Topography within the Runway 4 AOI varies from 640 feet at the end of the runway to 630 feet in lower areas.

3.5.1.2 Environmental Consequences

A review of threatened and endangered species information provided in the USFWS' Information for Planning and Consultation (IPaC) database for the AOI identified ten federally endangered, threatened, proposed endangered, or proposed threatened species (**Table 3-0 USFWS Endangered and Threatened Species List**). The Rusty Patched Bumble Bee is also listed as endangered under the Act and is included in this list.

The USFWS proposes to list the monarch butterfly as threatened under the Act and if finalized will extend the Act's protections to the species. Similarly, the salamander mussel is also proposed to be listed as endangered under the Act. Therefore, for the purposes of this EA, these two species will be considered as protected under the Act.

No critical habitat under USFWS jurisdiction was identified in the AOI. In addition, no federally listed species were observed during the field site visits. The monarch butterfly was observed on site.

A review of the IPaC database was coupled with use of the USFWS-directed Michigan Endangered Species Determination Key (DKey), which provided recommended effect determinations for species within the AOI. **Table 3-1 Recommended Effect Determinations from the Michigan Endangered Species Determination Key (DKey)** presents the recommended determinations. The USFWS verification letter is found in **Appendix C – Biological Resources**.

A database search of the Michigan Natural Features Inventory (MNFI) requested from EGLE as part of a Transportation Preliminary Database Search revealed no occurrences of state-listed threatened and endangered species, no Section 10 waterways, no Tier 1-designated eastern massasauga rattlesnake habitat, and no occurrences of Michigan Mussel Protocol Group 1/Group 2 mussels within the AOI.

The potential for impacts to federally threatened and endangered species within the AOI and recommended mitigation (if any) are discussed below.

Table 3-0 USFWS Endangered and Threatened Species List		
Species Name	**Common Name**	**Status**
Myotis septentrionalis	Northern Long-eared Bat	Endangered
Myotis sodalis	Indiana Bat	Endangered
Calidris canutus rufa	Red Knot	Threatened
Sistrurus catenatus	Eastern Massasauga Rattlesnake	Threatened
Villosa fabilis	Rayed Bean	Endangered
Obovaria subrotunda	Round Hickorynut	Threatened
Simpsonaias ambigua	Salamander Mussel	Proposed Endangered
Epioblasma triquetra	Snuffbox Mussel	Endangered
Danaus plexippus	Monarch Butterfly	Proposed Threatened
Platanthera leucophaea	Eastern Prairie Fringed Orchid	Threatened
Bombus affinis	Rusty Patched Bumble Bee	Endangered

Source: USFWS Information for Planning and Consultation (IPaC) Database

Table 3-1 Recommended Effect Determinations from the Michigan Endangered Species Determination Key (DKey)		
Common Name / Species Name	**Status**	**DKey Determination**
Northern Long-eared Bat *(Myotis septentrionalis)*	Endangered	No effect
Indiana Bat (*Myotis sodalis*)	Endangered	No effect
Red Knot (*Calidris canutus rufa*)	Threatened	No effect
Eastern Massasauga Rattlesnake *(Sistrurus catenatus)*	Threatened	NLAA*
Rayed Bean (*Villosa fabilis*)	Endangered	No effect
Round Hickorynut (*Obovaria subrotunda*)	Threatened	No effect
Salamander Mussel (*Simpsonaias ambigua*)	Proposed Endangered	No effect
Snuffbox Mussel (*Epioblasma triquetra*)	Endangered	No effect
Monarch Butterfly *(Danaus plexippus)*	Proposed Threatened	No effect
Eastern Prairie Fringed Orchid (*Platanthera eucophaea*)	Threatened	No effect

*NLAA=May affect, but not likely to adversely affect
Source: Michigan Endangered Species Determination Key (DKey)

Northern Long-eared Bat and Indiana Bat

The northern long-eared bat and Indiana bat is discussed in the subsections below.

Phase 1 Bat Habitat Assessments

Phase 1 bat habitat assessments were completed for the Northern Long-eared Bat (NLEB) and Indiana Bat (IBAT) according to guidelines presented in the USFWS' *Range-Wide Indiana Bat & Northern Long-eared Bat Survey Guidelines* for areas proposed for tree clearing. Field work for these assessments occurred over two site visits on June 6 –14, 2023, and September 25 – October 4, 2023.

Bat habitat requirements for the NLEB and IBAT are similar. Suitable summer habitat for the NLEB and IBAT is found at both ends of Runway 4/22 in areas outside of the perimeter fence.

The closed canopied, contiguous forested area within the Runway 4 AOI is dominated by tall (greater than 50 feet high) red maple, white pine, and black cherry with predominantly medium sized trees between 9- and 15-inches Diameter at Breast Height (DBH) and large trees greater than 15 inches DBH. Some large cottonwoods are also present in wetter areas; drier areas include paper birch. These mixed age stands generally have a varied and fairly open understory including immature cherry, sassafras, alder, white oak, shagbark hickory, and red oak. Multiple suitable snags are present in each of the areas assessed. Water resources are limited to seasonal availability in depressional areas; however, a perennial ditch does flow through the Runway 4 AOI, and there is a shallow marsh to the north of these areas that would provide availability to water during the summer months. This part of the Runway 4 AOI sees little human disturbance except for occasional off-road recreational activities.

In the Runway 22 AOI, suitable summer habitat is present though it is of a lower quality than that found in the Runway 4 AOI. Previous historic tree clearing in areas close to Smiths Creek Road has enabled invasive species to colonize including Oriental bittersweet, glossy buckthorn, and common reed. Several residences are located along the road. Still, there are large blocks of suitable habitat within the Runway 22 AOI, some of which are located on private property.

The swamp hardwood habitat that predominates in the less disturbed blocks provides seasonal availability to water resources. The area exhibits a closed canopy with a majority of trees greater than 50 feet tall and is dominated by large (greater than 15 inches DBH) red maple, cottonwood, and swamp white oak with a fairly cluttered understory of saplings and small trees. Multiple large snags are present. Non-dominant trees are shagbark hickory, elm, paper birch, and American hornbeam.

Bat Acoustic Survey

A bat acoustic survey was initiated at the direction of USFWS to determine presence or probable absence of the federally endangered NLEB and IBAT and proposed federally endangered Tricolored Bat (TCB). The study followed survey protocols set forth in the 2024 *Range-Wide Indiana Bat & Northern Long-Eared Bat Survey Guidelines*. The bat acoustic survey report is found in **Appendix C – Biological Resources**.

Initial software screening of detected calls identified nine species on at least one night of the survey including calls from NLEBs, IBATs, and TCBs. After qualitative analysis, the NLEB and IBAT were removed from the species list. Based on these results, the presence of these federally listed bats within the AOI is unlikely, and therefore, it was concluded that the proposed clearing of forest within the AOI is not likely to adversely affect these two federally listed species.

USFWS reviewed the bat acoustic survey report and concurred with its results and recommendations. USFWS indicated that tree clearing and other activities associated with the project are unlikely to affect the NLEB and IBAT regardless of when tree removals occur.

However, qualitative analysis did verify two TCB calls and three little brown bat (*Myotis lucifugus*) calls, suggesting these species are present within the project area. In addition to being proposed for listing as endangered under the Act, the TCB is also listed by the State of Michigan as threatened. The little brown bat is also listed by the State of Michigan as threatened. Based on surrounding forest cover and the likelihood of an abundance of suitable roosts for the TCB, USFWS indicated that they do not expect the proposed project will adversely affect the TCB if the trees can be cleared outside the species' summer roosting period (May 15 through July 31).

Conclusion

In summary, the presence of the federally listed NLEB and IBAT is unlikely within the AOI, and therefore, the proposed project is not likely to adversely affect these two species. The presence of the state listed TCB and little brown bat, however, is documented by the acoustic survey. USFWS guidance is to conduct project activities outside the summer roosting period for the TCB (May 15 through July 31) to minimize incidental take of state listed bats. The USFWS recommended consultation with the Michigan Department of Natural Resources (MDNR) for concurrence; however, MDNR did not provide any comments when contacted.

In addition, selective tree removals (i.e., individual trees) will be employed to the greatest extent possible, especially in areas where the obstruction density is low or in upland areas on private property with avigation easements. In wetland areas, trees will be cut and removed but grubbing or other ground disturbance will be avoided.

Red Knot

The AOI provides limited habitat potential for this species. The AOI consists of open grassland, wet meadow, scrub-shrub, upland forests, and forested wetland. These habitats do not support the red knot's biological needs for food and stopover habitat. Therefore, the proposed project will have no effect on the red knot.

Eastern Massasauga Rattlesnake

Although the AOI does not fall within habitat known to be occupied by, or with high potential to be occupied by, the EMR, it is within the known range of the snake. No occurrences of the EMR have been reported in St. Clair County.

Within the Runway 22 AOI is a mix of managed and unmanaged lands. Within the perimeter fence, regular maintenance keeps the area in a grassland state. While this habitat under different management conditions would be ideal upland habitat for the snake, regular maintenance and disturbance results in unsuitable habitat conditions.

North of Smiths Creek Road, a notable physical barrier to shadier wetland areas under tree canopy, the large, forested area is dense and is characterized by a closed canopy too shady to support the EMR's thermoregulation needs. Open sunny areas are extremely limited within this wooded area. Suitable habitat for the snake is not present in this area.

The highly managed areas on the airfield within the Runway 4 AOI are regularly mowed which, similar to the managed areas within the Runway 22 AOI, results in unsuitable habitat conditions.

Suitable habitat for the snake is present outside of the perimeter fence in the Runway 4 AOI. Intermixed open and shady habitats are available, depressional areas collect runoff and are supported by high water throughout most of the year, and component habitat with variable elevations are present. This part of the AOI sees little human disturbance except for occasional off-road recreational activities.

Clearing and grubbing activities will occur in upland areas only. Trees within wetlands, areas potentially used by the snakes as hibernation sites during the winter, would be cut and removed with limited ground disturbance. Tree removals will be conducted during the EMR's inactive period. No hydrologic alterations to groundwater levels are anticipated to occur during project activities and no ground disturbance is proposed in wetlands. Therefore, the proposed action may affect, but is not likely to adversely affect, the EMR.

Recommended BMPs for projects within the known EMR range will be implemented as follows:

- Use wildlife-safe erosion control materials.
- View the MDNR's "60-Second Snakes: The Eastern Massasauga Rattlesnake" video and/or review the EMR fact sheet.
- Report any EMR observations (or any other threatened or endangered species) during project implementation.

Mussels

The snuffbox mussel, rayed bean, round hickorynut, and salamander mussel are discussed in the subsections below.

Snuffbox Mussel

Populations of the snuffbox mussel have declined precipitously across its widespread historical range. Extant populations, with few exceptions, are highly fragmented and restricted to short reaches. It was known to be present in a number of upper Midwest states including Michigan at the time of the species' listing in 2012.

In Michigan, occurrences of the mussel have been reported in the lower half of the Lower Peninsula, including St. Clair County, as recently as 2021.

The mussel is found in small- to medium-sized creeks, larger rivers, and in lakes. The species occurs in swift currents of riffles and shoals and wave-washed shores of lakes over gravel and sand with occasional cobble and boulders. Individuals generally burrow deep into the substrate, except when spawning or attempting to attract a host.

Rayed Bean

The historic range of the rayed bean, a freshwater mussel, included parts of the Midwest and eastern U.S. to as far north as Ontario, Canada. The mussel appears to be extirpated from a large part of its historic

range and now consists of fragmented populations in Indiana, Michigan, New York, Ohio, Pennsylvania, and Ontario.

In Michigan, the rayed bean was found historically in St. Clair County in the Pine River, and in other eastern counties along Lake St. Clair and Lake Erie.

The rayed bean, like the snuffbox mussel, has seen its range severely diminished with live mussels only found in Michigan in the Pine River (St. Clair County) and Clinton River (Macomb County) in the last 20 years.

Similar to the snuffbox mussel, the rayed bean is typically found in small, shallow rivers with riffles, slow flowing rivers, or along shallow, wave-swept shorelines of lakes. It prefers gravel or sand substrates and is often found in and around roots of aquatic vegetation.

Round Hickorynut

The round hickorynut is a wide-ranging mussel found in nine states in the middle part of the United States from Tennessee northward to Michigan and as far north as Ontario, Canada. In Michigan, occurrences of the mussel are found in the Lake St. Clair and Lake Erie watersheds.

The Round Hickorynut is typically found in medium to large rivers and along the shores of Lake Erie and Lake St. Clair, near river mouths. It is generally found in sand and gravel substrates in areas with moderate flow.

Salamander Mussel

Similar to the round hickorynut, the salamander mussel is found in scattered populations in the middle part of the United States from Arkansas to New York. While it is widely distributed, it is rare throughout its range. In Michigan, it is found in the southeastern border counties of the state within the Lake St. Clair and Lake Huron watersheds. Locally, it has been found in the Pine River in St. Clair County.

The mussel is found in medium to large rivers and lakes, usually in silt or sand under flat stones.

Conclusion

The MNFI Michigan Mussel Web App shows the modeled potential presence or absence for mussel species in streams based on occurrence data from the MNFI database and individual species conservation status. The rayed bean and snuffbox mussel are modeled in Stream Group 3 by the MNFI; the round hickorynut and the salamander mussel are modeled in Stream Group 2. Group numbers indicate applicable survey protocols for a particular mussel. The Pine River contains modeled habitat for mussels and is located about 1.5 miles to the west of the Airport and AOI. The river flows southerly eventually reaching the St. Clair River approximately 6.5 miles south of PHN in the City of St. Clair.

The AOI contains no modeled potential presence/absence streams on Airport property or within the AOI. A perennial excavated ditch is present within the Runway 4 AOI. This ditch is not a high-quality water source and does not contain suitable substrates for any of the identified mussels. No other perennial streams are

within the AOI. Suitable habitat for identified mussels is not present within the AOI. In addition, no in-stream work is proposed for this project. Therefore, the proposed project will have no effect on these mussels.

Monarch Butterfly

Little suitable habitat is present within the AOI. This is in part due to the long history of vegetation maintenance activities on the airfield in both sections of the AOI and the predominance of forested areas not conducive to supporting the monarch's host plant. Open grassland areas are present within the Runway 4 AOI where several monarchs were noted during field work. However, little common milkweed was observed in these areas.

Proposed project activities will occur in forested areas and will not affect grassland areas within the AOI. Therefore, the proposed project will have no effect on the butterfly.

Eastern Prairie Fringed Orchid

In Michigan, reported occurrences of the Eastern Prairie Fringed Orchid generally are from counties in the southeast corner of the state south of Lake Saginaw. One disjunct occurrence from 1924 is reported from Cheboygan County on the northern tip of the Lower Peninsula. Two occurrences from St. Clair County are reported as recently as 2006.

