May 4, 2022

James Duran, Forest Supervisor % Paul Schilke, Winter Sports Coordinator P.O. Box 110 Questa, NM 87556

Re: Taos Ski Valley Gondola and Other Improvements Project

Mr. Duran,

These are comments on the proposal by Taos Ski Valley Inc. to build out new components to its existing resort in Taos County, New Mexico. The currently proposed projects present numerous issues that I feel must be addressed. I request that a full Environmental Impact Statement (EIS) be developed to address these concerns.

To preface my comments I would like to say that I am a resident of Valdez, NM. I love the outdoors and utilize the national forest and other public lands on an almost daily basis. I ski regularly and have purchased ski passes at Taos Ski Valley every year since the mid-1980s.

I live and grow food on 6 acres in Valdez. I am a Parciante of the San Antonio Acequia Association and utilize the acequia to water my food crops and orchard. My property borders the Rio Hondo. I can see the river now as I write this letter. This beautiful river not only lends a lovely aesthetic to my life but it also provides the water I drink and nourishes the food I eat. I am passionate in feeling that this river, and the lives it sustains, must be preserved and not compromised.

For those readers who may not be familiar with the area, Valdez is about 6 miles immediately downstream from the Ski Area and the Village of Taos Ski Valley. After the Rio Hondo leaves the Ski Valley, the next community it touches is Valdez.

# **General Comments**

1. The Scoping Notice states:

"The CNF is currently revising the 1986 Forest Plan. The CNF estimates that a final decision will be issued in summer of 2022. Should a revised forest plan be accepted during this project process, the projects will be analyzed for compliance with the new forest plan."

The final 2022 CNF Forest Management was issued in September of 2021 and the objection filing period for the final Plan concluded on November 1, 2021. Objections are currently being resolved and the acceptance of the Final Plan is imminent. I request that the CNF pause any action on the Taos Ski Valley Gondola and Other Improvements Project until the new Forest Plan has been implemented. It would be unfair to

respondents who have taken the time to craft a response based on the 1986 plan to have their responses then analyzed under the new 2022 plan. Forest Service staff would be required to duplicate their analysis under another plan. Once the 2022 Forest Plan has been implemented a new Scoping Notice should be sent out and responses collected and analyzed under the 2022 plan.

- 2. The Notice occasionally refers to "Taos" and the "Ski Valley" without clarifying if those terms mean the Village of Taos Ski Valley, Taos Ski Valley Incorporated, the geographic area or some other entity<sup>1</sup>. Those obscure references reduce the clarity of the Notice.
- 3. Some of these projects (notably the Gondola, Water Tank and Nordic Trails area) may directly affect the headwaters of the Rio Hondo, its watershed and associated wetlands. The direct harmful effects may include, but not be limited to: loss of wildlife habitat, loss of riparian areas, decreases in populations of wildlife, degraded visual and aural integrity of the adjacent Wilderness Areas, decreases in water quality, increased sedimentation of the Rio Hondo and reduced water flow in the Rio Hondo.

The Forest Service has already acknowledged that the waters in the Carson National Forest are impacted by the on-going drought and climate change:

"In addition to changes in forest condition, recent climatic drought conditions and the resultant decline in winter and summer precipitation have contributed to decreased water storage, runoff, and yield. The current drought in northern New Mexico began in spring 1996, following several years of above average temperature and was exacerbated by subsequent below-average precipitation and continued heat. Stream gauge data from across the forest reflects this same drop in available water. All areas have significantly reduced flow. On average, streamflow has declined by 20 percent from pre-1996 levels (USDA FS Carson NF 2015a; USGS 2014)." <sup>2</sup>

If allowed to proceed as proposed, the cumulative impact of these projects, the other projects in the area, and climate change may significantly impact the forest, the river and the people in the Rio Hondo Valley by further decreasing water quality and availability in the waters of the Rio Hondo.

[See Appendix 1 for general conflicts with the 2021 Forest Management Plan]

Action Requested: I ask that the Carson National Forest (CNF) study the direct, indirect and cumulative effects of the proposed development and the interaction of that development with all the other ongoing and planned projects in and around the Ski Valley to determine the likely cumulative effects of each alternative outlined in the Draft

<sup>&</sup>lt;sup>1</sup> In this response I will try to be clear when I am referring to the business ("TSV Inc."), the Village of Taos Ski Valley ("VSTV") and use the term "Ski Valley" when I am referring to the general geographic region from Amizette to Williams lake.

<sup>&</sup>lt;sup>2</sup> (From the Environmental Impact Statement Prepared for the 2021 Carson National Forest Management Plan <u>https://www.fs.usda.gov/Internet/FSE\_DOCUMENTS/fseprd942564.pdf</u>)

EIS. That analysis should consider the project's effect on water quality and quantity, fire risk, wildlife and the social and cultural impact on human populations along the Rio Hondo and its headwaters. Those effects should be analyzed under each alternative proposed in the Draft EIS.

Action Requested: I ask that the CNF study the proposed development and the interaction of that development with all the other ongoing and planned projects in and around the Ski Valley to determine their direct, indirect and cumulative effects on fire risk in the Ski Valley. That analysis should consider not only the effects of diminishing water availability but also the fire fighting capacity of local responders and systems.

4. It is reasonably foreseeable that the proposed projects, combined with the cumulative impacts of all the other incipient, public and private projects in the area, will increase visitor days in the Ski Valley. An increase in the number of visitor days will increase resource usage in the valley and put additional pressure on existing roads, water and sewage systems as well as increase demand for residential and commercial space and public services. Those increasing pressures may lead to a degradation of the forest and human (social, cultural and economic) environments.

It is difficult to assess the impact of the proposed individual projects without understanding the scope, timing and impact of the other public and private projects proposed for the area. The cumulative impact of all of those projects may create undesired outcomes that are not apparent when the proposed projects are considered independently.

Action Requested: I ask the Forest Service to study the foreseeable increases in visitor days and identify their forest and human impacts under each alternative in the Draft EIS. Also include an analysis of how many visitor days the area can support based on existing resources. Conduct the study considering not only the proposed projects but all other projects proposed for the Ski Valley area whether they are public or private.

5. Outside of the professional Ski Patrol which only responds to emergencies on the ski slopes during TSV Inc. operating hours, first responder services in the Ski Valley are provided by a very small number of professionals and volunteers. An increase in the number of visitors and their dispersion across a wider area may strain the current system. Lack of adequate first responder systems may result in avoidable negative outcomes from unavoidable incidents.

Action Requested: I ask that the Carson National Forest (CNF) analyze each alternative outlined in the Draft EIS to understand the impact on emergency services in the area. The analysis should consider the current and foreseeable potential capacity of the emergency service in the Ski Valley and take into account foreseeable increases in visitor days, longer operational periods and the distinct hazards inherent in the newly proposed activities.

6. Many parts of the proposal require removing additional trees from the Rio Hondo watershed. Taos Ski Valley (TSV) Inc. has already cleared a significant number of trees (the cleared ski runs alone comprise hundreds of acres) in the area and has plans to clear many more acres. TSV Inc.'s removal of trees combined with the devastating effects of the December 2021 windstorm has cleared a significant portion of the forest floor in the Kachina Basin. Bark beetle infestations, a foreseeable follow-on to the windstorm, are predicted to increase the loss of forest. The loss of trees is a significant contributor to the decline of forest health and an associated decline in nearby water quality and quantity as well as a significant detriment to wildlife habitat.



Figure 1. Recent habitat Loss in the Kachina Basin Due to December 2021 Windstorm

Action Requested: I ask the CNF to conduct a new study of the current state of the forest in the Kachina Basin and quantify the effects of the December 2021 windstorm. I further ask the CNF to analyze each alternative outlined in the Draft EIS to assess their direct, indirect and cumulative impact on forest health as assessed under that study.

7. Many of the projects proposed in the Notice will require disturbing the soil and excavating areas high on the mountain. Those activities may harm the watershed and disrupt the hydrology of the area in which they are conducted. If construction disturbs

springs or other groundwaters, water quality and availability may be compromised. However during periods of drought springs, seeps and streams may recede and not be immediately apparent. The proposed sites need to be studied to rule out any impact to the hydrology of the area.

