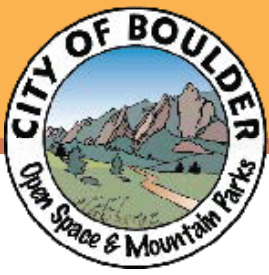


Open Space and Mountain Parks

2021 Master Plan Annual Progress Report





2021 Master Plan Progress Report

Master Plan Context

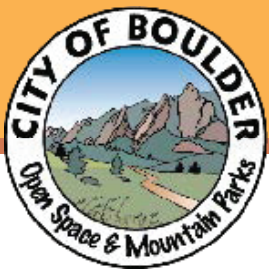
In September 2019, City Council unanimously accepted and adopted Open Space and Mountain Park's first Master Plan. The Master Plan set the course for tracking a vision for integrated and responsible land management over the next decade and beyond. Inputs into the Master Plan included the City Charter's purposes for open space, already established community-wide goals and plans, such as the Boulder Valley Comprehensive Plan, citywide guidance and past OSMP plans, and an intensive community engagement process that included over 10,000 comments and more than 1,300 completed statistically valid surveys.

The Master Plan framework consists of focus areas, desired outcomes, and prioritized strategies which together organize the policy direction and implementation priorities for OSMP. The five focus areas can be best understood through value statements, which were formed by merging community voices with those of OSMP staff, Open Space Board of Trustees and City Council. Implementation of the 46 Master Plan strategies is initially focused on accelerating and emphasizing programs and projects that advance one or more of the ten Tier 1 strategies. The department will also continue to advance Tier 2 and 3 strategies over the next decade as they all fulfil City Charter purposes for OSMP.

Reporting Progress

To track and highlight implementation progress of the Open Space and Mountain Parks Master Plan, OSMP staff rely on a variety of tools and communication approaches to report on implementation progress. One important tool staff use to help describe progress is this annual "progress report" which includes a brief description of the Master Plan context, reviews the 2021-2022 budget, describes major progress made in 2021, and highlights from the year. In 2021 OSMP staff dedicated capacity toward over 300 distinct projects and ongoing services. The intent of this progress report is not to describe and list everything that was accomplished, but rather is meant to be a high-level synopsis of highlights and will be complemented throughout the year by a host of other communications and ways to summarize progress, including:

- A community virtual "open house" webpage rolling out the week of May 18 that highlight upcoming projects of interest.
- A planned summer City publication with a community focus that will feature more in-depth stories.
- Upcoming Operating and Capital Improvement Program (CIP) Budget discussions.
- OSBT meeting agenda topics that focus on program and project updates that help to illustrate master plan outcomes and strategies.
- OSBT retreats and field trips.
- A 5-year Master Plan "check in" and the 10-year Master Plan update.

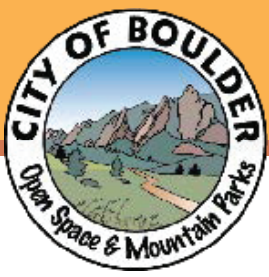


2021: A Look Back

Following 2020 when economic impacts due to COVID necessitated budget cuts, staff furloughs and an abbreviated field season, 2021 provided an opportunity for OSMP to build back to full strength. We were able to focus on getting full capacity back on the land and demonstrate a resilient presence out on the system. We celebrated the opening of the re-routed Anemone Trail and a collaborative process with Native American tribal nations to rename the former Settler’s Park to The Peoples’ Crossing. Although there were off-and-on glimpses of optimism regarding the lessening impacts of COVID, open space land and the people who steward it were faced with unforeseen tragic events. Once again, the department rallied to help keep the community safe and provide health and wellness opportunities that demonstrate how the benefits of nature can help the community heal.



2021: A Look Back	
March 22, 2021	Medal of Valor: Two OSMP rangers received Medal of Valor awards for their involvement in the response to the Boulder shooting tragedy.
April 7, 2021	Tribal Consultation: OSMP staff supported tribal consultation with over 12 Native American tribal nations resulting in renaming "Settler's Park" to "The Peoples' Crossing."
Dec 30, 2021	Marshall Fire Emergency Response: OSMP Rangers, agriculture staff and red-carded staff bravely responded to the Marshall Fire. They performed emergency door-to-door neighborhood evacuations, worked overnight to save homes and property, closed trails, searched for missing pets, staffed road closures, and later provided security for President Biden's visit to the area.
Jan 1 – Dec 31, 2021	COVID Recovery: Maintained staff and community safety during the second year of the COVID-19 pandemic and prepared for a gradual return to on-site office work in 2022.



Ecosystem Health and Resilience (EHR)

Using the best available science, we protect healthy ecosystems and mend those we have impaired.



