

Greeley Parks and Trails Master Plan



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EDAW

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Chapter One – The Plan Summary

Introduction

It was Horace Greeley, editor of the *New York Tribune*, who coined the famous phrase, "Go West young man, go West," but it was his visionary agricultural editor, Nathan C. Meeker, who spearheaded the colonization of Greeley in 1869. By the time Horace Greeley first visited the town bearing his namesake in October 1870, colonists had erected houses on town lots close to the confluence of the South Platte and Cache la Poudre rivers, established a newspaper, built irrigation canals, and designed streets 100 feet wide and lined with trees. A reading room opened in 1870 followed by the first school in 1872, a courthouse in 1883 and a college in 1889. Between then and now, the City has established a legacy of providing ample parks for its residents.

Today, Greeley is the largest city in Weld County with a growing population approaching 77,000. Greeley is situated an hour north of Denver and 20 minutes from the foothills of the Rocky Mountains. The City's close proximity to the Rocky Mountains provides dramatic mountain views from almost every location in the metro area. Greeley also encompasses a diverse array of natural areas, including open spaces, rivers, expansive grasslands, meandering creeks and scenic trails.

Community Vision and Goals

Greeley City Council has an adopted Vision Statement in its 2020 Comprehensive Plan that reads:

"Greeley will promote a healthy, diverse economy and high quality of life responsive to all its citizens and neighborhoods, thoughtfully managing its human and natural resources in a manner that creates and sustains a unique, vibrant and rewarding community in which to live and work."

The City has also adopted specific goals and priorities in support of this Vision. These goals address business practices, economic vitality, infrastructure growth and redevelopment, public safety, environmental stewardship and natural resources, transportation and community amenities. All of these broad goals relate in some form to this plan, as the "green infrastructure" created by parks, open space and trails contributes to community form, preservation of natural resources and provision of amenities that make a community a desirable place to live. The specific goal in the Comprehensive Plan that relates most directly is:

"Recreation and Parks. In order to enhance the community quality of life, promote healthy lifestyles and neighborhoods and achieve an important balance of area land uses, action should be taken to establish and maintain a comprehensive and integrated parks and recreation system which provides ample land for park use commensurate with and appropriate to area development, as well as community facilities which offer a full range of leisure opportunities for all community residents."

Through this Vision and Goals document, the City is truly making a statement about its commitment to parks and trails in the community.

Scope of the Plan

EDAW was retained by the City of Greeley Parks and Recreation Department to update the 1995 Parks and Recreation Master Plan, with specific focus on:

- Defining a comprehensive, Citywide recreational trails system.
- Establishing trail classifications, design standards and performance criteria.
- Defining level-of-service standards for parkland.
- Identifying where new parks will be needed.

This Parks and Trails Master Plan defines level-of-service standards, defines different types of parks and trails, and identifies new parks and trails to provide a balanced system of conveniently located parks, interconnected urban trails, and land for multi-purpose recreational facilities. The document is intended to be complementary to the City of Greeley Comprehensive Leisure Assessment, March 22, 2001, prepared by Barker Rinker Seacat (BRS).

Chapter Two – Existing Resources

This chapter documents the parks, trails and natural areas currently owned and maintained by the City of Greeley. Privately-owned parks and recreational facilities are not included, nor are indoor facilities or fields that may be available for public use at Aims Community College, University of Northern Colorado (UNC) or at the numerous schools in the City. Currently, Aims has a large turf area on the west side of the main campus that is used by recreation leagues for various field sports. The site provides 2 junior soccer fields, however these are available on an annually negotiated basis. UNC provides recreational open space for its students, but the larger City population does not have access. Schools provide primarily play equipment and outdoor basketball, but they also have 4 school sites and up to 6 non-regulation fields that are used for practice only. Because of the limited availability of these facilities to the general public, they are considered supplementary to the facilities that the City provides and are not included in the City inventory.

Map 1, Existing Parks and Trails, shows the location of the City facilities and lands.

Existing City Parks

Greeley has a total of 590 developed acres of parkland. Of this, 24 sites (197 acres) are neighborhood parks, 3 sites (105 acres) are community parks, 5 sites (136 acres) are sports complexes, 1 site (3 acres) is a dog park and 1 site (149 acres) is Island Grove Regional Park. The City has a total of 43 acres of undeveloped parkland at 2 sites, both of which are neighborhood parks. Table 2.1 lists the City's inventory of parkland. Also listed are the City's 4 natural areas, which total 151 acres.



Lincoln Park

Table 2.1, Existing Parks Inventory

Park Name	Address	Acres	Softball/ Baseball Field	Soccer/ Football Field	Tennis Court	Play Courts	Play- ground	Shelter	Rest- room
Neighborhood and Mini-Parks – Developed									
Allen	49 th Ave./9 th Street	11	0	0	0	0	Yes	0	No
Anna Gimmetad Memorial Park	19 th Ave. /31 st Street	7	0	0	0	0	Yes	1	Yes
Brentwood	25 th Ave. /26 th Street	5	0	0	0	0	Yes	0	No
Broadview	28 th Ave./6 th Street	6	1SB, NL	2	0	0	Yes	1, E	Yes
Cottonwood	26 th Ave./19 th Street	8	0	0	0	0	No	0	No
Delta	1 st Ave./24 th Street	6	0	0	0	2	No	0	No
East Memorial	2100 Balsam Avenue	13	2	0	0	2, L	Yes	3	Yes
Epple	43 rd Ave./4 th Street	7	0	0	0	Disc Golf	No	0	No
Farr	15 th Ave./26 th Street	6	1 SB, NL	0	2, L	1	Yes	1, E	Yes
Franklin	31 st Ave./6 th Street	4	0	0	0	0	No	0	No
Glenmere	14 th Ave./19 th Street	14	0	0	0	0	Yes	1, E	Yes
Josephine Jones	2631 52 nd Ave. Court	37	0	0	0	0	Yes	2	Yes
Kiwanis	14 th Ave./6 th & 7 th St.	1	0	0	0	1	Yes	0	No
Leavy	33 rd Ave./22 nd Street	5	0	0	0	0	Yes	0	No
Lincoln	10 th Ave./9 th Street	5	0	0	0	0	Yes	1, E	No
Luther	21 st Ave./10 th Street	10	0	0	0	0	Yes	2, NE	Yes
Peak View Park	13 th St. Rd /51 st Ave	11	1	0	0	1	Yes	1	Yes

Table 2.1, continued

Park Name	Address	Acres	Softball/ Baseball Field	Soccer/ Football Field	Tennis Court	Play Courts	Play- ground	Shelter	Rest- room
Pheasant Run	47 th Ave./4 th Street	8	1 SB, NL	2	0	0	Yes	1, E	Yes
Rodarte	910 A Street	5	1 SB, NL	0	0	1, L	Yes	1	No
Sherwood	29 th Ave./13 th Street	8	1 SB, NL	2	2, L	1	Yes	1, E	Yes
Sunrise	4 th Ave./11 th Street	5	0	0	0	2	Yes	1, E	Yes
Westmoor	39 th Ave./6 th Street	3	0	0	0	0	Yes	1, NE	Yes
Woodbriar	29 th Ave./19 th Street	6	0	0	0	0	Yes	1, E	Yes
Subtotal		191	8	6	4	11	20	19	NA
Neighborhood and Mini-Parks – Undeveloped									
Greeley West Park	35 th Ave./24 th Street	37							
Weber West	50 th Ave./B Street (to be developed in 2002)	6							
Total Developed & Undeveloped Neighborhood & Mini-Parkland		234	8	6	4	11	20	19	NA
Community Parks – Developed									
Bittersweet	35 th Ave./13 th Street	53	0	2	0	1	Yes (2)	2, E	Yes
Centennial	23 rd Ave./22 nd Street	18	1BB, L	0	6L, 6 NL	0	No	2, NE	Yes
Sanborn	28 th Ave./20 th Street	34	0	2	0	0	Yes	1	Yes
Subtotal		105	1	4	12	1	3	5	NA
Sports Complexes									
Forbes Fields	23 rd Ave./8 th Street	8	1BB, L	0	0	1-bmx	No	0	Yes
Youth Sports Complex	63 rd Ave./20 th Street	72	8BB/SB, L	0	0	0	No	0	Yes
Monfort Park		39	0	9	0	1-inline	No	1	Yes
East Memorial Phase Sport Complex	2400 Balsam Avenue	15	1	4	0	0	No	1	Yes
Greeley West Field	35 th Ave./24 th Street	2	1SB, L	0	0	0	No	0	No
Subtotal		136	11	13	0	2	0	2	NA
Community Parks – Undeveloped									
None									
Total Developed & Undeveloped Community Parkland (Includes Sports Complexes)		241	12	17	12	3	3	7	NA
Special Use Parks									
Rover Run Park		3							No
Subtotal		3							NA
Regional Parks									
Island Grove	14 th Ave./A Street	149*	5SB, L	0	0	2	Yes	2	Yes
Subtotal		149	5	0	0	2	1	2	
Natural Areas									
Hunters Cove West Natural Area		27	0	0	0	0		0	No
East Memorial Natural Area		12	0	0	0	0		0	No
Poudre River Park		100							No