Action Requested: I ask the Forest Service to conduct studies of the areas for proposed construction, including the restaurants, lift towers, nordic center, gondola, construction base, construction roads, and all other permanent and temporary structures to identify all hydrological features, including not currently active springs, seeps and streams. I further ask the CNF to analyze each alternative outlined in the Draft EIS to assess their direct, indirect and cumulative impact on the hydrology of the forest as in those areas.

8. The areas proposed for development are important habitats for several at-risk species, including but not limited to: Pikas, Ptarmigan, Golden Eagles, Pine Martens and Cut-throat Trout. Their terrain may be impacted during and after the proposed projects.

Action Requested: I ask that the CNF study the proposed development and the interaction of that development with all the other ongoing and planned projects in and around the Ski Valley to determine their direct, indirect and cumulative effects on the Species of Conservation Concern identified in CNF's 2020 "Potential Species of Conservation<sup>3</sup>" which are present in the project area, to determine the likely cumulative effects of each alternative outlined in the Draft EIS on those species.

9. The Rio Hondo is a vital component of the rural historic communities that lie along its path. These communities are traditional hispanic mountain villages that rely on the waters of the Rio Hondo to fill their acequias in support of their traditional lifestyles. In addition to supplying the acequias, the Rio Hondo is the ultimate source for all the drinking water and domestic use water in the canyon and the valley. Therefore the quality of the water in all branches of the Rio Hondo is vitally important to the residents of the Rio Hondo communities. Any decrease in water quality or decrease in supply at the headwaters of the Rio Hondo may have a significant negative impact on life in Valdez, Cañoncito and Arroyo Hondo. Agriculture, health and cultural practices may all be negatively affected. The projects proposed in this notice have the potential to spoil the Rio Hondo for the downstream rural historic communities.

Action Requested: I ask that the CNF analyze each alternative outlined in the Draft EIS to determine its direct, indirect and cumulative effects on the downstream rural historic communities before, during and after all phases of the project.

10. The stated intention of TSV Inc. and the Village of Taos Ski Valley is to build out a year-round, multi-attraction resort. What is left out of this and other proposals is a discussion of the duration of the construction phases and the ability of the current road system to handle the increased traffic that will result from all phases of the proposed development. The resulting increase in traffic may create impacts as far away as Santa

<sup>&</sup>lt;sup>3</sup> https://www.fs.usda.gov/Internet/FSE\_DOCUMENTS/fseprd502770.pdf

Fe and Southern Colorado. Air pollution, congestion, degradation of roads and other harmful effects are foreseeable consequences.

Action Requested: I ask that the CNF analyze each alternative outlined in the Draft EIS to determine their direct, indirect and cumulative effect on the road system in the Ski Valley, and its approaches, including Taos and Arroyo Seco, during and after all phases of the project. I ask that the analysis include an estimate of the length of the construction phase and an estimate of Vehicle Miles Traveled (VMT) for the vehicles used in the construction phase as well as VMT for the increased number of vehicles that will be traveling to the Ski Valley after construction is completed. The roads studied in this analysis should include all regional highways into Taos County and leading to the Taos Ski Valley Base Area.

# **Comments on Specific Components**

# Coordination with Rural Historic Communities

The waters of the Rio Hondo are important for cultural and traditional needs as well as for subsistence practices and economic support of rural historic communities. While the proposed projects may directly affect the waters of the Rio Hondo the proposal makes no provisions for ensuring that the water is of high quality, and is available in sustainable amounts. A more reasonable plan would include provisions for measuring and monitoring the quantity and quality of water in the Rio Hondo as well as cooperatively managing the flow of the river. It is reasonably foreseeable that the lack of consideration of the Rio Hondo communities' needs may result in Rio Hondo water being unavailable and/or unacceptable for use.

Increases in visitor days due to increased development in the Ski Valley may impact the downstream rural historic communities by increasing commercial and residential development along the roads leading to the Ski Valley and in the villages in the area. Competition for scarce resources, including water, land and health and social services may have a negative impact on the economy and culture of the rural historic communities along the Rio Hondo.

[See Appendix 2 for conflicts with the 2021 Forest Management Plan]

Action Requested: I ask that the Carson National Forest (CNF) analyze each alternative outlined in the Draft EIS to understand the direct, indirect and cumulative effects of the projects on the rural, historic communities along the Rio Hondo. The analysis should include the project's effect on the quantity and quality of the water in the Rio Hondo as well as the project's impact on the economy, health, services and culture of the Rio Hondo rural historic communities.

# Gondola

The Kachina Basin is sited in one of the most majestic and wild areas of the State. Positioned in the midst of the Wheeler Peak Wilderness Area, the Columbine-Hondo Wilderness Area and the

Carson National Forest, it is surrounded by many of the highest peaks in the State. The Federal Government has already recognized how important yet fragile this environment is by permanently protecting most of the land in the area. The small amount of private land in the area is hard to access, hard to build on and not suited for anything but minor, low density development.

A gondola is not necessary to the operation of the Ski Area. Taos Ski Valley has been successfully operating for 60 years without lift or gondola access along the Lake Fork of the Rio Hondo. No base-to-base lift or gondola was in operation even at the peak of the Ski Valley's popularity in the 1990s when skier days were almost 33% higher than today.

Some commentators have suggested that the gondola will provide an alternative means of accessing the ski slopes during wind events that shut down Lift 1. I feel that when wind conditions are high enough to shut down Lift 1 it is probably foolhardy.to be riding other lifts in the Ski Valley. Furthermore, wind effects are amplified in the Kachina Basin. The worst effects of the wind event of December 2021 were in the Kachina Basin (see Figure 1). Wind speeds in the area were measured at over 100 mph and while still high, were much lower in other areas of the Ski Valley. Under those conditions, fleeing Lift 1 to ride Lift 4 is "jumping out of the frying pan and into the fire."

The gondola may exacerbate the existing overuse of the Basin by facilitating further development. New businesses and attractions will be built in the Kachina Basin to accommodate the visitors arriving by gondola. Indeed, TSV Inc. already has plans to build about 100 new residences/housing units and about 20,000 square feet of additional commercial space in the Basin<sup>4</sup>. Those businesses and attractions will further increase the number of people wishing to visit the Basin. Supply and demand will synergistically reinforce each other to increase development and visitation in an area that is already overburdened.

TSV Inc. presents the gondola as a means to reduce vehicular traffic in the Basin. But constructing a gondola will not reduce traffic on Kachina Road. Local residents hoping for a reduction in traffic will be disappointed to discover that TSV Inc.'s plans to make the Ski Valley a year-round resort will result in what is now a seasonal traffic problem becoming a year-round traffic problem.

No matter how well TSV Inc. designs and operates the gondola, commercial deliveries to the increased number of businesses and attractions will need to be made by vehicles. In addition, the majority of the new residents of the 100 new housing units will choose to drive their vehicles to their homes because they won't want to leave their cars in the base area and to ensure that transportation is available when the gondola is not operating.

Even when the gondola is operating, some percentage of visitors to the Kachina Basin will always choose to drive their vehicles up the access road. Employees of the newly established businesses whose schedules don't match the gondola's operating hours will drive up the road to

<sup>&</sup>lt;sup>4</sup> <u>https://designworkshop.app.box.com/s/ilahna8d6nqsm0b6npg7iyg6swpt09o2</u>

work. I anticipate that the gondola, as part of the already planned commercial and residential development of the Kachina Basin, will increase traffic on the access road.

TSV Inc. also anticipates, and is planning for, an increase in traffic in the Basin. They are proposing<sup>5</sup> to almost double the number of parking spaces in the Basin. Doubling the number of parking spaces means double the number of cars in the area.

The Scoping Notice doesn't say whether riders will be charged to use the gondola. If there is a fee to ride the gondola, an even larger percentage of potential riders will choose to drive up Kachina Road rather than pay the fee. If the gondola is free it will become a regional attraction increasing crowds, noise, garbage, and sewage, and disturbing the wildlife.

In the long term, the cumulative impacts of the gondola and the follow-on development may result in even more congestion as well as serious environmental degradation of the entire Kachina basin and the adjacent wilderness areas. Besides being unnecessary and having the potential to create significant damage to the Kachina Basin the gondola may conflict with Forest Service direction as contained in §2343.14(1)g of the Forest Service Manual which says "increase utilization of snow sports facilities and not require extensive new support facilities, such as parking lots, restaurants, and <u>lifts</u>."

