

UDOT Avalanche Safety Backcountry Closure Policy

UDOT is responsible for managing the threat of avalanches onto all of Utah's state and federal highways. This is to ensure the safety of the travelling public along with the cities and communities that those highways connect. Many of those highways lead to very popular world class winter recreation opportunities. As this recreational user population increases, so does the risk of an encounter between a backcountry user and artificially triggered avalanche, or worse, the artillery shrapnel or blast from avalanche control work.

Avalanche control is conducted in mountain areas all over the world and it is standard protocol to absolutely ensure complete evacuation of control areas prior to the use of explosives. Along with this, programs that use military artillery have the extra responsibility to clear all areas that are subject to flying shrapnel from the exploding ordinance. US Army regulations state that the safe standoff distance for the 105mm artillery round is 1000 meters.

The Wasatch poses some unique challenges to this industry with its proximity to two million residents and relatively easy access to world class skiing and recreating. Avalanche safety programs have been utilizing military artillery since 1949 with great success. In the early 80's UDOT took over the role of stewarding that avalanche safety and since then the numbers of backcountry users has steadily increased. In addition to artillery, UDOT uses other types of exploding devices and techniques to trigger avalanches before they happen naturally onto open roads. It is absolutely imperative that we do everything we can to eliminate the possibility that someone is injured or killed in the process of us trying to prevent people from being injured or killed.

Under the authority of the local municipality where the specific avalanche paths are found, UDOT enacts backcountry closures prior to and during control missions. These areas can be found above to state highways in the Town of Alta, Cache, Weber, Salt Lake, Wasatch, Utah and Garfield Counties. Each municipality has ordinances that allow area closures in the interest of public safety. In general, these closures begin the night before control work but in some instances closures happen only hours before. Information about avalanche control closures can be found on the following links:

UDOT Avalanche Safety webpage, <http://www.udot.utah.gov/avalanche>

Utah Avalanche Center, <https://utahavalanchecenter.org/>

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Locally with roadway message signs and trailhead closure signs.

This policy outlines some of the areas regularly affected by UDOT Avalanche Safety Closures. The descriptions and maps below do not however cover all possible zones therefore all local terrain closures should be respected. UDOT's closures are also solely for backcountry land and do not represent U.S. Forest Service permitted ski areas. These areas have their own closures that sometimes run in conjunction with UDOT closures but are independent based on local operations.

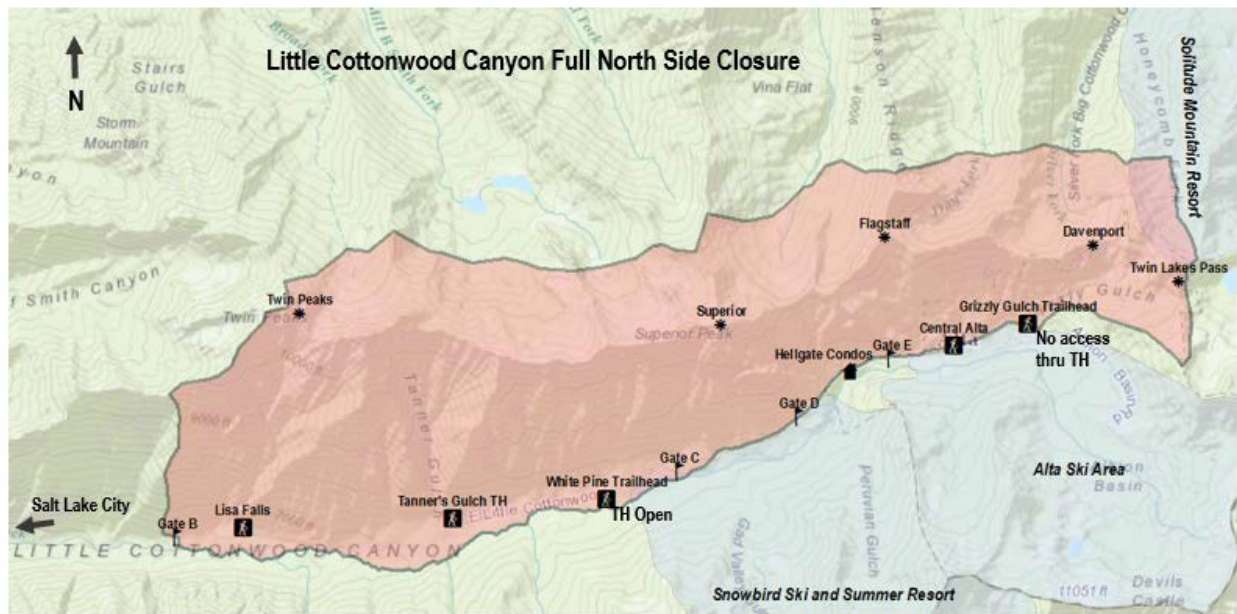
Little Cottonwood Canyon SR210 Backcountry Avalanche Control Closures

In Little Cottonwood Canyon the primary method for avalanche control is military artillery. Also utilized are remote avalanche control systems (RACS), limited helicopter bombing, and hand charge routes. A typical artillery mission consists of a 10:00pm backcountry closure the night before to ensure all touring parties have left the area and none can enter early on the morning of a shoot. Control work normally begins at 6:30 or 7:00am the next day and the backcountry areas will reopen at approximately 8:00am. These restrictions may be implemented at any hour due to changing avalanche conditions. Occasionally these restrictions will be enacted in the middle of the day as the avalanche hazard peaks and also to protect against rising temperatures and wet snow avalanches. Wet snow is not just a spring time occurrence as rapid warming can happen even mid winter and we ask that ski tourers pay particular attention when returning via the south facing terrain above the highway.

On a typical day the backcountry closure will consist of "All Little Cottonwood Canyon Backcountry north of LCC creek from Lisa Falls to Grizzly Gulch is closed". It will include a portion of Big Cottonwood Canyon that extends 1000 meters to the north of the Little Cottonwood ridge to protect the public from artillery shrapnel. The White Pine parking lot and trail will remain open allowing access to the south side of the canyon. This is basically the only backcountry open in LCC during a "Full North Side Closure". This freedom MUST be respected as we cannot allow parties to park at White Pine and cross to the north into closed terrain targeted for explosives. Any evidence that such an abuse is taking place will result in a reevaluation of White Pine parking restrictions.

