



chapter **5**

CUMING COUNTY'S FUTURE LAND USE PLAN

This chapter of the Cuming County Plan establishes a Land Use Plan based on the opportunities, challenges, and Plan Principles outlined in the previous chapters.

POLICY INFLUENCES

Determining appropriate land use policies includes an interaction of several factors:

Plan Principles. Chapter 4 presented the Plan Principles guiding development of the Cuming County planning jurisdiction. These principles provide the basic statements and assumptions that underlay land use policy for the county. They provide the foundation for development of a county that enables future economic opportunities in the area without compromising the environmental qualities of the county.

Existing land use patterns and current demands. Understanding current land use patterns establishes the facts on the ground that the land use plan should accommodate. While rural areas over the past 40 years have declined in population, interest in rural living has remained strong. The difference is that most of these residents are not directly employed in farming operations. While the plan will direct the market to some degree, a realistic plan cannot reverse market trends.

Environmental Resources & Constraints. Chapter 3 identified those environmental features that should be preserved but also those resources that can be capitalized on to strengthen and expand the county's economy. The Plan Principles and the community input that generated those principles placed a high priority on rural character, and preservation of environmental and economic resources. In summary, development should be driven towards the communities of Cuming County and existing developments, while areas with historic agriculture should be preserved.

Land Use Policy Process

Planning for the county does not end with the publication of this plan. Instead, the comprehensive plan must establish a process that guides hundreds of small decisions over time that determine the direction of county development. This section of the Cuming County Plan presents a vision of how the county should address development opportunities over time based on the above policy influences. The following discussion presents the basic principles for each district identified by the Future Land Use Plan (Map 5.1). These principles should be used to help guide private and public development decisions and policies within each district.

Land Use Districts

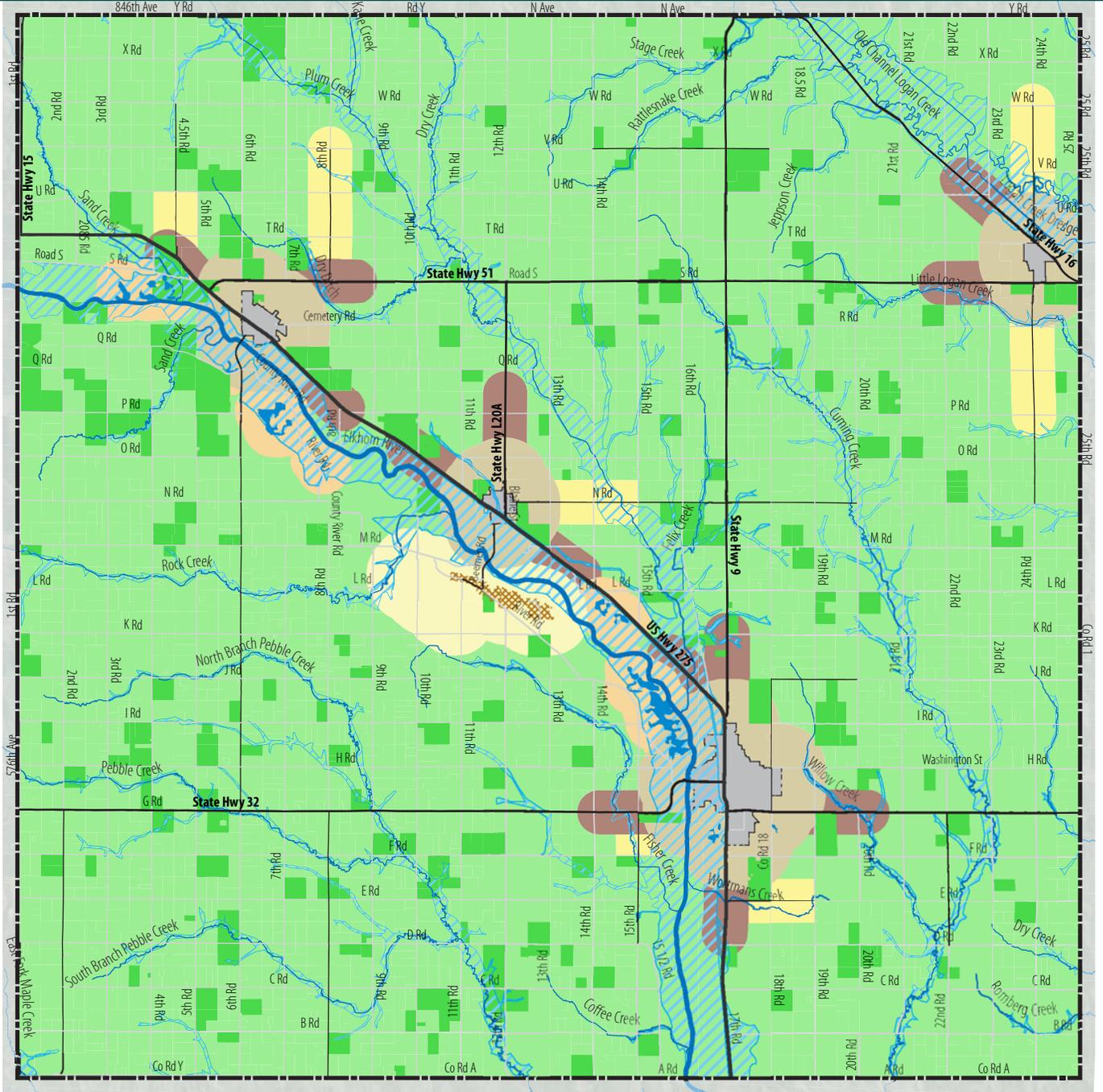
The Cuming County Land Use Plan identifies the following Land Use Districts, with policies based on location, markets, environmental considerations, and infrastructure issues:

- Floodplain/Natural Conservation District
- General Agricultural District
- Intensive Agricultural District
- Urban Reserve District
- Bluff-Oriented Development District
- Lake-Oriented Development District
- Community Gateway District
- Rural Residential Estate

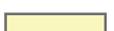
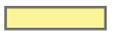
Each of these districts is presented in parallel and includes:

- A *Geographical Descriptor*, describing the attributes that make this area distinctive.
- *Guiding Factors* for making policy decisions
- *Principles and Patterns* that should be applied to each area.

Map 5.1: Future Land Use Plan



Future Land Use

- | | | |
|---|--|--|
|  County Boundary |  Paved Roads |  Transitional Agriculture [bluffs] |
|  Elkhorn River |  Gravel Roads |  Rural Residential Estate |
|  Creeks |  Intensive Agriculture | |
|  Major Lakes |  General Agriculture | |
|  City Boundaries |  Urban Reserve | |
|  Bluffs Zone |  Community Gateway District | |
|  Floodplain |  Transitional Agriculture [lakes] | |



Floodplain/Conservation Districts

The Elkhorn River floodplain features rich agricultural areas and a vital flood storage area. Land use policy should maintain the open, agricultural character of this district.

Geographic Descriptor

The natural flow of the Elkhorn River and most of the streams in Cuming County is from northwest to south. The floodplain of these corridors provided easy transportation routes and fertile soil to the early settlers. The Elkhorn River and Logan Creek floodplains are the widest and these broad, flat plains are primarily in row crop production.

Guiding Factors

The guiding principles outlined in Chapter 4 of this plan call for development to have limited impact on environmental features and to be directed toward unique urban settings. Large-scale developments, when built in the floodplain elevated on fill, can increase the reach of flood waters. Therefore, the appropriate final land use in the Natural Conservation District should be agriculture or open range. Future identification of native prairie sites or wetlands should also be protected under the conservation district.