Beyond its impact on development of the Kachina Basin, the gondola equipment and facilities have significant issues that may impact the environment of the Basin. Firstly, the description of the gondola is inadequate to assess all of its impacts. For example, there is no information on the gondola speed and height, how many cabins it will have, how noisy it will be and the proposed operating schedule.

What is known about the gondola equipment and facilities is disturbing. According to the map distributed with the Scoping Notice, the proposed route of the gondola will be immediately adjacent to, and, at points, directly on the Lake Fork of the Rio Hondo. The Scoping Notice says that a corridor will be cleared of trees to allow passage of the gondola cabins. That clearing, specified at 20 feet wide<sup>6</sup> and totaling about 3.5 acres, would be immediately adjacent to the Lake Fork of the Rio Hondo for most of its length and at some points on the river itself. Removing trees along the banks of the Lake Fork may increase silt and suspended particulate matter (SPM), destabilize banks and increase storm run-off among other harmful effects. Removing soil to place gondola towers may destabilize soil, damage plantlife and harm habitat. The end result may be decreased water quality as well as the degradation of aquatic wildlife habitat.

In addition, stripping the forest from the banks of the river may compromise, and in some places destroy, important riparian habitat for the wildlife found along the Lake Fork of the Rio Hondo. Those animal's eating, drinking and mating habits may be affected by the year-round, 12 hours-a-day noise and visual disturbance, and the increased presence of humans. The Lake

<sup>5</sup> Ibid.

<sup>&</sup>lt;sup>6</sup> Taos Region Clean Energy Transportation and Recreation Corridor proposal Feb. 8, 2022

Fork of the Rio Hondo provides an irreplaceable wildlife corridor. The proposed development may ruin the habitat and conditions that wildlife require to utilize the corridor.

Wildlife along the Lake Fork currently have relatively undisturbed access to the creek's waters and habitat for most of the year. Even during the 4 ½ month ski season human activities are low impact and are limited to a portion of the daylight hours. A year-round gondola station operating for most of the day and part of the night may discourage animals from visiting the water sources of the Lake Fork of the Rio Hondo and its associated wetlands. Lack of access to critical water and food may lead to decreased wildlife populations and increased stress on the remaining animals.

Based on the map distributed with the Notice and the limited description in the text of the Notice, TSV Inc. is proposing to build a Bridge/Terminal/Maintenance Complex in a riparian area and either on or immediately adjacent to a wetland. The "small stream" to be bridged and built on, is an important part of the Rio Hondo system and has an associated riparian environment. It not only adds its waters to the Lake Fork of the Rio Hondo but is a prime reason wetlands exist in the area.



Figure 2. Relationship of wetlands to gondola site

Those wetlands are a unique and important part of the forest environment in the Kachina basin. Just like the rest of the Rio Hondo system, the wetlands support an amazing variety of animals and contribute to the ecological diversity of the area. The wetlands have already been disturbed by the construction of a road through their midst and the placement of the Bavarian restaurant. Further constraining the stream and wetlands with a bridge and building foundations for the gondola facility may diminish riparian habitat and the wetlands.

Locating the proposed gondola maintenance facility in the Lake Fork riparian area and on, or near, the wetland creates an unacceptable level of risk for contamination by the products to be used to maintain the gondola. Building the maintenance facility as proposed would likely violate Section V. B., Water Pollution, of the Ski Area Term Special Use Permit issued 6/5/2014 which reads, in part, "Storage facilities for materials capable of causing water pollution, if accidentially discharged, shall be located so as to prevent any spillage into waters or channels leading into water that would result in harm to fish and wildlife or to human water supplies." It would also conflict with the Riparian Management Zone Guidelines (FW-WSW-RMZ-G) of the Forest Management Plan: "To protect water quality and aquatic species, refueling, <u>maintaining</u> equipment, and storing fuels or other toxicants should not occur in riparian management zones"

A gondola with its high towers, large permanent infrastructure and moving cabins may not meet the Visual Quality Objectives or Wilderness Desired Conditions of the Forest Management Plan. The gondola infrastructure will be easily visible from areas with high scenic integrity, including areas of the adjacent Wilderness Areas. Building the gondola would likely violate Section V. C., Esthetics, of the Ski Area Term Special Use Permit issued 6/5/2014. Furthermore §2343.14(1)e1 of the Forest Service manual requires "facilities to be visually consistent with or subordinate to the ski area's existing facilities, vegetation and landscape." Given its nature and the elements required for operation, it is hard to see how the proposed gondola will meet this requirement.

While the Forest Management Plan does not have conditions or guidelines for noise, it is important to consider the effects the gondola may have on the aural environment. Just as it may impact the visual environment, a gondola will create constant, unnatural noise over more than a mile of crucial habitat. And that noise may carry well beyond the path of the gondola. Based on the limited description of the operations of the gondola system, that noise will be created from dawn through the evening hours. Noise from the gondola may impact wildlife and interfere with their feeding, sleeping, mating and traveling through the forest.

[See Appendix 3 for conflicts with the 2021 Forest Management Plan]

Action Requested: Include not building the gondola Project as one of the alternatives to be considered in the Draft EIS.

Action Requested: I ask that the Carson National Forest (CNF) study the direct, indirect and cumulative effects of the gondola development and the interaction of that development with other proposed or ongoing projects, both public and private to determine the likely cumulative

effects of each alternative outlined in the Draft EIS. That analysis should consider the gondola's effect on water quality and quantity, wildlife, nearby wilderness areas, riparian areas, wetlands, traffic, and crowding.

Action Requested: Address the gondola's conflicts with the Forest Service Manual in the Draft EIS.

Action Requested: I ask that the Carson National Forest (CNF) study the direct, indirect and cumulative effects of the gondola development on the fragile Kachina Basin riparian and wetland environments under each of the scenarios in the Draft EIS.

Action Requested: I ask that the Carson National Forest (CNF) study the direct, indirect and cumulative effects of the gondola development on the viewsheds in the area, including the adjacent wilderness areas, under each of the scenarios in the Draft EIS.

Action Requested: I ask that the Carson National Forest (CNF) study the direct, indirect and cumulative effects of the gondola development on noise levels in the area, including the adjacent wilderness areas, under each of the scenarios in the Draft EIS.

Action Requested: I ask that the Carson National Forest (CNF) study the direct, indirect and cumulative effects of the gondola development on the fragile Kachina Basin terrestrial and aquatic wildlife as well as the plant life in the Kachina Basin under each of the scenarios in the Draft EIS.

Action Requested: I ask that the Carson National Forest (CNF) study the direct, indirect and cumulative effects of the gondola development on the adjacent wilderness areas under each of the scenarios in the Draft EIS.

# Water Tank and Booster Station

The Scoping Notice proposes a 5,000,000 gallon water tank near the base of Ski Lift #2. The Notice states "these projects will not increase the current water uptake from the Rio Hondo." I submit that it is impossible to fill a 5,000,000 gallon water tank without increasing current water uptake.

Does TSV Inc. have any plans for how to use the water beyond fire fighting and snow making? In the February 2022 Taos Region Clean Energy Transportation & Recreation Corridor presentation to the Taos County Planning Board<sup>7</sup>, the Water Tank project was identified as an "economic resiliency and emergency fire suppression" project. What are those economic resiliency uses? Are they compatible with the Forest Plan and Special Use Permit? If so, how will the water used for those purposes be monitored?

The Scoping Notice states "Taos<sup>8</sup> will continue to hold a diversionary right of 200 acre-feet, or 65.2 million gallons of water from the Rio Hondo annually." A search of the Office of the State Engineer's database on April 12, 2022 showed those water rights, Permit #SD 01701, allow 200 acre feet to be diverted but further state that withdrawals are limited to a total of 21.42 acre feet

<sup>&</sup>lt;sup>7</sup> Taos Region Clean Energy Transportation and Recreation Corridor proposal Feb. 8, 2022

<sup>&</sup>lt;sup>8</sup> I assume that in this instance "Taos" means TSV Inc.

of consumptive use. Those rights are further limited by a hard cap of only 0.11 acre feet of daily consumptive use between April 11th and October 25th each year<sup>9</sup>. How will the water tank affect those limits? I would want to be sure the water tank will not be used to circumvent that seasonal usage limit.

