

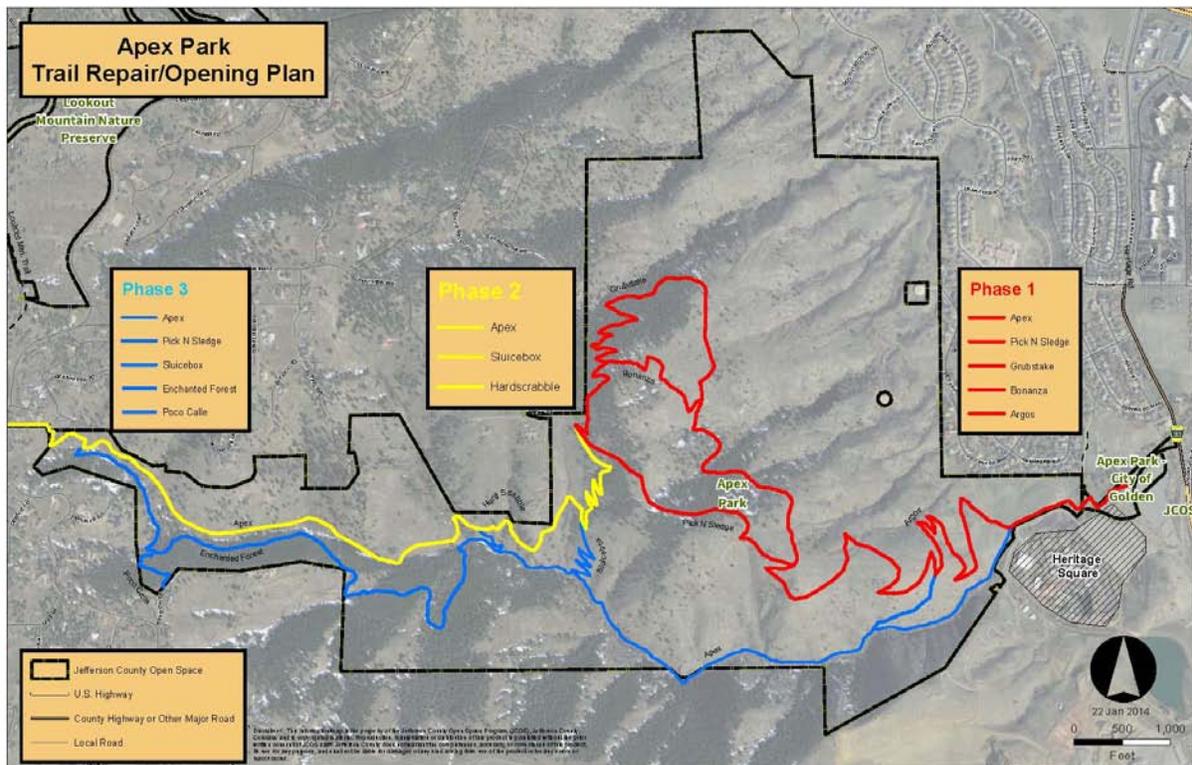
Apex Park Flood Recovery - 2014

Jeffco Open Space Flooding Overview:

The extreme flooding from historic rainfalls in September of 2013 caused severe trail damage and the subsequent closure of several trails. Two Jeffco Open Space Parks were closed in their entirety. Extensive repair work has taken place and volunteer efforts have aided in the recovery. Apex Park remains closed as well as portions of trails at Alderfer/Three Sisters Park, North Table Mountain Park, White Ranch Park and Lair o' the Bear Park.

Apex Park Flooding Assessment:

Apex Park suffered the greatest flood damage and requires the most planning and resources for recovery. One of the older parks in the County, many of the trails at Apex Park were established in the 1970s and 1980s at grades that were most susceptible for intense erosion from the flood event. Our Trails Crew has assessed all 9.5 miles of trail in the 697-acre park. Approximately, 40% of the trails in the park are damaged; some of the damaged areas have steep grades that need to be corrected through trail realignment. Damaged trails with grades of 15% or greater will be considered for re-routes. New sections of trail will be built to not exceed an average grade of 10%, resulting in more sustainable alignments that will be less susceptible to damage from future large storm events.



