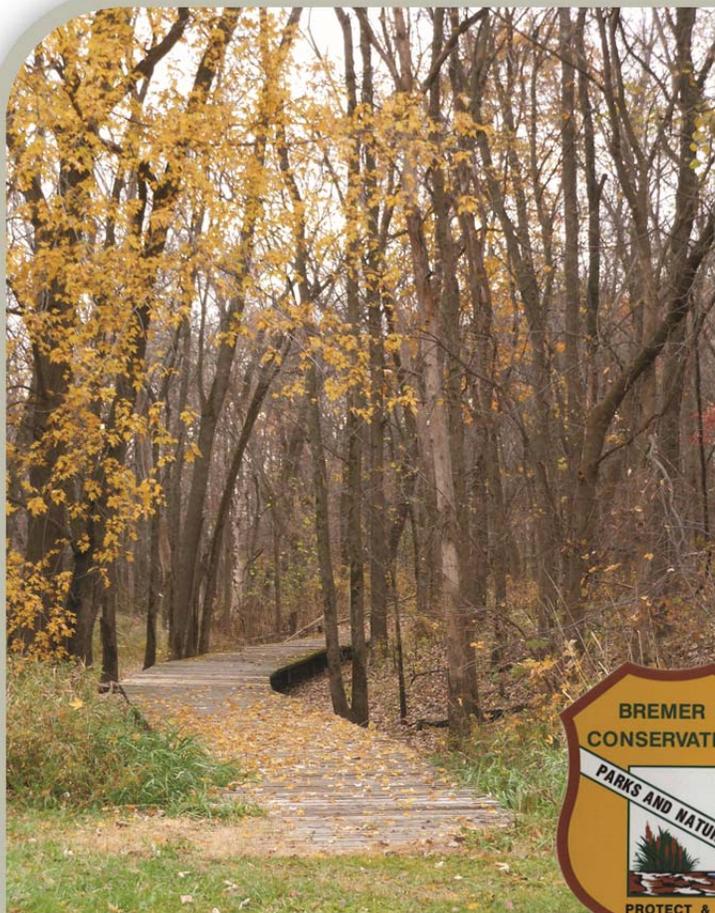


2020

Bremer County Conservation & Resource Enhancement and Protection Plan



Adopted: February 3, 2016



Prepared By:



INRCOG
Iowa Northland
Regional Council
Of Governments

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Executive Summary

Planning is a primary element for providing direction in setting and achieving goals of any organization. The Bremer County Conservation Board (BCCB) contracted with the Iowa Northland Regional Council of Governments (INRCOG) to facilitate meetings and develop this planning document. This Bremer County Conservation & Resource Enhancement and Protection (REAP) Plan's set forth standards and guidelines for the county to provide quality facilities and programs for outdoor recreation, environmental education, and conservation in Bremer County.



The plan has been developed utilizing historical background and public input. This plan was formulated by BCCB board members and staff, members of the Bremer County REAP committee, INRCOG staff, as well as direct input from county residents via a survey.

The completion of the Bremer County Conservation & Resource Enhancement and Protection Plan marks the beginning of another phase of guiding the continued planning process for the BCCB and REAP program.

As stated in the 2013 Iowa State Comprehensive Outdoor Recreation Plan...

“outdoor recreation has numerous benefits for both the public and the environment. Recreation areas provide the public with places to gather with family and friends, places to relax, and places that promote physical activity. These types of places add to an area and person’s quality of life.

Recreation areas also help to shape a community through planning efforts to provide adequate recreation space and facilities for the population served. Parks and open spaces can also provide environmental benefits such as buffers between conflicting land uses.”

This plan provides background into the recreational desires of the county and the goals that have been initiated. This plan is a vision for the future of the Bremer County Conservation Board. The plan will serve current board members and staff in guiding short-term as well as long-term organizational enhancements.

Chapter 1: County Conservation Board

Purpose of the Plan

In general, a conservation plan is a statement of policy and intent. The comprehensive plan gives direction to the location, form, and function of growth and planning for the organization. Because the plan is a policy document, its recommendations must be implemented through policies and programs that address current issues as well as long-term goals and concerns. The plan is not a program; it simply states desired ends, and provides a framework for achieving them. The plan does not include definitive schedules or cost estimates; as these are handled in implementation documents such as capital improvement plans and other program. This document possesses more of an inspirational value, something the organization can build toward.



Conservation Board

The mechanism for establishing county conservation boards – determined by the will of the voters of each respective county – was approved by the Iowa General Assembly in 1956. This visionary piece of legislation is defined in Chapter 350.1 of the Code of Iowa:

“The purpose of this chapter is to create a county conservation board and to authorize counties to acquire, develop, maintain, and make available to the inhabitants of the county: public museums, parks, preserves, parkways, playgrounds, recreational centers, county forests, wildlife and other conservation areas, and to promote and preserve the health and general welfare of the people, and to encourage the orderly development and conservation of natural resources, and to cultivate good citizenship by providing adequate programs of public recreation.”

Mission & Purpose

The mission of the Bremer County Conservation Board is...

“...to provide both citizens of and visitors to Bremer County with quality recreation opportunities, interpretation and education of the environment, and history of Bremer County, and longer term maintenance and protection of the county’s natural resources.”

Established in 1958, the Bremer Conservation Board has operated with this mission statement as a goal.

The BCCB duties include:

- ❖ Studying and determining the county’s park, recreational, and environmental education needs.
- ❖ Planning and administering the county parks, areas, and facilities.
- ❖ Accepting, on behalf of the county, all gifts given for conservation purposes.
- ❖ Identifying and obtaining funding to implement and manage responsibilities.

The Conservation Board’s office and shop are located at 1104 South Main Street in the south-central portion of the City of Tripoli.

As of 2014, the Board and staff managed over 4,300 acres, consisting of: parks, wildlife areas, prairies, river accesses, and many other natural areas for those wishing to get outdoors and experience the beauty of Bremer County.

Board Goals

The goals of the BCCB are:

1. To expand the Bremer County Conservation Board base of operations to enable the staff to better maintain and direct the future demands of the land management, conservation, and educational goals of the BCCB.
2. To increase the commitment in the “Acres for Wildlife” program promoting wildlife habitat management and development on private lands.
3. To enhance the BCCB’s growing Environmental Education (EE) program in Bremer County.
4. To protect river corridors in Bremer County.
5. To expand parks and recreation areas already owned and managed by the Board.
6. To offer additional facilities and to rejuvenate existing facilities in intensive use areas (parks).
7. To protect native habitat / ecologically unique areas such as native prairie or fens.

Board Policies

To help achieve the BCCB's mission and goals, the following general policies were established:

Planning

It shall be the policy of the BCCB to develop and maintain a comprehensive countywide plan. The countywide plan shall be reviewed at least once every five years and updated as needed. Individual development plans for specific projects and initiatives should be submitted to agencies and organizations with which BCCB maintains agreements with for review before a plan is implemented.

Outdoor Recreation & Conservation Opportunities

It shall be the policy to provide only those facilities and services which are in accordance with the basic purpose and classification of a public area. In general, such development shall be consistent with the natural environment, shall not be contrary to law or established rules and regulations, and involve no major modification of the natural features of the land and water. Specific interest groups may be permitted to donate time and funds for suitable developments which will not interfere with public use. With the exception of staff structures, seasonal park employee housing, and maintenance grounds, lands under the control of the BCCB will largely be reasonably accessible to the public. Public lands include the following:

Parks

These areas provide general recreation opportunities and development. Compatible uses include activities such as camping, picnicking, walking, bicycling, limited hunting, fishing, playing, cross-county skiing, and more. The intent is to provide general outdoor recreation opportunities in an area with scenic quality and natural features. A map of the four county parks can be found in Appendix E.

Wildlife Areas

Wildlife areas are for the preservation of natural features, wildlife habitat, and enjoyment of people. Development is held to a minimum, with the primary administrative concern being conservation and natural resource management. Only activities with minimal impact to natural features are permitted. Such activities often include hunting, fishing, nut and berry picking, nature walks, and photography. There are eleven wildlife areas, shown in the maps in Appendix E, which are managed by the BCCB.

Recreational Areas

These areas include the following sub-categories:

Water Accesses

These areas provide access to water for fishing, boating, canoeing, and kayaking. Water access areas may be incorporated into a park or natural area, and therefore allow for other activities. Water accesses include lakes, ponds, and boating and

canoe accesses along the Wapsipinicon River and the Cedar River which are described and promoted as part of the future Wapsipinicon River and Cedar River Water Trails.

Woods

These areas are forested and are actively managed for a variety of benefits, such as: wildlife diversity, desired wildlife species, timber production, and forest health; and hunting. Often, timber management addresses several benefits. Timber management techniques may include timber harvests and small clear-cuts.

Greenbelt

The Wapsie Greenbelt is a unique area in scenic splendor, natural wonder, and/or scientific importance. Recreation activities are strictly limited to those that will not affect the unique value of the natural features. Popular recreational activities along the greenbelt include: hiking, birdwatching, cross-country skiing, hunting and fishing.

Trails

These areas encourage recreational enjoyment of Bremer County's natural resources through exploring on either a bicycle or canoe/kayak.

Historic Sites

These are sites associated with historical, traditional, or cultural heritage and are of sufficient significance to merit preservation or restoration. Management is directed to restoration, preservation, and interpretation for sightseeing, enjoyment, and study of the historic and cultural features. Limited day-use facilities may be provided when such facilities do not detract from or interfere with the primary purpose and value of the site.

Prairies and Preserves

These areas may contain significant natural flora or fauna, or may be designated as a refuge for common species. These areas are regulated as to intensity and type of use. The three county managed prairies are: Brooks/Lease Prairie, Warrant Township Cemetery Prairie, and Winzenburg Prairie.

Environmental Education, Interpretive, and Informational Programs

The BCCB shall provide and continually develop a program of environmental education both on-site and off-site in an effort to interpret the natural resources of the county, promote their conservation and develop an environmentally responsible citizenry. Active involvement of citizens with natural settings is recognized as crucial to the accomplishment of this goal. To conserve natural resources and be environmentally-responsible, citizens need environmental awareness, knowledge, positive environmental attitudes and values and citizen action skills, so that their behaviors will aid in achieving a healthy balance between the natural and altered environments.

Inventory and Review

An inventory of all existing and potential areas shall be maintained. Particular emphasis is to be placed on the inventory of existing open space lands and natural environments in order to establish sound administrative decisions and as a basis for future acquisition priorities. The current inventory map is located in Appendix E.

Land Acquisition

The BCCB may acquire by gift, purchase, will, lease, agreement, easement, or condemnation any lands which shall be held and used in the name of Bremer County by the BCCB. The county may also request transfers of land from the Iowa Department of Natural Resources, Board of Supervisors, or the governing body of any municipality, district or public corporation. Areas shall be large enough to protect and provide a buffer against outside influences so as to retain those values for which the area was established, and to permit adequate development without damage or impairment of the primary purpose of the areas. Boundaries shall be established and marked at the time of purchase.

Finance

Land acquisition, development and maintenance may be financed in many ways, including, but not restricted to, the following: 1) General taxation; 2) Private and public grant-in-aid programs; 3) Bond issues; 4) Funds from the collection of fees and charges for special facilities, services and conveniences; 5) Equipment rental; 6) Timber sales; and 7) Gifts, donations or bequests established for this express purpose.

The BCCB shall collect reasonable fees for special services, facilities, and conveniences where such fees are deemed practical and necessary. Fees will be determined in a manner that is of a standard and equal nature for similar services and facilities. Efforts will be made to set fees at levels that will not prohibit use of areas by segments of the public.

Operation and Maintenance of Facilities

All areas and facilities shall be maintained in a clean, neat, sanitary, and orderly manner that protects public health and safety, and serves to increase interpretation and enjoyment of the features for which the land or facilities were reserved. The BCCB shall provide adequate staff to meet this objective.

Incompatible Land Use and Encroachment

Incompatible land uses such as mining, power development, rights-of-way, and non-park structures will not be permitted except in the most unusual circumstances. Hunting will be permitted where authorized. The lack of development on any area shall not be justification for allowing encroachment of incompatible uses. All areas acquired by the Board should remain dedicated to that use and protected against exploitation contrary to their purpose.

Regulations and Enforcement

It shall be the policy to formulate and, through legal procedures, issue and enforce adequate rules and regulations concerning public behavior in BCCB managed facilities and areas. These regulations shall be made available to park users.

Designation of Areas

Geographic, historic, local, or descriptive names shall be used in naming of areas. The use of names of living persons shall be considered only in exceptional cases. All plaques, memorials and other markers, as might be offered by special interest groups, must be approved by the Director before placement.

Board Staff

To assist the BCCB in carrying out day-to-day operations, the Board currently relies on six full-time staff members – Director, Environmental Education (EE) Coordinator/Naturalist, Recycling Educator/Naturalist, and three Natural Resources Technicians. In addition, the BCCB typically hires additional seasonal staff during the summer months.

Director

The director is responsible for managing all aspects of the county conservation board operations; supervises board staff; develops board budget; secures funding; and performs various other duties on behalf of the BCCB.

Naturalists

Two naturalists provide public programs year-round to schools and adult groups with the goal of providing information regarding public areas and educate visitors about their environment.

Natural Resources Technicians

Three technicians assist in managing county areas and performing maintenance and construction projects.

Seasonal Staff

During the warmer months, the BCCB hires part-time seasonal employees to provide additional support to the Natural Resource Technicians.

Chapter 2: Inventory of Existing Resources

Bremer County Facilities and Services

The BCCB owns and manages a variety of facilities, including: parks, wildlife areas, water accesses, trails, recreational facilities, prairies, lakes and ponds. Below is brief description of these facilities.

Parks

Conservation Board staff manage four parks in the county. Each park is available for overnight camping and offer electricity, flush toilets, showers, playgrounds, and sand volleyball courts. Camping reservations are not accepted at this time. Shelters (which can be reserved), water, and recycling stations are located in each park and dump stations are available in three parks. Firewood is available, for a donation, to be used only in the parks by campers. The parks contain many miles of hiking trails that traverse through different habitats and offer nature enthusiasts the beauty of Bremer County and northeast Iowa. Park gates are open May 1 - October 31. Limited hunting is allowed in three county parks November 1 - January 10 after which the parks provide numerous opportunities for cross-county skiing and snowshoeing for the remainder of the winter months and hiking, bird watching, and wildflower observation during the spring months. See Appendix E for a map of county park locations. The four Bremer County parks are:

Alcock Park

West of Frederika, this 42-acre park is one of four parks that allow camping in the county. Besides camping the park offers: shelters, electricity, drinking water, restrooms (pit and flush), showers, play equipment, dump station, picnicking, boat ramp, canoe access to the Wapsipinicon River, and fishing. Hunting is not allowed in this park at any time

Cedar Bend Park

Cedar Bend Park is located 1.5 miles northeast of Waverly and consists of 180 acres. Park amenities include: camping, shelters, electricity, drinking water, restrooms (pit and flush), showers, play equipment, dump station, picnicking, canoe access to the Cedar River, limited hunting, fishing, and a hiking trail.



North Cedar Park

Located one mile west of Plainfield, this 117-acre park offers camping, shelters, electricity, drinking water, flush restrooms, showers, play equipment, dump station, picnicking, boat ramp and canoe access to the Cedar River, limited hunting, fishing, and hiking.

North Woods Park

This 82-acre park is located one mile north of Sumner. The park offers camping, shelters, electricity, drinking water, restrooms (pit and flush), showers, play equipment, picnicking, limited hunting, fishing, and hiking.

Wildlife Areas

The Bremer County Conservation Board manages many wildlife areas in the county for public hunting, fishing, and trapping. The county's eleven wildlife areas range from 16 to 467 acres and provide other outdoor recreational opportunities including hiking, bird watching, nature photography, and nut and berry collecting. Users of these areas need to become familiar with sites and watch for boundary signs placed around the perimeters of the public areas. See Appendix E for a map of wildlife areas. Bremer County wildlife areas include:

Buck Creek Wildlife Area

This wildlife area consists of 50 acres and allows hunting during Iowa Department of Natural Resources (DNR) season as well as fishing. It is located five miles east of Readlyn on 230th Street.

Cedar Bend Wildlife Area

Located one mile northwest of Waverly on 195th Street, this 118-acre area allows hunting (DNR season) and fishing.

Cedar River Wildlife Area

This 59-acre area allows hunting during DNR established seasons. The area is also popular among hikers and provides access to the Cedar River for fishing. It is located three miles north of Plainfield on Badger Avenue.

Dillon Wildlife Area

This area is the smallest at 16 acres. It is located three miles east of Tripoli on Tahoe Avenue and only allows hunting during DNR's season.

J.J. Lynes & Sons Wildlife Area

Located one mile south of Plainfield on 150th Street, this 47-acre area allows hunting during DNR's season.

North Cedar Wildlife Area

At 111 acres, this area can be found one mile east of Plainfield via North Cedar Park. Hunting is allowed only during DNR hunting season.

Plum Creek Wildlife Area

The largest wildlife area at 467 acres, visitors can enjoy hunting (DNR season) and hiking. The area is located four miles northeast of Tripoli between Reed Avenue, 120th Street, and 140th Street.

Ringneck Wildlife Area

Located three miles west and three miles north of Tripoli on 140th Street this 40-acre area offers hunting during DNR's hunting season.

Seven Bridges Wildlife Area

As the second largest wildlife area managed by the BCCB, this 145-acre area allows hunting (DNR season), canoe access to the Wapsipinicon River, and fishing. It is located three miles south and three miles east of Readlyn.

Shell Rock Wildlife Area

This area is only accessible through DNR land. It is 20 acres in size and located 1.5 miles west of Janesville near the Shell Rock River. Hunting is allowed during the DNR hunting seasons.

Wilson Grove Wildlife Area

Home to two quarry ponds, the area allows hunting (DNR season) and fishing within the 90-acre area located 1.5 miles north of Sumner.

Recreation Areas

Other public areas managed by the Conservation Board include river accesses, native and reconstructed prairies, fishing lakes, a greenbelt, cemetery prairie, hard-surfaced trail, and other undeveloped natural areas. The Conservation Board also manages a water trail along the Wapsipinicon River, and soon on the Cedar River, to aid canoers when floating the rivers. All these areas foster additional recreational opportunities and complement the other public areas throughout Bremer County. Recreational areas managed by the BCCB include:

Avenue of the Saints Lake & Recreation Area

As one of two lakes in the county, the Avenue of the Saints Lake and Recreation Area spans 105 acres – of which 32 is the lake. The area is located two miles southwest of Waverly along Atlas Avenue. Users can enjoy picnicking, boat ramp and a canoe access onto the lake, pit restrooms, hunting during DNR's hunting season, fishing, and hiking.

Babcock Woods

Babcock Woods is an 80-acre natural area located within the southeastern corner of the Waverly city limits. The woods contain 150 year-old red oak trees and provide a glimpse of what Bremer County looked like during its settlement.

The BCCB received the western 40 acres of this area through the will of Aldora Babcock. The eastern half was bought by the BCCB from the Easter Seal Society.

This area has parking, kiosk, pit toilets, in addition to reconstructed native prairie in the former pasture. For visitors, the woods are a destination to view wildlife from the bird blind, go for a hike, observe wildflowers, and to pick berries, nuts, and mushrooms. The area is often used as an outdoor education site for area schools as well. The BCCB continues to work with the DNR District Forester to develop a timber management plan for the area.

Brooks/Lease Prairie

Acquired in May of 1999, this 8.2-acre prairie remnant is located on the west edge of Sumner on Whitetail Avenue. The prairie site was formerly a railroad right-of-way and contains over 90 species of wildflowers and prairie grasses. The prairie contains Bottle Gentians, Compass Plant, Shooting Star, Blazing Star, Rattlesnake Master, Indian grass, Big and Little Bluestem, plus many other prairie species. The area is also suitable for Monarch Butterfly habitat and is occasionally used for hiking.

Horton Road Ponds

Horton Road Ponds is a 24-acre area three miles north of Waverly on Horton Road. The area was used as part of the V14 road reconstruction project by the Bremer County Engineering Department. After completion of the project, the Bremer County Conservation Board, County Engineer, and Board of Supervisors were able to agree on a financial transaction that left the area to the conservation board to manage. Currently, the area has two ponds for fishing. However, future plans call for pond renovation, and to restock the ponds with bass, bluegill, and channel catfish, as well as adding fish habitat to at least the deeper pond, improving native grass seeding, adding a parking lot, pit toilet, and constructing fishing platforms.

Ingawanis Woodland

This 142-acre area was recently sold to the Iowa Natural Heritage Foundation by the Winnebago Council of the Boy Scouts of America. The area will eventually be purchased and managed as a public area by the BCCB. The area is located four miles west of Denver on Hawthorne Avenue and borders the Cedar River.

Plainfield Lake

One of two county lakes, this 60-acre site, 25 acres of which is the lake, provides pit toilets, a boat ramp, and fishing areas.

Shell Rock Access

The Shell Rock Access is a 13-acre area located 1.5 miles north and two miles west of Janesville on Cottage Avenue. The access offers fishing on the Shell Rock River and hiking.

Snyder Access

Located one-half mile north and one-half mile east of Tripoli, this 15 acre area offers canoe access to the Wapsipinicon River as well as hunting and fishing opportunities.

Wapsie River Greenbelt

Since the early 1960's, the BCCB has been working on a greenbelt project along the Wapsipinicon River extending from Tripoli southward to Iowa Highway 3. Parcels have been obtained over the years and the greenbelt now totals over 2,100 acres along the Wapsie. The greenbelt is home to a wide assortment of critters including a heron rookery, Sandhill cranes with young, Massasauga Rattlesnakes, song birds, families of river otters, and various other mammal and reptile species.

In addition to improving water quality and providing habitat, the greenbelt project offers numerous recreational activities. Bird watchers, nature photographers, cross-country skiers, hunters, trappers, hikers, and canoers can all find room within the 2,140 acres to pursue their own nature interests. Hunting, fishing, and a canoe access are available to users.

Warren Township Cemetery Prairie

The BCCB took over management duties of the Warren Township Cemetery Prairie, a two acre area, in 1987 with ownership transferred in 2002. The cemetery prairie is located 1 mile northeast of Waverly on Garden Avenue. Over 33 graves can be found at the cemetery, 26 of which have been identified. Tombstones range from the years 1855 to 1901. Hubert Higgins, a Civil War Veteran is buried in the cemetery. Mr. Higgins served in the 14th Regiment of the Iowa Volunteer Infantry. Since the cemetery was established so early in the county's history, many of the prairie plants have survived there among the tombstones. Over 128 species of flora can be found in the small prairie, including side-oats grama, yellow coneflower, spiderwort, prairie clover, and prairie dropseed.

