



GREELEY PARKS & RECREATION ADVISORY BOARD MEETING

FRIDAY, MARCH 1, 2024 -- 7:00am

Location: Greeley Recreation Center Room 101C

For virtual attendance:

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Agenda

1. Roll Call
2. Approval of Agenda
3. Approval of Minutes
4. New Director Mission Message
5. Public Input
6. Board Member Committee Reports: Art Commission
7. Staff Reports
8. Old Business
 - A.
9. New Business
 - A. Arroyos del Sol Master Plan - Justin Scharton
 - B. 2024 Chairperson selection
10. Upcoming Agendas
11. Next Meeting Set – Tentatively Friday, April 5, 2024
12. Adjournment

Board members unable to join this meeting, please notify Leslie Evans at: leslie.evans@greeleygov.com

GREELEY PARKS AND RECREATION ADVISORY BOARD

MEETING MINUTES – November 3, 2023

1. ROLL CALL

The Greeley Parks and Recreation Advisory Board met Friday, November 3, 2023, at 7:00am at the Greeley Recreation Center. Board members joining: Vicente Vega-Ruiz, Monica Ramirez, Adam Michaels, Sharon Wright and Greg McIntosh. Staff joining: Eric Bloomer (Parks Division Manager), Justin Scharton (Natural Areas & Trails Division Manager), Daniel Lawrence (Recreation Division Manager), Benjamin Alexander (Business Manager), and Nancy Milton (Office Manager).

- 2. APPROVAL OF AGENDA** – A motion was made by Greg McIntosh to approve the agenda. The motion was seconded by Sharon Wright and passed unanimously.

- 3. APPROVAL OF MINUTES** – A motion was made by Greg McIntosh to approve the minutes of the previous meeting. The motion was seconded by Sharon Wright and passed unanimously.

4. PUBLIC INPUT

- 5. BOARD MEMBER COMMITTEE REPORTS** – Art Commission – Sharon Wright: Armando Silva has been contracted for the Delta Park art. A bronze sculpture has been donated by an anonymous donor to be placed at Josephine Jones Park. Artwork for Long View Park should be in place by the end of November.

6. STAFF REPORTS

Eric Bloomer

- Hazelton Park development was supposed to include a bridge to connect the park to the neighborhood on the south. Construction on that bridge has begun and should be completed by the end of the month.
- The Chamber of Commerce will not be holding the holiday parade as in the past. They will instead hold a holiday drive-thru light show at Island Grove Park. The DDA has decided to light Lincoln Park and will host additional events on the Downtown Plazas. The Parks staff will light trees along the Union Colony Civic Center and Recreation Center.

Daniel Lawrence

- The Family FunPlex opened last Friday and everything has been going great.
- On Monday afternoon there will be a kick-off meeting for the Anna Gimmestad Feasibility Study.
- Staff are working with an architect and Public Works Department staff to redesign the plaza in front of the Ice Haus along 8th Avenue.

Justin Scharton

- Nothing further to add beyond what was submitted in his report.

7. OLD BUSINESS

- A. Naming of Shurview Property: Justin Scharton led the discussion reviewing features of the property as well as the naming suggestions provided by staff. Suggestions included: Rabbitbrush Natural Area, Soaring Eagle Natural Area, Arroyos del Sol Natural Area, and Sharktooth Natural Area. The consensus of the Board was the name Arroyos del Sol. Monica Ramirez remarked that the name Arroyos del Sol is not accurate, as the arroyos are not from the sun and geologically speaking, that would not be the correct term. There followed discussion concerning the correct translation of either Arroyos al Sol or Arroyos del Sol. A motion was made by Sharon Wright to recommend the name Arroyos al Sol, pending a final check of the grammar by a professional translator. The motion was seconded by Greg McIntosh and Monica Ramirez. The motion passed 5-0.
- B. ARPA Project Selections: One of the projects approved for funding for CPRD is the Youth Sports Complex lighting conversion to LED. Installation will be completed before the 2024 season. The Active Adult Center renovation project was approved and may include a movie theater, golf simulators, and upgrades to spaces such as flooring, fixtures and furniture. There is also a project led by the Public Works Department that will include CPRD working in collaboration with the Public Works and Water Departments on a master planning project for the Poudre River Trail Corridor.

8. NEW BUSINESS

9. UPCOMING AGENDAS – Trails Master Plan, Board Attendance

- 10. NEXT MEETING** – The Board will not meet in December 2023. The next meeting is tentatively scheduled for Friday, January 5, 2024.

- 11. ADJOURNMENT** –The meeting adjourned at 8:15am.

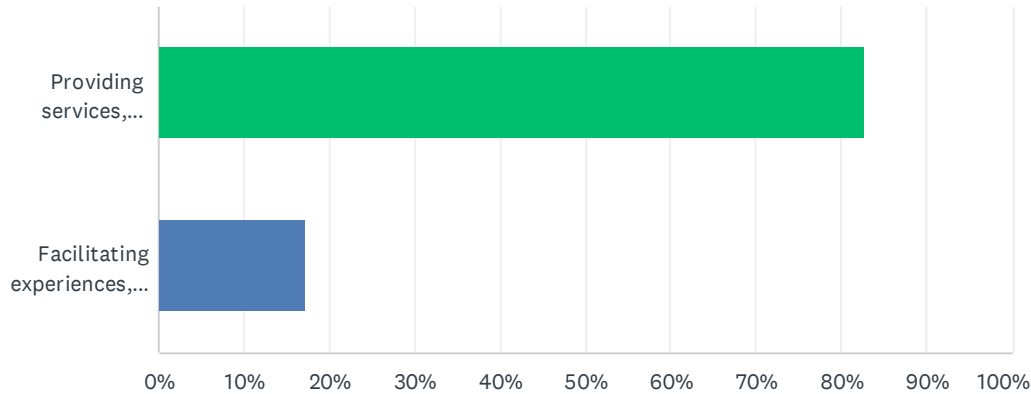
Respectfully submitted:

Vicente Vega-Ruiz, Chair

Nancy Milton, Office Manager

Q1 Select which mission statement below best reflects Culture Parks and Recreation Department's collective purpose and responsibilities.

Answered: 75 Skipped: 0



ANSWER CHOICES	RESPONSES	
Providing services, experiences, and spaces that promote a sense of community, health, and wellbeing for all.	82.67%	62
Facilitating experiences, building trust, and creating transformative impact community wide.	17.33%	13
TOTAL		75

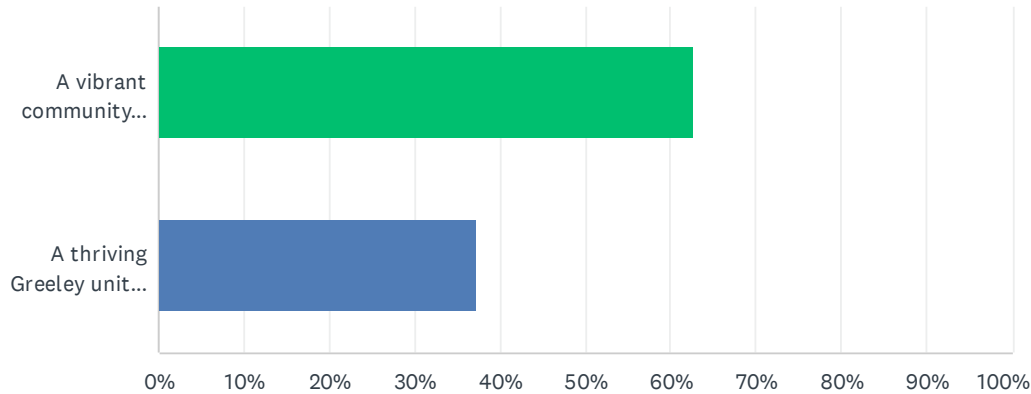
#	ADDITIONAL COMMENTS	DATE
1	My goal would be to update old facilities to bring them into the 21st century.	2/7/2024 4:33 PM
2	A. Impact is such a broad word, which can be detailed by the "Community, Health, Wellbeing" (from option 1), therefore first option is stronger. Mission Statement IS what we hope to impact, so it is using the "word in the definition". B. Building trust [between whom?] is more of Value more than a mission statement and doesn't seem measurable. C. The first statement is much more measurable, which will help us all work towards it daily, once key indicators and steps are in place of how to meet this mission statement. We can measure 1. services 2. experiences 3. spaces. D. Idea - Change the adjective clause to the following " to promote positive community, healthy living, and increased wellbeing for all". E. Please remove "Sense Of". "Sense of" can be grammatically modifying all three of the direct objects (community, health, and wellbeing) of the clause. It feels like it's giving us an out if things don't go so well and can be interpreted as indecisive. Furthermore, if we don't have a direction in which we are headed, we're doomed to flagellate and grasp at short term outputs instead of long-lasting outcomes for our community. Sense of will not allow us to markedly define these categories, because it is unequivocally subjective.	2/5/2024 1:01 PM
3	The other choice is much too wordy. Needs to be simple and "accessible" language for all people in the community, regardless of education.	2/5/2024 12:18 PM
4	I think belonging should be added to this.	2/1/2024 9:16 AM
5	I feel that the second statements saying building trust, insinuates we don't currently have trust.	2/1/2024 6:07 AM
6	Serving the community to provide impactful services through facilitated experiences while building trust and creating a healthy community with its wellbeing in mind.	1/31/2024 2:06 PM
7	I'm not sure about the word "facilitating" though. Something more active like "creating" would work better. Also, I'd like to see something about working with partners in the communities we serve.	1/31/2024 1:24 PM

Culture Parks and Recreation Mission + Vision Statements

8	This is not something we do with either comment. Our only focus is to keep city council and the public from complaining. We are reactive, and are only "Driven to Please" the powers that be. Without a base standard we can hold ourselves and city management to, we don't have time, staff or funding for improvement. This option is the closest fit because we mainly only focus on safety the only exception being when any one person in city management decides to change things based on there personal feelings.	1/31/2024 1:22 PM
9	I have clicked my preference, but I have to ask are we promoting only a 'sense' of community health and wellbeing or are we actually promoting community health and well being?	1/31/2024 1:16 PM
10	Change to: "Providing services, experiences, and creating transformative impact for all."	1/31/2024 12:57 PM
11	I think well-being has a hyphen in it.	1/31/2024 12:20 PM

Q2 Please select which vision statement below best describes the aspirations of the Culture Parks and Recreation Department.

Answered: 75 Skipped: 0



ANSWER CHOICES	RESPONSES	
A vibrant community connected through nature, heritage, entertainment, recreation, and the arts.	62.67%	47
A thriving Greeley united by accessible outdoor spaces, vibrant culture, and active engagement for all.	37.33%	28
TOTAL		75

#	ADDITIONAL COMMENTS	DATE
1	Reason why not #1: - How is CPRD responsible for Entertainment? Surely UCCC. Yet beyond, we do not offer or have budget lines for this sort of category, as the average community member understands it: Entertainment as an economic sector consists of diverse products and services including motion pictures, television, music, broadcasting, print media, toys, gaming, gambling, sports, and fine arts. Reason Why #2: - "United" much stronger than Connected. Connected can mean Virtual, LinkedIn, etc. Not true Unity. - "United" gives us work to shoot for, bigger than ourselves. bigger than what we can do alone as CPRD. Love it. - Outdoor spaces highlights the unseen portion of Parks while not dismissing the green spaces people typically associate with Parks. -Vibrant Culture allows for new areas of Growth within Culture. -Active Engagement is how we want our Recreation programs to be!! but they're not necessarily so. Could this be Positive Engagement? Or Meaningful Engagement? -Quick question: Why "Greeley" instead of Community? Is there advice to use our City's name in the Vision statement? Are other depts doing so?	2/5/2024 1:01 PM
2	I like this one because it specifically addresses the divisions of CPRD.	2/5/2024 12:18 PM
3	Love the "Thriving Greeley"	2/5/2024 11:57 AM
4	"A thriving Greeley connected through nature, heritage, entertainment, recreation and the Arts"	1/31/2024 2:05 PM
5	CPRD touches audiences far beyond Greeley itself.	1/31/2024 1:56 PM
6	Love number 1!	1/31/2024 1:24 PM
7	Again as a reactive entity we are not and cannot engage with the community. The best we are able to do is provide access to our parks and spaces. There is not enough manpower funding and Support from upper management for us to actively engage with the public. It feels like the only goal the parks department (Based on actions of middle/lower management) is to not be noticed and fly under the radar	1/31/2024 1:22 PM
8	I like both, but suggest this as a minor change to the first option, "A thriving and vibrant	1/31/2024 1:13 PM

Culture Parks and Recreation Mission + Vision Statements

	community connected through nature, heritage, entertainment, recreation, and the arts."	
9	Would "enriched" be a better word than "connected?" That's more what our department does. We provide the things that make Greeley a better and more enjoyable place to live.	1/31/2024 12:20 PM



Parks & Recreation Advisory Board - Agenda Summary

March 1, 2024

Justin Scharton, Culture, Parks and Recreation Department / Natural Areas & Trails, 970-350-9205

Title:

Shurview MaPreferred Concept

Background:

This update is in regards to the property known formerly as Shurview; in early 2023 the Parks and Recreation Advisory Board recommended the name "Arroyos del Sol" for the property, which has yet to be adopted by City Council. Both names are used in this update and refer to the same property.

The property was acquired by Trust for Public Land (TPL), in partnership with the City and leased to the City in March 2022. Over the past 16 months, TPL and the City have contracted Mundus Bishop to develop a master plan for the property. This process has included significant public engagement and input from community members. The completed master plan will provide a road map for future trail development and ecological restoration efforts on the site.

The work began with a Discovery Phase of public engagement, asking the community to share their vision for the property. Target audiences were identified and specific outreach techniques were used to engage them. Then a Technical Advisory Committee (TAC) was assembled to provide expert advice on balancing recreation and conservation. In the Goal Development Phase of public engagement, a diverse stakeholder group gathered to provide input and guidance on the project goals. Following these stakeholder roundtables, the TAC reviewed and provided comment on the project goals. Mundus Bishop worked with City staff to create two concepts for the property, balancing recreation and conservation. The community was asked to provide comments and vote on these concepts in the Concept Review Phase. To address concerns about the balance between recreation and conservation, a site visit and discussion was scheduled for key stakeholders, including Colorado Parks and Wildlife, Mundus Bishop, International Mountain Bike Association (sub-contractor to Mundus Bishop) and City staff. This site visit discussion, along with public

comments received in the Concept Review Phase, were used to create the preferred concept. The preferred concept was presented to the TAC in December 2023, and was further refined based on their comments.

The full draft master plan is attached and available for your review, and feedback on any portion of the master plan is welcome. Staff would particularly like to receive feedback on the preferred concept. The preferred concept seeks to provide inclusive recreational experiences for all visitors, while maintaining and improving wildlife habitat. While the site is relatively small compared to other regional recreation areas, it is the largest natural area in Greeley. As such, it is important that this site support a diverse range of experiences and ability levels, making it a welcoming place for all Greeley residents and regional visitors. Expert level outdoor enthusiasts may still need to travel to other sites that will provide sufficient challenge; but Arroyos del Sol will provide the close to home adventures that inspire future generations to care for nature.

A few key features of the preferred concept include:

- A variety of trail types, distances and difficulties to ensure that there is something for everyone.
- Resource Protection Zones, which will have limited trail access and human infrastructure, to provide sufficient habitat for the area's wildlife.
- Balanced Resource Protection and Visitor Use Zones will contain trails, visitor hubs and amenities, placed in areas of existing disturbance or lower quality habitat.
- Visitor uses and facilities that support diverse experiences such as recreation, interpretation, gathering and enjoyment of the natural area.