The Eastern Prairie Fringed Orchid can be found in a wide range of wetland habitats. Due to the species' need for full sun exposure, it is generally restricted to grass- and sedge-dominated plant communities.

Known habitat associates of the orchid were identified within the Runway 4 AOI. Therefore, a meander search of potential suitable habitat for the orchid was conducted. This survey did not find evidence of the orchid. The moist and wet habitats within the meander search area needed to accommodate this wetland species were often overgrown with trees, shrubs, and invasive common reed. While this part of the AOI does provide some limited potential habitat, the orchid is considered not to be present. Therefore, the proposed project will have no effect on the orchid.

Rusty Patched Bumble Bee

The Rusty Patched Bumble Bee (RPBB) is historically associated with grasslands and tallgrass prairies of the Upper Midwest. This type of habitat provides nesting sites, overwintering sites, and nectar and pollen from an abundant array of forbs.

The AOI is within the historical range of the RPBB in Michigan; however, no occurrences of the RPBB are reported for St. Clair County. The current range of the RPBB in Michigan is mapped in the lower southeastern corner of the state and does not include St. Clair County.

Suitable foraging and nesting habitat are limited within the AOI in part due to the long history of vegetation maintenance activities on the airfield in both sections of the AOI and swamp hardwood forested wetland and mature upland forested areas not conducive to supporting the bumble bee. Open grassland areas are present within the Runway 4 AOI but are limited. Therefore, the AOI provides limited potential habitat for the RPBB, and the proposed project will have no effect on the bumble bee.

Endangered and Threatened Species Conclusion

Impacts to federally endangered and threatened species are not expected from implementation of either the Preferred Alternative or the No Action Alternative.

3.5.2 Migratory Birds

The Migratory Bird Treaty Act of 1918 (MBTA) and its amendments are the main driver for the protection of migratory birds in the United States. Executive Order 13186, *Responsibilities of Federal Agencies to Protect Migratory Birds,* also obligates all federal agencies that engage in or authorize activities that might affect migratory birds to minimize those effects and encourage conservation measures that will improve bird populations. Executive Order 13186 provides for the protection of both migratory birds and migratory bird habitats.

In a biological sense, a migratory bird is an avian that has a seasonal and somewhat predictable pattern of movement. Generally, migratory birds are defined as all native birds in the United States, except those non-migratory species such as quail and turkey that are managed by individual states.

3.5.2.1 Affected Environment

The affected environment for migratory birds is the same as the affected environment for endangered and threatened species, which was described in **Section 3.5.1 Endangered and Threatened Species**.

3.5.2.2 Environmental Consequences

The USFWS IPaC database search identified 14 bird species protected under the MBTA and the Bald and Golden Eagle Protection Act that may occur in the AOI. Project activities will occur before May 15 and/or after July 31 within relatively short time periods. The probability of presence for most identified migratory birds with the exception of the Bald Eagle and Red-headed Woodpecker is indicated to be very low to absent during project activities. Abundant adjacent forested and wetland habitat provide refugia for any birds present during project activities. It is therefore concluded the proposed project will have no effect on species identified as Birds of Conservation Concern under the MBTA or on Bald Eagles.

Migratory bird impacts are not expected from implementation of either the Preferred Alternative or the No Action Alternative. No mitigation is proposed.

3.6 Coastal Resources

The Coastal Zone Management Act of 1972 (16 U.S.C. §§ 1451-1466) established the Federal Coastal Zone Management Program to encourage and assist states in preparing and implementing management programs to “preserve, protect, develop, and where possible, to restore or enhance the resources of the nation’s coastal zone.” In addition, the Coastal Barrier Resources Act of 1982 requires that no new federal expenditures or financial assistance may be made available for construction projects within the boundaries of the Coastal Barriers Resource System. Executive Order 13089, *Coral Reef Protection* requires federal agencies to “identify any actions that might affect coral reef ecosystems, protect and enhance the conditions of these ecosystems, and ensure that the actions carried out, authorized, or funded by federal agencies will not negatively impact or degrade coral reef ecosystems.”

3.6.1 Affected Environment

PHN is approximately three miles west of the St. Clair River at its nearest point. A review of maps for the Michigan Coastal Management Program (MCMP) shows that PHN is outside the MCMP's boundaries along the St. Clair River. In addition, the USFWS Coastal Barrier Resources Mapper shows the project area is not located within or near a resource that is part of the Coastal Barrier Resources System.

3.6.2 Environmental Consequences

Due to the Airport's inland location, impacts to coastal resources are not expected from implementation of either the Preferred Alternative or the No Action Alternative. No mitigation is proposed.

3.7 Department of Transportation Act, Section 4(f)

Section 4(f) of the Department of Transportation Act (49 U.S.C. § 303) requires that the Secretary of Transportation not approve any program or project that requires the use of any publicly owned land unless there is no feasible and prudent alternative to the use of such land. Common Section 4(f) resources include:

- Public parks
- Recreation areas
- Wildlife and waterfowl refuges of national, state, or local significance
- Land from a historic site of national, state, or local significance as determined by the officials having jurisdiction

3.7.1 Affected Environment

No Section 4(f) resources are in the project area. However, several Section 4(f) resources are within a 2.5-mile radius of PHN:

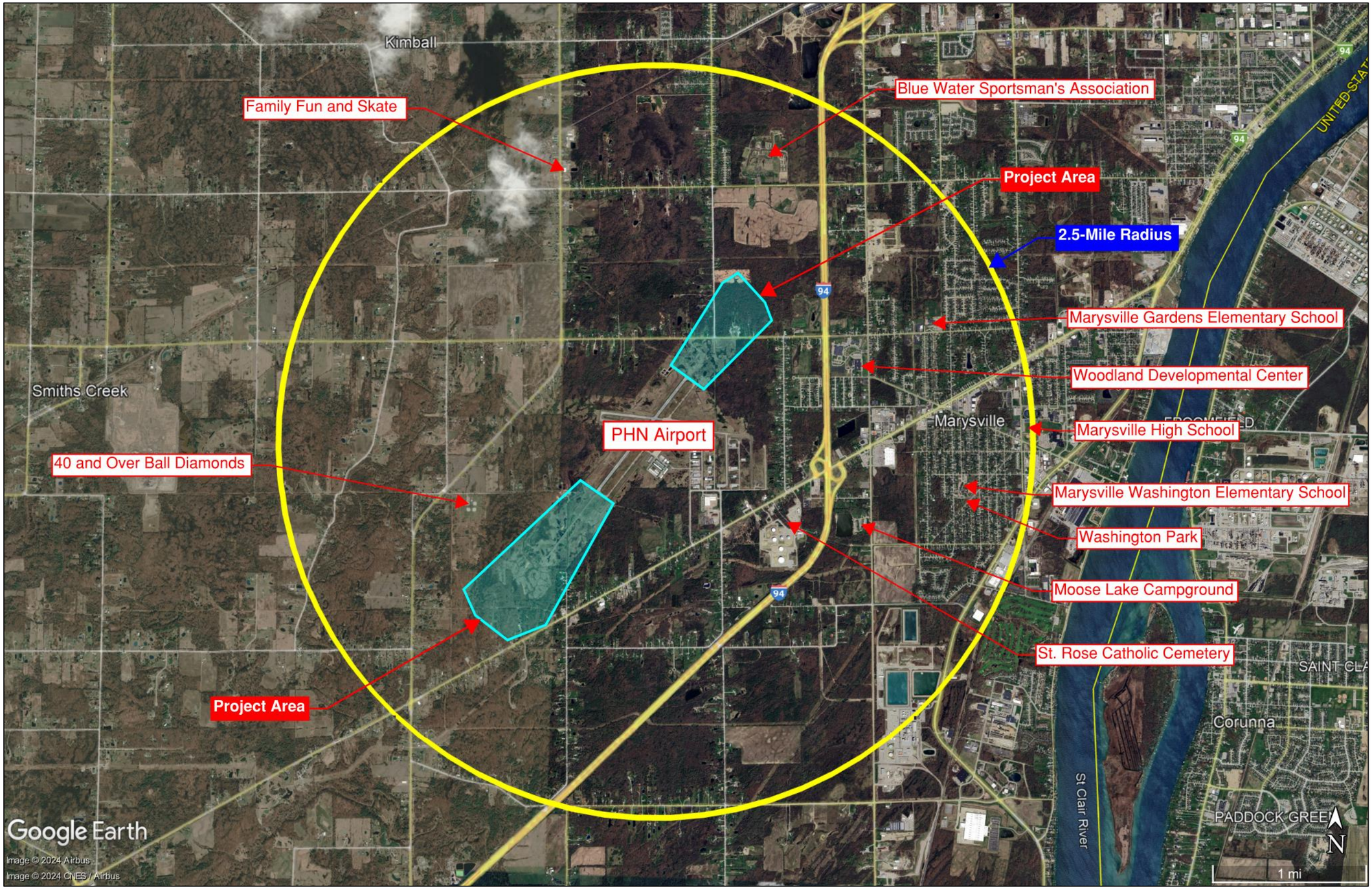
- Family Fun and Skate
- Blue Water Sportsman's Association
- Marysville Gardens Elementary School
- Woodland Developmental Center
- Marysville High School
- Marysville Washington Elementary School
- Washington Park
- Moose Lake Campground
- St. Rose Catholic Cemetery
- 40 and Over Ball Diamonds

The locations of these resources relative to the project area are shown in **Figure 3.4 Section 4(f) Resources**.

3.7.2 Environmental Consequences

There are no parks, recreation areas, cemeteries, schools with playgrounds or athletic fields, or wildlife or waterfowl refuges within the project area. The nearest such resource (40 and Over Ball Diamonds) is 0.4 miles west of the portion of the project area at the approach end of Runway 4.

Figure 3.4 Section 4(f) Resources



Source: 2024 Google Earth with labeling by Mead & Hunt, Inc.

Based on the information above, impacts to Section 4(f) resources are not expected from implementation of either the Preferred Alternative or the No Action Alternative. No mitigation is proposed.

3.8 Farmlands

The Farmland Protection Policy Act of 1981 (FPPA) described in 7 U.S.C. §§ 4201-4209 was enacted to minimize the extent to which federal actions and programs contribute to the unnecessary and irreversible conversion of farmland to non-agricultural uses. Per the FPPA, "farmland includes prime farmland, unique farmland, and land of statewide or local importance. Farmland subject to FPPA requirements does not have to be currently used for cropland. It can be forest land, pastureland, cropland, or other land, but not water or urban built-up land."

Prime farmland has the best combination of physical and chemical characteristics for producing food, forage, fiber, and oilseed crops. Unique farmland is defined as land other than prime farmland that is used for the production of specific high-value food and fiber crops such as citrus, tree nuts, olives, cranberries, fruits, and vegetables. Any federal action that may result in conversion of farmland to a non-agricultural use requires coordination with the U.S. Department of Agriculture's (USDA) Natural Resource Conservation Services (NRCS).

3.8.1 Affected Environment

Farmland classification maps available from the NRCS indicate the presence of farmland classified as "Prime Farmland if Drained" and "Farmland of Local Importance" in the project area at the approach end of Runway 4 and "Farmland of Local Importance" in the project area at the approach end of Runway 22. See **Appendix D – Farmland** for the farmland classification map.

3.8.2 Environmental Consequences

During coordination with the NRCS office in East Lansing, Michigan, for past EAs involving tree removals at other airports in Michigan, the NRCS has explained that clearing of trees is not considered irreversible conversion of farmland to non-agricultural uses. As such, those projects were exempt from the FPPA. Since the Preferred Alternative for this EA at PHN involves only tree clearing activities, it is assumed that the proposed project is also exempt from the FPPA.

Protected farmland impacts are not expected from implementation of either the Preferred Alternative or the No Action Alternative. No mitigation is proposed.

3.9 Hazardous Materials, Solid Waste, and Pollution Prevention

Hazardous materials can pose a risk to health, safety, and property. They include hazardous wastes and hazardous substances as well as other materials. Hazardous materials are regulated under several statutes, including the Comprehensive Environmental Response, Compensation, and Liability Act (42 U.S.C. §§ 9601-9675), the Resource Conservation and Recovery Act (RCRA) described in 42 U.S.C. §§ 6901-6992k, and the Toxic Substance Control Act (15 U.S.C. §§ 2601-2697). Solid waste is discarded material that falls into specific regulatory definitions and is regulated under RCRA. Pollution prevention refers to efforts to avoid, prevent, or reduce discharges and emissions of pollutants.

3.9.1 Affected Environment

In February 2025, a Phase I Environmental Site Assessment (ESA) in accordance with the American Society for Testing and Materials (ASTM) International Standard E1527-21*, Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process*, was completed for the proposed obstruction removal areas in the approaches of Runway 4/22. ASTM defines Recognized Environmental Condition (REC) as the presence or likely presence of hazardous substances or petroleum products on the obstruction clearing areas under conditions that are indicative of an existing release, a past release, or a material threat of a release of hazardous substances or petroleum products into the structures on the obstruction clearing areas or into the ground, ground water, or surface water of the obstruction clearing areas. The term does not include *de minimis* conditions that generally do not present a material risk of harm to public health or the environment and that generally would not be the subject of enforcement action if brought to the attention of appropriate governmental agencies. For a copy of the Phase I ESA report, see **Appendix E – Hazardous Materials**.

The Phase I ESA provided four findings of three separate sites (**Figure 3.5 Potentially Hazardous Materials Map**). These findings are summarized below.

Finding 1 – 177 Ash Drive – St. Clair County International Airport (not shown on Figure 3.5)

- This finding is associated with the Airport property.
- Given there is no evidence of a release associated with this finding and its only listing is in the Facility Registry Service/Facility Index database, no additional investigations or construction special provisions are recommended.