To the north of the area, Wartburg College manages Lageschulte Prairie. This 5.8 acre prairie contains 184 flora species.

Winzenburg Prairie

This 21-acre area is located in the southeast part of Waverly, and has been seeded as a native prairie. The area also allows access to the Cedar River.

Woods Pasture

This 50-acre pasture is located one miles east of Plainfield on Division Street. It offers hunting and fishing opportunities on the Cedar River.

Recreational Trails

Readlyn Grump Trail

The Readlyn Grump Trail is a 6-mile paved path managed by the BCCB. It is one of three trails (Waverly Rail Trail and Denver-Jefferson Trail) in the county that are a part of the Rolling Prairie Trail system which, when complete, will include nine communities, three counties, and two state parks. See Appendix E for a map of county trails.

The Readlyn Grump Trail begins at the ending of the Waverly Rail Trail and travels to Readlyn's Water Tower Park and Friendly People Ball Park through open fields, over streams, and a bridge over Quarter Section Run.

Cedar River Water Trail

The Bremer and Black Hawk County portions of the Cedar River are in their own planning process to become a state-designated water trail. So far, it has been identified as a "Developing Water Trail" by DNR. This stretch of the river has been enjoyed by local paddlers long before state designation was sought.

A great deal of recreation, culture, history exists alongside the Cedar making it a tremendous economic development and recreational asset and opportunity for to Bremer County.

The development of the Cedar into a state-designated water trail will increase public use and enjoyment of the Cedar River and its watershed, enhance environmental health, cultural heritage, and economic development opportunities of this special resource.

Wapsipinicon River Water Trail

A popular river for paddlers and fishing enthusiasts, the Wapsipinicon River provides a well-known water trail that spans several counties. There are twelve access points along the Wapsie River Greenbelt for paddlers. This water trail extends into Black Hawk County and Buchanan County.

Education Programs

Environmental Education

The Bremer County Conservation Board began its Environmental Education (EE) Program in 1988 with the intent of providing EE and outdoor recreation programming for the citizens of Bremer County. The EE program interprets the natural resources of the county, along with promoting the conservation and wise use of resources.

Naturalists develop programs for school groups, youth groups, and the general public on topics such as fishing, camping, hunter education, canoeing, bird watching, wildlife identification, and nature hikes.

Over the past 25 years, there have been numerous programs offered to the public and civic groups, but most of the focus has been dedicated to school programs that reinforce and expand upon what teachers/students are already studying in the classroom. From



2001 through 2014, there were 146,850 participants among 8,250 different programs presented by the BCCB staff.

Recycling Education

Bremer County encourages recycling in each community. Bremer County offers free educational programs to Bremer County Schools, civic groups, and youth groups on recycling and waste reduction. Activities range from learning about composting to going on an EcoPicnic.

Iowa DNR Areas, Facilities and Conservation Services in Bremer County

The Iowa Department of Natural Resources (DNR) owns and manages ground for public use within Bremer County as well. The Cedar-Wapsie Unit within the Wildlife Section of the DNR manages four areas in Bremer County. Combined, these four areas offer over 5,000 acres of open space available to the public for hunting, fishing, trapping, bird watching, hiking, and general recreational interests. See Appendix E for a map of Iowa DNR areas. These four areas are:

Aldo Leopold Wetland/Upland Complex

This 1,356 acre marsh and upland area is located three miles east of Readlyn on Highway 3, 2.25 miles south on Timber Road, and 0.5 miles east on 252nd Street. The area is a popular home for deer, pheasant, and waterfowl.

Heffernan Wildlife Area

Located 1.5 miles north of Frederika on Morgan Avenue, this 254-acre area consists of half bottomland timber and half grassland, river, and wetland. Species include deer pheasant, turkey, squirrel, waterfowl, and rabbit.

Sweet Marsh Wildlife Area

Deer, waterfowl, and doves can be found on this 3,157-acre area, located four miles northeast of Tripoli on Highway 93 and one mile south on Reed Road. The area consists of half marsh, fourth timber, and fourth upland.

Walnut Bend Wildlife Area

This 244 acre site (two-thirds grassland, one-third wetland) is located one mile west of Janesville on 275th Street, 1.5 miles north on Dakota, and 0.75 miles west on 265th Street.

Chapter 3: Public Input Survey

As part of this planning process an online survey of Bremer County residents was conducted to gather direct input. While this survey was not designed to be statistically significant or necessarily a precise representative cross section of the county, this qualitative survey still provides valuable insight to the recreational thought process of Bremer County residents.

County residents were notified a Conservation Board Public Input Survey would be open from November 30 through December 10, 2015. Survey posters and notification postcards were sent to all nine cities as well as the county courthouse. In addition, the survey was posted the county website, the conservation board's website, as well as a number of county, city and private Facebook pages. Survey cards were also handed out during BCCB programs.

A total of 107 surveys were completed. A summary of these survey results are discussed in this section of the plan. Due to the qualitative nature of the survey, strict interpretation of the results is cautioned. A copy of the survey questions is located in Appendix C.

Key Findings

Programs and Education

- Word-of-mouth and social media (e.g. Facebook) were the most popular mediums persons heard about BCCB programs and activities.
- Nearly 20 percent of survey participants were unaware of BCCB programs.
- According to survey data, recreational (bicycling, canoeing, snowshoeing, etc.) and environmental (water and air quality, soil conservation, etc.) programs were the most important to survey respondents.
- Education programs are a top priority for residents.

Recreational Activities

- A majority (57 percent) indicated that regional connections of existing trails should be a high priority for the conservation board.
- The next two most popular types of trails respondents wanted to see prioritized were trails along the Cedar River and passive nature trails.
- Using recreational trails, hiking, and use of playgrounds or natural play areas were the most popular recreational activities in the county.

County Parks and Campgrounds

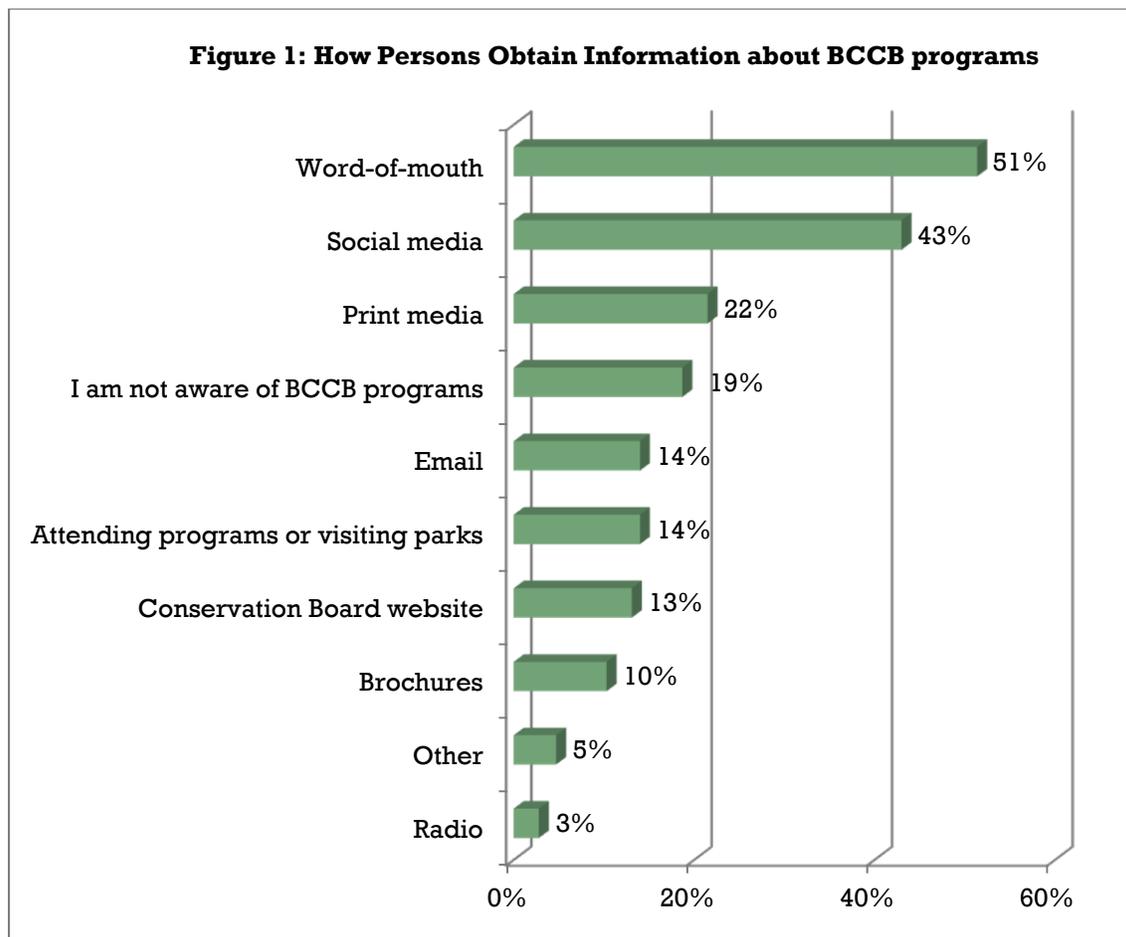
- Cedar Bend Park was the most frequently visited park, with 66 percent indicating their household had visited the park within the past year. North Cedar Park and Alcock Park, at 36 percent and 33 percent respectively, were the next most visited parks.
- Cedar Bend Park was also the most popular camping destination, with 23 percent indicating their household had camped there in the past year.
- Sixty-eight percent of respondents indicated they enjoy camping. Of those who enjoy camping, 63 percent would “likely” or “very likely” pay to spend the night in a park cabin.
- Fifty-eight percent of those who enjoy camping would be willing to pay extra to reserve a campsite in advance.
- Of those who enjoy camping, 31 percent would likely pay extra for a camping site large enough to accommodate a Class A or Class B RV.

Management

- The public views the operations and maintenance of Bremer County parks and facilities to be of high quality. Participants were asked to rate the condition of eleven different categories regarding management and operation of BCCB facilities. For all eleven categories, a majority indicated the operation and maintenance of BCCB facilities to be in, “excellent” or “good” condition.
- Participants were most impressed with the county’s natural area stewardship as well as open and green spaces.

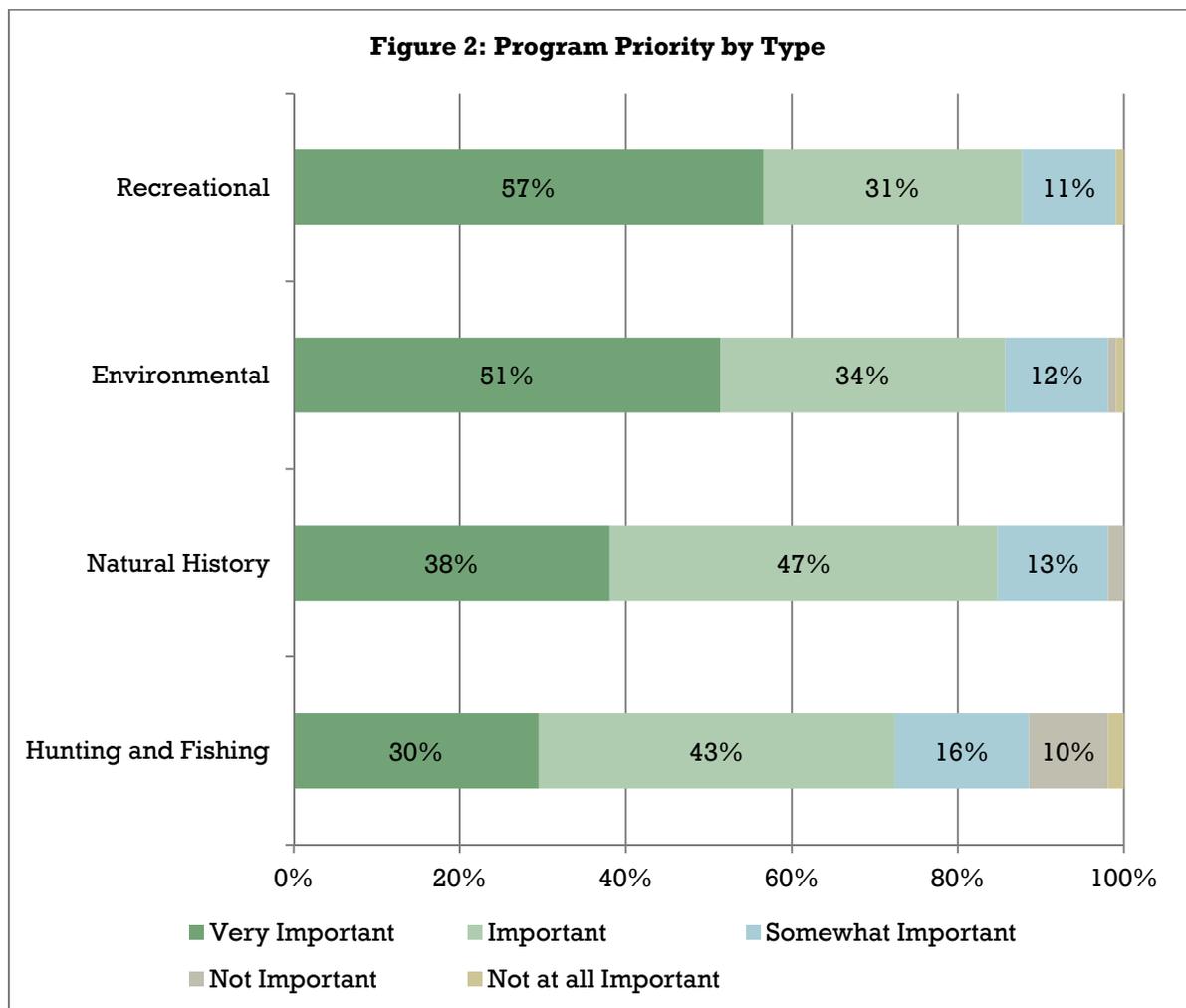
Programs and Education

The BCCB offers a variety of programs and special events that are open to the public each year. For example, in 2014 the BCCB hosted 756 programs that involved 12,786 participants. The survey inquired as to how persons most often heard of BCCB programs. As can be seen in Figure 1, the most popular mode was word-of-mouth, followed by social media. Nineteen percent of those surveyed were not aware of BCCB programs.

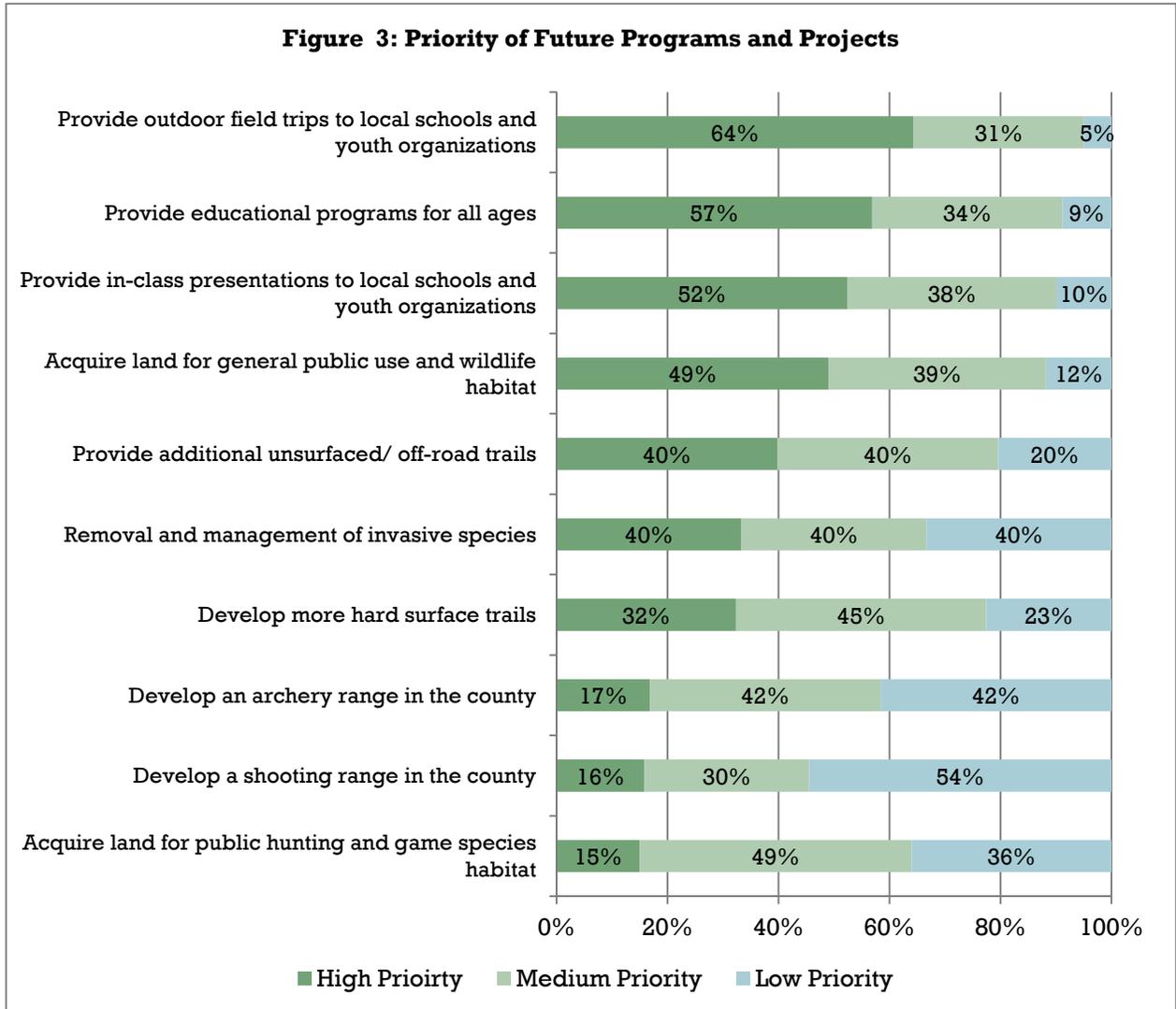


The survey also asked respondents to rate the level of importance of the various types of conservation programs offered. Respondents could choose to rank a category as: very important, important, somewhat important, not important, or not at all important.

Figure 2 shows the survey results, which indicate the most important types of programs are recreational (bicycling, canoeing, snowshoeing, etc.) followed by environmental (water and air quality, soil conservation, etc.). For each of these, a majority indicated these programs were a high priority.



Respondents were asked to rank the level of priority the conservation board should place on various types of programs and projects. Figure 3 shows that the continuation and expansion of educational programs has the highest priority among



residents.

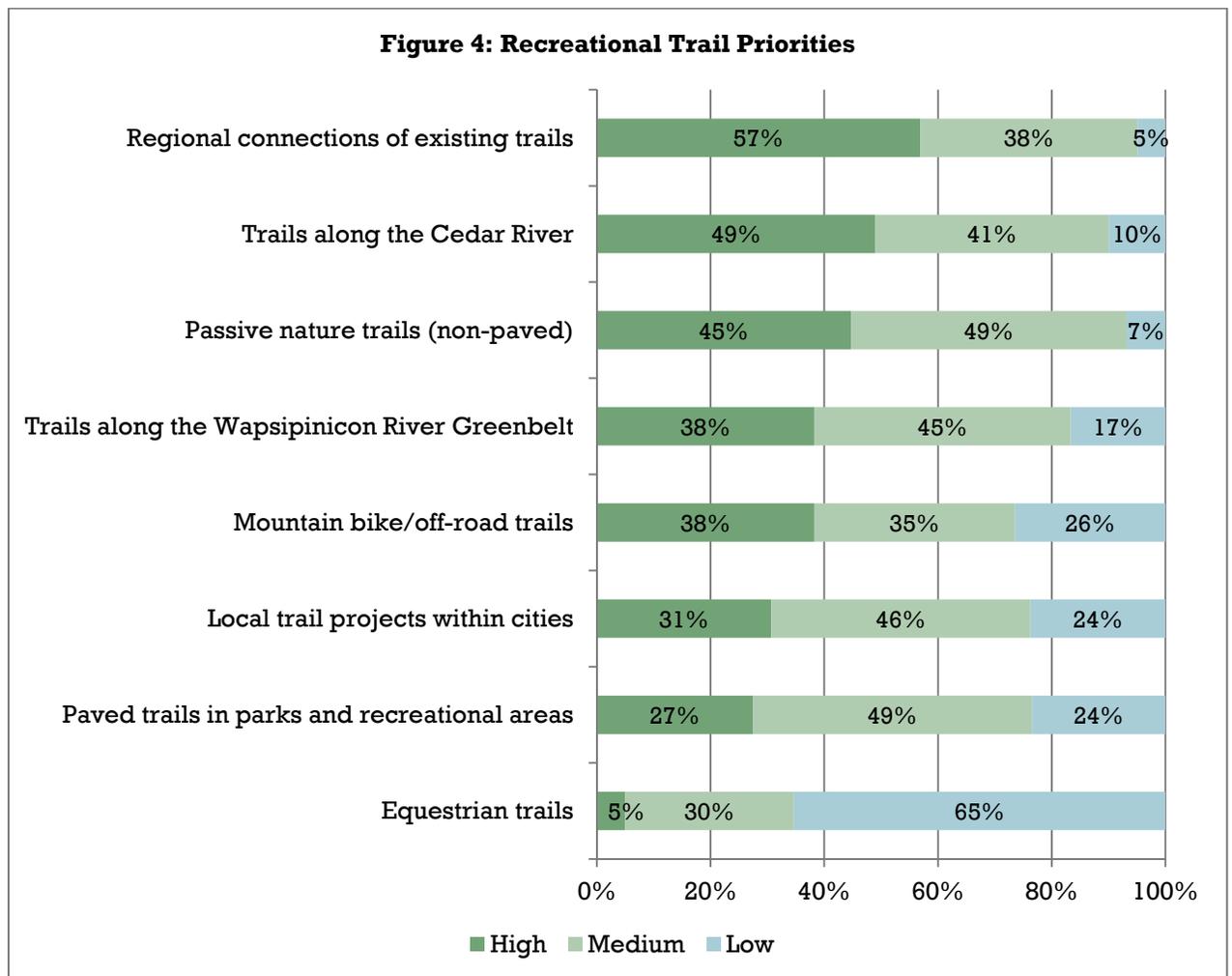
Of the ten programs respondents were asked to rank, the three programs with the highest priority were all education focused.