Following review by the Parks & Recreation board, the plan will be reviewed by Council

Attachments:

Draft Master Plan

Arroyos del Sol Master Plan

February 2024

Prepared for:

City of Greeley

Natural Areas & Trails Division

The Trust For Public Land

Prepared by:

Mundus Bishop

with

International Mountain Biking Association (IMBA) and ERO Resources

Parks and Recreation Advisory Board Review Draft

Acknowledgments

City of Greeley

Justin Scharton, Division Manager
Karen Scopel, Environmental Planner
Clint Anders, Parks Planner
Amy Bahar, Communications Specialist
Aimee Freeland, Communications Specialist
Kristen Wilkinson, Community Conservation Fellow

Trust for Public Land

Emily Patterson, Managing Director
Antonio Benton, Project Manager
Wade Shelton, Senior Project Manager

Lutheran Family Services Rocky Mountains Delta Park Coffee Chat Group

Gloria Galindo
Yesenia Garcia
Enyi Jama

Technical Advisory Committee

Adam Michaels, Parks and Recreation Advisory Board
Alex Tennant, City of Greeley Water & Sewer
Andrew Creekmore, University of Northern Colorado
Beth Bullard, Poudre Heritage Alliance
Betsy Kellums, City of Greeley Community Development
Bob Fries, Greeley Fire Department Community Safety Division
Brian Hathaway, City of Greeley Stormwater
Chelsie Romulo, University of Northern Colorado
Chris Bowles, Greeley History Museum
Clint Torczon, Parks and Recreation Advisory Board
Cory Dick, Coalition for the Poudre River Watershed
Dale Hall, Poudre River Trail Corridor, Inc.
Dan Tripp, Colorado Parks and Wildlife
Evan Johnson, OXY/Kerr MCGee

Greg McIntosh, Parks and Recreation Advisory Board
Hally Strevey, Coalition for the Poudre River Watershed
Jackson Davis, Colorado Parks and Wildlife
Jason LaBelle, Colorado State University
Kally Moran, City of Greeley Real Estate Management
Kassi Decuir, City of Greeley Adaptive and Inclusive Recreation
Kristy Weyerman, PDC Energy (formerly)
Larry Rogstad, Poudre Learning Center
Leah Hubbard, City of Greeley Water & Sewer
Louise Wilson, Parks and Recreation Advisory Board
Mary Ellen Cannon, Natural Resource Conservation Service
Meg du Bray, University of Northern Colorado
Meg Oren, City of Greeley Community Development
Olga Gonzalez, Weld County Public Health and Environment
Paul Montville, PDC Energy
Roger DeWitt, AIMS (retired)
Sam Dancis, Poudre Learning Center
Scott Franklin, University of Northern Colorado
Shane Kigin, Parks and Recreation Advisory Board
Sharon Bywater-Reyes, University of Northern Colorado
Stephen Castellane, Army Corps of Engineers
Steven Younkin, City of Greeley Public Works
Tom Jones, Great Western Trail Authority
Tracy Colling, OXY/Kerr MCGee
Wade Shelton, Trust for Public Land
Wade Willis, Town of Windsor

Consultant Team

Mundus Bishop
International Mountain Biking Association (IMBA)
ERO Resources

This master plan was made possible by

Great Outdoors Colorado (GOCO)

and

The Pine Tree Foundation on behalf of Susan and Kevin Beltz

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01

INTRODUCTION



Plan Need and Purpose



Arroyos del Sol is a critical link along the Cache la Poudre River urban wildlife corridor, offering spectacular views and expanded opportunities for recreation in Northern Colorado (image: Mundus Bishop, 2023).

Arroyos del Sol Natural Area (the natural area) is the result of a partnership between the City of Greeley's visionary Natural Areas & Trails Division and Trust for Public Land (TPL), who together sought to acquire a significant tract of open space on the western edge of the city. Arroyos del Sol's 978 acres of protected land provides for ecological and recreational needs in a region projected to have one of the highest growth rates in Colorado over the next 30 years. Greeley's newest natural area is envisioned as a hub for biodiversity, wildlife habitat, and outdoor recreation.

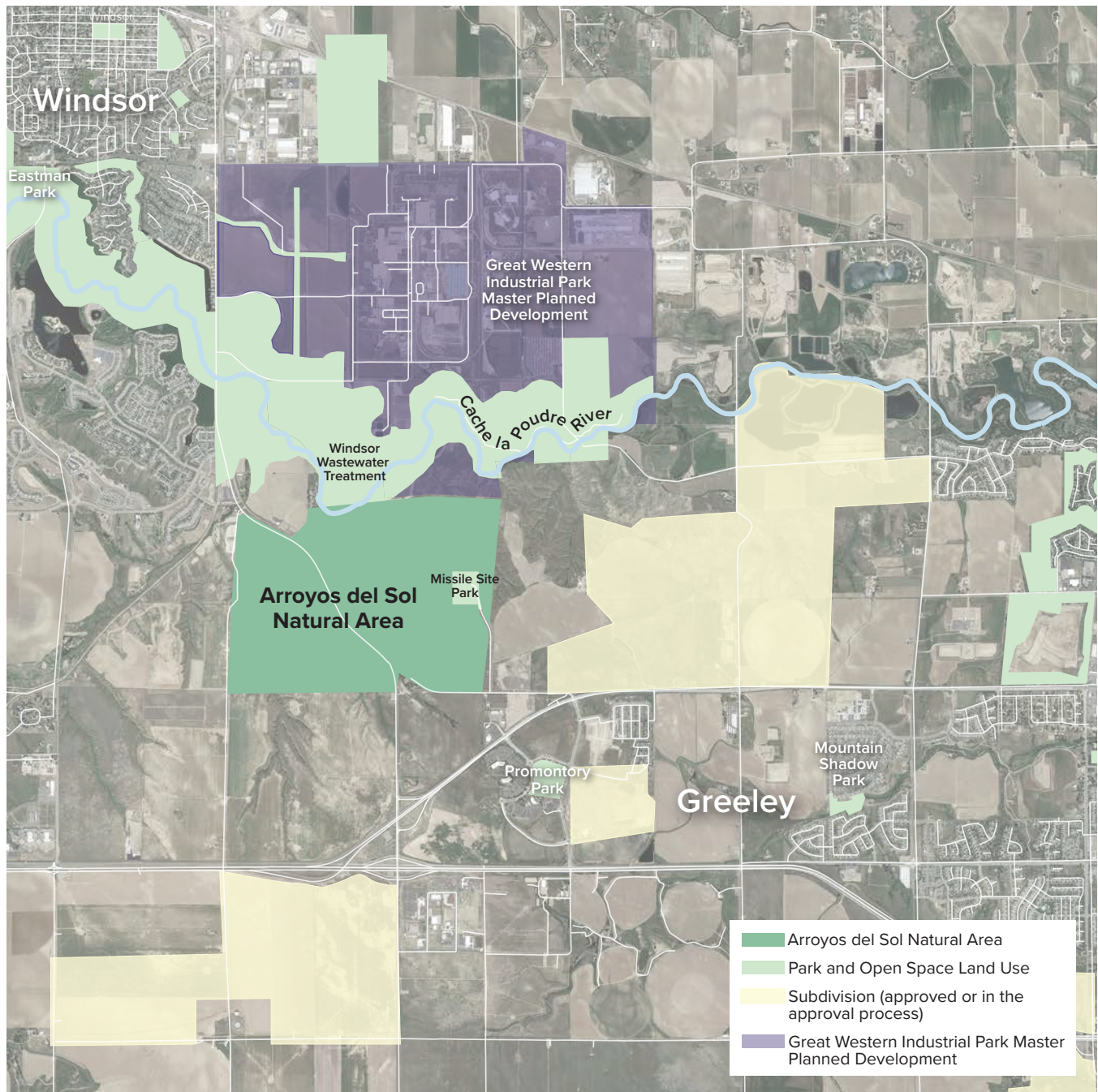
Arroyos del Sol's bluffs, arroyos, shortgrass prairie, and riparian ecosystems provide an island of high-quality habitat and biodiversity for plants, wildlife, and birds within a region of agricultural and rapid urban development. Arroyos del Sol contributes to the large-scale urban wildlife corridor along the Cache la Poudre River and supports over 91 zoological species and 168 plant species. This includes Platte River milkvetch,

a state critically imperiled plant species that has not been documented in Weld County since 1833, and other rare and vulnerable species—American bumble bee, bald eagle, American white pelican.¹

This master plan addresses the current and future needs of Arroyos del Sol and provides baseline documentation. This plan identifies additional research and site documentation, establishes a shared vision, and provides recommendations to guide improvement, conservation, and use.

The City of Greeley (the city) and TPL led the development of this long-term master plan. Input from more than 4,100 participants which included city staff, partners, community members, and technical experts guided the development of the shared vision and the recommended ecological and recreational improvements.

¹ Colorado National Heritage Program. *Biological Resource Survey of the Shurview Property, City of Greeley, CO*. (Fort Collins: Warner College of Natural Resources, Colorado State University, 2022), ii, iii; 1. "Nearly 1,000-Acres of Future Public Open Space on the Cache La Poudre River Purchased in Greeley," Great Outdoors Colorado, accessed January 1, 2024, <https://goco.org/news/releases/nearly-1000-acres-of-future-public-open-space-on-the-cache-la-poudre-river-purchased>.



The 2022 acquisition of Arroyos del Sol Natural Area culminates from a decades-long effort by the city to acquire a significant tract of open space on the western edge of the city where most remaining developable land is under private developer ownership. Trust for Public Land, in partnership with the city, led negotiations in 2022 to purchase the property. Key funding partners included Great Outdoors Colorado (GOCO), the Land and Water Conservation Fund, and the Town of Windsor. To ensure the property forever remains open space, a conservation easement held by Colorado Open Lands will ensure its permanent protection. This acquisition doubled Greeley's acreage of open space and permanently conserves one of the last large parcels of land suitable for conservation and recreation (image: Mundus Bishop, 2024).

Historical Context

Arroyos del Sol is significant for its connections to indigenous peoples, Euro-American homesteading, and the evolution of agriculture, ranching, and oil and gas production in the region.²

Archeological field surveys and traditional use patterns indicate stewardship and enduring associations of Arroyos del Sol to indigenous peoples. Native Americans were present along the banks of the Cache la Poudre River for thousands of years before the arrival of the Arapaho in the early nineteenth century.³

Regional traditional use patterns suggest Arroyos del Sol lands were likely utilized by indigenous peoples.⁴ The indigenous stewardship and use of Arroyos del Sol was irreversibly altered by the arrival of French trappers and traders in the late eighteenth century, and by later establishment of trading posts and homesteads in the nineteenth century.

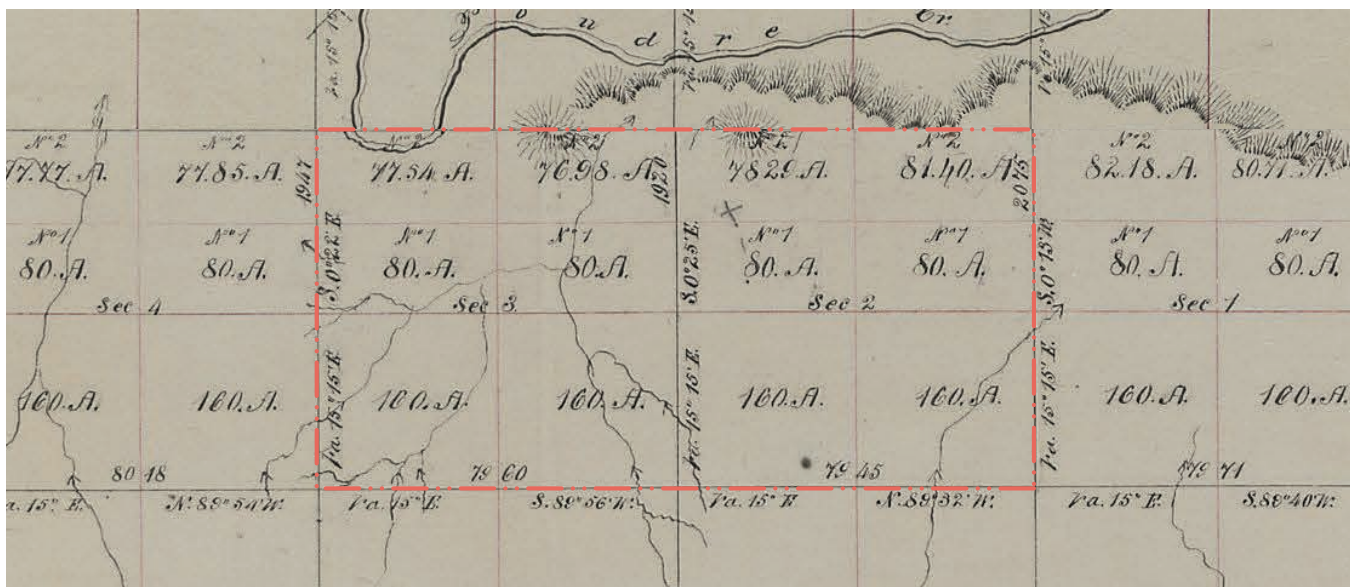
The Homestead Act of 1862 encouraged Euro-American settlement and forced the Arapaho out of the region. Euro-American settlement of Greeley accelerated with the organization of the Union Colony Association in December 1869. The association's founders, Nathan C. Meeker, Horace Greeley, and Robert A. Cameron, recruited members from New York to invest in the establishment of a farming colony in Colorado. By the spring of 1870 the association had purchased land along the Cache la Poudre and established the community of Greeley.

The General Land Office first surveyed Arroyos del Sol in 1863. The first land patents for the study area were issued in the early 1900s. The General Land Office granted the Union Pacific Railroad Company a patent for lands encompassing western portions of the site in 1903. Winfield S. Aldrich was issued a patent for lands encompassing the eastern portions of the site in 1911.

2 Further research and documentation is recommended to document the stories, families, and history of Arroyos del Sol. These include conducting archeological investigations and oral histories.

3 Burris, Lucy. *People of the Poudre: An Ethnohistory of the Cache la Poudre River National Heritage Area*. Larimer County, Colorado: U.S. National Park Service, Friends of the Poudre, Cache la Poudre River National Heritage Area, 2006.

4 Further investigation is recommended to document these connections.



Land patents issued for section 2 and section 3 of the General Land Office's 1863 Survey include present-day Arroyos del Sol.



Arroyos del Sol's connections to sheep grazing, crop production, and oil and gas remain visible throughout the site (image: Mundus Bishop, 2023).

Arroyos del Sol's evolution from homestead to agriculture and oil and gas production reflects the settlement and growth of Weld County. The county's large land mass, good soils, irrigation canals, and proximity to roads and railroad supported the development of crop cultivation (sugar beets, potatoes, and alfalfa) and livestock operations (sheep and cattle). Weld County's industry expanded with the establishment of sugar processing plants in the early 1900s, meat-packing plants after 1960, and establishment of the oil and gas industry in the nineteenth century.⁵

Extant agricultural features, disturbed grassland, and oil and gas features throughout Arroyos del Sol reflect these regional growth patterns. Robert E. and Veda K. Knox and their heirs owned and managed the property from the early 1960s until 2022. Agricultural use of the

site ended in 2008 when the Windsor EF3 tornado crossed the site. The tornado deposited debris and made conventional farming infeasible. Efforts to safely remove and dispose of debris continue. Oil and gas sites are largely abandoned with one active site remaining to the east of Highway (HWY) 257. The last remaining well sites west of HWY 257 were plugged and abandoned in 2023.

Missile Site Park, formerly known as Atlas "E" Missile Site 12, is located on an in-holding parcel within Arroyos del Sol. The military built four nuclear warhead-equipped Atlas E sites in Weld County in 1961, with command and control located at Francis E. Warren Air Force Base in Cheyenne, Wyoming. Atlas "E" Missile Site 12 was decommissioned and transferred to Weld County in 1965.⁶

⁵ Weld County | Articles | Colorado encyclopedia, accessed December 22, 2023, <https://coloradoencyclopedia.org/article/weld-county>; United States Department of the Interior, National Park Service. *National Register of Historic Places Nomination—Historic Farms and Ranches of Weld County*, 1988; Weld County | Articles | Colorado encyclopedia, accessed December 22, 2023, <https://coloradoencyclopedia.org/article/weld-county>.

⁶ "Missile Site Park (U.S. National Park Service)," National Parks Service, accessed January 1, 2024, <https://www.nps.gov/places/missilesiteparkcolorado.htm>.

Related Planning Studies

This master plan builds upon previously developed studies and documents for Arroyos del Sol and the surrounding area. The following site-specific studies and planning initiatives will continue to influence Arroyos del Sol as the master plan recommendations are implemented.