Without additional information on the source and usage of the water it is impossible to know if that diversion and usage is permitted. Construction should be delayed until those questions are answered.

Regardless of where the water comes from, removing and sequestering five million gallons of water and frequently replenishing the tank, may affect the already stressed riparian areas of the Rio Hondo and impact the amount of water available to downstream rural historic communities.

The Scoping Notice says the Tank and Station will be a "first line of defense against a wildfire". I'm in favor of a robust wildland fire fighting capacity. An enhanced fire fighting capability is good for everyone, especially for the downstream communities since deforestation due to fire is a serious threat to our water quality. But how will this tank contribute to a fire fighting effort especially when the fires are likely to be miles away? What's the operational plan for using that water to fight a fire? Does a plan to use the tank exist? Is there a better way to enhance wildland firefighting capabilities in the area? Given the current wildfires a few miles on the other side of the Sangre de Cristo's, this is not the time to squander valuable fire fighting resources

The best defense against wildfire is a well-watered forest. Impounding springs and sequestering water in tanks removes water from the forest watershed. As the watershed dries out fire risk is increased. Won't removing 5 million gallons of water from the already drought-stricken watershed of the Rio Hondo contribute to aridification of the forest and therefore increase fire danger?

[See Appendix 4 for conflicts with the 2021 Forest Management Plan]

Action Requested: I ask that the CNF study the sources of the water to be stored in the tank. I further ask the CNF to study all the ways in which that water will be used to understand their permissibility. I ask the CNF to consider the direct, indirect and cumulative effects of the tank development under each of the scenarios in the Draft EIS. During that analysis I ask that the Forest Service consider how the proposal might create water rights conflicts with other communities, including tribal and rural historical communities.

Action Requested: I ask that the CNF study the effect of the tank on the ability to fight fire in the Ski Valley under each of the scenarios in the Draft EIS. I ask that the study consider CNF's and TSV Inc.'s firefighting plans and include TSV Inc.'s capacity to provide trained water system operators during a fire emergency.

Action Requested: I ask that the CNF study the direct, indirect and cumulative effects of removing additional water from the Rio Hondo watershed on wildfire risk under each of the

<sup>&</sup>lt;sup>9</sup> New Mexico Office of the State Engineer Permit 1701A Approved 1/28/1985

scenarios in the Draft EIS. I ask that the study consider the cumulative effects of existing water impoundments and diversions as well as proposed impoundments and diversions.

#### **Nordic and Snowshoe Trails**

I'm in favor of Nordic and Snowshoe trails. I think they are a good use of the forest and they provide easily accessible activities that will get more people into the great outdoors. But TSV Inc.'s proposed Nordic and Snowshoe trails and associated buildings will lie immediately uphill from the Rio Hondo. Developing the trails at that site may impact wildlife and water quality in the Rio Hondo. Clearing trees directly uphill from the river and placing building sites on the slope may increase runoff thereby increasing silting, sedimentation and SPM.

Unfortunately, some of those effects have already occurred and are visible today. The area identified for the Nordic and Snow Shoe center was mechanically thinned in 2021 presumably in preparation for development of the Nordic Center. Subsequent to the thinning, erosion and exposure of soil are visible along the banks of the Rio Hondo. This damage and the TSV Inc.'s apparent failure to mitigate that damage, may violate Section VIII., J., Ground Surface Protection and Restoration, of the Ski Area Term Special Use Permit issued 6/5/2014.

In addition to affecting the Rio Hondo water quality, increased amounts of silt, sediment and SPM may flow downhill to the beaver colonies immediately below the proposed Nordic site as well as the beaver lodges and dams further downstream. Fish spawning areas along the Rio Hondo may also be affected. The resulting sedimentation and increased SPM may harm the beavers and fish as they struggle to reestablish themselves in their historic range. Sedimentation and additional particulate matter may negatively impact the plants, insects, amphibians and other biota that make up the Rio Hondo ecosystem.

Surely TSV Inc. can find another, less fragile site for the Nordic and Snowshoe center.

[See Appendix 5 for conflicts with the 2021 Forest Management Plan]



Figure 2. Erosion and soil exposure following thinning at Nordic Center site, May 1, 2022



Figure 3. Beaver dam directly downhill from Nordic Center Site, May 1, 2022

Action Requested: I ask that the CNF analyze each alternative outlined in the Draft EIS to determine the direct, indirect and cumulative effects of the Nordic Center development on water quality and quantity in the Rio Hondo. That analysis should consider the harmful effects on the development on wildlife and downstream rural historic communities under each of the alternatives outlined.

Action Requested: I ask that the CNF analyze each alternative outlined in the Draft EIS to determine the direct, indirect and cumulative effects of the Nordic Center development on beaver populations in the Rio Hondo.

Action Requested: I ask that the CNF analyze each alternative outlined in the Draft EIS to determine the direct, indirect and cumulative effects of the Nordic Center development on fish populations in the Rio Hondo.

#### Lift Replacement

Completely replacing lifts #2 and #8 will require excavating the old lift tower bases, removing the debris, filling in the holes and then digging new holes for the replacement towers. While the lift cable and other moving parts of a ski lift do need periodic replacement, the towers have a much longer life span. The excavation work to remove the towers will disturb the soil, increasing runoff and erosion and potentially impacting the hydrology of the watershed.

Action Requested: I ask that the CNF analyze each alternative outlined in the Draft EIS to determine the direct, indirect and cumulative effects of removing the ski lift towers on the hydrology and forest health of the proposed area. That analysis should consider the results of the hydrological assessment requested earlier in this response. I ask that reusing the existing towers be considered as one of the alternatives approaches in the Draft EIS.

#### Restaurants

Eleven thousand square feet of new development high on the mountain will disturb the soil, potentially increasing runoff and erosion and impacting the hydrology of the watershed. It may disturb wildlife during and after construction. It will also require additional infrastructure for utilities which may have similar impacts.

The Notice indicates that TSV Inc. has not yet identified how it will handle the sewage from these facilities. That seems to be an important question to leave unresolved. It indicates that the sewage might be piped down the mountain, which raises questions of the length and route of the sewer pipes, its ultimate destination, and how the skiers, the mountain and the watershed will be protected from leaks and spillages. The Notice also suggests the sewage might be "manually" hauled down the mountain. That mechanism also raises questions of its ultimate destination, and how the watershed will be protected from leaks and spillages.

The Ski Area already has multiple restaurants close to the lifts and slopes, additional facilities are not needed. Indeed, TSV Inc. found its restaurant capacity excessive enough that they closed the Phoenix Grill, one of its largest on-mountain dining facilities, just a few years ago. If needed, the existing Whistlestop Cafe and still existing Phoenix Grill building can be renovated to provide more modern dining facilities.

The proposed restaurants may conflict with Forest Service direction as contained in §2343.14(1)g of the Forest Service Manual which says "increase utilization of snow sports facilities and not require extensive new support facilities, such as parking lots, <u>restaurants</u>, and lifts."

[See Appendix 6 for conflicts with the 2021 Forest Management Plan]

Action Requested: I ask that the CNF add reusing the Phoenix and Whistle Stop facilities as one of the alternatives in the Draft EIS.

Action Requested: I ask that the CNF analyze each alternative outlined in the Draft EIS to determine the direct, indirect and cumulative effects of the restaurant development on the hydrology and wildlife populations of the proposed sites.

Action Requested: I ask that the CNF analyze each alternative outlined in the Draft EIS to determine the direct, indirect and cumulative effects of decommissioning the Whistlestop Cafe on the soil and wildlife in the area.

Action Requested: I ask that the CNF analyze each alternative outlined in the Draft EIS to determine the direct, indirect and cumulative effects of both piping sewage down the mountain or "manually" hauling it down the mountain.

Action Requested: Address the conflicts with the Forest Service Manual in the Draft EIS.