Table 2.1, continued

Park Name	Address	Acres	Softball/ Baseball Field	Soccer/ Football Field	Tennis Court	Play Courts	Play- ground	Shelter	Rest- room
Country Club West		12	0	0	0	0		0	No
Subtotal		151	0	0	0	0			
Total		784	25	23	16	16	24	28	NA

Notes

All acreages include water bodies.

L = Lighted, NL = Not Lighted; E = Electricity, NE – No Electricity.

* Island Grove Park has approximately 18 acres that serve the City like a community park. This acreage is included in the totals in Table 3.3.

Table 2.1 also lists the specific recreational facilities that are located within each park. A needs assessment for recreational facilities was conducted during the spring of 2001 by Barker Rinker Seacat (City of Greeley Comprehensive Leisure Assessment, March 2001). How the need for recreational facilities translates into the need for parkland is discussed in Chapter 3.

Existing Trails



The City currently has approximately 18.7 miles of primary, multi-purpose trails. These trails are paved, typically 8 to 10 feet wide, and are intended to accommodate a variety of uses including biking, walking, jogging and in-line skating. The majority of the existing trail system (14.4 miles) is adjacent to roadways as they were constructed as a retrofit to the existing development pattern, which did not provide for separate trail corridors. The exception to this is the Poudre River Trail system. The Poudre River Trail is part of a larger regional system that is planned to link to Windsor and, eventually, Fort Collins. The Poudre River Trail, being cooperatively developed by Greeley, Windsor and Weld County, is approximately 20 miles in length. The trail corridor varies from 25 to 50 feet in width with a 10-foot concrete trail surface.

Approximately 4.3 miles of this system have been constructed within the Urban Growth Area (UGA): 3.3 miles between 71st Avenue and 95th Avenue, and 1 mile at the north and east edges of Island Grove Park. A 6.5-mile gap exists between these two segments. Several miles of trail have been constructed west of the UGA connecting to Windsor.

Existing Natural Areas

Although this plan does not specifically address open space and natural areas, these lands are a critical part of developing a community-wide trails system. The 4 areas currently in the City’s inventory are listed in Table 2.1.



Sheep Draw

Chapter Three – Issues And Needs

Population and Demographic Characteristics

In 2000, the City of Greeley had a population of 76,930¹. In the previous 10 years, the City experienced a 27.1% increase in population, which is slightly lower than the statewide rate of 30.6% and significantly higher than the USA rate of 13.1%. According to the City Planning Department, the City's population is expected to increase by almost 16,000 by 2010 (20.7%) and 35,000 by 2020 (45.0%), resulting in a population of 92,839 and 111,580, respectively. This large increase in population over the next 20 years means that the City must be proactively planning for new parks, trails and recreational facilities to meet the needs of new residents in addition to the needs of existing residents.

Currently, the average household has 2.63 people, which is slightly higher than the state average of 2.53 and lower than the Weld County average of 2.78. This number is important when applying level-of-service standards for parkland, discussed later in this chapter.



Pheasant Run Park

The ethnic makeup of the community is predominantly white, comprising 82.9% of the population. A significant number of people (29.5%) are of Latino or Hispanic descent, with 21.2% claiming Mexico as their country of origin. The cultural diversity of the community should be acknowledged when planning for specific facilities in parks so that people of all cultures have the opportunity to enjoy the outdoors, individually or as part of a larger family or social group.

Age distribution in Greeley is similar to the age distribution within the state.

Approximately 31.9% of the population is under age 20, with 14.2% (10,897 people) age 5 to 14 – the predominant age of children who are most active in programmed recreational sports leagues. Of course, people of all ages use city parks, trails and recreational facilities. Recent trends are that many young adults are participating in recreational team sports activities into their 20's and 30's as well. The reason that this is significant is that sports fields (e.g., baseball, softball, soccer, football, lacrosse) take the largest amount of space in parks, and communities need to plan adequately for these demands. The relationship between facility needs and acreage of parkland is discussed later in this chapter. Additionally, children and adults who live outside city limits near Greeley are also potential participants and users of community facilities. The population of the greater Greeley service area has not been officially determined. Ten percent of the total population in Greeley is age 65 or older.

Parkland Requirements to Meet Recreational Facility Needs

According to the May 8, 2001 addendum to the March 2001 report prepared by BRS, the City of Greeley needs numerous additional outdoor recreational facilities by 2005 as listed in Table 3.1.

¹ U.S. Bureau of Census, 2000.

Table 3.1, 2005 Outdoor Recreational Facility Needs

Facility	Total Needed in 2005 ²	Recently Constructed	Net Remaining Need	Comments
Outdoor Basketball Courts	9	0	9	Some may be in parking overflow areas in Community Parks
Adult Ballfields	6	0	6	2 recommended by BRS Study plus 4 needed to replace undersized fields at Island Grove Park
Youth Ballfields	5	0	5	Unlighted
Soccer Fields	27	13	14	Various sizes needed, mini to adult
Tennis Courts	9	0	9	Group of 6 in one location for leagues and tournaments
In-Line Hockey Rinks	2	1	1	New rink at Monfort Park
Skate Park	1	0	1	Concrete bowl with various skill features

Indoor facility needs include 15 gymnasiums (mostly needed because of the lack of school gyms and lack of public access to school gyms that do exist), a large warm-water swimming pool, community rooms, an ice rink and space for seniors and teens. These types of elements are often combined into one location (Ice/Leisure Destination Center), as recommended by the BRS Study. A future community park in the western portion of the City should be planned to include such a center, which typically will require at least 15 acres for the building and parking.

The 11 ballfields and 14 soccer fields that are needed require the largest amount of parkland, with the ballfields needing approximately 25 to 30 acres with parking, and the soccer fields needing approximately 50 to 60 acres with parking. Adding 2 acres for tennis, 1 acre for an in-line rink and skate park, and 3 acres for basketball courts equates to approximately 80 to 95 acres if developed specifically as a sports complex, with no additional buffering or community use areas. The indoor facilities may take an additional 15 acres, for a total of approximately 95 to 110 acres of level, developable property needed to accommodate active recreation facilities.

If these facilities are placed within a larger community park setting, the need will be about 190 to 220 acres (or approximately twice the acreage) based on designs that balance active programmed sports uses with other community facilities, such as amphitheaters, sculpture parks, free play meadows, water features and festival spaces. Some of the court facilities, such as tennis courts and basketball courts, may be placed in neighborhood parks as well.

This analysis is not meant to imply that all of the facilities should be constructed in one location, but rather what their impact is collectively on the need for parkland.

Existing and Future Parkland Needs

Neighborhood Parkland. Currently the level of service for Neighborhood Parks in Greeley is 2.5 acres/1,000 population based on 191 acres of parks and 76,930 people. This is higher than the current adopted standard of 2 acres/1,000 population. This plan recommends that the City adopt a standard of 2.5 acres/1,000 population, which is closer to the existing level of service and provides enough parkland in a neighborhood to develop larger turf areas for sports

² Barker Rinker Seacat, City of Greeley Comprehensive Leisure Assessment, March 22, 2001

practices and open space for unprogrammed, passive uses. This recommendation is discussed further in the next chapter. Table 3.2 calculates the Neighborhood Parkland need for 2000, 2010 and 2020 based on current and recommended standards.



