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Logan, UT 84321

January 3, 2012

Josh Runhaar  
Planning and Zoning Commission  
Cache County  
179 North Main Street, Suite 305  
Logan, UT 84321

**SUBJECT: More reasons to not issue the conditional use permit for the proposed Cherry Peak Ski Area**

Dear Mr. Runhaar:

I am a Logan City resident, longtime skier, and am writing to raise several new issues that the Cache County Planning and Zoning Commission should require Logan Checketts to mitigate before approving the conditional use permit for the proposed Cherry Peak Ski resort. First, the resort needs a larger than 50-foot chairlift offset from the neighboring Mt. Naomi Wilderness Boundary. Second, the resort needs an avalanche control plan to protect human life and property. Third, warmer wintertime temperatures will exacerbate snow problems for the low elevation ski resort. And fourth, the resort must first demonstrate financial viability and that it will actually contribute to the general well being of the area and county. I raise these issues having attended the December, 2011 Commission meeting and read the proposed master plan, Commission reports, and prior public comments on the plan.

**1. Need a larger chairlift offset from wilderness boundary**

The proposed 50-foot chairlift offset from the Mt. Naomi Wilderness boundary is 20 times shorter than the minimal 1,000 feet (and typically further) offset all Utah ski lifts are now set back from U.S. Forest Service wilderness boundaries (Table 1). Further, a 50-foot offset does not allow skiers to safely unload from lifts, accommodate ski patrol, or other lift-top facilities within the ski area boundary. Figure 1 shows an annotated Google Earth image of the top of the Harry's Dream ski lift at nearby Beaver Mountain Resort. The solid black circle shows the 50-foot radius from the top of the lift. This distance reaches less than halfway across the skier unloading area (dashed blue box) which is already overcrowded on busy days. Further facilities

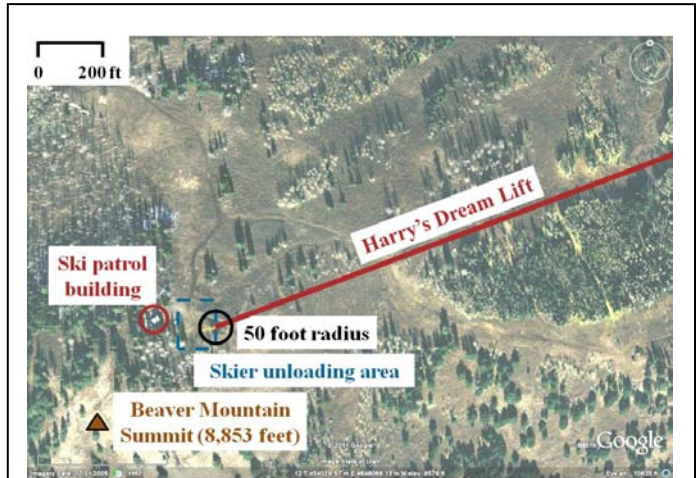
**Table 1. Proximity of existing Utah ski lifts to wilderness areas.** Distances calculated using Utah GIS Portal ski lift and USFS wilderness area data available at <http://gis.utah.gov>.

Ski Resort	Ski Lift(s)	Wilderness Area	Distance (feet)
Snowbird	Gad Zoom, Mid Gad, Wilbere, Bay Thunder	Twin Peaks	1,000
Sundance	Arrowhead	Mt. Timpanogos	2,120
Brianhead	The Dunes	Ashdown Gorge	4,500
Canyons	Ninety-Nine 90 Express	Mount Olympus	13,700

like the ski patrol building and top of the ridge are some 200 and 450 feet distant from the top of the lift. Requiring the minimum 1,000 foot buffer from the wilderness area practiced by all existing ski lifts in Utah will limit skiing to only 41 of the proposed 203 on the far west side of the Cherry Peak site (Figure 2). These considerations show the proposed site is ill-suited for a ski resort and incompatible with existing, adjacent land uses.

## 2. Need an avalanche control plan

Nationwide, snow avalanches kill 20 to 40 people per year (Temper 2008) with up to three deaths in recent years occurring inside Utah ski area boundaries on slopes where professional ski patrol had undertaken avalanche control activities. The Cherry Peak resort site is overlooked by steep avalanche-prone slopes greater than 30 degrees that can run down onto and kill skiers or damage property within the resort boundary (see arrows A to D in Figure 3). These overlooking slopes are on par with avalanche terrain at nearby Powder Mountain, Snow Basin, Park City Mountain Resort, The Canyons, Alta, Snowbird, Solitude, and Brighton. Professional ski patrol use hand explosives, artillery, ski cuts, and remote-detonated explosives to intentionally trigger avalanches at those resorts prior to opening slopes for skiers. However, at Cherry Peak, several avalanche paths start in the adjacent wilderness area so the resort cannot use explosives to control slopes. The proposed open ski area boundary will further increase risks since people trigger most fatal avalanches (Temper 2008): skiers can ride a lift, leave the resort, access adjacent avalanche-prone slopes, and trigger avalanches down onto unsuspecting in-bounds skiers below. How will the Cherry Peak resort control avalanches to prevent loss of life and property within the ski area boundary?



