# City of Fort Collins Natural Areas Department Gateway Natural Area Management Plan | 2019





Fort Collins naturally yours

## City of Fort Collins Natural Areas Department

## Gateway Natural Area Management Plan 2019

### Natural Areas Mission

The mission of the Natural Areas Department is to conserve and enhance lands with natural resource, agricultural, and scenic values, while providing meaningful education and appropriate recreation opportunities.

Memorandum of Adoption The Gateway Natural Area Management Plan was administratively adopted by the Natural Areas Department Director on May 22, 2019

John Stokes, Natural Areas Director

Date



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Photographic Note: all images were supplied by city of Fort Collins Natural Areas Department staff unless otherwise noted. Additional images are courtesy of individual photographers, whom we thank for their generosity and support of the Natural Areas Department.

## Chapter 1: Introduction and Background

Introduction and Landscape Context Purpose and Scope of the Management Plan Summary of Public Outreach

#### Introduction and Landscape Context

Gateway Natural Area ("Gateway") is located at the confluence of the main stem of the Cache la Poudre River (Poudre River) and its North Fork tributary (Figure 1.1). The site has long been treasured as a quick and idyllic mountain getaway, with its grassy lawns, large shade trees, and scenic views of the Poudre River. Gateway lies approximately 15 miles northwest of Fort Collins, Colorado, and is embedded within thousands of acres of public lands, including lands owned by the City of Greeley (Seaman Reservoir), the US Forest Service (Roosevelt National Forest), the Colorado State Land Board, and Colorado Parks and Wildlife (Figure 1.2). Gateway and adjacent public lands provide recreation opportunities, including fishing, rafting, kayaking, picnicking, hiking, and wildlife viewing, as well as habitat conservation.



Original Poudre Canyon Filter Plant; courtesy Fort Collins Museum



Figure 1.1 Geographic Location of Gateway Natural Area

In 1903, the original property was acquired to construct a water diversion and water treatment plant known as the City of Fort Collins Water Treatment Plant #1. Historically, this plant provided Fort Collins with treated water from the time of the plant's construction in 1903 until it was closed in the late 1980s. To this day, the City's Utility Department continues to divert raw water from the diversion dam just upstream of Gateway, piping the water to the LaPorte Avenue water treatment facility.



Figure 1.2 Matrix of public land ownership in the lower Cache la Poudre Canyon.

Throughout most of the 1900s, the area surrounding the water treatment plant was open to public use and was known locally as "The Mountain Park". The park was closed in the late 1970s due to public misuse, vandalism, and treatment plant security concerns. In June of 2002, the City of Fort Collins reopened it as Gateway Mountain Park, under management by the City of Fort Collins Parks Department. In late 2006, management of the site was transferred to the City's Natural Areas Department and renamed Gateway Natural Area.

#### Geographic Context

Four separate land parcels comprise the city's acreage, with the 170-acre Gateway Natural Area at the core of the complex (Figure 1.2). Adjacent and west of Gateway, just above the diversion structure, is a 209-acre parcel for managed for watershed protection and owned by the City's Utilities Department (labelled "City of Fort Collins"). A third parcel, Gateway Mountain Preserve, owned and managed by the Natural Areas Department consists of 324 acres west of the Cache la Poudre River. While this land is adjacent to other public lands (U.S. Forest Service and Colorado Parks and Wildlife), it is largely inaccessible and serves as a wildlife conservation area. Lastly, the Natural Areas Department manages two acres within an 11-acre down river site known as Picnic Rock, a heavily used recreation site downstream of Gateway. It provides access to the Poudre River and is a popular take-out spot for rafters, tubers, and kayakers.

#### Seaman Reservoir

The City of Greeley's Seaman Reservoir is located on the North Fork tributary of the Poudre River and is accessed by the City of Greeley through Gateway. The North Fork originates in the Laramie Mountains in Roosevelt National Forest to the northwest, while the main stem of the Poudre River originates to the west in the northern section of Rocky Mountain National Park. The North Fork flows into Seaman Reservoir at a point approximately one mile upstream of Gateway. The Greeley water diversion intake and associated water treatment plant are located south of the intersection of US 287 and CO Highway 14 on the main stem of the Poudre River.

Seaman Reservoir, constructed in 1947, is 80 feet deep at its deepest point near the dam. The reservoir was drained in June of 2008 and 2012 to repair the dam's gates and refilled shortly thereafter. Fishing for rainbow trout, brown trout, and perch is a primary sporting activity at the reservoir. The west side of the reservoir is open to fishing year-round with a valid fishing license. All forms of hunting are permitted on the State Trust land surrounding the reservoir between September 1 and May 15. Target shooting is prohibited; however, waterfowl and small game hunting is permitted between May 15 and September 1.

#### Purpose and Scope of the Management Plan

This management plan provides an overview of the natural values and public uses at Gateway Natural Areas while providing management guidance for the next 10 years. Natural area site management plans provide management guidance that may be updated and modified as new conditions arise or as new information becomes available. Major themes in this plan include the importance of wildlife habitat, ecological conservation, current visitation trends, traffic flow patterns, maintenance needs, recreational uses, and user fee structures.

An important component of Gateway's management is the consideration of its role and context within the matrix of surrounding public lands (Figure 1.2). The plan also evaluates the department's role in managing a two-acre portion of Picnic Rock State Wildlife Area (Picnic Rock), owned in partnership with the City's Utilities Department and Colorado Parks and Wildlife (CPW) but managed by Natural Areas. Management actions are embedded throughout the plan chapters, with Chapter 6 providing a summary of all recommended actions.

#### Summary of Public Outreach

During the planning process, staff gathered feedback from stakeholders—members of the general public, Gateway visitors, and key stakeholders such as commercial rafting companies, and public agencies. In the fall of 2017, staff met in a one-on-one format with key stakeholders to identify issues and management strategies. Key stakeholders included:

- City of Fort Collins Utilities Department
- Colorado Parks and Wildlife
- Colorado Department of Transportation
- Public lands managers from the U.S. Forest Service and City of Greeley
- Commercial river rafting companies, including Rocky Mountain Adventures, A-1 Wildwater, Wanderlust, Rapid Transit Rafting, and Mountain Whitewater Descents

In the Spring of 2018, citizens were asked to provide feedback about key management issues and general management proposals. The public feedback form provided a short background statement for each management issue followed by specific questions. Respondents also had the opportunity to add additional comments. These comments were categorized, tallied, and considered, relevant to the most closely matched management topics.

A variety of tools were used to reach natural area constituents:

- An online comment form was launched in early May and closed in late June 2018.
- Notification of the online comment period went out by press release, postings on the Natural Areas Department website, social media, and relevant trailheads.
- Emails were sent to the department's 6,000 Natural Areas E-news subscribers, as well as to a long list of Natural Areas constituent organizations and individuals. Recipients were directed to the online comment form.
- 202 postcards were sent to Gateway neighbors within a 5-mile radius and made available at the entrance station and to visitors during the on-site outreach.

• On-site visitor intercept surveys were held on May 26th, June 2nd, and June 9th of 2018. Visitors responded to the on-site survey by completing paper copies of the questionnaire, which matched the on-line survey form.

Results of the on-line survey and visitor intercept survey were combined and summarized. A total of 343 unique surveys were completed by the close of the public comment period in June of 2018. With little exception, the public was very supportive of the primary management recommendations. Specific results of the survey are incorporated and highlighted in Chapter 6, which summarizes all management recommendations. The full results of the public survey can be found in Appendix A.



Gateway Natural Area

## Chapter 2: Site Administration

Site Operations Significant On-site Facilities Leases and Memoranda of Understanding (MOU) Special Use Permits and Commercial Use Permits Operational Costs and Financial Analysis Seaman Reservoir Expansion

#### Site Operations

Gateway is primarily served by a resident on-site Natural Areas ranger. The ranger is responsible for site security and patrol, supervision of seasonal staff, fee collection, shelter reservation scheduling, commercial and special use permit application review, and general site maintenance. On routine patrols, the ranger monitors visitor safety and ensures protection of the site's ecological resources. Similarly, Gateway staff monitor the security of the abandoned water treatment facility to prevent trespass and protect the building from vandalism.

#### Significant on-site Facilities

#### Former Water Treatment Plant #1

The Natural Areas and Operations Services departments have a Memorandum of Understanding designating the City's Operation Services as the department responsible for the safety and maintenance of the former water treatment plant.

There has been a long-standing discussion within the City organization as to the future of this building. Conversations with City Historic Preservation staff suggest that the building is historic in nature and warrants preservation in some manner. Recent evidence of a significant little brown bat maternity roost (see Chapter 3) within the treatment plant has transformed the discussion to taking measures to preserve the building while conserving the bat maternity roost, as the abandoned structure hosts the most significant bat maternity roost discovered in northern Colorado. Natural Areas staff continues to work collaboratively with other City departments to determine conservation measures that can be taken to protect this significant bat colony.

#### City of Fort Collins River Diversion Structure for Municipal Water Supply

Presently, nearly half of the City of Fort Collins' drinking water is obtained from the Poudre River utilizing the original diversion dam, located 2,700 feet above the confluence of the Cache la Poudre River and its North Fork tributary. In some years, over 50% of the City's drinking water is drawn from the river. The intake consists of a huge drain on the upstream side of the concrete structure and associated infrastructure. This water is piped through the ridge to the round sediment removal plant at Gateway's entrance. The raw water is then transported by underground pipe along the Poudre River corridor to Water Treatment Plant #2 at the Soldier Canyon facility on Laporte Avenue in Fort Collins.

Routine ranger patrols are conducted each day in the area of the diversion dam as the structure is a critical facility essential to the City's water supply. For this reason and because of Homeland Security issues, fishing is prohibited upstream of the dam. Likewise, no boating vessels or tubers may go over the dam, nor is access permitted from the north bank. River users must take out prior to the dam and follow a trail down Colorado Highway 14 creating a dangerous pedestrian exposure as well as congestion along the highway. As will be discussed in Chapter 5, pedestrian access into Gateway through the vehicle entrance from Highway 14 will be prohibited beginning in 2019, due to safety concerns. A new alternative pedestrian entrance will be created a short distance downstream from the vehicle entrance (see Chapter 5 management actions).

#### **Gateway Entry Station**

The Gateway Entry Station is located at the bottom of the hill on the entrance road. The entry station was obtained as surplus item in 2008 from Rocky Mountain National Park in Estes Park, Colorado. In the spring of 2008, the Natural Areas Public Improvement crew restored and modernized the entry station by adding electricity, phone lines, lights, and a built-in electric heater. It was first utilized and staffed in May of 2008 and is normally staffed by the Visitor Information staff on Fridays, Saturdays, and Sundays between 9 a.m. and 5 p.m. from May 1 and mid-September. Visitor Information staff has been crucial in managing heavy weekend visitation, managing traffic flow, answering questions, and responding to other site needs.