#### Summary

I believe the Gondola and Restaurants are not appropriate or necessary. The Water Tank raises serious questions which should be answered before proceeding. I also believe that the proposed Nordic and Snowshoe center is inappropriately sited on the banks of the Rio Hondo. All of the proposed projects have the potential of disturbing and degrading the headwaters of the Rio Hondo. I believe they have the potential to negatively impact the waters of the Rio Hondo, harm the forest flora and fauna and endanger the centuries old traditional lifestyles along the Rio Hondo.

I ask that the Forest Service prepare an Environmental Impact Statement for these projects. I request the Forest Service identify and evaluate a reasonable range of alternatives that meet the purpose and need for the Proposed Action in the Draft EIS. The Draft EIS should evaluate all reasonable alternatives, including those that are "practical or feasible from the technical and economic standpoint and using common sense, rather than simply desirable from the standpoint of the applicant," and with sufficient detail so as to provide the public with a fair opportunity to compare and contrast the environmental impacts of the alternatives. Specifically, the Draft EIS should evaluate at a minimum: one (1) no action alternative; one (1) alternative that includes the entire Proposed Action; and, as many as needed, but no fewer than four (4) different alternatives that each include some but not all component parts of Proposed Action. Two specific alternatives have already been requested in the response. If the Forest Service selects a preferred alternative, then it is imperative that the preferred alternative be rigorously analyzed in the Draft EIS. The Draft EIS should conduct a comprehensive analysis of any and all direct impacts, indirect impacts, and cumulative effects that would result from implementing the Proposed Action. These should include, but not limited to, socio-economic, ecological, aesthetic, historic, cultural, economic, social, or health impacts.

#### **Closing Thoughts**

In the early 2000's it was easy to see that the Blake family had exhausted its ability to keep the Ski Area up-to-date and attractive to a new generation of skiers. I was excited when I heard that the Blakes were going to sell Louis Bacon. Mr. Bacon obviously had the resources to renovate the Ski Area but more importantly he also had a reputation as a conservationist who understood the limits of development and the value of maintaining and supporting tradition. As aging lifts were replaced, new terrain was opened, and facilities were upgraded, I felt that Taos Ski Valley was in good hands.

But further development in recent years has given me doubts about that confidence. The base area has been spiritually hollowed out and replaced by a generic facility. Most of the shops run by local folks have disappeared. Food quality and variety has decreased while prices have risen. Ticket prices have skyrocketed. Familiar faces are gone. Twenty-five dollar Ice Skating.

And now we have the current proposal. Instead of "building better" we are getting "building the same". We're getting development "because we can." Mr. Bacon hired an experienced,

professional team of ski industry professionals to manage TSV. They all have earned records of success in their previous ventures. And, not surprisingly, they are proposing to do to TSV what they did in those other areas.

We're getting a cookie cutter ski area. We're getting Vail on the Rio Grande. But people have always come to Taos because it is different. If people want a Vail-style experience they don't need to travel all this way, they can get that at their home ski areas or they can get the original version up in Colorado. Once we look and act like all the other areas we are no longer unique and we become irrelevant.

Leveraged real estate development is being promoted over the fish, the elk, the ptarmigans, the water and the people. It's time to move beyond development "because we can" or because we lack the vision to see other ways of running a business. Our world is, literally, on fire. It's time to do it differently.

I appreciate this opportunity to share my thoughts and comments. I look forward to the continuation of this valuable process.

# Appendices

Conflicts with 2021 Forest Management Plan<sup>10</sup>

This analysis is an integral part of my response and should be considered with the rest of my response.

# Appendix 1 - General Comment 3:

# Lands Desired Conditions (FW-LAND-DC):

"1. NFS lands exist as a mostly contiguous land base that best provides for and contributes to long-term socioeconomic diversity and stability of local communities, management of vegetation and watershed health, wildlife habitat and diversity, and recreation and scenic opportunity."

Conflict Explained: The actions proposed in this notice may diminish socioeconomic diversity and stability of local communities, watershed health, wildlife habitat and diversity, and scenic opportunity by removing habitat, compromising riparian areas, and reducing water quality and volume.

<sup>&</sup>lt;sup>10</sup> Here I reference components of the Final Carson National Forest Land Management Plan (MB-R3-02-11) as posted at <u>https://www.fs.usda.gov/Internet/FSE\_DOCUMENTS/fseprd942568.pdf</u>. My intent is not to provide a legalistic analysis of the proposed projects, rather these references serve to place my concerns in the language and context of the Forest Service's own standards and guidelines. I hope that doing so will more easily allow the Forest Service to understand, manage and respond to my response.

# Appendix 2 - Coordination with Rural Historic Communities

# Rural Historic Communities Desired Conditions (FW-RHC-DC):

"1. The uniqueness and values of rural historic communities and the traditional uses important for maintaining these cultures are recognized and valued as important.

"2. The long history and ties of rural historic communities and traditional uses (e.g., livestock grazing, fuelwood gathering, acequias, and hunting) to NFS lands and resources is understood and appreciated.

"3. Forest resources important for cultural and traditional needs (e.g., osha, piñon nuts, okote [pitch wood], medicinal herbs, and micaceous clay), as well as for subsistence practices and economic support of rural historic communities (e.g., livestock grazing, acequias, firewood, vigas, latillas, gravel, soils, and other forest products) are available and sustainable."

Conflict Explained: By failing to recognize, value, understand and appreciate the needs of rural historic communities, and include them in the plan, TSV Inc. has failed its responsibilities to those cultural institutions. Reduced water quality and volume may reduce the economic and cultural viability of rural historic communities.

# Cultural Resources Desired Conditions (FW-CR-DC)

"5. Traditional communities (e.g., land grant-merced and acequia governing bodies, federally recognized tribes) have opportunities to participate in the identification, protection, and preservation of cultural and historic resources that have importance to them.

# Cultural Resources Guidelines (FW-CR-G)

"1. When adverse effects to cultural and historic resources occur, known communities to whom the resources are important should be involved in the resolution of the adverse effects."

Conflict Explained: There is no evidence in the Notice that rural historic communities were directly involved in the planning process.

Appendix 3 - Gondola Project

#### Scenery Desired Conditions (FW-SCEN-DC)

"5. The Carson appears predominantly natural and human activities do not dominate the landscape.

"6. High-quality scenery dominates the landscape in areas that the public values highly for scenery (e.g., scenic byways, major roads and trails, and developed recreation sites) and in areas with high scenic integrity (e.g., wildernesses, wild and scenic rivers [wild classification only], inventoried roadless areas)."

Conflict Explained: The highly unnatural gondola will dominate the visual and aural environment along the Lake Fork of the Rio Hondo and in the Kachina basin. It may be easily visible from the adjoining Columbine–Hondo and Wheeler Peak Wilderness Areas and spoil the views from those areas.

#### Scenery Guidelines (FW-SCEN-G)

"1. Constructed features, facilities, and other infrastructure activities should blend with the natural appearing landscape and complement the natural setting.

"2. a. In areas with very high scenic integrity objectives, the scenic character should have only minor, if any, deviations. The areas should appear unaltered, with most of the area dominated by ecological processes. Range facilities are allowed, but mitigation measures should be used to minimize impacts to scenic quality."

Conflict Explained: Due to its nature, it is impossible for a gondola to blend with the natural landscape and complement the natural setting. It may be visible from the adjoining Columbine–Hondo and Wheeler Peak Wilderness Areas and spoil the views from those areas.

#### Watershed and Water Desired Conditions (FW-WSW-DC)

"1. Watersheds are functioning properly or trending toward proper functioning condition and resilient in that they exhibit high geomorphic, hydrologic, and biotic integrity relative to their potential condition.

"2. Ecological components (e.g., soil, vegetation, and fauna) are resilient or adaptive to disturbances, including human activities, changes in climate patterns, and natural ecological disturbances (e.g., fire, drought, flooding, wind, grazing, insects, disease, and pathogens) and maintain or improve water quality and riparian and aquatic species habitat.

"3. Soils, riparian areas, and watersheds sustain groundwater quantity and quality and recharge in aquifers. The water table is maintained at a level that sustains native riparian and aquatic vegetation, high productivity, and soil moisture characteristics.

"4. Aquatic habitats are connected and free from alterations (e.g., temperature regime changes, lack of adequate streamflow, and constructed barriers to aquatic organism passage) to allow for species migration, connectivity of fragmented populations, and genetic exchange. A constructed barrier to movement exists only to protect native aquatic species from nonnative aquatic species or for agricultural benefit (e.g., headgates)."