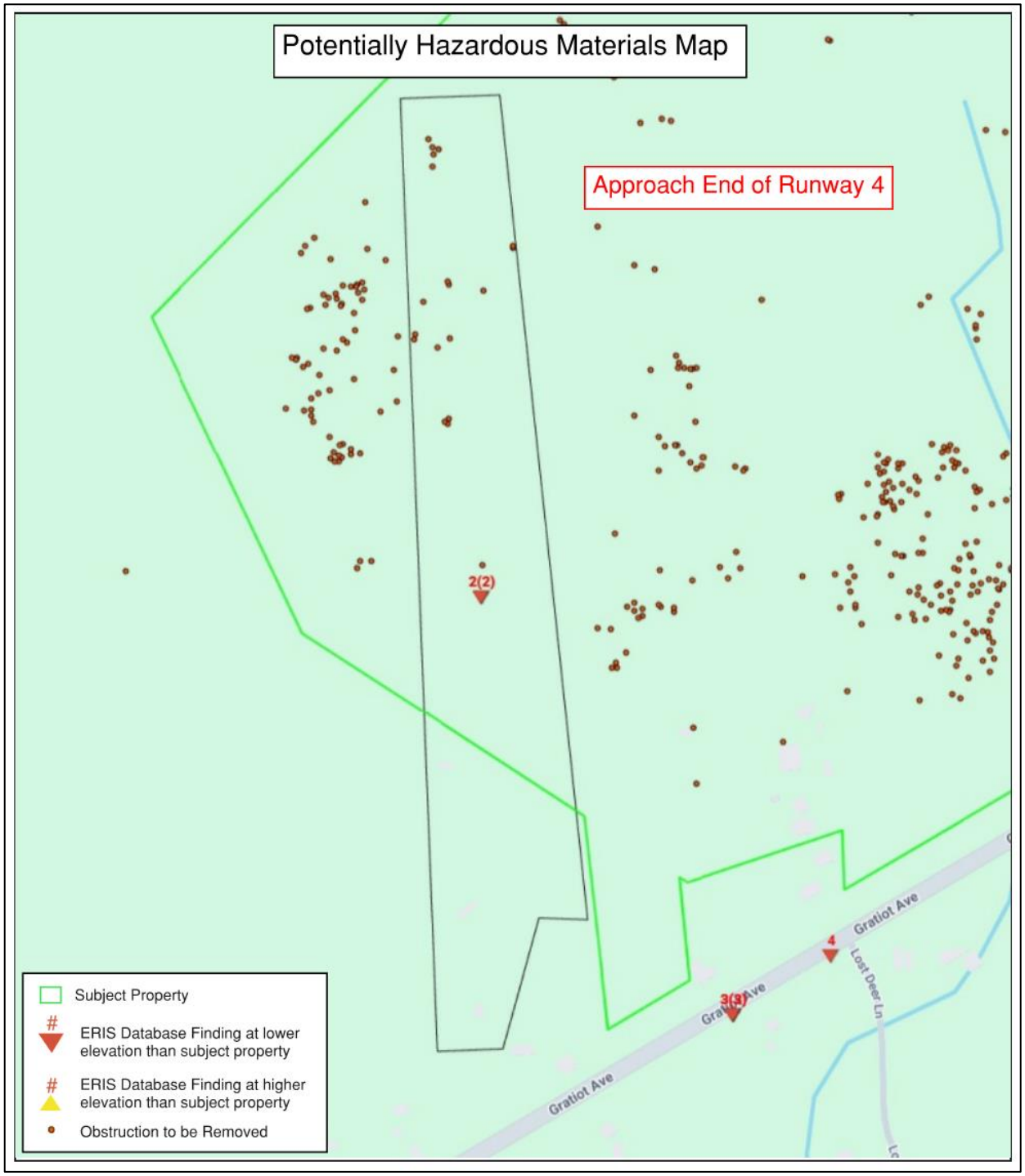
Findings 2/3 – 5740 Gratiot Avenue – Former Cleet's Car and Salvage

- This finding is a former auto repair and salvage business and is shown to be on the subject property.
- This finding is listed in multiple agency databases. A Baseline Environmental Assessment (BEA) was conducted in 2005 and found evidence of multiple releases of hazardous substances. Additionally, a Risk Conditions Classification assessment was completed in 2023 and found the potential for exposure or threat to human health, safety, or welfare, or to the environment, or sensitive environmental receptors in the long term. The BEA indicates alternative approaches to continuing operations of the site for the purposes of distinguishing a past release from a new one. No records indicate mitigation has occurred.
- A Phase II ESA and construction special provisions are recommended if this site is developed.

Finding 4 – 5640 Gratiot Avenue – Welser Well Drilling

- This finding is associated with a residential home and commercial business.
- Two 1,000-gallon underground storage tanks (USTs) were removed from the site in 1989.
- No additional investigations or construction special provisions are recommended.

Figure 3.5 Potentially Hazardous Materials Map



Source: *Phase I Environmental Site Assessment, Obstruction Clearing Environmental Assessment, St. Clair County International Airport (PHN), Smiths Creek, Michigan,* prepared by Mead & Hunt, Inc., February 2025

3.9.2 Environmental Consequences

The FAA has not established a significance threshold for hazardous waste, solid waste, or pollution prevention. However, the FAA 1050.1F, *Desk Reference* offers guidance to consider whether the proposed project could:

- Violate any laws or regulation regarding hazardous waste.
- Involve a contaminated site, or if actions within a contaminated site are appropriately mitigated.
- Produce an appreciable amount of hazardous waste.
- Generate a different quantity or type of solid waste that could exceed local capacity or use different methods of collection and disposal.

Findings 2/3 at 5740 Gratiot Avenue is located in the project area at the approach end of Runway 4 and is currently in use as a private residence. As explained above, the site was formerly an auto garage and salvage yard.

This parcel is long and narrow and there was limited visibility from the public right-of-way during the site reconnaissance. The property was cluttered with solid waste (junk). Various recreational campers, tires, scrap metal, and wood were observed on the property. No tanks or drums were observed. No evidence of stained soils, stressed vegetation, landfilling, or foul odors were noted, although the ground was snow covered, and observations were made from the public right-of-way. The property was not accessed. Aerial imagery showed various areas of debris.

Findings 2/3 is identified in the Environmental Risk Information Services (ERIS) Database Report in the databases below.

WASTE

This database contains records from the Waste Data System, which tracks activities regulated by the Solid Waste, Scrap Tire, Hazardous Waste and Liquid Industrial Waste programs. No further information was provided.

SPILL

This database contains records from the Pollution Emergency Alerting list maintained by EGLE. This listing tracks environmental damages and pollution. The SPILL database identifies a spill at Findings 2/3 in July 2021. An unknown quantity of diesel fuel, vehicle liquids, and components were released. No further information was available regarding containment methods, spill location, or physical characteristics of the area the spill occurred.

BEA

This database contains records from EGLE. A BEA allows people to purchase or begin operating at a facility without being held liable for existing contamination. BEAs are used to gather enough information about the property being transferred so that existing contamination can be distinguished from any new releases that might occur after the new owner or operator takes over the property.

State Hazardous Waste Sites (SHWS)

A Part 201 Facility is an area, place, or property where a hazardous substance in excess of the concentrations that satisfy the cleanup criteria for unrestricted residential use has been released, deposited, disposed of, or otherwise comes to be located. This list is maintained by the Remediation and Redevelopment Division in EGLE. The SHWS database serves a purpose similar to that of the federal Superfund Enterprise Management System (SEMS), functioning as a state-level counterpart for tracking potential hazardous substance release sites.

The BEA completed in 2005 for the site at Findings 2/3 found extensive debris including cars, trucks, tires, storage tanks, oil drums, and other scrap throughout the property. Records show this property was operated as a junk yard since the 1980s. Per the BEA, approximately eight (8) 250-gallon aboveground storage tanks and approximately 100 automotive fuel tanks were observed across the property. Basic maps included in the BEA offer an idea of where sources of potential releases are located on the property. Additionally, soil sampling was done in key locations near areas of observed hazardous substances. Soil samples found an array of hazardous substances, most with concentrations beyond the threshold that require mitigation. The BEA concluded that based on observations and soil sampling, hazardous substance releases had occurred.

Furthermore, the EGLE database contains a Remediation Information Data Exchange (RIDE) form for this finding from March 2023. This risk conditions classification form indicates the following:

- RIDE Risk Category: Risks Present and Require Action in the Long Term
    - Based on the site's Conceptual Site Model (CSM) and migration of contaminants, there is a potential for exposure or threat to human health, safety, or welfare, or to the environment, or sensitive environmental receptors in the long term. For the purpose of classification, potential exposures or threats considered to be long-term generally are greater than two years.
- Direct Contact: Risks Present and Require Action in the Short Term
    - Soil contamination at less than or equal to 3 feet below the ground surface that could typically be encountered by the public or by landscaping activities exceeds the direct contact criteria.
- Ground Water-Surface Water Interface (GSI)
    - The ground water contaminant plume exceeds GSI criteria, and the leading edge of the contaminated ground water plume is located more than two years' ground water travel time from a surface water body, or the plume is entering a storm sewer and the contamination will reach the outfall of the storm sewer in more than two years.

The Phase I ESA report concluded that Findings 2/3 at 5740 Gratiot Avenue is a REC given that there is evidence of a past release of various hazardous substances on the property. Given the context and scope of the proposed project, the use of special provisions and a change to the proposed action (e.g., no ground disturbance) may be warranted in lieu of a full Phase II ESA. The Phase I ESA provided the following sample special provision language to be used in contract documents for Findings 2/3:

Notice to Contractor – Contaminated Soil Locations

It is presumed that due to the previous known release of hazardous substances, contaminated soil exists within the proposed action area. Contaminated soils are likely present at the following site:

1. 5740 Gratiot Avenue, St. Clair, MI 48079. Tax Parcel ID #: 74-30-003-3006-000

The contaminated soil at the above site is expected to be within the excavation limits necessary to complete the work under this project. Control construction operations at this location to restrict any ground disturbance, including the use of heavy machinery. Construction work must be limited to dry conditions only to prevent the unintended ground disturbance that is likely in wet conditions. If contaminated soils are encountered at this site or elsewhere on the project during excavation, terminate excavation in the area and notify the engineer.

A change to the proposed action may be warranted in lieu of a full Phase 2. This includes altering the proposed action of clearing and grubbing to just aboveground removal of obstructions (trees). Specifically, within the area of contamination, obstructions (trees) should be felled at six inches to one foot above ground without ground disturbance. Resulting stumps should be left undisturbed by the contractor.

It is also recommended that the contractor consider wearing personal protective equipment (PPE) such as rubber boots and rubber gloves during project activities on the property at 5740 Gratiot Avenue.

In addition to the potential for hazardous materials at Findings 2/3, tree removal activities associated with the Preferred Alternative have the potential to create solid waste material (tree debris). Tree debris will be removed and preferably sold or offered to parcel owners, as appropriate.

The contractor will be required to have a Spill Prevention, Control, and Countermeasure (SPCC) plan in place to be implemented if a spill occurs during tree removal activities. An approved erosion control plan is also required to provide a collection area for non-recyclable waste. Any waste generated through proposed project improvements will be disposed of in compliance with all federal, state, and local regulations.

In conclusion, there is the potential for hazardous materials impacts from implementation of the Preferred Alternative. There would be no hazardous materials impacts from implementation of the No Action Alternative.

3.10 Historical, Architectural, Archeological, and Cultural Resources

Historical, architectural, archeological, and cultural resources include a variety of sites, properties, and facilities related to activities and societal and cultural institutions. Such resources express past and present elements of human culture and are important to a community. Section 106 of the National Historic Preservation Act, 54 U.S.C. § 300101, requires federal agencies to consider the effects their actions may have on these properties.

According to FAA Order 5050.4B, NEPA *Implementing Instructions for Airport Actions*, two basic laws apply to this impact category; the first law, the National Historic Preservation Act of 1966, as amended, "[r]ecommends measures to coordinate Federal historic preservation matters, to recommend measures to coordinate Federal historic preservation activities and to comment on Federal actions affecting historic properties included in or eligible for inclusion in the National Register of Historic Places."

The second law, the Archeological and Historic Preservation Act of 1974, "[p]rovides the survey, recovery, and preservation of significant scientific, prehistorical, historical, archeological, or paleontological data when such data may be destroyed or irreparably lost due to a Federal, Federally licensed, or Federally funded project."

3.10.1 Affected Environment

A Section 106 Report to identify the potential for impacts to historical, archeological, architectural, and cultural resources from the proposed project was completed in April 2024. The full report is provided in **Appendix F – Section 106 Report**.

There are two Areas of Potential Effect (APEs) for historical, architectural, archeological, and cultural resources: the Built-Environment APE and the Archeological APE. The Built-Environment APE is a total of 362 acres, split into two distinct areas at either end of Runway 4/22. The southwest portion of the Built-Environment APE consists of approximately 194 acres, and the northeast portion consists of approximately 168 acres. The Built-Environment APE includes both full and partial parcel boundaries where obstructions have been identified for removal. The full parcel boundaries of 26 privately owned parcels are included in the APE, as well as areas of County-owned Airport property directly surrounding the obstructions proposed for removal.

The Archeological APE is a total of 417 acres, consisting of the general area proposed for tree removals at each end of Runway 4/22. This Archeological APE is the area at each end of Runway 4/22 consistent with the Federal Aviation Regulation (FAR) Part 77 Imaginary Surfaces, Threshold Siting Surface (TSS), PAPI Light Signal Clearance Surface (LSCS) and Obstacle Clearance Surface (OCS), and State of Michigan Licensing Surface.

Both the Built-Environment APE and the Archeological APE largely consist of undeveloped, forested land on the Airport property, but also extend into some private residential parcels.

Architectural historians examined current and historic aerial photographs to identify above-ground resources located within the Built-Environment APE. Then they requested a records search from the Michigan State Historic Preservation Office (SHPO) to confirm whether any built resources within the project area had been previously surveyed. The historians did not identify any previously surveyed resources at the county or township level and contacted the Port Huron Museum and Marysville Historical Museum regarding potential built-environment resources near the project area. No built-environment resources were identified near the project area.

Archeologists completed an Archeological Reconnaissance Survey of the Archeological APE in October 2022 to identify potential below-ground resources. The reconnaissance included a literature review and visual inspection with photo documentation of the tree clearing locations to identify potential archeological sites with above-ground components that could be impacted by the clearing activities. No such resources were identified.

3.10.2 Environmental Consequences

The Section 106 Report summarizing the findings was submitted to the SHPO for review and concurrence. SHPO stated that it concurred that no historical, architectural, archeological, or cultural properties will be affected within the Archeological APE and Built-Environment APE for the proposed project and issued a "No adverse effect" determination. The SHPO letter of concurrence dated May 21, 2024, is found in **Appendix F – Section 106 Report**.

Historical, architectural, archeological, and cultural resources impacts are not expected from implementation of either the Preferred Alternative or the No Action Alternative. However, if historical, architectural, archeological, or cultural resources are encountered during tree removal activities, work must stop and the SHPO must be notified immediately.

3.11 Land Use

As described in 1050.1F, *Desk Reference*, regulations require the discussion of possible conflicts between the proposed action and the objectives of federal, state, regional, and local land use plans, policies, and controls for the area concerned. Where an inconsistency exists, the EA document should describe the extent to which the agency would reconcile its proposed action with the existing land use plan. The FAA also requires airport operators to ensure that actions are taken to establish and maintain compatible land uses around their airports.

Land use regulations near airports typically focus on safety for airport users and the surrounding community. Elements of airport actions can change existing land use patterns and, in some instances, disrupt communities, require residential or business relocations, or degrade surface transportation service. Land use controls and zoning regulations generally discourage or prohibit land use that is incompatible with airport operations. The authority to enact zoning codes usually lies at the local level.

According to FAA AC 150/5200-33C, *Hazardous Wildlife Attractants on or near Airports,* the FAA also requires that consideration be given to the potential increases in wildlife attractants that a project may create and that existing incompatible land uses near airports be assessed, such as solid waste landfills, crops, open water, and wetlands that may act as wildlife attractants.

