DESCRIPTION OF THE PROPOSED ACTION:
SNOWBASIN MASTER DEVELOPMENT PLAN (MDP) IMPROVEMENT PROJECTS

INTRODUCTION AND OVERVIEW

The Snowbasin Resort Mountain Master Development Plan (MDP) was created in 1995 and updated in 2009. The 1995 MDP focused on upgrades to Snowbasin to accommodate the 2002 Winter Olympic Games. The 2009 update addressed subsequent changes and refinements in resort operations as a day-use ski area. As detailed below, some projects from the 2009 MDP have been authorized but not completed. Others have not been formally proposed for authorization, and two new projects have been identified since 2009. Drawing from all three of these categories, the following list identifies proposed projects to be implemented within the next 5 years:

- Strawberry Quad lift installation.
- Wildcat Lift replacement.
- Wildcat snowmaking.
- Mt. Ogden Bowl ski run improvements.
- Summer trails.
- Upper Porky Face access road rehabilitation (not in 2009 MDP).
- Lower Penny Lane ski run improvements (not in 2009 MDP).

The locations of these projects are shown in Figure 1. The alignment of most projects is approximate at this time, reflecting preliminary designs. The final alignments may be adjusted based on impact analysis and other constraints identified through the review and design process.

Snowbasin operates on both private land and public, National Forest System (NFS) land administered by the Uinta-Wasatch-Cache National Forest (UWCNF). Operations on the NFS lands occur under a ski area term special-use permit (SUP) that was issued in 2001 and is valid through 2041. All proposed projects fall within the current SUP boundary.

RELATIONSHIP TO THE ACCEPTED MDP AND PREVIOUS APPROVALS

The 2009 MDP identified a number of projects that Snowbasin was considering in order to provide a high quality recreation experience at the ski area. The intent was to complete those projects in a 5-to-7-year period. The 2009 MDP grouped projects into phases, but the projects included in this proposal draw from several of those phases. For example, the Strawberry Quad lift was part of Phase 1a while the Wildcat lift replacement was part of Phase 2, and both are elements of this proposal. However, the No Name lift, which was also part of Phase 1a in the 2009 MDP, is not proposed at this time.

Some projects that were included in the 2009 MDP have been previously approved by the UWCNF but have yet to be completed. The Strawberry Quad lift installation is one such project. It was approved in a Decision Memo on October 2, 2008. The Wildcat Lift replacement, Wildcat snowmaking, Mt. Ogden Bowl ski run improvements, and summer trails projects were all included in the accepted 2009 MDP but have not been proposed for agency review and authorization until now. Regardless of past review and authorization, all projects included in this proposal from the accepted 2009 MDP are described below.
**Detailed Description of the Proposed Action**

**Strawberry Quad Lift Installation**

The proposed Strawberry Quad lift would provide an alternative to the Strawberry Express gondola. Currently, the gondola is the only access lift in the Strawberry area. While the gondola has the capacity to carry 2,400 people per hour, certain conditions justify the construction of a second lift. First, the top terminal of the gondola is located in a saddle between Strawberry Peak and DeMoisy Peak and is frequently exposed to inclement weather, including high wind, and avalanche hazard. Inclement weather can result in closing the gondola or in creating unfavorable skiing conditions off the top of the lift. When the gondola closes, there is no other lift-assisted option for skiers in the Strawberry area to ski at lower elevations conditions are more favorable or to return to the main base area. In addition, the ski runs initiating on the ridgeline require a traverse and can be too difficult for intermediate-level skiers during inclement weather.

In the past, snowcat shuttles have been necessary to evacuate stranded skiers from Strawberry pod when the gondola has suddenly closed. To avoid this situation, the entire pod is closed when weather conditions are threatening, eliminating 35 percent of the terrain capacity of the resort. The top terminal of the proposed Strawberry Quad lift would be below the ridge, and thus not as exposed to weather as the gondola, and it would be better situated to provide access to the true intermediate-level terrain lying below the ridge. As a result, the new lift would allow the resort to safely utilize the Strawberry pod under a much wider range of conditions, as well as providing redundant uphill capacity and egress from the Strawberry area.