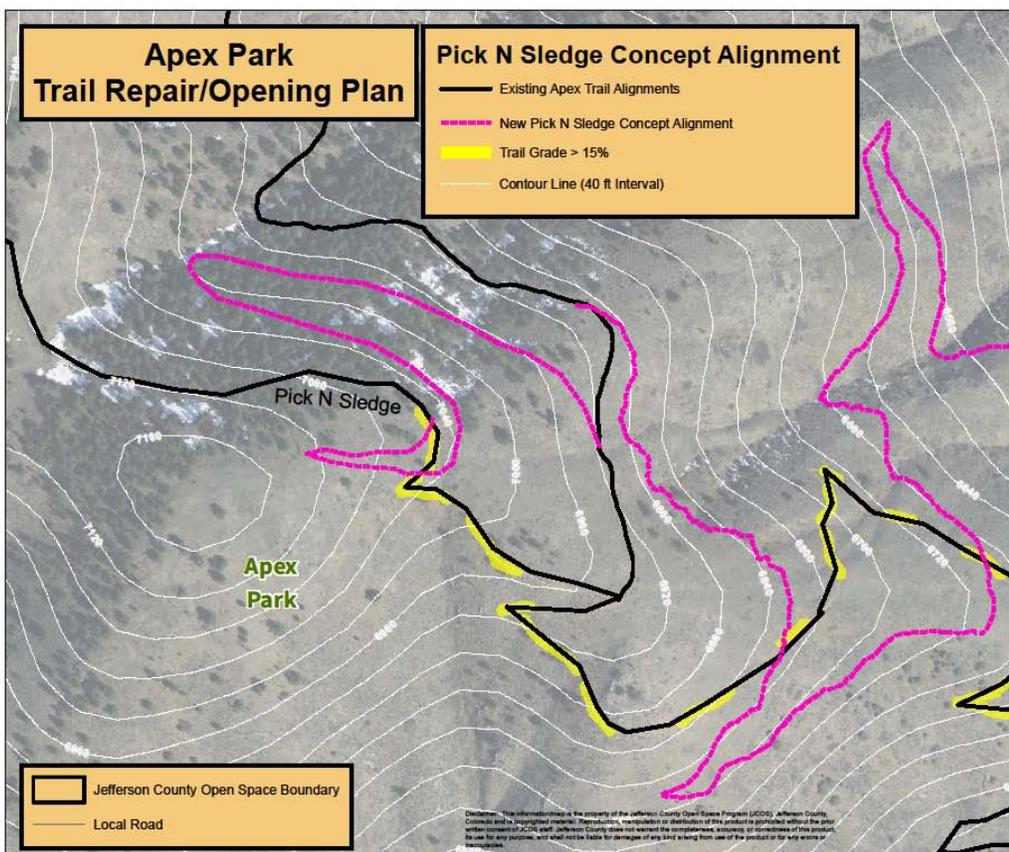
Apex Park Flood Repair Timeline:

PHASE 1 – Goal: Open the northeast portion of the Park by March 31, 2014. **Plan:** Use a mini-excavator to realign the most problematic areas where grades are unsustainable. Once excavated, hand finishing of the trails will provide excellent opportunities for volunteers. To meet an average 10% grade, over one mile of new trail (5,900 feet) will need to be constructed to realign Pick-N-Sledge Trail. The damaged

trail that is abandoned will be closed and rehabilitated with a series of volunteer events. Factors that may impact the timeline include permits, equipment access, north-facing slopes, freezing temperatures and frozen terrain.

Trail Re-alignment, Phase I:

Approximately 5,940 feet of new trail will replace the existing Pick-N-Sledge alignment. Please see map below. Our Trails staff has worked to design an alignment where grades would not exceed an average of 10% for stability, while retaining a similar trail experience provided prior to the flooding. With this major flood event, the hydrology of the park has changed significantly. Where soils once slowed the run off of moisture, the flood's scouring of soils now leaves exposed bedrock. Unfortunately, bedrock allows water to move more rapidly downhill creating soil erosion in minimally or undisturbed areas below. The realignment will address water management on the trails for years to come and reduce future maintenance.



