



VILLAGE COUNCIL REGULAR MEETING AGENDA
MEETING TO BE HELD VIA ZOOM TELECONFERENCE
TAOS SKI VALLEY, NEW MEXICO
TUESDAY, JUNE 27, 2023 2:00 P.M.

1. CALL TO ORDER AND NOTICE OF MEETING
2. ROLL CALL
3. APPROVAL OF THE AGENDA
4. APPROVAL OF THE MINUTES OF THE MAY 23, 2023 VILLAGE COUNCIL REGULAR MEETING
5. CITIZEN'S FORUM –for non-agenda items only. Limit to 5 minutes per person (please email awooldridge@vtsv.org to sign up)
6. COMMITTEE REPORTS
 - A. Planning & Zoning Commission
 - B. Public Safety Committee
 - C. Firewise Community Board
 - D. Parks & Recreation Committee
 - E. Lodger's Tax Advisory Board
7. REGIONAL REPORTS
8. MAYOR PRO TEM'S REPORT
9. STAFF REPORTS
 - A. Administrator Avila
 - B. Finance Director Griesedieck
 - C. Public Safety Director Vigil
 - D. Building Official Bowden
 - E. Planning Director Nicholson
 - F. Public Works Director Martinez
 - G. Clerk Wooldridge
10. OLD BUSINESS
 - A. PUBLIC HEARING: Consideration to adopt Ordinance No. 2023-30, an ordinance amending section 7, subsection 6, 'Avalanche Design Requirements' of Ordinance No. 2022-30, as Amended; adopting Snow Avalanche Hazard Maps for the Village; adopting regulations for new land development and building reconstruction in designated avalanche hazard zones; prohibiting new construction that adversely affects avalanche safety on other properties in the Village
11. NEW BUSINESS
 - A. Consideration to Approve Resolution No. 2023-538, A Resolution Authorizing and Approving Financial Assistance from the New Mexico State Highway and Transportation Department FY2024, NM LGRF DOT
 - B. Consideration to Approve Resolution No. 2023-539, A Resolution Authorizing and Approving Financial Assistance from the New Mexico State Highway and Transportation Department FY2023-2024 NM DOT Municipal Arterial Program (MAP) Cooperative Agreement
 - C. Consideration to Approve Resolution No. 2023-540 Election Resolution
 - D. Consideration to Approve Resolution No. 2023-541 Disposition of Records
 - E. Consideration to Approve Resolution No. 2023-542 Requesting a Permanent Budget Adjustment to the FY2023 Budget (BAR) to increase the transfers out of the General fund (03), while Increasing the Transfers in for pledged Funds to the USDA (63) for Debt Service
 - F. Consideration to Approve the Appointment of Planning & Zoning Commission Selection Committee Members

- G.** Consideration to Approve the Appointment of a Planning & Zoning Commissioner Emeritus
- H.** Consideration to Approve a 5% salary increase for all employees for the upcoming fiscal Year 23/24, as indicated in the adopted Preliminary Budget for FY24
- I.** Consideration to Approve a Cooperative Agreement for Emergency Medical Services Among Participating Agencies of the Enchanted Circle
- J.** Consideration to Approve an Amendment to the Village's Rocky Mountain Youth Corps Agreement to Include Additional Expenses for the Trails Project.
- K.** Consideration to Approve FY2024 Utility Rates for FY2024 Final Budget
- L.** Consideration to Authorize Mayor Pro Tem Wittman and Administrator Avila to Negotiate an Easement Agreement with Al Johnson on the Property Adjacent to the Village Complex at 1346 Highway 150 (item may follow Closed Session)

12. MISCELLANEOUS

13. CLOSED SESSION

- A.** Discussion of Possible Purchase, Acquisition or Disposal of Real Property or water rights by the Public Body. This matter may be discussed in closed session under Open Meetings Act exemption 10-15-1(H) (8)