3.11.1 Affected Environment

Kimball Township and St. Clair Township administer the planning and zoning around PHN. According to the Kimball Township zoning map, PHN property is zoned as I-3 – Air Industrial District.

The Kimball Township zoning map shows the following zones for the land adjacent to PHN:

- AG – Agricultural District

- R-2 – Single-Family Medium-Density Residence District
- Other

The Kimball Township zoning map is presented in **Figure 3.6 Kimball Township Zoning Map**.

Zoning for the southern portion of Airport property at the approach end of Runway 4 falls under the jurisdiction of St. Clair Township. According to the St. Clair Township zoning map, this portion of PHN property is zoned as I-H – Heavy Industrial District and I-L – Light Industrial District. Land adjacent to this portion of PHN property on the St. Clair Township zoning map is zoned as RU – Rural District and RS-1 Suburban Residential District (Low Density).

The St. Clair Township zoning map is provided in **Figure 3.7 St. Clair Township Zoning Map**.

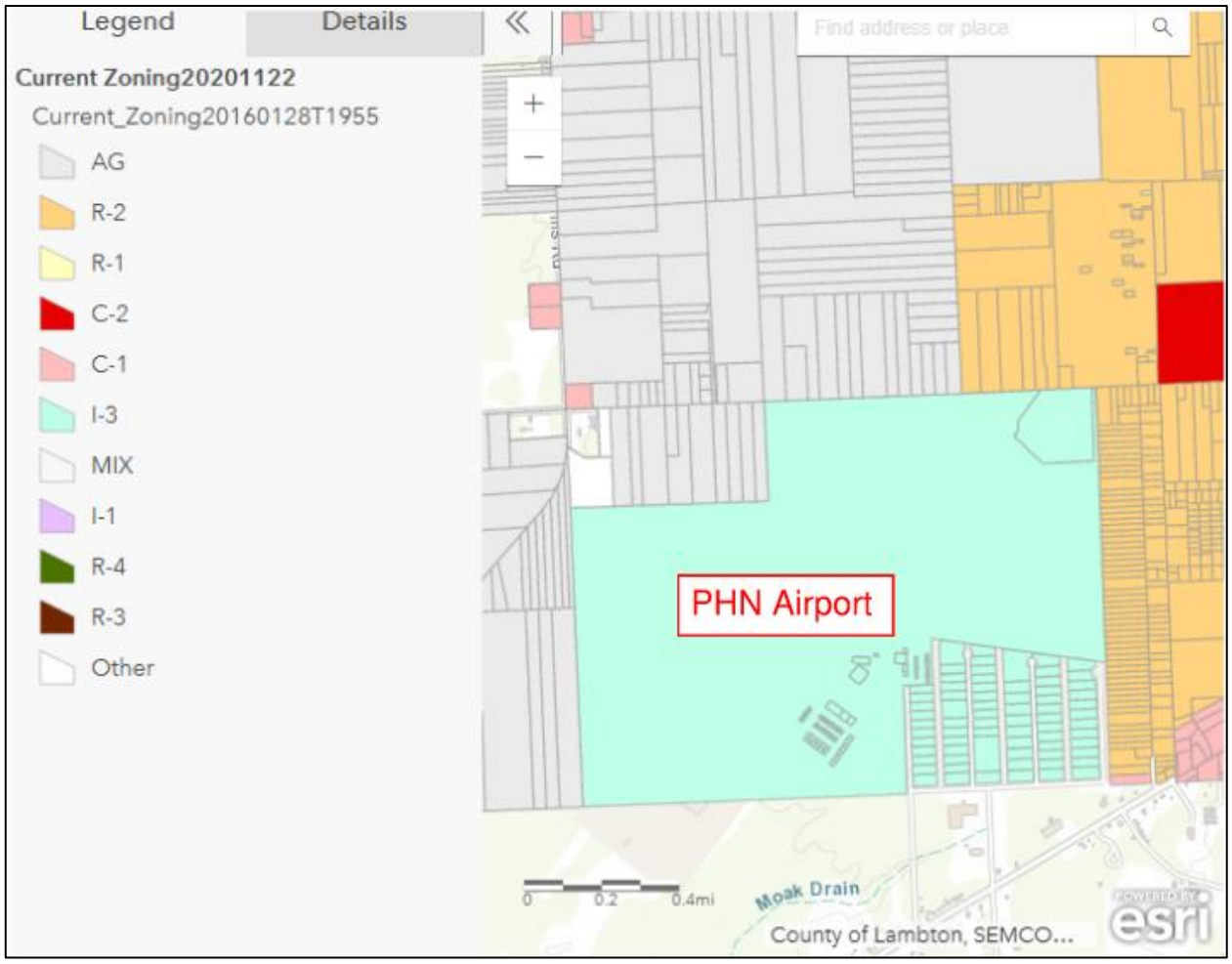
3.11.2 Environmental Consequences

The FAA has not established a significance threshold for land use, or factors to consider when determining significance of a project's effect on land use; however, to determine the potential for land use impacts caused by the Preferred Alternative and No Action Alternative, an evaluation of the proposed action and its compatibility with local land use controls and plans was completed.

No land use classification changes would occur with the Preferred Alternative or the No Action Alternative. No noise sensitive areas (residential, educational, health, religious, park or recreational, wildlife refuges, or cultural and historical) will be introduced or impacted. In compliance with 49 U.S.C. § 47017 (a)(10), the Airport has been proactive in restricting incompatible land uses adjacent to and within the immediate vicinity of PHN when feasible. Although the Preferred Alternative extends into areas off Airport property, the project involves tree removals only. Therefore, existing land use patterns will remain unchanged. The Preferred Alternative is considered compatible with the existing zoning and land uses of the surrounding area, as shown in **Figure 3.6 Kimball Township Zoning Map** and **Figure 3.7 St. Clair Township Zoning Map**.

The proposed action will not increase wildlife attractants or introduce new wildlife that is hazardous to aircraft operations. No wetlands, open water, or habitat will be created from implementation of the Preferred Alternative. It is anticipated that the proposed project may reduce wildlife attractants by removing trees in the Runway 4/22 approaches.

Figure 3.6 Kimball Township Zoning Map

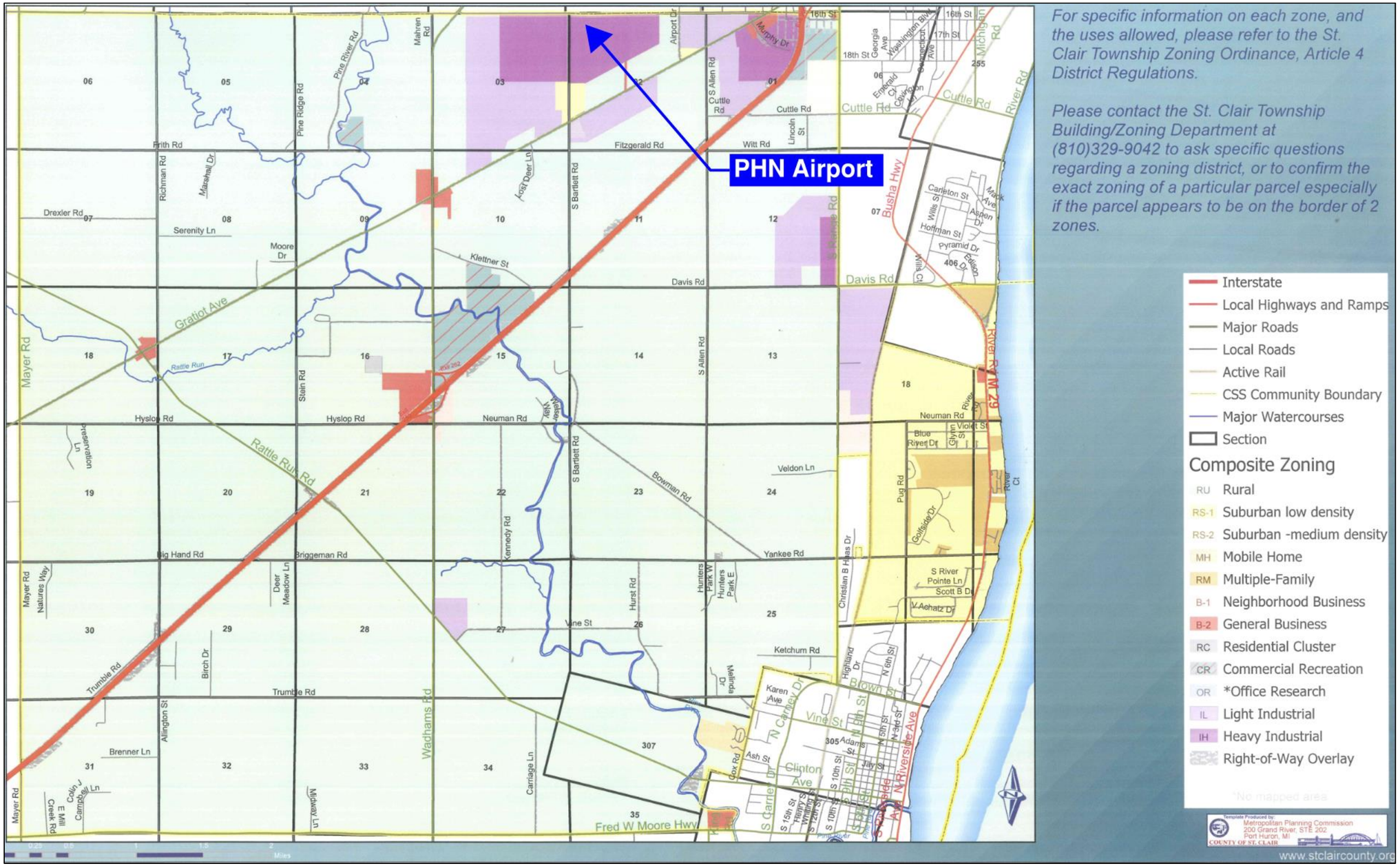


Source: Kimball Township, Michigan

In addition, neither the Preferred Alternative nor the No Action Alternative are expected to increase congestion, cause degradation of level of service, or permanently close any surface roads within, or adjacent to, the project area. Traffic from construction vehicles would be managed to avoid and minimize any impacts to local roads by defining haul routes and by scheduling the arrival and departure times of construction traffic so that normal traffic patterns are not interrupted. Any potential construction impacts to surface transportation would be temporary in nature.

Based on the above information, it is determined that the Preferred Alternative and the No Action Alternative are compatible with existing and planned land uses and zoning requirements. Land use impacts associated with the proposed action will not be significant based upon the factors described above.

Figure 3.7 St. Clair Township Zoning Map



Source: St. Clair Township, Michigan

3.12 Natural Resources and Energy Supply

Executive Order 13834, *Efficient Federal Operations* directs projects to examine the potential changes in the demand for energy or natural resources that would have a significant measurable effect on local supplies due to the implementation of the Preferred Alternative or the No Action Alternative. Energy requirements associated with an airport usually fall into two categories: (1) those that relate to changed demands for stationary facilities and (2) those that involve the movement of air and ground vehicles. Examples of these include airfield lighting, terminal building heating and cooling systems, and aircraft and passenger vehicles.

As described in 1050.1F, *Desk Reference*, federal agencies should consider energy requirements, natural depletable resources, and the conservation potential of alternatives including mitigation in NEPA documents. Though specific significance thresholds for natural resource consumption and energy supply have not been established by the FAA, the proposed action should be examined for the potential to cause demand to exceed available or future supplies of these resources.

FAA guidance typically states that airport improvement projects do not generally increase the consumption of energy or natural resources to the point that significant impacts would occur unless it is found that implementation of a proposed project would cause demand to exceed supply.

3.12.1 Affected Environment

The facilities at the Airport require electricity and natural gas for lighting, cooling/heating, and operations. The area around the Airport is considered a rural area with adequate access to natural resources for aircraft operations and construction projects as well as meeting the needs of the surrounding community.

3.12.2 Environmental Consequences

Due to the nature of the project, electric or gas use required to operate PHN facilities is not expected to increase because of the proposed project. The Preferred Alternative will not require the consumption of petroleum-based fuels or other natural resources in quantities that would surpass available supply. BMPs to reduce energy consumption during tree removal activities will be employed, where applicable. To reduce energy consumption associated with the temporary use of excavators and vehicles for the Preferred Alternative, construction equipment should be in good working order to ensure the most efficient use of fuel. All vehicles and equipment should be checked for leaks and repaired immediately.

The nature of the project does not lend itself to significant increases in energy or natural resources beyond temporary energy consumption associated with construction of the Preferred Alternative.

Natural resources and energy supply impacts are not expected from implementation of either the Preferred Alternative or the No Action Alternative.

3.13 Noise and Noise Compatible Land Use

According to FAA Order 5050.4B*, NEPA Implementing Instructions for Airport Actions,* “the compatibility of existing and planned land uses in the vicinity of an airport is usually associated with the extent of the noise

impacts related to that airport." An FAA noise analysis primarily focuses on how proposed airport actions would change the cumulative noise exposure of individuals to aircraft noise in areas surrounding the airport.

Noise is considered unwanted sound that disturbs or interrupts routine activities. Aviation noise includes sounds made by aircraft during departure, arrival, flight, taxiing, and other activities. The compatibility of land use around an airport is typically determined based on the level of aircraft noise. The degree of annoyance that people suffer from aircraft noise varies depending upon their activities at any given time.

The FAA uses the Day-Night Average Sound Level (DNL) as its primary noise metric. The DNL accounts for the levels of aircraft events, the number of times those events take place, and the timeframe in which they occur (day or night). The FAA, EPA, and U.S. Department of Housing and Urban Development have established the 65-decibel DNL level as the threshold for noise impacts over noise sensitive areas. Noise levels greater than 65 DNL on noise sensitive areas are considered a potential impact.

Noise sensitive areas typically include residential, educational, health, religious structures and sites, parks, recreational areas, wilderness areas, wildlife refuges, and cultural and historical sites. In the context of airport noise, such facilities, or areas within the 65 DNL contour, may be considered a noise sensitive land use.

3.13.1 Affected Environment

Noise-sensitive land uses (residential neighborhoods) exist in and adjacent to the project area at both ends of Runway 4/22. Other land uses adjacent to the Airport (agricultural and rural areas) are not considered noise-sensitive and were not considered for noise impacts.

3.13.2 Environmental Consequences

Per FAA Order 1050.1F, *Environmental Impacts: Policies and Procedures*, and Order 1050.1F *Desk Reference*, any airport that exceeds 90,000 annual piston-powered aircraft operations or 700 annual jet-powered aircraft operations, 10 or more daily helicopter operations, or any project that includes the construction of a new airport, a runway relocation, runway strengthening, or a major runway expansion requires a noise analysis. A noise analysis is performed for actions that result in a general overall increase in daily aircraft operations or the use of larger/noisier aircraft. The FAA's noise analysis primarily focuses on how proposed airport actions would change the cumulative noise exposure of individuals to aircraft noise in areas surrounding the airport.

