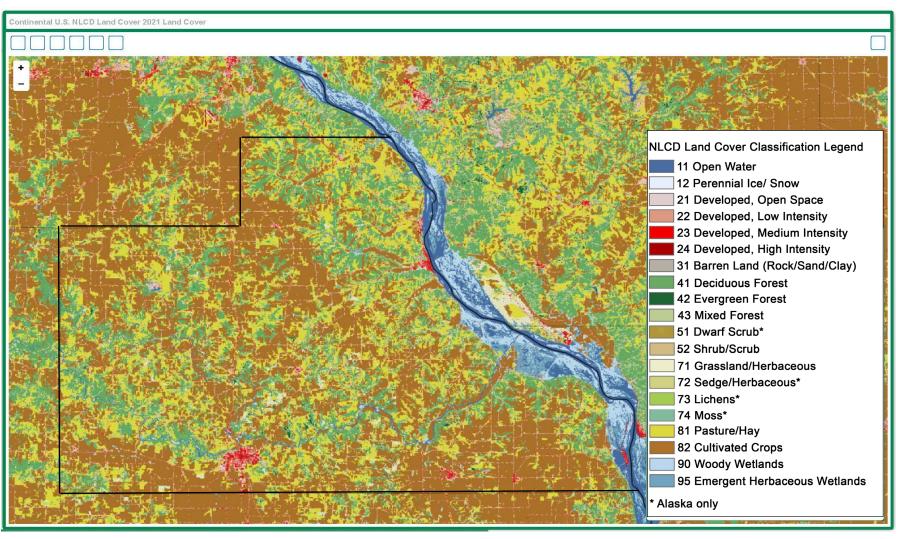
Chapter 12. Land Use



Land Cover Map for Jackson County (2021) Source: Multi-Resolution Land Characteristics Consortium, https://www.mrlc.gov/viewer// Dec. 2023

OVERVIEW

Land use planning is a very important part of effective local governance. The future land use plan establishes the county's goals and priorities that will guide decision making for a variety of situations. The Comprehensive Plan also encourages orderly development of land that minimizes conflicts between incompatible land uses and preserves key resources.

The goal of this chapter is to help Jackson County plan for future development by evaluating its conditions and resources and by making recommendations that ensure the community can grow while keeping its rural character.

LAND DEVELOPMENT TOOLS

Jackson County has several regulatory tools available to help promote orderly land development. The county can use its zoning, subdivision, and floodplain management ordinances and its resolutions regarding land use policy and ancient burial mounds to help establish logical and orderly land use patterns that address the priorities established in the Comprehensive Plan. This section covers the ordinances and resolutions that the county can utilize to implement its development priorities.

Zoning Ordinance

In conjunction with the Comprehensive Plan, Jackson County uses its zoning ordinance to establish orderly land use patterns. The zoning ordinance divides the county into districts and defines how property within those districts can be used. The zoning ordinance assigns compatible uses to the same district and separates incompatible uses. Zoning also regulates the physical characteristics of structures (such as height and size), their separation from other buildings, and standards for parking and signage.

Zoning Ordinance Application

The Jackson County zoning ordinance applies to the unincorporated areas of Jackson County. The ordinance also applies to properties located within the boundaries of an incorporated city if the city has not adopted its own zoning regulations.

The Iowa Code gives cities the ability to create their own zoning ordinances that apply to areas within their corporate limits. In Jackson County the cities of Bellevue and Maquoketa have adopted zoning ordinances.

Iowa Code Chapter 335 County Zoning exempts farmland, farm houses, farm barns, farm outbuildings, or other buildings or structures which are primarily adapted for use for agricultural purposes from county zoning ordinances. However, Iowa Code Chapter 335 also states that county zoning ordinances may apply to any structure, building, dam, obstruction, deposit, or excavation in or on the floodplains of any river or stream.

What is the purpose of county zoning regulations in lowa?

lowa Code Chapter 335 County Zoning (https://www.legis.iowa.gov/docs/code/335.pdf) requires in section 335.5 that:

- 1. The regulations shall be made in accordance with a comprehensive plan and shall be designed:
 - to preserve the availability of agricultural land;
 - to consider the protection of soil from wind and water erosion;
 - to encourage efficient urban development patterns;
 - to lessen congestion in the street or highway systems;
 - to secure safety from fire, flood, panic, and other dangers;
 - to protect health and the general welfare;
 - to provide adequate light and air;
 - to prevent the overcrowding of land;

- to avoid undue concentration of population;
- to promote the conservation of energy resources;
- to promote reasonable access to solar energy; and
- to facilitate the adequate provision of transportation, water, sewerage, schools, parks, and other public requirements.
- 2. The regulations shall be made with reasonable consideration, among other things, as to the character of the area of the district and the peculiar suitability of such area for particular uses, and with a view to conserving the value of buildings and encouraging the most appropriate use of land throughout such county.
- 3. The regulations and comprehensive plan shall be made with consideration of the smart planning principles in Iowa Code Chapter 18B Land Use Smart Planning.

For more information, see Chapter 1. Introduction of this comprehensive plan.

Zoning Districts

Jackson County's zoning ordinance divides the county into five zoning districts. A brief description of each district is provided below.

The A-1 Agricultural District is intended to preserve areas appropriate for agriculture and related uses and to reserve areas suitable for the efficient development of other uses when and if there is a demonstrated need and intent to develop such areas in accordance with the future land use policy.

The R-1 Residential District is intended to provide for limited residential development in the rural areas of the county where such use is compatible with surrounding land uses and where residential development will result in the most appropriate permanent use of the land regarding agricultural land, woodlands, and other natural resources.

The **C-1 Highway Commercial District** is intended to provide areas for commercial development which primarily serve the travelling public. This district is also intended to accommodate certain other

commercial uses which ordinarily require access to a major street or highway.

The M-1 Limited Industrial
District is intended principally
for manufacturing, processing,
storage, wholesaling,
distribution, and related uses
that are generally contained
within a building. It is further
the intent of this district to
accommodate such uses in
appropriate locations which
will not adversely affect
existing and future land uses
in other districts.

The M-2 General Industrial District is intended primarily for heavy manufacturing and closely related uses while providing protection against harmful effects to existing and future uses in other districts.

As shown in Figure 12.1, the zoning map of Jackson County, the A-1 Agricultural District (shown in white) covers most of the

county.

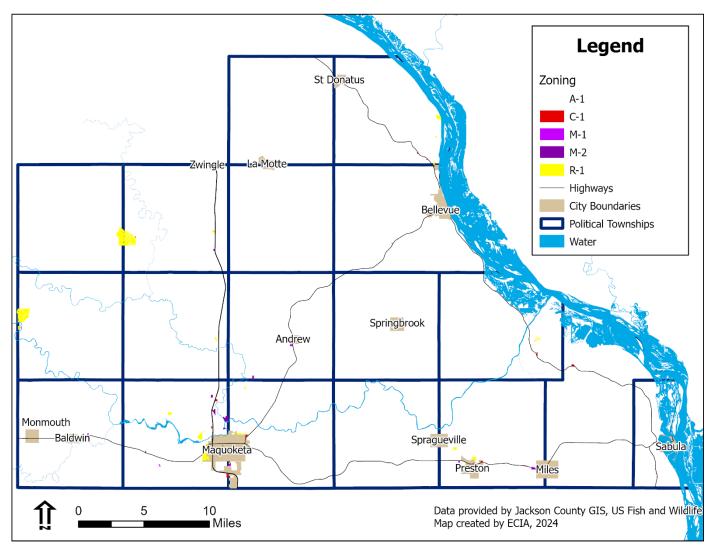


Figure 12.1 Zoning Map of Jackson County (2024)

Subdivision Ordinance

Jackson County's subdivision ordinance provides rules for the division and development of vacant land into parcels for agricultural, commercial, residential, or industrial uses. The ordinance aims to:

- provide a balance between land use rights of individuals and the economic, social, and environmental concerns of the public; and
- encourage orderly community development and provide control for the extension of public improvements, services, and utilities.