Developing a shooting range in the county had the highest percentage of low priority votes, with 54 percent indicating so.

Recreational Activities

The survey inquired into what type of recreational trail amenities county residents believe the BCCB should focus on in the coming years. Figure 4 shows that regional trail connections have the highest priority among respondents. The top response, with approximately 57 percent, for a “High Priority” project was expanding regional trail connections.

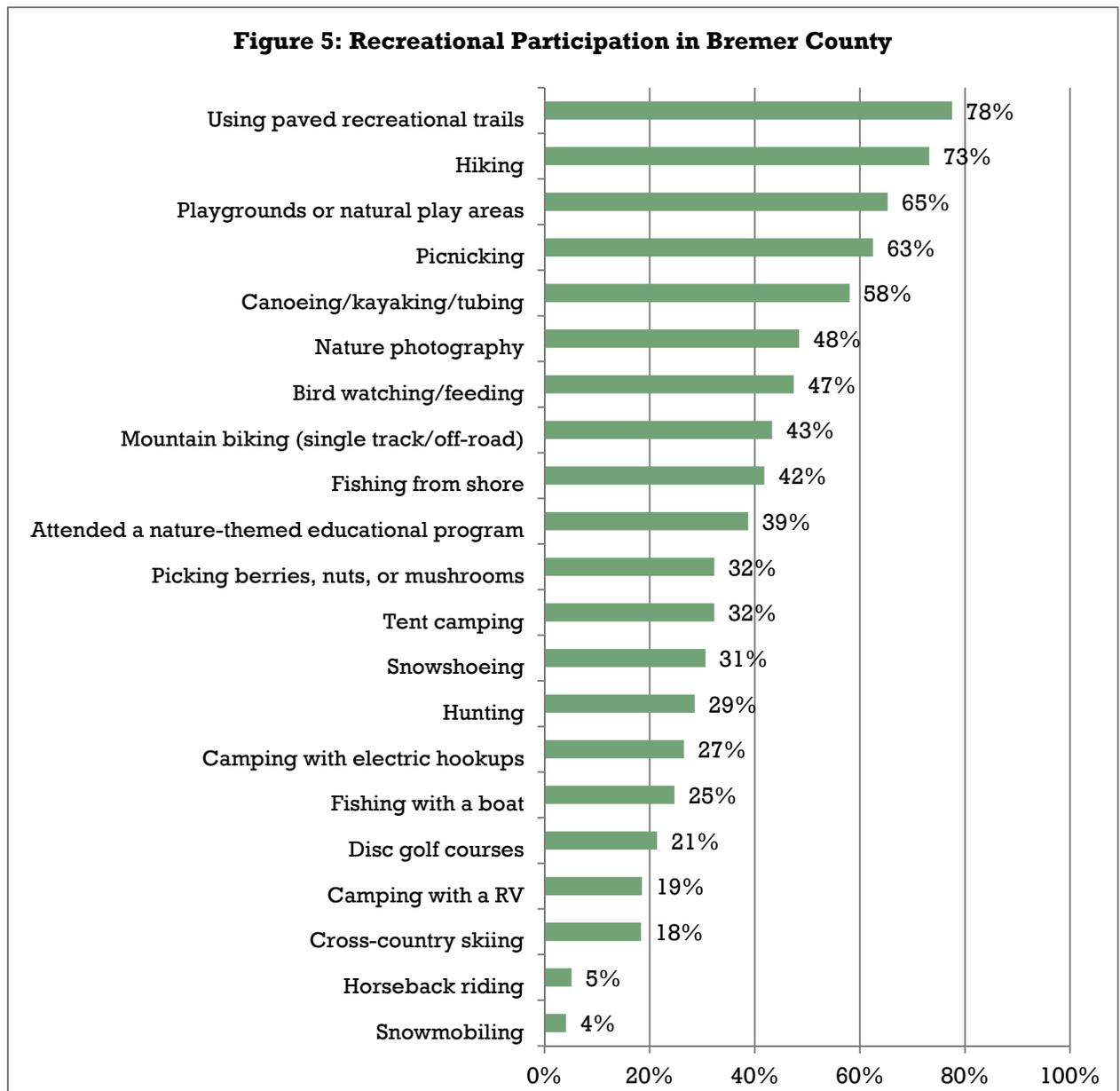
There is low demand for equestrian trails, as 65 percent marked this as a low priority. The next overall lowest priority was paved trails within existing parks and recreational areas.



Another survey question asked respondents to identify, from a pre-determined list, which recreational activities their household had participated in within the past year.

Shown in Figure 5, the most popular activities in Bremer County were: using paved recreational trails (78 percent); hiking (73 percent) and use of playgrounds or natural play areas (65 percent). Other activities which a majority of households participated in were picnicking (63 percent) and canoeing/kayaking/tubing (58 percent).

Camping with an RV, cross-country skiing, horseback riding, and snowmobiling had the lowest rates of participation.

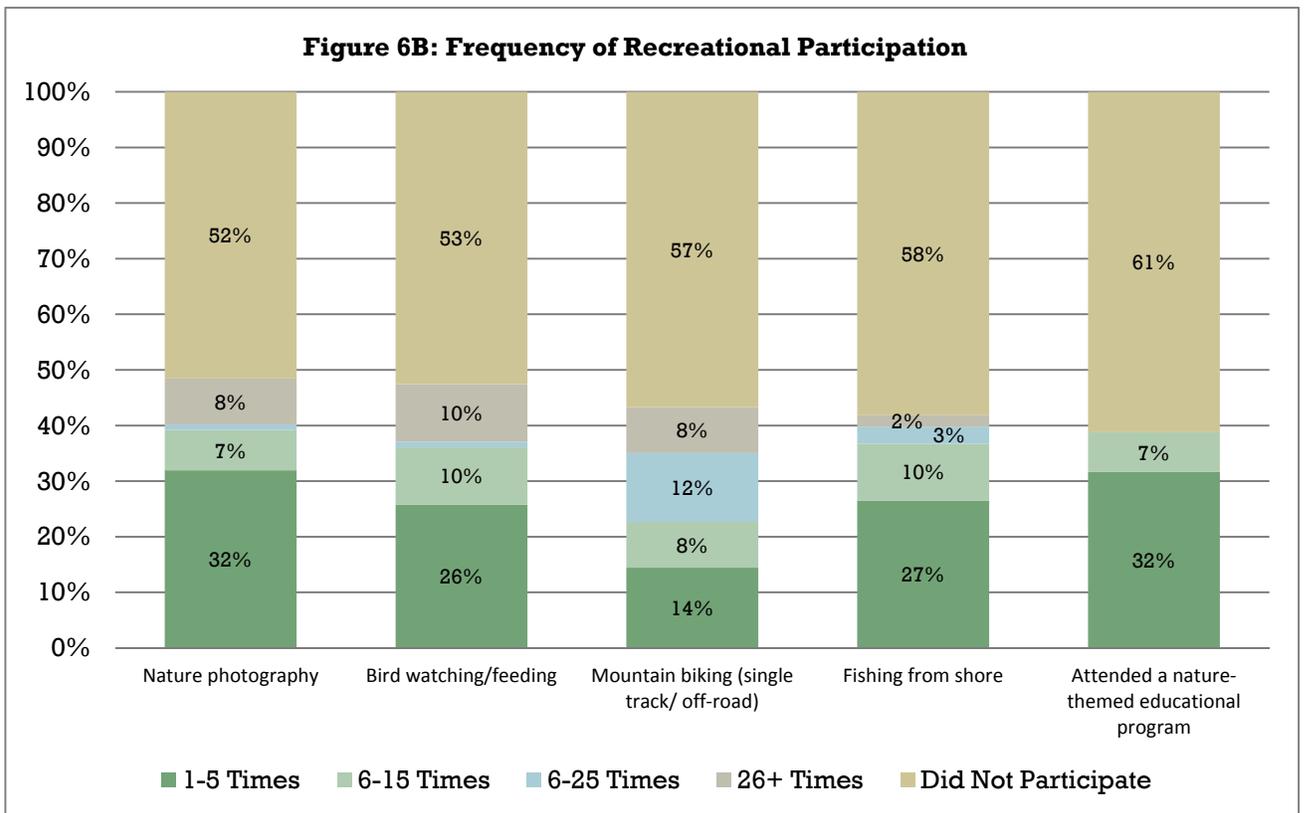
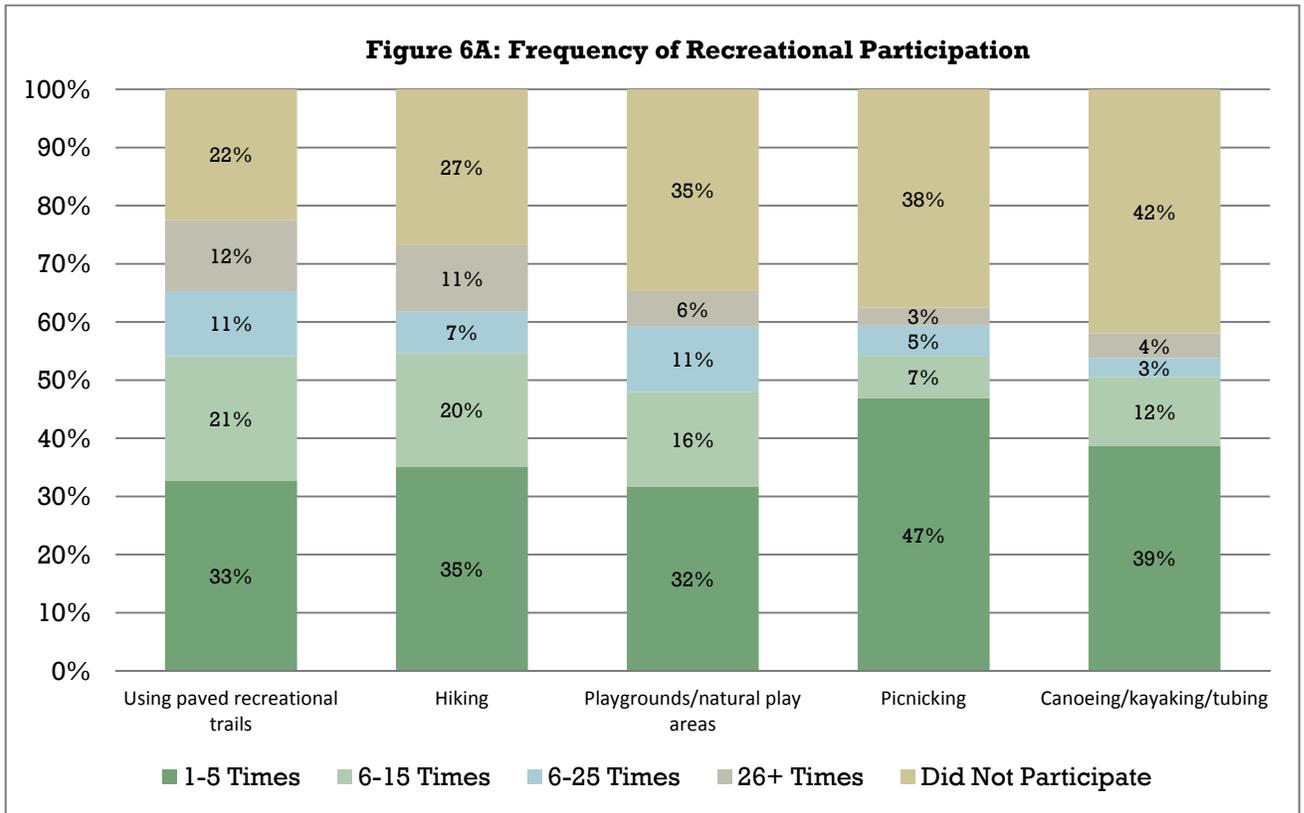


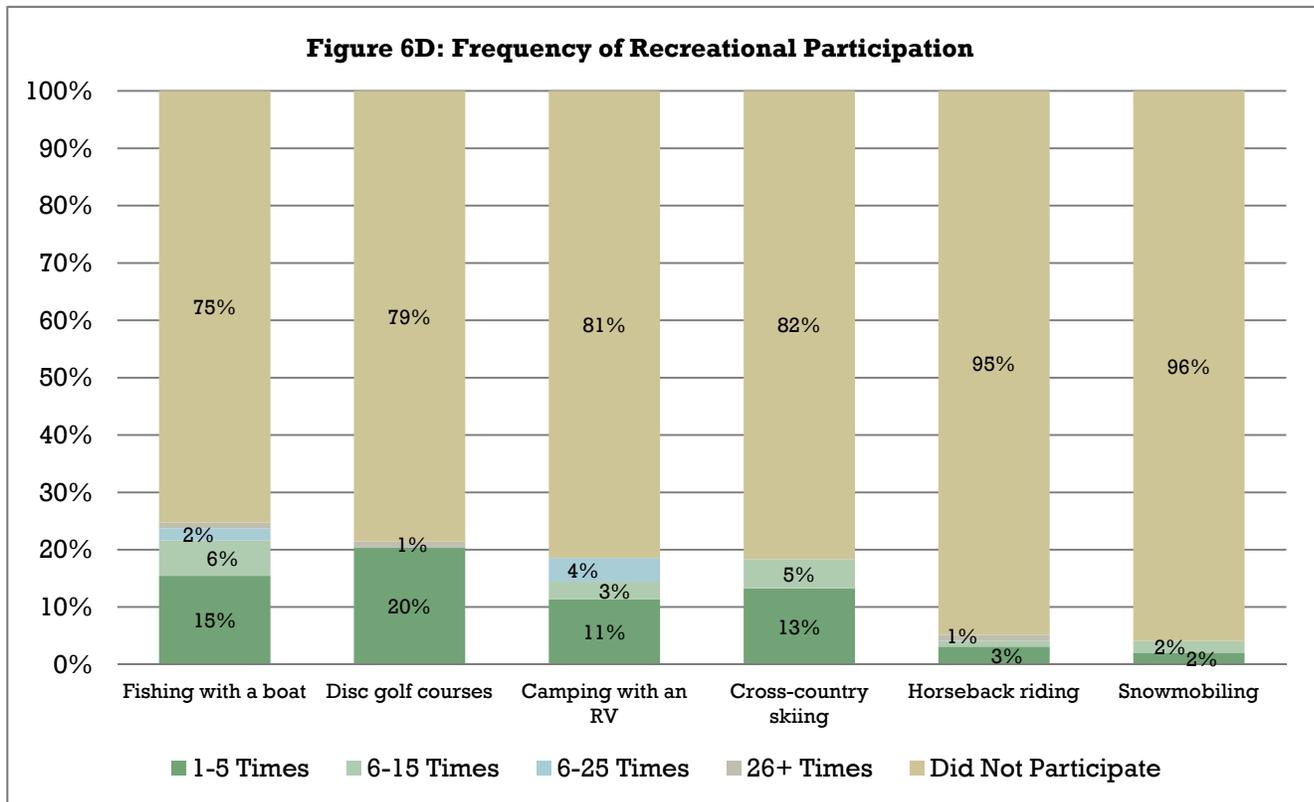
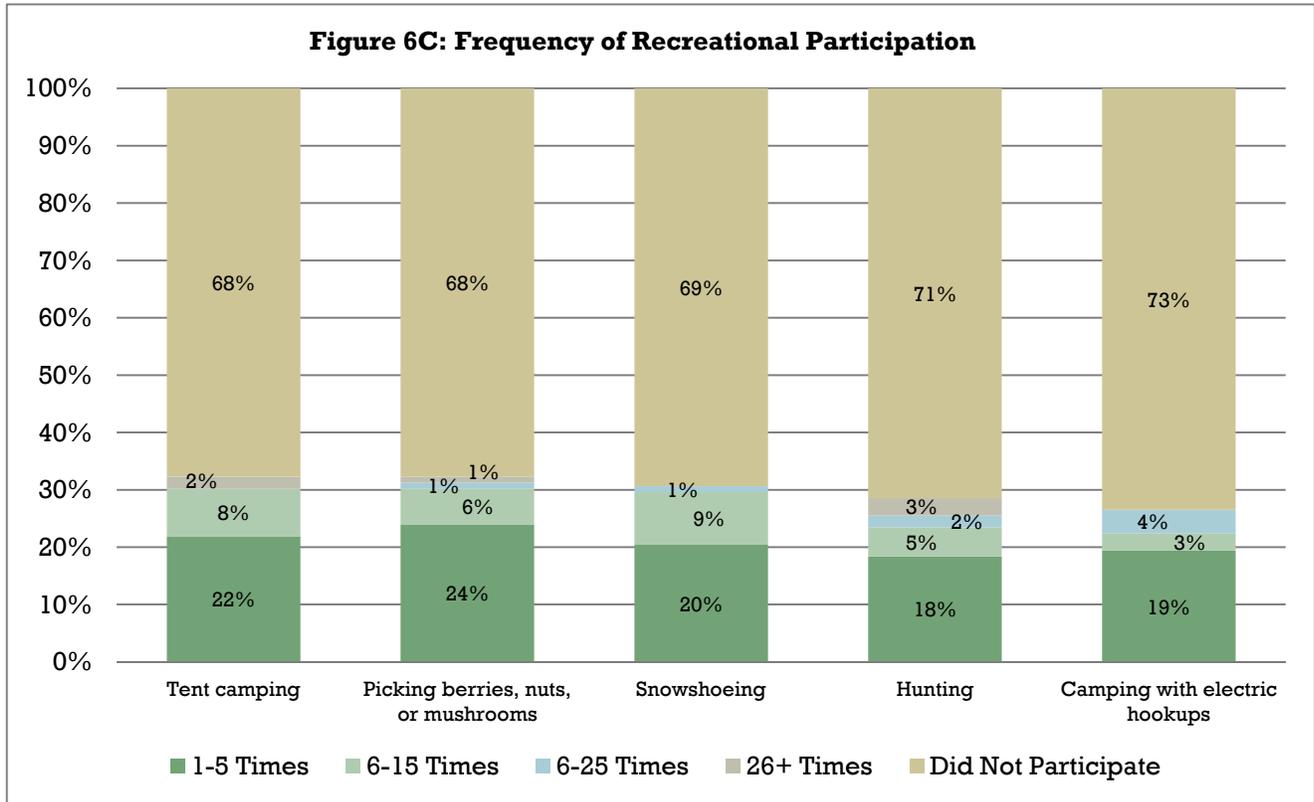
The survey also asked respondents to estimate the approximate number of times they, or members of their household, had participated in the recreational activities. Figures 6A through 6D show the frequency household participated in various activities. Frequency is divided into five groups: 1-5 times; 6-15 times, 6-25 times; 26+ times; and did not participate.

Use of recreational trails, as shown in Figure 6A, had the highest rate of repeat participation, as 44 percent stated they had used recreation trails six or more times in the past year.

Picnicking had the highest percentage of respondents, at 47 percent that participated in an activity between one and five times.

Cross-country skiing, horseback riding, and snowmobiling were the least popular recreational activities.





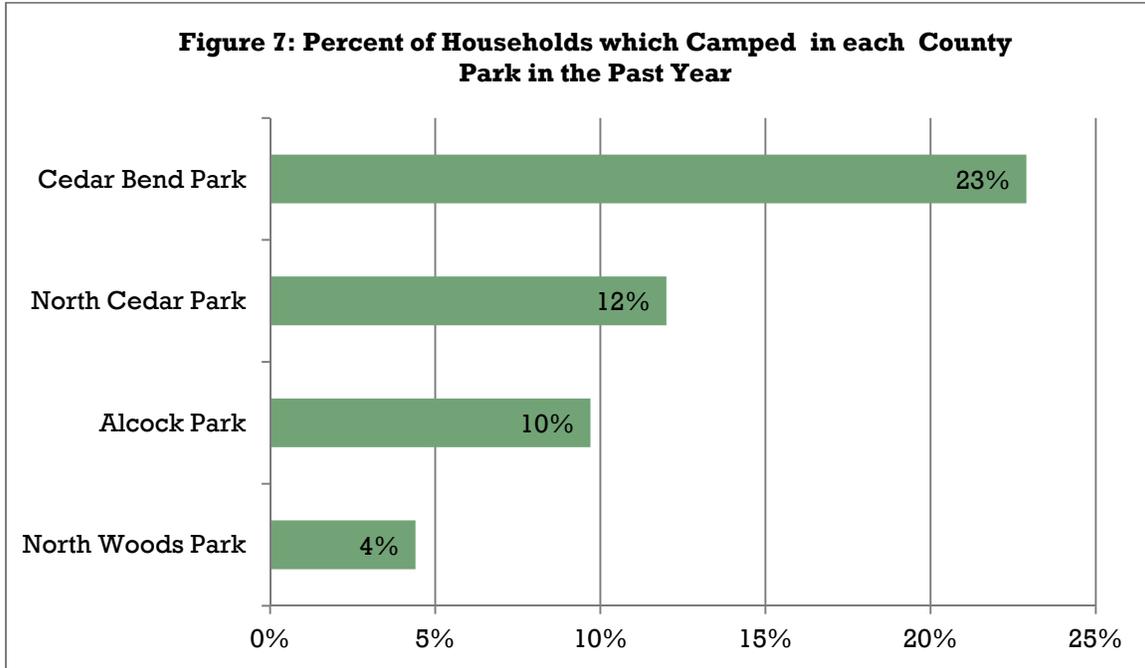
County Parks and Campgrounds

Respondents were asked to estimate the number of times that they, or a member of their household, had visited county parks within the past year. Table 1 shows the results. The most popular park was Cedar Bend Park, with nearly two-thirds of households reporting they had visited the park in the previous 12 months. A distant second was North Cedar Park (36 percent), followed by Alcock Park (33 percent), and finally North Woods Park (20 percent).

| | 1-2 Times | 3-6 Times | 6-12 Times | 13+ Times | Did Not Visit |
|-------------------------|------------------|------------------|-------------------|------------------|----------------------|
| Cedar Bend Park | 27.8% | 21.6% | 9.3% | 7.2% | 34.0% |
| Alcock Park | 22.9% | 7.3% | 2.1% | 1.0% | 66.7% |
| North Cedar Park | 20.4% | 7.1% | 5.1% | 3.1% | 64.3% |
| North Woods Park | 11.5% | 3.1% | 2.1% | 3.1% | 80.2% |

In addition to being the most frequented park, Cedar Bend was also the most popular park among campers. Nearly 23 percent of respondents had camped at Cedar Bend in the past year. The next most popular park was North Cedar (12 percent), followed by Alcock Park (10 percent).

| | 1-3 Nights | 4-9 Nights | 10+ Nights | Did Not Camp |
|-------------------------|-------------------|-------------------|-------------------|---------------------|
| Alcock Park | 8.6% | 1.1% | 0.0% | 90.3% |
| Cedar Bend Park | 18.8% | 2.1% | 2.1% | 77.1% |
| North Cedar Park | 7.6% | 0.0% | 4.3% | 88.0% |
| North Woods Park | 4.4% | 0.0% | 0.0% | 95.6% |



Persons were asked if they enjoyed camping and, if they indicated they did, if they would be willing to pay extra for various camping amenities. Sixty-eight percent stated that they do enjoy camping. Table 3 displays the percent of persons willing to pay extra for various amenities, of those respondents that enjoy camping do camp. Staying the night in a cabin was the most likely amenity persons would be willing to pay for, with approximately 63 percent indicating so. Nearly 70 percent of campers polled indicated they were not likely to pay extra for a campsite to accommodate larger RVs.

