

DECISION MEMO
for
Alta Ski Area East Baldy Remote Avalanche Mitigation Project

Salt Lake County, Utah
Uinta-Wasatch-Cache National Forest
Salt Lake Ranger District

1. BACKGROUND

The Uinta-Wasatch-Cache National Forest (UWCNF) received a proposal from Alta Ski Area (Alta) to modernize avalanche mitigation on the East face of Mt. Baldy (commonly referred to as East Baldy) using Gazex and/or Obell'X control technologies. East Baldy is the area addressed in this Decision Memo. The project is included in Alta's accepted master development plan, as amended. The project site is within Alta's special use permit boundary on National Forest System (NFS) lands, and the project has the potential to affect the human environment. Accordingly, we initiated review of the proposal as required by the National Environmental Policy Act of 1969 (NEPA). This notice documents that review and my decision.

2. DECISION AND RATIONALE

I have reviewed Alta's request, along with the associated environmental review documentation and have decided to approve this project, as described below (see Section 3: Project Description). I believe the project will improve ski area operations by providing a more reliable connection between Albion Basin and Collins Gulch and by using a safer, more modern technology to do so. The Obell'X and Gazex avalanche control systems can be installed and maintained with minimal impact on NFS resources. Implementation of the mitigation measures outlined below (see Section 4: Mitigation Measures) is a condition of my approval.

3. PROJECT DESCRIPTION

East Baldy presents a complicated avalanche-management challenge. The avalanche starting zones lay above a ski-way known as the East Baldy Traverse or EBT. This traverse is critical to operation of the ski area as it is the only connection between the upper portions of the two drainages which comprise the ski area. The road is frequently closed due to avalanche hazard, forcing skiers down and across the base of the ski area so that they can ski from the Albion Basin drainage into the Collins Gulch area. In addition to significantly slowing skier circulation, this increases skier density on Devil's Elbow, which is the "easier way" from the Sugarloaf lift.

Current avalanche control methods on East Baldy include the use of an Avalauncher gun, ski cutting, and hand delivery of explosive charges to the starting zones. The Avalauncher is limited in capability due to the close proximity of target areas to Snowbird Ski and Summer Resort. Ski cutting and explosive delivery can be effective, but they can also present hazards to personnel and are limited by weather and severity of the avalanche hazard.

Obell'X or Gazex avalanche control systems will reduce avalanche exposure for snow safety personnel and speed up avalanche control activities. These systems are installed in fixed positions within the avalanche starting zones (Figure 1) and are operated remotely by computer. Both are based on gas exploders. A phased

installation is proposed. The first step will be to install one Obell'X device. Other installations of either system will occur at the remaining four sites based on the effectiveness of the first installation.

The Obell'X system requires a concrete footing approximately 80 centimeters (32 inches) square. The footing contains a 2-meter (6.5-foot) tower which remains in place. A helicopter is used to place the Obell'X exploder unit on the tower and extract it for reloading and replacement. Obell'X exploders can be triggered remotely, are self-contained, do not require installation of gas lines, and are removed in the off-season. Constructing the footing for each exploder will disturb an area about 4.5 meters (15 feet) square.

The Gazex system requires two 80-centimeter-square concrete footings per unit. Constructing the upper footing will disturb about 4.5 meters square (15 feet square), the lower footing about 2 meters square (7 feet square). If Gazex exploders are used, multiple exploders will be connected with gas lines to a 2.5-meter-square (8-foot-square) gas storage building, disturbing about 5 meters (16.5 feet) square. The Gazex system is fixed and remains in place year-round.

In total, this project will result in a maximum of approximately 0.1 acres of ground disturbance. Temporarily disturbed areas will be rehabilitated using BMPs developed by Alta, the Alta Environmental Center, the UWCNF, and other agencies. All installations will be on NFS land within Alta's current permit boundary.

4. MITIGATION MEASURES

Implementation of the mitigation measures listed below is required as part of my decision. The project area is within Salt Lake City's municipal watershed, and protection of water quality is a primary consideration. Alta must obtain any state and local permits and authorizations, and complete all required plan reviews prior to final Forest Service authorization to proceed.

Soil Erosion, Sedimentation, and Water Quality

1. Prior to beginning the project, submit an erosion control plan prepared in accordance with the best management practices (BMPs) agreed upon by the Forest Service and Alta for similar projects in the past. This plan must be approved by the Forest Service prior to construction on NFS lands.
2. Include in the erosion control plan stockpiling of excavated material. Place stockpiled material on the upslope side, where possible. Stockpile topsoil separately from subsoil so it can easily be located and re-applied to the backfilled surface.
3. Promptly revegetate temporarily disturbed areas using the Forest Service approved seed mix and standard techniques developed by Alta and the Forest Service for this purpose. Monitor vegetation establishment and retreat as necessary.
4. Plan and implement projects to ensure that all temporarily disturbed areas are completely revegetated prior to snowfall.