Note to Climbers:

None of these closures affect access to the climbing in Little Cottonwood Canyon on the north side of the highway below Lisa Falls. No UDOT backcountry closures affect the south side from Perla's Ridge down to the mouth of the canyon. NO UDOT closures affect zones from the Coalpit Drainage up the entire south side of the canyon. SEE COALPIT #4 CLOSURE.

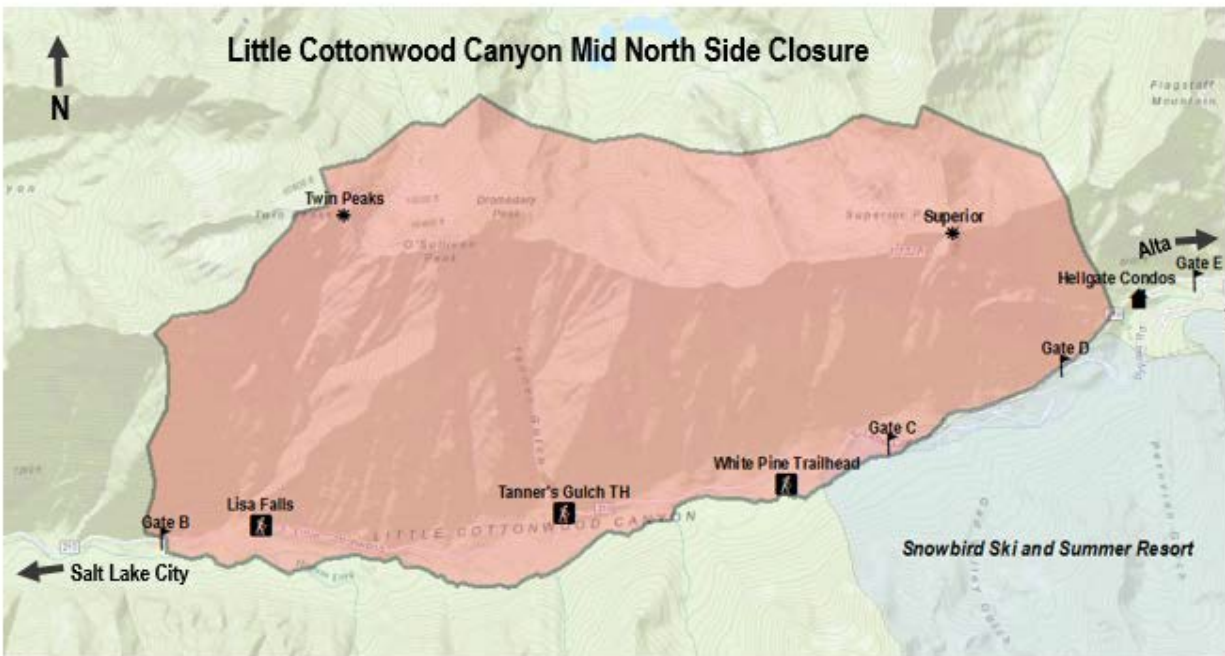


All terrain north of Little Cottonwood Creek from Gate B to Grizzly Gulch. Extends 100' over Twin Lakes Pass, and 1000 meters into BCC. White Pine Trailhead Open.

The LCC Full North Side Closure will consist of all terrain north of Little Cottonwood Creek from Lisa Falls through Grizzly Gulch to 100' over Twin Lakes Pass extending 1000 meters into Big Cottonwood Canyon along the main ridge to protect from the threat of flying artillery shrapnel. It will extend into Honeycomb Canyon at Solitude and only authorized avalanche control team members will be allowed in the Solitude portion of the closure as per the SL County and Town of Alta ordinances. The White Pine parking area and trailhead will remain open until the main highway closes.

Closed areas in BCC are Fantasy Ridge, East and West Bowl of Silver Fork, Flanagan's, Upper Days Fork, Main Days Fork, Holy Toledo, Hallway Couloir, the Eyebrow, Little Superior Buttress, Cardiac Bowl and Cardiac Ridge, Upper Mill B and Upper Broads Fork above the Blue Ice. The Guild Line, Silver Fork Meadows, Banana Days, Ivory Flakes, and Mineral Fork will remain open along with Lake Blanche, the Blue Ice, and Bonkers.

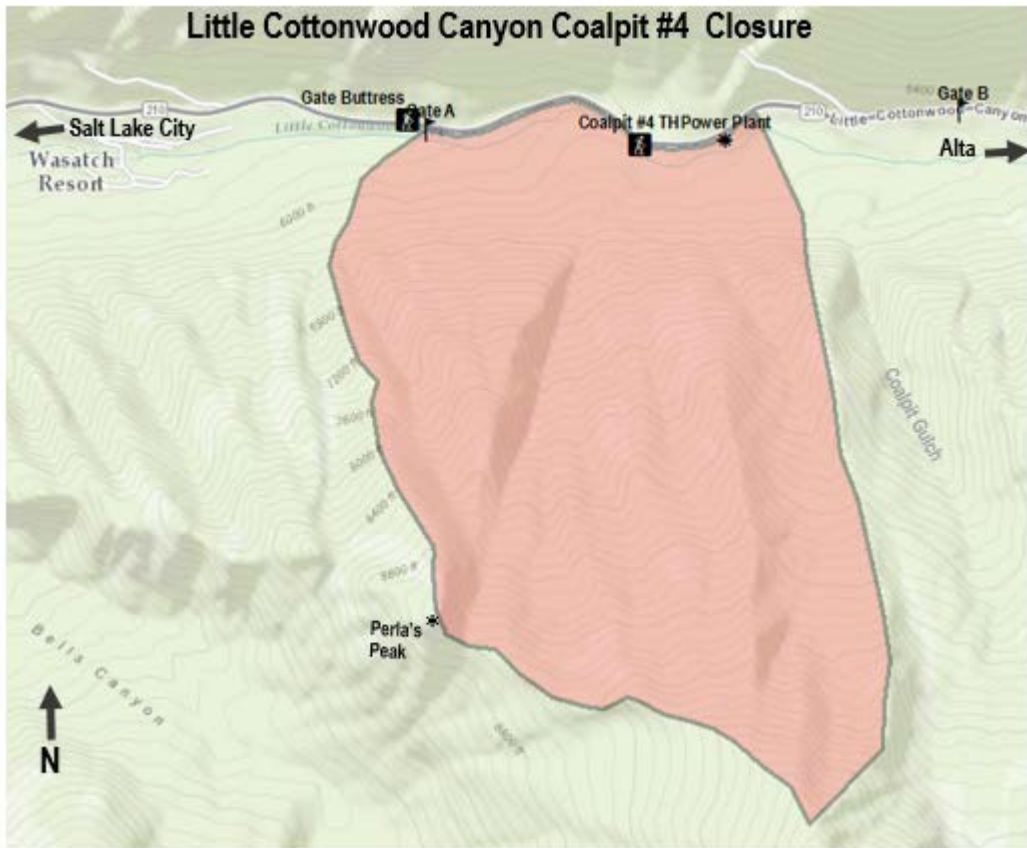
Occasionally the need will arise for avalanche control only in specific sections of the canyon and below are three more possible closure scenarios. As with the full canyon closure, these smaller closures will usually begin at 10:00pm the night before to ensure complete evacuation of the area.