14. ANNOUNCEMENT OF THE DATE, TIME & PLACE OF THE NEXT MEETING OF THE VILLAGE COUNCIL

15. ADJOURNMENT

-- Providing infrastructure & services to a World Class Ski Resort Community --



**VILLAGE COUNCIL REGULAR MEETING DRAFT MINUTES
MEETING TO BE HELD VIA ZOOM TELECONFERENCE
TAOS SKI VALLEY, NEW MEXICO
TUESDAY, MAY 23, 2023 2:00 P.M.**

1. CALL TO ORDER AND NOTICE OF MEETING

The regular meeting of the Village Council was called to order by Mayor Pro Tem Wittman at 2:00 p.m. Notice of the meeting was properly posted.

2. ROLL CALL

Ann Wooldridge, Village Clerk, called the roll and a quorum was present.

Governing Body Present:

Councilor Henry Caldwell

Councilor Brent Knox

Councilor Chris Stagg

Councilor Tom Wittman, Mayor Pro Tem

3. APPROVAL OF THE AGENDA

MOTION: To approve the agenda as written

MOTION: Councilor Stagg **SECOND:** Councilor Caldwell **PASSED:** 4-0

4. APPROVAL OF THE MINUTES OF THE APRIL 25, 2023 VILLAGE COUNCIL REGULAR MEETING and the APRIL 18, 2023 VILLAGE COUNCIL BUDGET WORKSHOP

MOTION: To Approve the minutes of the April 25, 2023 Village Council Regular Meeting and the April 18, 2023 Village Council Budget Workshop with the amendment in item 12. Miscellaneous of noting that a rate increase would meet the covenants of the WWTP loan.

MOTION: Councilor Caldwell **SECOND:** Councilor Knox **PASSED** 4-0

5. CITIZEN'S FORUM –for non-agenda items only. Limit to 5 minutes per person (please email awooldridge@vtsv.org to sign up)

Dan Vaughn spoke about summer 2023 Chamber activities.

6. COMMITTEE REPORTS

A. Planning & Zoning Commission

The Commission met on May 5, 2023 to approve referring the Avalanche Study to Council for updating the Avalanche section of the Zoning Ordinance. The Commission will meet again on June 5, 2023.

B. Public Safety Committee: Chair Trudy DiLeo relayed that there had been a presentation on remote-read meters at the Public Safety Committee meeting. The Committee urges that the Village mandate upgrades to each property's service line as well as investigating the remote-read meters for residents. Work continues on getting power lines underground in Amizette.

C. Firewise Community Board

D. Parks & Recreation Committee: Katt Kett announced Spring Clean up to be held Thursday May 25, 2023 with lunch to be held on the Plaza at 11:30 a.m. The Parks & Rec Committee is looking for volunteers to join and take over the Parks & Recreation Committee. Ms. Kett will continue to hold this position until November 2023.

E. Lodger's Tax Advisory Board: No Meeting held.

7. REGIONAL REPORTS: Administrator Avila reported on activities of the Taos Regional Landfill Board. Planning & Zoning Director Nicholson reported on the Regional Transportation Board meeting.

8. MAYOR PRO TEM'S REPORT

Mayor Pro Tem Wittman is still involved in solutions to getting water to the Wheeler Peak Condos. A potential leak in the Kachina area will be found soon, hopefully. A large leak was found at a private property on Zap's Road.

9. STAFF REPORTS

Reports were included in the Council packet and are posted to the Village website.

- A. Administrator Avila
- B. Finance Director Griesedieck
- C. Public Safety Director Vigil
- D. Building Official Bowden
- E. Planning Director Nicholson
- F. Public Works Director Martinez
- G. Clerk Wooldridge

10. OLD BUSINESS

11. NEW BUSINESS

A. Discussion, Acknowledgement, and Consideration to Approve the Village Interim Budget for Upcoming Fiscal Year FY2024, and Discussion of Budget-related Water/Sewer Rates for FY2024
Discussion took place about the Draft Budget, which was presented by Finance Officer Griesedieck.