#### Ranger Office and Maintenance Building

The Gateway Maintenance Office (house) is used for several purposes. First, the master bedroom of the house, along with associated common areas of the house, is made available (infrequent) as a lease for seasonal Gateway staff. The occupant is required to maintain the

house's interior as well as the immediate landscaping surrounding the structure. The leasee's master bedroom is a private area, and Natural Areas staff do not have inspection rights to the room without a 24-hour notice and/or consent from the tenant. Natural Areas Facilities Operations division is responsible for overall repairs to the Ranger Office house. The remaining rooms and garage remain fully functional and continue to be used by city employees for Gateway operations, including equipment storage in the



Ranger Office and Maintenance building

garage and lower floor. The remaining rooms include the kitchen, dining area, conference room (living room), bathroom, and ranger's office. This area supports a break room for staff and an occasional meeting location for Natural Areas staff.

#### Permanent Ranger Residence

This house is a fully-functional private residence. Natural Areas staff does not have inspection rights to the residence without a 24-hour notice and/or consent from the Resident Ranger. General maintenance and upkeep of residence and grounds are determined by the lease agreement and are the responsibility of the Resident Ranger and Facilities. The Resident Ranger is responsible for covering utility charges such as propane, electricity, wood for stove, and satellite television. The Resident Ranger bills the Natural Areas Department in January of each year for electricity cost, because the nearby public bathroom, entry station, and self-serve credit card terminal do not have a separate electrical meter since those facilities tie in to the Ranger Residence's electrical meter. Natural Areas Facilities Operations is responsible for overall repairs to the Ranger Residence.

#### Picnic Area

Two picnic shelters are located at the east end of Gateway's park area. There are six picnic tables under the large picnic shelter (Shelter A) and four picnic tables under the small shelter (Shelter B). The tables are available on a first-come-first-serve basis or may be reserved for a fee. Shelter A has a capacity of 50 people, and Shelter B has a capacity of 32 people. The reservation fees will be adjusted in 2019 to reflect regional market prices for similar facilities and will be benchmarked annually after that.

#### Management Action:

Modify the fee structure of picnic shelters to reflect regional market costs and pricing.



Picnic Shelters at Gateway Natural Area

#### Leases and Memoranda of Understanding (MOU)

#### Seaman Reservoir and Seaman Dam

An MOU between the City of Fort Collins Natural Areas Department and the City of Greeley Water Utility recognizes Greeley's access through Gateway for the maintenance and management of Seaman Reservoir and Dam. Road maintenance and snow plowing are the responsibility of the Natural Areas up to the river's bridge crossing. Since 2006, minor road repairs been largely implemented by Gateways Natural Areas staff.

#### Picnic Rock State Wildlife Area

Picnic Rock State Wildlife Area (Figure 2.1) is an 11-acre site located downstream from Gateway and is co-owned by Colorado Parks and Wildlife (CPW) and the City of Fort Collins Utilities Department. Land ownership is divided at the site, with the City owning two acres (the parking lot areas) and CPW owning an additional nine acres. The site is a very popular summertime destination for swimming, tubing, and fishing. Although there is a basic level of management, the popularity during most summer weeks leads to overcrowding, overflowing trash, and parking that frequently spills on to Colorado Highway 14 creating unsafe conditions for pedestrians. In 2006, when the site faced closure to the public due to lack of state funding, the Natural Areas Department established a Memorandum of Understanding (MOU) with CPW. In the MOU the Natural Areas Department agreed to conduct basic site maintenance in an effort to assist CPW and keep the site open to the public. "Basic" maintenance includes vault toilet cleaning, trash removal, litter pickup, and cleaning barbeque grills. Although not included in the MOU, the Natural Areas Department does make improvements to the parking area as needed.

As part of the Gateway management planning process, staff considered three options to address the site's management issues and Natural Areas Department participation in the management of Picnic Rock. The alternatives included:

- 1. Continue current basic maintenance operations and maintain an annual MOU with CPW.
- 2. Work with CPW to consider the transfer of ownership to Natural Areas.
- 3. Relinquish the MOU agreement with CPW and no longer provide maintenance assistance.

Factors that influenced the final decision included the following management challenges:

- Significant staff resources required to maintain a site owned primarily by another agency.
- Lack of communication options (no phone or radio service) when site or safety issues arise.
- Significant poor behaviors observed related to parking, litter, and dogs off leash making the site challenging for enforcement of City municipal code.

- As the site is not a gated property, overnight camping and late-night parties disturb neighboring landowners resulting in frequent complaints.
- Picnic Rock's use as a roadside restroom/trash stop for canyon travelers warrants increased maintenance especially during the summer months.

Based on evaluation of all options and consideration of the above factors, a continuance of current operations and maintainance of the status quo was determined to be the best option. Future developments and considerations will be addressed in the coming years as necessary, while robust coordination with CPW continues. At this time the Natural Areas Department will ensure the site remains open to public use and basic services are provided.

#### Management Action:

Natural Areas will continue to maintain the parking lot, clean restrooms, and remove trash at Picnic Rock.



Figure 2.1 Location of Picnic Rock and boundaries of property ownership (2-acre parking lot) by the City of Fort Collins

#### Special Use Permits and Commercial Use Permits

#### **Special Use Permits**

Any individual or group wishing to use Gateway Natural Area for an event or program with a large group (15 to 50 people) must obtain the department's special use permit. Permits are administered year-round for a variety of events, including family reunions, field trips, research projects, and educational events. Since 2015, the number of permits issued annually has ranged from 25 to 32 per year.

#### **Commercial Use Permits**

From 2012 to 2018, a total of 23 commercial use permits were issued at Gateway to commercial rafting businesses, an annual road running race, and fly-fishing outfitters. After consultation with permitted rafting companies and acknowledgement of significant crowding and parking issues generated by the high level of use, commercial use permits for rafting will be discontinued after the 2019 season. As an alternative, commercial users will utilize a U.S. Forest Service launch site that exists <sup>1</sup>/<sub>4</sub>-<sup>1</sup>/<sub>2</sub> mile downstream from Gateway, known as the Filter Plant put-in to accommodate the rafting needs.

#### Management Action:

Due to crowding and site capacity issues, commercial raft launches from Gateway will be discontinued following the 2019 season.

#### **Operational Costs and Financial Analysis**

Gateway Natural Area served an estimated 46,604 visitors in 2018. Visitation to Gateway dropped by roughly 7% from 2017. Daily and annual pass sales decreased by almost 5% from 2017. Factors that reduced visitation include a low water year, closing of the upper walk-in access, and the Seaman Fire during which Gateway closed for one week.

Gateway revenue dropped by \$3,744 from the previous year collecting a grand total of \$62,848 (6% decrease from 2017) (Table 2.1). Daily and annual parking passes totaled \$60,348, shelter reservations \$1050, and commercial activities \$1,450 (Table 2.2). Despite a reduction in revenue from 2017, Gateway reached capacity over 20 times throughout the summer season, resulting in many vehicles being turned away.

Gateway Natural Area's mountain parklike character is unique to the department's natural area system as it hosts lawn space, picnic shelters, and a highly used river access. The recreation focus of of Gateway is unlike any other of the department's natural areas as the site offers amenities not typical of a natural area. To this end, staff examined potential additional revenue generation to offset management expenses. A review of regional market open space fees revealed that Gateway's fee structure is lower than that of other regional sites and could be adjusted to reflect market-based pricing. This administative adjustment is intended to further offset costs related to the site's management.



#### Table 2.1 Gateway Natural Areas Revenue 2009-2018

#### Table 2.2 Gateway Natural Area Revenue 2017

2017 Gateway Revenue	
Daily Passes	\$53526
Annual Passes	\$6822
Shelter Reservation Fees	\$1050
Commercial Rafting Fees	\$800
Other Commercial Fees	\$650
Total Revenue	\$62,848

Table 2.3 illustrates the 5-year period 2012-2016, for which total operational costs (management expenses and personnel salaries) amounted to \$687,720. Revenues over that same period totaled \$274,642 which results in a net charge of \$413,720 to the Department's operations budget over the five-year period.

YEAR	REVENUE	EXPENSES	SALARIES	TOTALS
2012	\$28, 164	\$24,217	\$111,308	\$(107,361)
2013	44,198	20,013	101,540	(77,355)
2014	51,683	26,678	111,431	(86,426)
2015	72,136	34,181	105,675	(67,720)
2016	78,461	54,418	98,259	(74,216)
TOTALS	\$274,642	\$159,507	\$528,213	\$(413,078)

 Table 2.3 Gateway Natural Areas Revenue and Expenses

Based on this analysis, a new, market-based fee schedule will be implemented in 2019. Fee structures for all City Services, including fees charged by the Natural Areas Department, are evaluated annually and approved by the City Manager's office. The fee increases shown below are intended to continue to reduce operational costs while continuing to offer visitors excellent outdoor experiences.

2019 Fee Current Bike and Walk-in Day Pass \$0 \$3 \$6 \$7 Vehicle day pass \$35 \$40 Annual Entry Permit Annual Entry Permit - Senior Discount \$30 \$35 Annual Disabled w/state plates or \$12 \$15 placard Disabled Veteran with state license plate Free Free Free on Weekends Active Military with Identification Shelter Reservation \$50 \$80

Table 2.4 Gateway Natural Area Entrance Fees and Pass changes for 2019

Utilizing actual revenues from 2018, it is projected that the increase of fees in 2019 would provide an additional 13.5% or \$11,224 additional revenues over current (averaged) revenues.

Changes to revenue sources include:

- 1. Eliminating commercial rafting fees, beginning in 2020.
- 2. Instituting a \$7 vehicle entrance fee to citizen rafters who wish to launch from Gateway. (Historically, these vehicles were allowed 15-minute parking to launch but have also contributed significantly to traffic congestion.)
- 3. Instituting a new \$3 walk-in fee for the new secondary road access (to be described in Chapter 5).
- 4. Eliminating free entry to Gateway December through March in favor of the yearround fee access based on the schedule listed in Table 2.2.

#### Management Actions:

Modify the structure of entrance fees, shelter fees, and other fees to reflect regional market costs and pricing.

- 1. In 2019, modify the entrance fee structure and shelter reservation prices to reflect consistency with the City's Parks Department, benchmarked against regional market pricing.
- 2. Collect entrance fees year-round and from all users. Eliminate the December through March free access period.

#### Proposed Seaman Reservoir Expansion

The City of Greeley is proposing to expand Seaman Reservoir from its current size of 5,000 acre-feet to as much as 88,000 acre-feet. This would require construction of a new dam. The footprint of the enlarged reservoir would inundate several additional miles of the North Fork of the Cache la Poudre River. Greeley and the City of Fort Collins were in a joint federal permitting process for the Seaman Water Supply Project and the City's (Fort Collins) Halligan Water Supply Project until 2015, when the permitting process for the two projects were split into separate processes. To be able to expand the reservoir, Greeley needs numerous approvals and permits from federal, state, and local governments, including the U.S. Army Corps of Engineers, Colorado Department of Public Health and Environment, Colorado Parks and Wildlife, and Larimer County. Greeley may also require an agreement from Fort Collins, should the dam or other facilities be installed on Gateway.