The Mid North Side Little Cottonwood Canyon Closure will consist of all terrain from Lisa Falls to Two Trees including Mt. Superior and Little Superior from the Little Cottonwood Creek to the ridgeline extending 1000 meters into Big Cottonwood Canyon to protect from the threat of flying artillery shrapnel. The White Pine parking area and trailhead will remain open until the main highway closes. Terrain accessed south of the trailhead will be open.

All terrain north of Little Cottonwood Creek from Gate B to Hellgate Condos. Extends 1,000m into Big Cottonwood. White Pine Trailhead Open

Closed areas in BCC are Little Superior Buttress, Cardiac Bowl, Cardiac Ridge, all of Upper Mill B South, and Upper Broads Fork above the Blue Ice. Ivory Flakes, Mineral Fork, Blue Ice and Bonkers will remain open.



The Coalpit #4 closure will consist of Coalpit #1,2,3, and 4 chutes to Perla's Ridge along with the terrain above and on the Great White Icicle from the road to the ridgeline. This closure is usually implemented at 10:00pm the night before and reopens at approximately 08:00am.

Note to Ice Climbers:

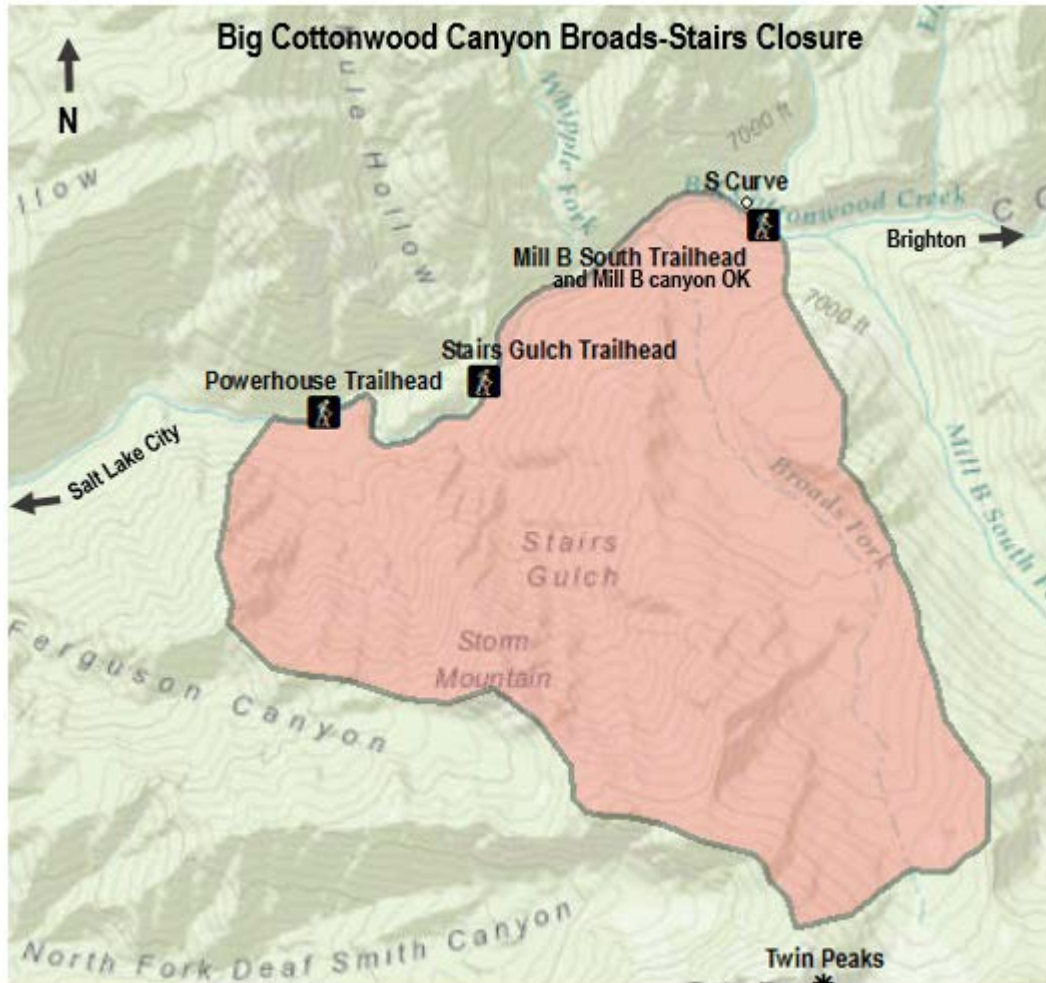
The Coalpit #4 closure is the only one that affects ice climbing areas in Little Cottonwood Canyon. This closure is very infrequent and happens on average once every five years.