Site-Specific Studies

Shur View Baseline Inventory Report—2023

The baseline inventory report was developed for a future conveyance of the perpetual conservation easement of Arroyos del Sol, which will be held by Colorado Open Lands. The report summarizes the physical and ecological conditions and documents conservation values of the property.

The report identifies the natural habitat of Arroyos del Sol as significant public benefit. The property provides significant habitat for species of high public interest and concern, economically important game species, and CNHP tracked plant communities. Its high scenic value contributes to public enjoyment of the area.



Projects initiated during the master plan process included continued efforts to remove debris from the 2008 tornado (top); abandonment and removal of oil and well sites and infrastructure west of HWY 257 (center); and trailhead improvements north of Missile Site Park (bottom) (images: Mundus Bishop, 2023).

Colorado Natural Heritage Program Biological Resources Study of the Shurview Property—2022

Colorado Natural Heritage Program (CNHP) conducted botanical and zoological surveys of Arroyos del Sol in 2021 and 2022 to supplement previously collected natural resource information and provide management recommendations.

Preliminary surveys documented more than 91 zoological species and 168 plant species, including Platte River milkvetch, a state critically imperiled plant species that had not been documented in Weld County since 1833.

CNHP's survey findings highlight the importance of the site as high quality habitat and for the biodiversity of the region.

Key recommendations include protecting habitat areas, protecting rare plant populations by protecting surrounding vegetation; conducting additional surveys; avoiding fragmentation of intact prairie habitat; allowing disturbed lands to continue to recover; and locating trails, roads, etc. in areas of existing disturbance.



CNHP botanical survey documented species associated with the Western Great Plains Shortgrass Prairie likely representative of the region before Euro-American settlement. Common grasses observed include purple threeawn (*Aristida purpurea*), sideoats grama (*Bouteloua curtipendula*), needle and thread (*Hesperostipa comata*), green needlegrass (*Nassella viridula*) and prairie Junegrass (*Koeleria macrantha*). Sod-forming graminoids included western wheatgrass (*Pascopyrum smithii*), threadleaf sedge (*Carex filifolia*), blue grama, with inland saltgrass (*Distichlis spicata*) in arroyo bottoms and the Cache la Poudre River floodplain. Local inclusions of mesic or sandy soils support taller grasses including little bluestem (*Schizachyrium scoparium*), Indian ricegrass (*Achnatherum hymenoides*), sand dropseed (*Sporobolus cryptandrus*) as well as scattered shrub species including sandsage (*Artemisia filifolia*), prairie sagewort (*Artemisia frigida*), fourwing saltbush (*Atriplex canescens*), soapweed yucca (*Yucca glauca*), pricklypear cactus (*Opuntia macrorhiza*, *O. polyacantha*), broom snakeweed (*Gutierrezia sarothrae*) and spreading buckwheat (*Eriogonum effusum*) (image: Mundus Bishop, 2023).

Related Planning Initiatives

Greeley Trails Master Plan Update—2023

The trails master plan addresses current needs of the community, adapts to a changing environment, reassesses past planning efforts, and applies current best practices to managing Greeley’s trail system. The plan provides trail design and management guidance with associated cost estimates. Recommendations identify future trail corridors along HWY 257, the western boundary of Arroyos del Sol, and bluffs east of Arroyos del Sol.

Greeley on the Go 2045 Transportation Master Plan—2023

The plan presents a vision and recommendations for a seamless mobility network emphasizing multimodal connectivity to meet current and future demand. Recommendations include a 2.7-mile extension of 4th Street. The alignment of this multimodal arterial is proposed south of Arroyos del Sol.

Get Outdoors Greeley Strategic Plan—2021

The 5-year strategic plan presents the Natural Areas & Trail Division’s goals and work plan for future acquisition, restoration, long-term stewardship, and implementation guidance. The strategic plan supports the Natural Areas & Trails Division’s vision of “a community connection to nature.”

This plan was developed before the acquisition of Arroyos del Sol and includes recommendations to focus acquisition efforts on lands with high conservation value and recreational opportunities. The strategic plan identifies Arroyos del Sol as a priority conservation area within a nature deficient area of Greeley’s long-range expected area of growth.

Concept Plan for Missile Site Park—2019

The concept for Missile Site Park identifies trailhead improvements, expanded and enhanced camp sites with areas for gathering and education along the western edge of the site. Camp amenities include a spray pad, firepits, play area, restrooms, memorial area, pay station, and RV dump station. A network of trails provide access to destination throughout the park and to Arroyos del Sol.

Imagine Greeley Comprehensive Plan—2018

The plan guides City policies and decision-making to support the community’s shared vision for the future. Arroyos del Sol is identified within the city’s long range expected growth area with employment, industrial and commercial areas to the south; mixed use to the east; and bluffs/community separator to the west. HWY 257 is identified as a multi-modal corridor.

Planning Process and Outreach

The master plan for Arroyos del Sol was prepared through an open and transparent year-long planning process. This included extensive engagement with city staff, TPL, partners, stakeholders, technical advisory committee members, and local and regional community members. The following describes the three phases of the project and highlights the outreach process.

Phase 1: Discovery included outreach, review of related planning initiatives and studies, and documentation of existing condition, and use. Assessment of existing condition led to the identification of needs and desires, project goals, and opportunities.

Phase 2: Concepts addressed issues and opportunities identified in previous stages. Facilitated discussions with city staff, partners, stakeholders, and the community identified the preferred program, two alternatives, and a vision for further development.

Phase 3: Master Plan documented the preferred concept and vision for Arroyos del Sol. This document establishes recommendations and guidance to implement the vision for Arroyos del Sol.



This master plan was developed based on extensive engagement with city staff, TPL, partners, and community members (images: Mundus Bishop, 2023).

Master Plan Process and Engagement



Community engagement was critical to the development of this master plan. TPL's Community Outreach with Resident Experts (CORE) program and GOCO's Fellowship Program was central to the development, implementation, and success of the community outreach plan. Outreach initiatives led by TPL and the GOCO fellow placed community voices at the center of the planning process to develop a shared vision for Arroyos del Sol reflecting their unique needs and desires. This included representation from the surrounding community and City of Greeley, with focused outreach from local immigrant and refugee communities in east Greeley.

More than 4,100 community members, technical advisors, and stakeholders guided the development of this master plan in 3 different languages through surveys, resident experts, meetings, site tours, and pop-up events. Outreach will continue beyond the completion of this master plan and will be integral through the implementation of this master plan vision.

Kick-off Event / Project Launch: 150 people attended the October 2022 event marking the launch of outreach initiatives.

Speak Up Greeley: The city's project website provided the public with background information, project updates, and access to online surveys. The page received 3,673 visitors and 301 contributions.

Surveys: Online surveys received 66 responses to questions tailored to identify needs and a vision.

“Keep it natural!”

— Community Member, 2022



October 2022 Kick-off Event (image: Mundus Bishop, 2022).

Stakeholder Meetings: The City of Greeley, TPL, and Social Research Lab at the University of Northern Colorado facilitated 3 forums with representatives from local organizations and individuals who expressed interest in the project to discuss project goals, needs, and desires. 75 participants attended in-person sessions.

Technical Advisory Committee (TAC) Meetings: Three hybrid (in-person and virtual) meetings were held at key milestones to share existing condition findings, discuss goals and programming, and refine draft and final concepts. The group included over 30 representatives from the community, special interest and user groups, partners, city agencies, and subject matter experts.

Delta Park Coffee Chat Group (coffee chat group): The coffee chat group engaged nearly 20 East Greeley residents, including Hispanic, Somali, and East African refugee communities to bridge linguistic and cultural divides and envision a natural area where everyone feels welcome. This included conversations at regularly occurring coffee chats, site tours, and onsite events.

Targeted Outreach: The City of Greeley and TPL engaged over 200 people in targeted outreach campaigns. This included people with disabilities (Connections for Independent Living and Envision); youth (high school clubs and classes, Boys and Girls Club, Rodarte Center, Earth Guardian Youth Conference, 4-H); seniors (Area Agency on Aging and senior group at Rodarte Center); colleges (University of Northern Colorado (UNC) and Aims Community College; and teachers (Greeley District 6).

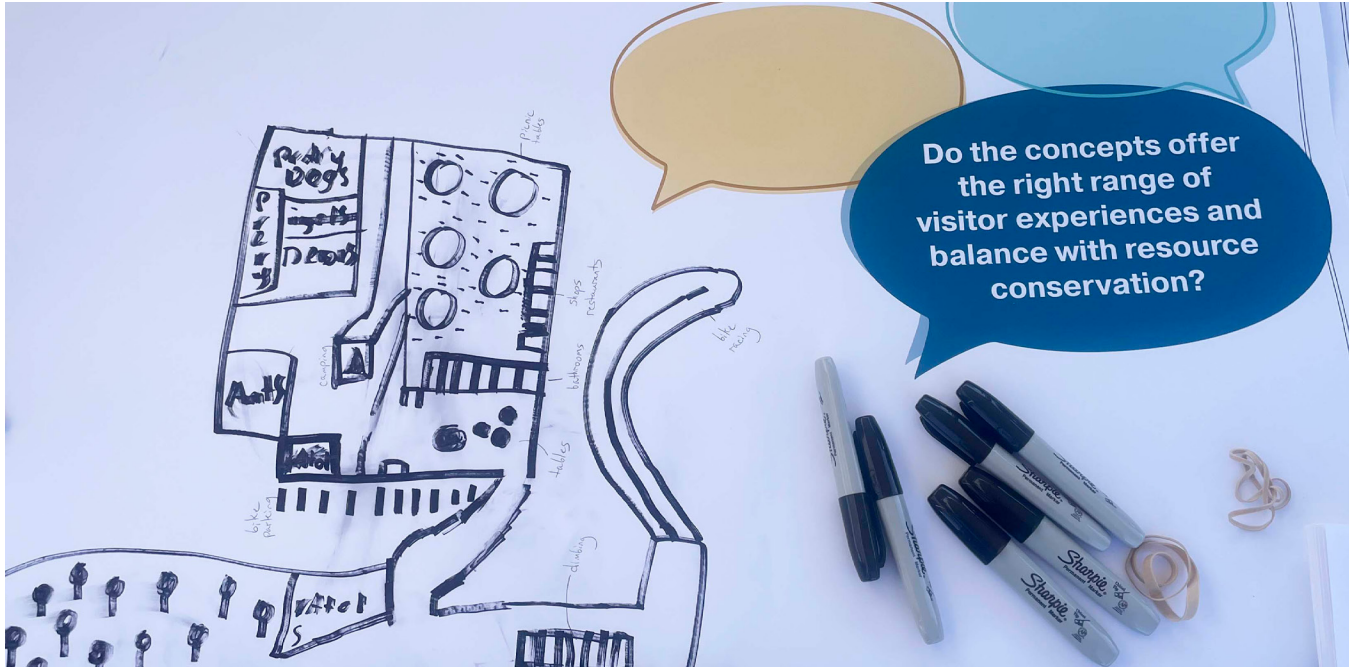
Pop-up Events: Over 70 people attended onsite events at project launch and concept development and additional events were held at Family FunPlex, Poudre River Forum, and Greeley's Farmer's Market. Over 70 people attended.



Outreach included opportunities to explore Arroyos del Sol (image: Mundus Bishop, 2023).

“Love that there is a mountain biking trail...Go Greeley!”

— Community Member, 2022



Outreach included opportunities for community members of all ages to share their vision for the future of Arroyos del Sol (image: Mundus Bishop, 2023).

Site Tours: The City of Greeley and TPL facilitated tours of Arroyos del Sol to allow participants to experience the site and share their visions, needs, and desires. Tours included 40 representatives from organizations including the Boys and Girls Club, Greeley School District 6, Greeley Central High School AVID Club, Aims Community College Agriculture Club, and the Delta Park Coffee Chat Group.

Naming Campaign: The City of Greeley launched a naming campaign in 2023 marking a new era for the city's newest natural area. The community shared 80 suggestions for the natural area. The names reflected the significance of the site, its resources, and the community.

Storybook: TPL collaborated with local artist Armando Silva, the City of Greeley, and Unite for Literacy to develop a storybook highlighting the Greeley community and landscape, wildlife, and experience of visiting Arroyos del Sol.

Meaningful conversations with the community identified a shared desire to keep Arroyos del Sol natural, integrate conservation with diverse opportunities for recreation and place-based programming and facilities reflecting the natural and cultural qualities of the site, and provide accessibility for all ages, backgrounds, abilities, and user groups.

02

MASTER PLAN



Vision and Goals

Vision: Conserve the shortgrass prairie, arroyos, bluffs, and wetlands of Arroyos del Sol as a hub supporting biodiversity, wildlife habitat, and outdoor recreation.





Land Protection

Ensure long-term land protection of the natural area and its natural and cultural resources for enjoyment by all.



Resiliency

Increase biodiversity and ecological and hydrological function of the shortgrass prairie, bluff, and riparian ecosystems.



Constituency

Build and maintain a constituency dedicated to stewardship, enjoyment, research, and continued protection of the natural area.



Land and People

Identify, protect, and share the unique cultural and historical stories, values, and associations of the natural area through place-based opportunities for recreation, interpretation, programming, and nature-based experiences. Reconnect and establish new connections to the land and people.



Connections

Establish connections within and between communities for visitor of all ages and abilities. Connect to open space and multi-modal transportation networks.



Facilities

Provide equitable facilities and infrastructure supporting the natural area's role as a hub for high-quality recreation, research, education, and resource conservation for visitors of all ages and abilities.

Site Plan

Arroyos del Sol is envisioned as a conserved natural area supporting biodiversity, wildlife habitat, and recreation. The site's diverse bluffs, arroyos, shortgrass prairie, and riparian ecosystems and associations with Arapaho use, homesteading, and dryland agriculture make it the ideal location for conservation and diverse visitor use.

The natural area's bluffs, plateaus, and arroyos are critical to the resiliency and biodiversity of Arroyos del Sol and the larger ecological corridor found along Cache la Poudre River. These landforms and associated ecosystems will be conserved and managed as critical habitat with opportunities for low-impact visitor use in areas of previous disturbance.

The existing HWY 257 box culvert will be maintained for stormwater drainage and as a wildlife crossing and additional opportunities for safe crossings will be provided.

Seven hundred acres of shortgrass prairie and arroyo habitat will be enhanced and protected as high quality habitat critical to declining species, including burrowing owls, ferruginous hawks, mountain plover, chestnut-collared longspur, and long-billed curlew. Arroyo habitat will be enhanced and protected as high quality habitat and wildlife corridors for mammals, birds, and reptiles.

Eleven acres of wetland and riparian floodplain will be enhanced and protected as high quality habitat and wildlife corridor contributing to the ecological health and resiliency of the region.

More than 500 acres of black-tailed prairie dog habitat will be monitored and protected.

1 2

Trailheads and visitor hubs with higher use will be clustered in small, defined areas of previous disturbance (agricultural fields, gas and oil sites, etc.) to maximize the conservation of prairie and riparian

vegetation and areas of unfragmented habitat. These visitor use areas will be sited to be subordinate to the prairie landscape and significant views. They will offer facilities and programming to facilitate use of the site.

1

Hilltop Hub will serve as the front door to Arroyos del Sol and be the primary point for interpretation, programming, small gatherings, picnicking, and play. It will offer introductory experiences for visitors to learn about and connect with the natural resources of Arroyos del Sol. Programming and experiences for first time and regular visitors to the site will be provided. It will include picnic shelters, adventure/nature play, bike skills areas, and trails. The pavilion and terrace will provide a distinct gathering space capitalizing on views to the prairie, arroyos, and mountains to the west.

3

New visitor use facilities will provide opportunities for visitors of all ages and abilities to explore, engage, find solitude, and inspire connections to the natural world of the shortgrass prairie. Facilities will be designed in harmony with the natural setting. They will include overlooks, shade shelters, seating, and interpretive and wayfinding signage.

