The objective of the open space program is to promote quality of life for citizens of Westminster through the preservation and protection of the quality of the natural environment” – W.M.C 13-5-1

MANAGEMENT PLAN GOALS

1. Conserve Natural Characteristics of the Area
2. Protect and Enhance Critical Grassland and Wildlife Habitat
3. Maintain Scenic Qualities
4. Provide for Appropriate Passive Recreational Opportunities
WESTMINSTER HILLS OPEN SPACE (WHOS) PLAN AREA
"Westminster Hills Open Space and Dog Park

(Northwest of Simms Boulevard and 100th Avenue)

This expansive 1000+ acre site includes an existing dog off -leash area (approximately 70 acres) as well as areas where dogs are required to be on-leash. The dog off -leash area is very popular and is a considered a regional or “destination” facility that attracts users living outside Westminster.

The off -leash dog areas are classified as Transitional landscape. The City should consider developing management similar to that done by Colorado State Parks for Cherry Creek State Park (October 2010) that would provide a specific management direction for the dog-off -leash area including rotating dog off -leash areas with an ongoing revegetation program."
Woman Creek

Urban Natural Landscape Management Areas

*Urban Natural* landscape parcels include sites that are natural in appearance, accommodate wildlife, and allow people to access non-developed environments. These sites do not include special features or particularly unique or rare species.

**Management Strategy**

- Maintain and enhance a stable, non-erosive, natural, naturalistic landscape including both native and desirable non-native plants, including eradication of noxious weeds.
- Encourage public access with formalized trails.

Westminster Hills

Transitional Landscape Management Areas

*Transitional* landscape management areas include sites undergoing restoration or sites scheduled for restoration and/or enhancement. This is a temporary classification until site improvements are completed, at which time the site can be reclassified as Urban Natural or Sensitive Landscape.

**Management Strategy**

- Achieve a stable, non-erosive condition through weed mitigation and revegetation so that these areas can eventually be reclassified as Urban Natural or Sensitive as a result of stewardship strategies.
- Public access may be temporarily limited.
ACQUISITION HISTORY
WHOS AQUISITIONS
WHOS ACQUISITIONS

• Preservation of Open Space “would add a buffer to the present eagle nesting activity area at the lake and provides a continuous wildlife corridor between Standley Lake and the large Open Space holdings of Boulder and Boulder County, Jefferson County and the City of Broomfield.” - Brauch Acquisition 1995

• “This is perhaps the only area in or near Westminster, where enough Open Space can be assembled to make visitors feel small, or humble, and to view and understand how much of Colorado appeared to early visitors and residents.”- Dennis and Shirley Brauch Acquisition 1996

• “This acquisition connects enough open land to allow some native prairie plants and wildlife to sustain themselves. Long walks and horse riding are potential uses, along with enjoying the views, photography or solitude.” -Snow Acquisition 1998
• “Acquisition of a portion of this property will expand the Westminster Hills Open Space and preserve upland short-grass prairie habitat.” –Sisters Acquisition 1998

• The property… is a crucial area to maintain the scenic vistas, wildlife habitat, shortgrass prairie and open feeling in this area.” –LDS Acquisition 2007

• This Acquisition will “preserve land identified as critical wildlife habitat by the United States Fish and Wildlife Service and as a Conservation Study Area in the Jefferson County Master Plan.” –Woman Creek Acquisition 2018
More than a dozen acquisitions over 3 decades.

Total investment of over $11 million.

More than $4.5 million in grant and support from partners including Jefferson County, Great Outdoors Colorado, The Trust for Public Lands and The Natural Resource Defense Fund.

Acquired to meet Open Space Program purposes specifically to preserve and protect the natural environment, spectacular views, and provide passive recreation opportunities.

“These natural areas, water bodies, tremendous vistas and panoramas, characteristic terrains and native flora and fauna are intended to be preserved and protected for the enjoyment of this and future generations by the judicious use of those sales tax dollars designated for the open space program.”

-W.M.C 13-5-1
ECOSYSTEM CONDITION
This ecological system once covered most of Colorado east of the mountain front.

Today, nearly 50% of our historic shortgrass prairie has been converted to agriculture or other uses – the largest loss of all of Colorado’s ecosystems.

Many of Colorado’s declining animal species are associated with the shortgrass prairie.