Table 3: Willingness to pay for Camping Amenities

| | Very Likely | Likely | Not Likely | Not at all Likely |
|---|-------------|--------|------------|-------------------|
| Staying the night in a cabin | 32.4% | 30.9% | 16.2% | 20.6% |
| Being able to reserve a campsite in advance | 31.3% | 26.9% | 25.4% | 16.4% |
| A campsite large enough to accommodate Class A and Class B RVs to drive or back-in | 15.3% | 15.3% | 18.6% | 50.8% |

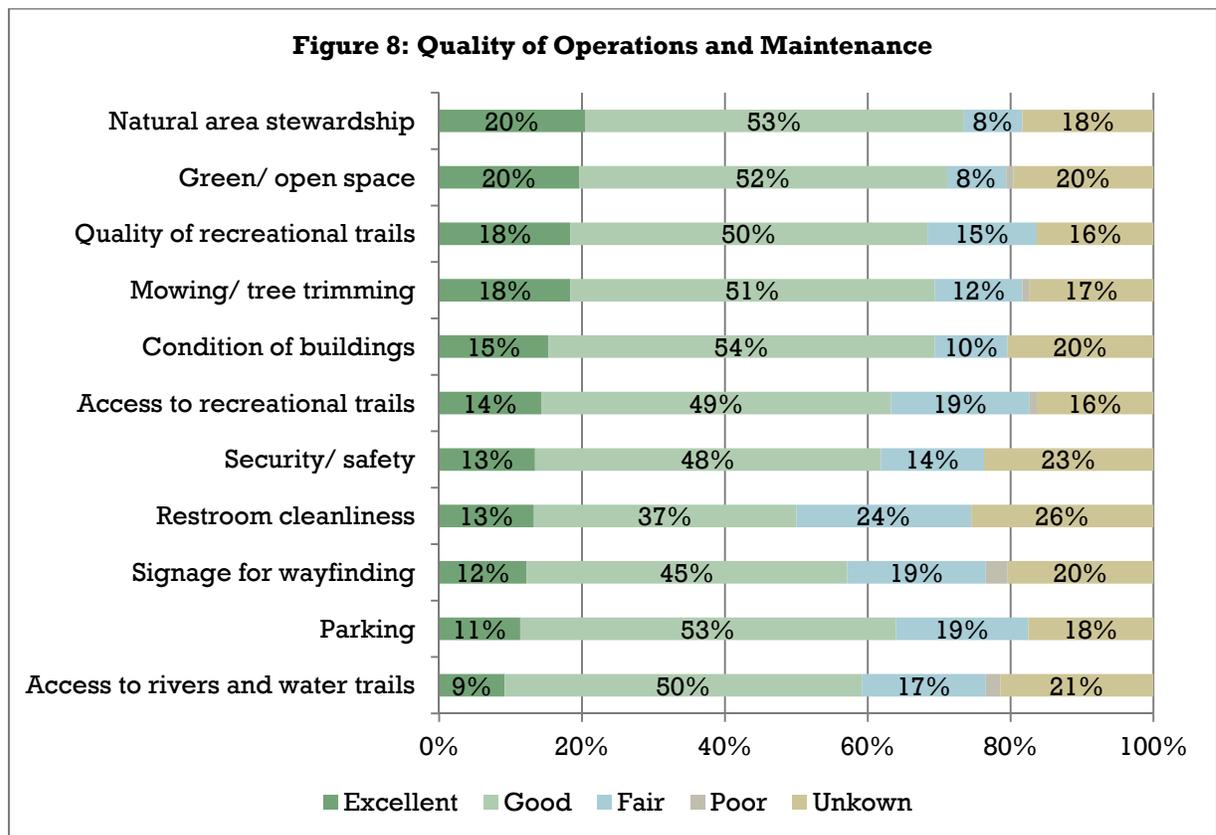
BCCB Management

The public has a positive view of the BCCB's operation and maintenance.

Participants were asked to rank eleven various categories regarding the BCCB. For all categories, at least 50 percent of respondents indicated the quality of operation and maintenance to be "Excellent" or "Good".

The survey showed residents were particularly impressed with the quality of the county's natural area stewardship as well as green and open spaces.

At 50 percent, restroom cleanliness had the highest portion of respondents with a fair view of the quality of operations and maintenance.



Chapters 4-6: Bremer County Conservation Board Plan

Chapters 4, 5, and 6 of this plan identify proposed improvements for the BCCB's areas and services. Based on input from BCCB members, a level of priority and timeline for implementation of each project was also determined.

Projects are divided by specific project location (e.g. Alcock Park) as well as general projects for that category (e.g. all parks).

A priority was assigned to each project; the higher the priority the greater the sense of need. The priority levels are:

- ❖ **Low**
- ❖ **Medium**
- ❖ **High**

The project timeframes, in which projects should be pursued, are divided into four categories.

- ❖ **Active** (Implemented as needed or through day-to-day operations)
- ❖ **Short Term** (1-2 years)
- ❖ **Medium Term** (3-5 years)
- ❖ **Long Term** (5+ years)

While each project's stated priority and timeline are not absolute, these classifications should guide the board when determining which and when projects should be undertaken.

Chapter 4: Outdoor Recreation & Conservation Plan

Americans use recreation facilities to keep physically fit, to have fun with family and friends, to experience nature, and to learn. Unlike exercise routines in a gym, outdoor recreation often become incorporated within a person's entertainment and lifestyle pursuits, leading to a lifetime of health benefits.

We calm and refresh ourselves outdoors and offset the stresses of modern society. Outdoor recreation is distinctive because it involves experiencing the natural environment - the land, water, air, trees, plants wildlife, and combinations of resources and landscapes.

Outdoor recreation provides significant social and environmental benefits difficult to assess in dollars. Because the ledger on the benefits is often ignored, recreation and resource protection suffer in competition with other programs for public and private dollars. Still, Iowans are beginning to better understand the economic benefit of natural resources, and place a higher value on the outdoors. This is especially apparent when one examines the dollars spent on outdoor recreation.

Outdoor recreation directly relates to benefits observed in education of our citizens, conservation of natural resources, and improved environmental quality. Some researchers have shown that good experiences in the outdoors provide the impetus for an attitude that leads people toward a lifestyle of learning and development of a conservation ethic. Studying nature or exploring history at an historic site are opportunities for learning and recreation.

Identified Park Projects

Table 4 lists potential park improvement projects.

| Table 4 : Park Projects | | | |
|--------------------------------|--|-----------------|-------------------|
| Area | Project/Improvement | Priority | Time Frame |
| All | 1. New roofs on shelter and shower houses | High | Active |
| | 2. Inventory and determine the condition of playground equipment. Then, prioritize which playgrounds should be replaced, updated, or removed | High | Active |
| | 3. Evaluate trails map and develop brochure for park information and trail system; mark existing trails in parks | High | Short Term |
| | 4. Upgrade campground electric (50 amp outlets) and identify areas for camping pads | High | Medium Term |
| | 5. Replace playground equipment, but reduce the overall number of playgrounds in parks and add natural playscapes instead of usual equipment | Medium | Short Term |
| | 6. Upgrade electric in shelters | Medium | Short Term |
| | 7. Construct small enclosures to cover self-registration stations and firewood payment stations in the parks. Also, incorporate signage and kiosk under roof with lighting as needed | Low | Medium Term |
| | 8. Evaluate and make necessary adjustments to how firewood is provided for campers | Low | Medium Term |
| | 9. Consider adding a septic field for dump stations | Low | Medium Term |
| | 10. Identify and blacktop high use/critical roads through parks | Low | Medium Term |
| | 11. Add a residence (e.g. small cabin or a camper) for seasonal employee(s) to use as they oversee parks | Low | Long Term |

| | | | |
|-------------------------|---|--------|-------------|
| Alcock Park | 12. Place boundary signs | Medium | Short Term |
| | 13. Remove shelter on east side and most of the barrier posts. Convert to an area for tent camping and vehicle access to the shoreline | Medium | Short Term |
| | 14. Provide water services to east side of the park | Medium | Medium Term |
| | 15. Construct new bridge over river connecting east and west sides. Bridge should be raised to be out of the flood area | Medium | Medium Term |
| | 16. Reevaluate and update the portage route for canoers | Medium | Medium Term |
| | 17. Upgrade electrical service on east side of park | Medium | Medium Term |
| | 18. Assess and determine the condition of the dam and make necessary repairs and mitigation actions as identified | Medium | Long Term |
| | 19. Construct a new shelter on east side near the dam and remove playground equipment | Low | Long Term |
| Cedar Bend Park | 20. Improve canoe access with signs, circle lane to unload, and parking | High | Short Term |
| | 21. Acquire land to the south of the campground to add campsites and a new road to the picnic area (to reduce traffic through the campground) | Medium | Medium Term |
| | 22. Organize and update shop facility, including upgrades to the exterior and rewiring of interior lighting | Medium | Medium Term |
| North Cedar Park | 23. Construct new entrance sign | High | Short Term |
| | 24. Place boundary signs south of Highway 188 | Medium | Short Term |
| | 25. Move gazebo and stabilize bank on trail south of Highway 188 | Medium | Medium Term |
| | 26. Add steel to sides and roof of recycle building | Medium | Medium Term |
| | 27. Replace park shelter | Medium | Long Term |
| | 28. Add pit toilet and wash station for canoers | Low | Long Term |
| North Woods Park | 29. Add dumpster pickup for garbage and eliminate most garbage barrels | High | Short Term |
| | 30. Develop camp sites in Pine Grove, south of the shower house | Medium | Short Term |

| | | | |
|-------------------------|--|--------|------------|
| North Woods Park | 31. Place a new AF Miller preserve sign | Medium | Active |
| | 32. Relocate old pit toilet building to the existing recycling location to be used as a recycling building; add new steel roof and sides | Medium | Short Term |
| | 33. Work with DNR to improve management of state preserve; add boardwalk to area with brochure describing plants | Medium | Short Term |
| | 34. Construct a dump station | Medium | Long Term |

Table 5 lists identified wildlife area improvement projects.

| Table 5: Wildlife Area Projects | | | |
|--|--|-----------------|-------------------|
| Area | Project/Improvement | Priority | Time Frame |
| All | 1. Finalize all area names to be used on signs, brochures, and all other BCCB documents | High | Ongoing/As Needed |
| | 2. Increase the number of controlled burns for improved native grass management | High | Ongoing/As Needed |
| | 3. Upgrade area entrance signs | High | Short Term |
| | 4. Update boundary signs by replacing older signs and adding new signage along the unfarmed boundary line | High | Short Term |
| | 5. Increase access to on-site information including maps, brochures, and signage | Medium | Short Term |
| | 6. Identify and purchase equipment needed for invasive species management | Medium | Short Term |
| | 7. Formulate a plan for upgrading food plots | Medium | Short Term |
| | 8. Address and improve non-game management areas (i.e., massasagu rattlesnakes, Sandhill cranes, owls, etc.) | Medium | Short Term |
| | 9. Begin aggressive woody invasive (i.e. Willows) removal and management | Medium | Short Term |
| | 10. Conduct an inventory of significant plant and animal species | Medium | Medium Term |

| | | | |
|-------------------------------|--|--------|-------------------|
| All | 11. Use the new plant and animal species inventories to update wildlife and habitat management plans | Medium | Medium Term |
| | 12. Build new and improve existing parking lots to improve access. Also, remove existing parking lots and lanes in areas that are not adjacent to roads in an effort to reduce dumping and vandalism | Medium | Medium Term |
| | 13. Update old forestry plans and develop new plans (where none exist) for areas; begin intensive timber management on forested county areas | Medium | Long Term |
| | 14. Improve fishing access points by cutting trees and brush along shorelines, ponds and lakes | Low | Medium Term |
| | 15. Start a tree nursery to develop shade trees that can be transplanted into parks and other areas | Low | Medium Term |
| | 16. Identify and remove old fences | Low | Long Term |
| Brooks/Lease Prairie | 17. Remove all trees from site | Medium | Ongoing/As Needed |
| Cedar Bend | 18. Develop access from north road | Medium | Medium Term |
| Cedar River | 19. Remove metal shed | Low | Short Term |
| Dillon | 20. Inventory plants | Medium | Medium Term |
| JJ Lynes | 21. Conduct a survey to establish legal boundary and update boundary signage accordingly | Medium | Ongoing/As Needed |
| | 22. Reduce ATV use in the area | Low | Ongoing/As Needed |
| Plum Creek | 23. Utilize the agricultural farm land on the northern edge of Plum Creek to provide wildlife habitat and a food plot | Medium | Medium Term |
| | 24. Rebuild pond and utilize artesian well for both pond and wetland upgrades | Medium | Long Term |
| Ringneck | 25. Develop a wetland on the east side | Medium | Medium Term |
| Wapsie River Greenbelt | 26. Continue to expand the Greenbelt and increase public awareness of the area's uniqueness and designation as a State Bird Conservation Area | High | Short Term |

| | | | |
|-------------------------------|--|--------|-------------|
| Wapsie River Greenbelt | 27. Reduce ATV use on area | High | Short Term |
| | 28. Continue land acquisitions to expand the greenbelt | High | Short Term |
| Wilson Grove | 29. Upgrade and/or replace bridge | Medium | Medium Term |
| | 30. Rebuild north parking lot | Low | Medium Term |

Table 6 lists other recreation improvement projects.

| Table 6: Other Recreation Area Projects | | | |
|--|---|-----------------|-------------------|
| Area | Project/Improvement | Priority | Time Frame |
| All | 1. Increase the removal of invasive plant species such as multiflora rose, garlic mustard, and buckthorne | High | Ongoing/As Needed |
| | 2. Finalize area names to be used uniformly on signs, brochures, and other BCCB documents | High | Short Term |
| | 3. Mark surveyed parcels within county farm site with permanent posts | Low | Medium Term |
| Babcock Woods | 4. Continue to preserve diverse habitat and oak trees | High | Ongoing/As Needed |
| | 5. Further develop invasive plant removal – multiflora rose, garlic mustard, and buckthorne | High | Ongoing/As Needed |
| | 6. Continue relationship with stakeholder groups to maintain off-road biking trail | Medium | Short Term |
| | 7. Manage western portion of the areas as a savanna | Medium | Medium Term |
| Cedar River Water Trail | 8. Construct a recreational trail | Medium | Medium |
| Cemetery Prairie | 9. Clear woody vegetation and dead trees | High | Ongoing/As Needed |
| | 10. Develop an area brochure to be included on the BCCB's website | Medium | Short Term |

| | | | |
|--|--|--------|-------------------|
| Horton Road Ponds | 11. Further establish area to facilitate public use including a parking lot, pit toilet, reseed areas, reduce woody invasion, sign boundary, build an entrance sign, construct a fishing pier, and establish fishing rules | Medium | Medium Term |
| Ingawanis Woodland | 12. Upgrade entrance and boundary signs | High | Ongoing/As Needed |
| | 13. Construct parking lot for area users | High | Short Term |
| | 14. Upgrade facility, including new cabinets, gutters, cover exterior restroom doors, skirt porch | Medium | Short Term |
| | 15. Cut permanent trail for Halloween hike | Medium | Short Term |
| Readlyn Grump Trail | 16. Develop a maintenance plan, i.e., burning, signage, woody invasion, rules, and regulations | High | Short Term |
| Rolling Prairie Trail | 17. Complete sections of the multi-county trail which pass through Bremer County; specifically west of Waverly toward Shell Rock and east of Readlyn towards Oelwein | Medium | Long Term |
| Saints Lake and Plainfield Lake | 18. Add courtesy docks | Medium | Medium Term |
| | 19. Divide lake into two parts and further develop the fishery at Saints Lake | Low | Long Term |
| Shell Rock Access | 20. Upgrade trail and bridge | Medium | Long Term |
| Wapsie Access | 21. Coordinate with City of Tripoli to enhance the bike trail through the area including improvements to reduce traffic and addition of new plantings | High | Ongoing/As Needed |
| Wapsie River Water Trail | 22. Update trail signage to access points | High | Ongoing/As Needed |
| Winzenburg Prairie | 23. Add park entrance sign | High | Short Term |
| | 24. Plant trees in a portion of prairie to simulate savanna | Medium | Medium Term |
| | 25. Construct a parking lot | Low | Long Term |

Chapter 5: Environmental Education Plan

Perhaps no other effort has the potential to benefit conservation and the environment as environmental education (EE). There is a unique need for environmental education in Iowa. Compared to other states, Iowa has one of the highest rates of private land ownership and management with only two percent of Iowa's land owned by the public. Environmental education possesses the ability to foster environmental literacy and personal responsibility of land management. Participants at the *1995 Iowa Governor's Conference on Education about Conservation and the Environment* defined environmental literacy as a goal of environmental education. An environmentally literate person was defined as one who understands:

- ❖ Basic principles of ecology, sociology, and economics;
- ❖ Interconnections of all parts of the environment;
- ❖ Sources of energy, the importance of energy efficiency, and relationships between energy use and lifestyle;
- ❖ Implications of economic and population trends;
- ❖ Impacts of personal lifestyles and personal choices;
- ❖ The importance of acting in a sustainable and constructive manner to protect the quality and diversity of the natural world.

Communities benefit from environmental education by having an environmentally literate citizenry. These community benefits have been researched and compiled into the following list of a *Dozen Reasons Our Country Needs Environmental Education*, developed by the World Wildlife Fund.

- ❖ Builds better citizens
- ❖ Builds better workers
- ❖ Advances excellent education
- ❖ Develops a sound ecological foundation
- ❖ Promotes tolerance for diverse views
- ❖ Creates critical and creative thinkers
- ❖ Links disciplines
- ❖ Helps learners resolve conflicts
- ❖ Helps learners understand value differences
- ❖ Links human health and environmental health
- ❖ Reaches out to all audiences/promotes social equity
- ❖ Works for a more sustainable future

Identified Environmental Education Projects

The list of proposed EE projects and program improvements are listed in Table 7.

| Project/Improvement | Priority | Time Frame |
|--|-----------------|-------------------|
| 1. Continue to expand programs by reaching new audiences, coordinating with volunteers to assist with programs, and diversify and add new program topics that connect people with their environment and the outdoors | High | Active |
| 2. Reach all county citizens and educate them about the BCCB, what it does, and how they can help. | High | Active |
| 3. Convert a small camper into a mini 'nature center' to house program materials and supplies which can be used for public and school programs in outlying areas | High | Short Term |
| 4. Install green technology and renewable energy (solar, wind, geothermal) throughout the county | High | Short Term |
| 5. Correlate all programs to Common Core and next generation science standards | High | Short Term |
| 6. Develop an evaluation method to assess the environmental education program | Medium | Active |
| 7. Increase marketing of services by updating maps and contact information on website | Medium | Short Term |
| 8. Develop and expand adult programs that highlight local resources | Medium | Short Term |
| 9. Use QR codes in brochures, park kiosks, and other BCCB documents | Medium | Short Term |
| 10. Increase public outreach by holding additional public meetings and writing newspaper articles to educate those using public areas with regard to legal issues pertaining to tree stands, ATV use, and other common issues. | Medium | Short Term |
| 11. Convert the Cedar Bend Park interpretive trail into a podcast | Medium | Medium Term |
| 12. Find and update geocaches in county areas | Low | Long Term |
| 13. Start a Star Lab program | Low | Long Term |

Chapter 6: Conservation Board Plan

Table 8 identifies general BCCB projects that are not limited to a specific program or geographic area.

| Table 8: General Improvements/Projects | | |
|---|-----------------|-------------------|
| Project/Improvement | Priority | Time Frame |
| 1. Continue land acquisition of parcels adjacent to existing public land and where outlying significant parcels become available; strive to fund these acquisitions without tax dollars | High | Ongoing/As Needed |
| 2. Research and establish a foundation to assist with donations, volunteers, and other needs as they arise | High | Ongoing/As Needed |
| 3. Increase handicapped-accessible hunting and fishing opportunities | High | Ongoing/As Needed |
| 4. Place all county areas and maps on BCCB website | High | Short Term |
| 5. Expand the BCCB employee base by adding a new full time employee or additional seasonal employees | High | Short Term |
| 6. Revive county REAP committee and strive for communication within groups by holding regular meetings and developing long-range plans | Medium | Short Term |
| 7. Develop aerial boundary map of county hunting areas and include on the county webpage | Medium | Short Term |
| 8. Construct new shop facility with heat, offices for maintenance staff, car wash bay, storage, a centralized space for conservation department's equipment and fuel station. | Medium | Medium Term |
| 9. Evaluate increasing the amount of work contracted out to free up existing staff for other projects (i.e., mowing, providing firewood, timber stand work, etc.) | Medium | Medium Term |
| 10. Add cabinets to meeting room at office for displays and storage | Medium | Medium Term |
| 11. Develop a youth-only hunting area in county | Low | Long Term |
| 12. Inventory and compile species lists for all county areas | Low | Long Term |

Chapter 7: 2016-2020 REAP Plan

As part of the development of the 2020 Bremer County Conservation Plan, the Bremer County REAP committee also updated their five-year plan as part of this document. While several aspects of the BCCB's priorities align with REAP, the REAP program casts a wide net of stakeholders that extends beyond the focus of the BCCB. This portion is dedicated to the 2016-2020 Bremer County REAP plan.

REAP Background

In May of 1989, the Iowa Legislature approved the Resource Enhancement and Protection (REAP) Act with overwhelming bipartisan support which created the REAP program. The program focuses state investment in natural and cultural resources.