In Jackson County the cities of Bellevue, Maquoketa, and Preston also have adopted subdivision ordinances.

Extraterritorial Jurisdiction

Iowa Code gives cities that have adopted subdivision ordinances the option to review subdivision plats that are located within two miles of their city boundaries. If a property owner within two miles of the city plans to subdivide their land, they must apply to both Jackson County

and that city for approval. The cities of Bellevue, Maquoketa, and Preston have adopted two-mile extraterritorial jurisdictions for subdivision review. Figure 12.2 shows the two-mile extraterritorial jurisdictions of these cities.

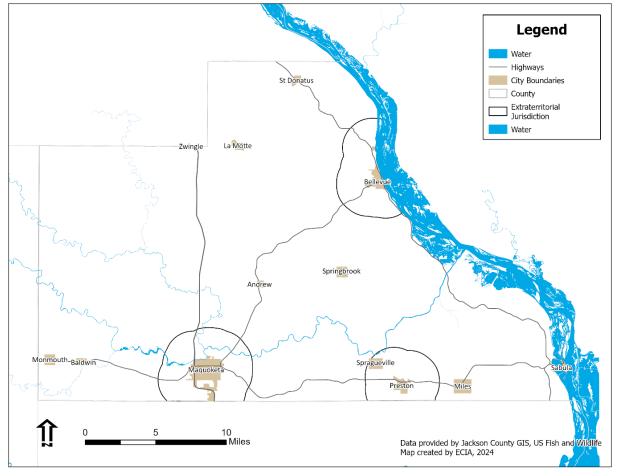


Figure 12.2 Extraterritorial Jurisdiction in Jackson County (2024) Source: Jackson County GIS

Floodplain Management Ordinance

Jackson County's floodplain management ordinance applies to all lands and uses which have significant flood hazards. The lowa Code's agricultural exemption for zoning does not apply to regulated floodplains. The cities of Bellevue, Maquoketa, and Preston have adopted floodplain management ordinances.

The Flood Insurance Rate Map produced by the Federal Emergency Management Agency (FEMA) for Jackson County identifies all flood hazard areas within the 100-year flood boundary (see Figure 12.3). There are multiple types of flood hazard zones present in Jackson County:

- The 1% annual chance flood zone has a 1% chance of its height being equaled or exceeded in a given year.
- The 0.2% annual chance flood zone has a 0.2% chance of its height being equaled or exceeded in a given year.
- A "Regulatory Floodway" means the channel of a river or other watercourse and the adjacent land areas that must be reserved in order to discharge the base flood without

cumulatively increasing the water surface elevation more than a designated height. Areas with reduced risk due to levee indicate that the area is provided protection through a levee system that prevents overflow.

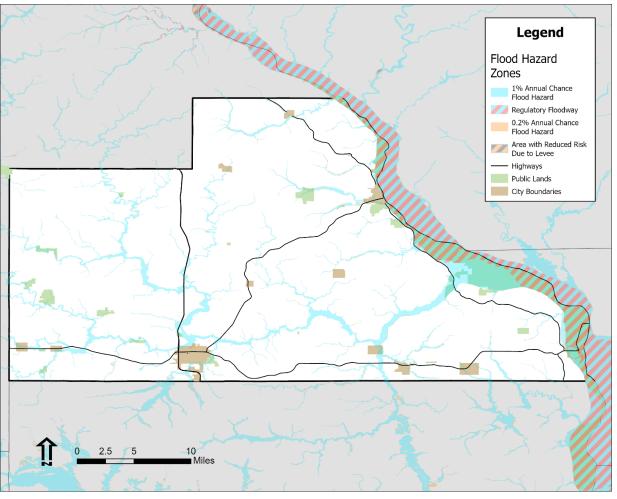


Figure 12.3 Flood Hazard Zones in Jackson County (2024)

Source: FEMA

Land Use Policy Resolution

Resolution #485-02-17-98, as amended by Resolution #116-09-09-03, of the Jackson County Board of Supervisors established the Jackson County Land Use Policy.

GOALS: The fundamental goals of land use planning and regulation in Jackson County are to enhance the quality of life of our residents, to utilize and conserve land and other natural resources to the best advantage and to provide a desirable level of facilities and services as economically and efficiently as possible.

Land Use Objectives

- 1. Accommodate anticipated growth by providing optimum locations for residential, commercial, industrial, public and semi-public land uses.
 - A. Residential land use in the rural area of the county should consist of single-family dwellings. Multi-family dwellings or high-density development should be encouraged to locate near the population centers where an adequate level of municipal facilities and services

- as well as streets, schools and other facilities are available.
- B. Commercial development in the county should be limited primarily toward highway-oriented uses and agricultural services. Major retail shopping centers should be encouraged to locate in urban areas.
- C. Industrial development should be encouraged to locate along major transportation arteries and at locations where adequate utilities and services exist or can be readily supplied.
- D. Locations for public and semi-public uses must be selected with regard for agricultural land, woodland and other natural resources as well as proximity to major streets and highways, users and effects on the environment.
- 2. Encourage future growth and development to occur in a compact and orderly manner.
- 3. Protect valuable natural resources from incompatible uses or other uses that would make their future utilization difficult or impossible.

- 4. Encourage urban development to take place near cities and towns where municipal facilities, such as sewers and water, are or will ultimately become available.
- 5. Future development should be coordinated with existing and proposed transportation systems.
- 6. Flood plains must be protected from encroachment.
- 7. The natural beauty and historic treasures of the county should be conserved and enhanced for the benefit of the population of Jackson County and the entire region.
- 8. The land use plan must have sufficient flexibility to permit private enterprise to operate freely in an open market.
- 9. Accommodate existing development without encouraging its continued growth in inappropriate areas.
- 10. Encourage home-based enterprise which does not conflict with neighboring uses.

The complete Land Use Policy contains commentary on each objective.

Ancient Burial Mounds Resolution

Jackson County has had two archeological projects completed to identify and protect ancient burial mound sites. Both projects were initiated by Jackson County due to concerns that mounds cannot be protected in accordance with Iowa Code Chapter 263B and Iowa Administrative Code 685-11 if they are not properly identified.

within the areas of the county designated on the Mound Potential Map as having significant potential for the existence of mounds, the Jackson County Zoning Administrator contacts the OSA to determine whether or not the site proposed for development, or any land within one-quarter mile, contains mounds known to the OSA.

Jackson County Resolution #184-12-07-99 established certain procedures to guard against destruction of ancient burial mounds in the course of developments which require specific approval of the Board of Supervisors or the Zoning Board of Adjustment. In 2024, the official Mound Potential Map became available to the public on the county's Geographic Information System (GIS) as shown in Figure 12.4.

Whenever applications are received for rezoning of land, subdivision of land, special exception uses, or structures

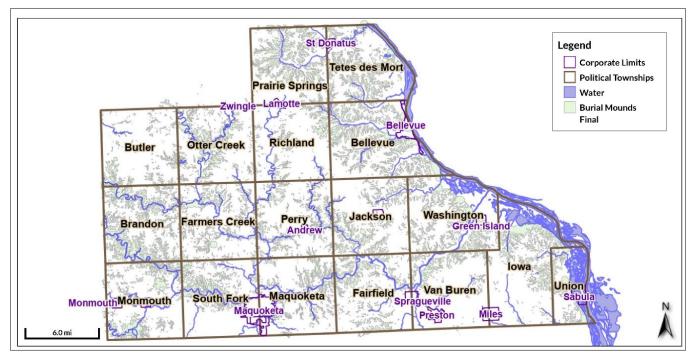


Figure 12.4 Mound Potential Map of Jackson County (2024)

EXISTING LAND USE

This section covers the existing land use within the County to best understand current conditions within the county.

Urban and Rural Breakdown

Table 12.1 shows the breakdown of rural (unincorporated areas) and urban (incorporated cities) land collected with GIS analysis of existing parcel data. Jackson County is mostly rural with its incorporated communities composing less than 2% of the county's total area.