B. Consideration to Approve **Resolution No. 2023-535** Requesting a Budget Adjustment (BAR) to the FY2023 Budget, Increasing Transfers into Law Enforcement (04), and Increasing Transfers out of the General Fund (03) to Cover Increased Expenses in FY23

MOTION: To Approve **Resolution No. 2023-535** Requesting a Budget Adjustment (BAR) to the FY2023 Budget, Increasing Transfers into Law Enforcement (04), and Increasing Transfers out of the General Fund (03) to Cover Increased Expenses in FY23

MOTION: Councilor Stagg **SECOND:** Councilor Caldwell **PASSED:4-0**

C. Consideration to Approve **Resolution No. 2023-536** Requesting a Budget Adjustment (BAR) to the FY2023 Budget, increasing revenues and expenses in the Water Reserve Fund (41) to accommodate the 2022 NM Subaward Grant of \$750,000 for Water System Repairs not Currently in the FY23 Budget

MOTION: To Approve **Resolution No. 2023-536** Requesting a Budget Adjustment (BAR) to the FY2023 Budget, increasing revenues and expenses in the Water Reserve Fund (41) to accommodate the 2022 NM Subaward Grant of \$750,000 for Water System Repairs not currently in the FY23 Budget

-- Providing infrastructure & services to a World Class Ski Resort Community --

MOTION: Councilor Stagg **SECOND:** Councilor Knox **PASSED:** 4-0

D. Consideration to Approve Resolution No. 2023-537 establishing a Village of Taos Ski Valley Policy for the Acceptance of Electronic Payments

This policy allows for electronic bank payments but does not allow for credit card payments.

MOTION: To Approve Resolution No. 2023-537 establishing a Village of Taos Ski Valley Policy for the Acceptance of Electronic Payments

MOTION: Councilor Stagg **SECOND:** Councilor Caldwell **PASSED:** 4-0

E. Consideration to Approve the Third Amendment to the April 5, 2021 Memorandum of Understanding and Agreement Regarding a Collaborative Village-wide Water System Study and Master Plan Report

This involves the next step in designing improvements for the Village's water system improvements.

MOTION: To Approve the Third Amendment to the April 5, 2021 Memorandum of Understanding and Agreement Regarding a Collaborative Village-wide Water System Study and Master Plan Report

MOTION: Councilor Stagg **SECOND:** Councilor Knox **PASSED:** 4-0

F. Consideration to Approve an Escrow and Development Agreement for Final Determination, Collection, and Payment of Development Impact Fees ("DIF") for Taos Ski Valley, Inc.'s Redevelopment of its Hotel St. Bernard Property

The Village has adopted Ordinance 2022-30 as provided by Statute for funding identified Capital projects. The ordinance stipulates the formulation of DIF charges to be collected before the building permit is issued. It also allows the Village and Developers to enter into an agreement for payment of DIF charges. To allow construction to start of the HSB buildings while the DIF charges are under review, the Village would agree to the DIF assessment being placed in escrow for use after the final decision of Council concerning eligible discounts is complete. The Council is asked to approve the escrow agreements requested to continue progress of HSB while final agreement is reached.

Staff recommends that Council approve the escrow agreements with the amendment agreed to by Mayor Pro Tem Wittman, to address how funds may be held for the payment of DIF charges. TSVI will pay \$1,000,000 to the Village now and will put the remainder of the funds into Escrow at 1st NM Title.