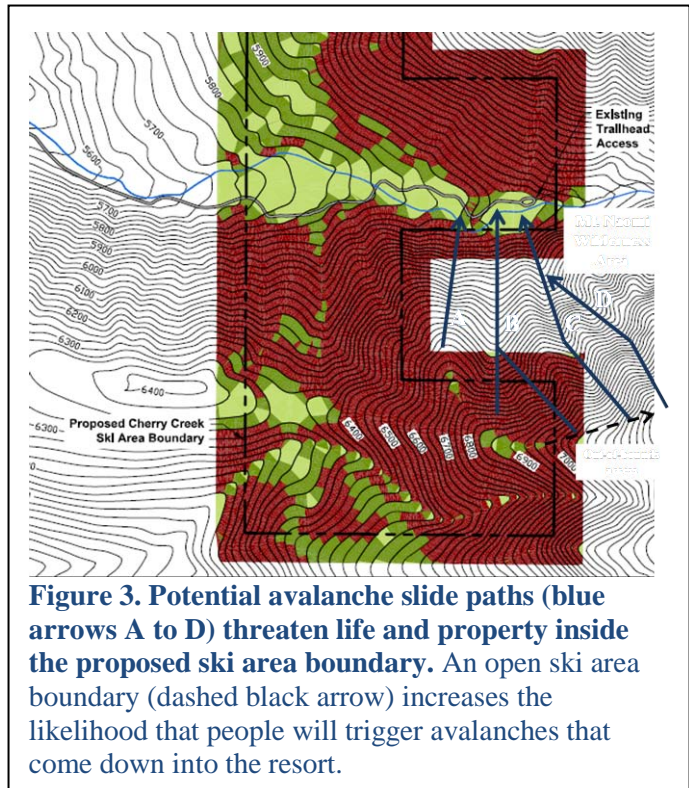
**Figure 1. Annotated Google Earth image of the top of the Harry's Dream Lift at Beaver Mountain Resort. A 50-foot offset is insufficient to safely convey skiers away from a lift and locate nearby ski**



**Figure 2. Skiable area when lifts are offset at least 1,000 feet from the wilderness boundary like all other Utah ski lifts.**

### 3. Future warmer temperatures will reduce low elevation snowpack

Utah Climate Center work shows Utah wintertime temperatures are rising and more precipitation is now falling as rain not snow (Gillies et al. 2012). These changes mean reduced snowpack and shorter ski season with changes most severe at low elevations (Gillies et al. 2012; Mote 2003) such as the 5,800 to 7,000 feet above sea level elevations proposed for the Cherry Peak ski resort. Other existing low-elevation ski resorts have commissioned work to predict snowpack over the next 60 years and the results are discouraging (Table 2; Lazar and Williams 2010). For example, Park City Mountain Resort (base elevation 6,800 ft which is 1,000 ft *higher* than the proposed Cherry Peak base) will have a shorter low-elevation ski season, a much shallower and sometimes non-existent snow pack. In response, Park City Mountain Resort is now planning new lifts and lodges to relocate base operations above 8,000 feet. Snowpack reductions at Cherry Peak will be more severe because the Cherry Peak resort base elevation is 1,000 feet *lower*, a wilderness boundary prevents upward expansion, and warmer temperatures mean fewer days to make artificial snow. A recent photo of the site (Figure 4) shows none to limited snow coverage and will typify future snow pack under warmer wintertime temperatures. Currently, snow-water equivalent (a measure of snowpack depth) for the abysmal 2011-2012 ski season measures only 60% of the historical average at the nearby Tony Grove snotel site. And yet this current abysmal coverage will likely be 1.5 to 3 times *more* than the snow pack we will see with future warmer temperatures. What actions will the Cherry Peak resort take to mitigate the effects of future reduced snowpack and ensure the ski area will contribute to the future general well being of Cache County?