Land Use Categories

The comprehensive plan uses nine categories to describe land uses within Jackson County. Figure 12.5 shows the breakdown of unincorporated parcels in Jackson County by land use type. Nearly 83% of the land use is agricultural.

The land use categories are described below and shown in the map of existing land use for Bellevue Township (see Figure 12.6). Existing land use maps for all 18 townships in Jackson County are shown in Figures 12.13 through Figure 12.30 at the end of this Chapter.

Table 12.1 Breakdown of Urban and Rural Parcels in Jackson County (2024)				
Type of Land	Number of Parcels	Total Acres	Percent	Average Parcel Size in Acres
Urban (Incorporated Cities)	6,279	66,13.22	1.62%	1.05
Rural (Unincorporated Areas)	15,982	402,689.82	98.38%	25.20
Source: Jackson County GIS				

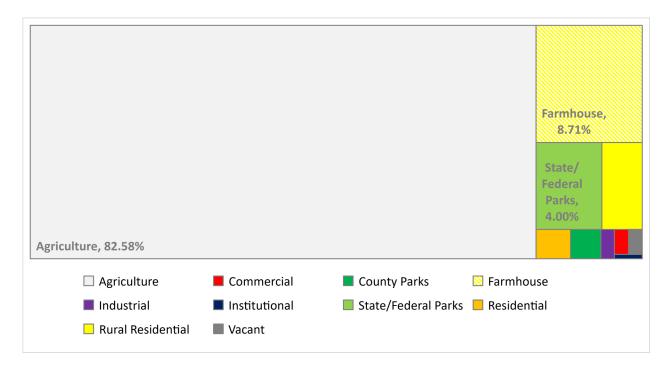


Figure 12.5 Land Uses in Unincorporated Jackson County (2023)

Agricultural (white) is land use solely for farms and agricultural purposes such as crop and livestock production.

Commercial (red) is land used for variety of businesses that provide goods and services.

Industrial (purple) is land used for manufacturing, warehousing, wholesale trade, construction, and quarrying.

Institutional (blue) is land used for public facilities such as governmental buildings, schools, churches, cemeteries, and health services.

County Park (dark green) is County owned land used for parks, passive and active recreation areas, trails, and conservation areas.

State/Federal Park (green) is state or federally owned land used for parks, passive and active recreation areas, trails, and conservation areas.

Residential (orange) is residentially zoned land used for single-family, two-family or multi-family dwellings.

Rural Residential (yellow) is a dwelling on agriculturally-zoned land that is classified for tax purposes as residential.

Farmhouse (yellow and white stripes) is a farm with a dwelling. These parcels will be both agriculturally zoned and classified as agricultural for tax purposes.

Vacant (gray) is land used for open space or agricultural purposes that is zoned or platted for a different use; for example, a lot in a subdivision where no dwelling is built on it. These parcels would generally be in an agricultural or residential zone.

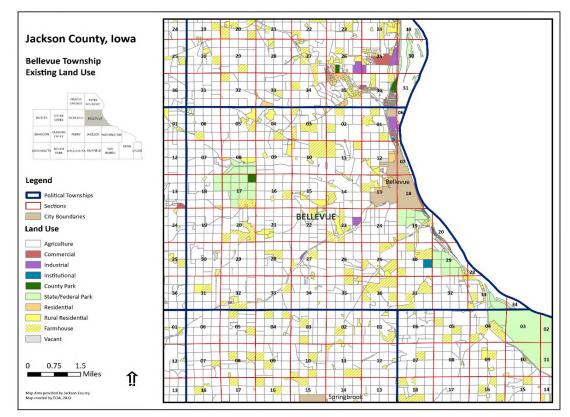


Figure 12.6 Existing Land Use Map for Bellevue Township (2023)

FUTURE LAND USE ANALYSIS

New growth can be a powerful catalyst for economic development within a community. Therefore, it is important that the location and type of growth is suitable for the existing conditions in Jackson County. When development occurs within the county it is important that it can answer the questions that have to be addressed to ensure the development is suitable for the area, such as:

- Is adequate infrastructure available?
- Will the use negatively impact surrounding lands?
- Is the topography and land quality suitable for the development?
- Is the land on a floodplain?
- Will the development lead to negative environmental impacts?

This section identifies criteria that can be evaluated to identify appropriate areas for new development. The criteria can be evaluated during the review process for a proposed development project.

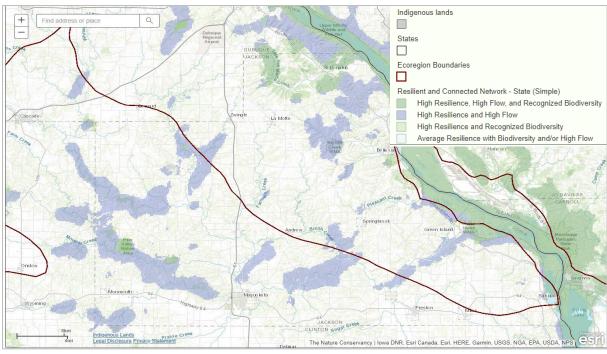


Figure 12.7 Climate Resilient Sites in Jackson County (2024)

Source: Nature Conservancy, https://www.maps.tnc.org/resilientland/ accessed Jan. 2024

Land Development Tools

Review of all of Jackson County's land development tools should be conducted for each development project: zoning, subdivision, and floodplain management ordinances; and land use policy and ancient burial mound resolutions.

Resiliency

Preserving sites with high levels of climate resiliency is also important to

protect the biodiversity and ecological functions of the area. As referred to in Chapter 9. Agriculture and Natural Resources, the Resilient and Connected Network mapped a collection of resilient sites (see Figure 12.7). If development is to occur at sites with high resiliency for biodiversity, it is important that the development mitigates its risk on the natural environment.

Update 03-27-24 12. LAND USE

Corn Suitability Rating

Corn Suitability Rating (CSR2) is an index developed by lowa State University that rates soil types by their potential row-crop productivity. Its purpose is to equalize tax assessments based on the soil types and their inherent agricultural properties. For more information on CSR2 see Chapter 9. Agriculture and Natural Resources.

CSR2 is one indicator of agricultural capabilities for a given area and can help guide which areas are better suited for agriculture or development. Figure 12.8 shows land in Jackson County by CSR2. The higher rating (in green) indicates better suitability for agricultural purposes.

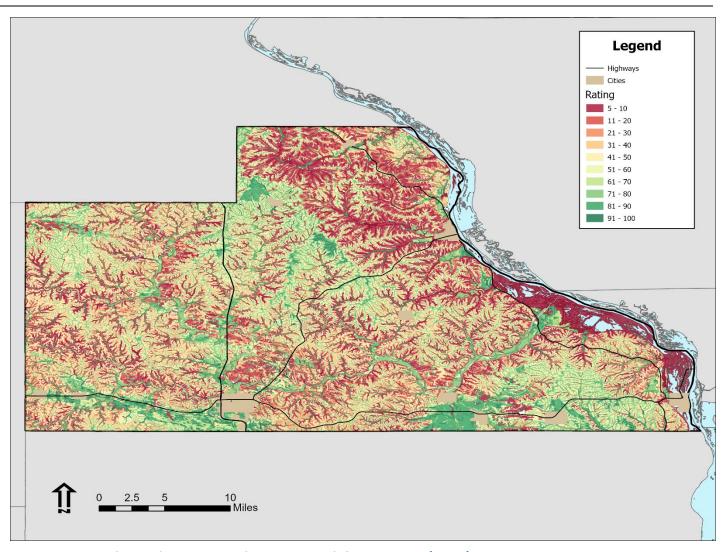


Figure 12.8 Land in Jackson County by Corn Suitability Rating 2 (CSR2)

Data Source: Iowa State University

Land Quality

Land quality refers to the extent that land is free from contamination and therefore suitable for a particular use.