MOTION: To Approve an Escrow and Development Agreement for Final Determination, Collection, and Payment of Development Impact Fees ("DIF") for Taos Ski Valley, Inc.'s Redevelopment of its Hotel St. Bernard Property with the Amendment that Mayor Pro Tem agreed to

MOTION: Councilor Stagg **SECOND:** Councilor Knox **PASSED:** 3-1 **OPPOSED:** Councilor Caldwell

G. Consideration to Publish and Post Ordinance No. 2023-30, an Ordinance amending section 7, subsection 6, 'Avalanche Design Requirements' of Ordinance No. 2022-30, as Amended; adopting Snow Avalanche Hazard Maps for the Village; adopting regulations for new land development and building reconstruction in designated avalanche hazard zones; prohibiting new construction that adversely affects avalanche safety on other properties in the Village

MOTION: To Publish and Post Ordinance No. 2023-30, an Ordinance amending section 7, subsection 6, 'Avalanche Design Requirements' of Ordinance No. 2022-30, as Amended; adopting Snow Avalanche Hazard Maps for the Village; adopting regulations for new land development and building reconstruction in designated avalanche hazard zones; prohibiting new construction that adversely affects avalanche safety on other properties in the Village

-- Providing infrastructure & services to a World Class Ski Resort Community --

MOTION: Councilor Stagg **SECOND:** Councilor Knox

Discussion took place about the study and the Avalanche report.

PASSED: 4-0

12. MISCELLANEOUS: No Reports

13. CLOSED SESSION

A. Discussion of Threatened or Pending Litigation. This matter may be discussed in closed session under Open Meetings Act exemption 10-15-1(H) (7)

No Closed Session took place.

14. ANNOUNCEMENT OF THE DATE, TIME & PLACE OF THE NEXT MEETING OF THE VILLAGE COUNCIL

The next meeting of the Village Council will be the regular meeting on June 27, 2023 at 2:00 p.m. via Zoom.

15. ADJOURNMENT

MOTION: To Adjourn

MOTION: Councilor Caldwell **SECOND:** Councilor Knox **PASSED:** 4-0

Attest: _____

Mayor Pro Tem Wittman

Ann M. Wooldridge, Village Clerk

-- Providing infrastructure & services to a World Class Ski Resort Community --

John Avila
Village Administrator
Village of Taos Ski Valley Council
Monthly Briefing
June 27, 2023



*** Ongoing & Past Projects ***

WWTP

Required mediation with Ovivo to have them make corrections to the Wastewater Treatment Plant is scheduled for the end of August. A review of the entire plant by subject a matter expert proceeded the action and start investigation of the membrane systems for further evidence in the case The Integrated Water Systems company had made corrections to train 2 to ensure operation through the 22/23 season. Those corrections using a different membrane than provided by Ovivo functioned correctly for the end of year demand and received continued evaluation through the Spring Season. Ovivo had been on site to examine the upgrades in comparison to Ovivo product which is required to process the peak period flow of 0.44 million gallons hydraulically and biologically per day (“MGD”) for fifteen days, twice per year and meet the effluent concentrations specified by VTSV.

The Village has been working with the contractors to pursue the funds needed to make further corrections and we have an agreement to prosecute to correct if Ovivo fails to correct. Some funds for the system are collected when Development Impact Fees paid for the system upgrade. It may require independent correction of remaining Ovivo Train#1 before the season starts. Currently Integrated Water Systems is at risk for the improvements to half the plant (Train#2) and has asked the Village to help with costs for completing the other half of the correction in 2023 (recent approximation of \$700,000 for Train #1, Materials overall materials needed to complete a single train, Mixers, UV Units, Membrane modules, and pipe valve and fittings.\$525K, Direct Labor \$140K and Equipment and transportation \$35K) IWS continues monitoring and addressing system operations issues, most recently adding a clean water wash system for the membranes.

Water

The repair projects continue on plan/ DEC, GGI: Bring the Kachina water tank on-line and connect it to the system. (Design to RFP July for turnkey pumphouse install) • Isolate locations and extent of water losses with Master Meters and replacement is underway with assistance from TSVI • Replace leaking waterlines where maximum water loss is determined including (Upper Twinning, Blue Jay Ridge, Cliffhanger, Zaps Road and from the master metering program). And emergency GIS tools for mapping As Built are utilized by Intern that is building AMP. Satellite data history studied for probable leaks • Hydrant replacement/installation in areas where 4-inch water mains are utilized for fire protection to determine if these lines are adequate to provide fire protection, and replace lines (Phoenix Switch Back)

- Replace all galvanized water lines in the system with adequately sized ductile iron water lines.(Upper Twinning and Old houses) • Begin a meter replacement program to ensure that all customer meters are scheduled to be replaced (evaluating remote read network technology with RFI for pilot program July 2023).