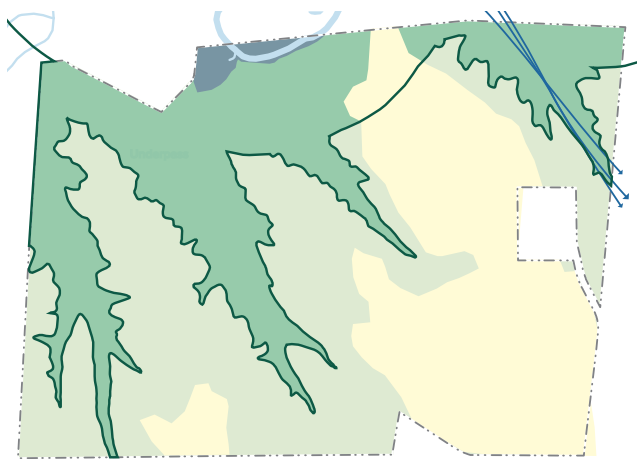
4 5

A comprehensive trails and access network will provide welcoming entrances for all modes; vehicular access and parking at visitor use hubs; safe and intuitive routes for all modes, ages, and abilities; and increased connections to regional trail networks, surrounding communities, and public transportation. The trail and road system will cultivate a sense of arrival and create moments of discovery beginning at Arroyos del Sol entrances and continuing through the prairie. The wide hike/bike trail will provide an accessible route and trail amenities along the top of the bluff and connect visitor use hubs and facilities to the east of HWY 257.

This plan focuses on conserving and enhancing wildlife habitat and ecosystems; increasing connectivity and accessibility; and providing inclusive recreational experiences for all visitors.

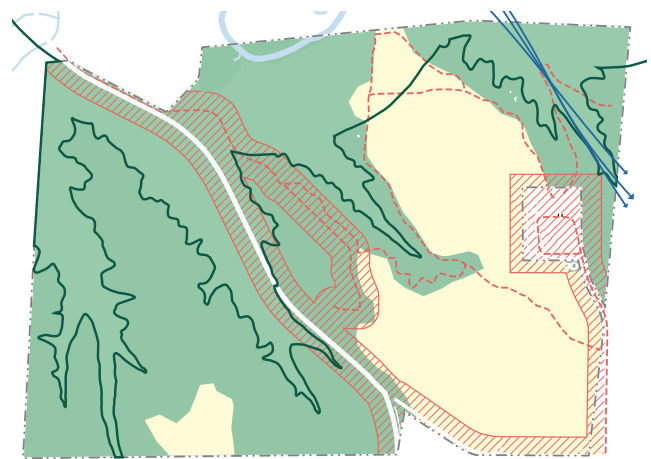


The importance of protecting and enhancing the natural resources of Arroyos del Sol while providing opportunities for visitor use was expressed by the city, its partners, and the community throughout this planning process.



Habitat

- | | |
|---|---------------------|
| High Priority Habitat Area
(Eagle Nest Buffer, Bald Eagle, Osprey, Great Blue Heron, and White Pelican Foraging, Arroyo Habitat) | Shortgrass Prairie |
| High Priority Wildlife Corridor | Arroyo |
| | Wetland |
| | Disturbed Grassland |



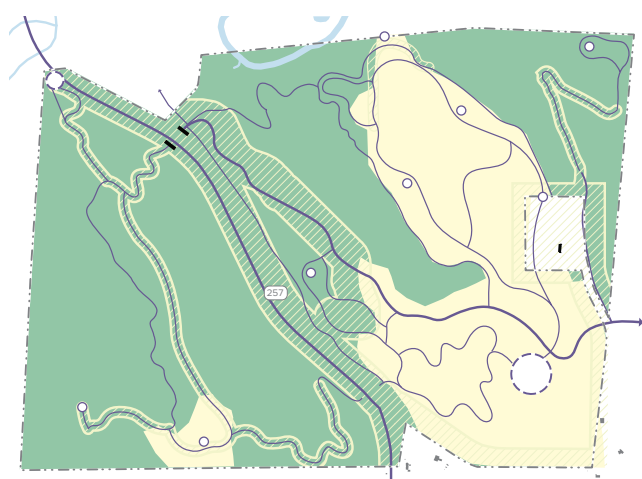
Disturbance and Fragmentation

- | Priority Conservation Areas | Areas of Disturbance/Fragmentation |
|---|------------------------------------|
| Habitat Area | Disturbed Grassland |
| Wildlife Corridor | High Disturbance/Fragmentation |
| Shortgrass Prairie, Arroyo, and Wetland | Road/Trail Fragmentation |

An assessment of existing resources in collaboration with city staff, Colorado Parks and Wildlife, Colorado Natural Heritage Program, and other partners identified areas critical for habitat, foraging, and migration/movement by birds and wildlife; areas supporting plant and wildlife biodiversity; and occurrences of rare and/or significant species. These locations are identified as high priority areas for conservation, restoration, and enhancement.

Assessment of existing conditions also identified areas of disturbance and fragmentation. These include road and trail corridors, Missile Site Park, oil and gas sites and areas historically used for grazing, crop production, and oil and gas production.

This plan organizes Arroyos del Sol into two zones to protect habitat and ecosystems, meet visitor needs, and assist in long-term land protection and management. These zones will evolve with further documentation of plants, wildlife, and natural and cultural resources.

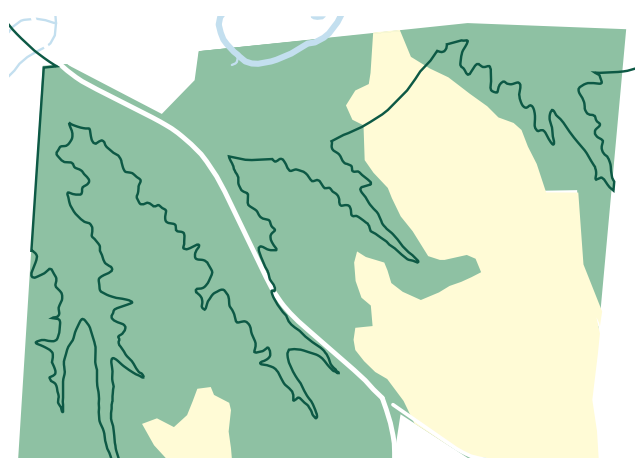


Visitor Use Framework

- | | |
|---|---|
| Habitat Areas | Visitor Use |
| Shortgrass Prairie, Arroyo, and Wetland | Visitor Hub |
| Disturbance Area | Visitor Use Area |
| Disturbed Grassland | Trail |
| High Disturbance/Fragmentation | |

Areas of disturbance and fragmentation present opportunities for restoration and visitor infrastructure. Focusing use in these locations limits further disturbance and fragmentation.

The resource protection zone will prioritize the protection and enhancement of ecosystems, promote biodiversity, and provide low-impact visitor experiences. The zone will be managed to conserve native shortgrass prairie, arroyos, and wetland landscapes through the protection and enhancement of soils, vegetation, and geological features. Low-



Management Zones

- | | |
|--|---|
| Resource Protection Zones | Balanced Resource Protection and Visitor Use Zone |
| High Priority Habitat | Shortgrass Prairie Restoration Zone |
| Shortgrass Prairie, Arroyo, and Wetland | |

impact visitor experiences, including trails, overlooks, and interpretation will be allowed and located within corridors of existing disturbance to minimize habitat fragmentation.

The balanced resource protection and visitor use zone will offer diverse visitor experiences. The zone will be managed to provide opportunities for recreation, interpretation, and enjoyment of the site for all visitors while promoting the conservation of resources and restoration of disturbed areas.

Visitor Use and Facilities

Visitor uses and facilities will support diverse experiences.

Visitor uses and facilities will provide the community with open space for recreation, interpretation, gathering, and enjoyment of the natural area. Visitor uses areas will be located to create a sense of arrival and moments of discovery for first-time and regular visitors. These areas will be located for interpretation of natural and cultural features and to capitalize on views. They will be designed as defined, compact areas of development subordinate to the natural features of Arroyos del Sol.



Visitor hubs will serve as arrival areas, offering amenities and orientation.

Hilltop Hub will be established as the center of visitor use and gateway to the site and nature-based experiences. Hilltop Hub will provide visitor amenities, orientation, interpretation, and small gathering areas for the community and

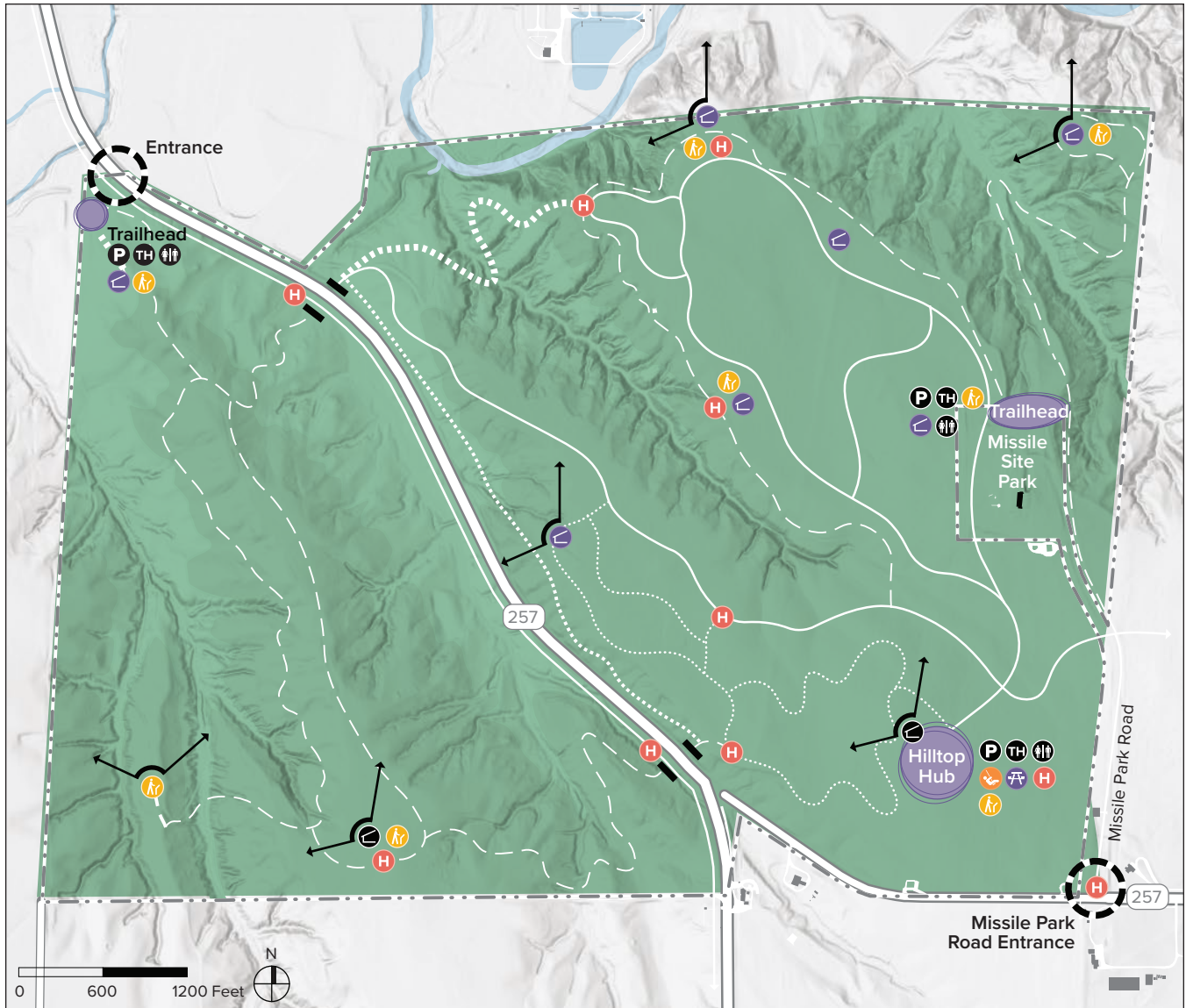
programming. Facilities will include visitor and bus parking, picnic shelters, adventure/nature play, bike skills, restrooms, trailhead, interpretation, and a terrace and pavilion for gathering. Trails will offer visitors of all ages and abilities diverse opportunities to connect from Hilltop Hub to the native landscape and diverse experiences of Arroyos del Sol. Future operations facilities may be located south of Hilltop Hub, visually and physically separated from visitor uses.

The **existing trailhead** north of Missile Site Park will be improved with expanded parking, restrooms, interpretation, orientation, shade/shelter, picnicking and a trail hub.

A **new trailhead** west of HWY 257 will provide parking, restrooms, interpretation, orientation, shade/shelter, and a trail hub.



Hilltop Hub will provide indoor and outdoor space for visitor contact, orientation, interpretation, gathering, and recreation. The pavilion and terrace will provide space for visitor contact, small gatherings, interpretation, administration, and restrooms (image: Mundus Bishop, 2023).



Use and Facilities

Facilities

- Trailhead
- Parking Area
- Restroom
- Pavilion
- Trail Hub
- Bike Skills Course

- Interpretation
- Overlook
- Shade Shelter
- Picnic
- Nature/Adventure Play

Trails

- Wide Hike/Bike Path
- Single Track Hike/Bike Trail
- Directional Hike/Bike Trail
- Mountain Bike Trail
- Incline Hiking Trail

Visitor use areas sensitively located throughout the site will provide visitor amenities facilitating use of the site.

 **Restrooms** will be provided at trailheads and will be designed and located to be subordinate to the shortgrass prairie with low slope or flat roofs and materials that complement that natural landscape.

 **Interpretation** will include self-guided (waysides and virtual/app-based) and program-based opportunities highlighting the natural and cultural resources of Arroyos del Sol. Future wildlife, plant, archeological, ethnographic, and cultural resource surveys will identify additional features important to the natural and cultural history of Arroyos del Sol. A future interpretive plan will link Arroyos del Sol's resources to meaningful stories and identify key messages and audiences.

 **Overlooks** will be sited to capitalize on views and provide opportunities for resting, wildlife watching, and interpretation along the trail network.

 **Shade shelters** will be located throughout Arroyos del Sol as small gathering/resting areas and for shelter from the elements (sun, rain, etc.). Shelters will be sited in context to the natural environment, respecting features such as vegetation, habitat, and views. They will be designed to be subordinate to the shortgrass prairie with low slope or flat roofs and materials that complement that natural landscape.



Overlooks will be sited to capitalize on views and provide space for visitor to rest with seating and shade shelters (image: Mundus Bishop, 2023).

Design Character

Visitor use areas will be designed to be subordinate and placed in context to the natural environment, respecting features such as vegetation, habitat, and views. The location and orientation of these areas will capitalize on views to the prairie, mountains, natural features, and iconic site features.

Visitor amenities will be provided to support visitor use and protect resources, including shade, seating, trash and recycling receptacles, restrooms, and wayfinding and interpretive signage.

- Amenities will be located in areas where they do not detract from the visitor experience, impact views, or diminish the character of Arroyos del Sol. They will be designed to express a consistent aesthetic, complementing the shortgrass prairie's character in materials, size, scale, and color. Features will be of a human-scale and designed with the highest level of craftsmanship and quality materials. Compatible materials include wood, steel, and stone.
- Wayfinding, interpretive, and regulatory signs reflecting the character of Arroyos del Sol will be subordinate to the landscape through their orientation, placement, and use of materials. Sign clutter will be minimized through thoughtful consideration to the need for and location of each sign.

Facilities will provide authentic settings to gather, learn, research, reflect, and support functions essential to Arroyos del Sol's daily operations. Thoughtful siting, orientation, and design will ensure facilities are subordinate to the natural setting and provide spaces immersing visitors in the shortgrass prairie. New facilities will be designed as low profiles and horizontal forms with low slope or flat roofs and will be oriented to capitalize on views to the prairie, arroyos, and mountains. Views to select facilities will be considered as "beacons" drawing visitors through the landscape.

Resiliency will be promoted through the design of new facilities. Renewable and energy efficient infrastructure, mechanical systems, and vehicles will be considered and environmentally conscious materials and products will be selected where feasible.

Dark sky criteria will be followed with exterior lighting limited to safety, security, accessibility, and wayfinding.

Stormwater infrastructure will be integrated with landscape and facility improvements to intercept and infiltrate localized drainage areas, reduce sediment loading, and create habitat.