Big Cottonwood Canyon SR 190 backcountry Avalanche Control Closures

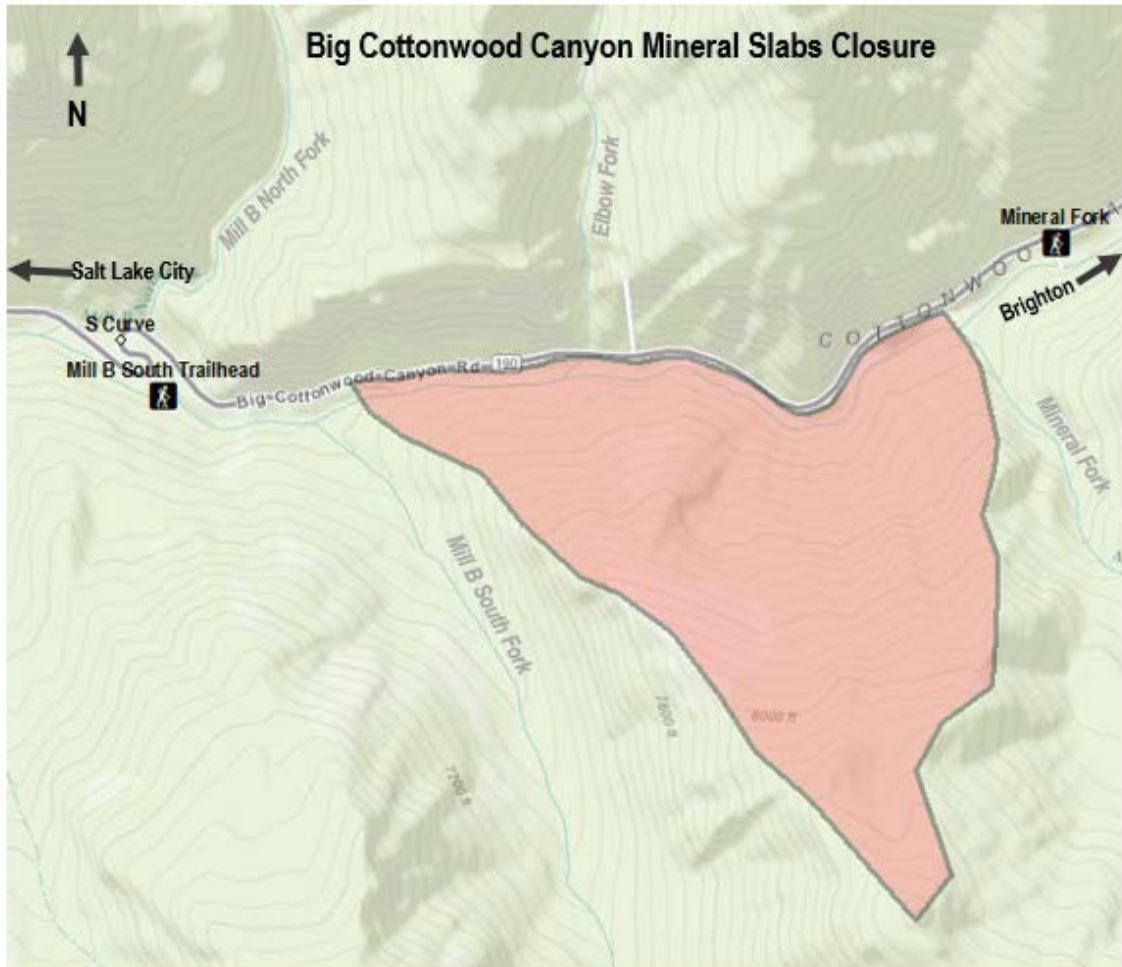
In Big Cottonwood Canyon the main methods for avalanche control are military artillery and helicopter bombing. Hand charge routes and an avalauncher are also utilized. Normally, the backcountry closures will begin at 10:00pm the night before to ensure all touring parties have left the area and none can enter early on the morning of a shoot. Control work will begin the next morning at first light to assist forecasters assuring complete evacuation, but these restrictions may be implemented at any hour due to changing avalanche conditions.

Occasionally these restrictions will be enacted in the middle of the day as the avalanche hazard peaks and also to protect against rising temperatures and wet snow avalanches.