According to the FAA 2024 TAF, PHN's total operations are forecast to remain below 38,000 annual operations through 2050, which is less than 90,000 operations. Therefore, the propeller aircraft activity levels are below the stated threshold for a noise analysis.

PHN's FAA Form 5010-1, *Airport Master Record* (last inspection date of August 2022) indicates there are no based helicopters at the Airport, which means it is unlikely the threshold of 10 daily helicopter operations for a noise analysis will be exceeded.

According to the FAA's Traffic Flow Management System Counts (TFMSC) database, Instrument Flight Rules (IFR) jet operations at PHN totaled 380 operations in 2024, which is below the threshold of 700 annual jet operations.

See **Appendix G – Noise** for a copy of the TAF, Form 5010-1, and TFMSC records.

The purpose of the proposed project is to enhance safety and utility of PHN by eliminating obstruction hazards in the Runway 4/22 approaches. The proposed action does not involve constructing a new airport, runway relocation, runway strengthening, or a major runway expansion.

Given that the nature of the project is to clear obstructions, it is unlikely the Preferred Alternative will cause an increase in noise levels over existing conditions or change existing air traffic patterns. Therefore, a noise analysis was not completed.

Temporary increases in noise may occur due to operations of heavy equipment and construction vehicles during tree removal activities. Construction staging areas are not allowed near noise sensitive land uses.

Based on the information presented above, noise impacts are not expected from implementation of either the Preferred Alternative or the No Action Alternative.

3.14 Socioeconomics and Children's Environmental Health and Safety Risks

Statutes related to socioeconomic impacts include the Uniform Relocation Assistance and Real Property Acquisitions Policy Act of 1970 (42 U.S.C. § 61 et seq.), Executive Order 13045, *Protection of Children from Environmental Health Risks and Safety Risks*, and other applicable federal guidance.

Airport development projects can impact the socioeconomic conditions of the surrounding community. Such projects have the potential to impact neighboring populations, including children, and may do so disproportionately to the overall area population. The proposed project was evaluated for socioeconomic impacts as well as health and safety risks to children.

3.14.1 Socioeconomic Impacts

The types of socioeconomic impacts that can arise from airport development projects include:

- Relocation of residences, businesses, or farms;
- Alteration of surface transportation patterns that may restrict community access;
- Disruption of established communities;
- Disruption of orderly, planned development; and
- Creation of appreciable changes in employment.

3.14.1.1 Affected Environment

Table 3-2 Major Employers in St. Clair County, Michigan lists important employers in St. Clair County and the number of people employed. The County's major employers and industry are not expected to be adversely impacted by the proposed action and may benefit from access to an improved airport facility. In addition, no appreciable changes in employment in the County are anticipated.

Table 3-2 Major Employers in St. Clair County, Michigan		
Company/Organization	**Industry**	**Number of Employees**
McLaren Port Huron	Healthcare	1,375
Motherson (SMR Automotive)	Manufacturing	1,050
St. Clair County	Government	988
Port Huron Area School District	Education	873
DTE Energy	Utility	747
ZF Marysville	Manufacturing	739
Lake Huron Medical Center	Healthcare	614
US Farathane	Manufacturing	610
Marysville Public School District	Education	457
East China School District	Education	425

Source: Economic Development Alliance of St. Clair County, Michigan

3.14.1.2 Environmental Consequences

No residential, business, or farm relocations will be required as part of this proposed project. In addition, no alteration of surface transportation patterns, community disruptions, or disruptions of orderly, planned development are expected.

New avigation easements for properties in the Runway 4/22 approaches are proposed. Avigation easements purchase the right to control the height of objects on the property, include the right to remove objects that penetrate various approach surfaces, and limit certain incompatible land uses. In the example of a tree, removal to the ground level to avoid any future growth is usually most desirable.

Where avigation easements are not currently in place, they will be obtained prior to tree clearing activities. Property owners with trees on their property that are considered current or future obstructions to the runway approaches will receive a one-time replacement with a low-growing species to help mitigate tree impacts to their property if they so desire. Specific mitigation and tree species will be determined during final design in coordination with the property owner, MDOT AERO, and the Airport.

No significant socioeconomic impacts are expected from implementation of either the Preferred Alternative or the No Action Alternative.

3.14.2 Children's Environmental Health and Safety Risks Impacts

FAA Order 1050.1F requires the identification of any potential environmental health risks to children as stated: "Environmental health risks and safety risks include risks to health and safety that are attributable to products or substances that a child is likely to come in contact with or ingest, such as air, food, drinking water, recreational waters, soil, or products they might use or be exposed to."

The FAA has not established a significance threshold for impacts to children's environmental health and safety; however, an analysis should include a determination on a proposed action's potential to cause disproportionate health or safety risks to children.

3.14.2.1 Affected Environment

Tree removals are proposed at both ends of Runway 4/22 under the Preferred Alternative. Areas near PHN contain residential populations including children. According to U.S. Census Bureau data, 26 percent of the population within a 2.5-mile radius of PHN is under the age of 18.

3.14.2.2 Environmental Consequences

In most cases, the significance of impacts to children's environmental health and safety is dependent on the significance of impacts in other environmental categories. Under the Preferred Alternative, there are no significant impacts to air quality, noise, or other resource categories that may influence the health of the surrounding population, including children. Although some tree removals are proposed on private property, areas affected by the Preferred Alternative do not include schools or other facilities that would otherwise be primarily accessed by children.

In addition, access to the project site would be restricted. It is unlikely that the development of the Preferred Alternative will include products or substances a child is likely to encounter. Therefore, no disproportionate health or safety risks to children are expected.

Children's Environmental Health and Safety Risks impacts from implementation of either the Preferred Alternative or the No Action Alternative are not anticipated. No mitigation is proposed.

3.15 Visual Effects (Including Light Emissions)

Airport lighting is required for security, obstruction identification, and navigation. The essential lighting systems required to safely operate an airport and its components can contribute to light emissions. When projects introduce new or existing relocated airport lighting facilities that may affect residential or other light-sensitive areas in proximity to an airport, an analysis of these impacts is necessary. FAA guidance states that the level of light emissions considered sufficient to warrant a special study is unusual, for example, occurring when a high-intensity strobe would be shining into a residential area or when apron, parking, or streetlights create a visual impact to pilots.

A project can also have impacts on the visual resources and visual character of the surrounding area. Visual resources and visual character impacts are typically related to a decrease in the aesthetic quality of an area resulting from development, construction, or demolition. FAA guidance states that an analysis of visual impacts is necessary when the proposed action would affect, obstruct, substantially alter, or remove visual resources including buildings, historic sites, or other landscape features, such as topography, water bodies, or vegetation, which are visually important or have unique characteristics.

3.15.1 Affected Environment

The proposed project will not introduce new or relocate existing airport lighting facilities that may affect residential or other light-sensitive areas in proximity to PHN.

Residential areas are located in the direct and indirect study areas at the approach ends of Runway 4/22 (see **Figure 3.0 Direct Impacts Study Area** and **Figure 3.1 Indirect Impacts Study Area**). Additional residential areas are adjacent to the indirect impacts study area. All other areas are considered rural and agricultural lands and are not subject to light-sensitive emission impacts.

3.15.2 Environmental Consequences

Trees that may act as a visual shield for residential properties will be removed in the Runway 4/22 approaches. At the approach end of Runway 4, the MALSR is approximately 0.18 miles north of the nearest residence susceptible to potential impacts. At the approach end of Runway 22, any existing runway lighting will be approximately 0.29 miles south of the nearest residence susceptible to potential impacts. However, as previously explained, property owners with trees on their property that are considered current or future obstructions to the runway approaches will receive a one-time replacement with a low-growing species to help mitigate tree impacts to their property, if desired. In addition, evening and nighttime runway lights are controlled by pilots and normally turned off unless needed by operating aircraft.

Although the proposed project will remove existing trees, impacts on resources that are visually important or have unique characteristics are not anticipated.

No significant visual effects impacts (including light emissions) are anticipated from implementation of either the Preferred Alternative or the No Action Alternative.

3.16 Water Resources

FAA Order 1050.1F references the Clean Water Act (CWA) described in 33 U.S.C. §§ 1251-1387, which provides the federal government with the authority to regulate activities related to water quality, including controlling discharges, preventing or minimizing loss of wetlands, and protecting local aquifers or sensitive ecological areas. In essence, the quality of surface water and ground water should not be degraded by the planned construction or operations associated with a proposed development.

Water resources are surface waters and ground water that are important to the ecosystem and the human environment. Analysis of water resources includes checking for disruption as well as changes in quality. Because wetlands, floodplains, surface waters, ground water, and other water resources are all connected within the overall system, this section encompasses an analysis of each.

3.16.1 Wetlands

Wetlands are areas that support specific vegetation due to inundation or saturation by ground water. Sometimes these are called swamps, marshes, or bogs. Wetlands provide benefits to the natural and human environments that include habitat, water filtration, storage, and recreation. There are several statutes, regulations, orders, and other requirements related to wetlands. The CWA regulates the discharge of pollutants into Waters of the U.S. (including wetlands) and establishes a program to regulate discharge of fill material into such waters. The CWA also requires projects not to violate water quality standards.

Surface waters or wetlands considered jurisdictional are regulated under the CWA; however, not all surface waters are under the authority of the CWA. The United States Army Corps of Engineers (USACE) makes

jurisdictional determination case by case. Non-jurisdictional wetlands are protected under Presidential Executive Order 11990, *Protection of Wetlands*, commonly known as the "No Net Loss" executive order. This executive order directs any project that uses federal funds or is federally approved to mitigate for all wetland impacts that it causes regardless of size or regulatory status. Therefore, any wetland impact as a result of the Preferred Alternative will require mitigation.

3.16.1.1 Affected Environment

To determine the locations and limits of area wetlands, appraise their types and functions, assess their regulatory status, and evaluate potential impacts from the proposed project, a team of qualified wetland biologists conducted a USACE-compliant wetland delineation within an AOI, split into two parts totaling 442.75 acres, over four site visits on August 16 – 23, 2022; October 3 – 7, 2022; June 6 – 14, 2023; and September 25 – October 4, 2023 (see **Figure 3.8 Wetland Delineation Area of Interest Map**). The field methods used conformed to the Routine Onsite Method of the *1987 U.S. Army Corps of Engineers' (USACE) Wetland Delineation Manual*, as enhanced by the *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: North Central and Northeast Region* (Version 2.0). The full wetland delineation report is provided in **Appendix H – Wetland Delineation Report**.

The AOI for the wetland delineation was the same as the AOI for the biological resources field investigations. Therefore, see **Section 3.5.1 Endangered & Threatened Species** for the AOI description.

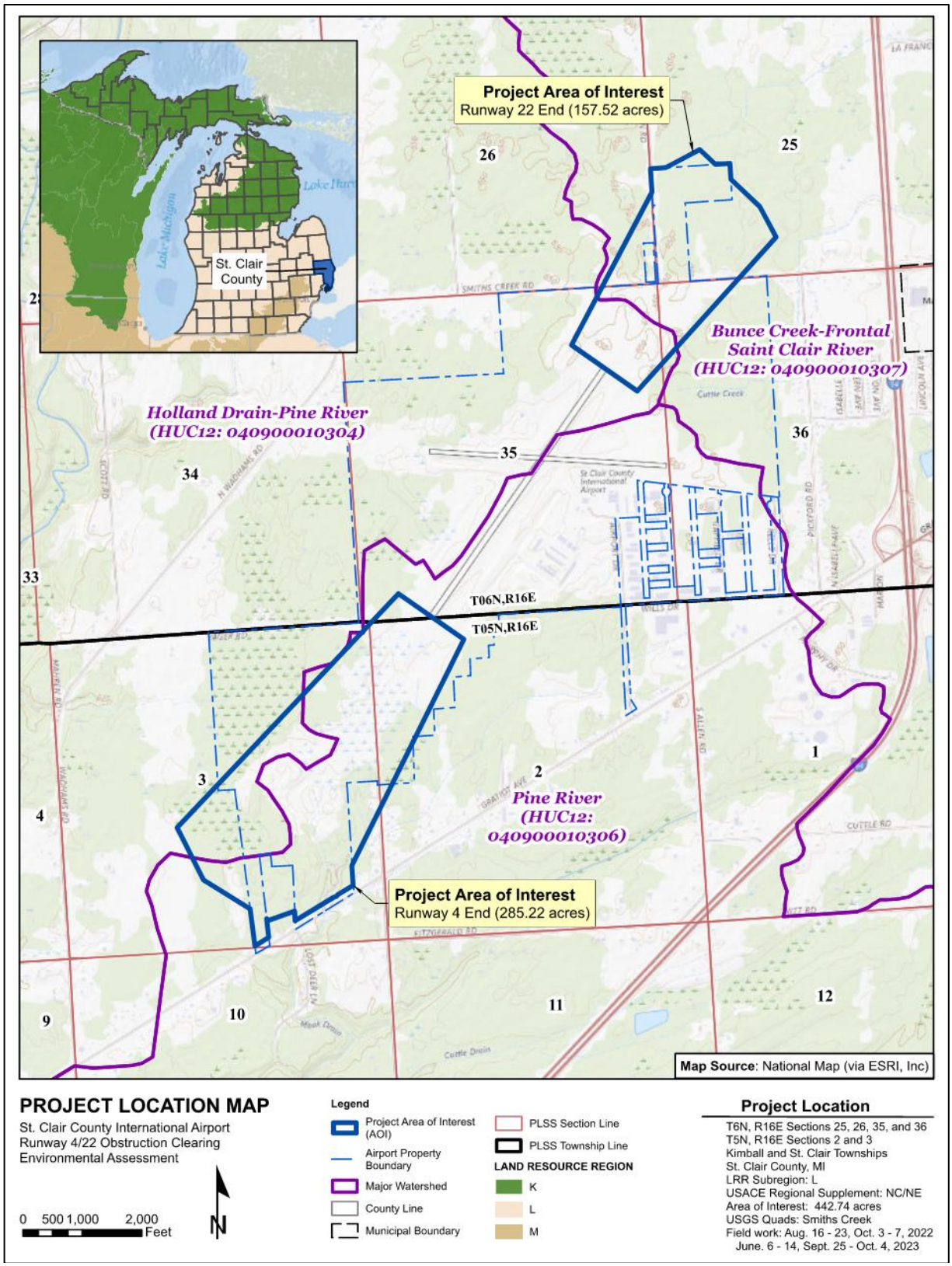
Delineated Wetland Descriptions

A total of 36 separate wetland boundaries enclosing 75.885 acres were delineated within the AOI. Of these 36 wetlands, four excavated ditches were delineated on Airport property as part of larger wetland complexes. Wetlands consisted of five types: Scrub-shrub (PSS), Forested (PFO), Emergent (PEM), Shallow Marsh (PUB), and Excavated Ditch (RUBx). On inaccessible private parcels within the AOI, nine wetlands enclosing 29.664 acres were estimated based on data sources including one-foot contours, soils, National Wetlands Inventory mapping, connectivity of adjacent wetlands, and historic aerial photos. Within these nine estimated wetlands, three excavated ditches were estimated. The inaccessible wetlands consisted of the same five types as above and generally are extensions of larger delineated wetlands. **Figure 3.9 Water Resources Map – Runway 4** and **Figure 3.10 Water Resources Map – Runway 22** show the delineated and estimated wetlands within the AOI. **Figure 3.11 Summary of Delineated and Estimated Water Resources within the Area of Interest** summarizes the delineated and estimated wetlands.