The existing measures of land quality discussed in Chapter 9. Agriculture and Natural Resources of this Comprehensive Plan can also be a way to determine whether land is more suited for agricultural purposes or for development. Determining the Natural Resource Conservation Service (NRCS) Land Capability Class for a site could be an indicator as to whether the land is appropriate for the type of development being proposed.

Topography

Jackson County's unique topography is also important to consider for development. The karst terrain present in Jackson County creates sinkholes that can create challenges for development as they may not be able to support certain types of uses. There is also the presence of steep bluffs along the Mississippi that also limit development. Figure 12.9 shows a topographic map of Jackson County.

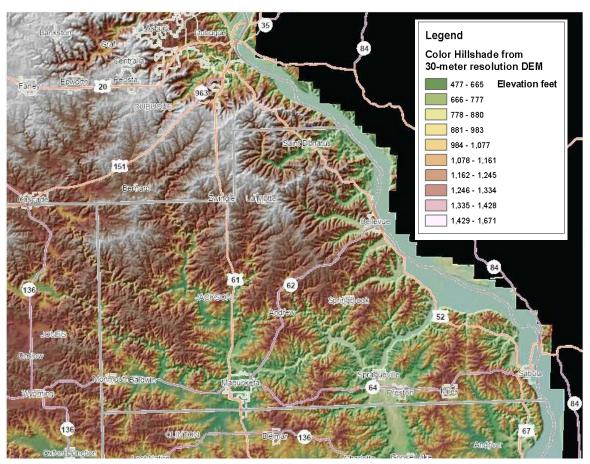


Figure 12.9 Topographic Map of Jackson County (2024)

Source: Iowa Geographic Map Center, 2024

Other Development Regulations

Coordination is necessary with other county and state offices that may impact development. These include road access and E911 addressing by the County

Engineer, location of wells and septic systems by the County Health Department, and floodplain development by the Iowa Department of Natural Resources.

Preliminary Analysis with GIS Mapping

The Jackson County GIS provides some preliminary tools for land use analysis in connection with future development. The corn suitability rating (CSR2), regulated floodplain, and potential burial mound areas are three layers that can help identify development constraints.

Figure 12.10 is a sample land use analysis map using CSR2 data. Land within the yellow circle has CSR2 ratings of 88 and 87, indicating high suitability for growing corn. The area of land to the south has CSR2 ratings from 5 to 14, indicating low suitability for growing corn.

Figure 12.11 is a sample land use analysis map using floodplain and burial mound

data. The southern third of the land within the yellow circle lies in the floodplain, and a portion in the northeast quadrant lies in the potential burial mound area.

Analysis of topography, zoning, access, easements, surrounding uses, and other characteristics also should be evaluated.

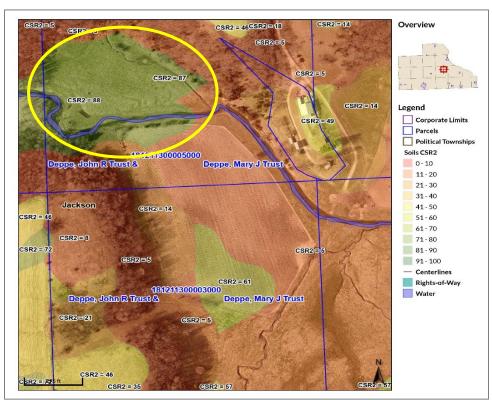


Figure 12.10 Sample Land Analysis Map Using CSR2 Layer (2024)

Source: Jackson County GIS, 2024

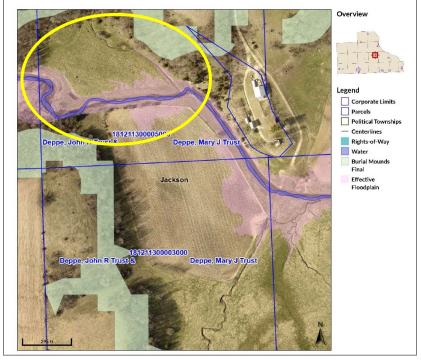


Figure 12.11 Sample Land Analysis Map Using Floodplain and Burial Mound Layers (2024)

FUTURE LAND USE MAP

The Future Land Use Map for Jackson County is shown in Figure 12.12.

The cities of Bellevue, Maguoketa, and Preston have adopted comprehensive plans that include future growth areas. The future city boundaries that are represented by these growth areas are identified with a light brown stripe outlined in black. Jackson County should coordinate with these cities when reviewing development proposals that are within the future growth areas.

Jackson County also should coordinate with these three cities for subdivision review and approval within the extraterritorial jurisdictions.

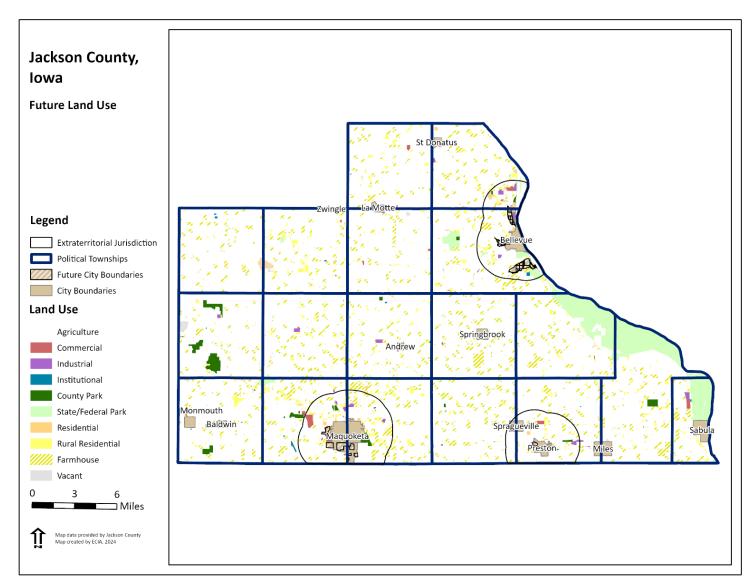


Figure 12.12 Future Land Use Map for Jackson County (2024)

ISSUES AND OPPORTUNITIES

Through the process of developing the Comprehensive Plan, the Jackson County community identified several land use priorities. These priorities were used to guide the development of the future land use map and will be used by the county to guide future land use decisions. The following section describes the issues and opportunities for each of Jackson County's land use priorities.

Keep the Land Use Policy Current

Issue: The Jackson County Land Use Policy was adopted in 1998 and amended in 2003. It is important to keep the Land Use Policy current with changing growth conditions in the region by employing best practices.

Opportunities: The Land Use Policy should be evaluated on a 5-year basis to make sure it remains a useful guide for growth and development. Evaluation can be considered in less than 5 years if development conditions change significantly.

Identify Appropriate Areas for New Development

Issue: New land development is necessary for quality of life and economic vitality. However, it is equally important that new growth occurs in appropriate locations and in an orderly manner.

Opportunities: Following the recommendations set out in this chapter can help provide procedures to determine whether or not specific land development works with the goals of the county.

Protect Agricultural Land and Open Space

Issue: Agriculture is a key part of the Jackson County economy and the county's residents value its rural landscape. Therefore, conservation of the farmlands, forests, and other natural areas that contribute to the rural experience is a critical land use priority for the county. Commercial and residential development, job growth, and population expansion are also significant priorities for Jackson County. However, development related to these priorities

could conflict with the natural landscapes that define the county's character.

Opportunities: To protect its natural spaces, Jackson County can work to foster a supportive economic climate that strikes a balance between future commercial, residential, and industrial development and the conservation of the agricultural land and open spaces. Longrange, strategic planning can determine which land is most important to conserve and which land is better suited to accommodate the projected need for future growth.

Maintain Jackson County's Public Lands and Parks

Issue: Public lands and parks are also important for preservation. The county's recreational opportunities are a source of pride for residents. Limiting the impact of new developments on existing public lands is also a critical land use priority.