Principles and Patterns

Floodplain areas can still be developed once they are elevated. However, elevation can affect adjacent property owners and should be done on a limited basis within the county's floodplains. The primary use in these areas will be agriculture and some very low density residential development. Residential development, if permitted, should occur on large lots to reduce impact on the floodplain. Low to medium density residential development could be considered if lots are clustered and if large parcels of land are preserved to mitigate any impacts on the floodplain.

General Agricultural Districts

Agriculture was at the heart of early settlement of Cuming County and remains the significant countywide economic force today. Outside of the communities, agriculture is the primary land use.

Geographic Descriptor

Historic development patterns, agricultural land values,

and distance from developed areas make these areas unlikely candidates for development and thus should be protected for agricultural production. The general agricultural districts should also provide a buffer between existing and future residential developments and the intensive agricultural district.

Guiding Factors

These areas are unlikely to be developed in the next 20 years. Agricultural uses will take priority in the district, but intensive agriculture may be allowed as a conditional use. Factors that should be taken into consideration when assessing new intensive agricultural operations include:

- Distance from existing residential developments.
- Stormwater management and any impacts on water quality or erosion.
- Proximity to existing confined animal feeding operations.
- Access to adequate roads and impact upon county roads.

Residential developments in the General Agricultural District should be discouraged so as to mitigate the impact on existing agricultural operations. Lot sizes should be large to deter residential development with small acreages.

Principles and Patterns

- Agricultural uses will take priority within the district.
- With the exception of existing farmsteads, minimum lot sizes should be significantly larger to discourage larger scale residential development and impacts on agricultural operations.
- Intense agricultural uses, such as confined animal feeding operations should be avoided near existing developments. The approval of these uses should consider the impact of the size of the operation as it relates surrounding developments and stormwater runoff.

Intensive Agriculture District

Cuming County is a leader in livestock production both in the state and nationally. These operations should be respected and supported for the importance they have in the economy of the county.



Geographic Descriptor

The Intensive Agricultural District identified in Map 5.1 identifies the majority of the existing intensive agricultural operations in the county. The county has a full range of intense operations but the majority are in cattle and hog feeding operations. These are located throughout the county but visitors are most familiar with the large operations located along Highway 275.

Guiding Factors

These areas include agricultural operations that should be protected. On site expansion of operations is permitted but no county regulations can be more lenient than Department of Environmental Quality (DEQ) requirements. The expansion of operations onto adjacent parcels should be reviewed based on the impact to any adjacent residential uses, stormwater runoff and transportation demands placed on adjoining roads. The impact on future developments should be viewed with the understanding that existing operations were in place ahead of development.

Principles and Patterns

- Agriculture will be the primary use within the district.
- Minimum lot sizes should be large to discourage larger scale residential development and impacts on agricultural operations.
- The county should consider implementing development agreements for these areas that outline the priority of agricultural uses and operations.
 - Development agreements clearly establish the developer's responsibility regarding project phasing, provisions for public and private facilities, improvements, and any other mutually agreed to terms and requirements.
- New confined animal feeding operations should be directed to properties adjacent to existing operations but the impact on road systems and traffic volumes must be evaluated with each project.

Urban Reserve Districts

As the communities of Cuming County strive to grow and expand their economic bases, the Urban Reserve District should accommodate that growth. Generally, devel-



Cuming County Comprehensive Plan

opment in the county should be directed to these areas where municipal services will provide the most efficient and economically sustainable locations.

Geographic Descriptor

These districts are located within a one mile area surrounding each of the communities. Generally these areas are outside the planning and zoning jurisdiction of the county but the county does provide services to these areas including road maintenance.

Guiding Factors

These areas should be protected as future growth areas for the communities. Residential, industrial and commercial growth should be directed toward these areas and should be connected to municipal services. General agricultural operations are appropriate but new intensive agricultural operations should be discouraged. Large lot subdivisions on individual wells and septic systems should be discouraged, especially when directly adjacent to communities.

Principles and Patterns

The Urban Reserve District will remain primarily in agricultural use with new developments directed to sites adjacent to existing development and/or along the Highway 275 corridor. Development priority should be given to sites with access of existing urban services. Any development should include a street pattern that connects to existing or future developments, ensuring a continuous grid of streets similar to the patterns in each community.

