

MEMORANDUM

TO: Open Space Board of Trustees

FROM: Dan Burke, Director, Open Space and Mountain Parks
Jeff Haley, Deputy Director of Trails and Facilities
Chad Brotherton, Visitor Infrastructure Senior Manager
Greg Seabloom, Trails Project Manager
Gabe Wilson, Trails Program Manager

DATE: June 14, 2023

SUBJECT: Written Information: North Sky Trail Implementation Update

Introduction

An anticipated project on the 2023 work plan for Open Space and Mountain Parks (OSMP) is the construction of the North Sky Trail. OSMP's North Trail Study Area (NTSA) management plan (Action Item NF13) calls for construction of the new three-and-a-half-mile North Sky Trail connecting Foothills North Trail (near the Foothills Trailhead) north to the Joder Ranch Trail. A map of the North Sky Trail alignment can be found in **Attachment A**. You can learn more about the overall NTSA process and plan [here](#). OSMP is preparing to start construction of this trail in June 2023, utilizing a variety of strategies including OSMP trail crews, significant volunteer engagement, and partnerships with Boulder Mountainbike Alliance, youth corps, and contractors.

The new trail will be open to multiple uses including hiking, mountain biking, and equestrian use and will link together other multi-use trails including Foothills North Trail and Joder Ranch Trail to help provide enhanced trail opportunities and connectivity in the north foothills area. As outlined in the NTSA Plan, the trail will follow sections of the existing 1880's-constructed railroad grade, parts of which currently serve as an undesignated trail.

In addition to recreation opportunities, minimizing impact to help protect natural resources is a high priority outlined in the NTSA Plan regarding the North Sky Trail. The OSMP project team is comprised of staff representing expertise in trails, botany, wildlife, wetlands, and cultural resources. This team has collaborated to design the trail to minimize impacts to sensitive resources such as foothills wetlands, shrub-nesting bird habitat, and the rare Bell's twinpod (*Physaria bellii*) – a plant species only found in a few locations in Boulder and Larimer Counties. Also, before trail design efforts even began OSMP Real Estate staff worked diligently to successfully acquire two Trail Easements on adjacent private properties. These newly acquired easements enable a section of trail to be located on these parcels that are at lower elevation and generally have lower quality and less sensitive habitat than the adjacent OSMP property.

General Overview

The trail will be constructed at a 4-foot width and aligned with sustainable grades and drainage to minimize erosion while also providing an enjoyable experience for all uses. Much of the trail will be natural-surface (comprised of native soils) – some locations will be surfaced with aggregate base course (gravel) where terrain and soil types may result in poor drainage and prolonged muddy trail conditions.

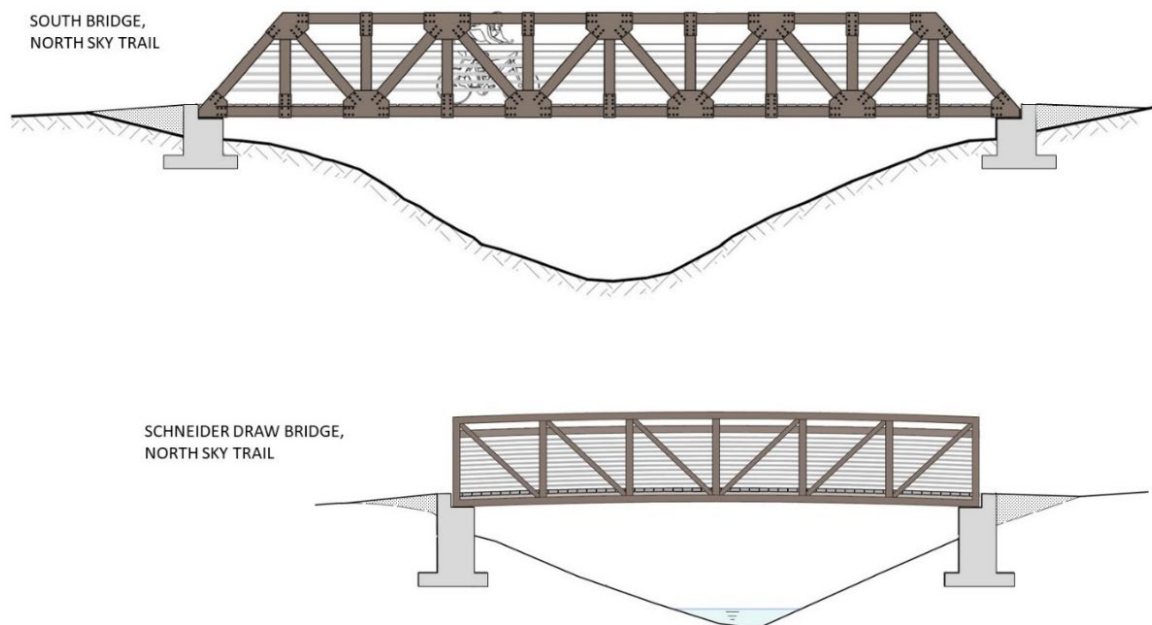
Once the trail is constructed, on-trail use will be required to protect rare plants and habitat in this area and a Habitat Conservation Area (HCA) will be enacted in the immediate vicinity. Additionally, dogs must be

on-leash and are allowed for most of the year; they are prohibited from May 1 – July 31 to protect bird nesting habitat.