Table 3.2, Neighborhood Parkland Need

	Current Standard 2 ac/1,000 pop.	Recommended Standard 2.5 ac/1,000 pop.
Year 2000		
Estimated Population	76,930*	76,930*
Existing Developed Neighborhood Parkland	191 Acres	191 Acres
Parkland Need According to Standard	153 Acres	192 Acres
Surplus/Shortage	+ 48 Acres**	+ 1 Acre**
Year 2010		
Estimated Population	92,839***	92,839***
Existing Developed Neighborhood Parkland	191 Acres	191 Acres
Parkland Need According to Standard	186 Acres	232 Acres
Surplus/Shortage	+ 15 Acres	- 41 Acres
Year 2020		
Estimated Population	111,580***	111,580***
Existing Developed Neighborhood Parkland	191 Acres	191 Acres
Parkland Need According to Standard	223 Acres	279 Acres
Surplus/Shortage	- 32 Acres	- 88 Acres
<p><i>**Although standards are currently met as applied to the whole City, several neighborhoods in the western area of the City are not served by neighborhood parks.</i></p> <p><i>Undeveloped neighborhood parkland currently owned by the City is 43 acres.</i></p>		

* U.S. Bureau of Census

*** City of Greeley Planning Department

Based on 2.5 acres/1,000 population, each square mile that has approximately 1,500 to 1,900 residential units (4,000 to 5,000 population) will need a 10 to 12-acre neighborhood park. Areas with less density, such as those with 750 to 1,000 residential units (2,000 to 3,000 population), will need a 5 to 8-acre park. Between now and 2010, that translates into 4 to 6 new neighborhood parks, and by 2020, a total of 9 to 12 new parks, depending upon how the City develops. The City currently owns 2 neighborhood parks sites: Weber West, which is 6 acres and planned for development in 2002, and Greeley West, which is 37 acres. The Greeley West Park site is larger than what is needed for a neighborhood park and much of it should be left in a naturalized condition. The remainder of the parkland will need to be acquired.

Community Parkland. Currently, the level of service for Community Parks in Greeley is 3.4 acres/1,000 population based on 259 acres of parks and 76,930 people. This standard is achieved by including sports complexes, which are a component of the community park system, and 15 acres of Island Grove Park, which are used like a community park. The current level of

service is significantly lower than the adopted standard of 6 acres/1,000 population. This plan recommends that the City adopt a standard of 5 acres/1,000 population, which is closer to standards that have been adopted in other Front Range communities³ while still being adequate to meet the needs for active recreational sports facilities and other programmed and unprogrammed community activities. This recommendation is discussed further in the next chapter. Table 3.3 calculates the Community Parkland need for 2000, 2010 and 2020 based on current and recommended standards.

Table 3.3, Community Parkland Need

	Current Standard 6 ac/1,000 pop.	Recommended Standard 5 ac/1,000 pop.
Year 2000		
Estimated Population	76,930*	76,930*
Existing Developed Community Parkland	259 Acres***	256 Acres***
Parkland Need According to Standard	462 Acres	385 Acres
Surplus/Shortage	- 203 Acres	- 126 Acres
Year 2010		
Estimated Population	92,839**	92,839**
Existing Developed Community Parkland	259 Acres***	259 Acres***
Parkland Need According to Standard	557 Acres	464 Acres
Surplus/Shortage	- 298 Acres	- 205 Acres
Year 2020		
Estimated Population	111,580**	111,580**
Existing Developed Community Parkland	259 Acres***	259 Acres***
Parkland Need According to Standard	669 Acres	558 Acres
Surplus/Shortage	- 410 Acres	- 299 Acres
<i>Undeveloped community park area currently owned by the City is 0 acres</i>		

* U.S. Bureau of Census.

** City of Greeley Planning Department.

*** Includes sports complexes (136 acres) and developed community parks (71 acres), as well as 18 acres of Island Grove Park that serves community park needs.

Based on 5 acres/1,000 population, Greeley will need to acquire and develop approximately 200 acres by 2010 and a total of 300 acres by 2020. This is similar to the analysis of parkland need that was discussed in the previous section of approximately 200 acres by 2005 based on constructing active recreational sports facilities in community parks. This parkland need can be translated into the need for acquisition and construction of 2 to 3 new community parks by 2010, and a total of 3 to 4 by 2020.

Parkland Distribution

Another way to analyze how residents are being served by parks is to map their distribution relative to residential areas. Neighborhood parks are intended to serve residents within walking distance and, as such, have a ½-mile service radius. Also, residents should not need to cross major arterial roadways or other linear barriers, such as railroads, ditches and drainages that do not have provisions for safe, comfortable pedestrian crossings. Map 2, Neighborhood Park Distribution Analysis, shows each neighborhood park and its service area, excluding areas that have major barriers between them and the park.

³ EDAW Inc. database of Front Range Communities, 2000

Residential land uses that are not covered by a service area are indicated on Map 2. A large area without access to a neighborhood park is located east of the UNC West Campus. This area is home to predominantly students and is considered to be served by the open space and facilities provided by the campus. Other underserved areas are further west and east of the existing city, one of which is between 35th and 47th Avenues. The area south of 20th will be served when Greeley West Park is developed. The area north of 20th has no land for another park, but could benefit from enhanced access via a dedicated trail system to Greeley West Park or Bittersweet Park. The area west of Highland Hills Golf Course was developed in the county and parks were not planned with development. New residential developments are quickly growing to the west of the existing city and will soon need neighborhood parks. Small areas of underserved residential development exist east of US85. As additional development occurs in this region, new parks should be developed.

Community parks are used by the larger community and typically include some intensively programmed sports facilities. Although some will walk, many people will ride bikes or buses or drive vehicles to these parks. Distribution through the community is desirable to reduce vehicle miles and to provide every part of the community with equitable access to larger parks and passive open space. Therefore, the service radius for community parks is 1 mile, or 1 community park for every 4 square miles. Map 3, Community Park Distribution Analysis, shows each community park and its service area. The southeast portion of Island Grove Park is considered to serve community park needs in that part of the City, so a service radius has been shown around that area. Sports complexes that do not have all the components of a balanced community park are not included; they are specialized, draw people from all over the City to participate in leagues, and are not considered to serve surrounding residential areas. Only Monfort Park, a sports complex, is shown with a service radius because it is open year-round and has picnic shelters and an in-line rink. However it does need more amenities, like access to a playground and some passive use areas, to better serve nearby residents.

Clearly, additional community parks are needed in the eastern and western portions of the City, especially as these areas continue to grow.

Trail Needs

Time and again when Colorado residents are surveyed, the most frequent activities in city parks, trails and open space systems are walking, nature observation, bicycling, picnicking and jogging.⁴ For example in Arvada, 80% of residents surveyed walked/hiked on a trail system, 79% observed nature or walked in an open space area, and 66% bicycled on a trail system. Comparatively, 20 to 25% of residents played soccer, golf, softball, outdoor basketball or tennis. Colorado Springs and Fort Collins' survey results show similar trends.

Nationally, the activities with the highest participation numbers are very similar, as shown in Table 3.4, Total National Participants by Activity – All Ages.

⁴ EDAW, Inc.

Table 3.4 Total National Participants by Activity – All Ages

Activity	1999 Participants (in 1,000's)
Recreational Walking	84,096
Recreational Bicycling	56,227
Fishing	54,320
Basketball	39,368
Day Hiking	39,235
Fitness Walking	35,976
Running/Jogging	34,047
Golf	28,216
In-Line Skating	27,865
Volleyball	24,176
Softball	19,766
Football	18,717
Soccer	17,582
Horseback Riding	16,906
Tennis	16,817
Roller Skating (4 wheel)	12,404
Baseball	12,069
Mountain Biking	7,849
Skateboarding	7,807
Archery	6,937
Artificial Wall Climbing	4,817
BMX Bicycling	3,730

Sports Participation Trends 1999, American Sports Data, Inc. for SGMA, January 2000

Multi-purpose, off-street trails accommodate many of these most popular activities with a common facility: a hardened surface trail within an open space corridor. A more narrow, soft-surface trail may also be desirable within the corridor to accommodate joggers, equestrians and other users who prefer a slower-paced walking experience. Trails are an economical way to provide for recreational needs for a large number of residents.

Off-street, multi-purpose trails are the preferred method to provide for trail users' needs. The most desirable trail experience is one that is in an open space corridor or area, separated from roadways, where the user can enjoy the natural environment. A paved, 8 to 10-foot wide surface allows for many types of users, including bicyclists, walkers, joggers and in-line skaters.