Trail Management for Phase 1 Opening:

A very popular park for mountain biking and hiking, Apex Park uses a mountain biking, directional, odd-day management strategy to enhance safety and the visitor experience. Since a limited number of trails will be open in Phase 1, we anticipate some limits on use to ensure safe and enjoyable experiences for visitors. Jeffco Open Space is reviewing options for managing trail use to correspond to the opening of Phase 1. More details on use restrictions for the Phase 1 opening will be available by February 28, 2014.

PHASE 2 – Goal: Extend partial opening of the Park to provide an east-to-west experience. Phase 2 of the flood recovery at Apex Park will involve repairs to Apex, Hardscrabble and Sluicebox Trails.

PHASE 3 – Goal: Complete repairs to Apex Park and open the park in its entirety. In the Third Quarter, repairs to Apex Trail, Poco Calle, Sluicebox and Pick-N-Sledge will allow for the park to open in its entirety. Apex trail, the main artery for park, has gullies up to 8 feet wide, mounds of boulders, and long stretches where all the soil has been washed away. Solutions include wooden bridges to span substantial gullies brought in by helicopter, and transport of fill material.

The Trail Restoration Process

Since the flooding at Apex Park, the Jeffco Open Space Trails staff, comprised of 9 full-time employees with over 100 years of experience collectively, has used the following process to determine the proper course of action to address trail damage.

1. Conduct initial assessment of damage to determine if the park and trails were safe for public use.
2. Close the Park based on unsafe and substandard conditions on approximately 40% of trails.
3. Apply trail ratings for the severity of trail damage and complete mapping of these areas.
4. Provide damage assessments and cost estimates to the Federal Emergency Management Agency (FEMA).
5. Identify the root cause of trail damage which was generally in areas with grades over 15%, unstable soils and gullies carrying storm water.
6. Determine a strategy to phase trail restorations to allow portions of the park to be reopened while other areas are being restored.
7. Identify and design new sustainable trail alignments that will increase their chance of surviving large storms in the future.
8. Create specific designs to meet current JCOS trail standards including clearing limits, retaining walls, switchbacks, appropriate surfacing materials, excavation, and cross sections.
9. Obtain the necessary construction permits from the City of Golden which most of the park falls within.
10. Develop a schedule for construction work and volunteer projects.
11. Providing volunteer trail construction training for those interested in leading small restoration crews.
12. Communicate all of the above at public meetings, on the JCOS website, and through social and print media.

Opportunities to Help:

Join our email list. Send an email to apexpark@jeffco.us and join our contact list. You will be sent special notices and updates on the Park from the Regional Parks Supervisor, Tim Sandsmark. This is also where written comments can be submitted.

Current Volunteer Events at Apex Park See a list below and please register through [EventBrite](#): All events are weather dependent. Volunteers who register should monitor email messages related to any cancelations due to weather.



Trail Training Projects, Tuesday-Wednesday-Thursday beginning January 28 from 9AM – 3PM Limited to 10 volunteers per project. The majority of these projects are scheduled to occur at Apex Park. Conditions may require these events to be relocated to other flood damaged sites when appropriate.

Trails Training Project	Tuesday, January 28, 2014	9AM to 3PM
Apex Park Recovery Project	Wednesday, January 29, 2014	9AM to 3PM
Trails Training Project	Wednesday, February 5, 2014	9AM to 3PM
Trails Training Project	Thursday, February 13, 2014	9AM to 3PM
Trails Training Project	Tuesday, February 18, 2014	9AM to 3PM
Trails Training Project	Wednesday, February 26, 2014	9AM to 3PM

Apex Park WEEKEND EVENTS: Details to be announced

- Apex Park Recovery Project Saturday, February 8
- Apex Park Recovery Project Saturday, February 22

Apex Park is located in central Jefferson County near Heritage Square, at the junction of West Colfax (Highway 40) and County Highway 93. The 697-acre Park was acquired in nine separate fee purchases, a land exchange and three easements over a 28-year period between 1974 and 2002. In 2013, JCOS completed a lease of 3.35 acres from the City of Golden. Apex Gulch is of historic significance as an early toll road. Preservation of the Deadman Gulch Natural Area was identified in the 1993 Natural Heritage Inventory. In addition to the flood recovery activity, a formalized trailhead with permanent restroom, kiosk and organized parking is being constructed on the east side of the Park.