REAP is funded from the Environment First Fund, which is generated from the state's gaming receipts as well as the sale of natural resources license plates. The original 1989 program authorized REAP for \$30 million annually. In 1996, the legislature amended the authorized amount to \$20 million annually and extended the program through 2021. Historically, funding levels have fallen below the authorized amount. Full funding for the REAP program remains a top priority of county REAP committees and the REAP Congress.

In 2014, the REAP program celebrated its 25th anniversary. During those 25 years, REAP has funded \$264 million in state investment through 14,535 projects in every county in Iowa. In 2015, REAP was appropriated \$16 million. Each year's REAP allocation is distributed proportionately into eight categories:

- ❖ State Open Spaces (28%)
- ❖ County Conservation (20%)
- ❖ Soil and Water Enhancement (20%)
- ❖ City Parks and Open Space (15%)
- ❖ Public Land Management (9%)
- ❖ Historical Resources (5%)
- ❖ Roadside Vegetation (1%)
- ❖ Conservation Education (first \$350,000)

Following the REAP's creation, various members of Bremer County organizations joined together to create the Bremer County REAP Committee and wrote the county's first REAP plan. The committee has continued to meet to review projects and approve grant applications.

REAP Programs and Local Funding

This section includes a summary of the type of REAP funding that has impacted the county. From 1989 through 2014, \$3,049,220 in REAP funds were allocated within Bremer County, funding over 140 projects. A historical list of Bremer County REAP funding is located in Appendix B.

Private/Public Open Space Acquisition

This portion of funds is allocated exclusively to the DNR for state acquisition and development of land and waters. The county does not receive funding from this source.

County Conservation

These monies are available to counties for land easements or acquisition, capital improvements, stabilization and protection of resources, repair and upgrading of facilities, environmental education, and equipment. The County receives an annual allocation based on population. The County Conservation Board has also received funding for six projects through the competitive grant portion of this category. Since 1990, Bremer County has received \$1,546,504 from this source.

Soil and Water Enhancement

These funds are available to landowners for soil and water conservation and enhancement projects. From 1990-2014 the Bremer County Soil and Water Conservation District has received \$315,981 from this program. Use of these funds has included projects focused on forestry, native vegetation, and water quality improvements.

City Parks and Open Space

This allocation is available to cities through competitive grants. From 1990 through 2014 the cities Janesville, Readlyn, Sumner, Tripoli, and Waverly received a combined total of \$547,596 from this funding category.

DNR Land Management

These monies are available to the DNR for development and management of state conservation lands. This account serves as a substitute for the state park user permit receipts, which were terminated by the legislature when REAP was enacted. The county does not receive funding from this source.

Historical Resource Development Program

The State Historical Society, part of the Department of Cultural Affairs, administers this portion of REAP funding. Grants are available to private individuals and businesses, as well as to non-profit organizations and agencies of Certified Local Governments. Several Bremer County organizations have received Historical Development grants through this program. The Bremer County Genealogical Society has received \$9,523 for microfilming historic county newspapers; the County historical society has received three grants totaling \$17,653; the Waverly Public Library received 42,880 in 1990 to develop a historical photo collection.

Roadside Vegetation

This funding is available through the Department of Transportation for state, county, and city management of roadside vegetation. Funding focuses on research and demonstration projects, equipment purchases, and seeding. From 1990 through 2014, the county has received \$11,650 for roadside vegetation.

Conservation Education Program (CEP)

A five-member board implements the Conservation Education Program (CEP) and is annually allocated approximately \$350,000 in grants for conservation education in Iowa. The county does not receive funding from this source.

DNR Administration

After the \$350,000 CEP allotment, 1 percent of the remaining funds are transferred to the DNR to help defray costs of REAP administration. The county does not receive funding from this source.

Bremer County Resource Inventory

In addition to the recreational and environmental resources managed by the DNR and BCCB inventoried in other sections of this plan, there are a wide variety of recreational, cultural, and historical resources throughout the county. Brief overviews of these resources are discussed below.

Historical and Cultural

Bremer County Genealogical Society

The society provides research and assistance tracing family history for Bremer and surrounding counties. The organization received REAP funding in 2004 and 2005 to microfilm historic local newspapers.

Bremer County Historical Society

According to the society's website, "The Bremer County Historical Society is much more than collections of old 'stuff'. We are a clearinghouse for information about old and largely forgotten villages and post offices; cemeteries and genealogy; notable citizens of days past, including town and county founders and other early settlers; economic history of the county and how things have changed; railroads; the Waverly airbase; history of individual towns within the county; and topics too numerous to list."

Green Mill Ford Bridge

This bridge, recognized on the National Register of Historic Places, was constructed in the 1870s featuring bowstring arch-truss design which was the choice of Iowa counties in the late 1860s and 1870s. However, due to structural flaws, bowstring arches were phased out in the 1880s.

City Libraries

There are seven libraries in Bremer County which are located in the cities of Denver, Janesville, Plainfield, Readlyn, Sumner, Tripoli, and Waverly.

Wartburg College

Founded in 1852, Wartburg College moved to its current home in Waverly in the 1930s. Today, the college has approximately 150 academic staff and 1,800 undergraduate students. Wartburg College is a private four-year liberal arts college.

Waverly AMVETS

Founded in 1944, AMVETS assists veterans along with sponsoring numerous programs to benefit the country and citizenry. The Waverly Area Veterans Post recently held a groundbreaking ceremony for their new Veterans Service Center. The 17,300-square-foot facility will serve the Waverly Veterans of Foreign Wars, American Legion, AMVETS, and the local Marine Corps League. The facility will be open year-round. Since 2011, the REAP program has awarded \$165,000 to the AMVETS for riverbank and on-site restoration.

Waverly House

Originally serving as a stage-coach stop, then named the Daily House Hotel this commercial building was built in 1862. It was later renamed the Waverly House Motel and eventually, in 1905, was converted into office space for a chemical company. As stated on the National Historic Registry, the building is considered significant as, “a well preserved example of 19th century commercial architecture”. The Waverly House is currently a local historical museum and home of the Bremer County Historical Society.

Waverly Municipal Hydroelectric Powerhouse

Built in 1909, the National Register of Historic Places determined the property, “uniquely represents the earliest era of Iowa’s municipal hydroelectric utility development.”

City Resources

Denver

Bisected by Quarter Section Run, a tributary to the Cedar River, the city has two parks adjacent to the river, including Denver City Park and Brandt Park. Camping with electric hookups is available in Brandt Park for \$10 per night.

Frederika

Located on the eastern bank of the Wapsipinicon River, Frederika City Park features fishing and boating access to the Wapsie along with well-developed trees and vegetation.

Janesville

The City of Janesville features four parks throughout the community. City Park includes sports fields, playground equipment, shelter houses, and open grass areas. In addition, the park offers a scenic view of the Cedar River from the city's pedestrian bridge and access to the Cedar via a boat ramp. The other three parks, Paul's Park, Beeson Park, and Road Side Park, offer a variety of amenities including playground equipment, open areas, community gardens, and picnic tables.

Plainfield

Gallagher Park is located in the northern half of the city and includes a shelter house and open field. North of the city limits is an old borrow pit, used during the construction of the Avenue of the Saints, which has been converted to Plainfield Lake and is under the BCCB's management. While the city does not have jurisdiction over the lake, officials have recognized the potential positive impact of building a city trail to the lake and expanding other recreational amenities.

Readlyn

The city has two parks: City Park and Ball Park. City Park features a basketball court, tennis court, shelter, picnic tables, restrooms, and playground equipment. Ball Park includes basketball, tennis, baseball, and volleyball courts. Ball Park also includes a shelter, picnic tables, restrooms, and play equipment.

Sumner

The city has five city parks including: City Park, Tribute Park, Water tower Park, and Veteran's Park.

Tripoli

The city boasts three city parks including, North Park, South Park, and Kid's Klub. North Park offers a playground and basketball court while South Park includes a park shelter, playground, and two ball diamonds. Kid's Klub, located in the southeast portion of the city, has a park shelter, playground equipment and one ball diamond.

Waverly

The city has over 20 parks spread throughout the community providing a variety of recreational opportunities for residents and visitors. Popular park amenities include: recreational trails, open space, playground equipment, picnic shelters, cabin, ice skating and shoreline fishing. In addition to city parks, the Waverly Rail Trail includes seven miles of asphalt trail. This regional trail connection provides trail access to the cities of Denver and Readlyn.

REAP Mission Statement & Goals

As part of the planning process, the Bremer County REAP committee developed a mission statement, goals, and specific projects. The committee's mission statement is:

The mission of the Bremer County Resource Enhancement and Protection Committee is to protect and enhance the environment and quality of life of current and future citizens and visitors of Bremer County.

Four broad based goals were developed to achieve this mission:

- A) Maintain and Develop Recreational Resources
- B) Preserve, Protect, and Enhance Natural Resources
- C) Provide Conservation and Land Stewardship Education
- D) Preserve Historic and Cultural Resources

For each of the four goals, projects were identified to help the committee achieve that goal. It should be noted that many of the projects have the potential to address multiple goals, but are only listed once.

The order of goals and projects do not necessarily reflect a prioritization. In addition, these project lists are not exclusive. New or amended projects, which support the mission of the committee, should be amended into this plan as they are identified.

Goal A: Maintain and Develop Recreational Resources

| | |
|---|--|
| 1. Expand local and regional recreational trails | |
| 1.1) | Develop a paved and/or crushed rock trail around Plainfield Lake, including a bridge crossing |
| 1.2) | Expand city trails in Sumner and Tripoli and connect these trails to the regional system |
| 1.3) | Complete the portion of the Rolling Prairie Trail, which travels east/west through the county, from Waverly to Shell Rock |
| 1.4) | Develop a recreational trail next to the Wapsipinicon River Corridor |
| 1.5) | Connect the City of Waverly to the Cedar Valley trails system in the Waterloo/Cedar Falls metro area |
| 1.6) | Connect city and county trails to Waverly and to the greater region |
| 2. Increase kayak/canoe access points throughout the county | |
| 2.1) | Develop access point and parking at the C33 bridge crossing |
| 2.2) | Establish an access to the Cedar River between Plainfield and C33 bridge (south of Plainfield) for both emergency response and recreational access |
| 2.3) | Develop a portage trail at the Cedar River Wildlife Area |
| 3. Develop and Modernize Camp Grounds throughout the County | |
| 3.1) | Develop campground at Champion Ridge in Waverly |
| 3.2) | Develop campground east of Tripoli at the site of the old trailer park, which already has water and sewer hookups |
| 3.3) | Modernize campgrounds at Cedar Bend Park to facilitate drive-through or back-in sites for larger recreational vehicles |
| 4. Increase public access to recreational areas | |
| 4.1) | Develop access points at borrow pits (owned by the Iowa Department of Transportation) at the crossing of Highway 3 and Highway 63. The area is popular destination for wildlife and wildlife viewing |
| 5. Restore wetlands and fishing accesses in general | |
| 5.1) | Expand access and restoration efforts at Baskins Creek |
| 6. Make recreational upgrades to wildlife and recreational areas | |
| 6.1) | Update Eagle Lodge at Ingawanis Woodlands |
| 6.2) | Expand multi-use trails at Ingawanis Woodlands |
| 6.3) | Increase signage at Ingawanis Woodlands |
| 7. Develop recreational amenities at Plainfield Lake | |
| 7.1) | Development of Plainfield Lake should include, but not be limited to, access for canoes and kayaks, fishing, recreational trail around the lake, and other recreational amenities |

Goal B: Preserve, Protect, and Enhance Natural Resource

| |
|---|
| 1. Implement flood mitigation and water quality improvements |
| 1.1) Acquire lands to reduce flooding impacts and improve water quality |
| 1.2) Mitigate in-town flooding north and west of Plainfield |
| 1.3) Support and participate in regional watershed initiatives |
| 1.4) Restore and reclaim wetlands |
| 2. Develop partnerships and information sharing between the county and cities for invasive species training, management, and education |
| 3. Develop and continue outdoor classrooms and prairies at local schools |
| 4. Acquire additional equipment and seed for the county IRVM as needed |
| 5. Implement and promote “best practice” projects along rivers and streams to reduce the soil, chemical, and nutrient impacts associated with runoff as well as to mitigate flooding |
| 5.1) Bioreactor/nitrate demonstration projects and plantings along rivers |
| 6. Develop water holding or detention ponds for flood and erosion mitigation. Potential locations include: |
| 6.1) North of Sumner |
| 6.2) West of Tripoli |
| 6.3) North/west of Plainfield |
| 6.4) North of Waverly |

Goal C: Provide Conservation and Land Stewardship Education

| |
|--|
| 1. Educate the public utilizing demonstration projects |
| 1.1) Continue Waverly bus tours of watersheds |
| 2. Promote demonstration projects and outdoor classrooms (rain gardens, permeable pavers, etc.) |
| 3. Conduct an inventory plant and wildlife species at recreational areas throughout the county |
| 3.1) Use inventory to develop literature, signage, and interpretive programs |
| 4. Increase interpretive Signage |
| 4.1) Install identification and interpretive signage (Ingawanis Woodlands) |
| 4.2) Install recreational trail signs focusing on wildlife, habitat, and way-finding |
| 4.3) Develop signage for watersheds |

Goal D: Preserve Historic and Cultural Resources

| | |
|--|--|
| 1. Identify and document historic sites throughout county | |
| 1.1) | Historic areas should include indigenous sites, schools, towns, campsites, and other resources as identified |
| 1.2) | Create brochures or information sheets summarizing information |
| 2. Survey Native American mounds, campsites, trails, and other areas to document for public education. Areas of focus should include: | |
| 2.1) | Indian Pond in Frederika |
| 2.2) | The former Red Ball Highway |
| 2.3) | Tripoli Trail as well has historic campsites of native persons |
| 2.4) | Identify and mark historic trails |
| 2.5) | Sweet Water Creek |
| 3. Cooperate with the Historical Society to develop historical narrative and signage in recreational areas | |
| 4. Inventory and develop narratives of historic cemeteries | |
| 5. Support private historical institutions throughout the county | |
| 5.1) | Support the "Poor Farm" which provides artifacts and narratives of local history |
| 5.2) | Maintain the Sweet Water Creek Cabin |

Appendix A: Bremer County Background

A brief summary of background information is included in this appendix to serve as a reference about the past, present, and predictable future of Bremer County.

Typically, elements of a background report are the geographic location, natural environment, history, demographics, and economy.

History

The following historical information comes from the 1965 Bremer County Atlas and input from Kathy Thoms (former Bremer County Director of Finance and Management) which is posted on the Bremer county website:

The first white man came to Bremer County in 1845 and settled about two miles southwest of Denver. At that time, this area was a Native American Reservation belonging to the Winnebago Tribe, numbering about 300 people. Later the reservation was purchased by the government, and the Native Americans were moved to the Crow River area of Minnesota, about 150 miles north of St. Paul.

Bremer County had been named in 1850 by Governor Stephen Hempstead, who was an admirer of the Swedish poet, Frederika Bremer. Bremer County is thought to be the only Iowa county named after a person eminent in literature.

Townships were named for famous people also: Washington, Jefferson, Jackson and Polk, four U.S. Presidents. Fremont and Douglas were named after candidates for U.S. President. Dayton was named for a Vice-Presidential candidate in 1856. Lafayette and Warren were named after two famous soldiers of the American Revolution. Frederika was named after Frederika Bremer, Maxfield after Judge Maxfield, and Sumner for Charles Sumner who was a U.S. Senator from Massachusetts from 1851 to 1874.

Waverly was first settled in 1850, and it soon grew to importance due to its waterpower that was used by the flour and saw mills. On January 24, 1853, Waverly was designated the county seat, and unlike numerous counties, the county seat has remained unchanged. Waverly was selected because of its growth, commercial position, and railroad facilities.

Bremer County was permanently organized in August 1853, with the election of county officers. The first courthouse was erected one year later by Richard Miles at a cost of \$147.50. The small frame building was used for only three years, and then it was replaced by a brick and stone two-story structure that cost \$23,000 to complete. None of the materials used in its construction-brick, stone, and lumber were from outside of the county. This 43' x 63' building was dedicated on January 1, 1858 at a grand ball and reception that was held in the new building.

This second courthouse did not contain a vault for the safekeeping of county records, so in the summer of 1870, a small brick building was constructed adjacent to the courthouse. The \$5,000 building was used to store all of the county records.

These two buildings were torn down in 1937 in order to make room for the third and present courthouse. The county used a Works Progress Administration (WPA) grant of more than \$60,000 to construct a \$139,000 courthouse. Several bands were on hand to celebrate the dedication and open house of the new courthouse on June 10, 1937.

On July 2, 1975 a joint law enforcement building was erected to be shared by the Waverly Police Department and The Bremer County Sheriff Department. At this time the Sheriff's housing quarters, office, and jail were removed from the courthouse building.

In 2003, Bremer County celebrated its 150th year from the election of county officers.

Geography

Bremer County is located in the Northeastern quadrant of the State of Iowa. The county includes the incorporated cities of: Denver, Frederika, Janesville, Plainfield, Readlyn, Sumner, Tripoli and Waverly. The county seat is located in Waverly. Bremer County is divided into fourteen townships including, in alphabetical order: Dayton, Douglas, Franklin, Frederika, Fremont, Jackson, Jefferson, Lafayette, Le Roy, Maxfield, Polk, Sumner, Warren and Washington. The County itself encompasses a total area of approximately 440 square miles (438 sq. mi land, 2 sq. mi water). As of the 2010 U.S. Census, Bremer County was the twenty-sixth largest in the state with 24,276 residents.

Geology

The planning area's terrain is generally a flat to rolling slope topography that characterizes the agricultural areas of northeast Iowa. There are several areas of steeper than normal slope with these being dispersed throughout the county adjacent to water sources. The highest elevation in the county, 1,169 feet above mean sea level, is north of Sumner. The lowest elevation is 865 feet above mean sea level, is found in the southwestern corner of the county, a few miles west of Janesville.

The most visible geographic features within the county are the Cedar and Wapsipinicon Rivers. The Cedar River flows through Waverly and Janesville. The Wapsipinicon flows through Frederika and mainly unincorporated areas.

Vegetation

The vast majority of rural Bremer County is planted or sowed for corn and soybeans. Grass and brush are present in uncultivated and undeveloped areas of the county. Trees and grasses are often incorporated with otherwise urbanized areas in the county for aesthetics, shade, or erosion control.

The high rate of cultivated farm land in the rural areas Bremer County and across the State of Iowa, combined with the relatively low percentage of conservation methods used in farming, has been known to cause excessive runoff into drainage ditches, streams, and rivers during rain events. Runoff is not only negatively effects water quality but also contributes to flash and river flooding.

Soils

Ninety-two percent of the planning area has soils with slopes of 5 percent or less. The planning area is abundantly supplied with a variety of soils other than productive agricultural soils. A map of soil types throughout the county is included in Appendix E. There are seven soil classifications for the planning area:

- ❖ **Floyd-Clyde-Kenyon:** Level to moderately sloping, dark-colored loamy soils that are moderately well drained, poorly drained, and somewhat poorly drained.
- ❖ **Tripoli-Readlyn:** Nearly level, dark-colored loamy soils that are somewhat poorly drained and poorly drained.
- ❖ **Klinger-Maxfield:** Level to moderately sloping, dark-colored silty soils that are somewhat poorly drained, poorly drained, and well drained.
- ❖ **Spillville-Waukee-Coland:** Level to gently sloping, dark-colored loamy soils that are well drained to poorly drained.
- ❖ **Marshan-Sigglekov-Hayfield:** Nearly level to steep, well drained and poorly drained soils that formed in loess; on uplands.
- ❖ **Sparta-Rockton-Kenyon:** Nearly level to steep, dark-colored and light colored loamy soils that are well drained and are moderately deep to shallow over limestone.
- ❖ **Seaton-Port Byron:** Level to moderately sloping, dark-colored silty soils that are somewhat poorly drained, poorly drained, and well drained.

Climate

The climate is identified as having cold, snowy winters with humid, hot summers. Bremer County is located in the polar front zone, the battleground of polar and tropical air masses. Being far removed from moderating influences of a large body of water, seasonal contrasts are quite distinctive and weather highly variable. Ample precipitation throughout the year is increased in the summer by invading maritime tropical air masses from the Gulf of Mexico. Cold winters are dominated by continental polar masses from the arctic regions.

The annual precipitation is approximately 36 inches. Approximately 71 percent of a year's precipitation falls during the months of April through September. Precipitation can be expected to exceed one-half inch or more 20 days per year, or one-tenth inch or more 56 days a year. Precipitation can occur in amounts of multiple inches within one hour or less during intense rainstorms. These storms, usually associated with extreme humidity, are capable of causing extensive damage to infrastructure. Often times it is the intensity of these rainstorms that are as telling as the frequency or duration. An extremely intense rainfall can overload detention basins and small streams due to the extreme speed of onset of surface flow, thus causing flash flooding and potentially sewer backups into homes and businesses.

The annual temperature range is large, typical of a continental climate, with January, the coldest month, averaging 13.8 degrees Fahrenheit. July is the warmest month averaging 72.1 degrees Fahrenheit.

Surface Water Systems

There are three watersheds that fall within the Bremer County borders. These watersheds, as defined by the United States Geological Survey, include the following:

- ❖ **Shell Rock River** – The Shell Rock watershed is present in the extreme western portion of Bremer County. The watershed is approximately 102 miles long and encompasses two states, Iowa and Minnesota. The Shell Rock River eventually flows into the Cedar River.
- ❖ **Upper Cedar River** - The Upper Cedar watershed flows from north to south through Bremer County. The Cedar River flows through Waverly and eventually down through Cedar Falls/Waterloo in neighboring Black Hawk County.
- ❖ **Upper Wapsipinicon River** – The Wapsipinicon River flows north-south through Bremer County and this watershed covers approximately 50 percent of the county.