Communities vary widely in the availability of recreational trails for their residents, ranging from 24 miles in Fort Collins, to 40 miles in Westminster and 48 miles in Boulder. Greeley currently provides a total of 18.7 miles of off-street trail: 4.3 miles of trail within its Urban Growth Area (UGA) that is in a dedicated trail corridor along the Poudre River, and 14.4 miles of trail that is off-street, but parallel and in close proximity to arterial roadways. The arterial roadway trails do not have a dedicated trail corridor, but instead are primarily widened sidewalks that also accommodate bicyclists. The City also has participated in constructing the Poudre River Trail further west towards Windsor, which is a very important regional link.

Considering the trails that have been constructed within the UGA of the City, the current level of service, including those in dedicated trail corridors and those parallel to roadways, is .24 miles/1,000 population.⁵ The average amount of trails for surveyed Front Range

⁵ Based on 18.7 miles of trail and 76,930 population in 2000.

communities is .21 miles/1,000 population.⁶ It is not entirely fair to compare levels of service standards (e.g., miles/population) between communities because the recreational value of a trail along a roadway is different than the value of a trail within a dedicated open space trail corridor. Also, many communities are aggressively working to expand their trails systems, acknowledging there are community needs that are currently not being met. The result is a Front Range average that is too low.

Another way to analyze the data is to look only at those communities that have what is perceived to be adequate trails systems. Arguably, the City of Westminster has come the farthest of the surveyed communities in developing trails, and provides a level of service of approximately .4 miles/1,000 population. This level is not unreasonable to assume as an appropriate goal for the City of Greeley. These comparisons should be used carefully, but not in isolation, to determine how many miles of trails a community should have. A trail system plan must be matched with the overall land use planning and development regulations of a community to result in a system that meets the goals and physical opportunities within the community.

In Greeley, there are opportunities for providing trails in newly developing areas. These trails can link parks, recreational facilities and other destinations through open space areas that follow natural drainages, canals and other linear features. Planning for new developments should include these connections, adding value to the development and the community as a whole.

Trail connections in the existing developed part of the City are more challenging. The opportunity for dedicated trail corridors are minimal, with most connections requiring renovation to existing road rights-of-way. One major need is to connect the large student population at UNC with the downtown, and the central City population with the rest of the City trail system. An opportunity exists through the older portion of the City via the No. 3 ditch that traverses the area from northwest to southeast. This trail opportunity and others are discussed in more detail in the next chapter.

⁶ Average includes 7 cities: Boulder, Colorado Springs, Fort Collins, Lakewood, Pueblo, Westminster and Arvada. EDAW Inc. database of Front Range Communities, 2000.

Chapter Four – Recommendations of the Master Plan

Trail Classifications and Design Standards

This plan addresses trails that are primarily recreational in nature, versus bike transportation corridors that are part of the higher speed, on-street bike lane system. Recreational trails may link to schools, public parks, recreational facilities and open space areas, to other neighborhoods, or to work or shopping destinations. The trail classifications and design standards presented in this section have been developed with consideration of information provided in “Planning Trails with Wildlife in Mind –A Handbook for Trail Planners.”⁷

The construction of a trail invariably results in some ecological impact. Whether it is vegetation that is removed in the process of building a trail or the creation of new ecological conditions prompting a shift in the composition of wildlife and plant species, biological diversity is impacted. Disturbance along a trail can also cause some wildlife species to abandon their nests, decline parental care, shorten feeding times and/or move away permanently. It is therefore imperative that trail corridors be designed from a regional perspective in an effort to balance the needs of the landscape and wildlife with that of recreational users.

With these thoughts in mind, the following design considerations are recommended:

- Minimize the zone of influence by reducing the width of the trail to the extent that a balance is achieved between the development of a multi-use trail system and the preservation of wildlife habitat.
- Align a trail along or near an existing human-created ecological edge rather than bisecting undisturbed areas or large areas of wildlife habitat to minimize habitat fragmentation.
- Primary trails should be located within a greenway or minimum 50-foot easement, to provide a scenic environment and provide adequate room for both a paved and non-paved trail where appropriate.
- Restrict the density of trails within and near high quality wildlife habitat areas.
- Select degraded areas with potential for restoration.
- All graded slopes should be revegetated and measures taken to control storm drainage, weed invasion and erosion.
- Locate trails, where feasible, in scenic locations, but not within or immediately adjacent to sensitive vegetation or significant wildlife habitat.
- Provide an adequate buffer, up to 100 feet, between trail development and wetland areas where feasible.
- Revegetate upland areas disturbed by trail development, as appropriate, for continuity with the surrounding natural vegetation communities.

⁷ Colorado State Parks, September 1998.

- Minimize cut and fill slopes adjacent to the trail.

Greeley’s existing trail system could benefit from increased connectivity and improved access, where feasible. The following is a description of the two community trail types in Greeley with their respective design standards. All trails shall be designed and constructed to current ADA standards and City of Greeley construction specifications.

Primary Multi-Purpose, Off-Street Trails. Paved Multi-Purpose, Off-Street Trails form the major trail spines through the City. They should accommodate a variety of trail users, including walkers, joggers, recreational bikers and sometimes, commute bikers within the same trail corridor. The preferable location of these trails should be along drainageways or other linear features, connecting parks, open space areas, recreational facilities and major destination nodes. Environmentally sensitive areas should be avoided. Primary Trails that must be located adjacent to roadways should incorporate a 50-foot easement where feasible and appropriate. A 3-foot wide, soft surface shoulder on one side of the trail should be provided for joggers and walkers who prefer a softer surface. Figure 4.1 illustrates the cross-section of a Primary Multi-Purpose, Off-Street Trail and includes trail widths, trail shoulders and clearance requirements. Table 4.1 lists the specific design standards for Primary and Secondary Trails.