Conflict Explained: The project as proposed may impair the function and diminish the resiliency and adaptivity of the headwaters of the Rio Hondo by destabilizing banks, removing trees and vegetation, removing riparian areas, constraining the natural flow of the river, and impinging on wetlands and aquatic species habitat. Groundwater quality and aquatic habitats may be reduced. "5. Aquatic and riparian habitats support self-sustaining populations of native fish, as well as other aquatic and riparian species. Ecosystems provide the quantity and quality of aquatic and riparian habitat commensurate with reference conditions."

Conflict Explained: The project as proposed may negatively impact native fish of the Rio Hondo system by creating conditions which will degrade aquatic and riparian habitats negatively impacting their ability to sustain populations of fish and other aquatic and riparian species.

"6. Watersheds support multiple uses (e.g., timber, recreation, grazing, and traditional uses by tribal communities and acequia associations) with no long-term decline in ecological conditions. Short Term impacts occur only when they serve to improve conditions over the life of the plan."

Conflict Explained: The project as proposed may negatively impact ecological conditions by destabilizing banks, removing trees and vegetation, removing riparian areas, constraining the natural flow of the river, and impinging on wetlands. The project as proposed may reduce the ability of acequia associations to use the waters of the Rio Hondo by decreasing water quality.

"7. Surface water and groundwater quality meet State water quality standards for designated uses."

Conflict Explained: The project as proposed may negatively affect water and groundwater quality by destabilizing banks, removing trees and vegetation, removing riparian areas, constraining the natural flow of the river, and impinging on wetlands.

#### Riparian Management Zone Desired Conditions (FW-WSW-RMZ-DC)

"1. Riparian ecosystems are not fragmented or constrained, and are properly functioning"

Conflict Explained: The project as proposed may directly fragment and constrain riparian areas along the headwaters of the Rio Hondo by destabilizing banks, and removing the trees and vegetation that underpin the riparian ecosystem.

"2. Riparian vegetation, particularly native species, support a wide range of vertebrate and invertebrate animal species. There is adequate recruitment and reproduction to maintain diverse native plant species composition indicative of the soil moisture conditions for the site and desired conditions for the vegetation community."

Conflict Explained: The project as proposed may remove riparian vegetation along the headwaters of the Rio Hondo compromising its ability to support a wide range of species.

"4. Riparian vegetation (density and structure) provides site-appropriate shade to regulate water temperature in streams."

Conflict Explained: The project as proposed may remove riparian vegetation along the headwaters of the Rio Hondo removing the shade necessary to regulate water temperature. Increased sedimentation may decrease stream flows thereby raising temperatures.

"5. Riparian ecosystems exhibit connectivity between and within aquatic, riparian, and upland components that reflect their natural linkages and range of variability. Stream courses and other links provide habitat and movement that maintain and disperse populations of riparian-dependent species, including beaver. Riparian areas are connected vertically between surface and subsurface flows."

Conflict Explained: The project as proposed may remove riparian ecosystems along the headwaters of the Rio Hondo thereby removing their connectivity and destroying habitat.

"6. Floodplains and adjacent upland areas provide diverse habitat components (e.g., vegetation, debris, logs) necessary for migration, hibernation, and brumation (extended inactivity) specific to the needs of riparian-obligate species."

Conflict Explained: The project as proposed may remove habitat components along the headwaters of the Rio Hondo and thereby reduce diversity necessary for migration, hibernation, and brumation specific to the needs of riparian-obligate species.

"9. Commensurate with the capability of individual riparian types and consistent with the hydrologic cycle, riparian vegetation provides life-cycle habitat needs for native and desirable nonnative, obligate riparian, and aquatic species and supports other wildlife."

Conflict Explained: The project as proposed may remove riparian vegetation along the headwaters of the Rio Hondo and in doing so, remove life-cycle habitat.

#### Riparian Management Zone Guidelines (FW-WSW-RMZ-G)

"4. To protect water quality and aquatic species, refueling, maintaining equipment, and storing fuels or other toxicants should not occur in riparian management zones"

Conflict Explained: The Scoping Notice states: "a small maintenance facility would be constructed adjacent to the Kachina terminal of the gondola." The Kachina terminal of the gondola will be within a riparian management zone and immediately adjacent to a wetland. If built as proposed the maintenance facility may pose a hazard to water quality and aquatic species.

#### Streams Desired Conditions (FW-WSW-RMZ-STM-DC)

"2. Stream ecosystems, including ephemeral watercourses, provide connectivity that is important to at risk species—for dispersal, access to new habitats, perpetuation of genetic diversity, seasonal movement, as well as nesting and foraging.

"3. Aquatic species are able to move throughout their historic habitat, including opportunities for seasonal and opportunistic movements. Barriers to movement only exist to protect native aquatic species from nonnative aquatic species or for agricultural benefit (e.g., headgates).
"4. Streams and their adjacent floodplains are connected and capable of filtering, processing, and storing sediment; aiding floodplain development; facilitating floodwater retention; withstanding high flow events; and increasing groundwater recharge."

Conflict Explained: The project as proposed may remove stream ecosystems along the headwaters of the Rio Hondo removing its ability to provide connectivity and preventing aquatic species from moving through their habitat and reducing opportunities for other movements. Floodwater retention may be compromised and groundwater recharge diminished.

"5. Water quality meets or surpasses State of New Mexico water quality standards for designated uses.

"6. The quantity and timing of stream flows are sustained at levels that maintain or enhance essential ecological functions, including channel and floodplain morphology, groundwater recharge, water quality, and stream temperature regulation."

Conflict Explained: The project as proposed may remove stabilizing banks, stream trees and vegetation along the headwaters of the Rio Hondo impairing stream flows, ecological functions and water quality by increasing sedimentation and increasing water temperatures.

#### Waterbodies Desired Conditions (FW-WSW-RMZ-WB-DC)

"1. Lakes, natural ponds, and their associated wetlands have the necessary soil, water, and vegetation attributes (e.g., diverse age classes and diverse composition of native plant species) to be resilient to human and natural disturbances and changing climate conditions across the landscape."

Conflict Explained: The project as proposed may remove soil, water and vegetation attributes along the wetlands associated with the Rio Hondo system reducing their resiliency and ability to adapt to changing climate conditions.

"2. Waterbodies support native biotic communities; there is adequate riparian vegetation and large woody debris to provide ecological conditions necessary for persistence. Commensurate with site capability, native vegetation around lakes and ponds exhibits various age classes and diverse composition of native species (e.g., grasses, forbs, sedges, shrubs, and deciduous trees) and includes species that indicate maintenance of riparian soil moisture characteristics (e.g., sedges, rushes, willows, and other riparian vegetation). Vegetation associations are variable, depending on waterbody size, location, and type and may include aquatic plants or algae, submergent and floating vegetation, emergent vegetation, grasses, forbs, sedges, shrubs, and deciduous trees."

Conflict Explained: The project as proposed may remove riparian vegetation thereby harming biotic communities.

"4. Hydrophytes and emergent vegetation exist in patterns of natural abundance in waterbodies and associated wetlands, at levels that reflect climatic conditions. Overhanging vegetation and floating plants (e.g., water lilies), are present where they naturally occur."

Conflict Explained: The project as proposed may remove soil, water and vegetation attributes along the wetlands associated with the Rio Hondo system reducing the natural abundance of hydrophytes and emergent vegetation.

#### Wetland Riparian Desired Conditions (FW-WSW-RMZ-WR-DC)

"1. Necessary soil, hydrologic regime, vegetation, and water characteristics of wetland riparian vegetation communities sustain the system's ability to support unique physical and biological attributes and the diversity of associated species (e.g., shrews and voles). Soils' ability to infiltrate water, recycle nutrients, and resist erosion is maintained and allows for burrowing by at-risk species."

Conflict Explained: By removing trees and vegetation along the route of the gondola necessary soil, bank integrity, hydrologic regime, vegetation, and water characteristics of wetland riparian communities may be removed.

"2. Upland vegetation is not encroaching, and the extent of wetlands is widening or has achieved its maximum potential and is within the natural range of variability. Development of fens continues."