A Few 2021 Highlights

Forest Thinning. Increased forestry staffing capacity to accelerate forest health and fire mitigation actions. Treated 141 acres of Ponderosa Pine, funded partially with a \$80,000 grant. Invested 11,000 staff hours and 800 hours of help from Junior Rangers and volunteers. Strategy EHR.1

Raptors. OSMP raptor monitoring and seasonal wildlife closures supported successful raptor breeding, with two successful Bald Eagle nests, one successful Golden Eagle nest, four successful Peregrine Falcon nests, and one successful Prairie Falcon nest. EHR.1

Northern Leopard Frog (NLF). Conducted 334 visits to 127 wetlands to monitor amphibians. Detected NLF (a tier 1 conservation species for the State of Colorado) at 38 wetlands, tying the record for the most frogs since monitoring began in 2006. NLF breeding was confirmed in 11 locations, which is also very high. EHR.1

Tall Oatgrass. For the first time, introduced cattle grazing in all four management units in the Shanahan Ridge area on OSMP, using 50 head of cattle to control this invasive grass species and reduce wildland fire risks. EHR.1

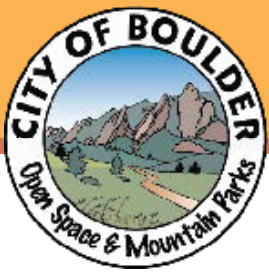
Upland Vegetation Management. Treated over 6,600 acres for non-native species across the OSMP system. Pulled 21,000 med sage, 7,700 purple loosestrife, and 26,000 hairy willow herb plants. Spent over 2,000 hours controlling teasel, crack willow, and other weeds in riparian and wetland areas. Over 30 tons of cattail were removed from OSMP ponds. Efforts included large volunteer commitments. EHR.6

Native Seeds. Spent over 400 hours collecting seeds of 11 different plant species. Seed mixes were provided for 24 projects across the system. Efforts included large volunteer commitments. EHR.1

New Zealand Mud Snail (NZMS) management. Developed a management plan to prevent the spread of NZMS and to enable riparian restoration. EHR.6

Bear Canyon Trail. Rerouted trail to better protect Preble's Meadow Jumping Mouse Habitat. EHR.1

"It is a very unique ecosystem with some of the greatest diversity on our continent. I can go 1,000 miles east or west and not find that diversity of plant and animal life." ~OSMP Visitor



Agriculture Today and Tomorrow (ATT)

Our legacy and future are based on working landscapes that are in harmony with nature.



A Few 2021 Highlights

Soil Health. Sampled 128 sites for a soil health baseline inventory and completed a summary report. Completed soil health treatments on 241 acres leased for agricultural purposes. Planned, co-hosted and participated in the sixth annual Soil Revolution Conference. Strategy ATT.2

Prescribed burns. Burned a total of 8,900 feet of irrigation ditches to enhance and maintain irrigation water delivery. ATT.1

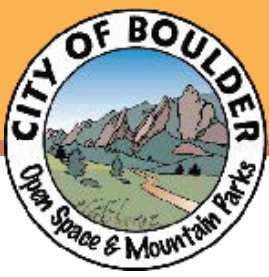
Irrigation Infrastructure Improvement. Spent over \$100,000 to improve and maintain irrigation infrastructure. ATT.1

Agricultural Land Restoration. Removed prairie dogs from 135 acres of irrigated agricultural land. Installed barriers and implemented restoration activities to prevent recolonization, enhance soil health and increase agricultural productivity from all removal areas. EHR.1, ATT.3

Fencing. Completed 52 fence and gate projects. Removed 13,625 feet of fencing and repaired 13,567 feet with Ready-to-Work and volunteer crews. Installed 9,748 feet of new or refurbished fencing. ATT.1

Farmhouse Renovation. Finished a complete renovation of OSMP' Ertl farmhouse which had been unoccupied and in need of repair. Asbestos and lead were abated; all systems were brought into code compliance; windows were replaced; the house was fully insulated; and the kitchen was upgraded. In 2022, agricultural tenants working the cattle and land near where the house stands will move into the farmhouse to help enhance agricultural stewardship of this area. ATT. 6

Farm Site Improvements. Spent \$125,000 on site improvements to five properties to stabilize and upgrade facilities for agricultural lessees. Four of these sites are diversified vegetable or animal farms providing local food sources for the community. ATT.1



Responsible Recreation, Stewardship & Enjoyment (RRSE)

We are united by our connection to and enjoyment of nature and our obligation to protect it.



A Few 2021 Highlights

Trail Maintenance. Utilized diverse resources including staff, youth corps crews, volunteers, contractors, and Junior Rangers to make progress on the maintenance backlog. Maintained ~1,500 drainage structures during routine maintenance. Constructed, maintained, or repaired ~3.5 miles of trail surface, installed over 400 new overlapping timber steps, constructed 784 rock steps, built 4,525 square feet of stone retaining wall. Spent 2,300 staff hours quarrying and moving material on job sites for repair-in-place trail projects. Strategy RRSE.2

Wayfinding Signs. Developed updated wayfinding signs to replace deteriorating infrastructure that not only labeled the trail names but also the destinations each trail leads to. RRSE.1

Flagstaff Nighttime Parking. Implemented new parking hours and a parking permit system along the Flagstaff corridor to improve visitor safety and resource protection. RRSE.1

Dog Waste. Expanded dog waste compost service and recycling service throughout the system. Upgraded bear-proof dog waste compost bins to a more durable and visually appealing style. With volunteers, picked up 55 pounds of dog waste along trails during our "Let's Doo It" campaign. RRSE.1

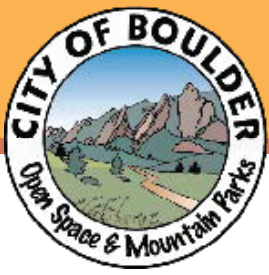
Junior Rangers. Junior Rangers built 54 feet of raised wooden trail on Springbrook and Marshall Mesa trails and repaired 696 linear feet of tread and worked on 2,164 linear feet of trail on Springbrook trail. RRSE.2

New Trail Fencing. Replaced fencing at Lost Gulch Trailhead with new buck and rail fencing to better protect natural resources and keep visitors on trail. Installed 4,000 linear feet of fencing to reduce off-trail travel. RRSE.8, EHR.4.