Vegetation and Weed Management

5. Determine final placement of exploders following a site visit by a Forest Service-approved botanist.
6. Remove potential fuels to reduce fire or fuel issues.
7. Use only certified weed-free seed.
8. Conduct weed surveys of project site for 3 years following construction. Treat any weeds identified.
9. Wash construction equipment, other than equipment owned by Alta, prior to any work on NFS lands, and inspect equipment regularly for any leaking fuel or fluids.

Recreation

10. Place exploders in locations that minimize impacts on skiing.

Visual Resources

11. Apply practical methods to ensure that color of support stands blends with the colors of the surrounding landscape.
12. Adhere to color, form, line, and texture guidelines to protect visual quality and remove Obell'X exploders during non-operational time periods (spring through fall).

Cultural Resources

13. Notify the Forest Service archaeologist immediately if and when any historic or prehistoric resources are exposed during construction activities.

Engineering/Design

14. Submit stamped engineering drawings and structural calculations of all permanent structures at least 45-days prior to implementation for Forest Service engineering review.

5. SCOPING AND PUBLIC INVOLVEMENT

On May 2, 2017, the UWCNF issued an e-mail to the public briefly describing the proposal and soliciting public input. The notice was e-mailed to individuals, organizations, and agencies on the UWCNF mailing list. No responses were received.

6. REASON FOR CATEGORICALLY EXCLUDING THE PROPOSED ACTION

I have determined that the proposed project, as described above, is consistent with the types of actions described under 36 CFR 220.6(e)(3) - *Approval, modification, or continuation of minor special uses of National Forest System lands that require less than 5 contiguous acres of land*. As noted above, the project will affect a maximum of about 0.1 acres of NFS land within the ski area's special use permit boundary. The potential direct, indirect, and cumulative effects of the project were reviewed and considered in my decision.

In regard to extraordinary circumstances, the Forest Service Handbook lists several topics that should be considered (CFR 36 220.6[b]). Forest Service and contracted resource specialists have visited the project area on numerous occasions, reviewed relevant studies and other published information, and documented their findings regarding these and other potential extraordinary circumstances in the project file, as summarized below.

- i. **Federally listed threatened or endangered species or designated critical habitat, species proposed for Federal listing or proposed critical habitat, or Forest Service sensitive species.** A biological survey of the project area was completed in August of 2010. No wildlife species or habitats of concern were identified in the project area. Likewise, there will be no effect on or impacts to migratory birds. Two sub-populations of the Forest Service sensitive plant, *Ivesia utahensis*, were located in the vicinity of proposed exploder placements. In order to avoid these populations, final placement of the tower foundations will be approved by a Forest Service-approved botanist prior to construction. Based on these considerations, threatened, endangered, and sensitive species do not constitute an extraordinary circumstance for these actions.
- ii. **Flood plains, wetlands, or municipal watersheds.** The project area lies in Salt Lake City's municipal watershed. The proposed action consists of minor disturbances with permanent installation of small structures on upland/rock slopes. No effects on watershed resources are anticipated. Based on these considerations, flood plains, wetlands, or municipal watersheds do not constitute an extraordinary circumstance for these actions.
- iii. **Congressionally designated areas, such as wilderness, wilderness study areas, or national recreation areas.** The project area does not include any designated wilderness, wilderness study

areas, or national recreation areas, so such designations do not constitute an extraordinary circumstance for these actions.

- iv. **Inventoried roadless areas.** The project area does not include any inventoried roadless areas, so such areas do not constitute an extraordinary circumstance for these actions.
- v. **Research Natural Areas.** The project area does not include any Research Natural Areas, so such areas do not constitute an extraordinary circumstance for these actions.
- vi. **American Indian and Alaska Native religious or cultural sites.** Section 3.4.1.1 of the 1997 Master Development Plan Final Environmental Impact Statement (FEIS) states that “prior to European settlement the ski area was used by Native Peoples for both hunting and plant gathering in a lifeway that was otherwise tied to the more abundant resources of the adjacent Salt Lake Valley. This short-term use leaves little archaeological imprint, and few examples of Native sites remain anywhere in the canyon.” No Native American sites have been found in or near the project area. The two relevant Tribes in the area were contacted during the scoping period, and neither responded to identify any concerns regarding the projects. Based on these considerations, American Indian and Alaska Native religious or cultural sites do not constitute an extraordinary circumstance for these actions.
- vii. **Archaeological sites, or historic properties or areas.** The area of potential disturbance for this project was included in a survey for archaeological resources in 2015 as part of the original alignment, and none were found. In accordance with Section 106 of the National Historic Preservation Act, a report was submitted to the Utah State Historic Preservation Office, which issued a letter concurring that “no historic properties affected” as per 36 CFR 800.4(d)(1). Mitigation measure 13 above will protect any archaeological resources discovered during construction. Based on these considerations, archaeological sites, or historic properties or areas, do not constitute an extraordinary circumstance for these actions.

Based on the findings summarized above, I am categorically excluding this decision from documentation in an environmental assessment or environmental impact statement. Based on experience with management activities similar to this and upon the environmental review conducted for this project, the effects of implementing this action will be limited in context and intensity. Connected and cumulative actions have been appropriately considered, an appropriate category for exclusion has been established by law and documented in the Forest Service Handbook, and our review indicates no extraordinary circumstances to preclude its application.