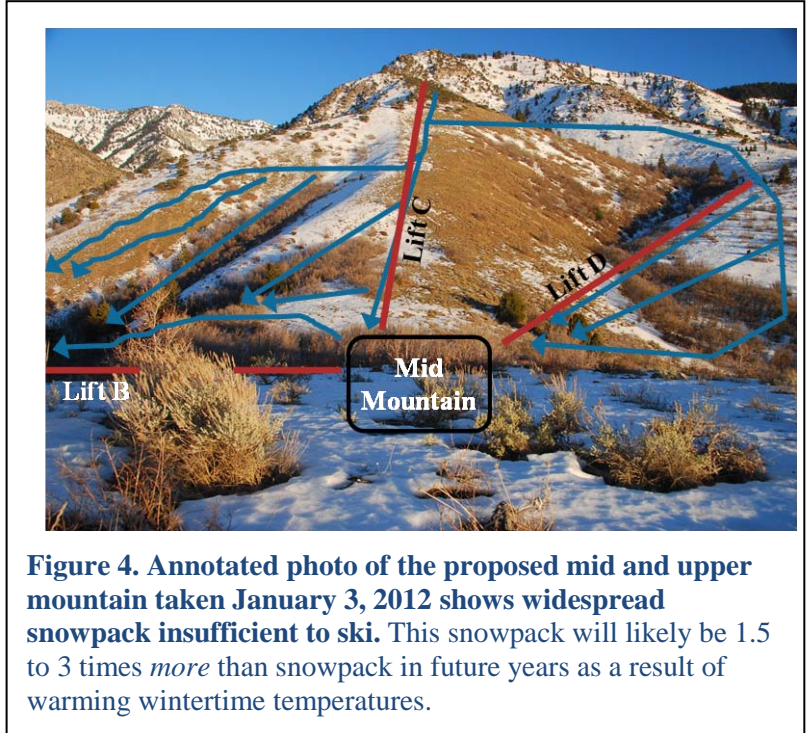
**Figure 3. Potential avalanche slide paths (blue arrows A to D) threaten life and property inside the proposed ski area boundary. An open ski area boundary (dashed black arrow) increases the likelihood that people will trigger avalanches that come down into the resort.**

**Table 2. Effects of future warmer wintertime temperatures on snowpack at Park City Mountain Resort base area (elevation 6,800 feet; Lazar and Williams 2010)**

Year	Decrease in ski season (weeks)	Other Changes
2030	2	
2050	3 to 4	Snow depth 20 to 40% of 1990 - 2010 average
2075	8+	Sometimes, snow only above 8,000 feet

#### 4. Need to demonstrate financial viability

Cherry Peak resort must still demonstrate financial viability to satisfy Section 17.06.070(A)1 of the Cache County code for conditional use permits that require facilities to “contribute to the general well being of the area and the county.” The master plan claims the ski area will serve 900 weekend-holiday and 500 weekday skier visits. What is the basis for these numbers? And if these visits do occur, what revenues will they generate, what capital and operating costs will the applicant incur to serve the skiers, and how will revenues cover the costs so the resort can stay in business and provide long-term services that contribute to Cache County? Ski resort revenues (from day and season pass tickets, ski school, rentals, food, etc.) are typically low and weather dependent (see issue #3 above).



**Figure 4. Annotated photo of the proposed mid and upper mountain taken January 3, 2012 shows widespread snowpack insufficient to ski. This snowpack will likely be 1.5 to 3 times *more* than snowpack in future years as a result of warming wintertime temperatures.**

Capital and maintenance costs (for ski lifts, lodges, snow cat and snow making equipment, water and sewer lines, parking lots, an access road, utilities, maintenance, employee + ski patrol wages, insurance, taxes, etc.) are fixed and large. Large destination resorts achieve profitability from lodging revenues and real estate sales. But these revenue items are not part of the Cherry Peak master plan (nor allowed under current county zoning). Most nearby small ski resorts have become unprofitable and closed or required non-profit, community, or government support to stay open (Peterson 2011). The Cherry Peak resort must provide a financial analysis of revenues and costs to demonstrate that the proposed skier area is financially viable, can stay open and viable in the future, and contribute to the general well being of Cache County.

#### Conclusion

The above issues make the current Cherry Peak ski area proposal incompatible with adjacent land uses, unsafe, unsuitable for skiing, and unproven financially. Before issuing a conditional use permit for the ski resort, the Cache County Planning and Zoning Commission must require (i) a sufficient offset from the neighboring Mt. Naomi Wilderness Boundary, (ii) an avalanche control plan to protect human life and property, (iii) mitigation for future warmer temperatures that will reduce snowpack and shorten the low elevation ski season, and (iv) proof of financial viability that the resort will contribute to the general well being of the area and county.

We must only approve environmentally-sound, safe, financially viable conditional use development that contributes to the general well being of Cache County citizens.

Thank you,

A handwritten signature in black ink that reads "David E. Rosenberg". The signature is written in a cursive, slightly slanted style.

David E. Rosenberg

### References

- Gillies, R. R., Wang, S.-Y., and Booth, M. R. (2012). "Observational and Synoptic Analyses of the Winter Precipitation Regime Change over Utah." Utah Climate Center, Logan, UT
- Lazar, B., and Williams, M. (2010). "Potential Impacts of Climate Change for U.S. West Slope Range Ski Areas: Projections for Park City Mountain Resort in 2030, 2050, and 2075." Western Snow Conference, Logan, UT
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- Peterson, C. (2011). "Ski Area Closed, Future Uncertain." Star-Tribune, Casper, WY.  
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- Temper, B. (2008). *Staying Alive in Avalanche Terrain*, The Mountaineers Books, Seattle, WA.