Monitoring. Installed five additional long-term and 90 short-term visitor counters and updated monitoring location names to enhance OSMP's visitation data. Conducted undesignated trail monitoring on 5,732 acres and performed trail condition monitoring on 34.5 miles of designated trails in the mountain backdrop. RRSE.1

Visitor Survey. Launched the Public Opinion and Visitor Experience Survey to understand and update information about OSMP visitors and completed the first four months of data collection. RRSE.1

Climbing Partnership. In partnership with Flatirons Climbing Council (FCC), issued 9 permits to FCC to establish new fixed hardware climbing routes in the flatirons. FCC also applied for 13 bolt replacement permits to ensure the safety of existing routes. RRSE.5



Community Connections, Education & Inclusion (CCEI)

Together, we build an inclusive community of stewards and seek to find our place in open



A Few 2021 Highlights

Volunteers focused on Communication with Visitors. Volunteer ambassadors – 7 volunteers made 30,392 visitor contacts. Bike patrol – 34 volunteers made 5,000+ contacts. Trail guides – 40 volunteers made 37,842 contacts. Flagstaff nature Center – 12 volunteers made 2,869 contacts. Strategy CCEI.2

Raptor and Bat Monitor Volunteers. Sixty volunteers provided data collection and observations to support OSMP resource management decisions. CCEI.8

Inclusive Hiring. Implemented more inclusive hiring practices in the Junior Ranger program by updating the application process to value a diversity of backgrounds and experiences and supported youth through the onboarding process. CCEI.1

Bilingual Programs. Provided 25 programs for 381 Spanish-speaking participants, including Nature Kids Boulder programming, bilingual school presentations and the bilingual arts programs. CCEI.1

Accessibility Programs. Served 1,519 people experiencing disabilities. Staff led 12 wheelchair-use trainings; 3 accessible presentations; 48 all-terrain handcycle experiences; 8 disability hikes; and 2 accessibility events. Family “Roll and Strolls” were a big hit. CCEI.1

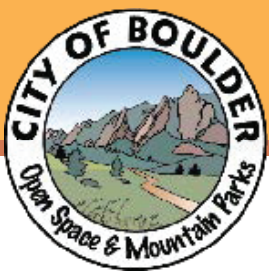
LGBTQIA+ Programs. Partnered with Out Boulder County to offer three activities with 17 participants and in partnership with Natural Highs, a recovery program that elevates the experiences of youth, OSMP offered five activities reaching 99 participants. CCEI.1

Presence On the Land. Staff and volunteers made over 142,348 visitor contacts out at our trails and trailheads to help enhance visitor understanding of the OSMP system. CCEI.2

Informative Signs. Installed new flip signs at cattle gates to alert visitors about the importance of keeping gates closed when cattle are present and how it relates to the city charter. CCEI.2

Connecting Youth to Nature. Provided 57 activities to 5,382 youth. Offered 5 school assemblies reaching 925 students and staff. Staff and volunteers provided 142 activities reaching 10,618 families. CCEI.3

Cultural Resources. Established a state-approved repository for the OSMP cultural resources collection and began work on curation. CCEI.9



Financial Sustainability (FS)

We steward public funding to fulfill the City Charter purposes for open space.



A Few 2021 Highlights

Budgeting for COVID. Developed COVID response budgets that responded to OSMP needs, from increased signage and messaging to purchase of personal protective equipment for staff to increased cleaning and sanitizing of buildings and infrastructure on the land. Strategy FS.1

Grants. Secured grant funding to support a new body camera requirement for OSMP Rangers; spent \$80,000 in grants for forest thinning in the Shanahan Ridge area; and awarded \$162,000 in grant funds for forest health and fire mitigation work that will take place in 2022 and 2023. FS.1

Emergency Response Support. Provided critical support to the Emergency Operation Center during the Marshall Fire disaster and developed and implemented staff time and expense tracking systems needed to secure federal reimbursement for fire recovery costs. FS.2

Contingency Reserves. Maintained 20 percent contingency reserves through the budget process, recognizing the need for the Open Space Fund to effectively respond to disasters. FS.2

System Management. Continued configuration of additional data sets in OSMP's asset management system to better track our assets (e.g trails, bridges, fencing, buildings, etc.) and improve the accuracy of work planning and costing for maintenance activities. FS.3

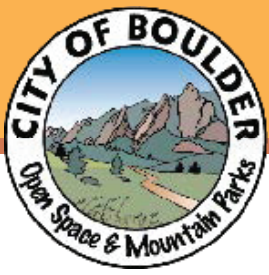
Taking Care of What We Have. Developed and executed the 2021 budget and staff workplan that prioritized capital maintenance and increased investment in maintenance activities during a budget reduction cycle. Work included: Managed conservation agreements, access agreements, and requests for licenses and disposals; ongoing stewardship of data and information to support effective decision-making; front desk services provided public information, management of Voice and Sight tags, facility rentals, permits and parking. FS.4

Acquisitions. Purchased a conservation easement at Long's Gardens. Acquired Boulder County Parks and Open Space land at Sombrero Marsh in order to consolidate management. FS.7