Community Gateway Districts

Cuming County's state and federal highways are the gateway to the county's communities and often the only impression visitors have of the county. The development and appearance of these corridors is important to the image of the county.

Geographic Descriptor

The access that Highway 275 provides to larger markets and the strong agricultural resources of the county could create future economic opportunities. While significant demand along the county's highway corridors, including Highways 275, 51, 32, 16, 9 and 20A, does not currently exist, these are potential locations for future ag-related commercial operations.

Guiding Factors

Uses along these corridors should first be directed to the Urban Reserve Districts. If expansion beyond the Urban Reserve areas is necessary then the county should limit the number of access points and provide ample access to developable areas not immediately along the roads. Commercial uses will tend to be located immediately adjacent to the roadways buffering residential development further from the highways.

Principles and Patterns

- Commercial and industrial uses should first be directed to the Urban Reserve District. Developments outside the Urban Reserve areas should be limited to the Highway corridors.
- Linear "strip" development should be avoided along the corridors. Instead, development should be clustered and preservation of existing agricultural operations should be encouraged. This approach should preserve the rural character of the corridors and to create developments that are unique from those in the region.
- All of these highways are major gateways into the communities of Cuming County. Because of the importance of these corridors, development should be closely reviewed to address site planning issues, landscaping, building scale, signage, and site amenities.
- Projects should employ stormwater management practices that can capture the water on site.

Lake Oriented Residential District

The Elkhorn River corridor is rich in resources including sand and gravel materials. The removal of these resources leave lakes that can be the centerpiece of very attractive residential development.

Geographical Descriptor

Sand and gravel deposits are located throughout the floodplain of the Elkhorn River. Generally these operations have been located in the corridor between West Point and Beemer with the newest operation located on the south end of West Point.

Guiding Factors

The sand and gravel resources along the Elkhorn River are an important economic resource to the county and region. When mining is completed on a site, the site can



be transitioned to other uses, including lake-oriented residential developments, recreation lakes, or habitat preservation areas. These areas should be protected and enhanced to create quality living environments for existing and future residents. General agricultural operations are appropriate in the areas surrounding these lakes but new intensive agricultural operations should be discouraged.

Principles and Patterns

- Upon completion of mining, extraction sites outside the floodway can be developed as residential communities.
- Water quality and ability of soils to handle waste water systems should be utmost when determining densities. Package systems for wastewater should be encouraged. Lot sizes may be smaller and clustered to minimize the impact on the lakes water quality and to capitalize on environmental features.
- Best management practices should be required for stormwater runoff into the lakes to protect water quality and the investment property owners have made. This may include limiting the use of fertilizers by the local homeowners association.
- Preliminary design of lake developments should be completed as mining operations begin, and should incorporate, open space, wetlands, and habitat development areas.
- Open space and wetlands should be planned to serve as green connections between lake developments and nearby communities.

Bluffs Oriented Residential District

The bluffs and wooded hills that overlook the Elkhorn Valley create one of the county's most beautiful landscapes. Conservation of this scenic area helps maintain the environmental and aesthetic quality of Cuming County.

Geographical Descriptor

The wooded hills and bluffs that overlook the Elkhorn River are most prominent on the west side of the river just west of Beemer. The steep slopes, tree cover and prairie make it an attractive area but these environmental assets also require sensitive design to preserve these assets. Steep slopes were used to define this area with a buffer area applied to protect these areas from more intense uses.

Principles and Patterns

- General agriculture and low-density residential uses will be the ultimate uses in these areas.
- Conservation development standards should be applied and the county may also give a density bonus for 50% or more of the development remaining in common open space.
- Developments with average lot sizes of less than one unit per three acres should be required to use municipal or package waste water systems.
- A stormwater management plan should be completed with new developments to prevent additional or future erosion of the bluffs.