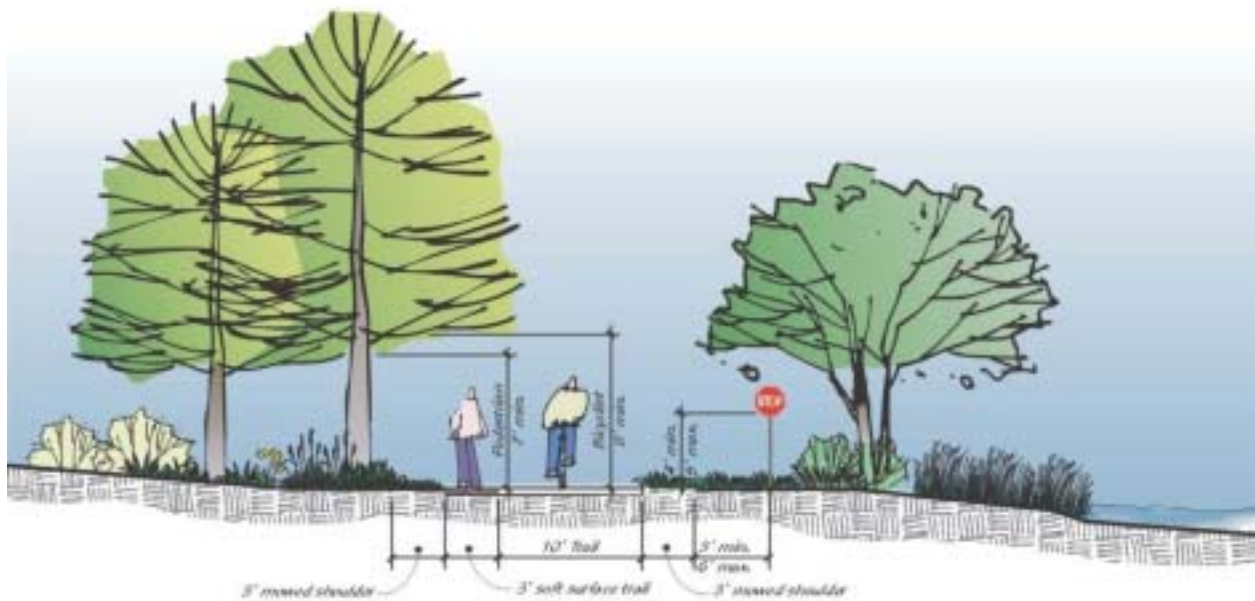


Figure 4.1. Primary Multi-Purpose Off-Street Trail Cross-Section

Table 4.1, Trail Design Standards

	Primary Multi-Purpose Off-Street Trails	Secondary Multi-Purpose Off-Street Trails
Definition	Trails for walking, jogging, skating, bicycling and other non-motorized uses that are part of the City of Greeley Primary Trail System, and that are constructed and maintained as part of the City's recreational facilities.	Trails for walking, jogging, skating, bicycling and other non-motorized uses that provide connections to the primary trail system, or to attractions, employment areas, shopping and services and between neighborhoods. These trails shall be privately owned and maintained and required as part of the City development process.
Right-of-Way	50 feet minimum width, designed as naturalized open space or parkland as determined by the City.	30 feet minimum width designed as naturalized open space or parkland as determined by the City
Trail Width	10 feet	8 feet.
Trail Surface	Concrete. No openings greater than ½ inch per ADA.	Concrete. No openings greater than ½ inch per ADA.
Parallel Trail Width	3 feet if present.	NA
Parallel Trail Surface	Crushed gravel if not used by equestrians. Natural surface if used by equestrians.	NA
Sight Distance	130 feet minimum. If unattainable, provide adequate signage.	90 feet minimum. If unattainable, provide adequate signage.
Grades	5% maximum preferred. In special circumstances, up to 8.33% may be allowed, not to exceed 200 feet in length.	5% maximum preferred. In special circumstances, up to 8.33% may be allowed, not to exceed 200 feet in length.
Cross Slope	1-2 % typical. 3% maximum.	1-2 % typical. 3% maximum.
Vertical Clearance	12 feet preferable, 10 feet minimum.	12 feet preferable, 10 feet minimum.
Shoulders	3 feet mowed and clear of hazards on each side of trail. Design for pruning and occasional mowing for 10 feet on each side of trail.	3 feet zone, clear of hazards either side.
Trail Centerline Radius	40 feet minimum at tight corners and switchbacks. 100 feet minimum elsewhere. Adequate signage where radius is shorter.	30 feet minimum at tight corners and switchbacks. 100 feet minimum elsewhere. Adequate signage where radius is shorter.
Radius at Intersections of Trails	15 feet to accommodate maintenance vehicles. 8 feet where vehicles are not anticipated.	8 feet minimum.
Separation from Roadway	20 feet minimum where feasible.	8 feet minimum where feasible.
Striping	4 inch wide, dashed white center lane striping. Yellow solid line where site distances prohibit safe passing.	None
Underpass width	12 feet minimum. 14 feet preferable.	10 feet minimum. 12 feet preferable.
Bridges	10 feet minimum.	8 feet minimum.
Guardrails	Guardrails or fencing along steep drops within 5 feet of trail.	Guardrails or fencing along steep drops within 5 feet of trail.
Trail Markings and Signage	As needed for safety, regulations and as desired for interpretation and wayfinding. Designs to meet <i>Manual of Uniform Traffic Control Devices (MUTCD)</i> standards and as recommended in <i>AASHTO Guide for the Development of Bicycle Facilities, 1999</i> .	As needed for safety, regulations and desired for interpretation and wayfinding. Designs to meet <i>Manual of Uniform Traffic Control Devices (MUTCD)</i> standards and as recommended in <i>AASHTO Guide for the Development of Bicycle Facilities, 1999</i> .
Amenities	Restrooms and drinking fountains/water jug fillers at strategic trailheads and as provided by nearby commercial uses. Benches, approximately 2 per mile. Trail markers, every 0.1 mile. Picnic tables as appropriate.	As appropriate.

Secondary Multi-Purpose, Off-Street Trails. Secondary Trail links should be provided through development areas to the Primary Trail system, as well as to parks and open space areas that are not on the Primary System. These Paved Multi-Purpose, Off-Street Trails should be provided by the project developer and be an integral part of the circulation and open space system of the development. Like Primary Trails, the Secondary Trails should be located in an open space corridor and accommodate a variety of trail users, including walkers, joggers and bicyclists. Primary Trails that must be located adjacent to roadways should incorporate a 30-foot easement where feasible and appropriate. Table 4.1 lists specific design requirements.

Proposed Trails

This plan recommends acquisition of the right-of-way and construction of trails throughout the community and Urban Growth Area (UGA). Map 4, Master Plan, shows the location of existing and proposed Primary Multi-Purpose, Off-Street Trails. Locations shown are conceptual but illustrate the intent to locate new trails in open space corridors, away from arterial road systems wherever possible. This system consists of approximately 68 miles of new trails. Trails along the Poudre River and Sheep Draw to US34 are considered high priority, as they will form major trail spines in the community through currently developing areas. Table 4.2 summarizes the quantity of trails shown on the Master Plan map. Connections to Loveland, Windsor, Johnstown, Milliken and Evans are also shown, primarily along irrigation canals or drainages. These trails should be coordinated with the adjacent municipalities to ensure that complete connections can be made.

Through the existing developed City, new trail corridors are challenging to find. As mentioned earlier, a connection should be made between UNC and the downtown. The City Public Works Department has explored options to create a trail connection within the existing roadway on 9th Avenue between the campus and Lincoln Park. This facility would be a combination commuter and recreational facility for bicycles as well as for pedestrians and skaters, but would not have an associated open space corridor.

An opportunity also exists diagonally through the City along the No. 3 ditch. This irrigation ditch physically occupies almost all of the right-of-way and winds through the older part of the City, primarily behind residential land uses. Currently, there is not enough room to construct a parallel trail, so the ditch surface would need to be covered to allow for use as a trail corridor. This project would be extremely beneficial in connecting the downtown area to the rest of the City trail system, but it will be expensive and a challenge to implement. This plan recommends exploring the feasibility of such a trail and perhaps developing a long-range plan for converting this corridor to multi-purpose trail use, much like Reservoir Road was done for vehicles years ago.

Table 4.2, Trail System Summary

Trail Segments	Length
Existing Poudre River Trails	4.3 miles
Existing City Trails	14.4 miles
Total Existing Trails	18.7 miles
Proposed Poudre River Between Island Grove and Windsor Connection	6.5 miles
Proposed Sheep Draw to US34	4.1 miles
Subtotal Highest Priority Proposed Trails	10.6 miles
Remainder of Proposed Trail System	57.4 miles
Total Proposed Trails	68.0 miles
Total City Trail System	86.7 miles

It is not feasible for the City to envision constructing all 68 miles of the trail system in the next 20 years, but it is reasonable to assume that it may be able to reserve all the trail corridors and construct at least half of the system (34 miles). If accomplished, the City would then provide a level of service of .47 miles of trails per 1,000 population.

Park Classifications and Standards

The following park classifications and standards are proposed for Greeley.

Table 4.3, Park Classifications and Standards

Classification	Desirable Acreage	Purpose/Function	Site Characteristics	Level-of-Service Standard
Community Park	30-120 acres	Provides opportunities for community-wide activities and facilities. Should maintain a balance between programmed sports facilities and other community activity areas, such as urban forests, gardens, water features, performance areas, festival spaces, plazas, etc., and have features that appeal to the broader community. Sports complexes should not be considered community parks. Community parks should generally be located to provide all residents access to a community park within 1 mile of their home. Community parks may also serve as the local neighborhood park for residential areas within ½ mile.	Portions of the site should be relatively flat to accommodate fields and facility development. Special site features, such as streams, lakes, forests, rock outcrops, historic or archaeological sites and other interesting elements may add to the unique character of the park. Ideally, will have good access from a collector or arterial street. Direct access to regional trail system desirable.	5 acres / 1,000 pop.
Neighborhood Park	6-15 acres typically, however some are larger due to natural features	Provides nearby recreation and leisure opportunities within walking distance (½ mile) of residential areas. Should serve as a common area for neighbors of all ages to gather, socialize and play. Typically may include a paved, multi-purpose area for court games/in-line skating or two tennis courts, a multi-purpose play field with backstop, play equipment, ADA	Locate adjacent to elementary or junior high schools when possible. Centrally locate within area served. Accessible via walkway or urban trail.	2.5 acres / 1,000 pop.