Real Estate Assets. Completed Phase 1 Residential Facility Assessment analyzing 41 residences on open space lands, their current and future uses and making recommendations around next steps. FS.8

Ranger Patrol Log. Developed a field-based data collection app, RAPTOR, to collect data around Ranger operations. This data will help inform the Ranger Strategic Plan in 2022. FS.9

Donations. Through a project agreement, the Boulder Open Space Conservancy (BOSC), raised and donated \$34,000 to support trail maintenance on Mount Sanitas. FS.1



2021 Funding: Master Plan Alignment

Funding to the Open Space Fund in 2021 supported implementation of the fiscally constrained funding scenario in the Master Plan. Throughout 2021, the city and the Open Space Fund continued to experience multi-year revenue impacts from COVID-19. During 2021 budget development, OSMP participated in a city requirement to reduce 10% of base budget. These reductions were made to ensure fund stewardship during a time of economic uncertainty and were balanced across operating and capital expenditures.

Revenue impacts to OSMP were lessened by the extension of a 0.15 percent sales tax increment to the Open Space Fund that was adopted via 2019 ballot measure. First year revenues generated by this tax increment in 2020

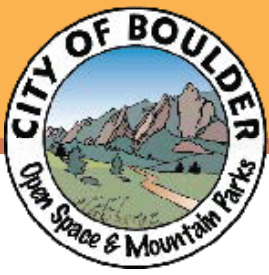
The approved 2021 OSMP CIP continued to invest heavily in Tier 1 strategies

Master Plan Tier	2020 CIP	2021 CIP	2022 CIP
Tier 1	76%	77%	72%
Tier 2	20%	18%	10%
Tier 3	4%	5%	18%

were used to purchase a conservation easement at Long's Garden. That purchase was completed in March of 2021. Some revenues collected from the 0.15 percent sales tax in 2021 were available for use by OSMP in 2021, and OSMP was able to program dollars to support key investments, even during a budget reduction scenario. For example, OSMP was able to shift two fixed-term positions supporting soil health and prairie dog management from the General Fund to the Open Space Fund. OSMP also converted the Trails Research Coordinator position from temporary to standard to support important condition assessment and asset management work, supporting Tier 1 Master Plan strategies.

The department anticipates that in 2022, revenues will rebound and OSMP will fully program the extended 0.15 percent sales tax increment to support Master Plan implementation. During the 2022 budget development process, OSMP was able to restore COVID-19 reductions, request to fill vacant positions that were held open to provide salary savings, reallocate \$521,000 in operating budget to accelerate Tier 1 priorities, and increase the CIP budget to pre-COVID levels. In 2022, the department will remove the fixed-term end dates from three staff positions supporting Tier 1 priorities: one Soil Health Program Manager, one Prairie Dog Program Manager, and one Wildlife Ecologist. Based on results of a citywide assessment around needs in data management and GIS, OSMP will also convert two positions from temporary to standard, one Human Dimensions Analyst and one GIS Analyst.

Despite COVID-19 challenges, OSMP was able to accomplish great work across all focus areas. In 2021, 100 percent of the department operating budget was utilized, and OSMP continued to make progress against Master Plan goals.



Looking Ahead

In 2022, OSMP staff are working on the implementation of the Climate Action and Equity outcomes and strategies of the Master Plan. The Master Plan calls for staff to become leaders in helping native ecosystems withstand and adapt to the effects of the climate crisis and to create welcoming conditions so that all people feel welcome, safe and can enjoy the benefits of open space. Both Climate Action and Equity are complex topics that require a lot of analysis and planning to take place ahead of making changes.

Climate Action

OSMP has been doing climate action work for years and the department takes a multi-faceted approach to climate action work. The six main areas where the department has been taking climate action are: land acquisition for protection and mitigation; restoring agriculture land to prevent soil loss and build carbon; managing forest fuels to mitigate catastrophic wildfire; restoring, enhancing and conserving ecosystem conditions and resilience; reducing the operational carbon footprint; and raising awareness and support for climate action. You can learn more at the Climate Change and Open Space website: [Climate Change and Open Space | City of Boulder \(bouldercolorado.gov\)](https://www.bouldercolorado.gov/climate-change-and-open-space)

In 2022, OSMP staff will develop a first estimate of the department's carbon footprint from operations as well as a baseline inventory of land-based carbon. The projects will identify and prioritize staff actions to accelerate the decarbonization of OSMP operations, enhance ecosystem disaster resilience, and maintain or increase carbon storage in land, all while protecting nature, agriculture, and visitors.

Wildfire Management

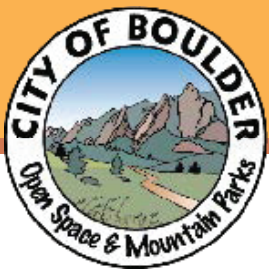
Related to climate action, OSMP is collaborating with the Boulder Fire Department and other partners on wildland fire preparedness, response and prevention. While OSMP's forestry crew has been steadily increasing the number of forest stands treated each year and the rangers continue to refine our fire response capability, the department initiated a joint wildland fire management review with the city fire department in 2021.



This management review will be completed in 2022. There are expected to be recommendations for enhancements and improvements in the areas of: administration, capacity, collaboration, communications, fire response, fuel mitigation, land management, prescribed fire, training, and regulation. These recommendations will serve as a road map for financial priorities in 2023 and beyond to continue to put the city in the best position possible to address the risk of wildland fire to the community.