The Strawberry Quad lift would be located to the north of the existing Strawberry Express gondola. The lower terminal would be at an approximate elevation of 6,605 feet, slightly down gradient from the lower gondola building to prevent congestion while still allowing gondola building users to ski to the lower terminal. The upper terminal would be located at an approximate elevation of 8,575 feet, which is 675 feet below the ridgeline. In the proposed alignment, the lift would provide access to over 80 percent of the Strawberry terrain. A redundant lift in this area would allow resort visitors to continue to utilize the terrain or return to the main base area.

The Strawberry Quad lift would be approximately 8,500 feet long, with a vertical rise of 1,970 feet and a design capacity of 2,400 people per hour. It would be a high-speed, detachable, top-drive lift. Constructing the lift would disturb approximately 1.4 acres of ground surface, including 0.5 acre of NFS land. Trees and brush would be removed from approximately 7.8 acres, including 0.4 acre on NFS land, in order to clear the lift alignment. Lift towers would be installed by helicopter; no permanent access roads would be constructed for lift tower installations. The footings for new lift towers would likely be excavated using a tracked excavator, which would access tower sites in a single pass by crawling out from existing roads.

The October 2008 Decision Memo also authorized four other small projects. Two of those projects involved installing snowmaking infrastructure on Dan’s Run and have been completed. The remaining two projects are associated with the Strawberry Quad lift. The first is construction of a 30-foot-wide skiway extending from the upper terminal of the proposed lift for a distance of approximately 850 feet, connecting to Main Street ski run. This new skiway would be used as a summer access road to the upper terminal, and vehicle traffic would be limited to Snowbasin operations and administrative purposes. A snowmaking line would be installed in the ski run to provide safe and reliable egress from Strawberry Bowl. The second project is installation of a buried electric line to provide power to the upper terminal. The electric line would connect to the existing power source at the snowmaking building. These two small projects would disturb approximately 0.75 acres of NFS land. All disturbed areas would be subject to standard rehabilitation and revegetation efforts after construction was complete.
**Wildcat Lift Replacement**
The Wildcat lift was initially constructed in 1973 to provide access to the Middle Bowl and Porcupine lifts. It is a fixed-grip triple chair with a capacity of 1,200 people per hour. The lift is now operated primarily to provide redundancy to the Needles Express gondola and Becker lift, and to provide additional out-of-base capacity during busy periods when skiers are waiting to access the upper mountain. Replacing the existing Wildcat lift with a high-speed, detachable quad lift is proposed. The proposed lift would improve skier-traffic flow in the Wildcat area, facilitate circulation to other areas of the mountain, and provide additional opportunity for racing and race training.

The updated Wildcat lift would be constructed largely on the same alignment as the existing lift, though the lower terminal may be shifted slightly to the north to decrease interference with the ski runs exiting the Wildcat area. The lift would remain approximately 4,800 feet long, with a vertical rise of 1,360 feet, but capacity would double to 2,400 people per hour. The lower terminal and first couple of towers would be located on private land, and the remainder of the lift would be located on NFS land. The existing lift and towers would be removed, though the lift tower footings would be left in place and buried to minimize ground disturbance. The footings for new lift towers would likely be excavated using a tracked excavator, which would access tower sites in a single pass by crawling out from existing roads. As appropriate, excavators may also use access roads which still remain from the original Wildcat lift construction. Lift replacement would result in ground disturbance on 1.25 acres, including 0.7 acre of NFS land.

**Wildcat Snowmaking**
Three main return routes carry the majority of the base area return skiing and repeat skiing from the Needles Express gondola. The Blue Grouse/City Hill route is located furthest west, the Bear Hollow/School Hill route is furthest east, and the Wildcat route is located between the two. All three are typically congested during busy periods. The Wildcat area is popular for races and can be isolated from other pods. Inadequate snow cover is one of the factors which limit the full, efficient use of the Wildcat area. Low snow cover can limit grooming, especially at the lower end of the pod where the Wildcat run crosses the summer road.