#### Potential Impacts

Until the City of Greeley and the permitting agencies provide more information on the configuration of the project, its operations, and impacts to Gateway are largely unknown. However, any impacts to Gateway Natural Area and surrounding lands may include:

**Loss of Habitat:** Although not located on Gateway, it is expected that the additional upstream inundation of the North Fork would affect several miles of riverine and riparian habitat, including wetlands and potentially critical habitat suited for Preble's Meadow Jumping Mouse (a federally threatened species). The additional inundation would create

a movement barrier for several native species of wildlife such as elk and mule deer and potentially isolate populations east of the North Fork.

**Construction impacts to bat colony roost** (see Chapter 3): While little brown bats are known to live in urban settings and cohabitate with humans, it is unknown as to what impacts may result from construction activities in the vicinity of the Treatment Plant #1. While there is a paucity of scientific data, it is likely that daily construction activities will disrupt the little brown bat maternity roost occupying the former water treatment plant. Though the bat colony receives no formal conservation protection, it is considered a "Species of Greatest Conservation Need" by Colorado Parks and Wildlife.

**Reduced flows in the Cache la Poudre River:** Currently, Seaman Reservoir diverts and stores water from the North Fork. The source of water needed to fill the expanded reservoir would include water diverted from the main stem of the Cache la Poudre River, using a new diversion infrastructure located at or near the City of Fort Collins diversion. Any resulting reduction in flows could have various ecological impacts as yet to be deterimined.

**Impacts to Gateway Natural Area:** At least one proposed configuration for the project includes a new dam for the enlarged reservoir that would be located downstream of the existing dam and further into Gateway Natural Area. This proposal would inundate additional river channel and riparian habitat, creating a profound impact to the habitat, recreation and scenic values of the site.

**Use of Fort Collins' facilities:** At least one proposed configuration of the project includes diversion of water from the main stem of the Cache la Poudre River at the Fort Collins pipeline diversion dam that is operated by Utilities and located within Gateway Natural Area. It would require an enlargement of the existing diversion dam, installation of a pumping station on Fort Collins-owned land on the north side of the river, and construction of a buried pipeline between the river and dam across Fort Collins-owned land. Greeley has also discussed other potential configurations that would seek to utilize Gateway and Fort Collins' facilities in different manners.

#### Management Action:

City Natural Areas and Utilities Departments will monitor the planning and permitting processes for Seaman Reservoir and will participate as directed by City Council.

## Chapter 3: Ecological Systems and Biodiversity

Geologic Resources Hydrologic Resources Vegetation Wildlife Resources

#### **Geologic Resources**

One of the more striking features at Gateway Natural Area is the Poudre Canyon and the geologic features easily observeable in the canyon walls. The bedrock of Gateway consists primarily of metamorphic rocks dating from the Precambrian era (metamorphosed about 1.7 billion years ago) composed of migmatitic quartz, granite, pegmatite, and veins of amphibolite. The older metamorphic rocks consist of mica schist, gneiss, granite, and pegmatite, with minor meta-basalt/amphibolite. Younger Precambrian rocks of igneous origin, primarily comprised of granite and quartz, cut across the metamorphic foliation. Unconsolidated sedimentary deposits of Quaternary (2.58 million years ago to today) silt, sand, and gravel lie along the bed and floodplain of the Poudre River.

The area surrounding Gateway was not directly glaciated but was cut by glacial snowmelt, which gave it the typical V-shaped valley profile. The Poudre River Canyon, tens of miles upstream from Gateway near Moraine Park, was the terminus of glacial ice as recently as 15,000 years ago. Glacial runoff transported very coarse debris to the Gateway area cutting the bedrock by meltwater and following zones of weakness charcterized by faults and nearly vertical layers. These same geologic features create sharp bends in the canyon and preserve the entrenched meander within Gateway. Fresh river sediment continues to be transported down the Poudre River during high water, forming the present-day flood plain and gravel bars. (Communications with geologist David Morse, Ph.D.)

The geologic map of the Laporte Quadrangle published by the United States Geological Survey (GQ-1621), shows the distribution of the various rock types for the Gateway area, including knotted mica schist, calc-silicate gneiss, quartzofeldspathic mica schist, pegmatite, and Quaternary deposits of silt, sand, and gravel. Gateway soils are classified as Haploboroll complex situated on steep rock outcrops, Redfeather sandy loam on 5 to 50 percent slopes, and Wetmore-Boyle-Rock and Ebeth-Moen loams on 5 to 30 percent slopes. Currently, erosion issues are not apparent from the effects of the 2013 High Park Fire.

#### Hydrologic Resources

The Poudre River is the source of high quality drinking water for Fort Collins residents, irrigation water for Front Range farms, habitat for fish and river depedent wildlife, and river-based recreation including fishing, rafting, tubing, and kayaking. Mountain snowmelt resulting is late spring/early summer runoff is the primary source of streamflow for the Poudre River. The natural V-shape of the canyon and Colorado Highway 14 restrict the space available for the river and riparian forest habitats; however, this stretch of river (from

the Munroe Diversion to the canyon mouth) receives a B grade from the "River Health Assessment Framework" (City of Fort Collins, 2015). This grade is higher than ratings of other stretches of the river downstream, due to the hydrologic, geomorphic, and natural biogeochemical processes that remain mostly intact. A few of the factors that bring the score down to a B are alterations to the flow and sediment regime, water temperature (particularly downstream from the river's confluence with the North Fork tributary), restriction of the river by CO Highway 14, and aquatic habitat connectivity disruption by physical barriers.

#### Vegetation

Gateway Natural Area hosts a variety of ecosystems, including foothills mixed forests, foothills shrublands, mixed grasslands, rocky slopes, riparian communities, and open water (Table 3.1). The Poudre River winds into and around the center of the natural area, which includes an irrigated picnic area with large eastern U. S. species of shade trees (Barringer, 1999) and parking spaces. Young trees will be planted near the aging shade trees in a "shadow planting" process, to replace older trees as they die.

Habitat Type	Description	Typical Plants
Foothills Mixed Forest	This ecosystem consists of widely spaced ponderosa pine with mixed grassland patches and/or shrublands (foothills or riparian). The species that dominate this area are generally more xeric than the species that occur in the riparian ecosystems. Trees and shrubs are of equal importance in this area. Note: evergreen trees may be absent due to recent wildfires.	Pinus ponderosa, Rubus deliciosus, Prunus virginiana ssp. melanocarpa, Prunus americana, Crataegus sp., Cercocarpus montanus, Rhus trilobata, Ribes cereum
Foothills Shrubland	This area is characterized by deciduous and evergreen shrubs with patches of mixed grasses and forbs in the understory. The species that dominate this area are generally more xeric than the species that occur in the riparian shrubland. Shrubs in this area usually occupy dry, rocky slopes and hilltops.	Cercocarpus montanus, Rhus trilobata, Yucca glauca, Juniperus communis, Juniperus scopulorum, Ribes cereum, Ericameria nauseosus

Habitat Type	Description	Typical Plants
Geological Feature	These areas are typically rock outcrops, cliffs, arroyos, canyons, and shale barrens. Vegetation is usually sparse and dominated by a mix of forbs, grasses, or shrubs.	Townsendia hookeri, Tetraneuris acaulis, Arenaria fendleri var. fendleri, Paronychia jamesii, Helianthus pumilus, Physaria bellii, Harbouria trachypleura, Musineon tenuifolium
Mixed Grass	This area is comprised by elements from both tall and shortgrass prairies in equal measure. Grass species usually include western wheatgrass ( <i>Pascopyrum smithii</i> ) and little bluestem ( <i>Schizachyrium</i> <i>scoparium</i> ) as dominants. Some widely spaced shrublands may occur in the area or on top of hills but are not dominant. Forbs are present and may equal up to 40% of the area.	Pascopyrum smithii, and Schizachyrium scoparium dominant
Open Water Lotic	A river, stream, creek, or ditch with moving water.	
Riparian Forest	Riparian trees dominate the area. The species that inhabit these areas require access to water, whether occurring adjacent to waterways or occupying canyons, gulches, or seeps where water accumulates. Riparian shrubs may be present but are of secondary importance. Patches of grassland and/or wetland areas (cattail or emergent) are also found in the riparian shrub community. An overstory of cottonwood and crack willows ( <i>Salix fragilis</i> ) round out the species composition	Populus deltoides ssp. monilifera, Populus angustifolia, Populus x acuminata, Salix fragilis, Ulmus pumilus, Alnus incana ssp. tenuifolia, Fraxinus pennsylvanica, Ulmus americanus, Celtis laevigata
Developed Areas	Area is developed hardscape (i.e. parking lots) or highly maintained landscape.	

The rocky slopes of the Poudre Canyon near the picnic area host several habitat types, including mixed forests, shrublands, and grasslands (Figure 3.1, map showing habitats). Gateway Mountain Preserve, a 324-acre tract to the south of Colorado Highway 14, has consisted of mostly shrubland since the 2013 High Park Fire burned sections of Gateway, leaving dead trees and little natural pine regeneration. The High Park Fire burned approximately 360 acres across all of Gateway. The spread of non-native invasive plants after the fire is a concern, particularly toadflax and winter annuals such as cheatgrass, which is difficult to treat due to the steep terrain.



Figure 3.1. Distribution of Habitat Types at Gateway Natural Area

Overall 239 species of plants have been recorded at Gateway. In 1999, an initial vegetation survey identified 222 species (Barringer, 1999). In 2008, 15 more species were added to the list, and two additional rare species were added in 2018. Of the plant species recorded at Gateway, 71 are not native and were introduced accidentally or by landscape plantings in

and around the picnic area. Eleven rare plants that are considered Species of Interest or considered rare by the Natural Areas Department occur at both Gateway and Picnic Rock (Natural Areas Restoration Plan 2016). The Species of Interest are fleshy hawthorn (*Crataegus succulenta*), hairy panicgrass (*Dichanthelium acuminatum*), Fendler's false cloak fern (*Argyrochosma fenderi*), Wyoming kittentail (*Besseya wyomingensis*), Sprengle's sedge (*Carex sprengelii*), taper-tip flat sedge (*Cyprus acuminatus*), and a bryophyte (mosses and liverworts), rhytidium moss (*Rhytidium rugosum*). Notably, Fendler's false cloak fern is growing in granite amphibolite (granular metamorphic rock) crevices; it is one of only two populations of this plant known in Larimer county. Hairy panicgrass occurs in riparian areas, and there are only two populations documented in Larimer County, both of which occur on City Natural Areas. It was documented in 1890 and later thought to be extirpated, until it was found at Gateway in 2012 during a rare plant survey. Wyoming kittentail is known to occur in snow accumulation areas. There are two populations documented in Larimer County and only eight populations in Colorado. Taper-tip flat sedge is known from three locations in Larimer County.