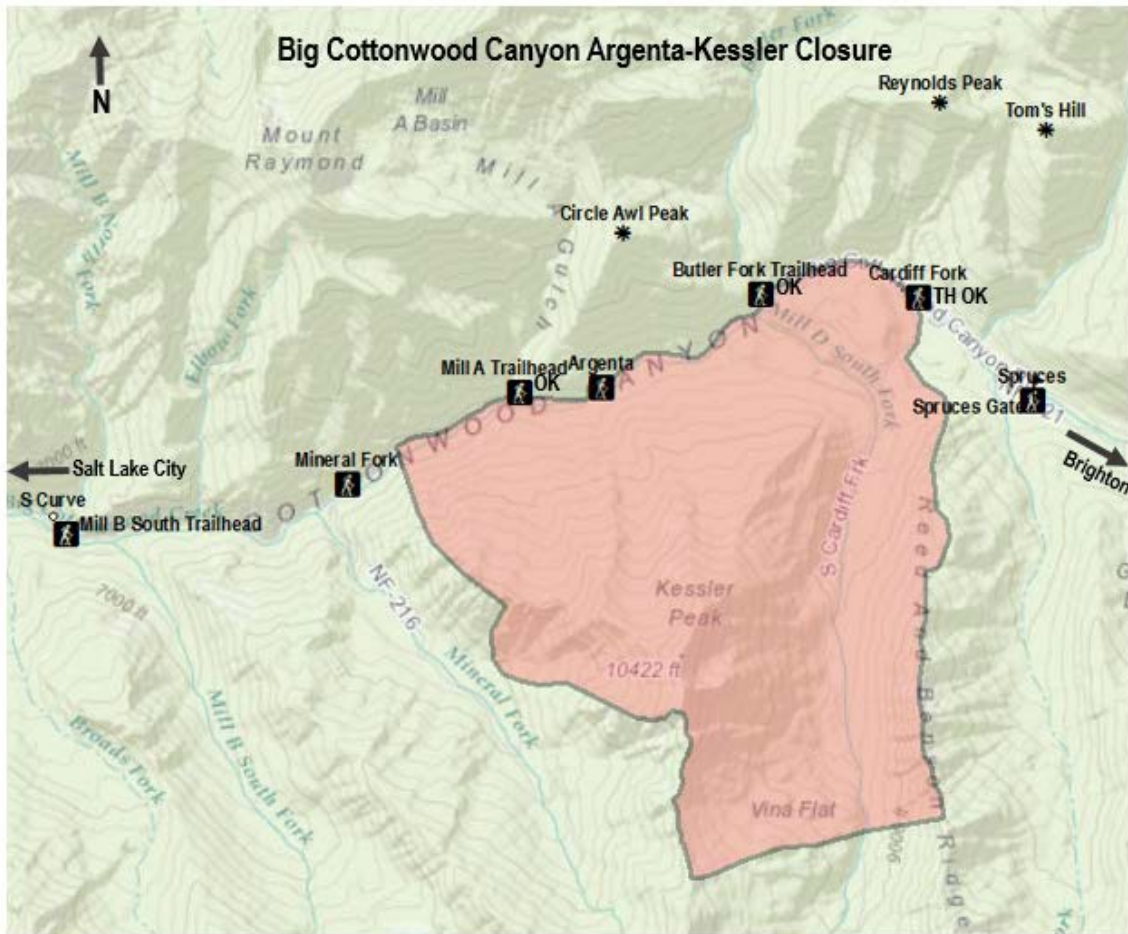
The boundaries of the closure areas include the avalanche paths that affect the highway along with adjacent terrain needed to protect from both artillery shrapnel and the potential for wide propagating avalanches that cross into neighboring drainages. Some main trailheads will be closed due to the inability for forecasters to assure areas are completely clear during times of limited visibility. The Broads Fork, Butler Fork or Cardiff Fork trail heads will be restricted prior to UDOT commencing avalanche control to aid with this process. See the specific description for each closure for more detail.



The StairsBroads-Stairs Closure is primarily for avalanche control in Stairs Gulch, either helicopter bombing or artillery. It includes the Power Plant Chutes, Stairs Gulch and the lower two-thirds of Broads Fork from the BCC creek to the Blue Ice. Access to the Broads Fork trail is restricted to help assure complete evacuation of the area including adjacent terrain.



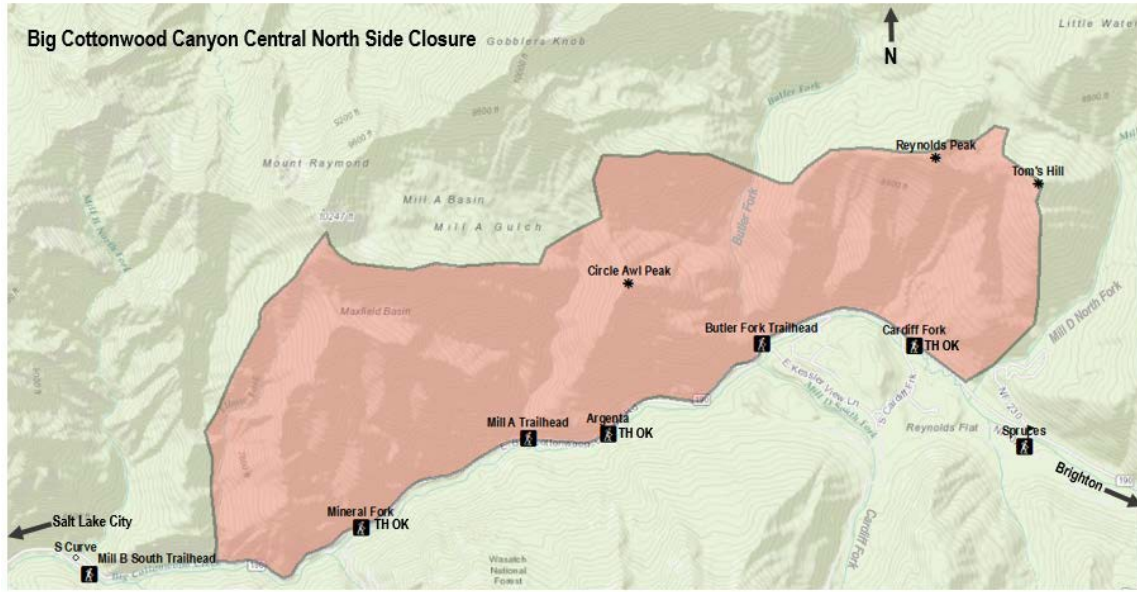
The Mineral Slabs closure is enacted prior to avalanche control with an avalauncher. It consist only of terrain at the Mineral Slabs and that immediately adjacent, from the BCC creek to the ridge.



The BCC Argenta-Kessler Closure is primarily for avalanche control in Argenta and the north face of Mt. Kessler, Gods Lawnmower, but very infrequently may include work in Argenta Chutes. It may be conducted either with helicopter bombing or artillery. It consists of the Argenta Chutes, Silver Mine Meadows, Argenta, Kessler and Lower Half of Cardiff Fork. The Little Giant path in Mineral Fork is included to protect from shrapnel or connecting avalanches. In Cardiff Fork, the closure includes Doughnut Falls, Catcher's Mitt, High Pockets, Georges Bowl and the Reed and Benson Ridge. The Cardiff Fork trailhead will be closed beginning at the BCC highway.