3.16.1.2 Environmental Consequences

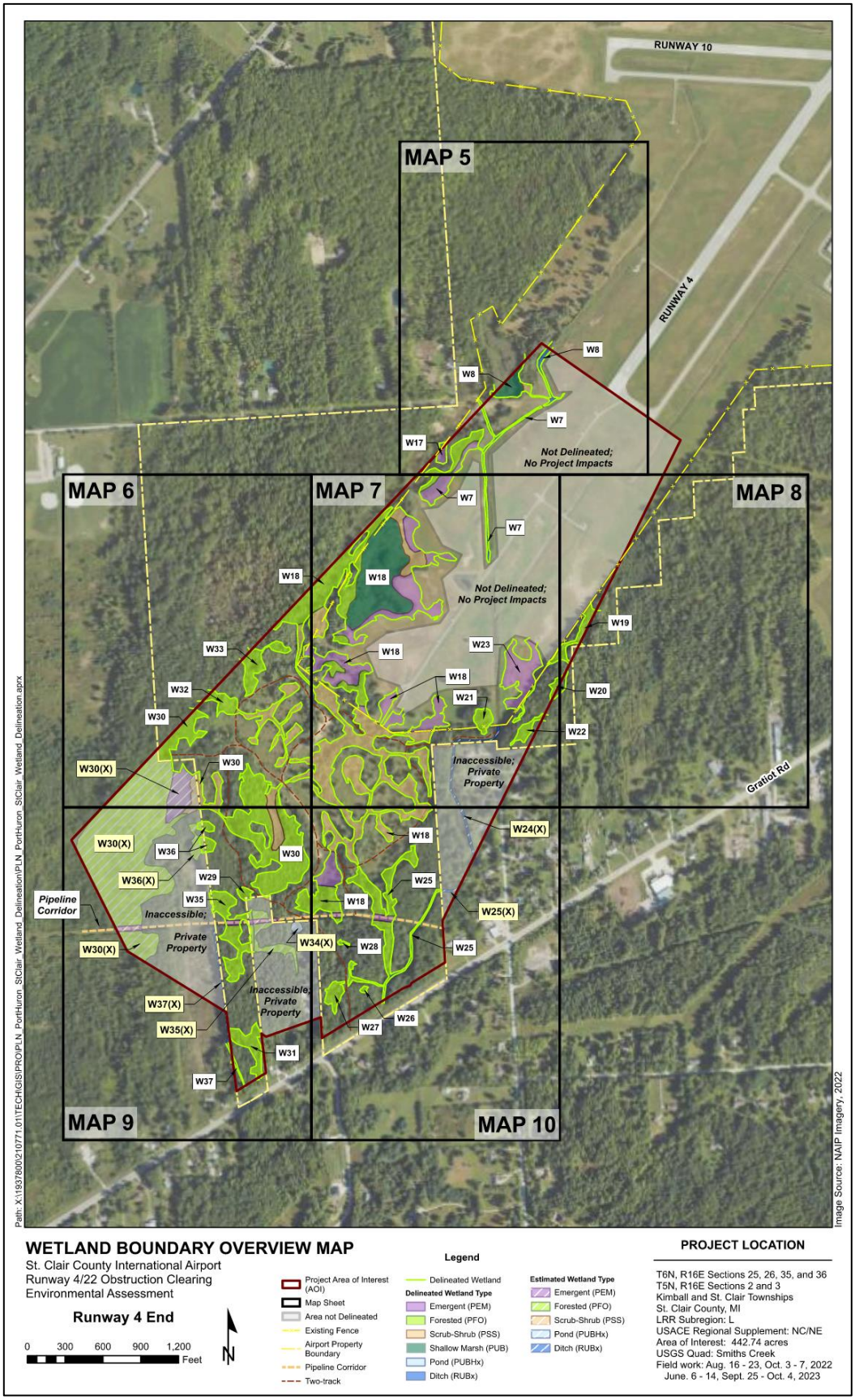
In wetland areas, trees identified as current and future obstructions will be cleared and stumps and understory trees and vegetation will remain with no ground disturbance under the Preferred Alternative. Since stumps and understory trees and vegetation will remain in wetland areas, the Preferred Alternative will create lowland areas that PHN will have to likely maintain to prevent regrowth in the distant future. Although a total of 105.549 acres of wetlands were delineated or estimated within the AOI, mitigation of impacts to wetlands will be avoided under the Preferred Alternative. Recent consultation with EGLE indicates that a one-time removal of trees as proposed under the Preferred Alternative along with no ground disturbance and no removal of understory trees in wetland areas will require no mitigation of impacts to wetlands. A Part 303 Wetland Protection Permit from EGLE will still be required, however.

Figure 3.8 Wetland Delineation Area of Interest Map



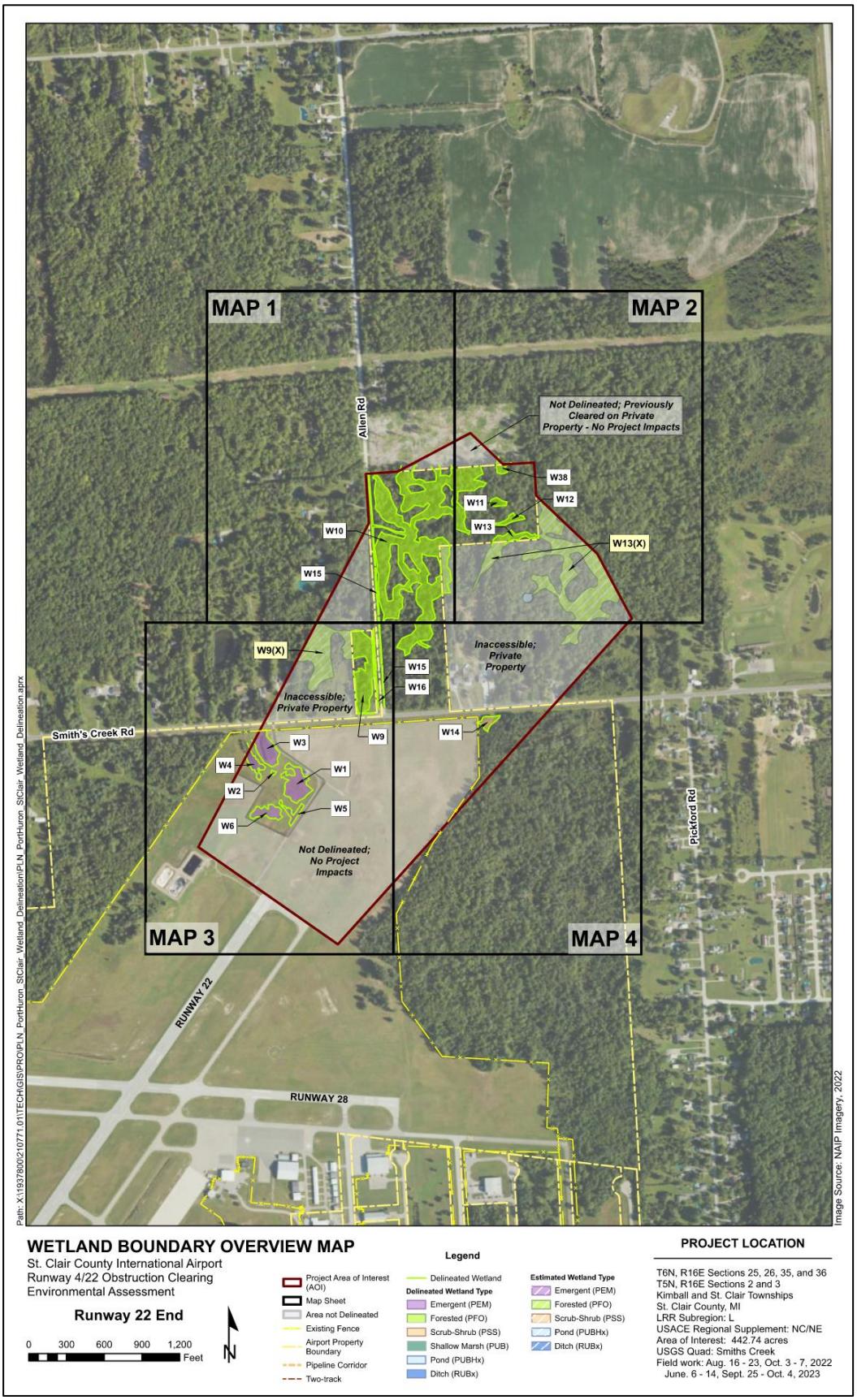
Source: *Wetland Delineation Report, Environmental Assessment for Runway 4/22 Approach Clearing, St. Clair County International Airport (PHN), Port Huron, MI*, prepared by Mead & Hunt, Inc., January 2025

Figure 3.9 Water Resources Map – Runway 4



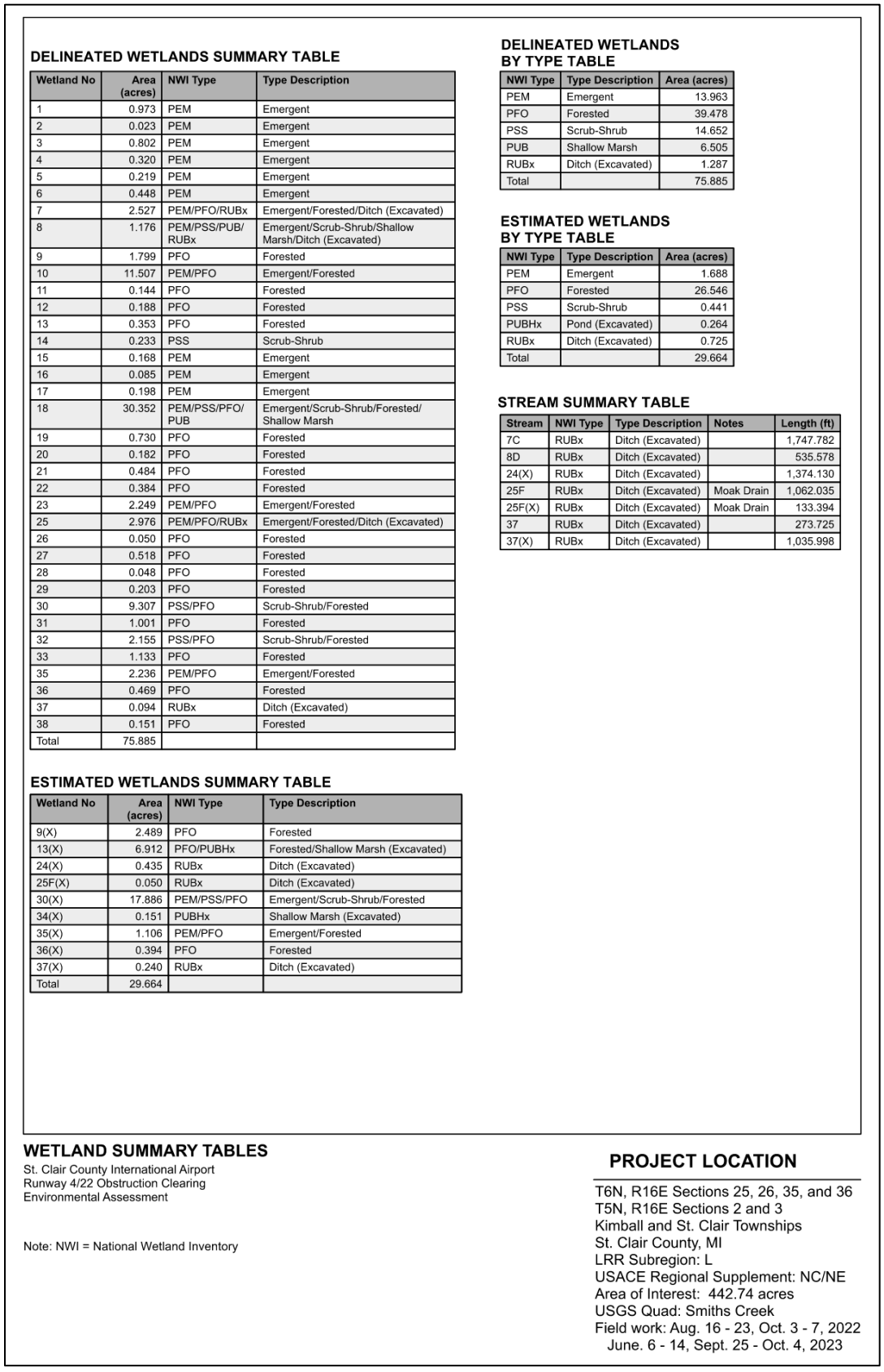
Source: *Wetland Delineation Report, Environmental Assessment for Runway 4/22 Approach Clearing, St. Clair County International Airport, Port Huron, MI*, prepared by Mead & Hunt, Inc., January 2025

Figure 3.10 Water Resources Map – Runway 22



Source: *Wetland Delineation Report, Environmental Assessment for Runway 4/22 Approach Clearing, St. Clair County International Airport, Port Huron, MI*, prepared by Mead & Hunt, Inc., January 2025

Figure 3.11 Summary of Delineated and Estimated Water Resources Within the Area of Interest



DELINEATED WETLANDS SUMMARY TABLE

Wetland No	Area (acres)	NWI Type	Type Description
1	0.973	PEM	Emergent
2	0.023	PEM	Emergent
3	0.802	PEM	Emergent
4	0.320	PEM	Emergent
5	0.219	PEM	Emergent
6	0.448	PEM	Emergent
7	2.527	PEM/PFO/RUBx	Emergent/Forested/Ditch (Excavated)
8	1.176	PEM/PSS/PUB/ RUBx	Emergent/Scrub-Shrub/Shallow Marsh/Ditch (Excavated)
9	1.799	PFO	Forested
10	11.507	PEM/PFO	Emergent/Forested
11	0.144	PFO	Forested
12	0.188	PFO	Forested
13	0.353	PFO	Forested
14	0.233	PSS	Scrub-Shrub
15	0.168	PEM	Emergent
16	0.085	PEM	Emergent
17	0.198	PEM	Emergent
18	30.352	PEM/PSS/PFO/ PUB	Emergent/Scrub-Shrub/Forested/ Shallow Marsh
19	0.730	PFO	Forested
20	0.182	PFO	Forested
21	0.484	PFO	Forested
22	0.384	PFO	Forested
23	2.249	PEM/PFO	Emergent/Forested
25	2.976	PEM/PFO/RUBx	Emergent/Forested/Ditch (Excavated)
26	0.050	PFO	Forested
27	0.518	PFO	Forested
28	0.048	PFO	Forested
29	0.203	PFO	Forested
30	9.307	PSS/PFO	Scrub-Shrub/Forested
31	1.001	PFO	Forested
32	2.155	PSS/PFO	Scrub-Shrub/Forested
33	1.133	PFO	Forested
35	2.236	PEM/PFO	Emergent/Forested
36	0.469	PFO	Forested
37	0.094	RUBx	Ditch (Excavated)
38	0.151	PFO	Forested
Total	75.885		