Conflict Explained: By constraining wetlands with a bridge, a gondola terminal and a maintenance facility the existing wetlands may be contracted and unable to achieve their maximum potential.

"4. To maintain the persistence of at-risk species, microhabitat conditions supporting bog violet (soggy soils under shrubs and willows) are present, commensurate with site potential."

Conflict Explained: By removing trees and vegetation along the route of the gondola and to clear space for the bridge, terminal and maintenance facility, at-risk species habitat may be removed.

# Wildlife, Fish, and Plant Desired Conditions (FW-WFP-DC)

"1. Sustainable populations of terrestrial and aquatic plant and animal species, including at-risk species, are supported by healthy ecosystems, as described by vegetation and watersheds and water desired conditions."

Conflict Explained: By removing trees and vegetation along the route of the gondola healthy ecosystems may be dismantled placing populations of terrestrial and aquatic plant and animal species at risk.

"2. Ecological conditions (vegetation and watersheds and water desired conditions) affecting habitat quality, distribution, and abundance contribute to self-sustaining populations of terrestrial and aquatic plant and animal species, including at-risk species, that are healthy, well distributed, genetically diverse, and connected (on NFS lands and to adjacent public and privately conserved lands), enabling species to adapt to changing environmental and climatic conditions. Conditions as described in vegetation and watersheds and water desired conditions provide for the life history, distribution, and natural population fluctuations of the species within the capability of the ecosystem."

# Conflict Explained: By removing trees and vegetation along the route of the gondola ecological conditions may be worsened and negatively impact species' ability to adapt.

"3. Ecological conditions (vegetation and watersheds and water desired conditions) provide habitat that contribute to the survival, recovery, and delisting of species under the Endangered Species Act; preclude the need for listing new species; improve conditions for species of conservation concern; and sustain both common and uncommon native species."

Conflict Explained: By removing trees and vegetation along the route of the gondola habitat may be degraded and the survival, recovery and delisting of species under the Endangered Species Act may decrease.

"4. Habitat conditions (vegetation and watersheds and water desired conditions) provide the resiliency and redundancy necessary to maintain species diversity and metapopulations."

# Conflict Explained: By removing trees and vegetation along the route of the gondola, habitat may be degraded and resilience and redundancy may decrease.

"5. Habitat connectivity and distribution provide for genetic exchange, daily and seasonal movements of animals, and predator-prey interactions across multiple spatial scales, consistent with existing landforms and topography."

Conflict Explained: By removing trees and vegetation along the route of the gondola, daily and seasonal movement of animals may decrease.

"7. To the extent possible, wildlife and fish are free from harassment and human disturbance at a scale that impacts vital functions (e.g., seasonal and daily movements, breeding, feeding, and rearing young) and could affect persistence of the species."

Conflict Explained: Constructing a large, 1,800 pph, gondola and its associated terminal building will directly increase the presence of humans which may, in turn, increase harassment and disturbance at a scale that impacts vital functions. In addition, the presence of the gondola will increase commercial activity in the area which may further increase harassment and disturbance.

"9. Habitats in the forest allow for the maintenance and promotion of interspecific relationships (e.g., predator-prey relationships and keystone species relationships)."

Conflict Explained: By removing trees and vegetation along the route of the gondola, interspecific relationships may be disrupted due to the lack of habitat for those interactions to occur.

"10. All aquatic and riparian habitats are hydrologically functioning and have sufficient emergent vegetation (as described in watersheds and water desired conditions or by site potential), as well as macroinvertebrate populations that support resident and migratory species."

Conflict Explained: By removing trees and vegetation along the route of the gondola, the proper functioning of aquatic and riparian habitats may be interrupted, in turn the habitats may fail to support resident and migratory species.

# Appendix 4 - Water Tank and Booster Station

# Watershed and Water Desired Conditions (FW-WSW-DC)

"1. Watersheds are functioning properly or trending toward proper functioning condition and resilient in that they exhibit high geomorphic, hydrologic, and biotic integrity relative to their potential condition.

"2. Ecological components (e.g., soil, vegetation, and fauna) are resilient or adaptive to disturbances, including human activities, changes in climate patterns, and natural ecological disturbances (e.g., fire, drought, flooding, wind, grazing, insects, disease, and pathogens) and maintain or improve water quality and riparian and aquatic species habitat.

"3. Soils, riparian areas, and watersheds sustain groundwater quantity and quality and recharge in aquifers. The water table is maintained at a level that sustains native riparian and aquatic vegetation, high productivity, and soil moisture characteristics."

Conflict Explained: Removing five million gallons of water from the Rio Hondo watershed and storing it in a tank will displace the water from its natural hydrological paths, decrease proper functioning and reduce the resiliency of the watershed and its ecological components. The result may be reduced groundwater quantity and quality and diminished recharge rates in aquifers.

# Rural Historic Communities Desired Conditions (FW-RHC-DC):

"1. The uniqueness and values of rural historic communities and the traditional uses important for maintaining these cultures are recognized and valued as important.

"2. The long history and ties of rural historic communities and traditional uses (e.g., livestock grazing, fuelwood gathering, acequias, and hunting) to NFS lands and resources is understood and appreciated.

"3. Forest resources important for cultural and traditional needs (e.g., osha, piñon nuts, okote [pitch wood], medicinal herbs, and micaceous clay), as well as for subsistence practices and economic support of rural historic communities (e.g., livestock grazing, acequias, firewood, vigas, latillas, gravel, soils, and other forest products) are available and sustainable."

# Cultural Resources Desired Conditions (FW-CR-DC)

"5. Traditional communities (e.g., land grant-merced and acequia governing bodies, federally recognized tribes) have opportunities to participate in the identification, protection, and preservation of cultural and historic resources that have importance to them.

# Cultural Resources Guidelines (FW-CR-G)

"1. When adverse effects to cultural and historic resources occur, known communities to whom the resources are important should be involved in the resolution of the adverse effects."

Conflict Explained: The plan as proposed fails to include the needs of historic rural communities. Ultimately reduced water quality and volume due to poor planning may reduce the economic viability of rural historic communities.

#### Appendix 5 - Nordic and Snowshoe Center

#### Watershed and Water Desired Conditions (FW-WSW-DC)

"1. Watersheds are functioning properly or trending toward proper functioning condition and resilient in that they exhibit high geomorphic, hydrologic, and biotic integrity relative to their potential condition. "

"2. Ecological components (e.g., soil, vegetation, and fauna) are resilient or adaptive to disturbances, including human activities, changes in climate patterns, and natural ecological disturbances (e.g., fire, drought, flooding, wind, grazing, insects, disease, and pathogens) and maintain or improve water quality and riparian and aquatic species habitat."

"3. Soils, riparian areas, and watersheds sustain groundwater quantity and quality and recharge in aquifers. The water table is maintained at a level that sustains native riparian and aquatic vegetation, high productivity, and soil moisture characteristics."

Conflict Explained: The project as proposed may reduce groundwater quality of the Rio Hondo system by removing trees and vegetation which may increase runoff, silting, sedimentation and SPM and increase water temperatures. The results may be decreased watershed functioning, resiliency, and water quality.

"5. Aquatic and riparian habitats support self-sustaining populations of native fish, as well as other aquatic and riparian species. Ecosystems provide the quantity and quality of aquatic and riparian habitat commensurate with reference conditions."

Conflict Explained: The project as proposed may negatively impact native fish of the Rio Hondo system by removing trees and vegetation leading to increased silting, sedimentation, SPM and higher temperatures in the aquatic and riparian habitats.

"6. Watersheds support multiple uses (e.g., timber, recreation, grazing, and traditional uses by tribal communities and acequia associations) with no long-term decline in ecological conditions. Short Term impacts occur only when they serve to improve conditions over the life of the plan."

Conflict Explained: The project as proposed may negatively impact ecological conditions by removing trees and vegetation. The project as proposed may reduce the ability of acequia associations to use the waters of the Rio Hondo by decreasing water quality.

"7. Surface water and groundwater quality meet State water quality standards for designated uses."

Conflict Explained: The project as proposed may reduce groundwater quality of the Rio Hondo system by removing trees and vegetation which may increase runoff, silting, sedimentation, SPM and increase water temperatures. The results may be decreased water quality.