#### Species of Interest at Picnic Rock

The Species of Interest that occur at Picnic Rock are wild hops (*Humulus lupulus var. neomexicanus*), large St. John's-wort (*Hypericum majus*), fringed loosestrife (*Lysimachia ciliata*), and roadside agrimony (*Agrimonia striata*). Notably, City of Fort Collins natural areas and Larimer County's Red Mountain Open Space host the only documented populations of wild hops, which is important to a rare butterfly, the hops azure. Picnic Rock hosts the only known population of large St. John's wort in Larimer County. There are only four known populations of roadside agrimony in Larimer County, and they all occur on natural areas.



Argyrochosma fendleri, Fendler's lipfern (top), Besseya wyomingesis (bottom), Carex sprengelii (right); courtesy Crystal Strouse



Dichanthelium acuminatum (top), Humulus neomexicanus (bottom); courtesy Crystal Strouse

Management Action (forest and soil conservation):

Observe forest recovery and regeneration of ponderosa pine and Douglas fir following the 2012 High Park Fire per the department's 2016 Restoration Plan. Consider reforestation trials to assist recovery, if appropriate. Continue to assess burned areas for erosion issues.

Management Action (exotic invasive plant treatment):

Continue to treat invasive exotic plants (e.g., cheatgrass, Dalmatian toadflax, volunteer rye, and mullein).

Management Action (shadow planting):

Shadow plant the large aging shade trees in the picnic area with young trees.

#### Wildlife Resources

Gateway Natural Area sits within a mosaic of publicly owned and protected lands. Roosevelt National Forest surrounds much of the natural area along with additional lands managed by Colorado Parks and Wildlife (CPW). The City of Greeley owns and manages Seaman Reservoir and the surrounding land to the north. Although Gateway is a relatively small tract of land, it hosts a high diversity of wildlife. Seventy-eight species of wildlife have been recorded at Gateway and Picnic Rock since 1995. (A full list of these species can be found in Table 3.2 at the end of this chapter.) Of these, eight are considered wildlife Species of Interest by the Natural Areas Department. Other wildlife considered Species of Greatest Conservation Need by Colorado Parks and Wildlife (Colorado State Wildlife Action Plan, 2015) include birds such as the bald eagle, golden eagle, lazuli bunting, mammals including fringed myotis, little brown bat, hoary bat, Abert's squirrel, and reptiles including the short-horned lizard. For some of these species CPW also tracks specific habitat ranges for conservation purposes (see Table 3.3 at the end of this chapter).

#### **Ungulates**

Deer, elk, bighorn sheep, and moose have been observed at Gateway or Picnic Rock. These large mammals likely use Gateway Natural Area as part of their range. CPW has species management plans that encompass Gateway for deer (2006), bighorn sheep (2012), elk (2012), and moose (2006). These plans include large areas of public land and guide CPW's approach to hunting management and attaining herd objectives. Gateway provides hunting access to the surrounding public lands that are within CPW's Data Analysis Units. Gateway falls within an area designated by CPW for a resident elk population and a winter concentration area. The severe winter range and winter concentration areas designated by CPW also encompass Gateway. Other notable designations for ungulates near Gateway include an elk migration corridor to the north, an elk production area 1.3 miles northwest, an elk severe winter range 1 mile north, and a mule deer concentration area 1.2 miles northwest of Gateway.

#### Carnivorans

Wildlife from the phylogenetic order Carnivoran observed at Gateway include black bear, red fox, mink, striped skunk, bobcat, mountain lion, coyote, badger, and raccoon. River otter have been observed in the North Fork of the Poudre River and could potentially use Gateway as well. Some of the larger carnivorans such as black bear and mountain lion are likely to use the area part-time for hunting, foraging, or as movement corridors between habitat patches. Notably, the area falls within CPW designation as a summer and fall concentration area, as well as a human conflict area for black bears. CPW's 2011 bear management plan that encompasses Gateway identifies conflicts between bears and people as a significant issue for this management unit. Bear-proof trash cans are in use at Gateway to avoid attracting and habituating black bears to human food sources. The meso-predators (coyote, skunk, fox, mink, bobcat, otter, and raccoon) could be full-time or part-time residents. Management actions for these mammals include den site protection and protection of movement corridors. Fox dens are observed yearly on the west side of Gateway near the river.

#### Small Mammals

Small mammals include those from the phylogenetic orders lagomorpha (rabbits) and rodentia (rodents). Eastern cottontail, yellow-bellied marmot, rock squirrel, fox squirrel, Abert's squirrel, and beaver have been documented on Gateway Natural Area. Two small mammal Species of Interest that occur or may occur on Gateway are Abert's squirrel and Preble's meadow jumping mouse (PMJM). The ponderosa pine forest is important habitat for the Abert's squirrel, as they use ponderosa pine almost exclusively for food, nesting, and cover. The existing ponderosa pine forest should be protected and assessed for habitat suitability (e.g., tree age and density). Large ponderosa should be protected as important cone producers which are a favorite food for Abert's squirrels. There is potential for the federally threatened Preble's meadow jumping mouse to occur in pockets of habitat along the Poudre River, including Gateway. Although the chance of finding PMJM on Gateway is small, surveys may be conducted to determine presence/absence. The Colorado Natural



Black Bear

Heritage Program has designated much of the Poudre River as a Potential Conservation Area, in large part due to the habitat for PMJM in riparian areas of the river.

#### Management Action:

Protect riparian areas suitable for Preble's meadow jumping mouse and consider surveys and riparian restoration where appropriate (Restoration Plan, 2016).

#### Bats

The Poudre River serves as valuable foraging habitat and as a migration corridor for a variety of bat species. Surveys in 2005 and 2017 detected eight species of bats at Gateway: little brown myotis, long-legged myotis, fringed myotis, long-eared myotis, big brown bat, silver-haired bat, hoary bat, and Brazilian free-tailed bat (potential). Bats were detected by using acoustic monitoring devices or captured by using mist nets. Three Species of Interest were found, including little brown myotis, hoary bat, and fringed myotis.

The former Fort Collins water treatment building, which was decommissioned in the early 1980s, is home to a large and regionally significant maternity colony of the little brown myotis. It is unknown exactly how many bats are occupying the roost. Most little brown bat maternity colonies in Colorado have fewer than 100 adult females (Armstrong et. al. 2011), but observations of emergence by staff and bat biologists suggest that this roost is significantly larger, likely the largest known in northern Colorado.

White-nose syndrome (WNS) is an introduced fungal disease that has caused severe declines as high as 30-99% annually in little brown bat populations in the eastern United States, and is now migrating to the western United States (Frick et. al., 2010). The little brown bat population in Colorado, including the maternity roost at Gateway, is vulnerable to the disease. As WNS approaches, the maternity roost provides valuable research and species conservation opportunities. Long-term data gathered from this site will be especially valuable to understanding WNS and its effect on little brown bats in Colorado. This ongoing research seeks innovative detection methods and tracking to further understand hibernation habits. The WNS disease affects hibernating bats because it thrives in the low temperatures in caves and other hibernacula. Little is known of brown bat hibernation ecology in the West due to the difficulty in finding hibernation roosts. The research projects at Gateway are sponsored by Colorado Natural Heritage Program, Colorado Parks and Wildlife, and Fort Lewis College.

Little brown bats occupy the maternity roost from late May through early September, and

disturbance during this time can disrupt rearing of young. Entering the building should be avoided, and disturbance immediately outside the active roost should also be minimized.

#### Management Action:

Background: The Poudre River flowing through Gateway provides valuable foraging habitat and a migration corridor for a variety of bat species. In 2017, a regionally significant maternity roost of little brown bats was discovered using the former water treatment building. Biologists suggest this roost may be the largest known in northern Colorado.



Little Brown Bat

In the next 10 years, efforts will be made to conserve the little brown bat maternity roost within the former water treatment plant. Specific actions will include minimizing entry into the building during the occupation season (late May through early September), eliminating overflow parking behind the structure, and redesigning traffic flow outside the front of the plant. Natural Areas staff will also continue to communicate with City Operation Services, Utilities, and Historic Preservation staff to find solutions to conserve the maternity bat roost while efforts are made to preserve the building.

#### Birds

Gateway hosts a variety of significant bird habitats due to the forest, riparian, and shrublands plant communities. There are 45 known species at Gateway. Three of them golden eagle, bald eagle, and lazuli bunting—are categorized by the Natural Areas Department as Species of Interest. A pair of bald eagles frequents Gateway, but nests of bald or golden eagles do not occur on the site. More monitoring through partnerships is planned to better understand avian populations and how to best manage for desirable habitat conditions at Gateway. Notably, CPW has designated an American white pelican foraging area that encompasses Seaman Reservoir just north of Gateway.



Lazuli Bunting (left), Blue-gray Gnatcatcher (right); courtesy Aran Meyer

#### Amphibians and Reptiles

Amphibians and reptiles documented at Gateway include Woodhouse's toad, chorus frog, short-horned lizard, bull snake, prairie rattlesnake, and milk snake. Short-horned lizards are considered a Species of Interest by the Natural Areas Department. Monitoring by incidental observation to record location of this species will help the Department track, protect, and manage critical habitat accordingly. Gateway falls within the CPW documented overall range for several species of reptiles, including bull snake, common garter snake,

Hernandez's short-horned lizard, milk snake, North American racer, painted turtle, plains garter snake, prairie lizard, prairie rattlesnake, six-lined racerunner, and terrestrial garter snake.

#### Fish

Fish species documented at Gateway include popular game fish (rainbow trout and brown trout) and smaller fish (longnose dace, longnose sucker, and white sucker). Fish found in and around Gateway provide high-quality fishing, and many anglers visit Gateway throughout the year. CPW manages fisheries in the Poudre and North Fork of the Poudre River.

#### Insects and other Invertebrates

Little is known about aquatic or terrestrial invertebrate populations on Gateway, thus new monitoring and inventory are desirable. Pollinators provide important ecological services for native plants and agricultural crops and but are in decline globally. An understanding of pollinator presence would help direct restoration efforts by enhancing larval host plants and nectar sources for detected species. Additionally, if the presence of a Species of Interest is detected, more focused habitat enhancement could be implemented. Aquatic invertebrate monitoring would provide baseline data for these species while providing a good indicator of water quality and fish habitat in the Poudre River.

#### Management Action for Rare Species:

In the next 10 years, ensure the conservation, persistence, and expansion of 11 rare plants and 8 rare species of wildlife occurring at Gateway and Picnic Rock. To protect rare ferns on the rock wall, prohibit climbing for any purpose, including cliff jumping.