The replacement of a water line on Upper Twinning is the first of problematic lines previously identified. The Cliffhanger line is completed with line tests and ready for service. Public Works crews are using a key new piece of construction equipment (excavator) for emergency and repair projects including hydrant and valve installation. Capital outlay of \$200K is included for initial plans and hydrant installation, to be ready for construction. An additional \$1.7m in capital outlay is awarded to the Village for the priority request item (agreement pending), Waterline replacement. \$5M for Taos County Projects from Apportionment Contingency Fund Appropriation of which \$750,000 grant funding has been utilized for some Village Water line repair.

Village Complex

Permits were obtained for repair of the damaged units but an attempt to gain better access to the property through an adjacent easement is the safer route (to be determined by July). Recent receipt of the insurance claim payment allows preconstruction Notice to Proceed. The damage from the snow gale to units Nine, Ten and One is assessed, after the insurance adjuster and the engineer visited the site. The Village has procured repair of units Nine, Ten and One and the insurance company had made partial payment to secure the site. The NMML Self Insurers Fund (SIF) review of contractor estimates are completed, and the NMLSIF has approved starting repair of the units. The preconstruction meeting was scheduled in March had additional delay for unexpected CID permitting.

There is increased interest among employees in housing at the Village Complex, but the operation is an enterprise fund and must produce enough revenue to cover expenses or be part of compensation. 100% occupancy of available units is possible once repairs are completed. Meanwhile use of office space is a benefit. Before the complex became available the Police Department was assigned to an unheated construction trailer for 20 years. is currently making use of the property as the Building Inspector, Public Safety Housing EMS/Fire, Police and Fire Administration Offices.

The use of the units as office space and EMS bunking rather than as apartment housing has reduced the average cost per unit of sewage pumping and utilities budget while under development. Because as apartments, 10 units alone will require over 2,000 Ft Sq for parking, the site would not be likely to accommodate all Village offices in Amizette. But the site does have room for Public Safety Administration offices and funding information will help determine the best use.

Kit Carson Electric (KCEC) Facility Undergrounding

Clearing vegetation within 100 feet of powerlines is the most economic method of guarding against starting fires for KCEC, but the Village has dedicated funding to get the KCEC facilities underground. The delay for KCEC getting NMDOT/USFS permits to be in the public ROW have been unsuccessful.

Reminder: Once the underground service is available near a property, the steps to connecting underground are:

The Owner to engage a contract electrician for work on their property,

Then together contact Kit Carson Electrical Cooperative with the meter number and request a *service upgrade to an underground service*, **KCEC** and the electrician will contact the Village for underground permitting and start credit request for public Right of Way work,

Proceed with underground work and connect to the underground service,

We recommend getting private access along the frontage of NM 150 for VTSV utility easements, we didn't have a report of progress with NMDOT/KCEC after many attempts and the neighbors are mostly onboard for private easements while KCEC pursued USFS/NMDOT. The Public Safety Committee is assisting Amizette neighbors to get easement forms submitted to KCEC. Additional efforts to educate Amizette residents about KCECUG is being planned with the help the Public Safety Committee almost all the properties are allowing access. NMDOT traffic safety permit and KCEC delivery of material are expected next steps after easements. GIS mapping of underground utilities was asked for Utility location as part of the nearly \$200,000 project. Awaiting GIS and online training materials to be accessible to all staff to release contractual liability.