Shortgrass prairie lands are almost all in private ownership.
<table>
<thead>
<tr>
<th>Species</th>
<th>Common Name</th>
<th>Priority Tier</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lithobates pipiens</td>
<td>Northern Leopard Frog</td>
<td>Tier 1</td>
<td>SC</td>
</tr>
<tr>
<td>Athene cunicularia</td>
<td>Burrowing Owl</td>
<td>Tier 1</td>
<td>ST</td>
</tr>
<tr>
<td>Zapus hudsonius preblei</td>
<td>Prebles Jumping Mouse*</td>
<td>Tier 1</td>
<td>LT/ST</td>
</tr>
<tr>
<td>Haliaeetus leucocephalus</td>
<td>Bald Eagle</td>
<td>Tier 2</td>
<td>SC</td>
</tr>
<tr>
<td>Ammodramus savannarum</td>
<td>Grasshopper Sparrow</td>
<td>Tier 2</td>
<td></td>
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<tr>
<td>Buteo regalis</td>
<td>Ferruginous hawk</td>
<td>Tier 2</td>
<td>SC</td>
</tr>
<tr>
<td>Calamospiza melanocorys</td>
<td>Lark Bunting</td>
<td>Tier 2</td>
<td></td>
</tr>
<tr>
<td>Lanius ludovicianus</td>
<td>Loggerhead shrike</td>
<td>Tier 2</td>
<td></td>
</tr>
<tr>
<td>Circus cyaneus</td>
<td>Northern Harrier</td>
<td>Tier 2</td>
<td></td>
</tr>
<tr>
<td>Spiranthes diluvialis</td>
<td>Ute Ladies Tress*</td>
<td></td>
<td>LT/ST</td>
</tr>
<tr>
<td>Danaus plexippus plexippus</td>
<td>Monarch Butterfly</td>
<td>**</td>
<td>LE* status warranted</td>
</tr>
</tbody>
</table>


Status Per Colorado’s 2015 State Wildlife Action Plan (SWAP) *habitat present not observed **not currently in SWAP
Due to a decline in numbers and habitat loss, burrowing owls are one of Colorado’s Species of Greatest Conservation Need and are listed in our state wildlife action plan (SWAP).

Nesting Burrowing Owls are present on WHOS having been observed there as recently as last week.

Outside of Rocky Flats, the only known nesting location on public land in Jefferson County.

Colorado Parks and Wildlife recommend a 1/8-mile exclusionary buffer and a 1/4-mile protection around nest sites.

Nest exclusively in Prairie dog colonies.

Diurnal activity and ground nesting make them especially susceptible to disturbance from human and canine presence.
Grassland bird species constitute one of the fastest declining vertebrate populations in North America.

Over 100 species of birds have been documented at Westminster Hills.

Many of these are ground nesting species, especially vulnerable to disturbance.
GRASSLAND STATUS
LIST C NOXIOUS WEEDS
TRAILS CONDITION
There are 10.3 Miles of officially designated trails in WHOS
There are ~12 Miles of undesignated trails in WHOS, 3.8 miles are being actively restored.
TRAILS OVER TIME

2015

2018

2023
NORTH (SIMMS) TRAIL PROFILE

CURRENT NORTH TRAIL PROFILE
GREENWAY TRAIL VEGETATION PROFILE

CURRENT SOUTH LOT GREENWAY TRAIL PROFILE

25% OR MORE NATIVE
NON-NATIVE
INVASIVE, PRIMARILY KOCHIA
BARE GROUND
STANDARD TRAIL WIDTH
BARE GROUND
INVASIVE, PRIMARILY KOCHIA
NON-NATIVE
25% NATIVE

57'
26'
21'
10'
30'
23'
34'

61'
110'
201'
Continual topsoil loss and windblown sand
Invasive Kochia
Complete loss of ground cover and water quality impacts
DOG EXCREMENT SAMPLE

• North Sample area 20’ wide (left to right in image) x 100’ long (top to bottom in image)
  • >100 individual fecal piles, greater than 1 fecal sample every 20 sq ft

• South Sample area 20’ wide x 75’ long
  • 46 fecal samples; approximately 1 fecal sample every 32 sq ft
The EPA provides these general actions to take when responding to elevated *E. coli* concentrations in recreational waters (EPA 2021):

- Take action in the event of an exceedance to prevent human exposure to *E. coli*. Exposure can cause infection, diarrhea, and other illness in humans. Additional data may be needed to understand the cause of the exceedance.

- Issue a public notice and post advisories to notify the public that the waterbody is closed to recreational activities.

- To prevent future *E. coli* exceedances, identify the source of the bacteria. Depending on the source, different steps will be necessary to remediate the problem and reduce the likelihood of future events.

- Place permanent signage in known areas of recorded dog waste issues and around water bodies to remind owners to remove dog waste.

- Post all water bodies as being potentially unsafe for recreational use.