#### **Riparian Management Zone Desired Conditions (FW-WSW-RMZ-DC)**

"1. Riparian ecosystems are not fragmented or constrained, and are properly functioning"

Conflict Explained: The project as proposed may reduce functioning of riparian ecosystems of the Rio Hondo by removing trees and vegetation which may increase runoff, silting, sedimentation, SPM and increase water temperatures.

"2. Riparian vegetation, particularly native species, support a wide range of vertebrate and invertebrate animal species. There is adequate recruitment and reproduction to maintain diverse

native plant species composition indicative of the soil moisture conditions for the site and desired conditions for the vegetation community."

Conflict Explained: The project as proposed may negatively impact riparian vegetation due to decreased soil moisture resulting from the removal of trees and vegetation from the site.

"4. Riparian vegetation (density and structure) provides site-appropriate shade to regulate water temperature in streams."

Conflict Explained: The project as proposed may reduce the ability of riparian ecosystems to provide shade to the Rio Hondo by removing trees and vegetation.

"5. Riparian ecosystems exhibit connectivity between and within aquatic, riparian, and upland components that reflect their natural linkages and range of variability. Stream courses and other links provide habitat and movement that maintain and disperse populations of riparian-dependent species, including beaver. Riparian areas are connected vertically between surface and subsurface flows."

Conflict Explained: The project as proposed is directly adjacent to one or more active beaver colonies and immediately upstream from several more colonies. The beavers are currently struggling to reestablish themselves in their traditional range. The removal of trees and vegetation from the Nordic site may result in increased silting, sedimentation and SPM detrimental not only to the beavers, but to all the animals along the Rio Hondo. It may also result in the removal of food from the beaver's habitat.

"6. Floodplains and adjacent upland areas provide diverse habitat components (e.g., vegetation, debris, logs) necessary for migration, hibernation, and brumation (extended inactivity) specific to the needs of riparian-obligate species."

Conflict Explained: The project as proposed may remove habitat components along the upland areas of the Rio Hondo reducing diversity of habitat.

#### Streams Desired Conditions (FW-WSW-RMZ-STM-DC)

"2. Stream ecosystems, including ephemeral watercourses, provide connectivity that is important to at risk species—for dispersal, access to new habitats, perpetuation of genetic diversity, seasonal movement, as well as nesting and foraging."

"3. Aquatic species are able to move throughout their historic habitat, including opportunities for seasonal and opportunistic movements. Barriers to movement only exist to protect native aquatic species from nonnative aquatic species or for agricultural benefit (e.g., headgates)."

Conflict Explained: The project as proposed may reduce functioning of riparian ecosystems of the Rio Hondo by removing trees and vegetation which may increase runoff, silting, sedimentation and SPM and increase water temperatures which in turn may affect species ability to move through and utilize the environment.

"4. Streams and their adjacent floodplains are connected and capable of filtering, processing, and storing sediment; aiding floodplain development; facilitating floodwater retention; withstanding high flow events; and increasing groundwater recharge."

Conflict Explained: The project as proposed may remove trees and vegetation from along the Rio Hondo. Removal of trees and vegetation may decrease floodwater retention and groundwater recharge may be diminished.

"5. Water quality meets or surpasses State of New Mexico water quality standards for designated uses."

Conflict Explained: The project as proposed will remove trees and vegetation from along the Rio Hondo reducing water quality by increasing sedimentation and SPM and increasing water temperatures.

#### Wetland Riparian Desired Conditions (FW-WSW-RMZ-WR-DC)

"1. Necessary soil, hydrologic regime, vegetation, and water characteristics of wetland riparian vegetation communities sustain the system's ability to support unique physical and biological attributes and the diversity of associated species (e.g., shrews and voles). Soils' ability to infiltrate water, recycle nutrients, and resist erosion is maintained and allows for burrowing by at-risk species."

Conflict Explained: The project as proposed will remove trees and vegetation from along the Rio Hondo exposing and drying out soils and reducing the systems ability to support unique attributes and a diversity of species. Without its natural cover the soils' ability to infiltrate water, recycle nutrients, and resist erosion may be compromised.

# Wildlife, Fish, and Plant Desired Conditions (FW-WFP-DC)

"1. Sustainable populations of terrestrial and aquatic plant and animal species, including at-risk species, are supported by healthy ecosystems, as described by vegetation and watersheds and water desired conditions."

Conflict Explained: The project as proposed may reduce functioning of riparian ecosystems of the Rio Hondo by removing trees and vegetation which may increase runoff, silting, sedimentation, SPM, and increase water temperatures. These changes may reduce the health of the ecosystem and its ability to sustain plant and animal species.

"2. Ecological conditions (vegetation and watersheds and water desired conditions) affecting habitat quality, distribution, and abundance contribute to self-sustaining populations of terrestrial and aquatic plant and animal species, including at-risk species, that are healthy, well distributed, genetically diverse, and connected (on NFS lands and to adjacent public and privately conserved lands), enabling species to adapt to changing environmental and climatic conditions. Conditions as described in vegetation and watersheds and water desired conditions provide for the life history, distribution, and natural population fluctuations of the species within the capability of the ecosystem."

Conflict Explained: The project as proposed may reduce the functioning of riparian ecosystems of the Rio Hondo by removing trees and vegetation which may increase runoff, silting, sedimentation, SPM and increase water temperatures. These changes may reduce the health of the ecosystem and negatively impact species ability to adapt.

"3. Ecological conditions (vegetation and watersheds and water desired conditions) provide habitat that contribute to the survival, recovery, and delisting of species under the Endangered Species Act; preclude the need for listing new species; improve conditions for species of conservation concern; and sustain both common and uncommon native species." Conflict Explained: By removing trees and vegetation habitat may be degraded and the survival, recovery and delisting of species under the Endangered Species Act may decrease.

"4. Habitat conditions (vegetation and watersheds and water desired conditions) provide the resiliency and redundancy necessary to maintain species diversity and metapopulations."

Conflict Explained: By removing trees and vegetation, habitat may be degraded and resilience and redundancy may decrease.

"5. Habitat connectivity and distribution provide for genetic exchange, daily and seasonal movements of animals, and predator-prey interactions across multiple spatial scales, consistent with existing landforms and topography."

Conflict Explained: By removing trees and vegetation, daily and seasonal movement of animals may decrease due to decreased cover and the presence of buildings and humans.

"7. To the extent possible, wildlife and fish are free from harassment and human disturbance at a scale that impacts vital functions (e.g., seasonal and daily movements, breeding, feeding, and rearing young) and could affect persistence of the species."

Conflict Explained: Constructing buildings and increasing the presence of humans may increase harassment and disturbance at a scale that impacts vital functions.

"9. Habitats in the forest allow for the maintenance and promotion of interspecific relationships (e.g., predator-prey relationships and keystone species relationships)."

Conflict Explained: By removing trees and vegetation interspecific relationships may be disrupted due to the lack of habitat for those interactions to occur.

#### Appendix 6 - Restaurants

#### Watershed and Water Desired Conditions (FW-WSW-DC)

"1. Watersheds are functioning properly or trending toward proper functioning condition and resilient in that they exhibit high geomorphic, hydrologic, and biotic integrity relative to their potential condition.

"2. Ecological components (e.g., soil, vegetation, and fauna) are resilient or adaptive to disturbances, including human activities, changes in climate patterns, and natural ecological disturbances (e.g., fire, drought, flooding, wind, grazing, insects, disease, and pathogens) and maintain or improve water quality and riparian and aquatic species habitat.

"3. Soils, riparian areas, and watersheds sustain groundwater quantity and quality and recharge in aquifers. The water table is maintained at a level that sustains native riparian and aquatic vegetation, high productivity, and soil moisture characteristics."

Conflict Explained: The project as proposed may impair the function and diminish the resiliency and adaptivity of the Rio Hondo by disturbing the soil, increasing runoff and erosion. Groundwater quality and quantity may be reduced.

"7. Surface water and groundwater quality meet State water quality standards for designated uses."

Conflict Explained: The project as proposed may negatively affect water and groundwater quality by disturbing the soil, increasing runoff and erosion. Groundwater quality and quantity may be reduced.