Replacing Kit Carson Electric overhead electrical lines with underground facilities in the Village and especially Amizette has been a priority concern for fire safety for many years. Since 2015 the Village has dedicated what electric franchise funding it has toward paying for the KCEC underground facilities in the public ROW. Since 2019 the Village has worked with KCEC to place the lines underground in the Amizette area. Projects alongside residential roads and easements on the North side of NM150 have had the installation, however the continued efforts of KCEC to get permission to place lines in the NMDOT/USFS ROW have not progressed and the Village along with neighbors and Public Safety/Fire Wise Committee have pursued an option to get private easement on properties abutting the south side of NM150 to install electric lines underground. Most property owners have joined the effort to convert services from overhead to underground. A couple of permissions remain before the project can start this year.

Although Anti donation restraints limit improvements on private property, the use of public funds to install this critical public safety infrastructure is allowed in the private easements as a valuable benefit to the Village.

While waiting for permits from NMDOT/USFS the Village has also continued to install underground facilities on residential roads that are not restricted by state and federal permissions. Zaps, Emma, Gusdorf, Porcupine Phoenix, Coyote, Chipmunk were (KCEC identified) priority projects that were able to get underground electric service installed. During COVID emergency, material and equipment delays, staffing shortage and price increases further affected the ability to complete projects, but the main setback is getting easements on NM150.

The Village KCEC undergrounding will add to the efforts of the NM150 thinning project that is expected to start this summer and hopefully the Village will be able to participate in those efforts as well. Our Building Official Volunteered to submit a Non-Federal Grants application to treat fire dangers on private property and is managing the project to thin private properties that increase fire safety in the Village.

TIDD

The Tax Increment Development District is the mechanism that certain economic development investments by the designated developer (TSVI) Taos Ski Valley Inc. are to be funded by tax revenues from the (VTSV) Village, County and the State. The tax is charged in most areas of the Village for project funding and correction for the misdirected payments is now addressed and paid on a yearly basis. TIDD is a separate political subdivision of the State, and the Board has fiduciary responsibility for oversight of those taxpayer dollars that pay the Tax Increment Bonds.

The planning documents, Village Water Study, the first amendment Water Line Repair Plan and second amendment for Master Meters installation and the third amendment Phoenix-Coyote water line replacement design are expected as TIDD eligible projects. TIDD eligible projects are intended to be dedicated after they are completed. As facility projects were accepted for dedication by the Village, the record is forwarded to the TIDD Board for future review and approval for reimbursement of the TSVI developer. TSVI has entered into an MOU with the Village to conduct water study and engineering and is progressing with equipment purchase and installation project of Master Meters.

The Thunderbird- Ernie Blake Road improvements are the next anticipated TIDD project to be reviewed for dedication when all documentation is submitted to the VTSV by TSVI.

The Entry Road is a pending TIDD project; Entry Road development by Taos Ski Valley Inc. has been presented to the Village at the Council Workshop. Questions and comments are provided to TSVI for their application to US Forest Service permit. The Village gave support to the USFS Master Development Plan submission by resolution. USFS has indicated that the project has approval.

The Village has received initial draft documents for the Staff to review prior to the TIDD dedication package for Thunder the Bird/Ernie Blake project. The TIDD Co- Treasurers are reviewing the invoices for the work on the project, more information may be available at the TIDD Board meeting 7/26/23 at 2pm.

Items

Regional reports:

Taos Regional Landfill Board Virtual Meeting Thursday, June 15, 2023: Budget review shows that there has been a decrease of landfill cells from 10 years to 7 years useful life. This equates to about \$500,000 expense to take increased volume of solid waste or (\$50k/year). Since at least 33% of the waste stream is organic waste (could be higher with wood and sewer sludge added) an option to cut that stream is sought with the purchase of a fire box for \$210,000. Now the air quality measurement is a tradeoff between Methane and Carbon. What other options to reducing the organic waste to the Landfill are workable in the Village of Taos Ski Valley?

Juneteenth: Some staff taking vacation for the Juneteenth holiday have asked if the federal holiday can be included in the list of holidays for the Village of Taos Ski Valley. The Village Clerk surveyed the other NM municipalities for an idea of which holidays are recognized during the year. The results were mixed from how many Holidays are recognized and which federal holidays are recognized.