### Surface water *E. coli* concentrations

<table>
<thead>
<tr>
<th>Sample ID</th>
<th>Date</th>
<th>Results (MPN/100mL)</th>
<th>EPA Threshold Value(^1)</th>
<th>EPA Threshold Value(^2)</th>
</tr>
</thead>
<tbody>
<tr>
<td>WH-SW-1 (Mower Reservoir)</td>
<td>5/23/2023</td>
<td>&gt;2,419.6</td>
<td>100</td>
<td>320</td>
</tr>
<tr>
<td>WH-SW-1 (Mower Reservoir)</td>
<td>6/22/2023</td>
<td>1,119.9</td>
<td>100</td>
<td>320</td>
</tr>
<tr>
<td>WH-SW-1 (Mower Reservoir)</td>
<td>7/27/2023</td>
<td>1,119.9</td>
<td>100</td>
<td>320</td>
</tr>
<tr>
<td>WH-SW-1 (Mower Reservoir)</td>
<td>8/28/2023</td>
<td>&gt;2,419.6</td>
<td>100</td>
<td>320</td>
</tr>
<tr>
<td>WH-SW-2</td>
<td>5/23/2023</td>
<td>32.7</td>
<td>100</td>
<td>320</td>
</tr>
<tr>
<td>WH-SW-2</td>
<td>6/22/2023</td>
<td>261.3</td>
<td>100</td>
<td>320</td>
</tr>
<tr>
<td>WH-SW-2</td>
<td>7/27/2023</td>
<td>980.4</td>
<td>100</td>
<td>320</td>
</tr>
<tr>
<td>WH-SW-2</td>
<td>8/28/2023</td>
<td>&gt;2,419.6</td>
<td>100</td>
<td>320</td>
</tr>
<tr>
<td>WH-SW-3</td>
<td>5/23/2023</td>
<td>35.5</td>
<td>100</td>
<td>320</td>
</tr>
<tr>
<td>WH-SW-3</td>
<td>6/22/2023</td>
<td>290.9</td>
<td>100</td>
<td>320</td>
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<tr>
<td>WH-SW-3</td>
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<td>816.4</td>
<td>100</td>
<td>320</td>
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<tr>
<td>WH-SW-3</td>
<td>8/28/2023</td>
<td>&gt;2,419.6</td>
<td>100</td>
<td>320</td>
</tr>
</tbody>
</table>

\(^1\) = EPA Estimated illness rate: 32 per 1,000 - Geometric Mean (colony forming units [cfu]/100mL); \(^2\) = EPA Estimated illness rate: 32 per 1,000 – statistical threshold value (STV- 90th percentile (cfu/100mL); \(Bold\) = Concentration exceeds one or both Threshold Values.
Two paved lots; Simms and 105th and 100th Avenue.

Total of 135 spaces (60 at Simms and 75 at 100th).

Parking lots have been expanded at least 6x since 2000.

Every expansion of parking has been followed by significant increases in visitors.

Current parking capacity meets average use volume 5 days a week, but overflows onto adjacent streets on weekends.
YEARLY VEHICLE COUNTS

*100th avenue missing
6 months data

January-June

100th Ave Vehicle Entrance  Simms St Vehicle Entrance  Total
VISITATION DATA
VISITOR COUNTS APRIL 27 - JUNE 27

- Total Visitation
- Pedestrian Access Totals
  - Simms St Lot
  - 100th Ave Lot West
  - 100th Ave Lot North

Graph showing visitor counts for different lots and total visitation from April 27 to June 27.
EVALUATION OF OFF LEASH DOG OPPORTUNITY
In 2000, community request for an off-leash dog opportunity, at the time off-leash opportunities were rare and little research had been done on impacts.

City Council approved a change to the Westminster Municipal Code (WMC) to allow a one-year pilot project on approximately 20 acres of open space at the Colorado Hills Open Space site (WHOS).

No formal evaluation of the pilot project was done and in 2001 pilot was deemed successful and expanded to ~40 acres.

In 2008 staff expanded the off-leash area to all WHOS (1000 ac).

In 2009 after multiple dog coyote conflicts and an outbreak of Bubonic plague off-leash area was reduced to the current ~400ac.
13-5-3. - Preservation of Land and Other Open Space Uses.

A. Generally, lands acquired with open space funds shall be preserved and managed in a natural condition … Examples of compatible passive recreation include hiking, nature study and photography.

B. Additional activities that may be allowed on certain open space property, or portions thereof, after the City Manager determines such activities will not have a detrimental effect on the natural qualities for which the open space was originally acquired include… off-leash dog exercise areas

13-1-7. - Use Regulations at Off-Leash Dog Sites.