Hilltop Hub will provide a clear visitor arrival space and starting off point to explore the site or remain at the space to picnic, recreate, or participate in programming. The location of Hilltop Hub capitalizes on views to the prairie, arroyos, mountains, and iconic site features. Hilltop Hub's trails, parking, and facilities will provide diverse opportunities for visitors of all ages and abilities (image: Mundus Bishop, 2023).

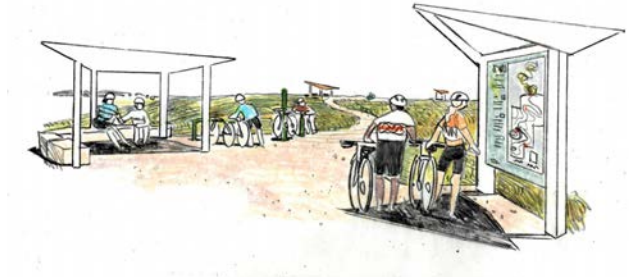
Trails and Access

Arroyos del Sol will offer visitors safe access and parking, accessible routes, and memorable opportunities to explore the site.

Welcoming entrances for all modes will increase accessibility to Arroyos del Sol. This includes future access at west of HWY 257 and enhancements at Missile Park Road Entrance for all modes—vehicles, bicycles, public transit, etc. A traffic study will be completed prior to the establishment of new vehicular entrances to ensure safety and accessible for all modes.

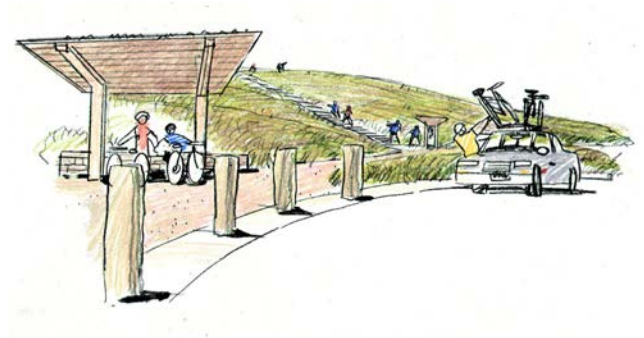


Trailheads will be located to the east (2) and west (1) of HWY 257. Trailheads will include parking, restrooms, trash and recycling receptacles, seating, bike racks, bike repair stations, shade shelters, and regulatory, wayfinding, and site identification signage.



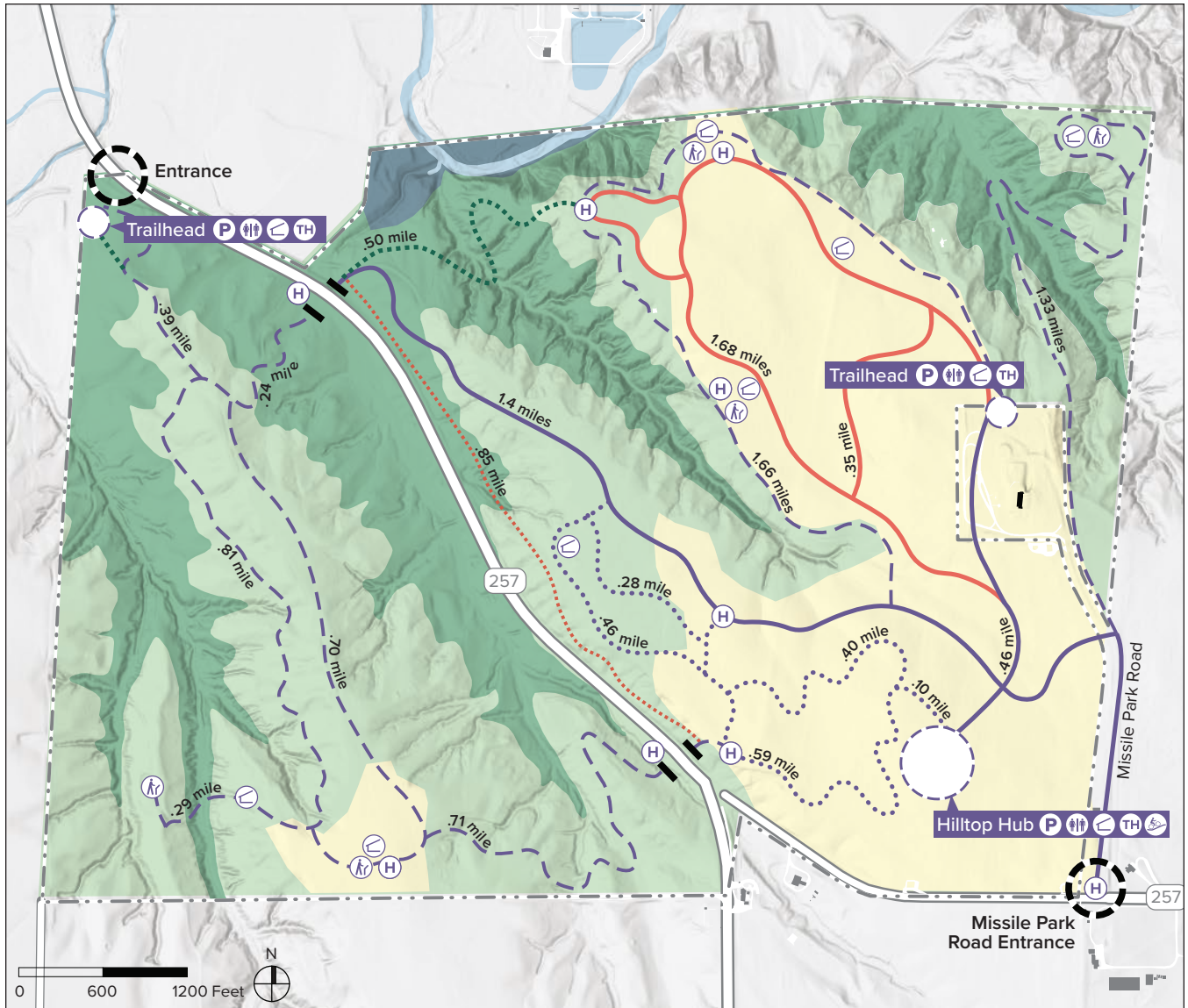
Trail hubs will be strategically located as designated places for trail users to meet to begin their trail experiences and as a series of landmarks to meet or rest mid-trip and make decisions about routes to take throughout Arroyos del Sol.

Parking areas will enhance visitor access and will accommodate bus drop-offs and accessible parking, including new parking at Hilltop Hub and west of HWY 257 and improved parking at the existing trailhead.



HWY 257 crossings will provide safe connections from east to west and increase accessibility throughout Arroyos del Sol. Crossings will occur with future improvement of HWY 257. Traffic and hydrological studies will be completed prior to the establishment of new crossings to ensure safety and accessible for all modes. Crossing will include measures to increase safe wildlife connections across HWY 257.





Trail Network

Amenities

- Trailhead
- Trail Hub
- Parking Area
- Pavilion/Shade Shelter
- Bike Skills Course
- HWY 257 Crossing

Trails

- Wide Hike/Bike Path
- Wide Hike/Bike Path - Bluff Trail
- Single Track Hike/Bike Trail
- Directional Hike/Bike Trail
- Mountain Bike Trail

A hierarchy of trails will offer diverse experiences for all visitors.

Trail alignments will be further refined based on topographic survey, plant and wildlife survey, field conditions, cultural resource surveys, and soils and hydrological data. Future design will include opportunities for the community to participate in trail naming campaigns based on the City of Greeley's guidelines and process for naming natural areas and trails.

Wide hike/bike trails will connect to visitor hubs east of 257 and provide a loop around the bluff overlooking Cache la Poudre to the north. These soft surface trails will be 8' wide with a crushed gravel surface.

Single track hike/bike trails will provide opportunities for diverse experiences of varying degrees of challenge east and west of HWY 257. These natural surface trails will be 3' to 4' wide with a native or aggregate surface.

Directional hike/bike trails will provide opportunities for diverse experiences of varying degrees of challenge east HWY 257. These natural surface trails will be 18" to 2' wide with a native or aggregate surface.

Mountain bike trails will provide a signature mountain bike experience parallel to HWY 257. These natural surface trails will be 12" to 2' wide.

Incline trails will offer the most challenging pedestrian experience. The steps will be designed to challenge visitors while being sustainably designed to minimize hillside erosion.



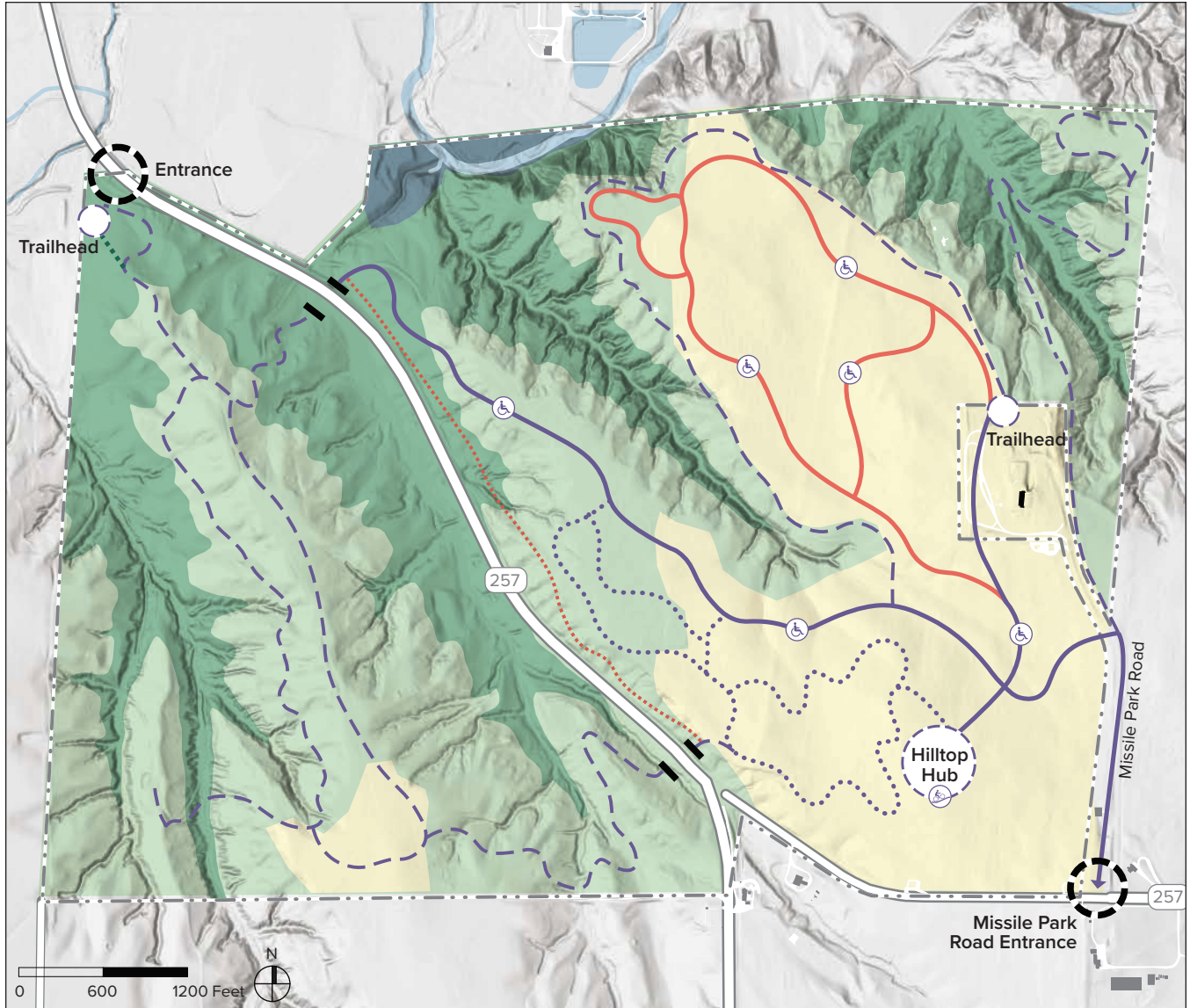
Bike skills course will provide an area for bicyclists of all ages and abilities to improve their skills. These 12" to 2' wide natural surface trails will include features to create interest for experienced riders and help less experienced riders build confidence.



Accessible routes will be designed to meet Architectural Barriers Act (ABA) Guidelines for Outdoor Developed Areas for accessible routes and amenities. Wide hike/bike trails and associated amenities will meet ABA requirements. The loop along the bluff will have gentler grades and be more easily accessible. The route from HWY 257 to Hilltop Hub will offer a more challenging accessible route with steeper grades.



Bike skills course trails will provide diverse trails and features for riders of all ages and abilities to improve their skills (image: Mundus Bishop, 2023).



Trail Typologies

Trail Type	Accessible Route (meets ABA requirements)
— Wide Hike/Bike Path	Fully accessible
— Wide Hike/Bike Path - Bluff Trail	Segments exceed 5%, includes landings
- - - Single Track Hike/Bike Trail	Not accessible
..... Directional Hike/Bike Trail	Not accessible
..... Mountain Bike Trail	Not accessible
..... Incline Hiking Trail	Not accessible

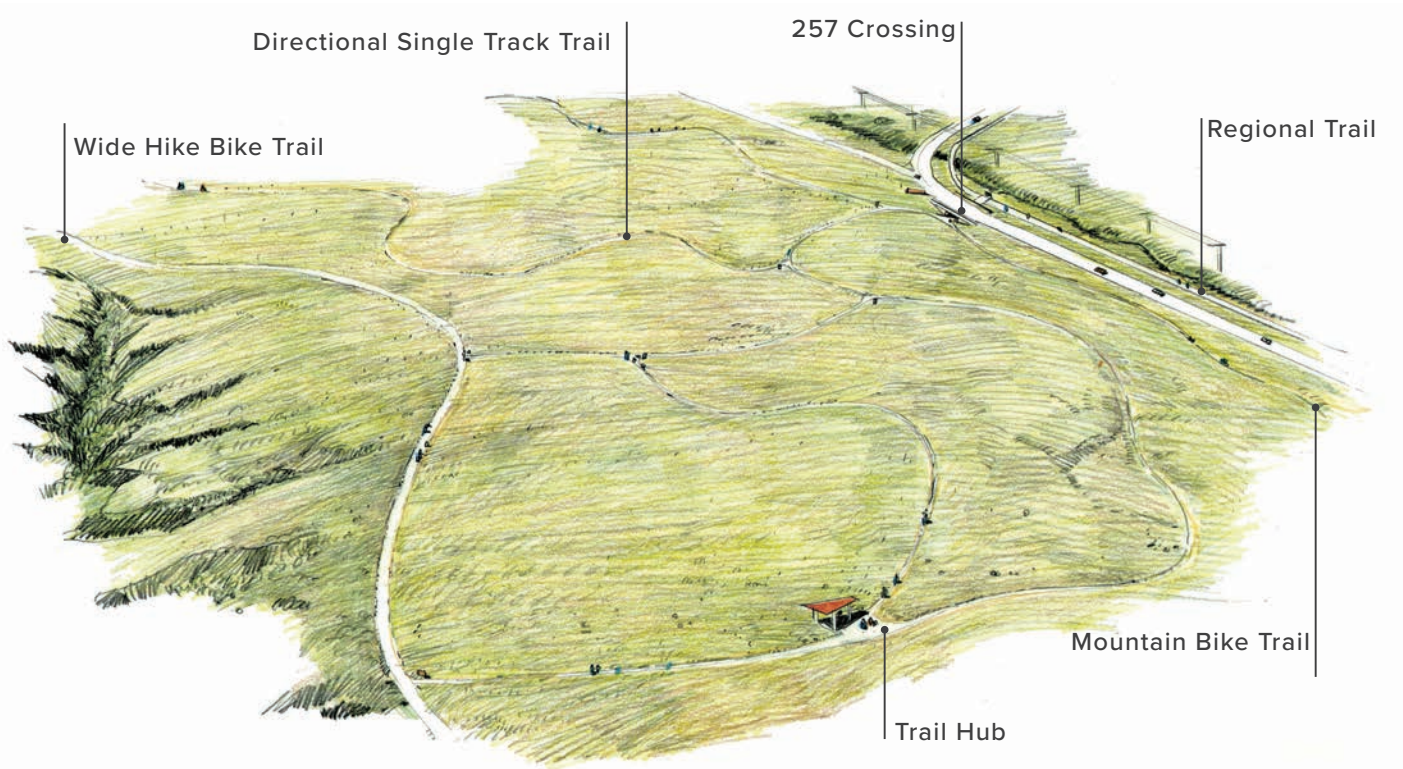
Trail Design Character

Trail will largely be located in areas of previous disturbance to minimize habitat fragmentation and support vegetation and erosion restoration initiatives. They will be designed to be integrated with the natural setting, to capitalize on views, and to follow best practices for sustainable trail development. This includes following natural topography, preventing headcut erosion and loss of soil, promoting positive drainage, and minimizing impacts to wildlife and plant biodiversity.