7. FINDINGS REQUIRED BY OTHER LAWS

The only finding required by other laws not addressed directly or indirectly above is Forest Plan compliance in accordance with the National Forest Management Act. This action has been evaluated for consistency with the *2003 Revised Forest Plan for the Wasatch-Cache National Forest*. The project area is in Management Prescription 4.5, which emphasizes providing developed recreation opportunities. Thus, this action is consistent with the management prescription. In terms of more specific Forest Plan direction, my review indicates that this action, with required mitigation measures in place, is consistent with all applicable standards and guidelines.


8. ADMINISTRATIVE APPEAL

Decisions to categorically exclude actions from further analysis in an environmental assessment or environmental impact statement are not subject to appeal.

9. PROJECT IMPLEMENTATION

Implementation may begin once any pre-construction mitigation measures are in place. For further information, contact Polly Bergseng at:

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DAVID C. WHITTEKIEND

12/15/17

Date

Forest Supervisor, Uinta-Wasatch-Cache National Forest

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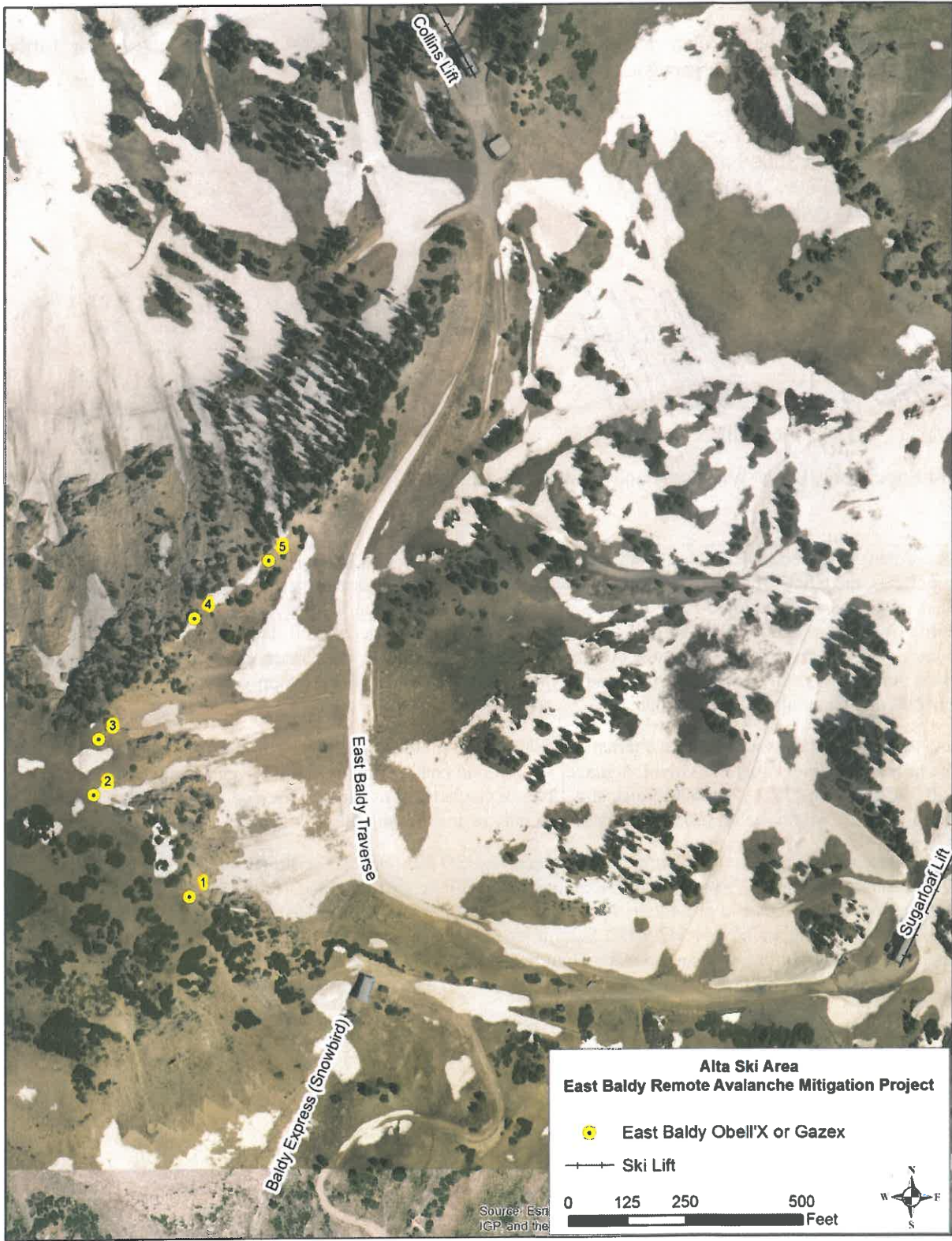


Figure 1. East Baldy Remote Avalanche Mitigation Project.