Threatened & Endangered Species

Iowa's endangered and threatened species law was enacted in 1975. An endangered species means any species of fish, plant life, or wildlife which is in danger of extinction throughout all or a significant part of its range. A threatened species are species which are likely to become an endangered within the foreseeable future throughout all or a significant portion of its range. There are fifty-six (56) species in Bremer County.

| Common Name | Scientific Name | Class | State Status | Federal Status |
|------------------------|------------------------------------|--------------------|---------------------|-----------------------|
| Central Newt | <i>Notophthalmus viridescens</i> | AMPHIBIANS | T | |
| Bald Eagle | <i>Haliaeetus leucocephalus</i> | BIRDS | S | |
| Red-shouldered Hawk | <i>Buteo lineatus</i> | BIRDS | E | |
| Short-eared Owl | <i>Asio flammeus</i> | BIRDS | E | |
| American Brook Lamprey | <i>Lampetra appendix</i> | FISH | T | |
| Blacknose Shiner | <i>Notropis heterolepis</i> | FISH | T | |
| Topeka Shiner | <i>Notropis topeka</i> | FISH | T | E |
| Western Sand Darter | <i>Ammocrypta clara</i> | FISH | T | |
| Creek Heelsplitter | <i>Lasmigona compressa</i> | FRESHWATER MUSSELS | T | |
| Creeper | <i>Strophitus undulatus</i> | FRESHWATER MUSSELS | T | |
| Cylindrical Papershell | <i>Anodontoides ferussacianus</i> | FRESHWATER MUSSELS | T | |
| Ellipse | <i>Venustaconcha ellipsiformis</i> | FRESHWATER MUSSELS | T | |
| Yellow Sandshell | <i>Lampsilis teres</i> | FRESHWATER MUSSELS | E | |
| Broad-winged Skipper | <i>Poanes viator</i> | INSECTS | S | |
| Dion Skipper | <i>Euphyes dion</i> | INSECTS | S | |
| Pipevine Swallowtail | <i>Battus philenor</i> | INSECTS | S | |
| Bent Milk-vetch | <i>Astragalus distortus</i> | PLANTS (DICOTS) | S | |
| Bog Birch | <i>Betula pumila</i> | PLANTS (DICOTS) | T | |
| Bog Willow | <i>Salix pedicellaris</i> | PLANTS (DICOTS) | T | |
| Buckbean | <i>Menyanthes trifoliata</i> | PLANTS (DICOTS) | T | |
| Earleaf Foxglove | <i>Tomanthera auriculata</i> | PLANTS (DICOTS) | S | |
| False Mermaid-weed | <i>Floerkea proserpinacoides</i> | PLANTS (DICOTS) | E | |
| Flat Top White Aster | <i>Aster pubentior</i> | PLANTS (DICOTS) | S | |
| Fragrant False Indigo | <i>Amorpha nana</i> | PLANTS (DICOTS) | T | |

| | | | | |
|--------------------------------|---------------------------|-------------------------|---|---|
| Hill's Thistle | Cirsium hillii | PLANTS (DICOTS) | S | |
| Kitten Tails | Besseyia bullii | PLANTS (DICOTS) | T | |
| Lance-leaved Violet | Viola lanceolata | PLANTS (DICOTS) | S | |
| Missouri Lambsquarters | Chenopodium missouriensis | PLANTS (DICOTS) | S | |
| Sage Willow | Salix candida | PLANTS (DICOTS) | S | |
| Shining Willow | Salix lucida | PLANTS (DICOTS) | T | |
| Spring Avens | Geum vernum | PLANTS (DICOTS) | S | |
| Swamp Thistle | Cirsium muticum | PLANTS (DICOTS) | S | |
| Sweet Indian Plantain | Cacalia suaveolens | PLANTS (DICOTS) | T | |
| Tunnel-formed Penstemon | Penstemon tubiflorus | PLANTS (DICOTS) | S | |
| Valerian | Valeriana edulis | PLANTS (DICOTS) | S | |
| Winterberry | Ilex verticillata | PLANTS (DICOTS) | E | |
| Field Sedge | Carex conoidea | PLANTS (MONOCOTS) | S | |
| Glomerate Sedge | Carex aggregata | PLANTS (MONOCOTS) | S | |
| Great Plains Ladies'-tresses | Spiranthes magnicamporum | PLANTS (MONOCOTS) | S | |
| Nuttall Pondweed | Potamogeton epihydrus | PLANTS (MONOCOTS) | S | |
| Pale Green Orchid | Platanthera flava | PLANTS (MONOCOTS) | E | |
| Purple Fringed Orchid | Platanthera psycodes | PLANTS (MONOCOTS) | T | |
| Slender Sedge | Carex tenera | PLANTS (MONOCOTS) | S | |
| Small White Lady's Slipper | Cypripedium candidum | PLANTS (MONOCOTS) | S | |
| Soft Rush | Juncus effusus | PLANTS (MONOCOTS) | S | |
| Tall Cotton Grass | Eriophorum angustifolium | PLANTS (MONOCOTS) | S | |
| Western Prairie Fringed Orchid | Platanthera praeclara | PLANTS (MONOCOTS) | T | T |
| Leathery Grape Fern | Botrychium multifidum | PLANTS (PTERIODOPHYTES) | T | |
| Ledge Spikemoss | Selaginella rupestris | PLANTS (PTERIODOPHYTES) | S | |
| Northern Adder's-tongue | Ophioglossum pusillum | PLANTS (PTERIODOPHYTES) | S | |
| Woodland Horsetail | Equisetum sylvaticum | PLANTS (PTERIODOPHYTES) | T | |
| Blanding's Turtle | Emydoidea blandingii | REPTILES | T | |
| Bullsnake | Pituophis catenifer sayi | REPTILES | S | |
| Eastern Massasauga | Sistrurus catenatus | REPTILES | E | |
| Smooth Green Snake | Liochlorophis vernalis | REPTILES | S | |
| Wood Turtle | Clemmys insculpta | REPTILES | E | |

Source: DNR Natural Areas Inventory (July 2014)

Socio-Economic Characteristics

Population

Bremer County has experienced an overall decrease in population since 1980. Much of this population loss can be attributed to the 1980s farm crisis. However, as shown in Table 9, the County, and many communities, have recovered some population since 1990.

Table 9: Population Trends for Selected Communities in Bremer County, Iowa

| Community | 1980 Population | 1990 Population | 2000 Population | 2010 Population | % Change 1980-2010 |
|---|--------------------|--------------------|--------------------|--------------------|-----------------------|
| City of Denver | 1,647 | 1,600 | 1,627 | 1,780 | 8.1 |
| City of Frederika | 223 | 188 | 199 | 183 | -17.9 |
| City of Janesville | 840 | 822 | 829 | 930 | 10.7 |
| City of Plainfield | 469 | 455 | 438 | 436 | -7.0 |
| City of Readlyn | 858 | 773 | 786 | 808 | -5.8 |
| City of Sumner | 2,335 | 2,078 | 2,106 | 2,028 | -13.1 |
| City of Tripoli | 1,280 | 1,188 | 1,310 | 1,313 | 2.6 |
| Bremer County (Unincorporated Area) | 8,724 | 7,170 | 7,062 | 6,924 | -20.6 |
| Bremer County(total) | 24,820 | 22,813 | 23,325 | 24,276 | -2.2 |
| State of Iowa | 2,913,808 | 2,776,755 | 2,926,324 | 3,046,355 | 4.5 |

Source: U.S. Census Bureau and Iowa Data Center

The following projections are based on the linear and geometric methods, which assume that future population will continue to change based on past trends. The linear method adds or subtracts from the population the average number from each ten-year period since 1950, while the geometric method uses an average growth or decline rate. Table 10 shows the actual number change and the growth or decline rate for each decade and their averages.

It is important to note that these projections are just estimates based on past trends. Many variables can affect a county's population growth or decline. Nevertheless, projecting population can give some idea as to how to plan for the future.

| Year | Population | Number Change (Linear Method) | Growth/Decline Rate (Geometric Method) |
|---------------------|------------|----------------------------------|---|
| 1950 | 18,884 | -- | 0.0 |
| 1960 | 21,108 | 2,224 | 11.8 |
| 1970 | 22,737 | 1,629 | 7.7 |
| 1980 | 24,820 | 2,083 | 9.2 |
| 1990 | 22,813 | -2,007 | -8.1 |
| 2000 | 23,325 | 512 | 2.2 |
| 2010 | 24,276 | 951 | 4.1 |
| Average (1950-2010) | | 4,441 / 6.0 = 740.2 | 26.9/6.0 = 4.5% |
| 2020* | | 25,016 | 25,368 |

*Source: U.S. Census Bureau and Iowa Data Center; *Projections*

Economy

The per capita and median household income for the county and its communities are listed in Table 11. The county, as a whole, has a per capita income in 1999 dollars of \$19,199. The median household income for the entire county, in 1999 dollars, is \$40,826. The City of Tripoli has the smallest per capita income, \$16,882; however, Sumner was the smallest median household income, \$33,417.

| Community | Per Capita Income | | Median Household Income | |
|----------------------|-------------------|----------|-------------------------|----------|
| | 1990 | 2000 | 1990 | 2000 |
| City of Denver | \$13,538 | \$20,791 | \$29,292 | \$44,375 |
| City of Frederika | 9,817 | 20,224 | 17,500 | 36,250 |
| City of Janesville | 11,077 | 18,878 | 26,538 | 40,060 |
| City of Plainfield | 10,177 | 18,156 | 23,092 | 39,688 |
| City of Readlyn | 11,508 | 17,721 | 30,043 | 41,625 |
| City of Sumner | 10,969 | 18,029 | 20,885 | 33,417 |
| City of Tripoli | 11,135 | 16,882 | 21,893 | 34,444 |
| Bremer County(total) | 11,626 | 19,199 | 27,326 | 40,826 |
| State of Iowa | 12,422 | 19,674 | 26,229 | 39,469 |

Source: U.S. Census Bureau

Based on available data, Bremer County has a large percentage of its residents employed in the education, health and social services, similar to the rest of the state. Manufacturing is the second highest industry, which employs 18.6 percent of the county. The data also shows the rural environment of the county, with 5.5 percent employment in the agricultural, forestry, fishing and hunting, and mining industry. The retail trade sector is also a higher percentage due to the concentration of retail businesses in Waverly. There are industrial parks located in Waverly (70 acres), Sumner (15 acres), and Denver has some acreage available as well.

Wartburg College is the largest employer in Bremer County. The college is located in Waverly with 525 faculty/staff and 1,320 student employees. CUNA Mutual Life Insurance, Waverly Health Center, Nestle Beverage, and GMT Corporation are also major employers within the county.

Bremer County has seven school districts providing K-12 education and a large portion of the county's employment. These districts include: Waverly-Shell Rock Community Schools, Denver Community Schools, Janesville Consolidated Schools, Nashua-Plainfield School District, Sumner Community Schools, Tripoli Community Schools, and Wapsie Valley Community Schools.

Appendix B: Bremer County REAP Funding

| City Parks and Open Space | | |
|--|--|-----------|
| Recipient: City of Janesville | | |
| FY 2010 | Park Master Plan Implementation | \$44,500 |
| Recipient: City of Readlyn | | |
| FY 2006 | Rolling Prairie Trail Development | \$30,413 |
| Recipient: City of Sumner | | |
| FY 1990 | Sumner City Park | \$4,010 |
| Recipient: City of Tripoli | | |
| FY 2012 | Sweet Water Creek Restoration & Park | \$75,000 |
| FY 2015 | Sweet Water Creek Recreational Trail | \$75,000 |
| Recipient: City of Waverly | | |
| FY 2008 | Crestwood Park to Brookwood Park Ext. | \$100,000 |
| FY 2010 | Waverly Yard Waste Reclamation | \$53,673 |
| FY 2011 | AMVETS Area Riverbank & Site Restoration | \$65,000 |
| FY 2015 | AMVETS Area Riverbank & Site Restoration | \$100,000 |
| <i>Total: \$547,596</i> | | |
| Conservation Education | | |
| Recipient: Cedar Valley RC&D | | |
| FY 2010 | Wapsi Wild Videocasts | \$5,000 |
| <i>Total: \$5,000</i> | | |
| County Conservation | | |
| Recipient: Bremer CCB | | |
| FY 1990 | Wapsi River Greenbelt | \$255,000 |
| FY 1991 | Wapsi River Greenbelt | \$119,500 |
| FY 1995 | Wapsi River Greenbelt | \$115,000 |
| FY 1996 | Wapsi River Greenbelt | \$76,450 |
| FY 1998 | Wapsi River Greenbelt | \$160,725 |
| FY 2000 | Wapsi River Greenbelt | \$286,026 |
| FY 2004 | Wapsi River Greenbelt | \$153,400 |
| FY 2006 | Wapsi River Greenbelt | \$42,900 |
| Recipient: County Special REAP Account | | |
| FY 1990 | Per county allocations | \$9,086 |
| FY 1991 | Per county allocations | \$12,415 |
| FY 1992 | Per county allocations | \$6,121 |
| FY 1993 | Per county allocations | \$4,917 |
| FY 1994 | Per county allocations | \$4,288 |
| FY 1995 | Per county allocations | \$4,587 |
| FY 1996 | Per county allocations | \$5,527 |
| FY 1997 | Per county allocations | \$6,054 |
| FY 1998 | Per county allocations | \$5,992 |
| FY 1999 | Per county allocations | \$5,785 |
| FY 2000 | Per county allocations | \$6,695 |
| FY 2001 | Per county allocations | \$6,759 |
| FY 2002 | Per county allocations | \$4,680 |
| FY 2003 | Per county allocations | \$183 |
| FY 2004 | Per county allocations | \$6,782 |
| FY 2005 | Per county allocations | \$6,705 |
| FY 2006 | Per county allocations | \$7,007 |
| FY 2007 | Per county allocations | \$6,901 |

| | | |
|--|--|---------------------------|
| FY 2008 | Per county allocations | \$9,627 |
| FY 2009 | Per county allocations | \$11,130 |
| FY 2010 | Per county allocations | \$10,858 |
| FY 2011 | Per county allocations | \$9,148 |
| FY 2012 | Per county allocations | \$7,362 |
| FY 2013 | Per county allocations | \$6,893 |
| FY 2014 | Per county allocations | \$9,848 |
| FY 2015 | Per county allocations | \$9,653 |
| FY 1990 | Per population allocations | \$7,395 |
| FY 1991 | Per population allocations | \$10,359 |
| FY 1992 | Per population allocations | \$5,578 |
| FY 1993 | Per population allocations | \$4,117 |
| FY 1994 | Per population allocations | \$3,850 |
| FY 1995 | Per population allocations | \$4,106 |
| FY 1996 | Per population allocations | \$4,779 |
| FY 1997 | Per population allocations | \$5,244 |
| FY 1998 | Per population allocations | \$5,270 |
| FY 1999 | Per population allocations | \$4,880 |
| FY 2000 | Per population allocations | \$5,642 |
| FY 2001 | Per population allocations | \$5,697 |
| FY 2002 | Per population allocations | \$3,799 |
| FY 2003 | Per population allocations | \$148 |
| FY 2004 | Per population allocations | \$5,457 |
| FY 2005 | Per population allocations | \$5,433 |
| FY 2006 | Per population allocations | \$5,649 |
| FY 2007 | Per population allocations | \$5,535 |
| FY 2008 | Per population allocations | \$7,692 |
| FY 2009 | Per population allocations | \$8,931 |
| FY 2010 | Per population allocations | \$8,675 |
| FY 2011 | Per population allocations | \$7,555 |
| FY 2012 | Per population allocations | \$5,935 |
| FY 2013 | Per population allocations | \$5,528 |
| FY 2014 | Per population allocations | \$7,696 |
| FY 2015 | Per population allocations | \$7,550 |
| | | <i>Total: \$1,546,504</i> |
| Historical Resource Development | | |
| Recipient: Bremer County Genealogical Society | | |
| FY 2004 | Microfilming the Plainfield News '38-'74 | \$2,763 |
| FY 2005 | Microfilming Tripoli Leader NPs '20-'31 | \$3,800 |
| Recipient: County Genealogical Society | | |
| FY 2001 | Microfilm 1905-1926 Tripoli Leader | \$2,960 |
| Recipient: County Historical Society | | |
| FY 2009 | Bremer County Historical Museum | \$787 |
| FY 1994 | Heating, Cooling, Electrical Rehab. | \$4,000 |
| FY 2001 | HVAC for Museum 2nd & 3rd floors | \$12,866 |
| Recipient: Waverly Public Library & Friends of | | |
| FY 1990 | Waverly Historical Photos Collection | \$2,880 |
| | | <i>Total: \$30,056</i> |
| Open Space | | |
| Recipient: 7-Bridges WMA | | |
| FY 2010 | Meyer Property | \$24,000 |
| Recipient: Bremer County Treasurer | | |

| | | |
|---|----------------------------------|-----------|
| FY 1994 | Local property tax reimbursement | \$8,280 |
| FY 1995 | Local property tax reimbursement | \$7,984 |
| FY 1996 | Local property tax reimbursement | \$7,762 |
| FY 1997 | Local property tax reimbursement | \$7,692 |
| FY 1998 | Local property tax reimbursement | \$7,914 |
| FY 1999 | Local property tax reimbursement | \$9,408 |
| FY 2000 | Local property tax reimbursement | \$10,062 |
| FY 2001 | Local property tax reimbursement | \$10,026 |
| FY 2002 | Local property tax reimbursement | \$11,792 |
| FY 2003 | Local property tax reimbursement | \$12,066 |
| FY 2004 | Local property tax reimbursement | \$10,714 |
| FY 2005 | Local property tax reimbursement | \$10,782 |
| FY 2006 | Local property tax reimbursement | \$9,114 |
| FY 2007 | Local property tax reimbursement | \$9,114 |
| FY 2008 | Local property tax reimbursement | \$9,652 |
| FY 2009 | Local property tax reimbursement | \$9,988 |
| FY 2010 | Local property tax reimbursement | \$10,582 |
| FY 2011 | Local property tax reimbursement | \$11,930 |
| FY 2012 | Local property tax reimbursement | \$11,652 |
| FY 2013 | Local property tax reimbursement | \$12,266 |
| FY 2014 | Local property tax reimbursement | \$12,654 |
| Recipient: Pheasants Forever, DU, INHF | | |
| FY 1992 | Wapsipinicon Wetlands | \$357,000 |
| <i>Total: \$592,434</i> | | |
| Roadside Vegetation | | |
| Recipient: Brad Azeltine, DOT Maintenance | | |
| FY 1990 | Seed-Waverly Maintenance | \$3,068 |
| Recipient: City of Denver | | |
| FY 1996 | Bypass enhancement | \$1,154 |
| Recipient: City of Plainfield | | |
| FY 2000 | Gateway planting | \$990 |
| Recipient: City of Sumner | | |
| FY 1995 | Gateway planting | \$876 |
| Recipient: City of Waverly | | |
| FY 1996 | Gateway planting | \$4,503 |
| Recipient: State Roadside Office | | |
| FY 1996 | Native Planting | \$1,059 |
| <i>Total: \$11,650</i> | | |
| Soil and Water Enhancement | | |
| Recipient: Soil and Water Conservation District | | |
| FY 1990 | Allocations for practices | \$9,339 |
| FY 1991 | Allocations for practices | \$13,246 |
| FY 1992 | Allocations for practices | \$4,942 |
| FY 1993 | Allocations for practices | \$2,882 |
| FY 1994 | Allocations for practices | \$16,609 |
| FY 1995 | Allocations for practices | \$4,475 |
| FY 1996 | Allocations for practices | \$8,152 |
| FY 1997 | Allocations for practices | \$8,866 |
| FY 1998 | Allocations for practices | \$5,411 |
| FY 1999 | Allocations for practices | \$4,946 |
| FY 2000 | Allocations for practices | \$9,215 |
| FY 2001 | Allocations for practices | \$6,163 |

| | | |
|---|------------------------------|-------------------------|
| FY 2002 | Allocations for practices | \$6,802 |
| FY 2003 | Allocations for practices | \$885 |
| FY 2004 | Allocations for practices | \$17,047 |
| FY 2005 | Allocations for practices | \$16,640 |
| FY 2006 | Allocations for practices | \$8,041 |
| FY 2007 | Allocations for practices | \$20,230 |
| FY 2008 | Allocations for practices | \$18,133 |
| FY 2009 | Allocations for practices | \$11,978 |
| FY 2010 | Allocations for practices | \$12,300 |
| FY 2011 | Allocations for practices | \$9,828 |
| FY 2012 | Allocations for practices | \$7,429 |
| FY 2013 | Allocations for practices | \$6,653 |
| FY 1990 | Forestry & native vegetation | \$3,776 |
| FY 1991 | Forestry & native vegetation | \$5,993 |
| FY 1993 | Forestry & native vegetation | \$887 |
| FY 1994 | Forestry & native vegetation | \$5,022 |
| FY 1995 | Forestry & native vegetation | \$1,346 |
| FY 1996 | Forestry & native vegetation | \$2,564 |
| FY 1997 | Forestry & native vegetation | \$935 |
| FY 1998 | Forestry & native vegetation | \$1,500 |
| FY 1999 | Forestry & native vegetation | \$1,800 |
| FY 2000 | Forestry & native vegetation | \$14,057 |
| FY 2001 | Forestry & native vegetation | \$2,959 |
| FY 2002 | Forestry & native vegetation | \$829 |
| FY 2004 | Forestry & native vegetation | \$7,714 |
| FY 2005 | Forestry & native vegetation | \$6,410 |
| FY 2006 | Forestry & native vegetation | \$2,010 |
| FY 2007 | Forestry & native vegetation | \$5,014 |
| FY 2008 | Forestry & native vegetation | \$6,885 |
| FY 2009 | Forestry & native vegetation | \$3,997 |
| FY 2010 | Forestry & native vegetation | \$4,100 |
| FY 2011 | Forestry & native vegetation | \$3,277 |
| FY 2012 | Forestry & native vegetation | \$2,476 |
| FY 2013 | Forestry & native vegetation | \$2,218 |
| | | <i>Total: \$315,981</i> |
| Total REAP Allocations in Bremer County: \$3,049,220 | | |

Appendix C: Public Input Survey Questions

As part of the public input portion of this plan, an online survey of Bremer County residents was conducted from November 30 through December 10, 2015. A total of 107 surveys were completed. This section of the plan provides a list of the survey questions asked. A summary of the survey results can be found in Chapter 3.



Bremer County Conservation Survey

Hello and welcome to the Bremer County Conservation Board Public Input Survey! Thank you for taking the time to complete this survey! This survey contains 15 questions and should take no longer than 5-10 minutes.

Your input is important and will help the Conservation Board develop their long-term plans and projects to improve the environmental, recreational, educational, and historic resources throughout the county.

Next

Background Information

Before the survey begins, we would like to provide you with a brief overview of the Bremer County Conservation Board:

Since 1958 Bremer County Conservation Board (BCCB) has been involved in numerous programs promoting conservation, recreation, environmental education, public parks, wildlife areas and much more. BCCB manages 28 individual parks, wildlife areas and recreation areas with lakes and rivers consisting of nearly 4,300 acres across the county. Parks, preserves, wildlife areas, prairies, river accesses and greenbelts are all available to area residents and visitors.

