

ELEMENT 5: AGRICULTURAL, NATURAL, AND CULTURAL RESOURCES



Agricultural, natural, and cultural resources provide the foundation for the community's development and character. The city's natural resource base, including environmentally sensitive areas, soils, environmental corridors, wetlands, and floodplains, are critical factors in local planning. This element is intended to identify strategies to preserve and protect the city's natural resources. Natural resource planning in Monona is also guided by the 5-year Parks and Open Space Plan (2015), the Wetland Management Plan (1990), and Sustainability Plan (2015), which are adopted as components of this Comprehensive Plan.

Additionally, cultural resources are the distinctive assets that offer a tangible connection to the history and cultural heritage of a place. Cultural resources include historic buildings and structures, archeological sites, native landscapes, and the cultural heritage that define a community. Historic and cultural preservation provides residents a connection to the history of their homes, neighborhoods, cities, and regions. This "sense of place" fosters civic pride, improves quality of life, and provides continuity between the past, present and future. This element will inventory the city's natural and cultural resource base and provide recommendations for its preservation and promotion.

5.1 NATURAL RESOURCES

5.1.1 AGRICULTURAL RESOURCES

The City of Monona was primarily a farming community, characterized by homesteads, farmland, and scattered cottage development until the late 1940s. In the Post-WWII decades, Monona's population boomed. With the community's rapid growth, there was an increased demand for homes, services, and businesses. Area farms were quickly sold and subdivided, with most of the Monona Drive frontage being developed for commercial use while the interior lands of the city were developed for residential use. Annexation of land ended in 1980 when there was simply no more land to annex as Monona's boundaries had run into the City of Madison, surrounding wetlands, and Lake Monona. Because all of the agricultural land in Monona has been developed, there are no major agricultural resources within the community.

5.1.2 NATURAL RESOURCES

Despite a lack of agricultural resources, Monona does contain a strong base of natural resources. Its natural resources include soils, groundwater, forests, stream corridors, surface water, wetlands, wildlife habitats, environmentally sensitive areas, and parks.

5.1.3 GROUNDWATER

The city's water source is groundwater that is extracted from the Mt. Simon and Eau Claire aquifers. Groundwater is recharged by rainfall that does not run off into streams or rivers and that does not evaporate, but percolates down through the soil to the aquifer. Monona's groundwater is drawn from three deep wells identified in the table below.

Table 5.1: Monona's Water Sources

ID	Well #	Source	Depth	Location
1	BF541	Groundwater	305'	Nichols & Schluter
2	BF542	Groundwater	500'	Midland & Sylvan
3	HJ185	Groundwater	775'	South Towne

5.1.4 WATERSHEDS AND SURFACE WATERS

Located on the eastern and southern shores of Lake Monona, the city has more than four miles of shoreline and several public access points to Lake Monona. Lake Monona is a 3,359 acre lake with a maximum depth of 74 feet.

An important natural feature of the city and region is the Yahara River which links the Madison area chain of lakes (Mendota, Monona, Waubesa, and Kegonsa). The Yahara River runs south through the City of Monona from Lake Monona to Upper Mud Lake toward Lake Waubesa. It is approximately 800 feet at its widest point and 100 feet at its narrowest point. The Yahara River Watershed contains most of the urban land in the Madison metropolitan area and includes some of the largest wetlands left in Dane County. These surface water resources are important in providing scenic beauty and swimming, boating, and fishing opportunities to area residents and visitors.

5.1.5 FLOODPLAINS

The Federal Emergency Management Agency (FEMA) designates floodplains as areas predicted to be flooded during the 100-year storm event (i.e. a storm that has a one percent chance of occurring in any given year). Development within the floodplain is regulated by the city's Floodplain and Shoreland-Wetland Zoning Ordinance.

5.1.6 WETLANDS

Wetland ecosystems play significant roles in maintaining the quality of groundwater and surface water and provide habitats for wildlife. Wetland areas within the city have been identified and mapped by the Wisconsin Department of Natural Resources and can be viewed on the WDNR Surface Water Data Viewer.