Equity

In 2021, OSMP created its first Justice, Equity, Diversity, & Inclusion Team (JEDI). This team has focused on improving internal communications, auditing existing trainings, committing equity ambassadors, and supporting the department on equity-related projects. In 2022 the JEDI team plans to continue to audit and modify trainings, to pivot to external communications, to analyze departmental policies, and to support the department in using the City's Land Acknowledgement to guide projects.



In early 2022, the department completed its first equity assessment in support of the City's racial equity initiatives. Information gathered via the assessment will be analyzed in 2022 and serve as guidance for the department to continue equity work and set the foundation for equity-related goal setting and annual work planning. Results will also inform a department operational equity plan, as called for in the City's Racial Equity Plan. This internal plan will likely be developed in 2023.

In 2023, OSMP is again expected to play a significant role in the city's Consultation with over a dozen American Indian tribal nations who share a deep connection to the lands in the Boulder Valley.

ECOSYSTEM HEALTH AND RESILIENCE

WHAT THIS LOOKS LIKE:

EHR.A) HIGH DIVERSITY OF NATIVE PLANTS AND ANIMALS:

OSMP lands support a high diversity of native plants and animals, expansive natural areas and some of the most critical wildlife habitat along the Front Range.

EHR.B) RESTORED, RESILIENT HABITAT:

Degraded habitat with high potential to support native or extirpated (i.e., locally extinct) native species is restored and made more resilient to stressors like invasive species or direct and indirect human impacts.

EHR.C) CLIMATE ACTION:

OSMP is a leader in helping native ecosystems withstand and adapt to the effects of the climate crisis.

EHR.D) INFORMED, SHARED STEWARDSHIP:

OSMP and the community work side by side to develop a greater understanding of the land and to safeguard our natural heritage.

HOW THIS IS ACHIEVED:

EHR.1) PRESERVE AND RESTORE IMPORTANT HABITAT BLOCKS AND CORRIDORS:

Sustain, enhance, connect and restore habitat blocks with high ecological value and potential through conservation practices.

EHR.2) UPDATE AND CONTINUE IMPLEMENTING SYSTEM PLANS GUIDING ECOSYSTEM MANAGEMENT:

Update the Grassland and Forest Ecosystem Management Plans and continue managing entire ecosystems by considering all elements and processes of natural systems rather than focusing on one species or attribute at a time.

EHR.3) ADDRESS THE GLOBAL CLIMATE CRISIS HERE AND NOW:

For the benefit of natural ecosystems and future generations, exhibit environmental leadership by taking immediate, targeted and unified action in response to ecosystem changes that the global climate crisis will bring about.



EHR.4) REDUCE UNDESIGNATED TRAILS:

Guided by best practices or area-specific plans, mitigate resource impacts by restoring, designating, re-routing or recategorizing undesignated trails, especially in sensitive habitat areas, while considering appropriate routes to serve desired destinations for visitors.

EHR.5) EXTEND ON-TRAIL REQUIREMENTS:

Through future area planning, reduce off-trail travel in targeted locations, especially in sensitive habitat areas.

EHR.6) CONTROL INVASIVE SPECIES:

Prioritize management and control of species that have severe and/or widespread impacts, particularly those that are non-native and most likely to be controlled.

EHR.7) DEVELOP A LEARNING LABORATORY APPROACH TO CONSERVATION:

Conduct, support, apply and widely distribute the findings of long-term scientific research to inspire and engage community stewardship.

EHR.8) REDUCE IMPACTS FROM NOISE, LIGHT AND NEARBY LAND USES:

Mitigate impacts to wildlife, sensitive habitat areas, scenic character or natural soundscapes from noise pollution, light pollution and adjacent land uses.

EHR.9) REDUCE AND OFFSET OSMP GREENHOUSE GAS EMISSIONS:

Support the citywide climate commitment by reducing and offsetting greenhouse gas emissions related to departmental operations.

AGRICULTURE TODAY AND TOMORROW

WHAT THIS LOOKS LIKE:

ATT.A) VIABLE AGRICULTURAL LIVELIHOODS:

The city's ranchers and farmers are valued and supported in their contributions to the stewardship of Boulder's agricultural heritage.

ATT.B) SUSTAINABLE, PRODUCTIVE AGRICULTURE:

OSMP's agricultural lands and infrastructure remain productive and sustainable long into the future.

ATT.C) DIVERSE AGRICULTURAL PRODUCTS FOR LOCAL MARKETS:

A diversity of food and agricultural products is grown on suitable open space properties to better meet the changing demands of the local agricultural economy and the needs of ranchers, farmers and city residents.

ATT.D) HIGH-VALUE HABITAT ON RANCHES AND FARMS:

City agricultural lands provide high-value habitat for rare and native species, integrating both agricultural and ecosystem objectives.

ATT.E) SOIL HEALTH AND RESILIENCE:

Appropriate agricultural practices

protect high-quality soils from erosion, improve productivity, maintain soil health and increase resilience in a changing climate.

ATT.F) RESILIENT AND EFFICIENT WATER SUPPLY:

OSMP emerges as a leader in the acquisition and preservation of water assets and the application of innovative irrigation practices that anticipate environmental change.

ATT.G) APPRECIATION FOR WORKING LANDSCAPES:

Community members experience and better understand working landscapes, contributing to the preservation of Boulder's agricultural lands and heritage.