Table 4.3, continued

Classification	Desirable Acreage	Purpose/Function	Site Characteristics	Level-of-Service Standard
		<p>accessible trails, and shaded areas for picnics and sitting within a landscaped setting that is a blend of full irrigation for active uses and xeriscape. Features such as interpretive signs, water bodies and areas of natural vegetation may also be included where appropriate. In most cases, programmed sports activities should be limited to practices. Street frontage should be along a minimum of 50% of the park's perimeter. With this, on-street parking is typically adequate, unless a rental picnic pavilion is included, or other feature that generates a large volume of automobile traffic that cannot be accommodated on the available street frontage.</p> <p>School/park facilities include many of the same neighborhood standards, except that school/parks should include game fields (preferably two), off-street parking that is situated for school and park purposes, and a playground designed for age groups not served by school playgrounds.</p>	<p>Portions of the site should be relatively flat to accommodate fields and facility development.</p>	
Mini/Pocket Parks	3 or less acres	<p>Not a park type that is typically provided by the City. May be developed by the City to serve a neighborhood, only where opportunities for a larger park site are unavailable. Typically considered to serve residents within ¼ mile of the park. Due to limited size, may only contain a few of the elements typical of a standard neighborhood park. Private pocket parks will be allowed and may be considered for a credit against required development fees.</p>	<p>Similar to those required for neighborhood parks.</p>	<p>Not applicable. Part of neighborhood park standards.</p>
Special Purpose Parks	Varies	<p>Serves a singular or very focused community need, such as a horticulture center, environmental education center, working farm, dog park, performance area, urban plaza, equestrian center and civic park.</p>	<p>Varies.</p>	<p>Not applicable.</p>
Regional Park	Varies	<p>Provides facilities and recreational amenities intended to serve City residents as well as the surrounding region. As such, regional parks typically involve partnerships involving several jurisdictions coming together to provide a service or benefit that they can't individually afford or that they can provide more economically through a partnership.</p>	<p>Portions of the site should be relatively flat to accommodate fields and facility development. Special site features, such as streams, lakes, forests, rock outcrops, historic or archaeological sites and other interesting elements may add to the unique character of the park.</p> <p>Direct access from an arterial street.</p> <p>Direct access to regional trail system</p>	<p>Not applicable, but some park acreage may be used to satisfy community park needs and therefore be calculated into the total community parkland available in the City.</p>

Table 4.3, continued

Classification	Desirable Acreage	Purpose/Function	Site Characteristics	Level-of-Service Standard
Sports Complexes	Varies	Provides opportunities for community-wide programmed and non-programmed sports, such as baseball, softball, soccer, tennis, in-line hockey, and skateboarding in higher intensity use facilities. Limited areas for passive recreation uses and other features that appeal to the broader community. Strategically located to fill service gaps for specialized sports facilities.	Majority of site should be relatively flat to accommodate sports fields. Locate away from residential areas to avoid light and noise conflicts.	Not applicable. Part of community park standard

Proposed Parks

The Master Plan (Map 4) shows the conceptual locations of future parks to correspond to areas of planned residential development within the UGA according to the City’s 2020 Comprehensive Plan⁸. The lack of designated future parks on the Master Plan map does not exclude the need to provide parks if residential development occurs in other locations, such as within the Community Separator and Strategic Development Corridor along US34. The plan allows for flexibility in the locations, numbers and timing of construction for parks, depending upon where development occurs, by applying the level of service and design standards for each park type listed in Table 4.3.

With the exception of Missile Silo Park, which remains a wonderful opportunity for a partnership between Windsor, Weld County and Greeley to create a unique regional park, only community and neighborhood parks are envisioned at this time. The development of sports complexes at the exclusion of other community-wide facilities is discouraged. Instead, Greeley should look at providing more areas, like Bittersweet Park, for the enjoyment of all residents. Sports facilities can be a component of such a park, but should not define its character. One of the community parks in the western portion of the City should be identified to include the Ice/Leisure Destination Center referenced in the BRS study. Four community parks are shown west of 65th Avenue, one near Seeley Lake and one near the eastern edge of the UGA.

Neighborhood parks are shown in approximately every square mile that is planned for future residential development. A total of 26 new neighborhood parks are shown, which represents what the City would need at complete build-out of planned residential areas. The City is not expected to grow to build-out by 2020. Instead, approximately 9 to 12 new neighborhood parks may be required within this timeframe to meet the needs of current underserved areas and the needs of 35,000 new residents. The Master Plan map should be used as a guide to acquire these sites in advance of imminent development, wherever it is to occur, and develop these sites as needed.

Estimated Costs

The cost for trail and park construction varies widely, depending upon the specific elements to be included in each park, the terrain, necessary road crossings and other physical features that require more extensive design solutions. For the purposes of assigning an order of magnitude

⁸ City of Greeley 2020 Comprehensive Plan, 2000

cost to the master plan recommendations, we have assumed costs that are in order with the costs EDAW has experienced in designing and overseeing the construction of similar facilities. Costs are in 2001 dollars and must be escalated yearly to compensate for inflation.

Neighborhood Parkland \$130,000/acre for acquisition and development
 Community Parkland.....\$140,000/acres for acquisition and development
 10' Wide Concrete Multi-Purpose Trail..... \$180,000/mile for grading and paving
 Trail Corridor Amenities and Drainage \$50,000/mile for benches, signs and culverts
 Grade-Separated Crossings.....Costs not included at this time

Table 4.4 totals the cost for parks and trails that have been recommended as part of the 2020 vision.

Table 4.4, Budgetary Master Plan Costs

	Quantity Needed by 2020	Unit Cost	Extended Cost	Comments
Neighborhood Parkland	88 acres	\$130,000	\$11.44 million	9-12 parks
Community Parkland	299 acres	\$140,000	\$41.86 million	3-4 parks
Primary Multi-Purpose, Off-Street Trail	34 miles	\$230,000	\$7.80 million	Includes 10' trail, amenities and drainage
Total			\$61.10 million	

Implementation Tools

Parks

Although the City already has a parkland fee assessed on new development, the City should consider establishing an annually adjusted parkland fee that fully covers the cost of acquiring and developing both neighborhood and community parks. However, even if the parkland fee were adjusted tomorrow, these fees cannot be used to develop parks that are needed by current residents. Therefore, the City should consider other funding mechanisms as well, such as sales tax, partnerships with the school district, sports associations or private developers, grants and lottery proceeds.