Prev Next

Programs and Education

The BCCB Environmental Education (EE) program interprets the natural resources of the county, as well as promoting the conservation and wise use of those areas. The Bremer County Naturalists develop programs for school groups, youth groups, nursing homes, clubs/organizations and the general public. In 2014, over 756 programs were presented with 12,786 participants involved!

1. As mentioned, the BCCB offers a variety of educational programs as well as several special events each year. How do you typically obtain information about Bremer County Conservation Board Environmental Education programs? Select all that apply.

- Brochures
- Social media (e.g. Facebook)
- Print media (e.g. newspaper)
- Word-of-mouth
- Conservation Board website (www.mycountyparks.com/County/Bremer.aspx)
- Attending programs or visiting parks
- Email
- Radio
- I am not aware of BCCB programs
- Other (please specify)

2. Please indicate the level of importance the following types of educational programs are for Bremer County residents.

| | Very important | Important | Somewhat important | Not important | Not at all important |
|--|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| Environmental (water and air quality, soil conservation, etc.) | <input type="radio"/> |
| Recreational (bicycling, canoeing, snowshoeing, etc.) | <input type="radio"/> |
| Hunting and fishing (mentoring programs, etc.) | <input type="radio"/> |
| Natural history (habitat, wildlife, geology, etc.) | <input type="radio"/> |

Are there any other specific types of educational programs you would like to see continued, expanded, or developed?

Priorities

3. In the coming years, what level of priority should Bremer County place on the following types of programs and projects?

| | High Priority | Medium Priority | Low Priority |
|---|-----------------------|-----------------------|-----------------------|
| Acquire land for public hunting and game species habitat | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Acquire land for general public use and wildlife habitat | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Develop more hard surface trails | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Provide additional un-surfaced/ off-road trails | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Provide in-class presentations to local schools and youth organizations | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Provide outdoor field trips to local schools and youth organizations | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Provide educational programs for all ages | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Removal and management of invasive species | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Develop a shooting range in the county | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Develop an archery range in the county | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

4. Are there any other programs or projects Bremer County should place high priority on pursuing in the future?

5. In the coming years, what level of priority should Bremer County place on the following types of recreational trail amenities? Please select high, medium, or low for each answer.

| | High Priority | Medium Priority | Low Priority |
|---|-----------------------|-----------------------|-----------------------|
| Paved trails in parks and recreational areas | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Passive nature trails (non-paved) | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Local trail projects within cities | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Equestrian trails | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Mountain bike/ off-road trails | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Regional connections of existing trails | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Trails along the Wapsipinicon River Greenbelt | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Trails along the Cedar River | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

Additional comments regarding recreational trails:

Participation

6. In the past year, how often have you, or members of your household, engaged in the following outdoor activities in Bremer County? Please estimate the number of times you participated in that activity in the past year.

| | Did not participate | 1-5 times | 6-15 times | 16-25 times | 26+ times |
|--|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| Playgrounds or natural play areas | <input type="radio"/> |
| Disc golf courses | <input type="radio"/> |
| Picnicking | <input type="radio"/> |
| Mountain biking (single track/ off-road) | <input type="radio"/> |
| Hunting | <input type="radio"/> |
| Fishing from shore | <input type="radio"/> |
| Fishing with a boat | <input type="radio"/> |
| Bird watching/feeding | <input type="radio"/> |
| Nature photography | <input type="radio"/> |
| Tent camping | <input type="radio"/> |
| Camping with electric hookups | <input type="radio"/> |
| Camping with a RV | <input type="radio"/> |
| Canoeing/kayaking/tubing | <input type="radio"/> |
| Hiking | <input type="radio"/> |
| Using paved recreational trails (bicycling, jogging, etc.) | <input type="radio"/> |
| Snowmobiling | <input type="radio"/> |
| Snowshoeing | <input type="radio"/> |
| Cross-country skiing | <input type="radio"/> |
| Picking berries, nuts, or mushrooms | <input type="radio"/> |
| Attended a nature-themed educational program | <input type="radio"/> |
| Horseback riding | <input type="radio"/> |

7. Are there any outdoor recreational activities that are not included in the previous list that you would like to begin or participate in more often?

No

Recreational Activities:

8. How many times have you, or members of your household, visited the following county parks in the past year?

| | 1-2 times | 3-6 times | 6-12 times | 13+ times | Did not visit |
|---------------------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| Alcock Park (West of Fredenka) | <input type="radio"/> |
| Cedar Bend Park (North of Waverly) | <input type="radio"/> |
| North Cedar Park (East of Plainfield) | <input type="radio"/> |
| North Woods Park (North of Sumner) | <input type="radio"/> |

Bremer County Conservation maintains four public parks for camping. Camping is on a first-come first-serve basis from May 1 - October 31. All county parks have 20 and 30 amp outlets for all sizes of campers. Shelters, water, pit toilets and playground equipment as well as restroom and shower facilities are available at all of the parks.

9. Have you or members of your household camped in the following county parks in the past year? If so, please indicate approximately how many nights.

| | 1-3 nights | 4-9 nights | 10 or more nights | Did not camp |
|---|-----------------------|-----------------------|-----------------------|-----------------------|
| Alcock Park (West of Frederika) | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Cedar Bend Park (North of Waverly) | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| North Cedar Park (ortheast of Plainfield) | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| North Woods Park (North of Sumner) | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

10. If you enjoy camping, how likely would be you be willing to pay extra for the following camping amenities:

| | Very Likely | Likely | Not Likely | Not at all Likely | Do not Camp |
|--|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| Being able to reserve a campsite in advance | <input type="radio"/> |
| A campsite large enough to accommodate Class A and Class B RVs to drive or back-in | <input type="radio"/> |
| Staying the night in a cabin | <input type="radio"/> |

11. Based on your experience, how would you rate the quality of operation and maintenance of the Bremer County Conservation parks and facilities?

| | Excellent | Good | Fair | Poor | Unknown/ Not Applicable |
|-----------------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-------------------------|
| Condition of buildings | <input type="radio"/> |
| Natural area stewardship | <input type="radio"/> |
| Mowing/ tree trimming | <input type="radio"/> |
| Parking | <input type="radio"/> |
| Restroom cleanliness | <input type="radio"/> |
| Signage and wayfinding | <input type="radio"/> |
| Green/open space | <input type="radio"/> |
| Quality of recreational trails | <input type="radio"/> |
| Access to recreational trails | <input type="radio"/> |
| Access to rivers and water trails | <input type="radio"/> |
| Security/safety | <input type="radio"/> |

Additional Comments:

Appendix D: Potential Funding Sources

A number of projects have been identified in both the BCCB and REAP Committee sections of the plan. This section includes a summary of potential government funding sources for some of these projects.

Community Attraction & Tourism Program (CAT)

The CAT program is an opportunity for cities, counties, and non-profit organizations to ask for financial assistance for vertical infrastructure projects including museums, recreation centers, aquatic centers, sports arenas, and other attractions.

Applications are submitted to the Iowa Economic Development Authority and the Vision Iowa Board on a quarterly basis. Applicants are reminded that the Vision Iowa Board will require city, county, and private funding for each project.

Federal Recreational Trail Program

This program provides funding for the development and maintenance of motorized and non-motorized recreational trails and trail-related projects. Public agencies and private organizations are eligible to sponsor projects, however, private sponsorship do require a public agency co-sponsor. A minimum 20 percent match is required and trails resulting from successful applications must be maintained as a public facility for a minimum of 20 years. Applications for the program are typically due in the fall.

Resource Enhancement and Protection (REAP) Program

REAP offers a variety of grant programs for various government and private entities. Historically, statewide REAP funding has typically varied \$15 million - \$20 million.

REAP programs include:

- ❖ State Open Spaces (28%)
- ❖ County Conservation (20%)
- ❖ Soil and Water Enhancement (20%)
- ❖ City Parks and Open Space (15%)
- ❖ Public Land Management (9%)
- ❖ Historical Resources (5%)
- ❖ Roadside Vegetation (1%)
- ❖ Conservation Education (first \$350,000)

Additional details on the REAP program can be found in Chapter 7 of this plan.

State Recreational Trails Program

The State Recreational Trails Program is a funding opportunity for acquisition, construction, or improvement of recreational trails that are open for public use or trails that will be dedicated to public use upon completion. Applications are typically due in the summer.

Land and Water Conservation Fund (LWCF)

The Land and Water Conservation Fund (LWCF) Program is a federally funded grant program administered by the Iowa Department of Natural Resources that provides matching funds of 50 percent for outdoor recreation area development and acquisition. Iowa's cities and counties are eligible to participate. Competition for LWCF funds is intense, but this program provides an excellent opportunity to develop a wide range of outdoor recreational projects that are in high demand. Popular projects in recent years have included skate parks, playgrounds, new and renovated swimming pools, sport complexes, campgrounds and multipurpose trails.

Iowa's Statewide Transportation Alternative Program (TAP)

This source provides funding for surface transportation alternative projects that have a state-wide or multiregional focus on improving transportation. Local governments, including school districts, are eligible to apply. Projects that may be considered for funding include: construction, planning, and design of on and off-road trail facilities; construction, planning, and design of infrastructure projects and systems to provide safe routes to non-drivers; conversion and use of abandoned railroad corridors for recreational trails; construction of turnouts, overlooks, and view areas; general community improvement activities; and various environmental mitigation projects.

Iowa Northland Regional Transportation Authority (INRTA) Transportation Alternative Program (TAP)

The Iowa Northland Regional Transportation Authority (RTA) was established in 1993 under the umbrella of INRCOG to conduct transportation planning and programming for Black Hawk, Bremer, Buchanan, Butler, Chickasaw, and Grundy Counties. The TAP program provides funding to expand travel choices and improve the transportation experience. TAP funding must go towards bicycle, pedestrian, scenic, historic, or other enhancement-type transportation projects.

Iowa Living Roadway Trust Fund

This Department of Transportation (DOT) program provides funding for integrated roadside vegetation management (IRVM) and related practices. Items typically funded by this program include: plant materials; planting and establishment materials; burn equipment; spraying and brush control equipment; seeding and harvesting equipment; GIS and GPS equipment; and IRVM educational materials.

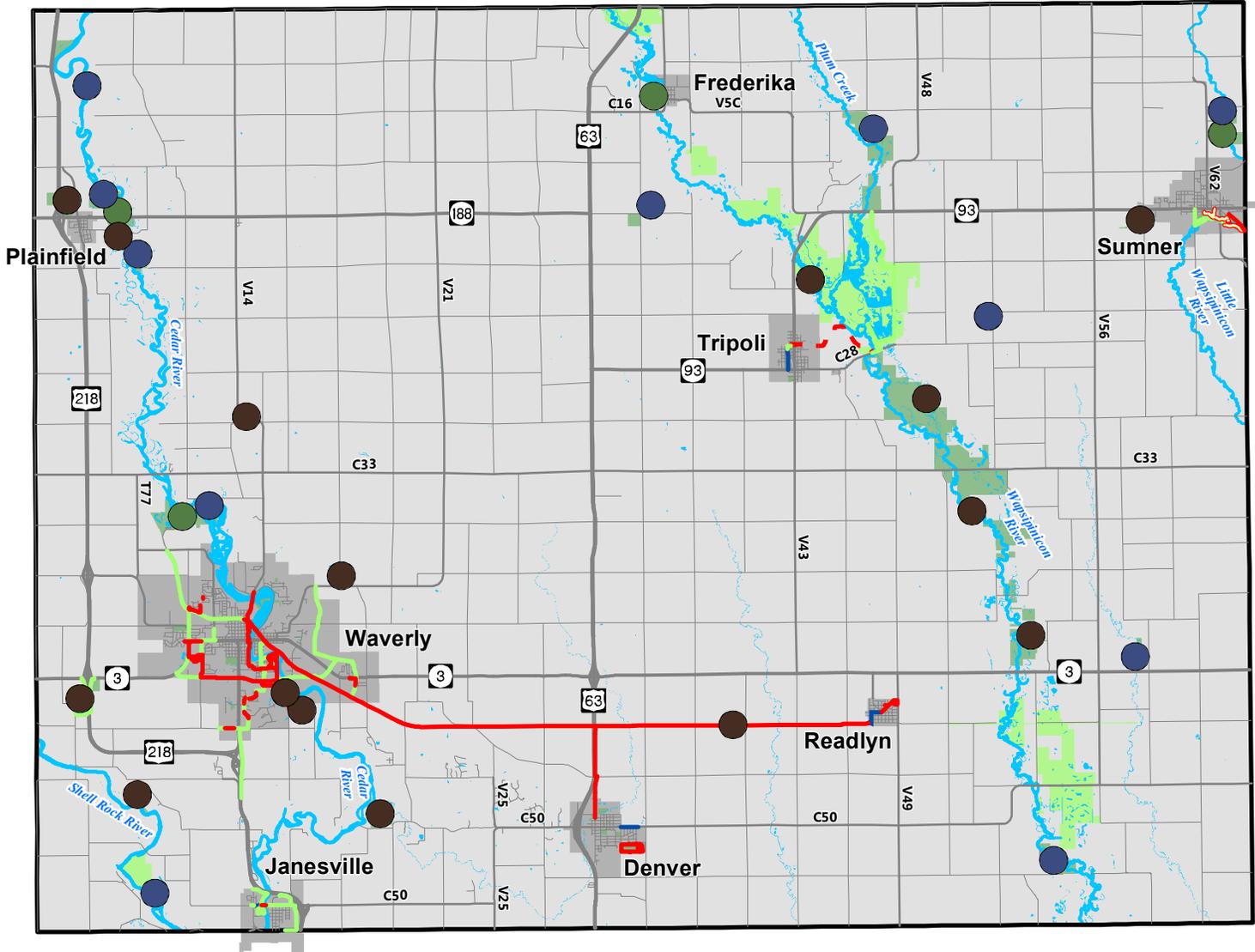
Iowa Clean Air Attainment Program (ICAAP)

This program provides funding for highway and streets; transit; bicycles and pedestrian; and freight projects or programs that support Iowa's clean air quality by reducing transportation related emissions. Criteria require a minimum \$20,000 total project cost with at least a 20 percent local match. Applications are typically due annually in October.

Appendix E: County Maps

- ❖ **Parks and Trails Map**
- ❖ **Conservation Board Area Directory**
- ❖ **Drainage Basins**
- ❖ **Soil Taxonomy Order**
- ❖ **Soils Land Capability Class**
- ❖ **Regional Trail Plan**

Bremer County Parks and Trails Map



-  Existing Paved Trail
-  Existing Granular Trail
-  Existing Paved Shoulder
-  Programmed Trail (Construction Pending)
-  On-Road Bicycle Route*
-  Planned Trail

*** On-Road Bike Compatibility Rating Factors:**

- Average Daily Traffic
- Roadway Width
- Percent Center Yellow Line
- Percent Heavy/Truck Traffic

Bicycle route designation should not be seen as a guarantee against injury. Bicyclists must ensure that they understand how to ride in a competent manner and avoid routes with heavy traffic. It is the responsibility of each individual user to determine whether a particular bicycle facility is suitable for them.

-  Parks
-  Wildlife Areas
-  Other Rec. Areas
-  County Recreation Areas
-  Iowa DNR Areas
-  City Limits
-  Major Roads
-  Rivers

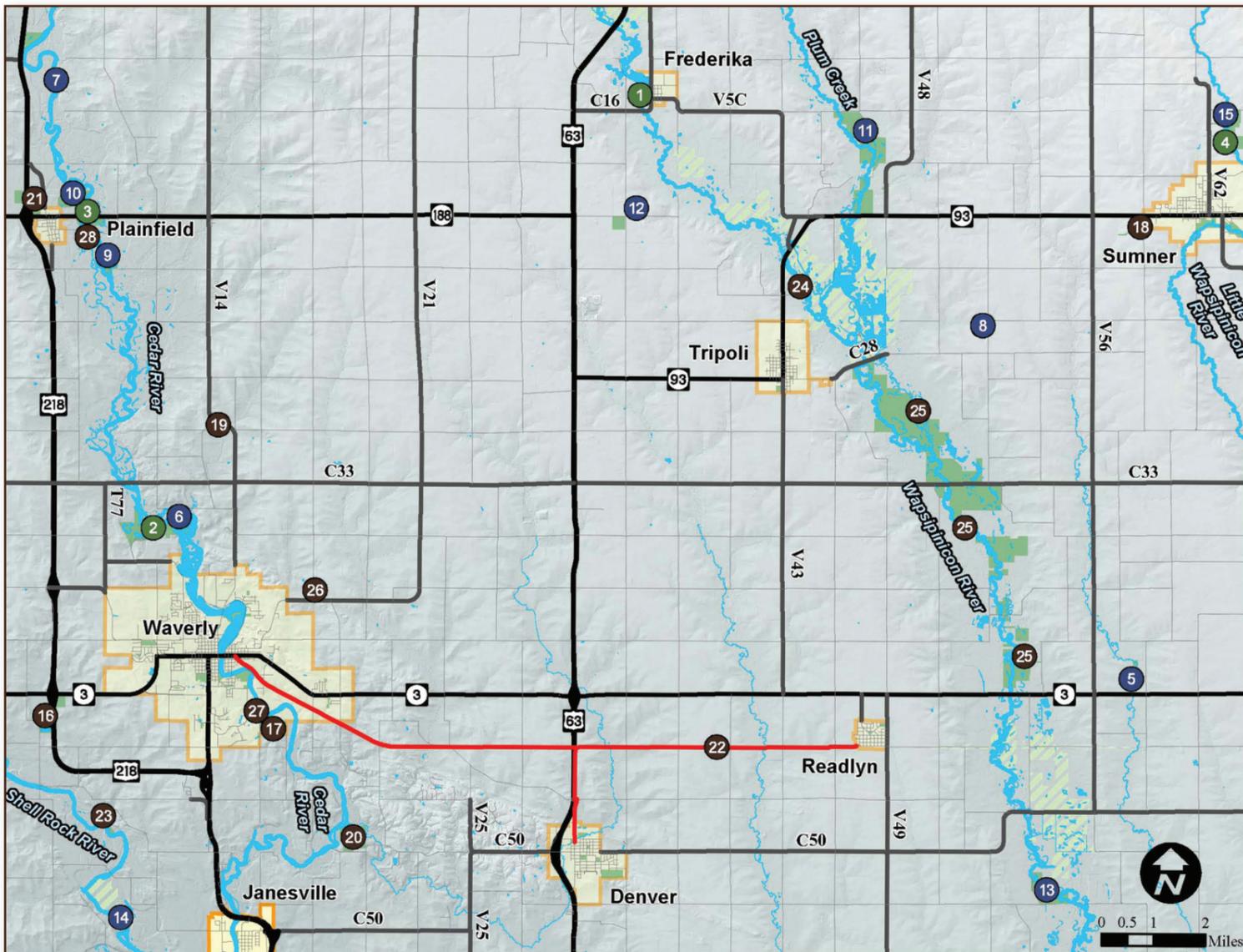
The map does not represent a survey, no liability is assumed for the accuracy of the data delineated herein, either expressed or implied by INRCOG.
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Bremer County Conservation Board AREA DIRECTORY

| | Acres | Location | Address | Camping | Camping Fees | Shelter | Electricity | Drinking Water | Restroom (P)it or (F)lush | Showers | Play Equipment | Dump Station | Picnicking | Boat Ramp | Canoe Access | Hunting - DNR Seasons | Hunting Nov. 1 - Jan. 10 | Fishing | Hiking/Walking Trail |
|-------------------------------|-------|---|--|---------|--------------|---------|-------------|----------------|---------------------------|---------|----------------|--------------|------------|-----------|--------------|-----------------------|--------------------------|---------|----------------------|
| PARKS | | | | | | | | | | | | | | | | | | | |
| 1 | 42 | West side of Frederika | 1171 Midway Ave. | ◆ | ◆ | ◆ | ◆ | ◆ | P&F | ◆ | ◆ | ◆ | ◆ | ◆ | ◆ | | | ◆ | |
| 2 | 180 | 1.5 mi. northwest of Waverly | 1267 205th St. | ◆ | ◆ | ◆ | ◆ | ◆ | P&F | ◆ | ◆ | ◆ | ◆ | ◆ | ◆ | | | ◆ | ◆ |
| 3 | 117 | 1 mi. east of Plainfield | 1163 140th St. | ◆ | ◆ | ◆ | ◆ | ◆ | F | ◆ | ◆ | ◆ | ◆ | ◆ | ◆ | | | ◆ | ◆ |
| 4 | 82 | 1 mi. north of Sumner | 1249 Yuma Ave. | ◆ | ◆ | ◆ | ◆ | ◆ | P&F | ◆ | ◆ | ◆ | ◆ | ◆ | ◆ | | | ◆ | ◆ |
| WILDLIFE AREAS | | | | | | | | | | | | | | | | | | | |
| 5 | 50 | 5 mi. east of Readlyn | 3175 230th St. | | | | | | | | | | | | | | | ◆ | ◆ |
| 6 | 118 | 1 mi. northwest of Waverly | 1338 195th St. | | | | | | | | | | | | | | | ◆ | ◆ |
| 7 | 59 | 3 mi. north of Plainfield | 1055 Badger Ave. | | | | | | | | | | | | | | | ◆ | ◆ |
| 8 | 16 | 3 mi. east of Tripoli | 1600 Tahoe Ave. | | | | | | | | | | | | | | | ◆ | ◆ |
| 9 | 47 | 1 mi. southeast of Plainfield | 1241 150th St. | | | | | | | | | | | | | | | ◆ | ◆ |
| 10 | 111 | 1 mi. east of Plainfield | via North Cedar Park | | | | | | | | | | | | | | | ◆ | ◆ |
| 11 | 467 | 4 mi. northeast of Tripoli | 1300 Reed Ave. 2638 120th St. 2657 140th St. | | | | | | | | | | | | | | | ◆ | ◆ |
| 12 | 40 | 3 mi. west, 3 mi. north of Tripoli | 2182 140th St. | | | | | | | | | | | | | | | ◆ | ◆ |
| 13 | 145 | 3 mi. south, 3 mi. east of Readlyn | 3015 270th St. | | | | | | | | | | | | | | | ◆ | ◆ |
| 14 | 20 | 1.5 mi. west of Janesville | access via DNR land | | | | | | | | | | | | | | | ◆ | ◆ |
| 15 | 90 | 1.5 mi. north of Sumner | 1225 Yuma Ave. 3368 120th St. | | | | | | | | | | | | | | | ◆ | ◆ |
| OTHER RECREATION AREAS | | | | | | | | | | | | | | | | | | | |
| 16 | 105 | 2 mi. southwest of Waverly | 2371 Atlas Ave. | | | | | | P | | | | ◆ | ◆ | | | | ◆ | ◆ |
| 17 | 80 | Southeast part of Waverly | 1500 18th Ave. SE | | | | | | P | | | | | | | | | | ◆ |
| 18 | 8 | 1 mi. west of Sumner | 1416 Whitetail Ave. | | | | | | | | | | | | | | | ◆ | ◆ |
| 19 | 24 | 3 mi. north of Waverly | 1780 Easton Ave. | | | | | | | | | | | | | | | | ◆ |
| 20 | 142 | 2 mi. northeast of Janesville | 2588 Hawthorne Ave. | | | | | | | | | | | | | | | | ◆ |
| 21 | 60 | .5 mi. north of Plainfield | 1370 Badger Ave. | | | | | | P | | | | | ◆ | | | | | ◆ |
| 22 | 67 | Hwy. 63 to Readlyn | -- | | | | | | | | | | | | | | | | ◆ |
| 23 | 13 | 1.5 mi. north, 2 mi. west of Janesville | 2534 Cottage Ave. | | | | | | | | | | | | | | | | ◆ |
| 24 | 15 | .5 mi. north, .5 mi. east of Tripoli | 2527 155th St. | | | | | | | | | | | | | | | | ◆ |
| 25 | 2,140 | 1-7 mi. southeast of Tripoli | -- | | | | | | | | | | | | | | | | ◆ |
| 26 | 2 | 1 mi. northeast of Waverly | 2101 Garden Ave. | | | | | | | | | | | | | | | | ◆ |
| 27 | 21 | Southeast part of Waverly | access via 8th St. SE | | | | | | | | | | | | | | | | ◆ |
| 28 | 50 | 1 mi. east of Plainfield | 1 Division St. | | | | | | | | | | | | | | | | ◆ |

Bremer County Conservation Board Areas



Reminder!