Note to Cardiff Homeowners:

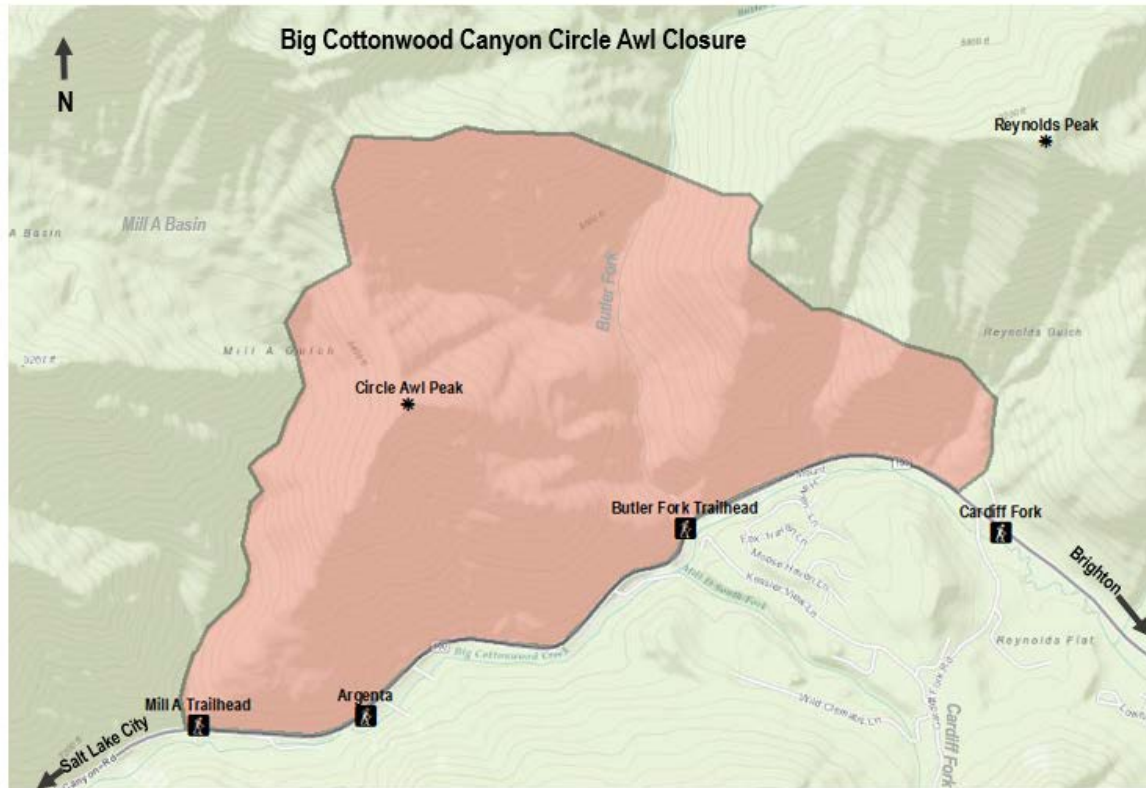
This closure does not restrict the rights of homeowners on their private property. It extends through this community due to the large amount of public land scattered in the area and the trailhead access from the main highway.



The BCC Central North Side Closure is for when avalanche control is conducted in multiple zones on the north side above the road. This scenario is very infrequent and happens only once every few years. Avalauncher and hand charge control is conducted in the Reynolds Rock, Circle Awl, West Maxfield and Rock House paths.

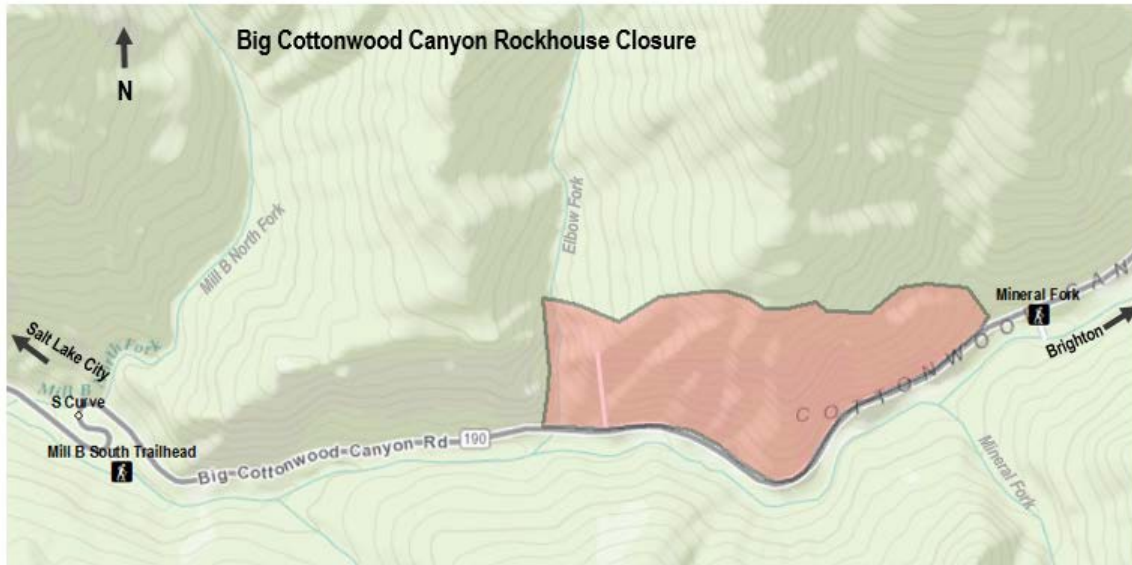
The Closure begins on the east end in East Reynolds Gully (west of Tom's Hill) and includes Reynolds Peak, East Face of Reynolds, Grand Central, Lower Butler Fork up to Scary Gully, West Fork of Butler up to West Butler Pass, Butler Trees, Circle Awl, Mill A Gulch, Maxfield Basin, West Maxfield, Rock House and the BCC Elbow Fork down to Moss Ledge.

The Mill D Trailhead at Reynolds Flat, Butler Fork Trailhead, Mill A Trailhead and Moss Ledge Trailhead will be closed the night before a planned morning shoot the next day.



The BCC Circle Awl Closure is enacted prior to avalauncher work on the Reynolds Rock and Circle Awl paths. It starts just west of the Mill D Trailhead at Reynolds Flats and extends west into Lower Butler Fork up to Scary Gully, West Fork of Butler up to West Butler Pass, Butler Trees, Circle Awl, and ends at the Mill A Gulch creek.