ESTIMATED WETLANDS SUMMARY TABLE

Wetland No	Area (acres)	NWI Type	Type Description
9(X)	2.489	PFO	Forested
13(X)	6.912	PFO/PUBHx	Forested/Shallow Marsh (Excavated)
24(X)	0.435	RUBx	Ditch (Excavated)
25F(X)	0.050	RUBx	Ditch (Excavated)
30(X)	17.886	PEM/PSS/PFO	Emergent/Scrub-Shrub/Forested
34(X)	0.151	PUBHx	Shallow Marsh (Excavated)
35(X)	1.106	PEM/PFO	Emergent/Forested
36(X)	0.394	PFO	Forested
37(X)	0.240	RUBx	Ditch (Excavated)
Total	29.664		

DELINEATED WETLANDS BY TYPE TABLE

NWI Type	Type Description	Area (acres)
PEM	Emergent	13.963
PFO	Forested	39.478
PSS	Scrub-Shrub	14.652
PUB	Shallow Marsh	6.505
RUBx	Ditch (Excavated)	1.287
Total		75.885

ESTIMATED WETLANDS BY TYPE TABLE

NWI Type	Type Description	Area (acres)
PEM	Emergent	1.688
PFO	Forested	26.546
PSS	Scrub-Shrub	0.441
PUBHx	Pond (Excavated)	0.264
RUBx	Ditch (Excavated)	0.725
Total		29.664

STREAM SUMMARY TABLE

Stream	NWI Type	Type Description	Notes	Length (ft)
7C	RUBx	Ditch (Excavated)		1,747.782
8D	RUBx	Ditch (Excavated)		535.578
24(X)	RUBx	Ditch (Excavated)		1,374.130
25F	RUBx	Ditch (Excavated)	Moak Drain	1,062.035
25F(X)	RUBx	Ditch (Excavated)	Moak Drain	133.394
37	RUBx	Ditch (Excavated)		273.725
37(X)	RUBx	Ditch (Excavated)		1,035.998

WETLAND SUMMARY TABLES

St. Clair County International Airport
Runway 4/22 Obstruction Clearing
Environmental Assessment

Note: NWI = National Wetland Inventory

PROJECT LOCATION

T6N, R16E Sections 25, 26, 35, and 36
T5N, R16E Sections 2 and 3
Kimball and St. Clair Townships
St. Clair County, MI
LRR Subregion: L
USACE Regional Supplement: NC/NE
Area of Interest: 442.74 acres
USGS Quad: Smiths Creek
Field work: Aug. 16 - 23, Oct. 3 - 7, 2022
June. 6 - 14, Sept. 25 - Oct. 4, 2023

Source: *Wetland Delineation Report, Environmental Assessment for Runway 4/22 Approach Clearing, St. Clair County International Airport, Port Huron, MI*, prepared by Mead & Hunt, Inc., January 2025

In addition to obtaining a Part 303 Wetland Protection Permit, all delineated wetlands will be shown on construction plans to protect them from any possible direct or indirect impacts and construction documents will require avoidance and erosion control measures.

The Preferred Alternative is expected to have adverse wetland impacts; however, these impacts will not require mitigation beyond the permitting process. The No-Build Alternative will have no impacts to wetlands.

3.16.2 Floodplains

Executive Order 11988, *Floodplain Management*, defines floodplains as "the lowland and relatively flat areas adjoining inland and coastal waters including flood-prone areas of offshore islands, including at a minimum, that area subject to a one percent or greater chance of flooding in any given year." Executive Order 11988 discourages federal actions in a floodplain unless no practicable alternative exists and requires measures to minimize unavoidable short-term and long-term impacts if the proposed action occurs in a floodplain.

A floodplain is a flat, low area adjacent to a stream, river, or creek that may be flooded during high water flow conditions. A 100-year floodplain includes the area that has a one percent (1%) chance of flooding in any given year. Projects within a 100-year floodplain are discouraged.

3.16.2.1 Affected Environment

According to the wetland delineation report, there are no mapped floodplains within the project area (see **Appendix H – Wetland Delineation Report**). In addition, as part of the National Flood Insurance Program, the Federal Emergency Management Agency (FEMA) produces Flood Insurance Rate Maps (FIRMs) that serve as official flood maps depicting Special Flood Hazard Areas. The FEMA FIRM for PHN and the surrounding area shows there are no regulated floodplains on Airport property or in the project area. The FIRM is presented in **Appendix I – Floodplains**.

3.16.2.2 Environmental Consequences

The wetland delineation report and the FEMA FIRM for PHN indicate there are no regulated floodplains in the project area. Therefore, floodplain impacts are not expected.

Floodplain impacts from implementation of either the Preferred Alternative or the No Action Alternative are not anticipated. No mitigation is proposed.

3.16.3 Surface Water

The CWA, in conjunction with the Fish and Wildlife Coordination Act (16 U.S.C. §§ 661-667d), Rivers and Harbors Act (33 U.S.C. § 401 and 403), the Safe Drinking Water Act (SDWA) found in 42 U.S.C. §§ 300(f)-300j26, and other local statutes, establishes regulations that protect the nation's water resources. Surface waters are typically lakes, rivers, streams, creeks, and wetlands. Surface waters collect the water from precipitation that does not infiltrate the soil and instead flows across the land. Surface waters can be hydrologically connected to ground water.

3.16.3.1 Affected Environment

In combination with the above-described wetland delineation completed for the project-wide AOI, regulated water resources were also evaluated to determine potential surface water impacts from implementation of the Preferred Alternative.

The streams summarized in **Figure 3.11 Summary of Delineated and Estimated Water Resources Within the Area of Interest** total 6,162.642 linear feet. They are steep-sided, excavated ditches that convey drainage from Airport property ultimately to the Moak Drain or are parts of the Moak Drain itself. Slow flowing water was found in these ditches at multiple site visits. Wetland 37(X) was observable from Airport property and was approximately 10 - 15 feet wide with water to an unknown depth, likely more than two feet deep.

See **Figure 3.9 Water Resources Map – Runway 4** and **Figure 3.10 Water Resources Map – Runway 22** for maps showing the locations of the delineated and estimated streams.

3.16.3.2 Environmental Consequences

No impacts to the excavated ditches listed in **Figure 3.11 Summary of Delineated and Estimated Water Resources Within the Area of Interest** are anticipated beyond tree clearing activities.

Soil erosion is a source of concern due to possible adverse impacts to surface waters from construction projects. Since the Airport site is generally flat, a high risk of soil erosion is not expected during ground disturbing activities. However, some amount of erosion may occur during tree removals, which will be minimized using appropriate BMPs. The following list of BMPs represents common erosion control measures that should be considered during tree removals and applied where applicable:

- Sediment traps
- Temporary cement ponds
- Temporary grassing of disturbed areas
- Vegetation cover replaced as soon as possible
- Wildlife safe erosion mats and mulch
- Silt fencing and drainage check dams
- Settling basins for storm water treatment

All excavated soils and staging areas for construction equipment will be placed in non-sensitive upland areas with disturbed areas replanted as soon as possible to reduce the likelihood of erosion.

Mitigation measures prepared under an erosion control plan, in accordance with FAA AC 150/5370-10H, *Standard Specifications for Construction of Airports*, will help minimize long-term impacts to area water quality and to the existing drainage system.

In accordance with Part 91, Michigan Soil Erosion and Sedimentation Control of the Natural Resources and Environmental Protection Act, 1994 Public Act 451, as amended, a soil erosion and sedimentation control permit is required from St. Clair County.

The Airport is also required to obtain a National Pollutant Discharge Elimination System (NPDES) permit for construction activity disturbing 1 acre or more of soil. Permittees are required to control runoff from construction sites and develop a construction Stormwater Pollution Prevention Plan (SWPPP) that includes erosion prevention and sediment control BMPs.

Surface water impacts from implementation of either the Preferred Alternative or the No Action Alternative are not anticipated.

3.16.4 Ground Water

Ground water is below the surface of the ground within the spaces between soil and rock formations. Ground water quality is primarily governed under the SDWA administered by the EPA. The study area for ground water includes all areas where the ground could be disturbed by construction of the Preferred Alternative, where impervious surfaces could change rates of ground water infiltration, where airport operations could increase spills or leaks, and where construction vehicles and other equipment could potentially impact ground water due to staging, machinery, storage, and spills.

3.16.4.1 Affected Environment

In evaluating ground water resources in the project area, the following databases were reviewed:

- EPA Sole Source Aquifer for Drinking Water Database and Mapping Tool
- EGLE Open Data GIS dataset for water wells in Michigan
- EGLE Open Data GIS dataset for wellhead protection areas in Michigan

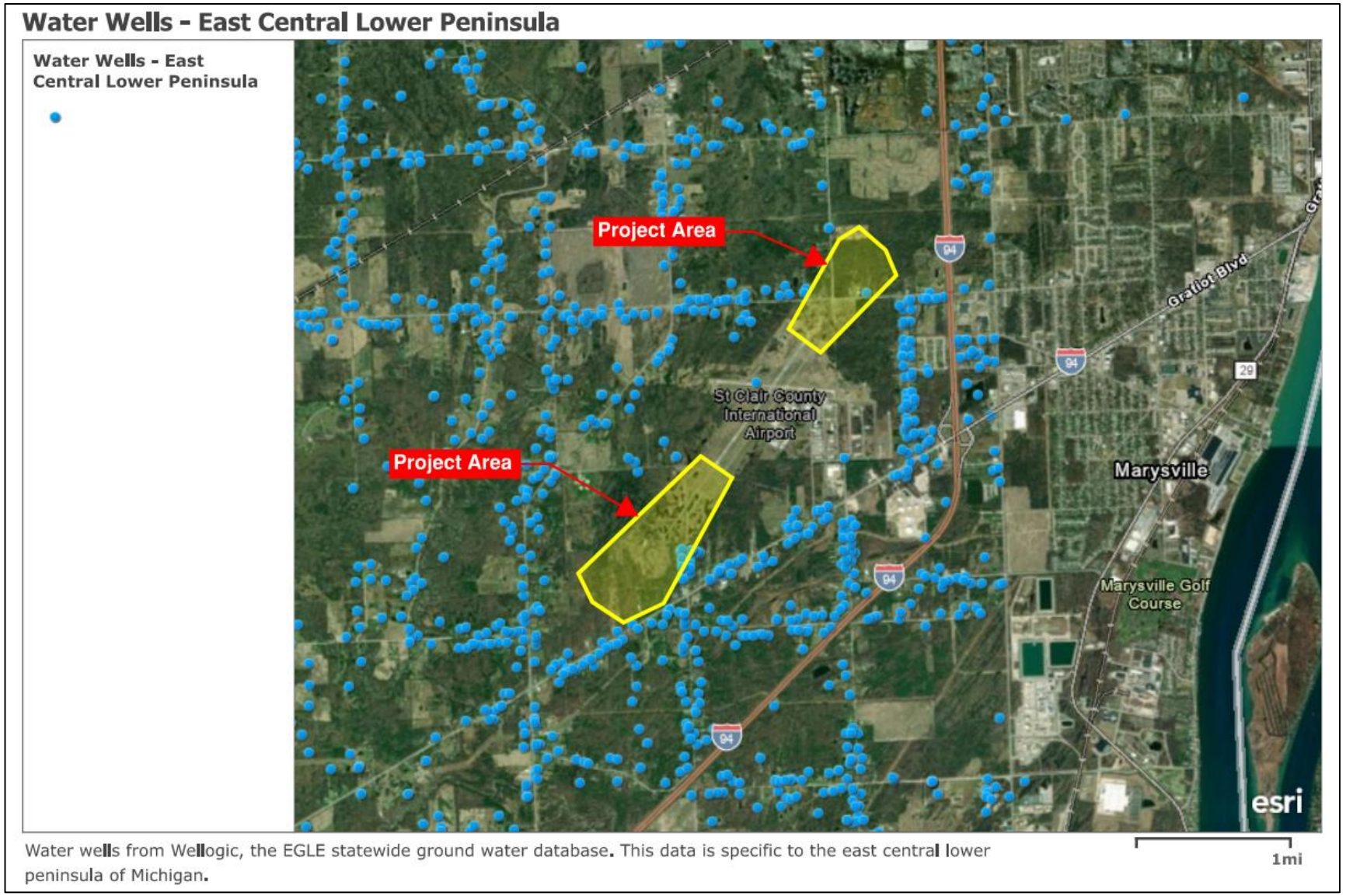
3.16.4.2 Environmental Consequences

The EPA maintains a database of ground water sources that serve as the sole source of drinking water for a population. According to the EPA, the proposed project is not within a Sole Source Aquifer for Drinking Water.

EGLE maintains several databases of water wells and wellhead protection areas in Michigan. According to EGLE's Open Data GIS dataset for water wells in the east central Lower Peninsula, there are several drinking water wells within the limits of the project area at the approach ends of Runway 4 and Runway 22, as shown in **Figure 3.12 Water Wells.** There will be no direct impacts to these wells, however. The wells will be flagged in the field during tree removals and will be marked on construction plans to ensure they are avoided. If it is determined during final design that there will be impacts to any wells during project implementation, the wells will be relocated in accordance with state and local regulations.