The Parks, Recreation and Libraries Director is authorized to establish or discontinue off-leash dog park sites.
The presence of dogs causes most wildlife to move away from an area, which temporarily or permanently reduces the amount of functionally available habitat to wildlife.

People with dogs disturb wildlife more than humans alone.

The disturbance effects of off-leash dogs are stronger than on-leash and substantially expand the amount of wildlife habitat affected.

Birds flush more readily in the presence of dogs than people, resulting in reduced fitness and nesting failure.

On Trails with dog use there are significant impacts to ground nesting birds, within 246 feet of the trail.

The unpredictability of off-leash dogs prevents wildlife habituation in large areas of habitat.

Dog walking caused a 41% reduction in numbers of bird individuals detected and a 35% reduction in species richness.

Dog feces adds significant nitrogen to the soil, which encourages the growth of non-native plants at the expense of native plants.
DRAFT RECOMMENDED ACTIONS
A. Change area management designation of Woman Creek (west of Alkire to Indiana) from Urban Natural to Sensitive

**Sensitive Landscape Management Areas**

*Sensitive landscape* open space parcels include sites that have high value landscape features such as threatened and endangered species, wetlands, or relatively complex rich plant communities. Such parcels have the highest value for flora and fauna when viewed at both the localized and community-wide level.

**Management Strategy**

- Preserve the resource as the primary goal.
- Recreational uses should be restricted to designated trails.
- Efforts should be made to close and revegetate all social trails in the area.
- All trailheads should include educational and regulatory information.
- Noxious weed management in the area should concentrate on eradication.
B. Designate the Westminster Hills Area West of the ditch and East of Alkire as a Passive Recreational Opportunity Area where dogs must be leashed

➢ Management consistent with Open Space regulations throughout the rest of the City.
➢ Provides protection for sensitive natural resource.
➢ Allows for restoration of disturbed areas.
➢ Continues to provide opportunities for passive recreational use with dogs.
➢ Current off-leash activity does have a detrimental effect on the natural qualities for which the open space was originally acquired in contradiction of City code.
C. Evaluate Dog Off leash Opportunities: Either transfer a portion of WHOS east of the ditch to Parks for development as a dog park or identify dog park opportunities elsewhere.

Management consistent with Open Space regulations throughout the rest of the City.

- Specific location would need to be identified to provide neighborhood buffer to the north.
- Install fencing and infrastructure to facilitate transitions from parking lot and from dog park to Open Space.
- Allows for active recreational management including developing appropriate infrastructure.
- Would provide local dog off-leash opportunities consistent with the original intent.
Close and restore all undesignated trails

Install infrastructure to enforce on-trail requirements
➢ Adopt and manage east–west property boundary trail
➢ Remove redundant undesignated trails
➢ Identify best options for adoption
➢ Evaluate for removal, consolidation and appropriate adoption
➢ Remove redundant undesignated trails
➢ Evaluate designated trails to consolidate redundancy
➢ Remove or adopt undesignated trails
➢ Evaluate Simms Access points for adoption or consolidation
PROPOSED EDUCATIONAL OPPORTUNITIES

➢ Develop and Install educational signage to emphasize the importance and value of Shortgrass Prairie Ecosystems.

➢ Identify an easily accessed loop trail from the 100th Trailhead to establish an interpretive walk.

➢ In partnership with the Leave No Trace organization, host Spotlight Focus programming.

➢ Work with partners including the Butterfly Pavilion to establish Burrowing Owl Monitoring, restoration evaluation, and BioBlitz assessments.

➢ Host Interpretive Nature Education opportunities on a regular basis, develop a volunteer friends of WHOS to support.
➢ Develop and Install consistent sign messaging to clearly present regulatory requirements.

➢ Utilize fencing, plantings and other infrastructure to encourage and enforce on trail requirements.

➢ Evaluate current fencing and remove any unnecessary segments.
PROPOSED RESTORATION AND INVASIVE SPECIES MANAGEMENT

➢ Continue Integrated Pest Management to control all Colorado State Listed Species on the property

➢ Develop program for targeted List B species eradication and control

➢ Identify High Priority areas for restoration and re-establishment of Native Short Grass Prairie.
  ➢ Areas with existing stands of healthy native plants East of Alkire
  ➢ Prepare restoration action plans for quick implementation in the event of a Prairie Dog Colony Collapse
  ➢ Transition Non-Native Grasslands on Woman Creek Property to Native
  ➢ Target 10-20 Acres of new restoration areas on an annual basis
To provide feedback on tonight’s presentation and sign up for future updates please email: whos@westminsterco.gov

For more information please visit: https://www.westminsterco.gov/WHOS