Monona's wetlands include the 220-acre Monona Wetland Conservancy on the city's southern border, a 20-acre land area in the Aldo Leopold Nature Center, and isolated wetland areas in the central city. Wetlands make up approximately eight percent of the city's total land area. A Management Plan was created in 1990 for the management and conservation of this environmentally sensitive area and requires future updates. The city's Floodplain and Shoreland-Wetland Zoning Ordinance regulates development within these wetland areas. The code defines shoreland as land within the following distances from the ordinary high water mark of navigable waters: 1,000 feet from a lake, pond, or flowage; and 300 feet from a river or stream or to the landward side of the floodplain, whichever distance is greater.

5.1.7 ENVIRONMENTALLY SENSITIVE AREAS

The Capital Area Regional Planning Commission (CARPC) defines environmental corridors as "continuous systems of open space in urban and urbanizing areas, that include environmentally sensitive lands and natural resources requiring protection from disturbance and development, and lands needed for open space and recreational use." Environmental corridors provide linkages in the landscape for movement of species and provide a buffer between natural and built environments. These corridors normally include one or more natural resource elements essential to maintenance of

ecological balance and diversity. Lands often included in this designation are lakes, ponds, streams, wetlands, floodplains, shoreland buffer strips, steep slopes, woodlands, parks, unique vegetation or geology, and unique soils.

5.1.8 SOILS

According to the Dane County Soil Survey, the soils within the city are mostly of the Dodge-St. Charles-McHenry classification. These soils are characterized by well drained and moderately well drained deep silt loams and are underlain by sandy loam glacial till. Monona also contains a large area of soils in the Houghton series, which are mostly located in the wetland conservancy areas to the south. The Houghton series consists of deep, very poorly drained, nearly level soils on low benches and bottoms in stream valleys. Many of Monona's minor soils that are not within the Dodge-St. Charles-McHenry classification are poorly drained; these include Adrian, Colwood, Elvers, Houghton, Marsh, Orion, Palms, Sable, Virgil, and Wacousta soils. More information on Monona's soils can be found in the map series in the Plan's appendices, and in the Dane County Soil Survey. There are no active pits or quarries in the city nor is there any significant potential for them.

5.1.9 FORESTS

Maintaining its abundance of trees is an integral part of the city's dedication to natural resources. The National Arbor Day Foundation has recognized Monona as a Tree City USA since 1990, though tree preservation had been extremely important to Monona residents well before this designation. Tree preservation is evident throughout the city on private property, along city streets, and throughout the city park system. Most of the parks in the system have a large collection of trees. In 1995, the City of Monona established Monona Woodland Park. According to the Capital Area Regional Planning Commission, Monona's total acreage of woodland in 2010 was sixteen acres.

5.1.10 WILDLIFE HABITAT

The Monona Wetlands and Monona Woodland Park provide a natural habitat for wildlife within the urban area. Other urbanized pockets of wildlife habitat exist throughout the city. The lakeshore is an important wildlife habitat in Monona. The Aldo Leopold Nature Center, located north and east of Monona's Woodland Park, is surrounded by wetlands, woods, and an open prairie area with trails; this area also serves as another wildlife habitat in the city. The nature center leases the land from the City of Monona.

5.1.11 PARKS, OPEN SPACE, AND RECREATION

Public open spaces are important determinants of the quality of life within a community. These lands serve multiple functions including outdoor recreation, outdoor education, buffers, flood and stormwater management, habitat preservation, air and surface water quality improvement, protection of groundwater recharge areas, aesthetics, and community focal points.

Monona's Park and Open Space Plan is an important component of the city's overall community master planning program. This plan provides extensive background information on each of the city's parks and is updated every five years.

Monona's city park system contains over 330 acres of neighborhood parks, community parks, area parks, and open spaces. These parks provide such recreation facilities as shelters, basketball hoops, playground equipment, baseball and softball diamonds, tennis courts, soccer fields, lake access, historical sites, hiking trails, volleyball courts, an ice skating rink, and a swimming pool. Specialized

recreation areas are also available just outside of the city's boundaries, including the Monona Golf Course, Edna Taylor Conservancy Park, Olbrich Park, and the Nine Springs E-Way.

5.2 CULTURAL RESOURCES

5.2.1 HISTORICAL OVERVIEW

Lake Monona and the Yahara River were popular campsites for Monona's early inhabitants. Native Americans settled near these clean and clear waters for access to food, farming and transportation. The first and earliest people, dating from the Archaic period (7000 B.C. to 100 B.C.) were known for specialization in food gathering and tool making. Drills and scrapers characteristic of this group have been found on the present site of the WPS building on Broadway. The Woodland Culture followed until the arrival of Europeans in the 19th century. The Effigy Mound builders were a subset of the Woodland Culture and left many earthen burial mounds in the Four Lakes Region. The Ho-Chunk are the most recent Native American inhabitants of the area; they also evolved from the Woodland Culture. In the early 1900s many of the Native American families set up camps along the shores of Mud Lake and Monona's Wetlands and sold hand-made products to tourists.