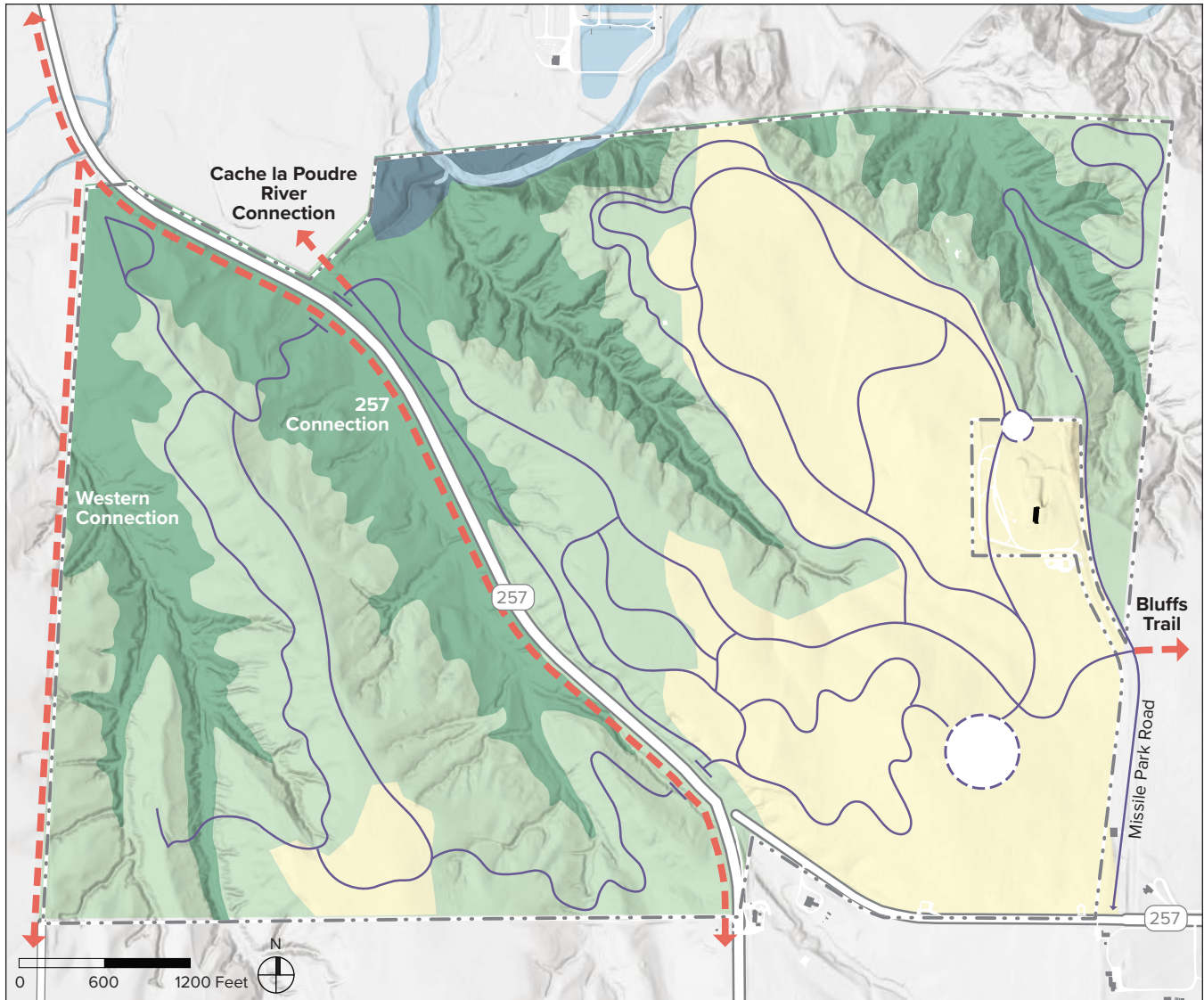
Existing roads identified as trail corridors will be regraded and drainage structures to minimize erosion and surface deterioration.

Arroyo crossings will be designed to allow for wildlife crossings and flow of water during storm events while implementing measures to prevent erosion of headcuts and banks.

Wide hike/bike and select single track hike/bike trails will be designed to provide restricted operational and emergency vehicle access.



A robust trail system will be designed to be integrated with the natural setting, to capitalize on views, and to follow best practices for sustainable trail development (image: Mundus Bishop, 2023).



Future Connections

Arroyos del Sol will evolve into a more integrated natural area as related plans for regional multi-modal routes are implemented. This includes a connection along the western boundary of Arroyos del Sol, a connection along HWY 257, crossings of HWY 257, a connection to bluffs to the east, and a connection to Cache la Poudre River to the north. These connections are

outside the boundary of Arroyos del Sol and would occur in the long-term as part of future road improvement and/or private development projects.

A connection to future public transit service to the south of Arroyos del Sol will also be further studied with establishment of the transit stop.

Landscape Typologies

Landscape typologies will promote biodiversity, healthy habitats and ecosystems, and resiliency while supporting visitor use.

Management and improvement of the landscape will be guided by the development of a natural resource management plan (planned for 2024) with specific strategies addressing vegetation management, reclamation of disturbed areas, wildlife management, prairie dog management, and visitor use / trail management. The following landscape typologies identify areas critical for habitat, areas where use or improvement threatens ecological function and health, and areas for sustainable visitor experiences.



Shortgrass prairie, arroyo, and wetland typologies will continue to support biodiversity and high quality habitat with the dense urban and agricultural context of Arroyos del Sol. Intact habitat areas will be surveyed, mapped, and managed to protect vegetation from fragmentation. Rare plant populations occurring in these areas will be protected by conserving surrounding native vegetation from development and visitor use. Visitor use restrictions will be further studied to minimize impacts to wildlife and habitat (i.e., dogs).

Large areas of intact vegetation will be protected as priority biodiversity areas by locating infrastructure and amenities in areas of previous disturbance. Native seeds will be collected onsite for future restoration.



The **arroyo typology** will be managed to conserve soil, diversity of vegetation found throughout the arroyos, and network of wildlife corridors between areas of upland prairie and the Cache la Poudre River to the north. Cottonwoods growing within these arroyos will be protected as critical habitat for eagles, hawks, ospreys, and migratory birds. Visitor use will be minimized to minimize fragmentation and impacts.



The **wetland typology** will be enhanced by creating a vegetated buffer surrounding the floodplain to improve water quality and protect wildlife, plant biodiversity, and floodplain habitat. Visitor use will be minimized to minimize fragmentation and impacts.

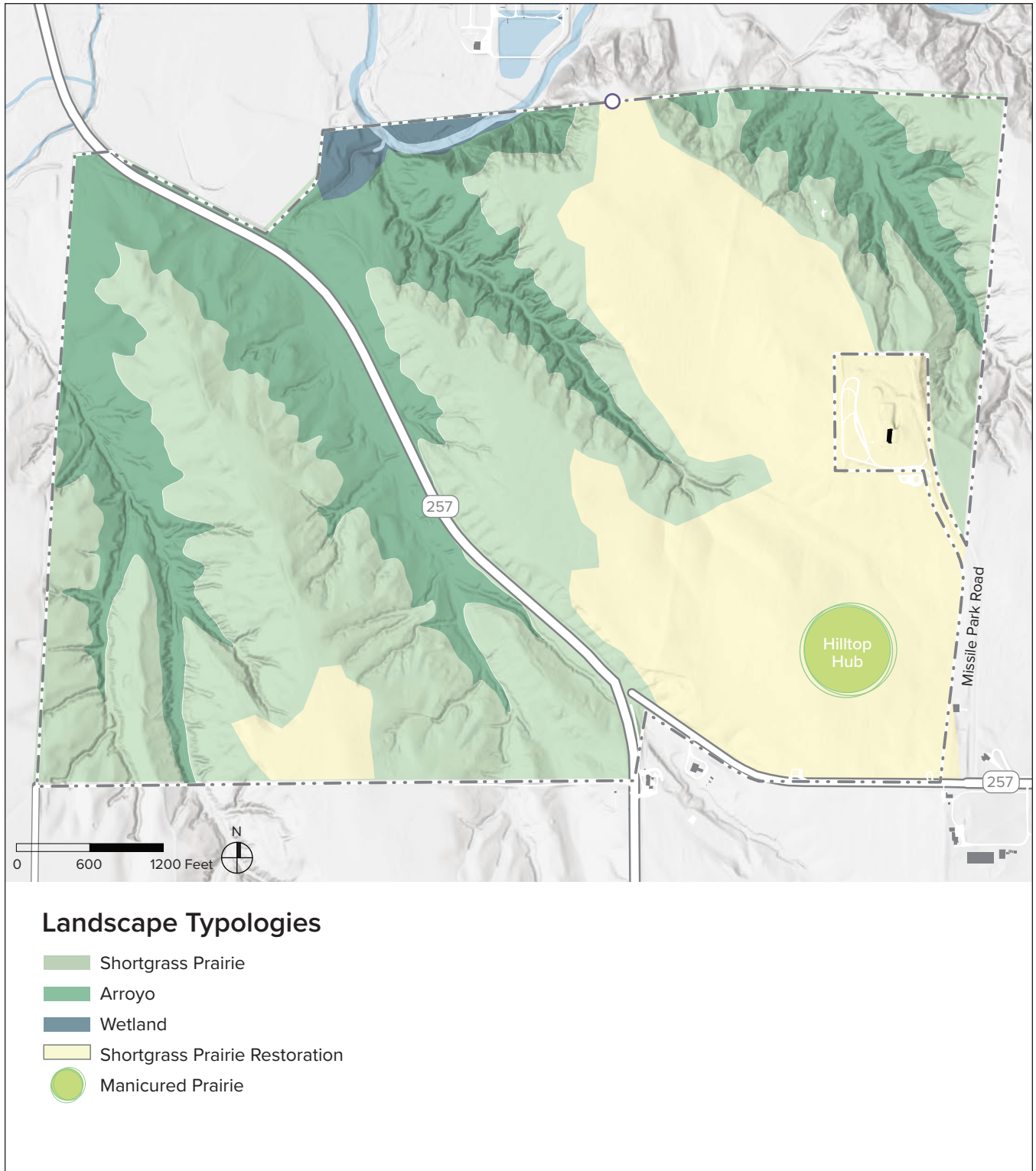


The **shortgrass prairie restoration typology** will support the highest visit use of the site and continue to recover from grazing, farming, and other anthropogenic disturbances on their own to increase native cover. Restoration activities will be focused in small areas where monitoring and cyclical maintenance is feasible and will utilize native seeds collected onsite to the greatest extent possible.

The healthy population of black-tailed prairie dogs at Arroyos del Sol and their habitat will be conserved and managed to maintain a viable population size.



The **manicured prairie typology** will reflect the character of the shortgrass prairie with opportunities to plant trees for shade and increased habitat and to establish native plantings to define outdoor gathering spaces, connect the Hilltop Hub to the landscape of the larger site, and provide a backdrop for interpretation of the site. The typology will implement water conservation measures and promote biodiversity.



Implementation

This master plan vision is ambitious, and implementation will require collaboration between the City of Greeley and its partners. Master plan recommendations are described as discrete projects supporting the vision. Funding sources will include private, state and federal grant funding. This master plan provides a resource to leverage contributions from partners and pursue grant funds.

General costing for master plan recommendations is estimated at approximately \$22 million to \$33.5 million. Implementation of discrete projects may occur in phases over several years but the intent is to fully implement a discrete project before focusing resources to another discrete project. This approach ensures full realization of this master plan vision.

The phased implementation strategy suggests implementation priorities. Priorities may shift to reflect site and visitor needs, safety and maintenance concerns, or opportunities to leverage partnerships and funding for implementation.

A proactive approach to allocating both operational and capital funds is recommended to address deferred maintenance and implement improvements. On-going maintenance and restoration projects are not identified in the prioritization framework but encompass the general categories of landscape, signage, fencing, and trail and road repair.

Project	Order of Magnitude Cost Estimate		Phasing Priority		
	Low Range	High Range	Priority 1	Priority 2	Priority 3
East Trails - Wide Hike/Bike Trail	4,800,000	6,500,000	•		
East Trails - Single Track, Directional, Mtn Bike	1,500,000	2,500,000		•	
East Trails - Arroyo Trail	600,000	1,000,000			•
West Trails	1,000,000	1,500,000			•
West Trailhead	1,800,000	2,000,000			•
Missile Site Trailhead	1,500,000	2,000,000	•		
Hilltop Hub Site	6,500,000	10,000,000	•		
Hilltop Hub Utilities	1,500,000	2,000,000		•	
Hilltop Hub Pavilion	3,000,000	6,000,000		•	

TOTAL ESTIMATED OPINION OF COST: 22,200,000 33,500,000

(based on 2024 market condition with contingencies, general conditions, design and engineering fees, and escalation)

Further Study

This master plan was informed by existing baseline documentation. Future wildlife, plant, archeological, ethnographic, and cultural resource surveys will identify additional features important to the natural and cultural history of Arroyos del Sol.

Natural Resources

Research and investigation will include documentation of natural resources. This will include the following.

- Conducting botanical surveys in all seasons, including the flowering seasons of rare and state critically imperiled plant species.
- Conducting zoological surveys in all seasons.
- Monitoring visitor use and behavior to protect resources (e.g., impacts of dogs and humans to wildlife).

Archeological, Ethnographic, and Cultural Resources

Research and documentation will include documentation of archeological, ethnographic, natural, and cultural resources. This further study will ensure potentially sensitive resources and traditional cultural properties are identified, recorded, evaluated through consultation with associated tribes, and protected. This will include the following.