#### Management Action for Ecological Monitoring and Management

Consider Species of Interest inventories of Gateway's wildlife by habitat, including lotic, riparian forest, mixed grass, foothills mixed forest, and shrubland habitats.

#### Table 3.2 Habitat Wildlife Observed on Gateway and Picnic Rock

**Species:** <sup>\*</sup> = Species of Interest; U = unusual; I = Introduced (non-native); FT = Federal Threatened; FE = Federal Endangered; ST = Colorado Threatened; SC = Colorado Species of Concern.

BIRDS	Gateway	Picnic Rock
Canada goose	Х	Х
Mallard	Х	Х
Common merganser	Х	Х
Dusky grouse	Х	
Wild turkey	Х	
Great blue heron	Х	Х
Turkey vulture	Х	Х
*Bald eagle (SC)	Х	
Red-tailed hawk	Х	Х
<mark>*</mark> Golden eagle	Х	Х
Rock pigeon (I)	Х	Х
Mourning dove	Х	Х
Great horned owl	Х	
Broad-tailed hummingbird	Х	Х
Belted kingfisher	Х	Х
Downy woodpecker	Х	Х
Northern flicker	Х	Х
Stellar's jay	Х	Х
Black-billed magpie	Х	Х
American crow	Х	Х
Common raven	Х	Х
Mountain chickadee	Х	
Brown creeper	Х	

BIRDS	Gateway	Picnic Rock
Canyon wren	Х	
American dipper	Х	Х
Golden-crowned kinglet	Х	
Townsend's solitaire	Х	Х
American robin	Х	Х
Gray catbird	Х	Х
European starling (I)	Х	Х
Northern parula (U)	Х	
Wilson's warbler	Х	Х
Green-tailed towhee	Х	
Spotted towhee	Х	
White-crowned sparrow	Х	Х
Dark-eyed junco	Х	Х
Red-winged blackbird	Х	Х
Common grackle	Х	Х
Bullock's oriole	Х	Х
House finch	Х	Х
White-winged crossbill (U)	Х	
Lesser goldfinch	Х	Х
American goldfinch	Х	Х
House sparrow (I)	Х	Х
TOTAL BIRDS	44	

MAMMALS	Gateway	Picnic Rock
Western small-footed myotis		
Long-eared myotis	Х	
<mark>*</mark> Fringed myotis (U)	Х	
Long-legged myotis	Х	
<sup>*</sup> Little brown bat	Х	
*Hoary bat	Х	
Silver-haired bat	Х	
Big brown bat	Х	
Eastern cottontail	Х	
Yellow-bellied marmot	Х	
Rock squirrel	Х	
<sup>*</sup> Tassel-eared squirrel (U)	Х	
Fox squirrel	Х	Х
Red fox	Х	
Black bear	Х	Х
Raccoon	Х	Х
Mink	Х	Х
Striped skunk	Х	Х
Mountain lion		
Bobcat		
Elk		
Mule deer	Х	
Moose (U)	Х	
*Bighorn sheep (U)		Х
TOTAL MAMMALS	23	

Amphibians and Reptiles	Gateway	Picnic Rock
Woodhouse's toad	Х	Х
Chorus frog	Х	Х
*Short-horned lizard		
Bullsnake	Х	Х
Milk snake	Х	
Western rattlesnake	Х	Х
TOTAL HERPTILES	5	

FISHES	Gateway	Picnic Rock
Greenback cutthroat trout (ST)	Х	
Rainbow trout (I)	Х	
Brown trout (I)	Х	
Longnose dace	Х	
Longnose sucker	Х	
White sucker	Х	
TOTAL FISHES	6	

Species	Type of Range	Gateway	Picnic Rock	Gateway Mountain Preserve
Abert's squirrel	Overall Range	Х	Х	Х
Big-horned sheep	Overall Range	Х		
Black bear	Fall Concentration	Х	Х	Х
Black bear	Human Conflict		Х	Х
Black bear	Summer Concentration	Х	Х	Х
Elk	Resident Population	Х		
Elk	Winter Concentration	Х		
Elk	Winter Range	Х	Х	Х
Elk	Overall Range	Х	Х	Х
Great blue heron	Foraging	Х	Х	
Moose	Overall Range	Х	Х	Х
Mountain lion	Overall Range	Х	Х	Х
Mountain lion	Human Conflict	Х	Х	Х
Mule deer	Summer Range	Х	Х	Х
Mule deer	Resident Population		Х	Х
Mule deer	Severe Winter Range	Х	Х	Х
Mule deer	Winter Concentration	Х	Х	Х
Mule deer	Winter Range	Х	Х	Х
Mule deer	Overall Range	Х	Х	Х
Preble's meadow jumping mouse	Overall Range	Х	Х	Х
Bull snake	Overall Range	Х	Х	Х
Common garter snake	Overall Range	Х	Х	Х
Hernandez's short-horned lizard	Overall Range	Х	Х	Х
Milk snake	Overall Range	Х	Х	Х
North American racer	Overall Range	Х	Х	Х
Painted turtle	Overall Range	Х	Х	Х
Plains garter snake	Overall Range	Х	Х	Х
Prairie lizard	Overall Range	Х	Х	Х
Prairie rattlesnake	Overall Range	Х	Х	Х
Six-lined racerunner	Overall Range	Х	Х	Х
Terrestrial garter snake	Overall Range	Х	Х	Х
River otter	Overall Range	Х	Х	
River otter	Winter Range	Х	Х	
White-tailed deer	Overall Range	Х	Х	Х
Turkey	Winter Range		Х	Х
Turkey	Overall Range	Х	Х	Х

Table 3.3 Ranges for Species of Greatest Conservation Need, tracked by Colorado Parks andWildlife (Colorado State Wildlife Action Plan, 2015)
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Confluence of the North Fork and main stem of the Poudre River

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# Chapter 4: Cultural and Historical Resources

History Civilian Conservation Corp (CCC) City of Fort Collins Parks Management

# History

Prior to 1883, Fort Collins' domestic water deliveries relied on water wagons, or residents hauled water by hand from the Poudre River or various irrigation canals. Unfiltered and untreated water resulted in outbreaks of disease in the area, most notably cholera and typhoid. Several large fires around this same time contributed to the public need for a reliable and safe supply of water.

In 1883, Fort Collins opened its first public works project, the Water Works, located several miles west of town, to deliver water from the Poudre River to residents. While this original public works project delivered pressurized water, which assisted with fire outbreaks, it did not alleviate the need for clean water, since the water was neither filtered nor treated (Molnar, 2005). The growth of the town was so rapid in 1902 and 1903 that the demand for domestic water outstripped supply, making it necessary to provide an additional source of the "indispensable necessity" (Waltrous, 1911). The increased demand for water was due in part to an increase in population as the sugar beet industry expanded and created new jobs.



Poudre Canyon Filter Plant construction, 1909-1910; courtesy Fort Collins Museum of Discovery

In 1903, after obtaining senior water rights, the City of Fort Collins began construction of Water Treatment Plant #1 at the confluence of the Cache la Poudre River and its North fork tributary, where Gateway Natural Area is today (Molnar, 2005). The location of the water collection was placed just above the confluence, avoiding sewage and other contamination from settlements along the North fork and providing Fort Collins residents with a slightly cleaner source of water. In 1909, the City installed a new mechanical filtration system to cleanse all the water the system supplied, and Fort Collins prided itself in having the best municipal water plant in the Rocky Mountains.

Throughout most of the 1900s, the area surrounding Treatment Plant #1 was open for public recreational use and known locally as The Mountain Park or Water Works Park. At the beginning of construction in 1909, C. V. Roberts of the Roberts Filter Manufacturing Company said, "The grounds will be terraced and seeded to grass, and we will lay out driveways and walks, so that with little additional work, the city can convert the site into a beautiful park." Longtime residents of Fort Collins and northern Colorado flocked to the site, and later reminisced of summer days spent swimming, fishing, and picnicking at Gateway.

In the 1970s, property was closed to the public due to security concerns relating to water quality. During the 1980s, increases in population placed additional demands on the aging plant. At this point it was estimated that an \$11 million renovation and restoration was required to upgrade the facility to meet demands. In 1987, the City's Water Advisory Board recommended decommision of Treatment Plant #1 after 77 years of operation.

# Civilian Conservation Corp (CCC)

The high unemployment rates of the Great Depression of the 1930's prompted the creation of the Civilian Conservation Corps (CCC) as a federal relief program under president Franklin D. Roosevelt's New Deal legislation. The CCC established camps throughout undeveloped and forested areas of the country with the purpose of conducting environmental conservation projects on forest, park, and farm lands. One of the CCC's work camps was located at Water Works Park in 1933. A variety of work completed by the CCC, including bridges, fences, trails, and stone retaining walls were constructed along the Poudre River and are visible at Gateway Natural Area today.

## City of Fort Collins Parks Management

In 2002, Gateway Mountain Park was opened to the public after years of community effort. The enhanced park provided \$1.3 million in infrastructure improvements including a new road access replacing the single lane road to enable ingress and egress of both official vehicles and park visitors.

The park improvement were funded through a partnership between the CO Division of Wildlife, Colorado State Lottery, City and County sales tax, Colorado Department of Transportation, Colorado Scenic and Historic Byway Commission, and Friends of the Poudre (Table 4.1). In 2006, the site was transferred from the City's Parks Department to its Natural Areas Department and renamed Gateway Natural Area.

#### Table 4.1: Funding Sources for the 2002 Opening of Gateway Mountain Park

Organization				
City General Fund (Natural Resources 1/4 cent sales tax and Conservation Trust Funds)	\$520,000			
Colorado Department of Transportation	\$383,000			
Colorado Scenic and Historic Byway Commission	\$182,000			
Great Outdoors Colorado – Lottery Funds				
Colorado Division of Wildlife	\$80,000			
Larimer County	\$20,000			
Friends of the Poudre	\$5,000			

## Management Action:

Natural Areas Department will continue to recognize the historical significance of the 1903 water treatment plant while also conserving the little brown bat colony roost and collaborating with other City departments (Utilities, Historic Preservation, and Operation Services) to conserve the historic values of this site.



Gateway Natural Area; courtesy Norm Keally

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# **Chapter 5: Visitor Experience** Visitation Traffic, Congestion, and Parking Recreation Trends Management Zoning

After a short drive to the mountains, Gateway visitors enjoy a variety of experiences, including picnicking, fishing, wading in the Poudre River, and hiking through the sites'canyon and forests. The long history of visitor enjoyment at the site began when the park it opened to the public in 1910. Although the park was closed in the 1970s, it was reopened by the City's Parks Department in 2002. In 2006, management responsibilities of the site were transferred to the Natural Areas Department.