In the early 20th century, much of the land now within the City of Monona was farmed by European immigrants. A few of the prominent farms include the Frank Allis Farm, George Kalbfleisch Farm, George Nichols Farm, and Fred Schluter Farm. Around the 1950s, these farms were subdivided for residential development and for later commercial development. The Allis farm, originally 600 acres, included much of present day Monona Drive, south to Pflaum Road, and included the Monona Golf Course area. The Nichols farm occupied land between Monona Drive to McKenna Road, and from Dean Avenue to Nichols Road. What was once the homestead of Fred Schluter is now the core of the City of Monona, which includes Winnequah Park, City Hall, the Community Center, Library, and elementary schools.

In the early 20th century, cottages and resorts dotted the Monona lakeshore which provided a retreat for nearby city dwellers. Many of the lakeshore homes were originally constructed as cottages and many have now been replaced by larger homes.

Monona, at first a part of Blooming Grove Township, developed into a village in 1938 and finally into a city in 1969. Monona developed differently from most other municipalities. Normally a community will grow around its commercial district as the center of activity, employment, retail, and entertainment. Monona did not follow this pattern. In its early history, Monona consisted of prominent farms and summer cottages. Instead of the commercial area being the center of the city, it developed along the eastern boundary line, or present day Monona Drive. Monona Drive, as the city's main street, has evolved drastically through the latter half of the 20th century. Although Monona Drive has undergone extensive changes and has few buildings to be noted as landmarks, it has served the community as a thriving commercial area, meeting the needs of Monona's residents by providing vital goods and services.

5.2.2 PRESERVATION EFFORTS

Monona is proud of its abundant historical and cultural resources in the community. The city established a Landmarks Commission in 1975 to protect, enhance, and perpetuate the City's historical and cultural heritage. The Landmarks Commission has identified twenty-two City of Monona landmark sites and three sites on the State of Wisconsin Historic Register (marked by asterisk):

1. Adolph Wagner House	4705 Tonyawatha Trail
2. Black Bridge - Site	Bridge Road
3. Blooming Grove Town Hall - Site	Monona Drive and Dean Avenue
4. Bungalowen	5805-5807 Winnequah Road
5. Charles Fix House	4659 Tonyawatha Trail
6. Chet Clarke House - Site	5000 Monona Drive
7. Ernie's Trading Post	4500 Winnequah Road
8. Frank Allis Home / Novitiate	4123 Monona Drive
9. Fred Schluter Farm - Site	5310 Schluter Road
10. George Kalbfleisch, Jr. Farm - Site	706 Dean Avenue
11. George Nichols Farm - Site	6204 Ridgewood Avenue
12. Knute Reindahl House - Site	4009 Monona Drive
13. Lambole Cottage	4529 Winnequah Road
14. Morningside Sanitarium	300 Femrite Drive
15. Mound – Outlet*	Midwood Avenue and Ridgewood Avenue
16. Mound - Reindahl/Monona	4009 Monona Drive
17. Mound - Tompkins-Brindler*	5805 Monona Drive, Woodland Park
18. Nichols School	5301 Monona Drive
19. Otto Schroeder House	4811 Tonyawatha Trail
20. Royal Airport – Site*	W Broadway and Highway 12/18
21. Springhaven Pagoda	4227 Winnequah Road
22. Tonyawatha Springs Hotel - Site	4541 Winnequah Road
23. Tower of Memories	601 E Broadway
24. William Schlutz Farm - Site	4611 Winnequah Road

The city has preserved its Native American roots in a variety of ways. Many original Native American words and names remain throughout the community in the names of streets, bodies of water, and other natural resources. The city's name, Monona, is an Indian word meaning "beautiful." Original Indian burial and effigy mounds have been preserved at different locations in the city. One of the most significant preservations of the Native American heritage in the community is the Indian Mound Park. The Monona Landmarks Commission placed a state historical marker in this park describing the Outlet Mound as a burial place used by the Woodland Indians. In 2001 the city's Landmarks Commission also placed a state historical marker in Monona's Woodland Park for the Tompkins-Brindler mound group. Many interviews were conducted with native inhabitants of the area which have been preserved by transcription into the city's local history book: *City of Monona: Its Heritage and Landmarks (2011)*.