Trails

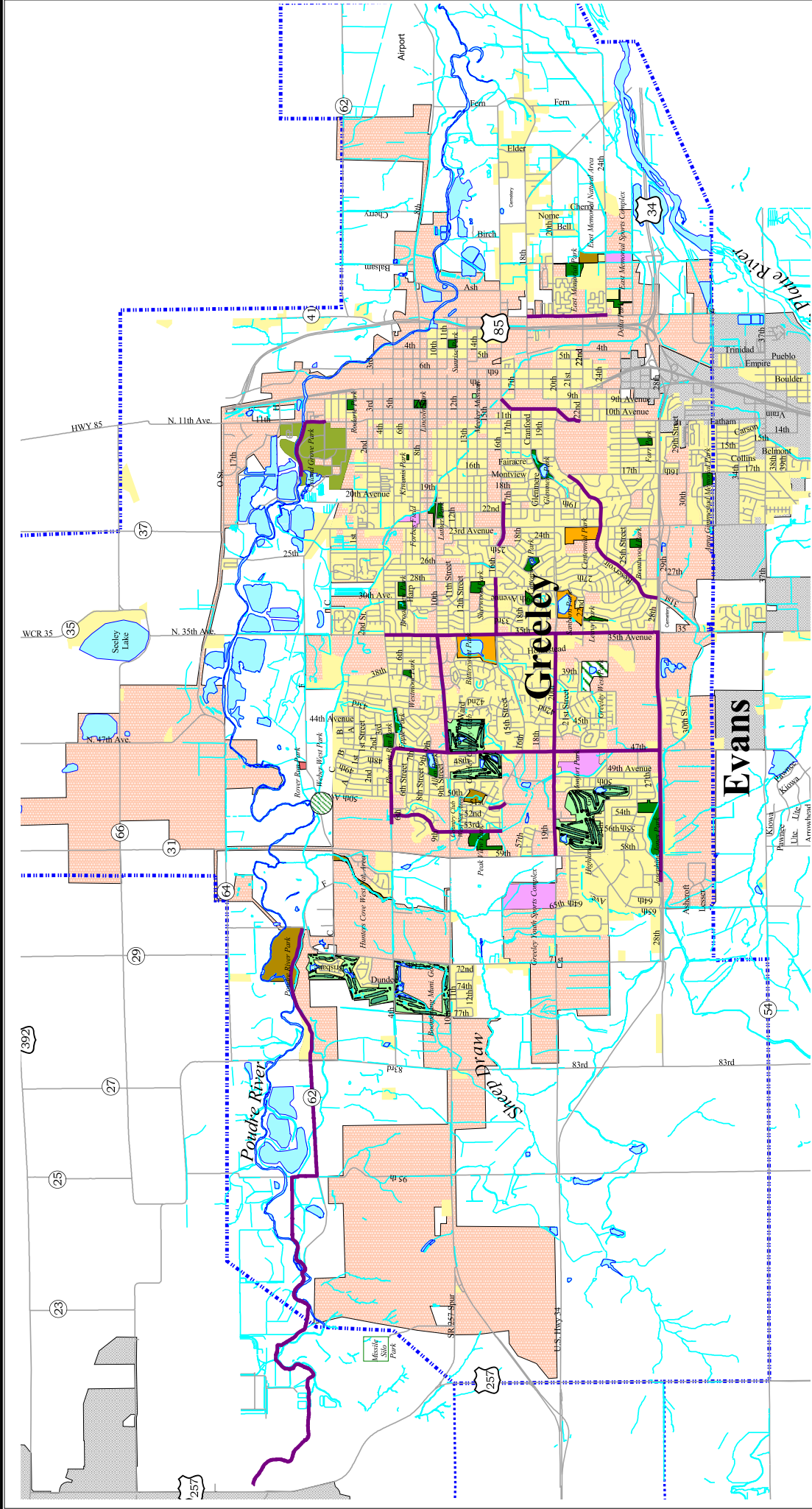
Currently, there is no dedicated funding source for trail corridor acquisition and trail construction. Many other communities dedicate their annual Colorado Lottery funds to trail corridor acquisition and trail construction projects. Greeley does not have this option because its lottery funds are encumbered for the Downtown Recreation Center until 2003, and then the funds are dedicated to the Union Colony Civic Center through 2006. After that time, these funds, which could be in excess of \$600,000 annually, will be available for other uses.

This plan recommends that the City consider modifying its subdivision ordinance to require adjacent developments to dedicate the necessary trail corridors to the City. The City may also consider implementing a trail construction development impact fee. In addition, the grants available from Go Colorado and other organizations are often substantial and may be viable sources of funding, especially for trails that provide connections to other communities. However, most of these grants require matching funds, so finding a dedicated funding source for trails in Greeley should be a goal of the City.

MAPS



Map-1 Existing Parks and Trails
January 16, 2002
0 1 Miles

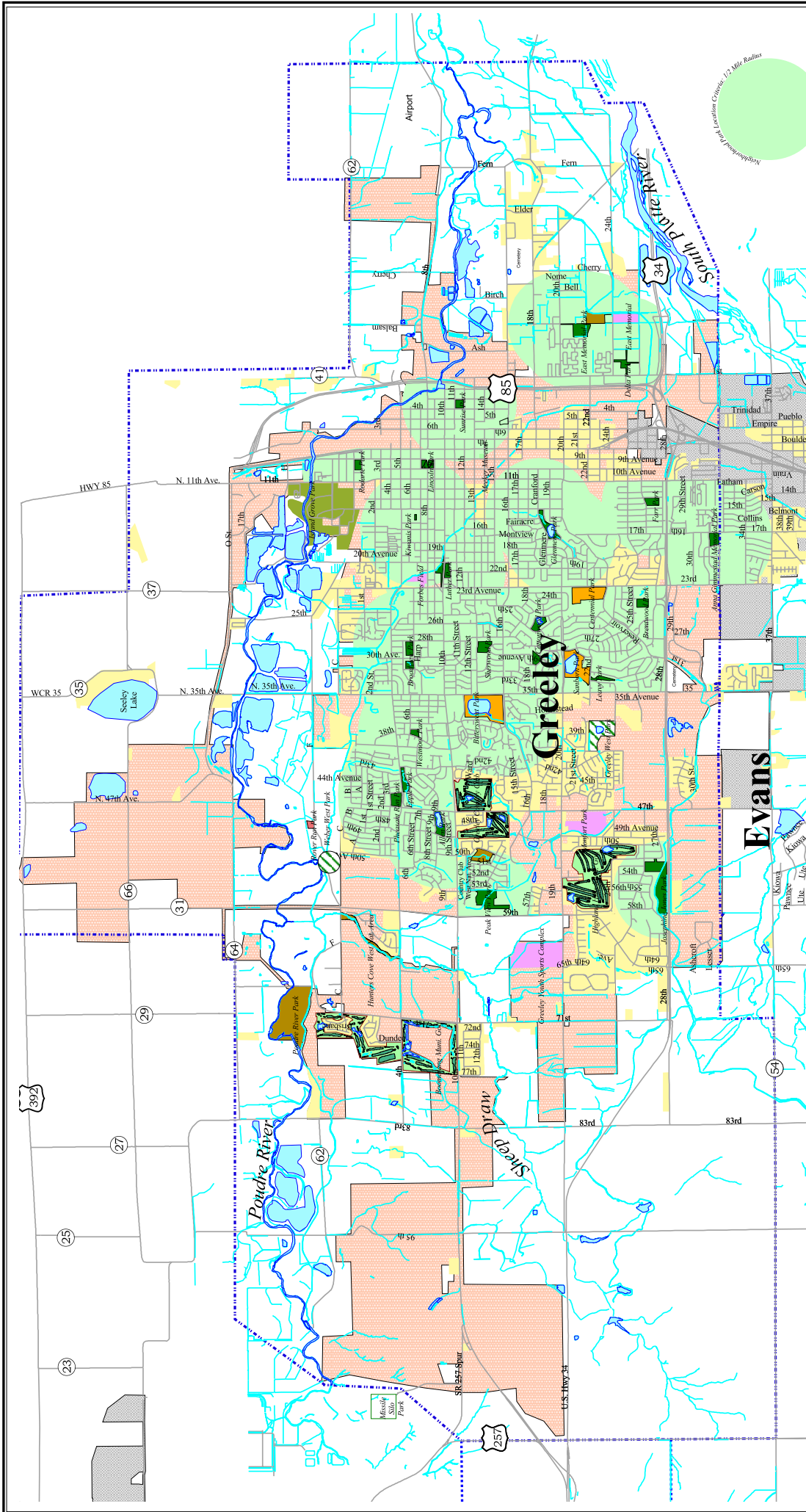


- Regional Parks
- Natural Areas
- Developed Community Parks
- Developed Neighborhood Parks
- Undeveloped Neighborhood Parks
- Sports Complexes
- Special Use Parks
- Residential Areas
- Greeley Incorporated Area
- Multi-Purpose Off-Street Trail
- - - Urban Growth Area Boundary

City of Greeley Parks and Trails Master Plan

Existing Parks and Trails

EDAW



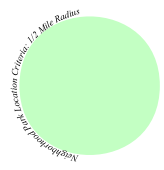
- Regional Parks
- Natural Areas
- Developed Community Parks
- Developed Neighborhood Parks
- Undeveloped Neighborhood Parks
- Sports Complexes
- Special Use Parks
- Residential Areas
- Greeley Incorporated Areas
- Urban Growth Area Boundary