## Visitation

Access to outdoor recreation is cited as one of the many reasons the population of Fort Collins and Larimer County continues to grow. Consequently, Gateway Natural Area has experienced an increase in visitation, especially over the last five years, and this continues today. A summary of visitation and vehicle traffice is found in Tables 5.1 and 5.2 respectively. A full breakdown of visitation can be found in Appendix B.

Public input for this plan revealed that visitors overwhelmingly enjoy the Gateway experience. Data gathered through the public survey (Appendix A) found that 80% of visitors were satisfied or very satisfied with their experience. Only 7% of respondents found it to be overly crowded, and 20% reporting not crowded at all. As might be expected, the varying sense of crowding depends on the day of the week, time of the year, and personal perspectives.

Not surprisingly, most crowding at the site occurs on weekends in the early summer during the river's snowmelt season, which transforms the river into a nature playground for river enthusiasts. Heavy demand for Gateway's boat launch area by commercial operators, and private (citizen) rafters and kayakers becomes the main factor of the site's congestion. The same situation also plays out on late summer weekends when lower, slower river flows make the river safer and conducive for tubing. Traffic counts conducted in 2017 demonstrate that on average nearly twice as many vehicles entered on weekend days (114) than on weekdays (66), with May through August accounting for the highest visitation.



Hikers at Gateway Natural Area





Significant events affecting visitation numbers:

2012 - Hewlett Gulch Fire (Gateway closed May 15-19, 2012), High Park Fire (Gateway closed June 10-30, 2012).

2013 - Gateway closed September 12-22, 2013 due to flooding.



Table 5.2 Gateway Vehicle Counts, 2013-2017

# Traffic, Congestion, and Parking

Increased visitation drives significant management issues. On crowded days, Gateway's entrance becomes congested with rafters, kayakers, and tubers launching at the ramp, in addition to vehicles turning out once the rafts are unloaded. Similarly, river visitors who park on the shoulder of Highway 14 walk along the highway and then down Gateway's main entrance road. This situation results I a potentially dangerous situation as the narrow, steep-walled driveway lacks a shoulder or pedestrian lane.

## **Management Actions**

Improve overall traffic flow through parking lot redesign for a total capacity of 50 parking spaces. Parallel parking will be eliminated and replaced with pull-ins to create additional spaces, improve traffic flow, and make more room for the turn-around at the east end of the parking lot.

To eliminate safety issues along Colorado Highway 14 and the main access road, pedestrian access will be prohibited on Gateway's main access road. A new pedestrian access will be created 1/5 mile south of the entrance (see Rafting and Tubing section below).

# **Recreation Trends**

Visitors recreate in a variety of enjoyable ways during every season. While hiking and fishing are year-round activities, picnicking, river rafting, and tubing naturally increase in the summer months. Visitor and citizen surveys conducted for this management plan in 2018 found hiking and picnicking to be the most popular activities, followed by fishing, playing at the Natural Playground, passing through to Seaman Reservoir or other public lands, and river-run activities (Table 5.3). Notably, when the river-run recreational activities are combined (rafting, tubing, and "other" responses including kayaking), they are as popular as fishing, playground use, and passing through Gateway to other public lands (23%).



#### Table 5.3 Visitor uses while at Gateway Natural Area

## Hiking and Passing Through to Other Public Lands

Gateway features two short and steep trails, including the ¼ mile Overlook Trail and the ¾ mile Black Powder Trail (Figure 5.1). Both trails offer scenic views of the river oxbow and mountain valleys. Visitors also hike the one-mile dirt road up to the crest of Seaman Reservoir, which is owned and managed by the City of Greeley. Access through Gateway to other adjoining public lands, including those of the U.S. Forest Service and State Land Board, is not permitted, with the exception of fishing or hunting with a state-issued permit (per Colorado Parks and Wildlife regulations). Citizen feedback indicated that 23% of respondents reported using Gateway for access to other public lands, despite the prohibitions. Pedestrian counters installed in 2017 confirmed a high use of travel-through, with 34% - 45% of visitors travelling through Gateway to access other public lands.



Figure 5.1 Gateway Natural Area trails and access points

## Picnic Area and Natural Playground

Gateway's parklike setting is attractive to visitors for picnicking and family gatherings. In 2011, Gateway was identified as an ideal place for a natural playground for children, with the purpose of fostering a connection with nature. In that same year, the Natural Playground was constructed and opened to the public. Elements include stepping stumps, a rock streambed, a wooden boardwalk, a sand play area, a boat carving, rock walls, and a rustic log ladder.



Gateway Natural Area Natural Playground

The playgound has also served as an ideal setting for educational programing for schools and the broader community. Annually, the Department leads school field trips, community programs, and volunteer learning events. Educational topics typically include river, forest, and fire ecology.

As part of this management plan, several ideas were considered to enhance the uses and features of the playground. Feedback from the public survey confirmed that the playground is a popular feature (24% of respondents reported the playground as a main activity) but also warrants additional maintenance and updating.

### Management Action for the Natural Playground:

Continue improving, updating, and maintaining features of the Natural Playground, including minor modifications to further support outdoor classroom events.

Fishing

Fishing is a popular, year-round activity at Gateway Natural Area. More than 24% of Gateway's visitors report fishing as a main activity here. Fishing upstream of the confluence of the North Fork and the main stem of the Poudre River is a "catch and release with flies and lures only" for all trout. Year-round fishing is also very popular at Seaman Reservoir, including ice-fishing in the winter. Rainbow trout, brown trout, and perch are common species in the reservoir. State and local fishing regulations apply.



Gateway Natural Area Natural; courtesy Norm Keally

## Management Action for Fishing:

Continue to provide anglers access to a high-quality fishing opportunity in cooperation with Colorado Parks and Wildlife.

## River Rafting, Kayaking, and Tubing

As long as Gateway has been open to the public, visitors have cherished the opportunity to utilize the site as the launching point for rafting, kayaking, and tubing. The river stretch from Gateway to Lower Picnic Rock is commonly known as the Filter Plant Run, which features class II and III rapids over a course of 3¼ river miles (Figure 5.2). This river run is one of the most popular in the entire Poudre Canyon.



**Class II** - Easy rapids with smaller waves, clear channels that are obvious without scouting. Some maneuvering might be required. Intermediate skills needed.

**Class III** - Rapids with high, irregular waves. Narrow passages that often require precise maneuvering. Expert skills needed.

Source:

American Whitewater

en.wikipedia.org/wiki/American\_Whitew ater

Natural Areas Department *Play It Safe* brochure:

fcgov.com/naturalareas/filesriversafety-brochure-2018.pdf

Figure 5.2 River Rafting/Kayak "Filter Plan Run"

As stated above, the popularity of Gateway as a river launching point makes it a highly congested and even unsafe area, as the boat launch and entrance area overflows with river users, especially on weekends. In an effort to promote pedestrian safety and reduce congestion at the entrance and boat launch area, pedestrian access via the main entrance road will be eliminated in favor of a new pedestrian access just 1/5 mile downstream (east) on Highway 14 (Figures 5.1 and 5.3). The existing dirt road that once served as Gateway's main entrance will be improved to provide up to three new launch sites. Users entering at the trailhead would be required to pay a \$3 pedestrian entrance fee via a self-pay station (Figure 5.3).

### Commercial Rafting

Early in this planning effort, commercial rafting was identified as the most significant source of vehicle congestion, crowding, and visitor confusion near the gatehouse and boat ramp. As a result, use during peak summer months required multiple Natural Area Staff to assist with parking and traffic flow.

Historically, five commercial rafting companies have used Gateway and Lower Picnic Rock for early season rafting when spring snowmelt produces high flows. One company has utilized Gateway every summer day as a restroom stop and rafting orientation, prior to heading to upper reaches of the river that are still navigable during the lower flow season. Over the course of the summer this single company's use produces 8,000 to 9,000 visitors. When other commercial operators are factored in, an estimated additional 4,000 to 10,000 visitors are using the site. In total, these numbers correlate to 150-400 visitors per day brought into Gateway by commercial operators. In light of this, an extensive cooperative effort with the rafting companies examined river launch site alternatives, and a US Forest Service launch site ½ mile downstream of Gateway was identified. Although this alternative shortens the Filter Plant Run, the run would still offer a 2¾-mile run down to Lower Picnic Rock. To this end, Natural Areas will discontinue permitting commercial rafting permits after the 2019 float season.



Kayaker; courtesy Norm Keally

Management Actions for Rafting, Kayaking, and Tubing:

A new pedestrian access will be constructed 1/5 mile south of the Gateway main entrance and provide several new launching points for river users.

Following the 2019 season, commercial rafting use at Gateway will be discontinued. This includes launching as well as stopping for restroom breaks and safety talks.

#### **River Safety**

The Natural Areas Department is one of many partnering with Poudre Fire Authority and other local authorities to increase safety on the Poudre River. Specific river routes have been designated, including the Filter Plant run. On-site signage has been installed at multiple locations, and a "Play it Safe" campaign is ongoing.

#### Management Action for River Safety:

The Natural Areas Department will continue the campaign to advocate for river safety as part of the Poudre River Safety Coalition.



Figure 5.3: Location of existing emergency access road to be utilized as pedestrian access to two new river input/outtake locations.

## Management Zoning

In 2010, the Natural Areas Department developed a system of management zoning to more effectively protect natural resources and manage visitor use. The Management Zoning System consists of five zones ranging from natural areas areas closed to public use (0) to focal areas designated for intensive public use (4). A modifier is often added to the zoning designation to describe if the area is on-trail use only (A) or off-trail use permitted (B).

In Figure 5.4, designations are (1) areas closed due to lack of trails and safety concerns, (2A) areas of resource protection and on-trail use only, (3B) areas for a natural experience and off-trail use permitted, and (4B) areas of intense visitor use. Specifically, these designations are defined as:

Zone 1 – Closed Zones: Portions of a natural area that are not open to the public due to one or more reasons specified below in Zone 2A description. In closed zones, trails and other public amenities either do not exist or are intended for maintenance purposes only.

Zone 2A – Resource Protection Zones and on-trail only: Portions of a natural area where conservation and resource protection are the highest priorities. Visitor access is generally limited to on-trail or trailside activities. Public amenities are limited or nonexistent. Temporary or seasonal closures may be implemented for resource protection, restoration, or other reasons.

Zone 3B – Natural Experience Zones: Portions of a natural area intended to provide a connection with nature and site-appropriate recreation. Off-trail use is generally allowed.

Zone 4B – Focal Recreation Zones and off-trail use allowed: Portions of a natural area that provide intense and directed recreation. These are developed areas intended to provide defined recreation or access to recreation. Focal areas generally include parking lots, picnic areas, boating or fishing access points, designated rock-climbing areas, etc.

A complete key and description of the Natural Areas management zoning system is found as Appendix C.