Opportunities: The county can continue to conserve existing lands while also seeking opportunities for expansion of public lands for further preservation.

Preserve Soil and Water Quality

Issue: All new developments must consider the effects on surrounding watersheds, as healthy watersheds bring the benefit of clean drinking water, healthy soil, reduced flooding, recreational opportunities, and better water quality.

Opportunities: The State of Iowa is monitoring erosion control practices to ensure that the soils in the region are healthy and that nutrients are not being lost to other regions. Development must therefore consider the effects that it would have on the area's soil quality, as erosion has negative consequences on soil organic matter as referenced in Chapter 9. Agriculture and Natural Resources.

Protecting Cultural Sites

Issue: Many areas within the county hold special cultural significance to the region. One example is century and heritage farms. The Iowa Department of Agriculture and Land Stewardship awards these designations to families who have held farmland for over 100 years for the

century farm or 150 years for the heritage designation.

Within Jackson County there are 232 Century Farms and 51 Heritage Farms. These farms are vital to the agricultural character of Jackson County therefore preserving these sites is important to preserving the heritage of the region. For a list of all the farms in the county, visit: https://centuryfarms.iowaagriculture.gov/.

There are also various historical sites in the county that are important to preserve for the community's heritage. The National Register of Historic Places has 76 listings within the county, with four resources being labeled with "State Significance".

The Mound Potential Map and the 2017 OSA Technical Report 566 referenced in Chapter 10 also should be taken into consideration when evaluating the suitability of a piece of land. There are many locations within the county with high potential suitability for archeological research, and precautions must be taken before seeking development at those sites.

Opportunities: Keeping an inventory of important cultural heritage sites could be useful when reviewing specific sites for new development.

Coordination with Cities

Issue: It is important for communities in Jackson County to work together for zoning codes and subdivision codes to have the best effect. Under Iowa Code, communities are given extraterritorial subdivision review, allowing them to require that new rural subdivisions within two miles to meet the community's subdivision standards. The cities of Bellevue, Maquoketa, and Preston, in Jackson County, already have their own comprehensive plans that guide their future developments. It is important that these plans are considered when determining land use within the county.

Opportunities: Work with cities to ensure that they are able to apply their zoning and subdivision codes to the best of their ability.

GOALS AND OBJECTIVES

Best Practices

- 12.1 Keep the Land Use Policy current with changing growth conditions in the region by employing best practices.
 - Evaluate land use goals on a 5-year basis to make sure the Land Use
 Policy remains a useful guide for growth and development.
 - Consider reviewing and amending Land Use Policy's goals between 5year intervals should development conditions significantly change.
 - Review zoning and subdivision ordinances to ensure compliance with the recommendations in the Jackson County Comprehensive Plan.
- 12.2 Ensure that cities are coordinating with each other for their best development.
 - Review existing future land use maps of each jurisdiction to ensure compatibility of goals with other jurisdictions in the county.

Preservation

12.3 Preserve and protect viable land for agriculture.

- Review the A-1 Agricultural District zone to ensure it effectively protects current open spaces.
- Evaluate the quality of land using indicators such as CSR2 and Land Capability Class in the county to determine the best use.
- Enforce zoning ordinance when proposed developments interfere with viable agricultural lands.

- 12.4 Preserve and protect parks, open spaces, and natural resources.
 - Ensure that development is not interfering with water quality and cultural sites.
- Evaluate the effectiveness of the zoning code based on its ability to protect natural resources.



Jackson County landscape

Photo Credit: Jackson County Area Tourism

EXISTING LAND USE MAPS

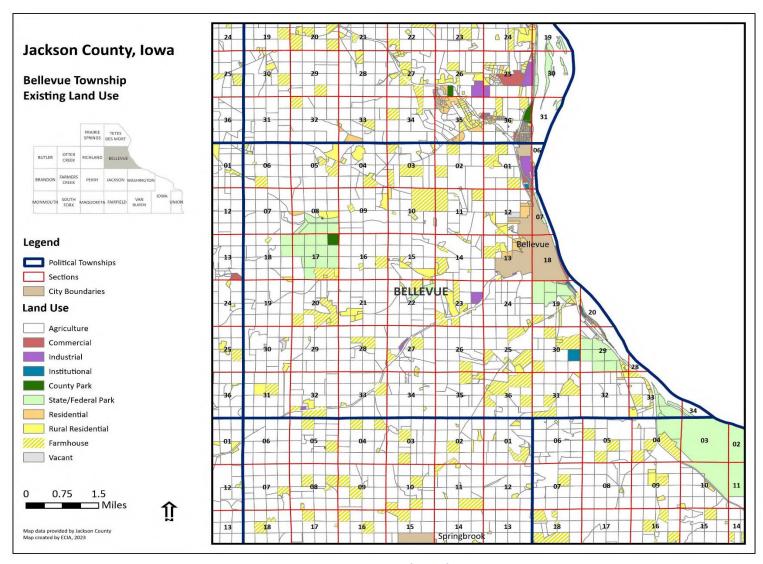


Figure 12.13 Existing Land Use Map for Bellevue Township (2023)

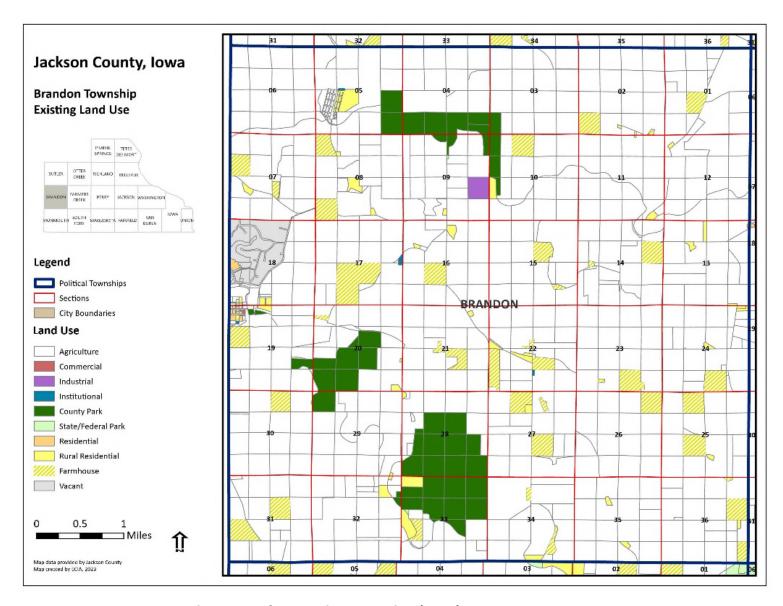


Figure 12.14 Existing Land Use Map for Brandon Township (2023)

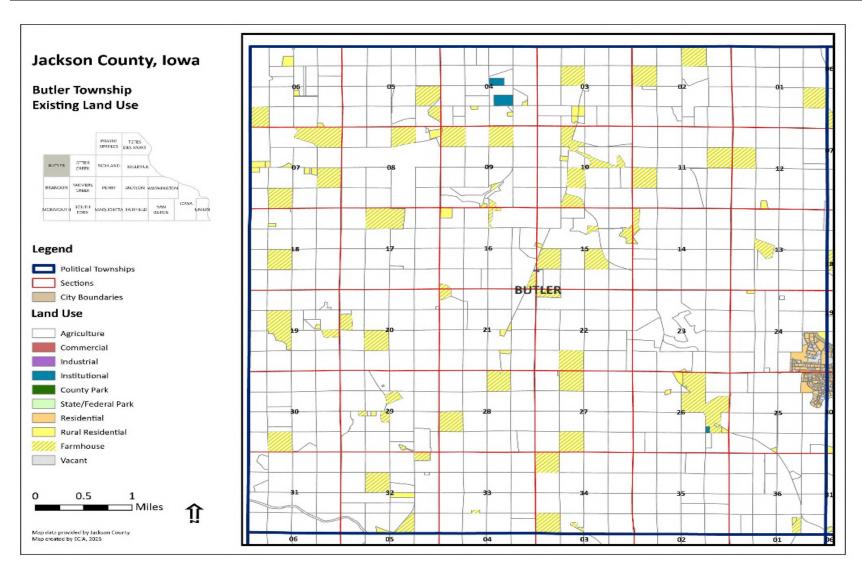


Figure 12.15 Existing Land Use Map for Butler Township (2023)