Construction of this trail supports several high-level OSMP Master Plan Strategies, including:

- EHR 4 – Reduce undesignated trails (Tier 2)
- RRSE 7 – Build new trails as guided by past and future plans (Tier 3)
- RRSE 6 – Support a range of passive recreational experiences (Tier 3)

The North Sky Trail requires the construction of two trail bridges – the South Bridge spanning a through-cut in the 1880's railroad grade embankment, and the other spanning the Schneider Draw drainage. A third bridge was initially planned over Deep Draw in the northern portion of the trail alignment; however, this has been removed from the project plans when a far less costly at-grade crossing option was identified that also adheres to goals for ecological protection, trail sustainability, and visitor experience. The South Bridge is designed as a gusseted steel truss structure to have a railroad-bridge type aesthetic, recognizing the railroad history of the area. The Schneider Draw Bridge is located to the east of the Railroad Grade to cross the drainage at a location that minimizes impacts to the high-quality riparian area.



Restoration and re-vegetation of unused sections of the existing undesignated trail will be implemented along with trail construction to allow impacted areas to restore to a natural condition. Restoration work includes de-compaction of soil, the addition of soil fill (sourced from other trail excavations) to re-establish natural topography, re-seeding with native plants species, erosion control, fencing, and signs. The project will remove approximately 2 miles of undesignated trail from the undesignated trail inventory.

Implementation

OSMP is utilizing a hybrid approach to trail construction – utilizing several workforces to implement the project collaboratively. Staff have been strategically testing elements of this approach on recent projects (e.g., the Tenderfoot Trail reroute, Doudy Draw Trail Repairs, Community Ditch Trail reroute, and the Ski Jump Trail reroute) and building capacity for several years in preparation for the North Sky project. This innovative model allows community engagement as well as utilizing workforces for tasks that best align with required skills. It is also projected to reduce costs and shorten the construction timeframe.

Workforces include:

- OSMP Trail Crews
- Volunteer events organized by OSMP.
- Boulder Mountainbike Alliance (BMA) support through volunteer events and operation of their mini excavator to assist with trail construction.
- Youth/Conservation Corps crews, including OSMP's Junior Rangers crews.
- Trail construction contractor
- Bridge construction contractor

Key milestones in the project schedule will include:

- June 2023: Start of trail construction (pending issuance of final construction permits)
- Fall 2023: Construction of the two trail bridges.
- Early 2024: Estimated final completion of the trail.

Construction of the trail will involve the use of small machinery (i.e., mini excavators), hand labor, heavy equipment for the bridges, and likely the use of a helicopter to transport bridge materials and other trail construction materials. OSMP has carefully developed the construction approach and equipment selection to minimize short term impacts and all temporary impacts will be restored following best management practices.

Public Information and Outreach

OSMP will use several public outreach methods to inform the community about closures during trail construction, and to provide updates on the project. For public safety while heavy equipment is constructing the South Bridge (Fall 2023), OSMP will close a portion of Foothills North Trail (between Hogback Ridge and Foothills Trailhead) and the Foothills Trailhead. Additionally, properties west of Highway 36 and between Foothills North Trail and Joder Ranch Trail will be closed (including the existing undesignated trail) due to the presence of equipment and open excavations.

OSMP will provide updates to the community regarding project accomplishments and upcoming events such as construction of trail sections, volunteer events and accomplishments, bridge construction, and other items of interest.

OSMP will utilize several outreach tactics including social media, Next Door, the Field Notes newsletter, and press releases.

Near Term Next Steps

Major upcoming action items include:

- OSMP will commence trail construction upon issuance of final construction permits – expected in June 2023.
- Trail Volunteers:
 - 11 “Trail Work Tuesdays” where 5-10 volunteers will join OSMP's Hybrid Trail Crew for a day of trail construction
 - Partnership with Volunteers for Outdoor Colorado (VOC) – 4 events between August and October will host 50+ volunteers per event.
 - National Public Lands Day trail construction event – Saturday, September 23, 2023 (50+ volunteers expected)
 - Open to all community volunteer events Saturday, July 22 and Saturday, August 26 (30+ volunteers expected for each)
 - 5-10 corporate or local business groups will be joining to volunteer mid-week throughout the Summer and Fall.

- OSMP ecologists will continue to collaborate with trail staff regarding oversight of project implementation, treating non-native weeds onsite, and implementing restoration/revegetation plans.
- Implementation of the on-trail requirement for North Sky Trail and HCA activation.
- As directed by the NTSA Plan, OSMP will create interpretive opportunities around the new trail alignment to provide education about the area. This will include signage expressing the importance of staying on-trail to protect rare plant habitat.
- OSMP is planning to incorporate the new North Sky Trail in the muddy trail closures program – when rainfall or snowmelt conditions result in muddy conditions, the trail will be closed to public use to prevent impacts to vegetation due to trail users bypassing around muddy trail sections. As with other locations in the muddy trails program, OSMP staff monitor trail conditions and re-open them when soils are sufficiently dry.

ATTACHMENTS:

- **Attachment A:** North Sky Trail alignment map