Figure 5.4 Management Zones at Gateway Natural Area

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# Chapter 6: Summary of Management Actions

Chapter 1: Introduction and Background Chapter 2: Site Administration Chapter 3: Ecological Systems and Biodiversity Chapter 4: Cultural Resources Chapter 5: Visitor Experience

Chapter 1: Introduction and Background Introductory chapter, no management actions specified.

Chapter 2: Site Administration

Significant on-site facilities

<u>Park and Picnic Area</u> - Due to increased use and visitation, including entrance fees and shelter use, reservation fees will change in 2019 to reflect regional market prices and be benchmarked annually after that.

Management Action:

Modify the fee structure of picnic shelter reservations to reflect regional market costs and pricing.

Public Feedback to this recommendation: 64% Agree, 21% Disagree, 14% Neutral

Leases and Memoranda of Understanding (MOU)

An annual MOU between the Natural Areas Department and Colorado Parks and Wildlife outlines the shared responsibilities of Picnic Rock. Natural Areas is responsible for parking lot maintenance, restroom cleaning, and trash removal. CPW will continue regulation enforcement as needed.

Management Action:

Natural Areas will continue to maintain the parking lot, clean restrooms, and remove trash at Picnic Rock.

Public Feedback to this Management Action: 87% Agree, 3% Disagree, 10% Neutral

Special Use Permits and Commercial Use Permits

After consultation with permitted rafting companies and acknowledgment of significant crowding issues generated by the high level of use, permits for commercial rafting will be discontinued after the 2019 season.

Management Action:

Due to crowding and site capacity issues, commercial raft launches from Gateway will be discontinued following the 2019 season.

Significant stakeholder outreach but Public feedback not requested

## **Operational Costs and Financial Analysis**

A review of regional market open space fees revealed that Gateway's fee structure is lower than other regional sites and should be adjusted to market-based pricing to further offset costs of the site's management.

Management Action:

Modify the structure of entrance fees, shelter fees, and other fees to reflect regional market costs and pricing.

- 1. In 2019, begin modifying the entrance fee structure and shelter reservation prices to reflect consistency with the City's Parks Department and benchmarked against regional market pricing.
- 2.
- 3. Collect entrance fees year-round and from all users. This would eliminate the December through February free access period.

Public Feedback to these Management Actions: 64% Agree, 21% Disagree, 14% Neutral

## Proposed Seaman Reservoir Project Expansion

The City of Greeley is proposing to expand its existing Seaman Reservoir from its current size of approximately 5,000 acre-feet to as much as 88,000 acre-feet. The footprint of the enlarged reservoir would inundate several additional miles of the North Fork and is expected to have ecological impacts to both the North Fork and the main stem of the Cache la Poudre River.

Management Action:

*City Natural Areas and Utilities Departments will monitor the planning and permitting processes for Seaman Reservoir and will participate as directed by City Council.* 

Public feedback not requested

# Chapter 3: Ecological Systems and Biodiversity

Gateway Natural Area hosts a variety of healthy ecosystems, including foothills mixed forests, foothills shrublands, mixed grasslands, rocky slopes, riparian communities, and open water. Conservation of these and other resources will be implemented in the next 10 years. Also, additional monitoring and inventory will further understanding of Species of Interest identified in the department's 2017 Wildlife Conservation Guidelines, as little is known about invertebrate populations, reptiles, and amphibians. A monitoring program for breeding birds could help identify habitat needs, and an understanding of pollinator presence would help direct restoration efforts by enhancing larval host plants and nectar sources for detected species.

Management Action for Rare Species

In the next 10 years, ensure the conservation, persistence, and expansion of 11 rare plants and 8 rare species of wildlife occurring at Gateway and Picnic Rock. To protect rare ferns on the rock wall, prohibit climbing for any purpose, including cliff jumping.

Management Action for Ecological Monitoring and Management

Consider inventory of wildlife on the property, including invertebrates, breeding birds, and other species noted in the Department's Species of Interest list (NAD Wildlife Conservation Guidelines, 2017). Consider species inventories by habitat, including lotic, riparian forest, mixed grass, foothills mixed forest, and shrubland habitats.

Management Action (conservation of Preble's meadow jumping mouse habitat)

Protect riparian areas suitable for Preble's meadow jumping mouse. Consider surveys and riparian restoration where appropriate (Restoration Plan, 2016).

#### Management Action (forest and soil conservation)

Observe forest recovery and regeneration of ponderosa pine and Douglas fir following the 2012 High Park Fire per the department's 2016 Restoration Plan. Consider reforestation trials to assist recovery, if appropriate.

Continue to assess burned areas for erosion issues.

Management Action (exotic invasive plant treatment)

Continue to treat invasive exotic plants (e.g., cheatgrass, Dalmatian toadflax, volunteer rye, mullein, and others).

#### Management Action (shadow planting)

Shadow plant the large aging shade trees in the picnic area with young trees.

#### Conservation of the little brown bat roosting colony

Background: The Poudre River flowing through Gateway provides valuable foraging habitat and a migration corridor for a variety of bat species. In 2017, a regionally significant maternity roost of little brown bats was discovered using the former water treatment building. Most little brown bat maternity colonies in Colorado have fewer than 100 adult females (Armstrong et. al. 2011), but observations of emergence by staff and bat biologists suggest that this roost is significantly larger, likely the largest known for northern Colorado.

#### Management Action

In the next 10 years, efforts will be made to conserve the little brown bat maternity roost within the former water treatment plant. Specific actions will include minimizing entry into the building during the occupation season (late May through early September), eliminating overflow parking behind the structure, and redesigning traffic flow outside the front of the plant. Natural Areas staff will also continue to communicate with City Operation Services, Utilities, and Historic Preservation

staff to find solutions to conserve the maternity bat roost while efforts are made to preserve the building.

Public Feedback for Chapter 3 Management Actions: 90% Agree 4% Disagree 6% Neutral

# Chapter 4: Cultural Resources

In 1903, after obtaining senior water rights, the City of Fort Collins began construction of Water Treatment Plant #1, at the confluence of the Cache la Poudre River and its North Fork tributary, where Gateway Natural Area is today (Molnar, 2005). Throughout the 1900's, the area surrounding the plant was open to the public for recreational use and known locally as The Mountain Park or Water Works Park. In late 2006, the City of Fort Collins Natural Areas Department assumed management of the park. Today, Gateway Natural Area is co-managed with the City's Utilities Division, and the treatment plant remains a prominent feature of the Natural Area.

## Management Action for Cultural Resources

Natural Areas Department will continue to recognize the historical significance of the 1903 water treatment plant while conserving the little brown bat colony roost and collaborating with City Utilities, Historic Preservation, and Operation Services to conserve the historic values of this site.

Public feedback not requested

# Chapter 5: Visitor Experience

Increasing visitation has caused several issues, including crowding at the entrance and safety concerns on busy days. On crowded days, Gateway's entrance becomes congested with rafters, kayakers, and tubers launching at the ramp, vehicles turning around, and dozens of pedestrians walking along the access road.

Management Action to Reduce Traffic and Congestion:

Improve overall traffic flow through parking lot redesign for a total capacity of 50 parking spaces. Parallel parking will be eliminated and replaced with pull-ins to create the additional spaces, improve traffic flow, and make more room for the turn-around at the east end of the parking lot. To eliminate safety issues along Colorado Highway 14 and the main access road, pedestrian access will be prohibited on Gateway's main access road. A new pedestrian access will be created 1/5 mile south of the entrance (see Rafting and Tubing section below).

Citizen Feedback to these Management Actions: 72% Agree 17% Disagree 11% Neutral

## Natural Playground

A total of 24% of Gateway visitors utilized the Natural Playground that was first constructed in 2011. The purpose of the playground is to encourage outdoor play and foster a connection with nature.

Management Action for the Natural Playground:

Continue improving, updating, and maintaining features of the Natural Playground, including minor modifications to further support outdoor classroom events.

Public feedback not requested

## Fishing

Fishing is a popular, year-round activity at Gateway Natural Area. More than 24% of Gateway's visitors report fishing as one of their main activities when visiting the site. Management Action for Fishing:

Continue to provide anglers access to a high-quality fishing opportunity in cooperation with Colorado Parks and Wildlife.

Public feedback not requested

## **Rafting and Tubing**

There is significant vehicle congestion, crowding, and confusion near the gatehouse and boat ramp at Gateway during summer weekends. The high level of use brought in by the commercial rafting companies is significant, and there is a USFS designated launch site ½ mile downstream of Gateway. To address entrance congestion and safety concerns, and because pedestrian traffic on the main entrance road will be eliminated, a new pedestrian entrance will be created.

Management Actions for Rafting and Tubing:

Following the 2019 season, commercial rafting use at Gateway will be discontinued. This includes launching as well as stopping for restroom breaks and safety talks.

A new pedestrian access will be constructed 1/5 mile south of the Gateway main entrance and will provide several new launching points for river users.

Extensive review with stakeholders

### **River Safety**

The Natural Areas Department is one of many partnering with Poudre Fire Authority and other local authorities to increase safety on the Poudre River. Management Action for River Safety:

The Natural Areas Department will continue the campaign to advocate for river safety as part of the Poudre River Safety Coalition.