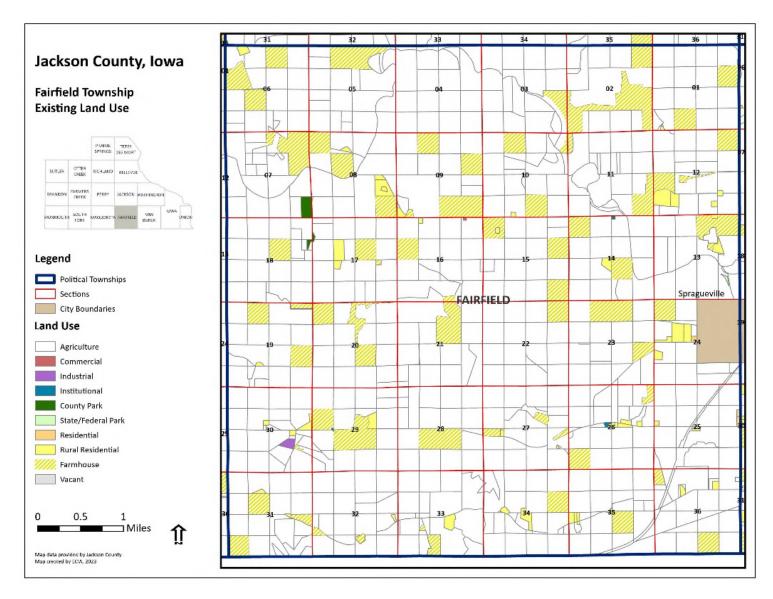


Figure 12.16 Existing Land Use Map for Fairfield Township (2023)

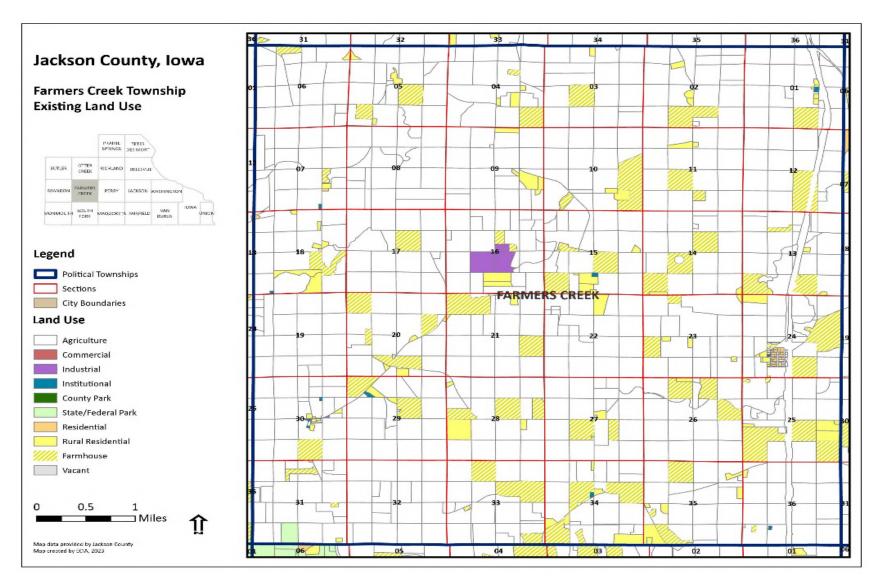


Figure 12.17 Existing Land Use Map for Farmers Creek Township (2023)

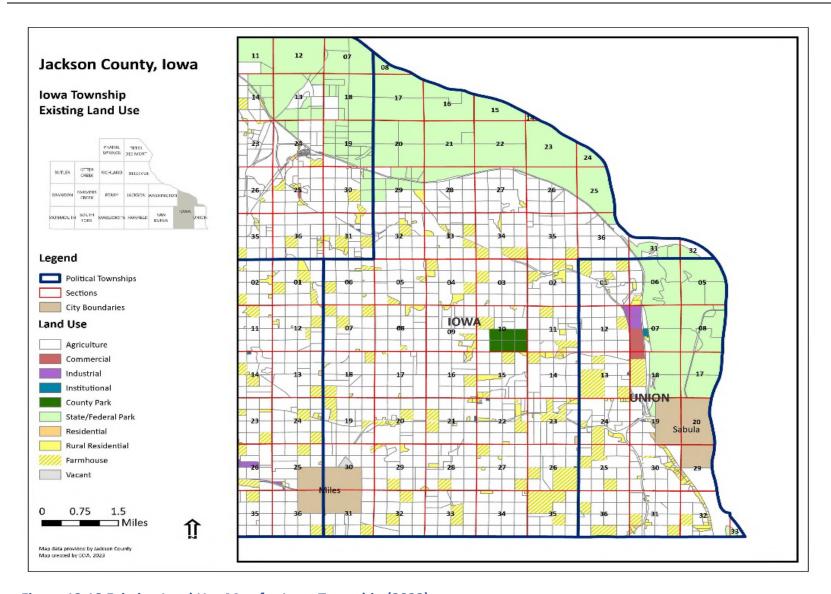


Figure 12.18 Existing Land Use Map for Iowa Township (2023)

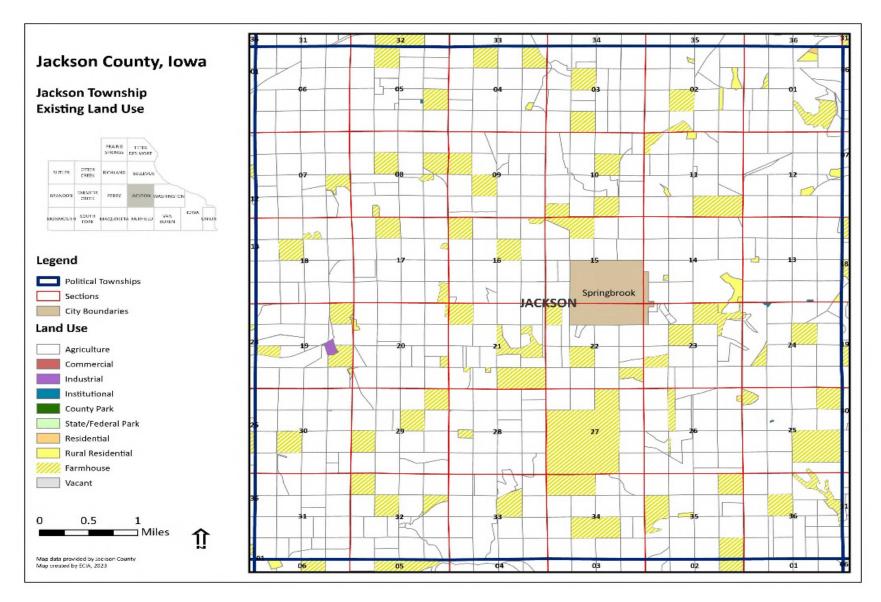


Figure 12.19 Existing Land Use Map for Jackson Township (2023)