The Butler Fork and Mill A Gulch Trailheads will be closed to help forecasters with complete evacuation of the area.



The BCC Rockhouse Closure is enacted prior to avalauncher control work in the Rock House Chute, located directly above the highway across from the Mineral Fork Trailhead and Mineral Slabs.

It extends from the lower third of the Rock House Slide Path to the Moss Ledge area.

Provo Canyon SR 189 and SR 92 Backcountry Avalanche Control Closures

In Provo Canyon the main methods for avalanche control are military artillery, helicopter explosives delivery, avalauncher explosives delivery, and hand charges. Every effort is made to initiate a backcountry closure eight hours prior to avalanche mitigation work. It is possible, however, that a backcountry closure will be initiated with less than eight hours of time before avalanche mitigation work begins.

The boundaries of the closure areas include the avalanche paths that affect the highway along with adjacent terrain needed to protect from both artillery fragmentation and the potential for wide propagating avalanches that cross into neighboring drainages.

The terrain descriptions below are for the outlined closure boundaries on the map displayed on the UDOT Avalanche Safety webpage.



"Provo Bridal Veil Slide Canyon Closure":

This closure includes all terrain within the Provo Canyon highway corridor between Canyon Glen Park and Vivian Park, including the Nunn's Park exit and parking area, the bike path between Nunn's Park and Vivian Park, the Provo River in this area, all of the ice climbing located in the Bridal Veil Falls waterfall area and Stairway to Heaven area, and the dirt parking area located in the run out zone of the Lost Creek avalanche Path. Outside of the highway corridor, in terrain to the NW of the highway, the closure includes: The Lost Creek drainage; the Slide Canyon drainage; the Arrowhead drainage; the terrain from the top of the Arrowhead drainage to the Fingers along the Sundance terrain boundary; all of the Fingers (terrain above the Sundance Resort) extending to 100M beyond the Bearclaw slide path; all of the Big Provo Hole other than the upper 500M of the face bordered by the East Ridge of Timpanogos; terrain on the Orem side of Timpanogos beginning with Little Baldy Bowl and extending toward the Provo Canyon highway on a line even with the Little Baldy summit. The closure line passes through and includes Canyon Glen Park. Terrain to the SE of the highway included in the closure includes: The Cascade Chutes, Bridal Veil Falls drainage, Davis Canyon through Snowslide Canyon and Ferguson South, and all of Bunnell's Fork down to an elevation of 6000', the line of the closure runs on the Big Springs/ Bunnell's ridge to the summit of Cascade Peak and descends on the west side of Cascade to 100 M short of the Hope Campground and then runs NW to Canyon Glen Park including the terrain from 10-7 Split to the Provo Canyon highway.



"Provo Deer Creek Dam Closure":

The closure includes the Deer Creek Dam Chute, The Power Plant Chute, and terrain 100 M beyond the Power Plant Chute in a line paralleling the Power Plat Chute fall line, and terrain 200 M into the drainage east of the Deer Creek Dam Chute to a point 50 vertical feet above the top of the Power Plant Chute on the ridge. The closure extends 250 M into the Deer Creek Reservoir where the Deer Creek Dam Chute avalanche path empties into the reservoir.



"Provo North Fork Closure":

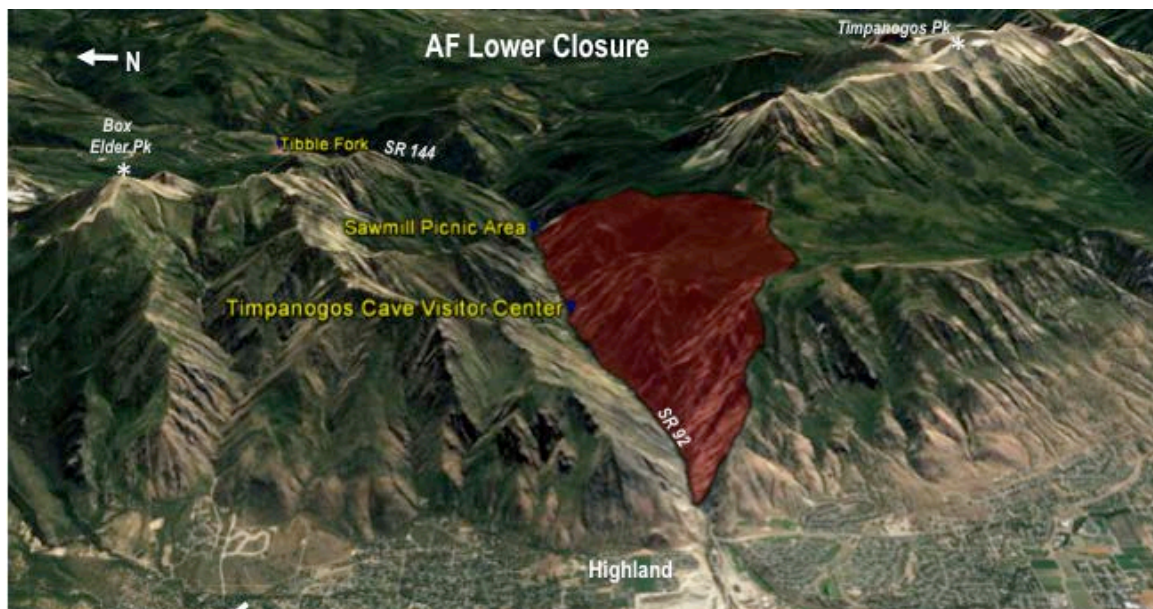
The closure includes all terrain extending from the North Fork ridge crest to SR 92 from a point 500 M beyond (traveling in an up canyon direction) the lower closure gate on SR 92 to a point 200 M beyond (traveling in an up canyon direction) the upper closure gate on SR 92. The closure deviates from the North Fork ridge crest to include the Trestle Avalanche Path and its maximum runout zone on the Provo Canyon highway side of the North Fork Ridge. The closure includes all terrain to the west of SR92 from the road to the ridge formed by Archie's Peak beginning 1.1 kilometers beyond (traveling in an up canyon direction) the lower closure gate on SR92. The closure line on the terrain west of the road descends on its upper end along the Archie's Peak ridge to the point where it meets the upper closure gate on SR92 just below the Sundance entrance from the road. This closure does not affect the ability of private property owners within the closure to utilize their property.