- Roadways within new developments should generally be designed to follow contours, including road alignments on ridgelines to maximize views and permit natural stormwater management along the drainageways.
- General agricultural operations are appropriate, but new intensive agricultural operations are strongly discouraged.

Rural Residential Districts

Rural acreage development will continue to be a strong market within the county. The county should accommodate this demand adjacent to urban reserve districts while ensuring the environmental qualities and agricultural economy of the county.

Geographic Descriptor

The Rural Residential Districts are outside the jurisdictions of the communities of Cuming County but adjacent to existing developments or corridors that can support increased traffic loads. These areas tend to be away from existing intensive agricultural uses, however, these uses cannot always be avoided, especially in relation to existing housing.

Guiding Factors

New rural residential developments should be directly adjacent to existing jurisdictions and subdivisions. These areas should have access to adequate services including water, wastewater, and roads. Future designations should avoid areas disconnected from existing developments or near intensive agricultural operations. The cost-to-benefit of developments as it relates to existing road systems should also be considered. While new developments may not initially demand a paved or oiled road, the added traffic volumes will increase maintenance costs and could ultimately lead to demands for paving.

Principles and Patterns

- Development densities within the Rural Residential Districts typically will have a density of less than one unit per five acres. Average lot size will be five acres. Smaller lot sizes and higher densities may be used if:
 - Conservation subdivision techniques are applied to preserve open spaces.
 - County road systems are improved to accommodate additional traffic loads.
 - Adequate water and wastewater services are available.



Chapter 5: Cuming County's Future Land Use Plan

- The overall design pattern in the district should maintain drainageways as open spaces with primary development on the upland areas. To the maximum degree possible, storm drainage should be handled on the surface and conveyed to open areas, decreasing both volume and velocity of flow.
- Roadways within new developments should generally be designed to follow contours, including road alignments on ridgelines to maximize views and permit natural stormwater management along the drainageways.
- New developments should preserve other environmental features through the use of conservation design techniques. Conserved open space may be used for agriculture, recreation, stormwater management, or open land. Generally, these preserves should be open-ended, providing opportunities for connections to preserves in adjacent developments.
- Commercial services should be concentrated within existing communities and in those areas identified as Community Gateway Districts in Map 5.1. Some home based business operations may be allowed, but hours of operation, traffic volumes, and impact on road systems should be closely reviewed.

Conclusions

Cuming County has bountiful resources and a varied economy. This provides both great opportunities and challenges for the county. Land use policies should:

- Protect existing farming operations and encourage businesses that build on the county's economic base.
- Direct development toward the communities of Cuming County. Developments outside of the communities should be mindful of the agriculture economy and environmental resources.
- Developments in the county, especially in the bluffs and lake areas, should be encouraged to use conservation subdivision technics.

Conservation Subdivisions

In conservation subdivisions smaller lot sizes are permitted in return for conservation of major environmental resources and significant open spaces. The open spaces may be owned in common by property owners, donated to a public or nonprofit agency, or maintained in private ownership. Conservation designs, skillfully executed, are more successful at preserving such features as views, waterways, and agricultural lands, than conventional subdivisions, both serving the public interest and creating more marketable projects.

Conservation subdivisions are designed on a specific parcel using a four step process:

1. Identifying potential conservation areas on a site-specific basis. These include those features defined in the environmental analysis outlined in Chapter 2, incorporating:
 - Soils that do not support residential development.
 - Wetlands with appropriate buffers.
 - Floodplains.
 - Steep slopes in excess of 15%.
 - Wildlife habitats.
 - Woodlands.
 - Prairies, with appropriate buffers.
 - Historic sites.
 - Ridgelines and view corridors.
 - » Individual specimen trees or small stands of significant trees.

These defined areas would be preserved as open space in the development design.

2. Locating house sites, maximizing view lots or adjacency to significant site assets.
3. Designing the street and trails system to serve the residential sites. Street alignments should maximize the design quality of the site and should generally be interconnected.
4. Drawing in parcel lines.