The proposed snowmaking would improve snow cover in Wildcat Bowl and the Eas-A-Long, Herbert’s, Stewart’s, Stein’s, and Upper Blue Grouse ski runs. Snowmaking would improve snow cover early in the season to better match the amount of snow accumulated on upper portions of the mountain. Likewise, when the snow cover on the upper portions of the mountain was inadequate, snowmaking in the Wildcat area would allow the resort to open the lower portion of the mountain alone. In combination with the proposed Wildcat lift replacement, snowmaking would make the Wildcat pod a more important and integrated part of the resort and a key component of early season operation.

The proposed Wildcat snowmaking system would include approximately 14,900 feet of buried water line and would provide snowmaking coverage to approximately 39.4 acres of the Wildcat area. The final placement of the snowmaking system would be designed to maximize snow distribution without hindering skier use of the runs. The new snowmaking lines would be constructed primarily in previously disturbed areas such as roads and skiways. Construction of the Wildcat snowmaking system would disturb approximately 7 acres of NFS land.

**Mt. Ogden Bowl Ski Run Improvements**
The Mt. Ogden road doubles as a summer access road to the top terminal area of the John Paul lift and as the only intermediate-level route down from the upper terminal and restaurant, known as Mt. Ogden Bowl ski run. The run is narrow, adjacent to rough, rocky terrain, and has sharp corners. Because of the roughness, snow coverage is often a problem during the early season and may delay opening the run.
With adequate snow cover, the ski run is approximately 20 feet wide. Grooming can increase the width of the run by another 5 to 10 feet when conditions are right.

These circumstances make the ski run challenging for intermediate-level skiers, especially if weather conditions limit visibility. Under favorable weather conditions, the run can still be congested as advanced skiers overtake slower skiers. The proposed improvements would widen the Mt. Ogden Bowl ski run and provide snowmaking capability, thus removing constraints imposed by terrain and poor snow coverage. Improvements would also be made to a lower segment of the ski run located on private land. Those improvements would total about 5 acres and would overlap the area disturbed by snowmaking.

The proposed Mt. Ogden Bowl improvements include ground surface grading and rock removal along a 1,500-foot segment of the existing run that would increase the run width to between 100 and 150 feet. The radius of sharp corners would be increased to match the overall fall line. The project would be completed using on-site cut and fill material. Water lines from the Porky Face area would be extended to support snowmaking operations. Standard mitigation measures, including erosion control and seeding appropriate grass and forb species, would then be used to stabilize the disturbance area. The ground surface work and snowmaking line installation would disturb approximately 5 acres of NFS land.

**Summer Trails**

Snowbasin has an extensive summer recreation trail network that is used by hikers and mountain bike riders. A number of user-created trails parallel the ridgeline that forms the western boundary of Snowbasin. Collectively, these trails are known as the Circle of Cirques. They are a source of surface disturbance and erosion, and they pose a potential safety issue since they are not constructed or maintained to a set standard. It is proposed that existing segments of the Circle of Cirques trail be improved to Forest Service standards to reduce erosion and increase safety. Access routes to the trail from the Needles Lodge and from an access road on Mt. Allen would also be improved. The finished trail, including the Needles access route, would be approximately 3.4 miles in length and create a temporary disturbance approximately 4.5 feet wide. The trail would be constructed using hand tools or small excavators, and would result in ground disturbance on 1.9 acres, including 1.5 acres of NFS land. However, since parts of the trail already exist as user-created trails, the actual new disturbance would be less than 1.5 acres on NFS land.

Another summer trail would be created in the Wildcat area and would have two segments. The first segment would be constructed to take advantage of existing service roads. It would begin near the lower terminal of the Porcupine lift, traverse back and forth in the Wildcat area, and then end at an intersection with the existing Porcupine summer trail. A second, connecting, trail segment would begin at the proposed Wildcat trail between the Stein’s and Stewart’s ski runs, proceed southward to the top of the Snowshoe ski run, and then follow the run to the intersection with the existing Needles summer trail.

Together these segments would create a new trail loop on the lower portion of the mountain and provide improved access to trails on the upper portion. The segments would have a combined length of 3.4 miles, and would create a temporary disturbance approximately 4.5 feet wide. Construction of the Wildcat summer trail would disturb 1.85 acres, including 1.8 acres of NFS land. Again, since parts of the trail would coincide with existing service roads, the amount of new disturbance on NFS lands would be less than the 1.8 acres.