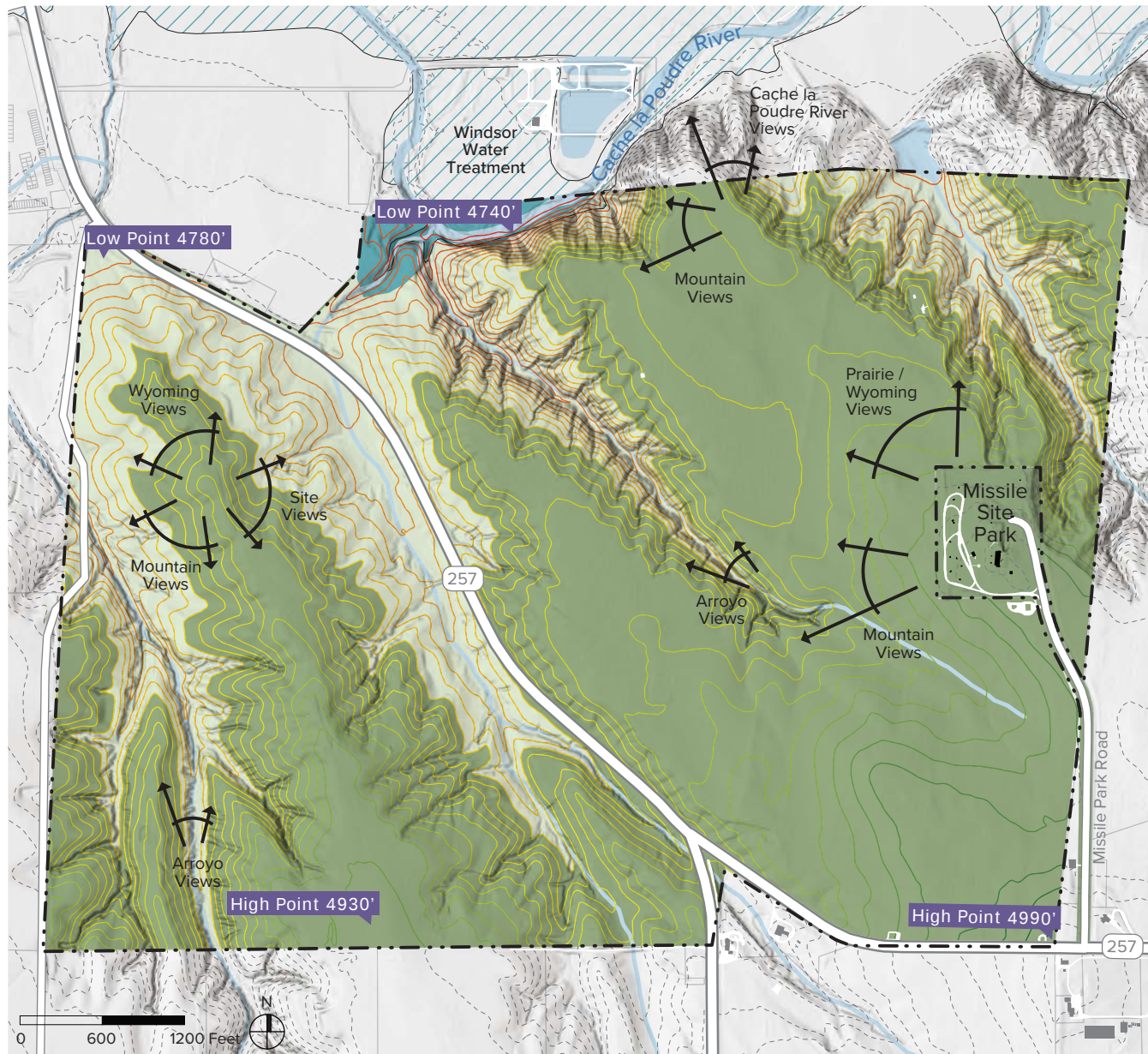
- Documenting values, stories, and connections to Arroyos del Sol.
- Identifying connections between indigenous peoples and the flora and fauna of Arroyos del Sol.
- Documenting tradition use connection to the landscape of Arroyos del Sol and Cache la Poudre River.
- Developing on-site and web-based resources and experiences to share values, stories, and connections to the landscape of Arroyos del Sol.
- Conducting investigation before any ground penetrating activities to determine the presence, condition, and significance of archeological features.

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APPENDICES



Appendix A: Existing Conditions



Landscape Character and Scenic Resources



Views

Landscape Character

Shortgrass Prairie/Grassland¹

Arroyo

Riparian Floodplain¹

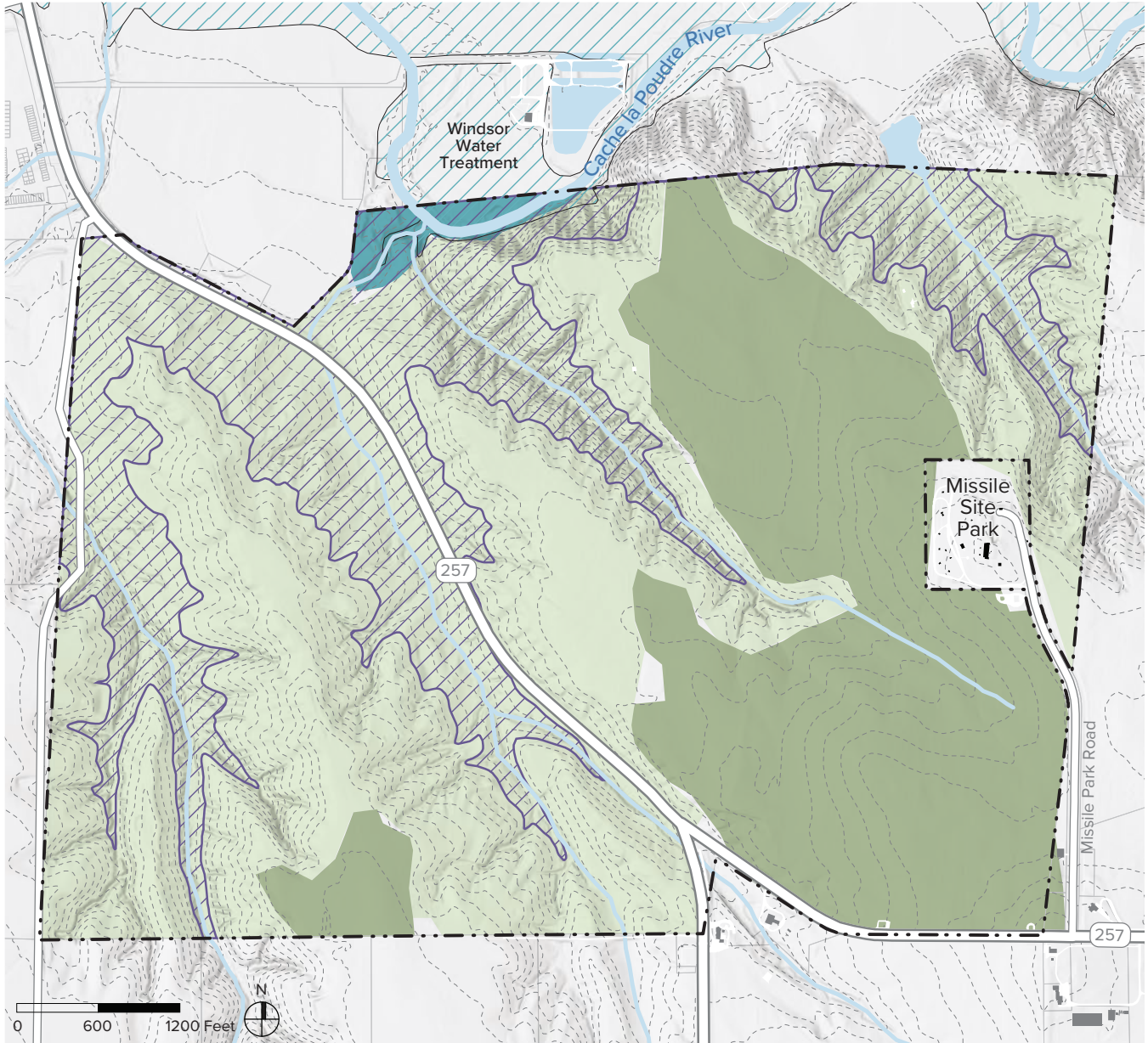
Base Flood Zone²

Elevation

High Elevation

Low Elevation

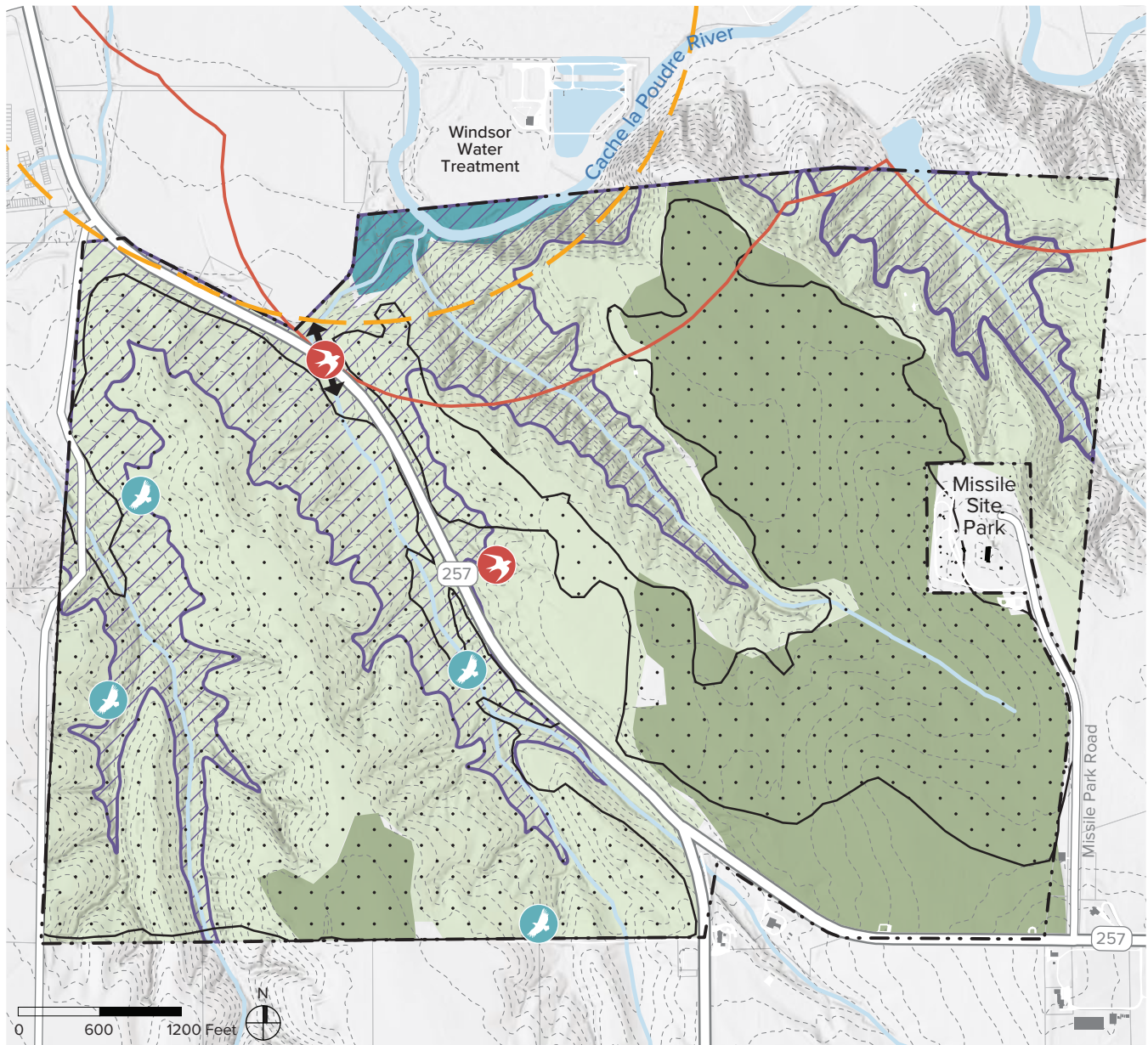
Source: ¹CNHP; ²Weld County GIS



Ecological Systems

- Shortgrass Prairie¹
- Disturbed Grassland (abandoned agricultural lands)¹
- Riparian Floodplain¹
- Arroyo
- Base Flood Zone (AE)²

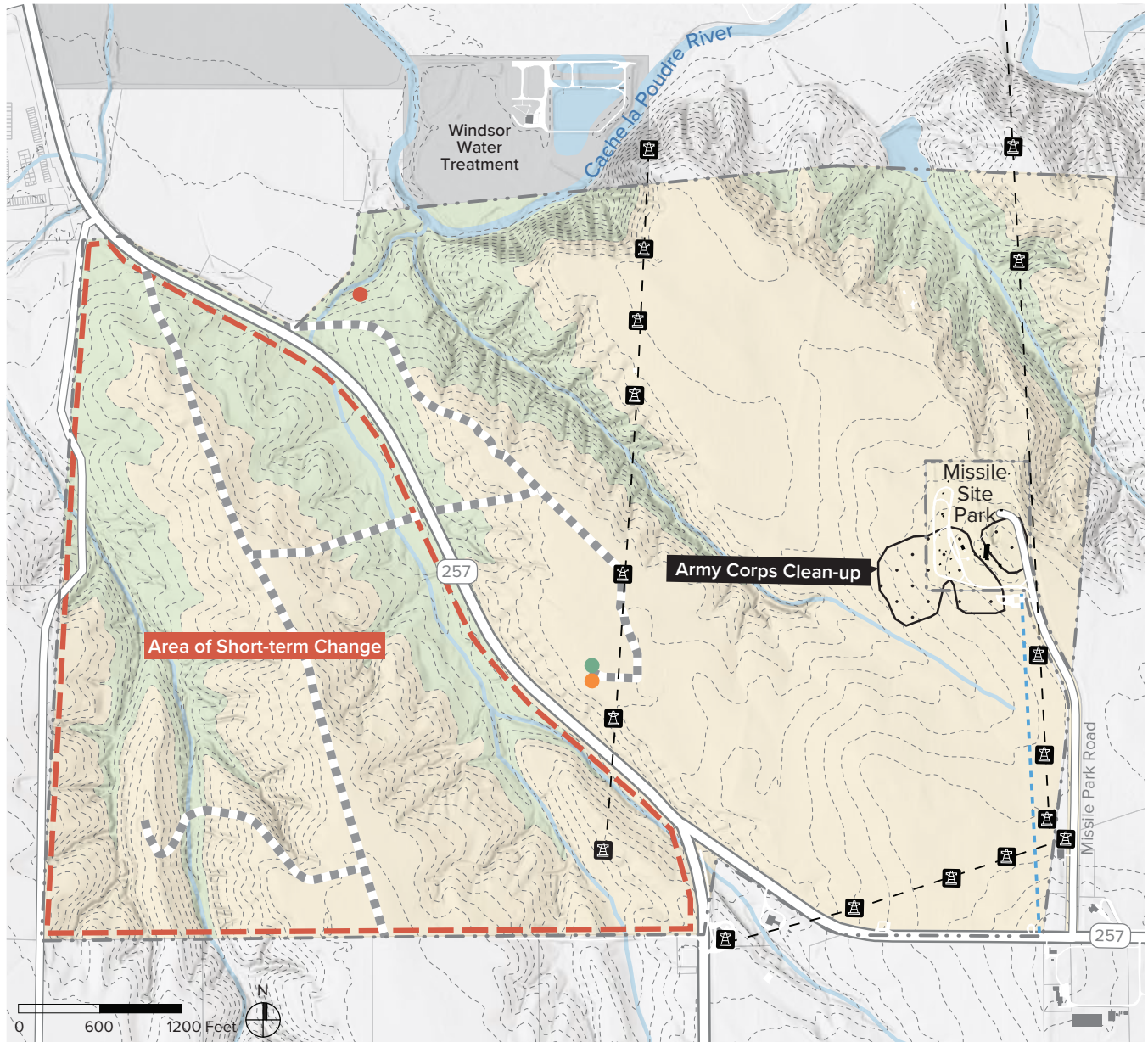
Source: ¹CNHP; ²Weld County GIS



Wildlife Habitat

- | | |
|---|----------------------------------|
| Raptor Nest ¹ | Prairie Dog Complex ¹ |
| Swallow Nest ¹ | Arroyo Habitat Area |
| Eagle Nest ¹ | Shortgrass Prairie ¹ |
| Eagle Nest Buffer (1/2 mile) ¹ | Disturbed Grassland ¹ |
| Bald Eagle, Osprey, Great Blue Heron, and White Pelican Foraging ¹ | Riparian Floodplain ¹ |
| | Culvert (HWY underpass) |