City of Greeley Parks and Trails Master Plan

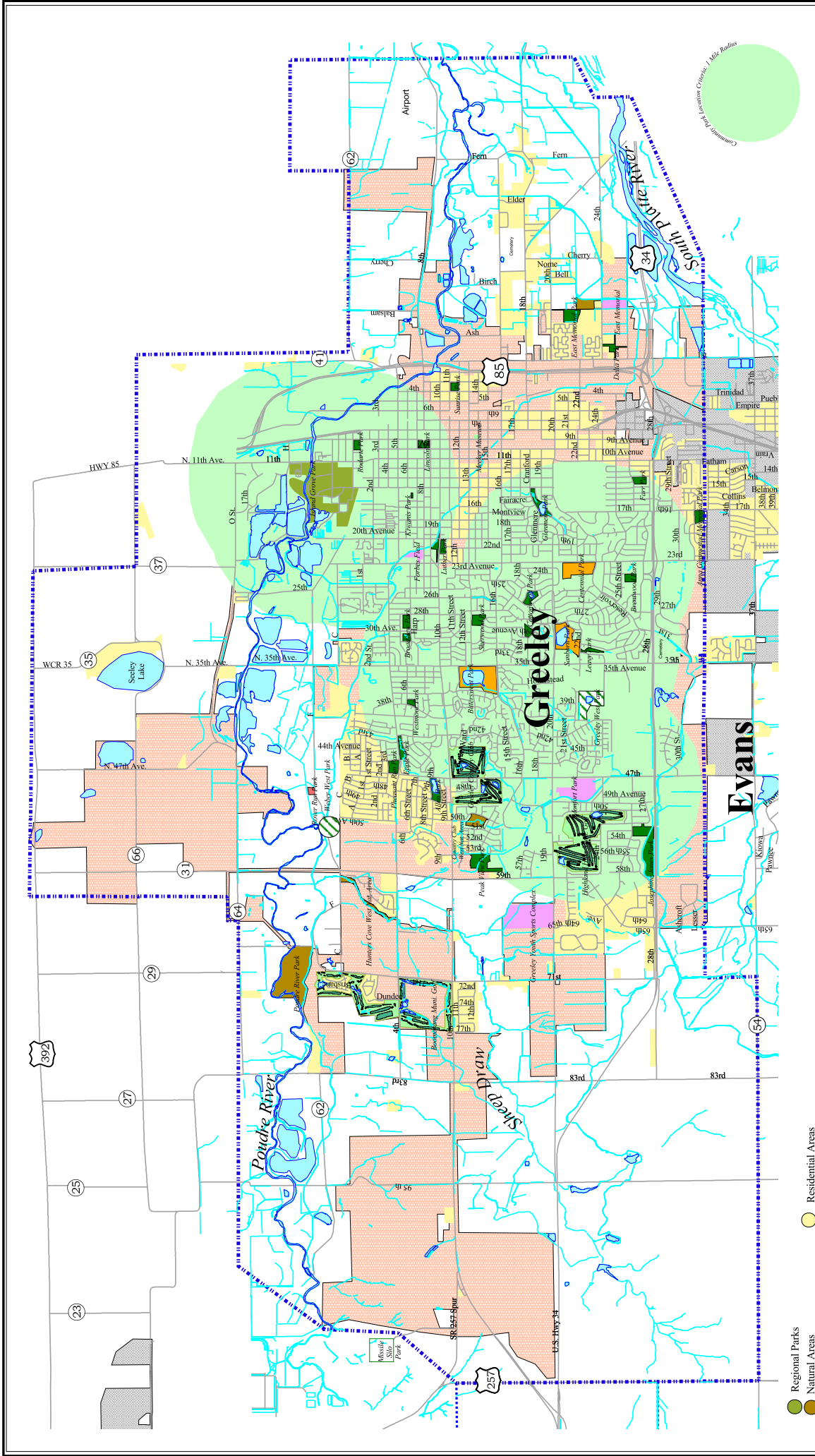
Neighborhood Park Distribution Analysis

EDAW

Map-2 Neighborhood Park Distribution Analysis
January 16, 2002



Neighborhood Park Location Criteria 1/2 Mile Radius



City of Greeley Parks and Trails Master Plan

Community Park Distribution Analysis

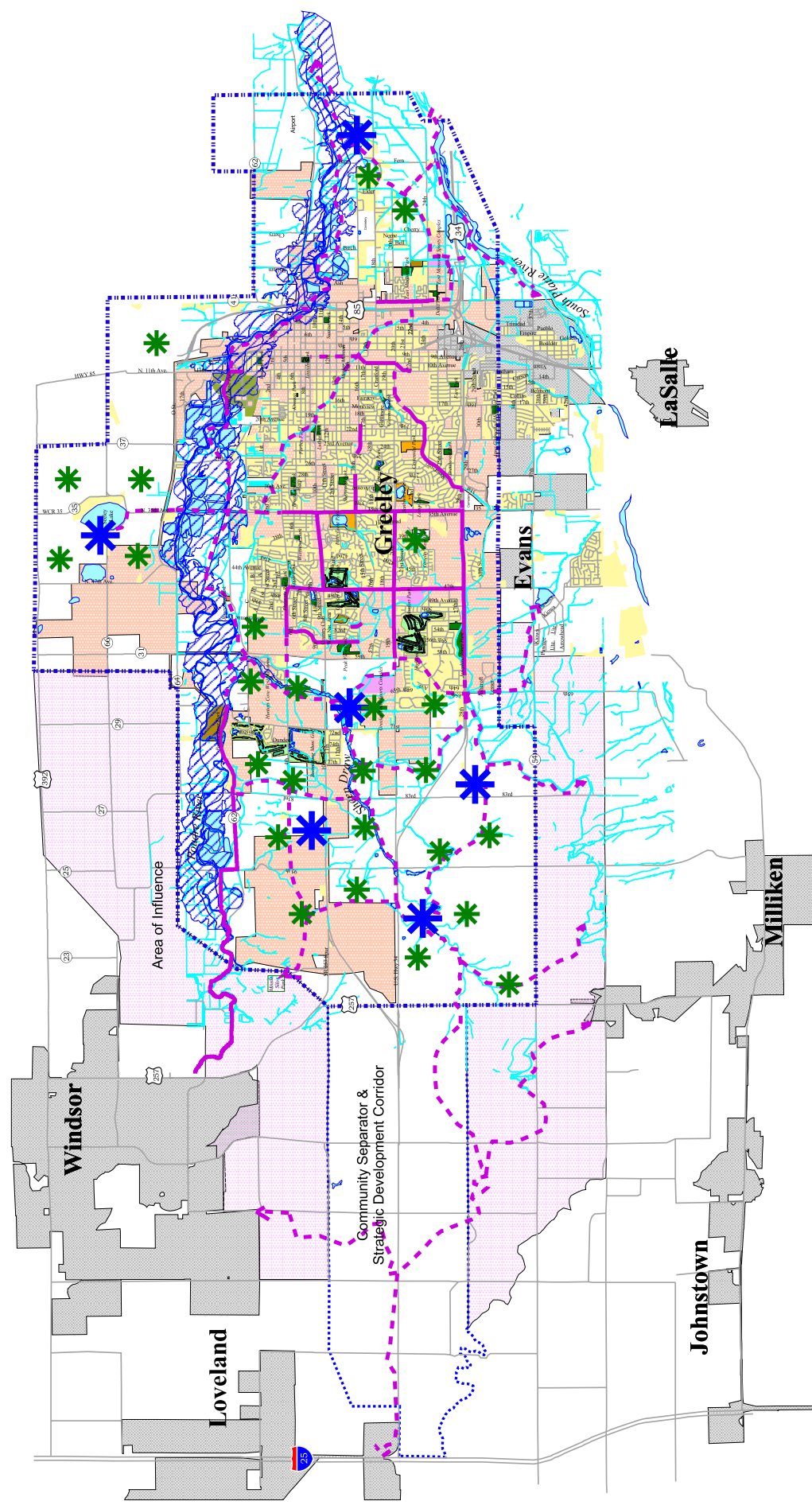
EDAW

Map-3 Community Park Distribution Analysis
January 16, 2002
1 Miles

- Regional Parks
- Natural Areas
- Developed Community Parks
- Developed Neighborhood Parks
- Undeveloped Neighborhood Parks
- Sports Complexes
- Special Use Parks
- Residential Areas
- Greeley Incorporated Areas
- Urban Growth Area Boundary



Map-4 Master Plan
January 16, 2002
0 1 2 Miles



- Regional Parks
- Natural Areas
- Developed Community Parks
- Developed Neighborhood Parks
- Undeveloped Neighborhood Parks
- Sports Complexes
- Special Use Parks
- Residential Areas
- 100 Year Flood Plain
- Greeley Incorporated Area
- Multi-Purpose Off-Street Trail
- Proposed Multi-Purpose Off-Street Trail
- Urban Growth Area Boundary
- Proposed Community Park
- Proposed Neighborhood Park

City of Greeley Parks and Trails Master Plan

Master Plan

EDAW