HOW THIS IS ACHIEVED:

ATT.1) REDUCE MAINTENANCE BACKLOG FOR AGRICULTURE AND WATER INFRASTRUCTURE:

Focus investments on maintaining and improving existing agricultural infrastructure to standards – both water-related and structural.

ATT.2) INCREASE SOIL HEALTH AND RESILIENCE:

Manage agricultural activities in tilled lands and native grasslands to



Photo by Gail Kezele

prevent soil erosion, maintain and/or improve soil health, sequester carbon and protect ecosystem function.

ATT.3) ADDRESS CONFLICTS BETWEEN AGRICULTURE AND PRAIRIE DOGS:

Maintain the viability of agricultural operations by reducing impacts from prairie dogs on irrigated lands, while supporting ecologically sustainable prairie dog populations across the larger landscape.

ATT.4) PROTECT WATER RESOURCES IN A WARMER FUTURE:

Develop and implement a water resources management plan that balances sustainable agriculture, ecosystem stewardship, protection of water rights, efficiency of water use and resilience in a more variable climate.

ATT.5) ENCOURAGE DIVERSE AND INNOVATIVE AGRICULTURAL OPERATIONS:

Partner with open space ranchers and farmers to analyze and where appropriate expand the variety of agricultural operations on OSMP lands, focusing on the infrastructure and technical assistance needed to support local food systems, including diversified vegetable farming, pastured livestock, micro dairies and taking products to market.

ATT.6) SUPPORT THE SUCCESS OF RANCHERS AND FARMERS:

Where appropriate, evaluate and pilot cost-sharing, partnerships and other mechanisms to encourage both responsible land stewardship and economic viability for a diverse range of current and future farmers and ranchers on OSMP lands.

ATT.7) INTEGRATE NATIVE ECOSYSTEMS AND AGRICULTURE:

While maintaining the viability of agricultural operations, evaluate and increase the potential for improving the quality of habitat on agricultural lands through staffed programs and partnerships with ranchers and farmers.

ATT.8) FURTHER REDUCE OR ELIMINATE PESTICIDE USE:

Reduce or eliminate the use of pesticides wherever possible. When reduction or elimination of pesticides is not possible, use the least toxic and least persistent pesticide that is effective.

ATT.9) ENHANCE ENJOYMENT AND PROTECTION OF WORKING LANDSCAPES:

Partner with community members, farmers and ranchers to maintain and enhance the condition of working landscapes, viewsheds and historic structures.

RESPONSIBLE RECREATION, STEWARDSHIP AND ENJOYMENT

WHAT THIS LOOKS LIKE:

RRSE.A) DIVERSE RANGE OF RECREATIONAL EXPERIENCES:

A fun and diverse range of passive recreational experiences inspire stewardship and contribute to our physical and mental well-being.

RRSE.B) ENJOYABLE, RESPONSIBLE RECREATION:

Amid changing visitor use levels and patterns, ecosystem health is sustained, and visitor experiences remain positive.

RRSE.C) WELCOMING, ACCESSIBLE TRAILHEADS:

Welcoming trailheads and supporting recreational facilities provide access to and highlight Boulder's scenic, natural and cultural landscape.

RRSE.D) GREAT EXPERIENCES FOR ALL:

Visitors respect and care for each other and for the land, so all can enjoy themselves for generations to come.

RRSE.E) HIGH-QUALITY TRAIL NETWORK:

Visitors can enjoy OSMP lands and reach a range of recreational destinations through a well-maintained, connected network of local and regional trails that is welcoming and accessible to all.

HOW THIS IS ACHIEVED:

RRSE.1) ASSESS AND MANAGE INCREASING VISITATION:

Continue implementing measures from approved plans to mitigate impacts of increasing visitation in specific locations, while also updating the systemwide visitor use management plan to generate and implement ideas for understanding and addressing visitation growth throughout the system and to nurture stewardship and enjoyable visitor experiences.

RRSE.2) REDUCE TRAIL MAINTENANCE BACKLOG:

Using a prioritized, life-cycle approach to improving the condition of OSMP's diverse portfolio of historic and modern trails, develop and implement a maintenance approach to fix immediate needs and identify what is needed to manage the trail network long-term.

RRSE.3) UPDATE GUIDELINES AND STANDARDS FOR QUALITY TRAIL DESIGN AND CONSTRUCTION:

Design and construct quality trails that facilitate a range of experiences through a variety of landscape types, using design guidelines and construction standards that elevate the quality, sustainability and accessibility of trails and encourage

the use of native materials that blend with natural surroundings.

RRSE.4) ENCOURAGE MULTIMODAL ACCESS TO TRAILHEADS:

Explore and partner on a range of coordinated transportation and design solutions to reduce parking congestion, reduce greenhouse gas emissions from visitor travel and promote active living, ecosystem health and public transportation.

RRSE.5) MANAGE PASSIVE RECREATION ACTIVITIES REQUIRING AN OSMP PERMIT:

Support enjoyable and compatible recreation experiences by periodically evaluating and refining management practices for use permits, off-leash dog visits and other related regulations to minimize resource impacts and ensure programs are easy-to-understand for visitors, manageable for staff and responsive to changing conditions.

RRSE.6) SUPPORT A RANGE OF PASSIVE RECREATION EXPERIENCES:

Continue to honor a diverse range of passive recreation opportunities that respect the unique character and history of the Boulder community and its surrounding open space lands, providing fun and memorable experiences.