- Motorized vehicles (trucks, ATVs, snowmobiles, etc.) are not allowed on trails or away from parking lots on county-managed areas.
- Unless receptacles are available, all trash must be removed when using a county area.
- Fires are permitted only in areas with provided grills.
- Permanent tree stands (using any nails or screws) are prohibited and legal tree stands are allowed only on public ground during periods prior to and after the seasons per DNR regulations.
- Call our office or a conservation officer for more information.

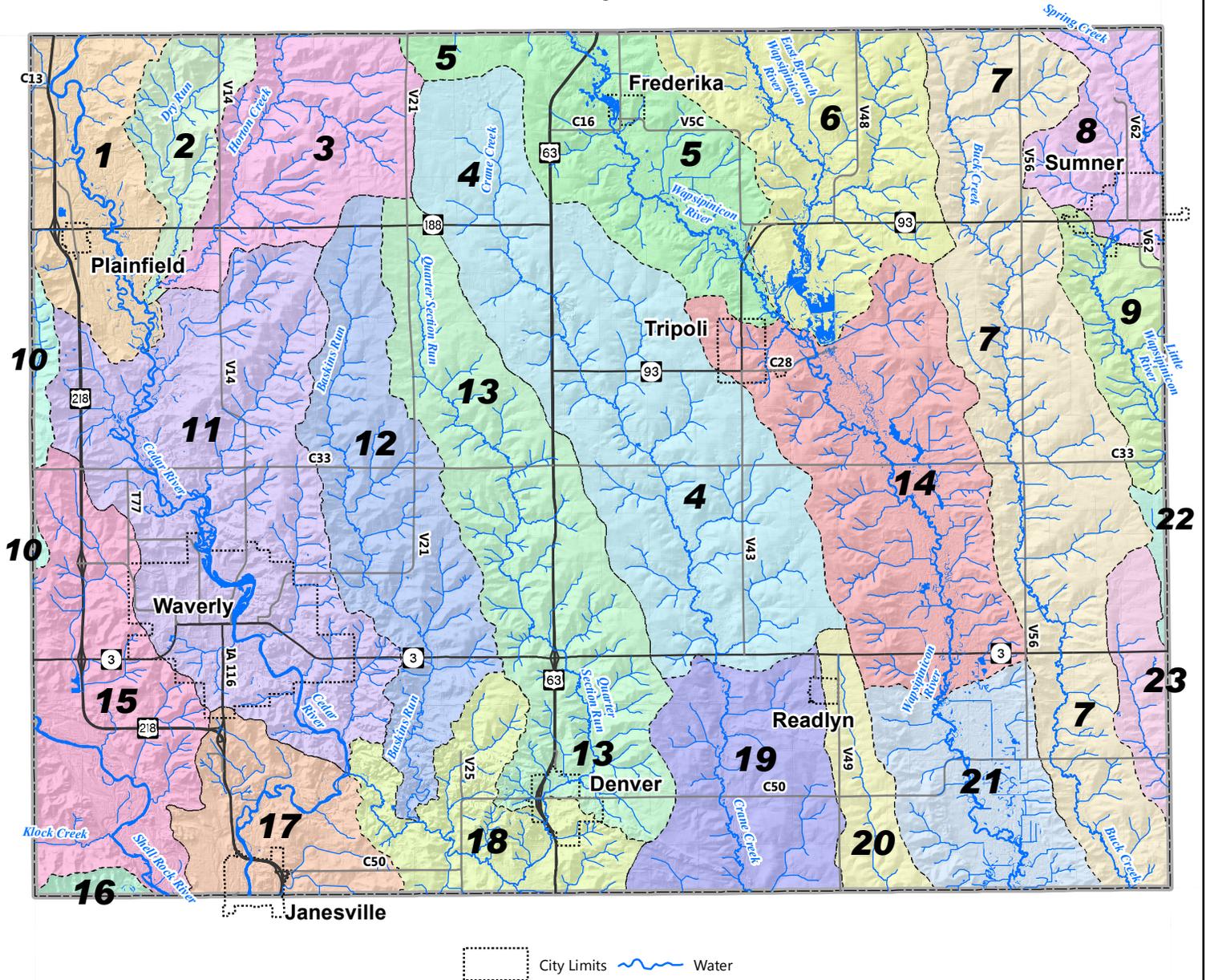


Iowa DNR Areas

The Iowa Department of Natural Resources (DNR) also owns and manages ground for public use in Bremer County. The Cedar-Wapsi Unit within the Wildlife Section of the DNR manages many areas in seven counties in northeast Iowa, four of which are located in Bremer County. The Sweet Marsh Wildlife Management Area, Aldo Leopold Wetland/Upland Complex, Heffernan Wildlife Management Area, and

Walnut Bend Wildlife Management Area consist of over 5,000 acres open to the public for hunting, fishing, trapping, bird watching, hiking, and general recreational interests (these areas are in dashed light green on the map). More information can be found at www.iowadnr.gov or by calling the local wildlife biologist at (319) 213-2815.

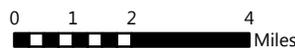
Bremer County Watersheds



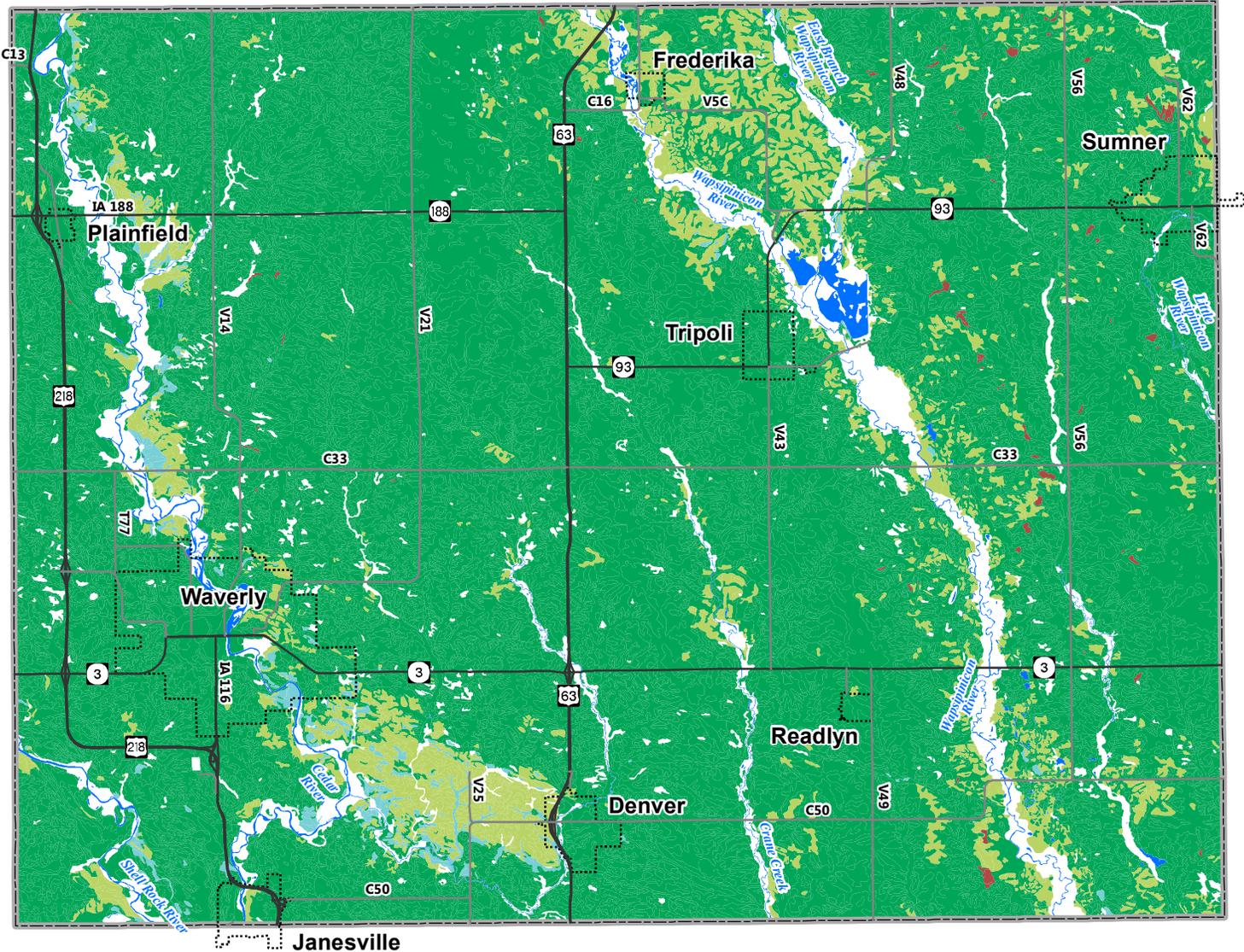
| STREAM NAME | TRIBUTARY TO | STREAM NAME | TRIBUTARY TO |
|----------------------------------|---------------------------|-------------------------------|---------------------------|
| 1. Cedar River | Cedar River | 13. Upper Quarter Section Run | Quarter Section Run |
| 2. Dry Run | Cedar River | 14. Wapsipinicon River | Wapsipinicon River |
| 3. Horton Creek | Cedar River | 15. Shell Rock River | Shell Rock River |
| 4. Upper Crane Creek | Wapsipinicon River | 16. West Fork Cedar River | Cedar River |
| 5. Wapsipinicon River | Wapsipinicon River | 17. West Fork Cedar River | Cedar River |
| 6. Lower East Branch Wapsi River | Wapsipinicon River | 18. Lower Quarter Section Run | Quarter Section Run |
| 7. Buck Creek | Little Wapsipinicon River | 19. Middle Crane Creek | Crane Creek |
| 8. Little Wapsipinicon River | Little Wapsipinicon River | 20. Lower Crane Creek | Crane Creek |
| 9. Little Wapsipinicon River | Little Wapsipinicon River | 21. Wapsipinicon River | Wapsipinicon River |
| 10. Curry Creek | Shell Rock River | 22. Middle Little Wapsi River | Little Wapsipinicon River |
| 11. Cedar River | Cedar River | 23. Lower Little Wapsi River | Little Wapsipinicon River |
| 12. Baskins Run | Quarter Section Run | | |

Hydrologic Units (Watershed) Data Source: U.S. Department of Agriculture, Natural Resources Conservation Service 2003

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Bremer County Soils Soil Taxonomy Order



-  City Limit Boundaries
-  Water

Soil Taxonomy Order

-  No Data
-  Alfisols
-  Entisols
-  Histosols
-  Mollisols



Alfisols – These soils result from weathering process that leach clay minerals and other constituents out of the surface layer and into the subsoil, where they can hold and supply moisture and nutrient to plants. They formed primarily under forest or mixed vegetative covers and are productive for most crops. Alfisols make up about 10 percent of the world’s ice-free land surface.



Entisols – Occur in areas of recently deposited parent materials or in areas where erosion and deposition rates are faster than the rate of soil development; such as dunes, steep slopes, and flood plains. They occur in many environments. Entisols make up about 16 percent of the world’s ice-free land surface.



Histosols – Have a high content of organic matter and no permafrost. Most are saturated year round, but a few are freely drained. Histosols are commonly called bogs, moors, peats, or muck. Histosols form in decomposed plant remains that accumulate in water forest litter, or moss faster than they decay. If these soils are drained and exposed to air, microbial decomposition is accelerated and the soils may subside dramatically. Histosols make up about 1 percent of the world’s ice-free land surface.



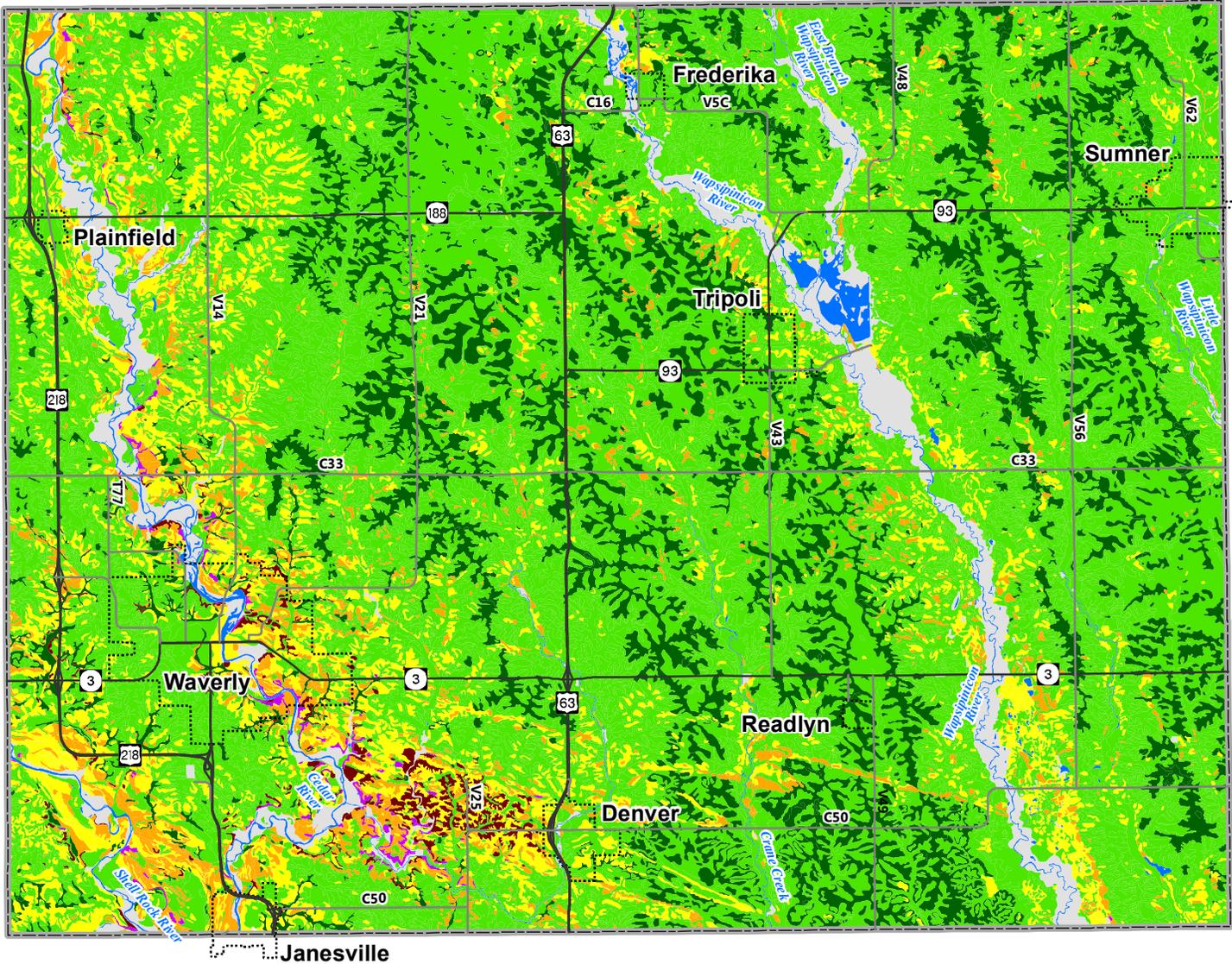
Mollisols – Is common on the Great Plains and the western states. Nearly all Mollisols have a mollic epipedon. Most have supported grass vegetation at some time, although many apparently have been forested in the past. Mollisols are used mainly as cropland. Generally, grains and sorghum are grown in the drier regions and corn and soybeans in the warmer, humid regions.

Soil Data Source: U.S. Department of Agriculture,
Natural Resources Conservation Service,
Soil Survey Geographic (SSURGO) 9-12-2005

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Bremer County Soils Land Capability Class



Land Capability Class

----- City Limits

Water



Soils have FEW limitations that restrict their use



Soils have MODERATE limitations that reduce the choice of plants or that require MODERATE conservation practices



Soils have SEVERE limitations that reduce the choice of plants or that require SPECIAL conservation practices, or both



Soils have VERY SEVERE limitations that reduce the choice of plants or that require VERY careful management, or both



Soils are NOT likely to erode but have OTHER limitations, impractical to remove, that limit their use



Soils have SEVERE limitations that make them generally unsuitable for cultivation



Soils have VERY SEVERE limitations that make them unsuitable for cultivation



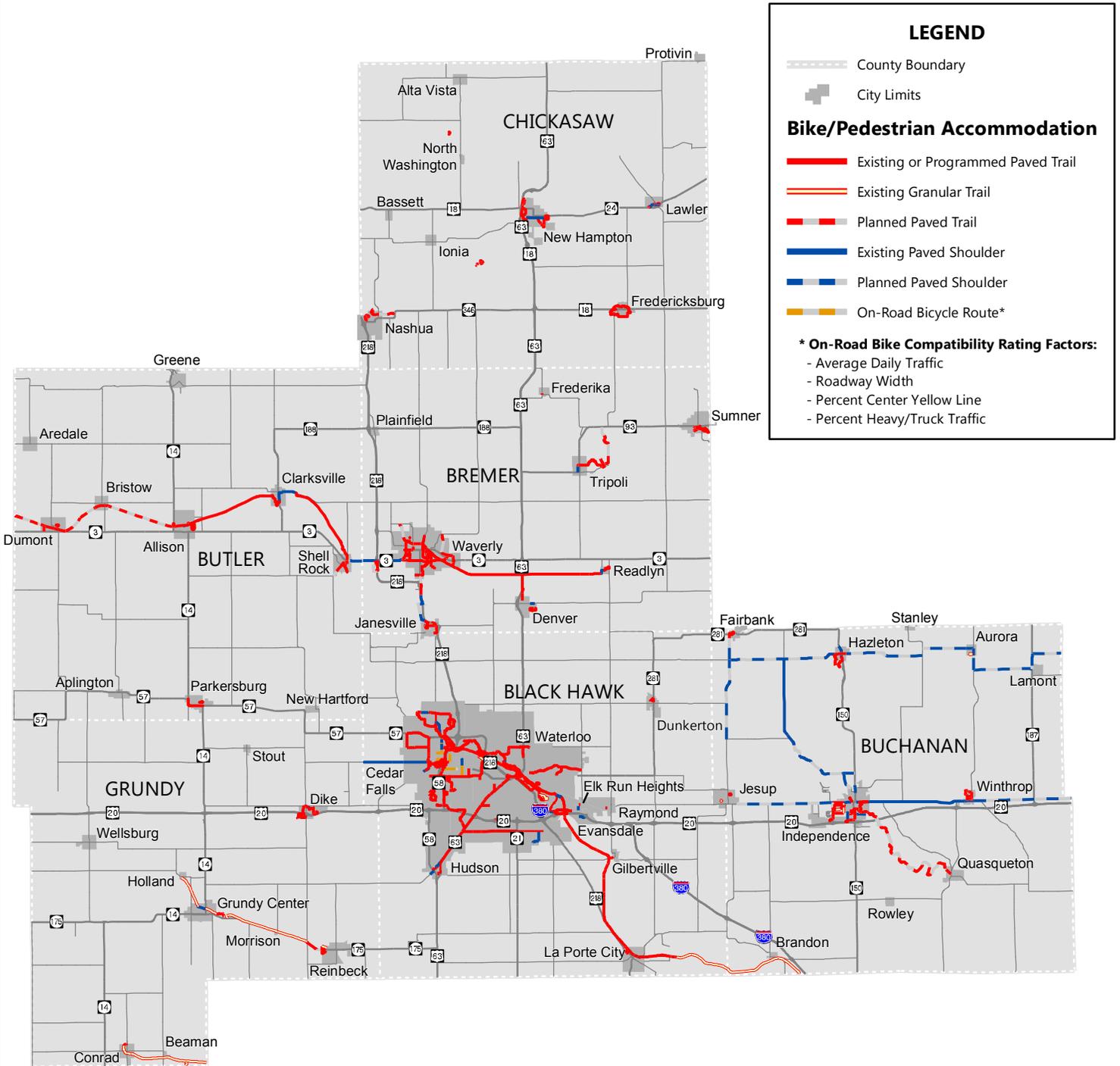
Soils and miscellaneous areas have limitations that nearly PRECLUDE their use for commercial crop production

Soil Data Source: U.S. Department of Agriculture,
Natural Resources Conservation Service,
Soil Survey Geographic (SSURGO) 9-12-2005

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Iowa Northland Regional Trail Plan



Bicycle route designation should not be seen as a guarantee against injury. Bicyclists must ensure that they understand how to ride in a competent manner and avoid routes with heavy traffic. It is the responsibility of each individual user to determine whether a particular bicycle facility is suitable for them.