Many Forest Service trails in the vicinity of Snowbasin have proven difficult to maintain due to steep slopes and erosive soils. Snowbasin would engage professional design and construction personnel to ensure that final alignments, trail design, construction practices, and rehabilitation practices minimize these issues. Subsequent trail management would include measures to reduce user impacts (e.g., daily inspections, prompt repair of damaged areas, and closure when a trail is excessively wet).
PROJECTS NOT IDENTIFIED IN THE 2009 MDP OR PREVIOUSLY REVIEWED

Since the release of the 2009 MDP, Snowbasin has identified two additional projects – Upper Porky Face access road rehabilitation and Lower Penny Lane ski run improvement – that would improve the recreational experience and safety of Snowbasin guests and employees. These projects would not alter the comfortable carrying capacity established in the 2009 MDP. Rather they are designed to address recognized constraints in current day-to-day operations. It is proposed that these projects be included as amendments to the MDP.

**Upper Porky Face Access Road Rehabilitation**
The upper Porky Face access road rehabilitation project is intended to close a switchback road segment that is no longer needed. Initially constructed to provide access to the Porcupine and John Paul lifts, the Porky Face access road crosses multiple fall line ski runs and interferes with grooming operations. The access road was constructed by excavating into the hillslope and side casting excavated material to create the running surface. The resulting cut and fill slopes delay opening the area for skiing early in the season or when snow cover is otherwise inadequate.

The rehabilitation project would include re-contouring approximately 2,130 feet of the existing access road to match the adjacent hillslope contour and ski run fall line. The road’s running surface would be de-compacted and material above and below the road would be used to re-establish the hillslope contour. The rehabilitation would all take place on privately owned land. If necessary, clean, weed-free fill material would be imported to augment the material recovered from above and below the road.

As part of this project, a new 1,030-foot-long road segment would be constructed along the existing sewer line corridor, connecting the Needles Restaurant access road to the Porky Face Access Road above the rehabilitated segment (shown on Figure 1 as Project 6b). The road segment would have a 12- to 16-foot width and would be constructed with necessary drainage features. This new segment would provide vehicle access to the Porcupine and John Paul lifts, replacing the rehabilitated road. Material cut for the construction of the new road segment could also be used as fill in the rehabilitated portion of the Porky Face access road. Mitigation measures, including erosion control and seeding appropriate grass and forb species, would then be used to stabilize the re-contoured hillslope.

The Upper Porky Face access road rehabilitation project would affect 4 acres, only 0.1 acres of which is located on NFS land. Construction of the new access road segment would affect approximately 1 acre of NFS land that was previously disturbed when the sewer line was installed. The construction and rehabilitation would result in a 1,100-foot net reduction of roads.

**Lower Penny Lane Ski Run Improvement**
The lower Penny Lane ski run improvement project is proposed to improve visibility and reduce steep and narrow sections of the Penny Lane ski run. This run is the main return path from the Strawberry area to the base area. In addition, it is one of two beginner-level ski runs that are accessed from the top of the Becker lift. In the current alignment, Penny Lane intersects the Snowshoe ski run near a sharp corner with poor visibility. Immediately downslope of the intersection, the Penny Lane ski run is narrow and steep, following the alignment of an existing service road. These features, together with the potential for high skier density when the top of Strawberry bowl is closed, are challenging for beginner-level skiers.

The lower Penny Lane ski run improvement project consists of reshaping the lower 600 feet of the Penny Lane and Snowshoe runs to improve visibility, and re-contouring the steep and narrow segment below the intersection of the Penny Lane and Snowshoe ski runs. This project would disturb approximately 3 acres, including 1 acre of NFS land.
SUMMARY AND CONCLUSION

The projects described above, with the exception of the upper Porky Face access road rehabilitation and lower Penny Lane ski run improvements projects, were part of the 2009 MDP, and the latter two projects have been accepted as MDP amendments. All of these projects provide timely and effective means of addressing recognized constraints to resort operation and will result in improved recreational opportunities and visitor safety. None of the projects would expand Snowbasin or alter the comfortable carrying capacity established in the 2009 MDP, nor are they linked to any off-site, private land development. They would simply improve the overall recreational experience offered by Snowbasin on NFS land.