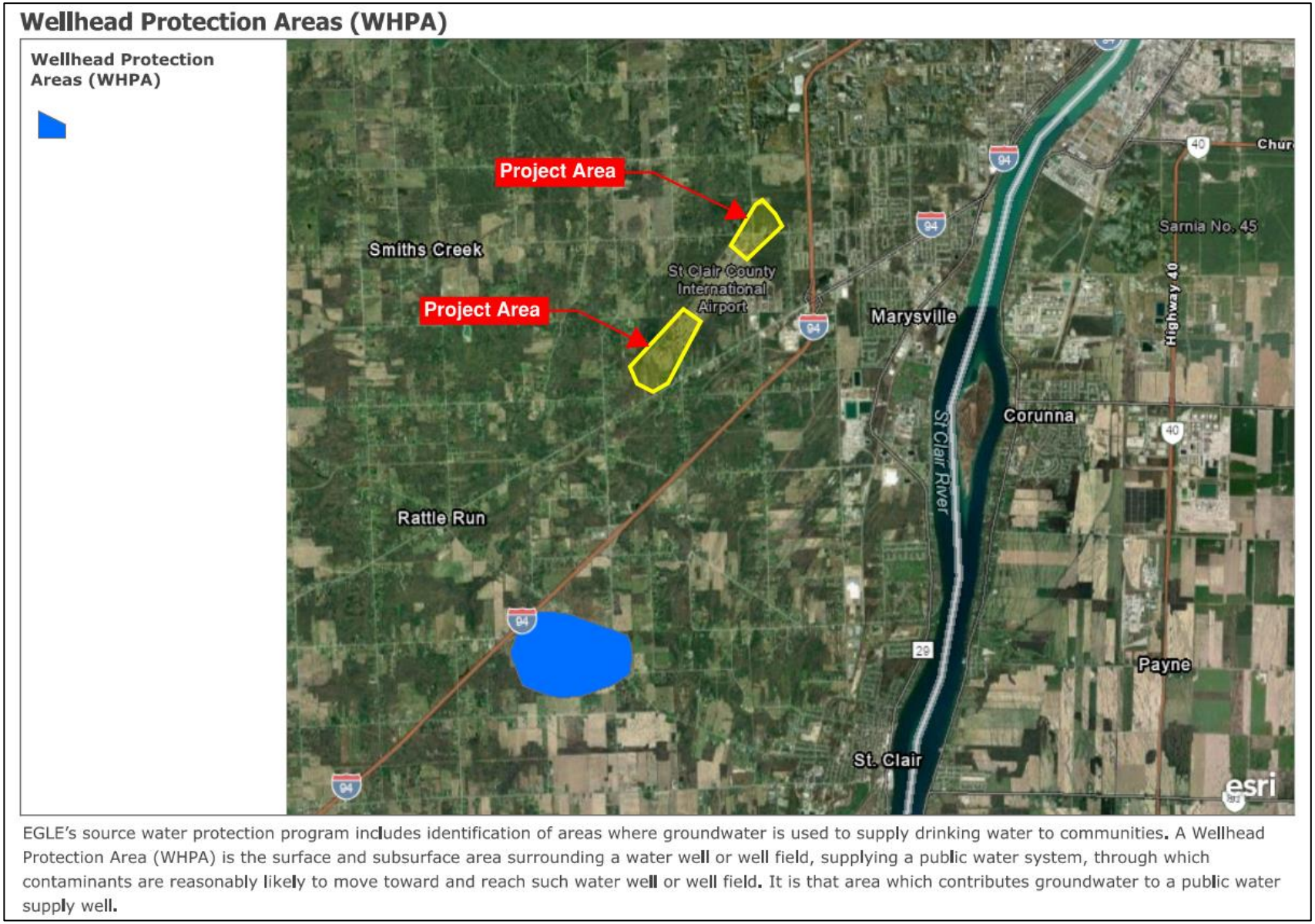
Wellhead protection areas represent the land surface area that contributes ground water to wells serving public water supply systems throughout Michigan. The wellhead protection areas define a landscape in which management strategies are employed to protect public water supply from ground water contamination. According to EGLE's Open Data wellhead protection dataset, there are no wellhead protection areas in or near the limits of the proposed tree removals, as shown in **Figure 3.13 Wellhead Protection Areas**.

Figure 3.12 Water Wells



Source: Michigan Department of Environment, Great Lakes, and Energy, Water

Figure 3.13 Wellhead Protection Areas



Source: Michigan Dept. of Environment, Great Lakes, and Energy, Wellhead Protection Areas

No ground water impacts are expected from implementation of either the Preferred Alternative or the No Action Alternative.

3.16.5 Wild and Scenic Rivers

Wild and Scenic Rivers are those resources that have extraordinary scenic, recreational, geologic, ecosystem, historic, or cultural value as defined in the Wild and Scenic Rivers Act. The Wild and Scenic Rivers Act (16 U.S.C. §§ 1271-1287) creates a national system intended to preserve certain rivers in a free-flowing condition for current and future enjoyment. The national system is administered by the Bureau of Land Management (BLM), the National Park Service (NPS), the USFWS, and the United States Forest Service (USFS). The land surrounding a protected river or river segment determines the agency that administers the national system.

The Nationwide Rivers Inventory (NRI) is a list maintained by the NPS that identifies river segments that possess remarkable natural or cultural values and are of more than local or regional importance. All federal agencies are required to avoid or mitigate impacts to NRI segments.

3.16.5.1 Affected Environment

According to the National Wild and Scenic Rivers System website, no rivers in St. Clair County are in the National Wild and Scenic Rivers System. The nearest protected river is the Au Sable River, which is approximately 130 miles northwest of PHN in Northern Michigan.

According to the NPS, there are no NRI rivers in St. Clair County. The nearest protected river is the Clinton River, which is approximately 25 miles southwest of the Airport.

3.16.5.2 Environmental Consequences

There are no rivers listed in the National Wild and Scenic Rivers System or NRI rivers located in or within proximity of the project area. The closest protected resource is the Clinton River, an NRI river that is approximately 25 miles southwest of the Airport.

Impacts to rivers listed in the National Wild and Scenic Rivers System and NRI resources are not anticipated with the implementation of either the Preferred Alternative or the No Action Alternative. No mitigation is proposed.

3.17 Other Project Considerations

This section discusses other items that, while not specifically covered in previous sections, are important to the understanding of the project's potential impacts on the social, environmental, and economic surroundings.

Conformance with Plans, Policies, and Controls: An airport development project plays an important role in the local and regional economy. Often, a project influences the type and location of specific land uses, the ground transportation network, and the general direction of community growth. When evaluating an action's conformance with plans and policies, there are usually two levels of planning involved. The first level

addresses policy plans, which are goals and objectives for the area or jurisdiction. The second addresses specific physical plans that direct development of the physical infrastructure.

Coordination with the Airport does not indicate any conflicts with local, county, or regional planning efforts. The tree removals will occur on a combination of Airport-owned property, private property with existing avigation easements, and private property identified for future avigation easements. St. Clair County, Kimball Township, and St. Clair Township are fully aware of the proposed project.

Conformance with Laws and Administrative Rules: In preparing this EA, various federal, state, regional, and local agencies were contacted to solicit their comments on the proposed project as it related to their specific area of expertise or regulatory jurisdiction including permitting and mitigation requirements (**Appendix A – Early Agency Coordination**). Based on this coordination, inconsistency with known federal, state, or local laws or administrative rules is not expected. All phases of the proposed action will adhere to appropriate regulations and permitting requirements including any necessary mitigation measures.

Means to Mitigate Adverse Environmental Impacts: Projects should take care to avoid permanent adverse impacts on the environment. It is important that all adverse environmental impacts be minimized or mitigated if avoidance is not possible. The various impacts of the Preferred Alternative and the means to mitigate them to the greatest extent possible are summarized in **Table 3-3 Mitigation Summary of the Preferred Alternative**.

Degree of Controversy on Environmental Grounds: The Preferred Alternative is consistent with all federal, state, regional, and local plans and laws. According to conversations and correspondence with various federal and state agencies and the Airport, there have been no negative public comments or controversy concerning the proposed action.

Table 3-3 Mitigation Summary of the Preferred Alternative	
Environmental Factor	**Proposed Mitigation and Permits**
Air Quality	To minimize air emissions from construction equipment the following recommendations may be implemented and incorporated by the Airport during tree removals, where feasible: • Use low-sulfur diesel fuel (less than 0.05 percent sulfur). • Retrofit engines with an exhaust filtration device to capture diesel particulate matter before it enters the construction site. • Position the exhaust pipe so that the diesel fumes are directed away from the operator and nearby workers, thereby reducing the fume concentration to which personnel are exposed. • Use catalytic converters to reduce carbon monoxide, aldehydes, and hydrocarbons in diesel fumes. These devices must be used with low sulfur fuels. • Use climate-controlled cabs that are pressurized and equipped with high efficiency particulate air (HEPA) filters to reduce the operator's exposure to diesel fumes. • Regularly maintain diesel engines, which is essential to keeping exhaust emissions low, and follow the manufacturer's recommended maintenance schedule. • Reduce exposure through work practices and training, such as turning off engines when vehicles are stopped for more than a few minutes, training diesel operators to perform routine inspections, and maintaining filtration devices. • Purchase new vehicles that are equipped with the most advanced emission control systems available. • With older vehicles, use electric starting aids as block heaters to warm the engine to reduce diesel emissions.
Biological Resources	To minimize impacts to any potential bat populations, the following measures will be implemented: • Tree cutting will be avoided from May 15 through July 31. • Selective tree removals (i.e., individual trees) will be employed to the greatest extent possible, especially in areas where the obstruction density is low or in upland areas on private property with avigation easements. In wetland areas, trees will be cut and removed but grubbing or other ground disturbance will be avoided. Recommended best management practices (BMPs) for the Eastern Massasauga Rattlesnake (EMR) will be implemented as follows: • Use of wildlife-safe erosion control materials.

Table 3-3 Mitigation Summary of the Preferred Alternative	
Environmental Factor	**Proposed Mitigation and Permits**
	• Viewing of the Michigan Department of Natural Resources' "60-Second Snakes: The Eastern Massasauga Rattlesnake" video and/or review of the EMR fact sheet. • Reporting of any EMR observations (or any other threatened or endangered species) during project implementation.
Coastal Resources	None Required.
Dept. of Transportation Act, Section 4(f)	None Required.
Farmlands	None Required.
Hazardous Materials	Since there is evidence of a past release of various hazardous substances at 5740 Gratiot Avenue in the Runway 4 portion of the project area the use of special provisions and a change to the proposed action (e.g., no ground disturbance) may be warranted in lieu of a full Phase II Environmental Site Assessment (ESA). The Phase I ESA completed for Findings 2/3 provided the following sample special provision language to be included in contracting documents: "A Notice to Contractor – Contaminated Soil Locations It is presumed that due to the previous known release of hazardous substances, contaminated soil exists within the proposed action area. Contaminated soils are likely present at the following site: 1. 5740 Gratiot Avenue, St. Clair, MI 48079. Tax Parcel ID #: 74-30-003-3006-000 The contaminated soil at the above site is expected to be within the excavation limits necessary to complete the work under this project. Control construction operations at this location to restrict any ground disturbance, including the use of heavy machinery. Construction work must be limited to dry conditions only to prevent the unintended ground disturbance that is likely in wet conditions. If contaminated soils are encountered at this site or elsewhere on the project during excavation, terminate excavation in the area and notify the engineer. A change to the proposed action may be warranted in lieu of a full Phase 2. This includes altering the proposed action of clearing and grubbing to just aboveground removal of obstructions (trees). Specifically, within the area of contamination, obstructions (trees)

Table 3-3 Mitigation Summary of the Preferred Alternative	
Environmental Factor	**Proposed Mitigation and Permits**
	should be felled at six inches to one foot above ground without ground disturbance. Resulting stumps should be left undisturbed by the contractor." It is recommended that the contractor consider wearing personal protective equipment (PPE) such as rubber boots and rubber gloves during project activities on the property at 5740 Gratiot Avenue. The contractor is required to have a Spill Prevention, Control, and Countermeasure (SPCC) plan in place to be implemented if a spill occurs during tree removals. An approved erosion control plan is required. Any waste generated through proposed project improvements will be disposed of in compliance with all federal, state, and local regulations.
Historical, Architectural, Archeological, and Cultural Resources	If cultural resources are encountered during tree removals, work must stop, and the State Historic Preservation Office (SHPO) must be notified immediately.
Land Use	Traffic from construction vehicles will be managed to avoid and minimize any impacts to local roads by defining haul routes and by scheduling the arrival and departure times of construction traffic so that normal traffic patterns are not interrupted.
Natural Resources and Energy Supply	BMPs to reduce energy consumption during construction will be employed, where applicable. To reduce energy consumption associated with the temporary use of excavators and construction vehicles, equipment should be in good working order to ensure the most efficient use of fuel. All vehicles and equipment should be checked for leaks and repaired immediately.
Noise and Noise Compatible Land Use	Construction staging areas are not allowed near noise sensitive land uses.
Socioeconomics and Children's Environmental Health and Safety Risks	Where avigation easements are not currently in place, they will be obtained prior to tree clearing activities. Property owners with trees on their property that are considered current or future obstructions to the runway approaches will receive a one-time replacement with a low-growing species to help mitigate tree impacts to their property if they so desire. Specific mitigation and tree species will be determined during final design in coordination with the property owner, the

Table 3-3 Mitigation Summary of the Preferred Alternative	
Environmental Factor	**Proposed Mitigation and Permits**
	Michigan Department of Transportation Office of Aeronautics (MDOT AERO), and the Airport.
Visual Effects & Light Emissions	Property owners with trees on their property that are considered current or future obstructions to the runway approaches will receive, if so desired, a one-time replacement with a low-growing species to help mitigate impacts to trees that may act as a visual shield for their property.
Water Resources	<u>Wetlands:</u> • Obtain a Part 303 Wetland Protection Permit from EGLE. • All delineated wetlands will be shown on construction plans to protect them from any possible direct or indirect impacts and construction documents will require avoidance and erosion control measures. <u>Floodplains:</u> None Required. <u>Surface Water:</u> • Soil erosion is a source of concern as a possible adverse impact to surface waters from construction projects. The following list of BMPs represents common erosion control measures that should be considered during tree removals and applied where applicable: o Sediment traps o Temporary cement ponds o Temporary grassing of disturbed areas o Vegetation cover replaced as soon as possible o Wildlife safe erosion mats and mulch o Silt fencing and drainage check dams o Settling basins for storm water treatment • All excavated soils and staging areas for construction equipment will be placed in non-sensitive upland areas with disturbed areas replanted as soon as possible to reduce the likelihood of erosion. • Mitigation measures prepared under an erosion control plan in accordance with FAA AC 150/5370-10H, *Standard Specifications for Construction of Airports*, will help minimize long-term impacts to area water quality and to the existing drainage system. • In accordance with Part 91, Michigan Soil Erosion and Sedimentation Control of the Natural Resources and Environmental Protection Act, 1994 Public Act 451, as amended, a soil erosion and sedimentation control permit is required from St. Clair County.

Table 3-3 Mitigation Summary of the Preferred Alternative	
Environmental Factor	**Proposed Mitigation and Permits**
	• Obtain a National Pollutant Discharge Elimination System (NPDES) permit for construction activity disturbing 1 acre or more of soil. • Permittees are required to control runoff from construction sites and develop a construction Stormwater Pollution Prevention Plan (SWPPP) that includes erosion prevention and sediment control BMPs. <u>Ground Water:</u> • Drinking water wells within the limits of the proposed tree removal areas will be flagged in the field and will be marked on construction plans to ensure they are avoided. If it is determined during final design that there will be impacts to any wells during project implementation, the wells will be relocated. <u>Wild and Scenic Rivers:</u> None Required.