RRSE.7) BUILD NEW TRAILS AS GUIDED BY PAST AND FUTURE PLANS:

Implement past and future plans by constructing new local and regional trail segments where lands offer high recreation potential, especially when opportunities for citywide and regional partnerships leverage OSMP funding.

RRSE.8) PROVIDE WELCOMING AND INSPIRING VISITOR FACILITIES AND SERVICES:

For a range of visitor demographics, continue to provide and improve welcoming, sustainable and accessible trailheads and facilities that lay lightly on the land and inspire understanding of the surrounding landscape, such as the Ranger Cottage, Flagstaff Nature Center, Panorama Point, and other gathering areas or viewpoints.

RRSE.9) DEVELOP A LEARNING LABORATORY APPROACH TO RECREATION:

Combine community engagement results with scientific research and comprehensive data analysis to understand trends, develop and assess practical initiatives, and design management approaches that seek to improve community well-being, enjoyment, understanding and stewardship.

COMMUNITY CONNECTION, EDUCATION AND INCLUSION

WHAT THIS LOOKS LIKE:

CCEI.A) INSPIRING ENVIRONMENTAL EDUCATION:

Visitors participate in education programs and other forums that deepen their sense of place and appreciation for Boulder's natural, cultural and scenic heritage and broaden their understanding of OSMP land and its management.

CCEI.B) FULFILLING COMMUNITY INVOLVEMENT:

Community volunteerism, partnerships and neighborhood involvement serve an increasingly vital role in OSMP's fulfillment of the City Charter purposes for open space.

CCEI.C) LIFETIME CONNECTIONS WITH NATURE:

Long-term connections with OSMP lands are strengthened and deepened over the course of our lives and across generations, in part to inspire response to the climate crisis.

CCEI.D) PHYSICAL AND MENTAL WELL-BEING:

Increase awareness of the benefits of nature and the ways visiting OSMP lands can reduce stress and increase physical and mental well-being.

CCEI.E) ENGAGED YOUTH INSPIRED BY NATURE:

OSMP is an emerging leader in

promoting an increase in the time that youth spend outdoors and caring for their open space system.

CCEI.F) PROMOTING EQUITY AND INCLUSION:

We are all part of an inclusive community, where all people feel welcome, safe and able to enjoy the benefits of open space.

CCEI.G) CONNECTIONS TO BOULDER'S PAST:

Cultural landscapes and historic resources on OSMP lands are preserved so that people can enjoy and understand the places and stories of Boulder's past.

HOW THIS IS ACHIEVED:

CCEI.1) WELCOME DIVERSE BACKGROUNDS AND ABILITIES:

Improve understanding, services and facilities for underserved communities through outreach, collaborative partnerships, listening sessions, culturally-relevant programming, language translations, visual signs and materials, staffing and other creative means of empowering and engaging underserved members of our community.

CCEI.2) ENHANCE COMMUNICATION WITH VISITORS:

Foster discovery, enjoyment



and stewardship through a coordinated effort to enhance signs, communications and media that incorporate effective design, messaging and languages for a range of audiences as well as increasing ranger and volunteer presence on the system to welcome and inform visitors.

CCEI.3) CONNECT YOUTH TO THE OUTDOORS:

Ensure youth get outside more by offering a continuum of educational and service-learning opportunities that fosters youth interest, competence and confidence in enjoying and conserving nature.

CCEI.4) SUPPORT CITYWIDE ENGAGEMENT WITH FEDERALLY RECOGNIZED AMERICAN INDIAN TRIBES AND INDIGENOUS PEOPLES:

Support citywide efforts to work in partnership with federally recognized American Indian Tribes and other city departments through formal government-to-government consultations to support American Indian Tribes and Indigenous Peoples' connections to their ancestral homelands.

CCEI.5) FOSTER WELLNESS THROUGH IMMERSION IN THE OUTDOORS:

Working with schools and organizations, raise awareness of how open space improves physical and mental well-being.

CCEI.6) INSPIRE ENVIRONMENTAL LITERACY AND NEW INVOLVEMENT IN OSMP:

Build the capacity of environmental education to inspire collective stewardship and climate action through comprehensive, collaborative programming across the system.

CCEI.7) CULTIVATE LEADERS IN STEWARDSHIP:

Advance skill-building and training for volunteers and stewards through expanded mentorship and leadership opportunities that increase OSMP's capacity to address needs and support career development in open space management.

CCEI.8) HEIGHTEN COMMUNITY UNDERSTANDING OF LAND MANAGEMENT EFFORTS:

Heighten community and neighborhood understanding and involvement in OSMP management and planning efforts through targeted education, outreach and in-person engagements in support of on-the-ground action.

CCEI.9) PRESERVE AND PROTECT BOULDER'S CULTURAL HERITAGE:

Complete and maintain a cultural resource inventory and management plan to improve the protection of cultural resources and landscapes and to connect all people with Boulder's past.

FINANCIAL SUSTAINABILITY

WHAT THIS LOOKS LIKE:

FS.A) LASTING VALUE FOR THE COMMUNITY:

OSMP effectively and efficiently manages city taxpayer dollars to build both trust and lasting open space value.

FS.B) RESILIENCE TO CHANGE:

Financial management strengthens adaptability and resilience to local, national and global market forces and environmental change.

FS.C) PROTECTED INVESTMENTS:

The community's long-term investment in open space is protected or enhanced by prioritizing maintenance of OSMP properties and assets.