### Public feedback not requested

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Response	Percent	Count				
Yes	64.7%	165				
No	35.3%	90				
NO	Total	255				
	TULAI	200				
Are you a Larimer County Re						
Response	Percent	Count				
Yes	85.2%	218				
No	14.8%	38				
	Total	256				
What are your main activities	on Gateway Natural Areap					
Response	Percent	Count				
Hiking	74.6%	212				
Picnic	38.7%	110				
Fishing	24.3%	69				
Natural Playground	23.6%	67				
Passing through to adjacent						
public lands	22.5%	64				
Other:	12.3%	35				
Tubing	8.5%	24				
		27				
Rafting The management plan makes Wildlife to remove trash, clea	8.5% the recommendation to con n bathrooms, and maintain t	24 tinue the agreement with Colorado Parks and the parking lot at Picnic Rock. Do you agree				
Rafting The management plan makes Wildlife to remove trash, clea with this management recom Response Yes	8.5% the recommendation to con in bathrooms, and maintain t mendation? Percent 87.3%	24         tinue the agreement with Colorado Parks and         the parking lot at Picnic Rock. Do you agree         Count         226				
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Rafting The management plan makes Wildlife to remove trash, clea with this management recom Response Yes	8.5% the recommendation to con in bathrooms, and maintain t mendation? Percent 87.3%	24         tinue the agreement with Colorado Parks and         the parking lot at Picnic Rock. Do you agree         Count         226				
Rafting The management plan makes Wildlife to remove trash, clea with this management recom Response Yes No No Neutral To address financial sustainal	8.5%         the recommendation to consecutive         in bathrooms, and maintain temendation?         Percent         87.3%         2.7%         10.0%         Total	24       tinue the agreement with Colorado Parks and the parking lot at Picnic Rock. Do you agree       Count       226       7       26				
Rafting The management plan makes Wildlife to remove trash, clea with this management recom Response Yes No Neutral To address financial sustainal Daily entrance fee: \$7 Response Yes No	8.5%         the recommendation to con         in bathrooms, and maintain t         mendation?         Percent         87.3%         2.7%         10.0%         Total         bility the management plan r         Annual entrance fee: \$40         Percent         64.2%         21.4%	24         tinue the agreement with Colorado Parks and         the parking lot at Picnic Rock. Do you agree         Count         226         7         26         259         recommends changing the fee structure to:         Shelter rental fee: \$80         Count         165         55				
Rafting The management plan makes Wildlife to remove trash, clea with this management recom Response Yes No Neutral To address financial sustainal Daily entrance fee: \$7 Response Yes No No Neutral Do you agree with the manage	8.5%         the recommendation to con         n bathrooms, and maintain t         mendation?         Percent         87.3%         2.7%         10.0%         Total         bility the management plan r         Annual entrance fee: \$40         Percent         64.2%         21.4%         14.4%         Total	24         tinue the agreement with Colorado Parks and the parking lot at Picnic Rock. Do you agree         Count         226         7         26         259         recommends changing the fee structure to:         Shelter rental fee: \$80         Count         165         55         37         257         protect and enhance natural resources?				
Rafting The management plan makes Wildlife to remove trash, clea with this management recom Response Yes No Neutral To address financial sustainal Daily entrance fee: \$7 Response Yes No Neutral Do you agree with the manage Response	8.5%         the recommendation to consect on bathrooms, and maintain to mendation?         Percent         87.3%         2.7%         10.0%         Total         bility the management plan response for the second se	24         tinue the agreement with Colorado Parks and the parking lot at Picnic Rock. Do you agree         Count         226         7         26         259         recommends changing the fee structure to:         Shelter rental fee: \$80         Count         165         55         37         257         protect and enhance natural resources?         Count				
Rafting The management plan makes Wildlife to remove trash, clea with this management recomm Response Yes No Neutral To address financial sustainal Daily entrance fee: \$7 Response Yes No Neutral Do you agree with the manage Response Yes Yes	8.5%         the recommendation to consect on bathrooms, and maintain to mendation?         Percent         87.3%         2.7%         10.0%         Total         bility the management plan response fee: \$40         Percent         64.2%         21.4%         14.4%         Total         ement recommendations to         Percent         90.8%	24         tinue the agreement with Colorado Parks and the parking lot at Picnic Rock. Do you agree         Count         226         7         26         259         recommends changing the fee structure to:         Shelter rental fee: \$80         Count         165         55         37         257         protect and enhance natural resources?         Count         237				
Rafting         The management plan makes         Wildlife to remove trash, clea         with this management recommand         Response         Yes         No         Neutral         To address financial sustainal         Daily entrance fee: \$7         Yes         No         Neutral         Do you agree with the manage         Response         Yes         No         No	8.5%         the recommendation to consect on bathrooms, and maintain to mendation?         Percent         87.3%         2.7%         10.0%         Total         bility the management plan response fee: \$40         Percent         64.2%         21.4%         14.4%         Total         ement recommendations to         Percent         90.8%         3.8%	24         tinue the agreement with Colorado Parks and the parking lot at Picnic Rock. Do you agree         Count         226         7         26         259         recommends changing the fee structure to:         Shelter rental fee: \$80         Count         165         55         37         257         protect and enhance natural resources?         Count         237         10				
Rafting         The management plan makes         Wildlife to remove trash, clea         with this management recommand         Response         Yes         No         Neutral         To address financial sustainal         Daily entrance fee: \$7         Yes         No         Neutral         Do you agree with the management         Response         Yes         No         Neutral	8.5%         the recommendation to consect on bathrooms, and maintain to mendation?         Percent         87.3%         2.7%         10.0%         Total         bility the management plan response fee: \$40         Percent         64.2%         21.4%         14.4%         Total         ement recommendations to         Percent         90.8%	24         tinue the agreement with Colorado Parks and the parking lot at Picnic Rock. Do you agree         Count         226         7         26         259         recommends changing the fee structure to:         Shelter rental fee: \$80         Count         165         55         37         257         protect and enhance natural resources?         Count         237				

# Appendix A: Results from public feedback

How often do you or your fa	amily/group use the natura	al playground?					
Response	Percent	Count					
Never	49.1%	108					
Once or twice a year	40.0%	88					
Once or twice a month	8.2%	18					
More than twice a month	2.7%	6					
	Total	220					
Please indicate which natura	al playground features are						
Response	Percent	Count					
Sand play zone	30.0%	45					
Carved boat	30.0%	45					
Stepping stumps	49.3%	74					
Rustic log ladder	40.0%	60					
Other:	44.7%	67					
Please indicate which natura							
Activity	Percent	Count					
Stepping stumps	49.3%	74					
Rustic log ladder	40.0%	60					
Sand play zone	30.0%	45					
Carved boat	30.0%	45					
Other	44.7%	67					
Do you agree with the mana in the narrative provided?	gement recommendation	s to implement parking improvements as described					
Response	Percent	Count					
Yes	72.3%	191					
No	16.7%	44					
Neutral	11.0%	29					
	Total	264					
How would you rate your ov	verall satisfaction with Gat	teway Natural Area?					
Response	Percent	Count					
Very satisfied	47.3%	131					
Satisfied	33.2%	92					
Somewhat satisfied	15.5%	43					
Somewhat dissatisfied	2.5%	7					
Dissatisfied	0.7%	2					
Very dissatisfied	0.7%	2					

# Appendix B: Gateway Natural Area Estimated Visitation, 2007-2018

	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Total Visitors	29,971	27,365	25,944	26,655	38,741	16,963	27,337	40,949	47,247	52,745	50,32 5	46,60 4
Daily Pass Estimate based on number of daily passes sold x 3 visitors per vehicle	15,726	12,234	11880	11958	13605	7770	12849	15783	22050	26169	27849	26763
Annual Pass Estimate based on number of annual passes sold x 3 visitors per vehicle x 6 visits per year	1764	2628	2358	2700	2862	1674	2466	2790	4248	3618	4662	3798
Rapid Transit Rafting Company Actual number	8319	8341	7544	7835	7822	5733	7925	8474	8982	8563	8144	7948
Other Rafting companies												
2011: 7 buses/day x 42 days x 35 rafters 2014: 5 buses/day x 52 days x 35 rafters 2015: 5 buses/day x 26 days x 35 rafters 2016: 6 buses/day x 30 days x 35 rafters	0	0	0	0	10290 <sup>1</sup>	0	0	9100 <sup>1</sup>	4550 <sup>1</sup>	6300	1575 <sup>6</sup>	0
Walk-In (some summer estimates based on actual data)	3707	3707	3707	3707	3707	1786 <sup>2</sup>	3642	4347	6052 <sup>3</sup>	6275	6275	6275
100 walk-ins per day for 12 summer weekend days	1200	1200	1200	1200	1200	400	1200	1200	1500 <sup>3</sup>	1500	1500	1500
50 walk-ins per day for 16 summer weekend days	800	800	800	800	800	267	800	800	1200 <sup>3</sup>	1200	1200	1200
15 walk-ins per day for 64 summer week days	960	960	960	960	960	320	960	1600 <sup>3</sup>	2000 <sup>3</sup>	2000	2000	2000
5 walk-ins per day for 121 days (Apr, May, Sep, Oct)	605	605	605	605	605	202	540 <sup>4</sup>	605	1210 <sup>3</sup>	1210	1210	1210
2 walk-ins per day for 61 days (Nov, Mar)	122	122	122	122	122	122	122	122	122	305	305	305
20 walk-ins total for 91 days (Dec, Jan, Feb)	20	20	20	20	20	20	20	20	20	60	60	60
No Fee Period (Dec-Feb)	455	455	455	455	455	455	455	455	13655	1820	1820	1820

<sup>&</sup>lt;sup>1</sup> Three additional rafting companies launched form Gateway to Picnic Rock, June 1-July 15, 2009, May 24-July 15, 2014 and June 2-June 22, 2015 due to high and dangerous water upstream

<sup>6</sup>Actual reported numbers from rafting companies

<sup>&</sup>lt;sup>2</sup> Hewlett Gulch Fire (Gateway closed May 15-May 19, 2012), High Park Fire (Gateway closed June 10-June 30, 2012), Black Powder trail closed to August fire mitigation efforts at Seaman Reservoir (closed July 10-July 24, 2012), and several campfires/grill restrictions contributed to reduced Gateway visitation.

<sup>&</sup>lt;sup>3</sup> Increase in visitation due to warmer weather and increase in number of people hiking to Seaman and camping at Seaman

<sup>&</sup>lt;sup>4</sup> Gateway closed September 12-September 22, 2013 due to flood. Gateway bridge damaged, closing bridge access to Seaman Reservoir, Black Powder Trail, and North Fork of Poudre River until May 2014

<sup>&</sup>lt;sup>5</sup> Increase in off-season visitation due to warmer weather, more fishermen, and population increase

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# Appendix C: Key to Management Zoning

#### <u>Zone 0 – Closed Natural Area</u>

The entire natural area is not open for public access. The natural area is either not intended for public use or is not yet open due to lack of public amenities (e.g., trails, parking lots) required prior to opening.

#### Zone 1 – Closed Zones

Portions of a natural area that are not open to the public due to one or more reasons specified below. In closed zones, trails and other public amenities either do not exist or are intended for maintenance purposes only. All Zone 1 – Closed Zones are modified as "C – no trails available." Reasons for closures may include: Areas closed for *conservation* or wildlife refuge Areas where no *formal access* is provided Areas closed due to *public safety concerns* Areas under *long-term restoration* (typically 10 years or more) Areas closed due to the presence of *cultural artifacts* Areas closed on *leased land* because public access is not allowed by the terms of the lease

#### Zone 2 – Resource Protection Zones

Portions of a natural area where conservation and resource protection are the highest priorities. Visitor access is generally limited to on-trail or trailside activities. Public amenities are limited or nonexistent. Temporary or seasonal closures may be implemented for resource protection, restoration, or other reasons.

#### <u> Zone 3 – Natural Experience Zones</u>

Portions of a natural area intended to provide visitors with a place to connect with nature and enjoy site appropriate recreation. Off-trail use is generally allowed, and public amenities may exist, though, not to the scale or frequency of a focal area (Zone 4). Temporary or seasonal closures may be implemented for resource protection, restoration, or other reasons.

#### <u> Zone 4 – Focal Recreation Zones</u>

Portions of a natural area that provide intense and directed recreation. These are developed areas intended to provide defined recreation or access to recreation. Focal areas generally include parking lots, picnic areas, boating or fishing access points, designated rock-climbing areas, etc. Temporary or seasonal closures may be implemented for resource protection, restoration, or other reasons.

Trail Modifiers (Regulatory Zoning): A – On-trail only B – Off-trail use allowed