American Fork Canyon SR 92 and SR 144 Backcountry Avalanche Control Closures

In American Fork Canyon the main methods for avalanche control are helicopter explosives delivery and hand charge routes. Every effort is made to initiate a backcountry closure eight hours prior to avalanche mitigation work. It is possible, however, that a backcountry closure will be initiated with less than eight hours of time before avalanche mitigation work begins.

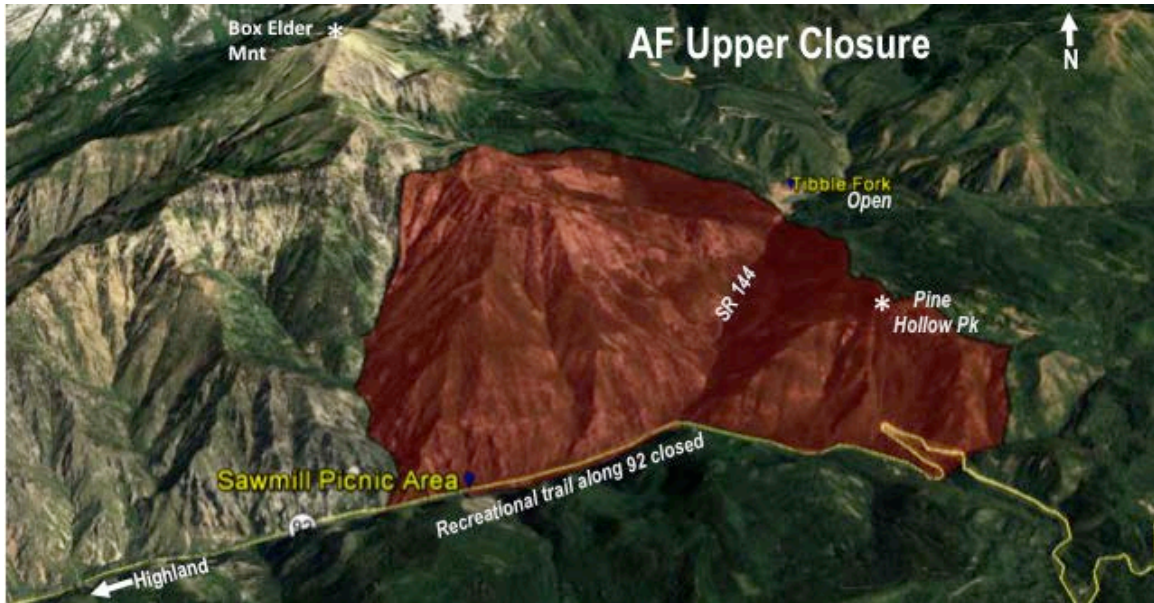
The boundaries of the closure areas include the avalanche paths that affect the highway along with adjacent terrain needed to protect for the potential for wide propagating avalanches that cross into neighboring drainages.

The terrain descriptions below are for the outlined closure boundaries on the map displayed on the UDOT Avalanche Safety webpage.



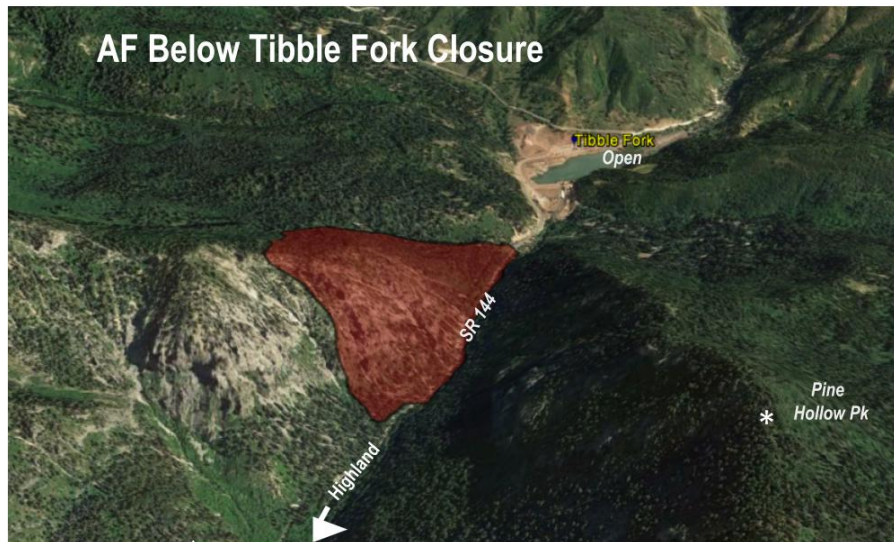
"AF Lower South Closure":

The closure includes all terrain south of SR92 beginning at the road closure gate just above the fee booth to just beyond the Hanging Rock East avalanche path and extending in elevation from the American Fork Creek to 8,600' on the flat terrain where the Timpooneke Road traverses. All Timpanogos National Monument facilities on the south side of the road are included in this closure.



"AF Upper North Closure":

The closure includes terrain north of SR92 from the Tank Canyon creekbed to the winter closure of SR92 at Pine Hollow and terrain above SR144 to both the east and west. The closure includes the Sawmill day use area, and the cross country ski track that starts at Sawmill; part of Tank Canyon; Grey Cliffs; Burch's; Roadhouse Rocks; Mile Rock; The Newton Chutes; Newton Canyon; and part of Wide Hollow. East of SR144 terrain within the closure includes the Tibble Towers over to and including Stuart's Slide and Pine Hollow north of SR92.



AF Tibble Newton Chutes Closure":

The closure includes the area west of SR144 centered around the Newton Chutes and extends from 150 meters below (down canyon) the Newton Chutes closure road sign to the egress of Newton Canyon and up to an elevation of 7,300' in between these two features. In terrain to the east of SR144 the closure extends to the maximum runout distance of the Newton Chutes.