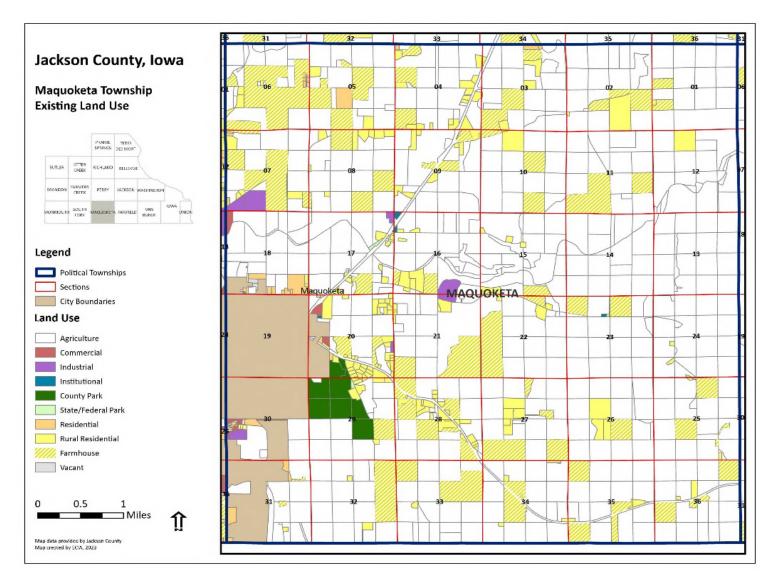


Figure 12.20 Existing Land Use Map for Maquoketa Township (2023)

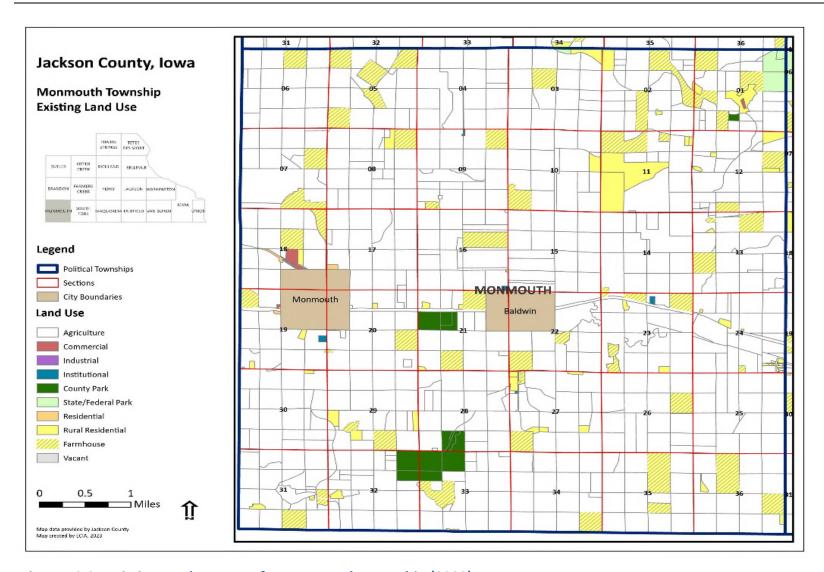


Figure 12.21 Existing Land Use Map for Monmouth Township (2023)

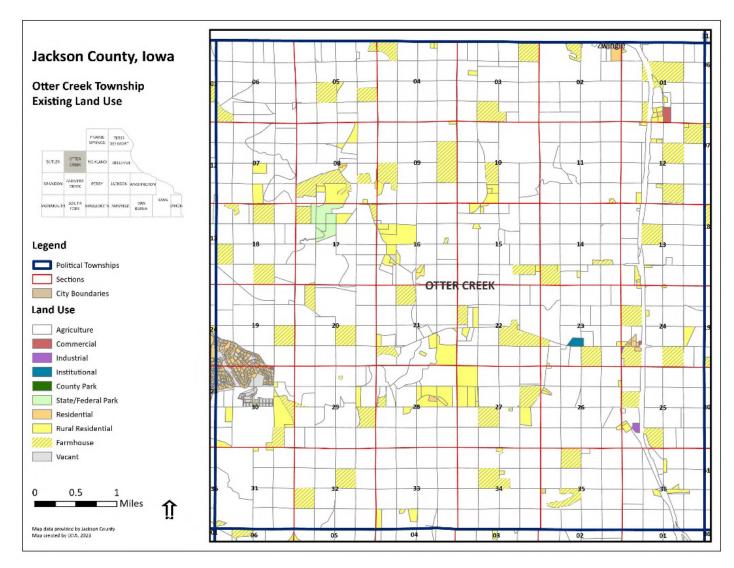


Figure 12.22 Existing Land Use Map for Otter Creek Township (2023)

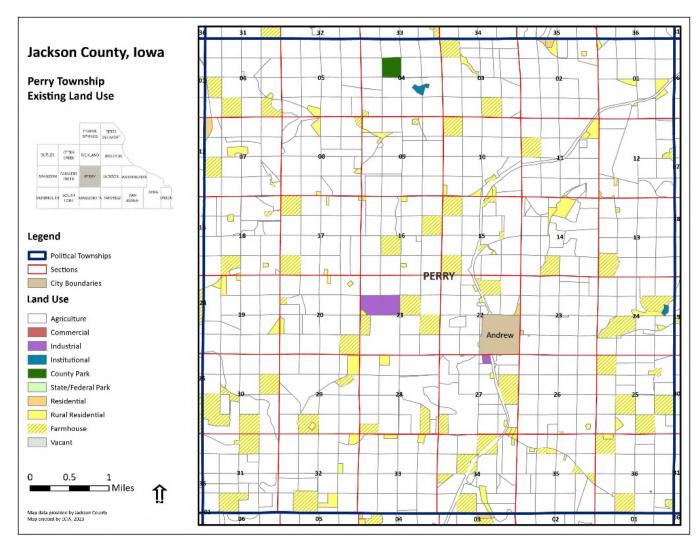


Figure 12.23 Existing Land Use Map for Perry Township (2023)

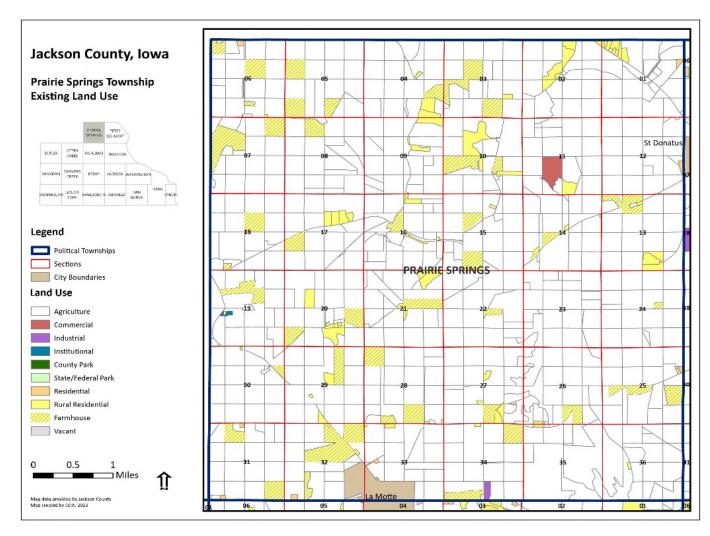


Figure 12.24 Existing Land Use Map for Prairie Springs Township (2023)

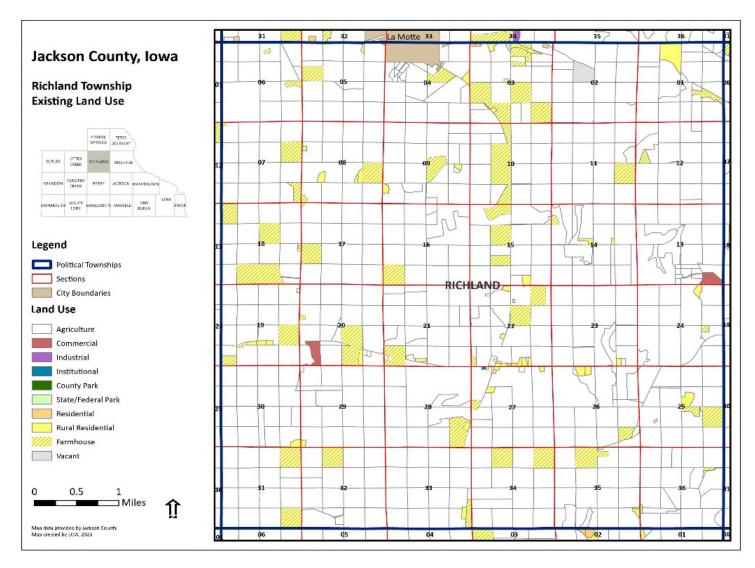


Figure 12.25 Existing Land Use Map for Richland Township (2023)