FS.D) PRIORITIZED ACQUISITIONS:

Strategic acquisition of land, mineral and water interests continue to play an important role in preserving, enhancing and managing Boulder's legacy of preservation, agriculture and passive recreation.

FS.E) EFFECTIVE COMMUNICATION:

Financial information is proactively and clearly communicated to promote accountability, increase community understanding of OSMP financial management,

and ensure alignment of spending with community priorities.

HOW THIS IS ACHIEVED:

FS.1) STABILIZE FUNDING:

Steadily generate funds through sales and use tax collections while strategically leveraging other revenue streams and local dollars to support OSMP's capacity to deliver open space services.

FS.2) BUDGET FOR FUTURE UNCERTAINTY:

Create, optimize, and manage budgets that anticipate major change drivers such as extreme weather events and fluctuations in revenue and spending.

FS.3) UNDERSTAND TOTAL COST OF SYSTEM MANAGEMENT:

Adopt or create models to understand the total value and cost of managing the OSMP system and its many diverse assets, including impact and investment tracking for upfront and ongoing costs regarding land management, agriculture, trails and other infrastructure.

FS.4) TAKE CARE OF WHAT WE HAVE:

Focus capital investments on retaining the health of ecosystems on OSMP properties,

as well as maintenance of existing trails, amenities and agricultural infrastructure.

FS.5) PRIORITIZE ACQUISITIONS IN BOULDER VALLEY’S RURAL PRESERVATION AREA:

Prioritize opportunities to acquire land, mineral and water interests in the Area III - Rural Preservation Area – of the Boulder Valley Comprehensive Plan to advance its goals, OSMP Master Plan focus areas and City Charter purposes for open space.

FS.6) PARTNER TO PROTECT LANDS BEYOND THE PRIORITY AREA:

Consider acquisition of land, mineral and water interests outside the Boulder Valley Comprehensive Plan boundary where partnership opportunities help leverage costs and advance OSMP Master Plan focus areas and City Charter purposes for open space.

FS.7) PARTICIPATE IN OTHER ACQUISITION OPPORTUNITIES:

Consider acquisition of land, water and mineral interests within Area I and II of the Boulder Valley Comprehensive Plan only when coupled with planning, development or annexation projects or where citywide priorities or partnership opportunities emerge.

FS.8) EVALUATE EXISTING REAL ESTATE ASSETS ON OSMP LANDS:

To improve the protection of, and align with, open space purposes in the City Charter, assess real estate assets and explore alternative preservation and stewardship options to better enable staff to steward and manage for those purposes.

FS.9) INVEST IN WORKFORCE DEVELOPMENT AND OPERATIONAL NEEDS:

To provide effective management of the OSMP system over time, maintain a team-oriented workforce that benefits from experience and ongoing training and is equipped with adequate resources to meet the expectations of the community.

FS.10) UPDATE PLANNING FRAMEWORK:

Refine OSMP planning methods and products to better inform and prioritize the efficient use of limited funding.

TIER 1 MASTER PLAN STRATEGIES

EHR. 1	Preserve and restore important habitat blocks and corridors
EHR. 2	Update and continue implementing system plans guiding ecosystem management
EHR. 3	Address the global climate crisis here and now
ATT. 1	Reduce maintenance backlog for agriculture and water infrastructure
ATT. 2	Increase soil health and resilience
ATT. 3	Address conflicts between agriculture and prairie dogs
RRSE. 1	Assess and manage increasing visitation
RRSE. 2	Reduce trail maintenance backlog
CCEI. 1	Welcome diverse backgrounds and abilities
CCEI. 2	Enhance communication with visitors

TIER 2 MASTER PLAN STRATEGIES

EHR. 4	Reduce undesignated trails
EHR. 5	Extend on-trail requirements
EHR. 6	Control invasive species
EHR. 7	Develop a learning laboratory approach to conservation

ATT. 4	Protect water resources in a warmer future
ATT. 5	Encourage diverse and innovative agricultural operations

RRSE. 3	Update guidelines and standards for quality trail design and construction
RRSE. 4	Encourage multimodal access to trailheads
RRSE. 5	Manage passive recreation activities requiring an OSMP permit

CCEI. 3	Connect youth to the outdoors
CCEI. 4	Support citywide engagement with federally recognized American Indian Tribes and Indigenous Peoples

TIER 3 MASTER PLAN STRATEGIES

EHR. 8	Reduce impacts from noise, light and nearby land uses
EHR. 9	Reduce and offset OSMP greenhouse gas emissions

ATT. 6	Support the success of ranchers and farmers
ATT. 7	Integrate native ecosystems and agriculture
ATT. 8	Further reduce or eliminate pesticide use
ATT. 9	Enhance enjoyment and protection of working landscapes

RRSE. 6	Support a range of passive recreation experiences
RRSE. 7	Build new trails as guided by past and future plans
RRSE. 8	Provide welcoming and inspiring visitor facilities and services
RRSE. 9	Develop a learning laboratory approach to recreation

CCEI. 5	Foster wellness through immersion in the outdoors
CCEI. 6	Inspire environmental literacy and new involvement in OSMP
CCEI. 7	Cultivate leaders in stewardship
CCEI. 8	Heighten community understanding of land management efforts
CCEI. 9	Preserve and protect Boulder's cultural heritage

Acquisitions (FS.5, FS.6, FS.7)