Monona has a collection of diverse historic architecture. Many historic homes were once summer cottages and farmhouses. International Style houses in the city with their flat roofs and box-like shapes are prevalent in the city, mostly constructed in the 1930s and 40s. Most of these homes are in the Frost Woods Neighborhood. In the 1940s and 50s, Sears Catalog Homes and pre-fabricated Lustron homes went from the mass-production lines to Monona's recently subdivided farmlands. Mid-century ranch homes were also popular during Monona's residential boom. Nichols School, an example of typical historic 1930s elementary school architecture, stands on the same corner where the area's children have attended school since 1869. The Tower of Memories at the Roselawn Memorial Park Cemetery has a unique form of Gothic Revival funerary architecture.

5.2.3 HISTORIC AND CULTURAL RESOURCES

In 1999, the Blooming Grove Historical Society, with support from the City of Monona, published *Monona in the Making: History of the City of Pride, 1938-1975*. This book depicts the development of the community, its government, schools, and churches. Prior to that, the Monona Landmarks Commission originally published *City of Monona: Its Landmarks and Heritage* in 1980. This book was updated and republished in 2011, and includes descriptions of Monona's native history, and numerous culturally and historically significant homes and structures.

The State of Wisconsin has some funding available for communities to conduct historical surveys. The city may apply for a grant through the State Historical Society to conduct an intensive historic architecture survey. Such a survey has not occurred in Monona, and Society staff believes that the city is under-surveyed in this area. The State Historical Society's records indicate that none of Monona's International Style homes or other historic homes are part of the National or State Register of Historic Places. Monona plans to undertake a survey and promote the registration of these homes and other historical sites. By having these sites registered, the site owners may be eligible for tax credits to help maintain the historical significance of the property. Additionally, the Landmarks Commission will complete an inventory of the city's historical sites. The city's historic records will be archived in the Monona Public Library. The Landmarks Commission also intends to pursue preservation and restoration of historic sites such as the Springhaven Pagoda. Besides preserving existing landmarks, the city will work to increase the recognition of historically significant locations. Creating historic preservation guidelines is one of the many steps that the city needs to take to accomplish its goal of cultural and historic preservation.

5.3 GOALS OBJECTIVES POLICIES AND PROGRAMS



GOAL 5.1

Preserve and enhance the natural, cultural, and scenic resources of Monona for the enjoyment of present residents and future generations.

POLICIES

Preserve environmental corridors, scenic views, natural land, and areas of ecological significance.

Encourage conservation practices that improve the quality of the land, water, and air.

Preserve primary wetlands in their natural state and conserve soils, water, and forest resources.

Encourage the proper handling of wastes and chemicals, so that they have a minimal adverse effect on health and the environment.

Encourage uses of land and other natural resources that are in accordance with their character and adaptability.

Protect, maintain, and enhance the quality of Monona's drinking water.

Update the *1990 Wetland Management Plan* to improve the environmental qualities of the wetlands and to enhance their educational, recreational, and visual values.

Inventory Monona's current tree stock.

Prepare a forest management plan that focuses on continuing tree preservation and planting.

Update City's plans that relate to natural resources, such as the 5-year Park and Open Space Plan, as necessary.

Maintain existing cooperative relationships for the maintenance and preservation of cultural and natural resources.

Maintain a cooperative relationship with the Wisconsin Department of Natural Resources (DNR).

Preserve and enhance the quality of Lake Monona.



GOAL 5.2

Protect and perpetuate improvements, sites, and districts, which reflect Monona’s cultural, social, economic, political, and architectural history.

POLICIES

Inventory the city’s landmarks and historic sites.

Create historic preservation guidelines.

Conduct a historical survey of the city.

Assist and encourage historic homeowners in registering their homes in the state or national register.

Continue to mark places of historic significance in Monona.

Provide opportunities for education and community awareness of Monona’s history, such as roundtable discussions, organizing walking tours, and distributing information through publications and news articles.

Encourage the preservation of published articles on Monona’s events in retrievable form through the establishment of archives at the Library to maintain historic records of the city.