Source: ¹CNHP



Utilities, Monitoring Sites, and ROWS

— X — Transmission Line

- - - Water Line

Active Oil and Gas Wells¹

● Producing

● Shut-in

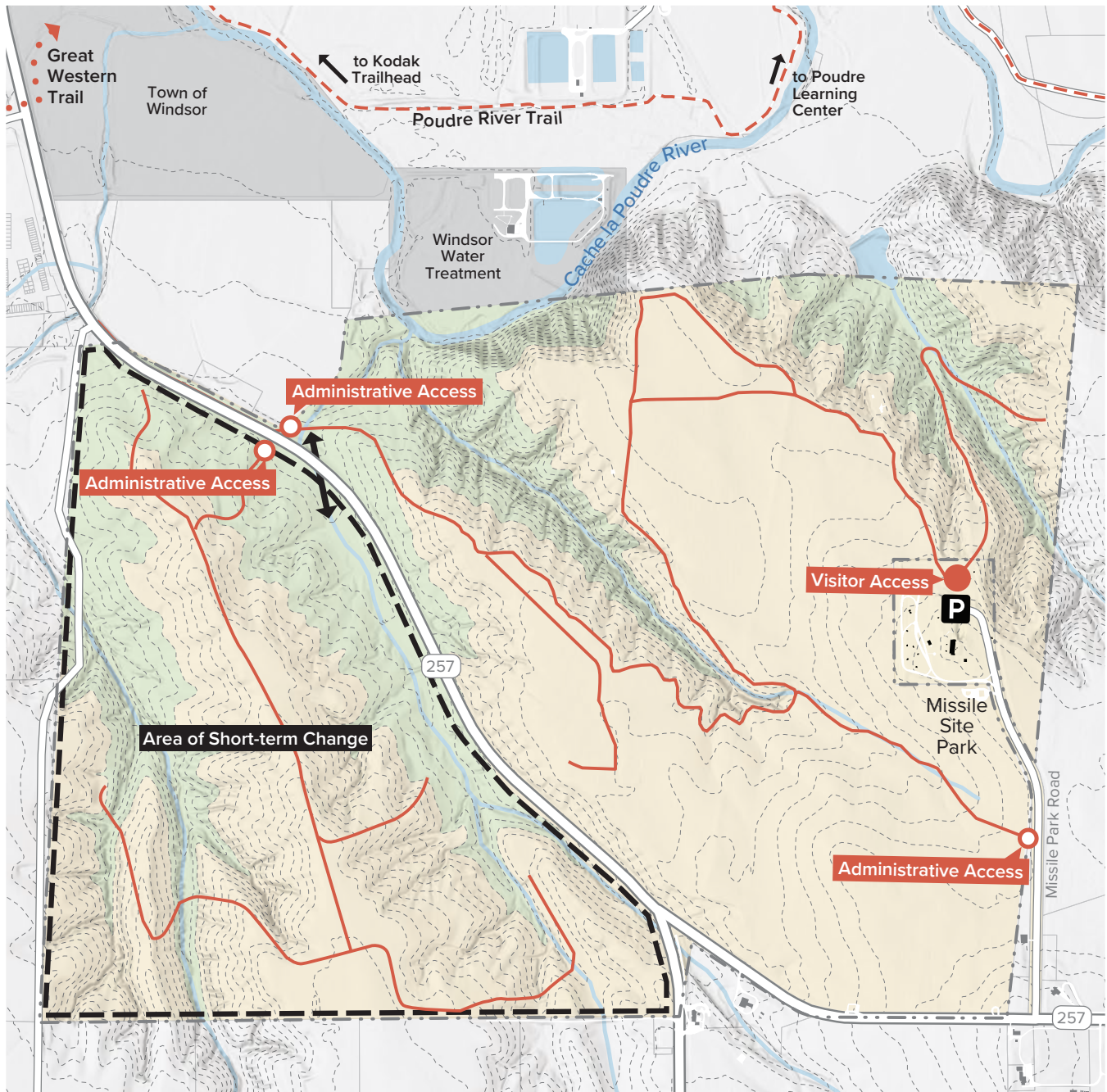
● Temporarily Abandoned

■ ■ ■ Road ROW

Regulatory Site

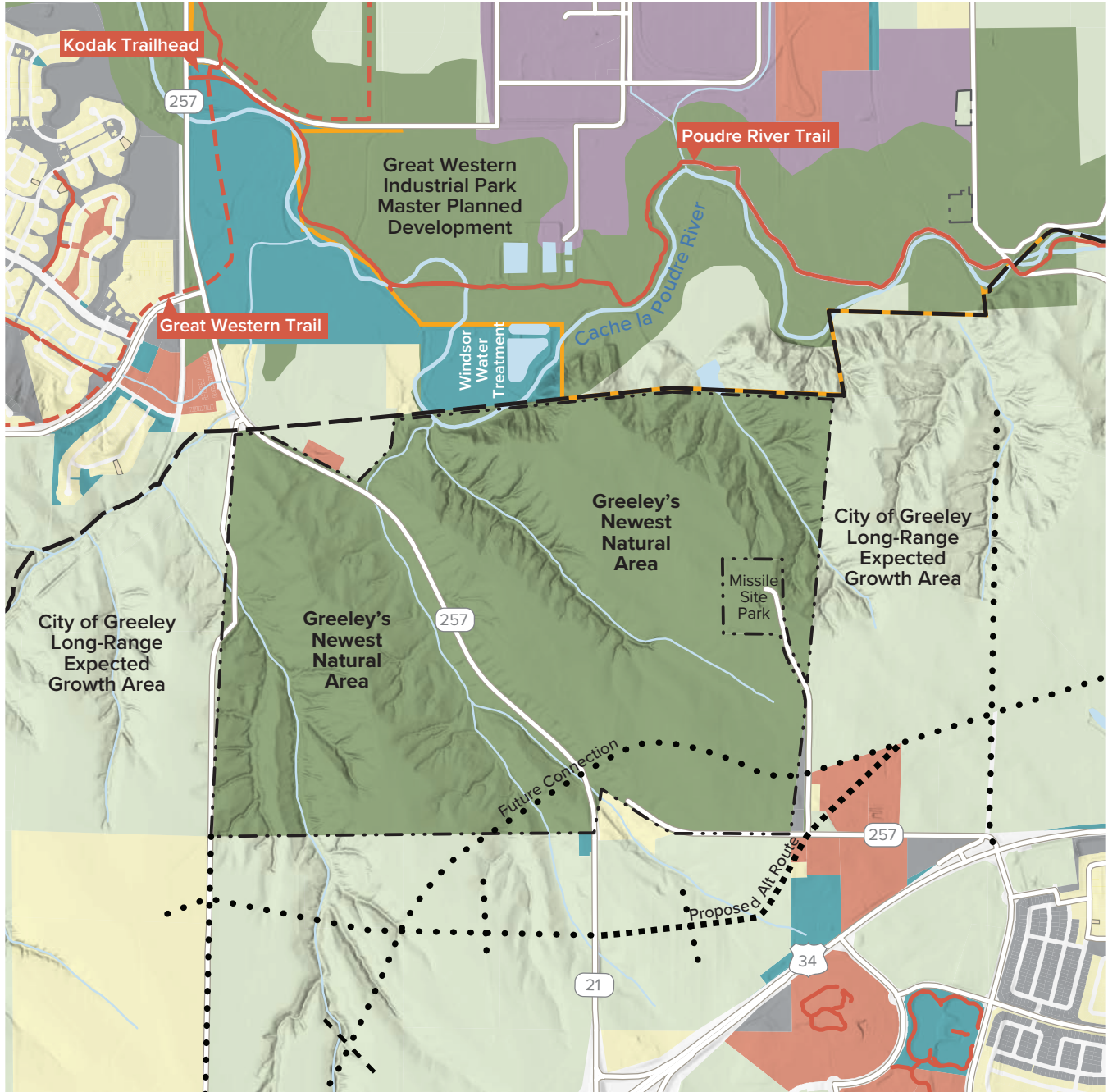
□ Monitoring Site

Source: ¹Weld County GIS



Connective Infrastructure

-  Gate
-  Parking
-  Natural Surface Road
-  Poudre River Trail
-  Culvert (HWY underpass)



Context

— Multi-Use Trail	 City of Greeley Long-Range Expected Growth Area	 Open Space/Park	 Industrial
— Multi-Use Trail (planned)	 Great Western Industrial Park Master Planned Development	 Agriculture	 Public - Exempt
• • • Proposed Road		 Residential Real Estate	 Vacant

Appendix B: Master Plan Alternatives

Summary of Feedback

Two master plan alternatives were reviewed by the city, partners, technical advisory committee, stakeholders, and the community. This diverse group expressed a preference for Concept B, indicating the alternative reflects the shared vision of integrating conservation with diverse opportunities for visitor experiences.

The following feedback informed the development of the preferred alternative presented in this master plan.

Habitat conservation: Concept B prioritizes conservation while providing for diverse visitor use. The easternmost arroyo provides a critical corridor between Cache la Poudre River and upland foraging resources to the south. Limit visitor use in this arroyo and along the Cache la Poudre River. Prioritize these areas for wildlife habitat.

Accessibility: Ensure trails, parking, amenities, and programming are accessible to visitors of all ages and abilities.

Visitor amenities: Concept B provides the best range and access to amenities. Provide vault toilets at key locations and shade throughout the trail network. Consider designing structures to double as shelters from rain, hail, etc.

Hilltop Hub: Provide picnicking and “introductory” experiences for visitors new to the natural area.

Trail network: Concept B offers the best range of opportunities for all users, ages, abilities, etc. Consider options for loops, opportunities to separate user groups, and locations for trail hubs (designated meeting points for trail users and places where they can make decisions about their trail experience).

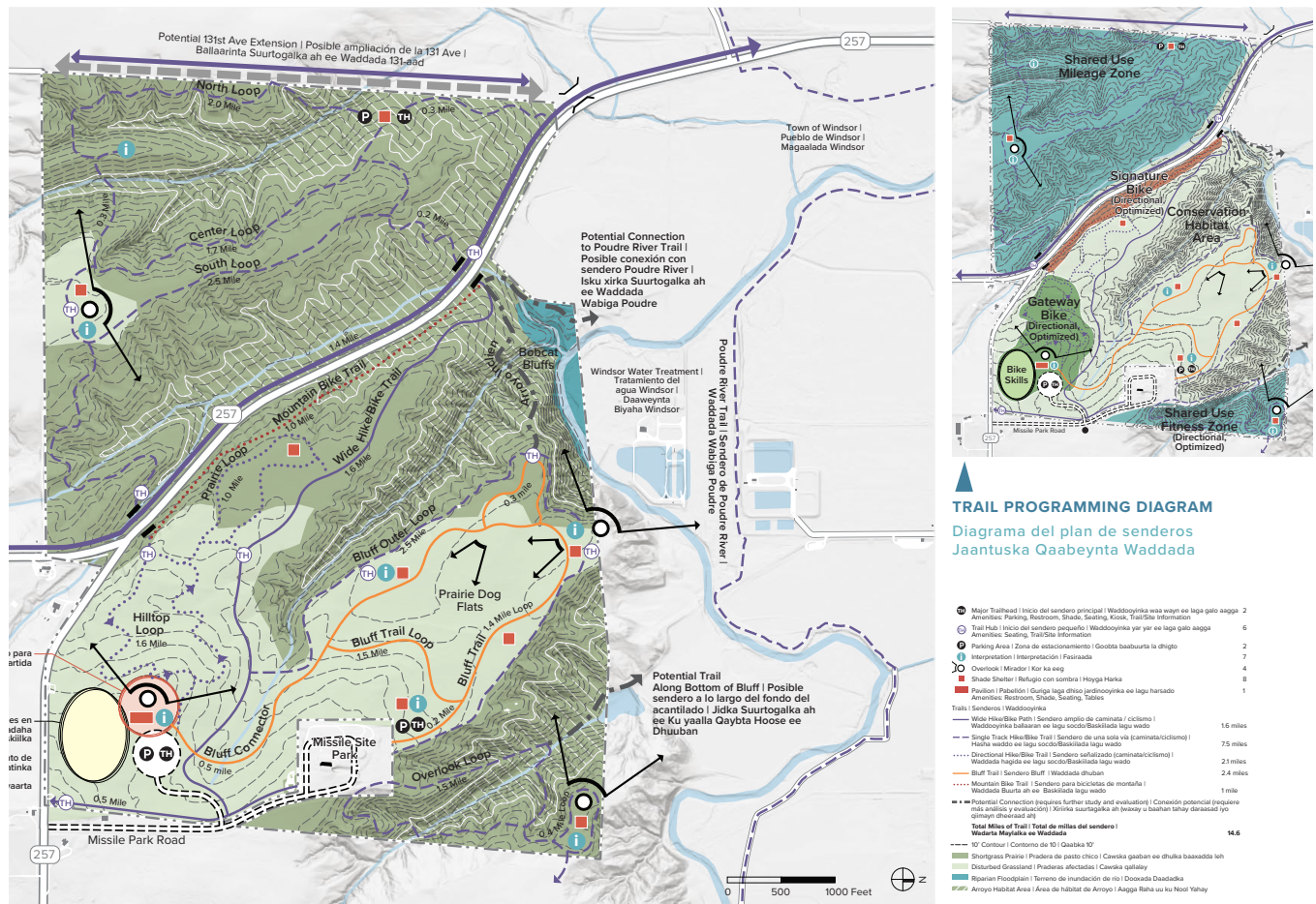
Incline trail: Recommend including the incline trail in Concept B. Consider feasibility (is it long/steep enough) and potential increased demand for parking.

Community connections: Show future connections to the Poudre River Trail and surrounding community.

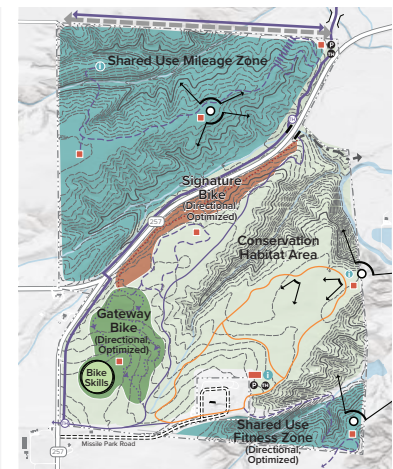
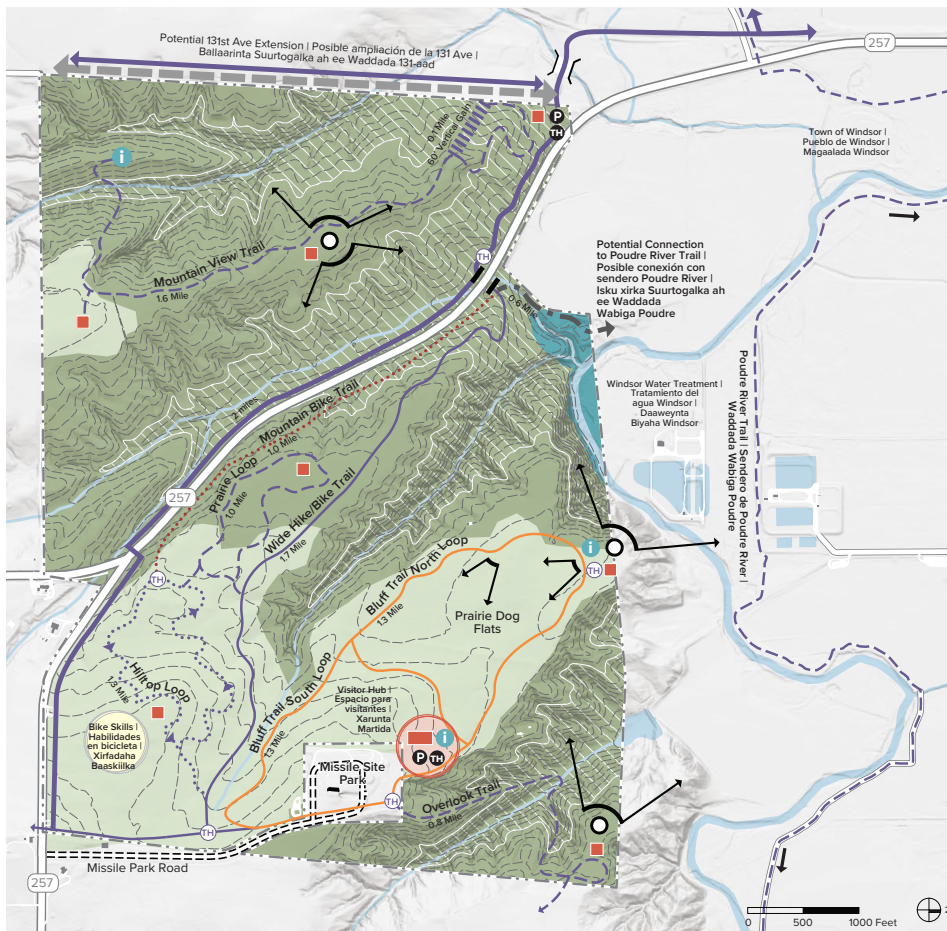


The assessment of alternatives and development of a preferred master plan included onsite discussion and field truthing with the city, TPL, and Colorado Parks and Wildlife (image: Mundus Bishop, 2023).

Concept B - Preferred Alternative



Concept A



TRAIL PROGRAMMING DIAGRAM Diagrama del plan de senderos Jaantuska Qaabeynta Waddada



Arroyos del Sol

Master Plan February 2024