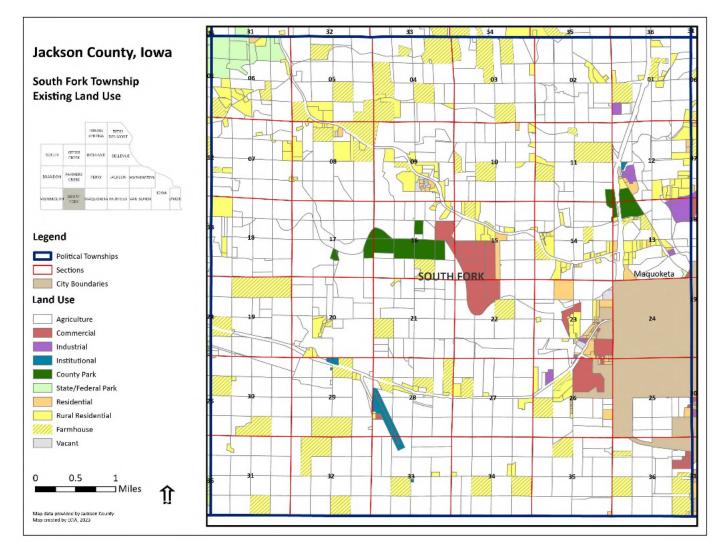


Figure 12.26 Existing Land Use Map for South Fork Township (2023)

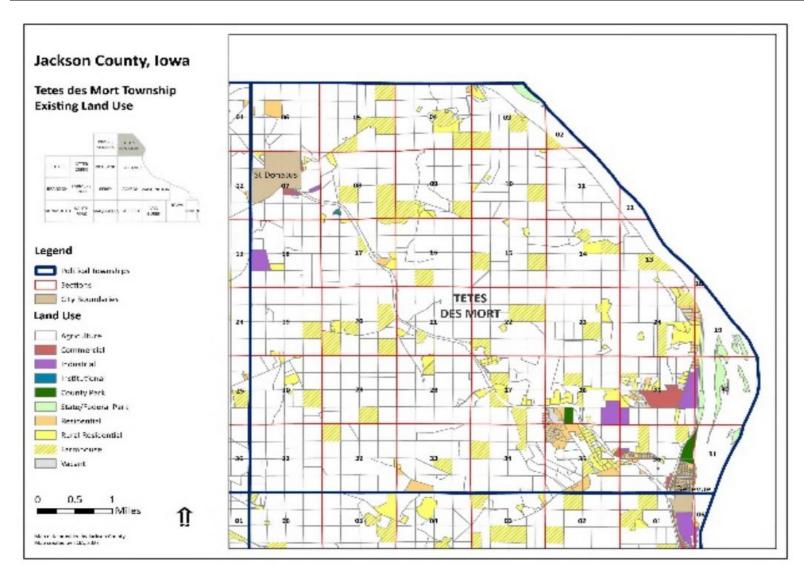


Figure 12.27 Existing Land Use Map for Tete des Morts Township (2023)

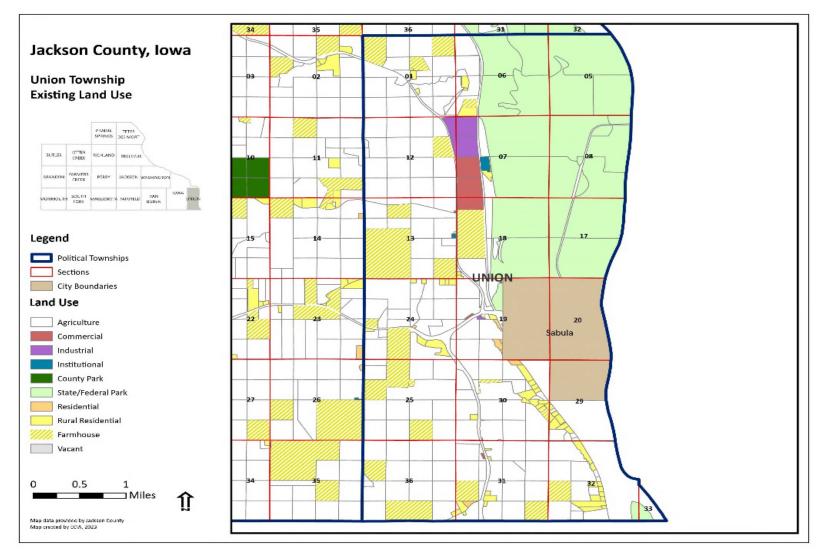


Figure 12.28 Existing Land Use Map for Union Township (2023)

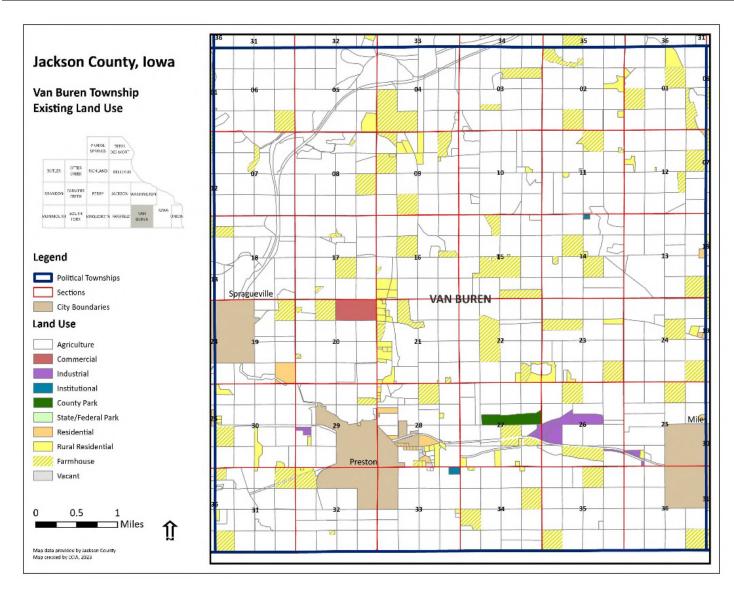


Figure 12.29 Existing Land Use Map for Van Buren Township (2023)

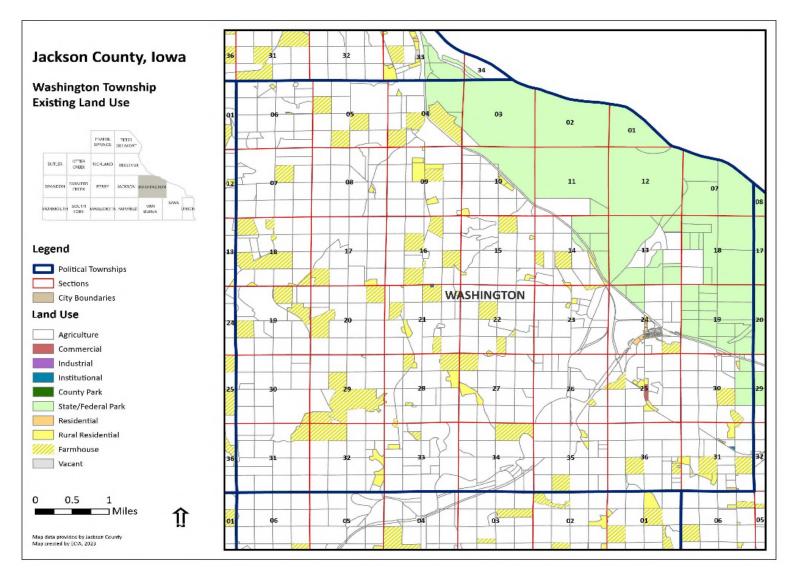


Figure 12.30 Existing Land Use Map for Iowa Township (2023)