Salary Schedule, Taos County is completing a wage study to identify levels of pay for each position. The Information from the study can help the Village determine an updated pay and grade schedule in the weeks to come.

PARC events

(Spring Cleanup, May 25 and Fall Volunteer Recognition, October 5 TBD announcement and program signup, participation in the Independence Day events for the **first week in July** to be determined after Public Safety meeting input.)

1. Disc Golf Course

- VTSV PARC owns and stores all the necessary equipment . We pay one person to put up and take down course. This person usually has the help of one or two more people. They can usually put up the course in two days, including all baskets and signage for the course. Prior to course set-up, it is always approved by John Kelly from TSV Inc. With recent construction in Core area, a new course set-up is required.

2. Sand Volleyball Court

- This court has had a permanent location back at the BAV. The sand for this court was originally provided by VTSV PARC with the help of TSV Inc employee spreading and leveling the sand. Each year the sand needs to be cleaned and raked to remove debris and this is done when erecting the net at the beginning of each summer season. VTSV PARC owns the net and provides a volleyball for public use. A more permanent site is recommended.

3. JR Trail

- PARC still maintains this trail by cleaning up trash and debris but it is long overdue for some professional trail maintenance. Flora and Fauna signage has been constructed by the children participating in Field Institute of Taos. The interpretative drawings by the children have been hung on trees and displayed along the trail. PARC would like to install permanent stands for signage for better display, easier to read, closer to path, etc. Recommend Way Finding installations near private property locations on all trails to keep hikers from cutting through private property.

4. Kachina Vista Municipal Park

- Since this road has been closed to vehicular traffic, a peaceful scenic moderate climb has been a welcomed repose for residents as well as visitors who want to go for a walk close to home and off the busy roads. Securing the wooden benches and clearing turning zone at the trail lower end are recommended.

5. Kachina Wetlands

- This area is a sensitive wetland area behind the Bavarian. VTSV PARC established a picnic area along the edge as well as a sitting area with a park bench for people to take in the beauty of the Kachina basin. With the incredible windstorm of December 2021, trees fell down crushing the picnic table. The park bench is still in place and intact. Trail maintenance around wetlands needs to be improved to further protect wetland and informative educational signage will be in place in the near future. Something we have been expecting to work on with VTSV Village planner, Patrick Nicholson.

6. Hiker Parking

- amenities include informational kiosk, picnic table, trash receptacle, vault toilet. KCEC has promised installation of EV charging stations at the site.

7. The Plaza and Sutton Place Hanging Flower Baskets

- This beautification effort is a much-appreciated esthetic touch to our already beautiful surroundings. It is a short-lived treat to have more flowers in the base area. The best time to hang the baskets is around June 21 and taking them down around September 17th, just after the annual Oktoberfest festivities. At

approximate \$200/basket cost, public support for continuing the project is appreciated.

COVID -19 - Pandemic Emergency: Village Offices are following the NM Department of Health Order and are OPEN for visitors, hours of operation are still **9AM -4PM M-F**. Staff work in office and Staff no longer remote schedule without prior approval for medical issues. Immunosuppressed individuals are more vulnerable and may remain contagious for up to 3 weeks. **Public Health Order 12/1/2022; because of increase of Influenza, RSV (respiratory syncytial virus), COVID and the impact on limited medical resources, that increased precautions are implemented: Have Covid Symptoms? Stay HOME, get tested. "Wear masks when in indoor public settings".**

Although individuals testing positive for COVID no longer regularly report to the NM Department of Health, regional wastewater surveillance has shown that there were two spikes in COVID Cases for a generally downward trend. Those were in early February and early April the Village Staff had a 25% infection rate in May but recovered on the whole. The federal wastewater surveillance program, initiated with the onset of COVID pandemic is considered one of the most reliable infection tracking tools for a number of viruses. **Symptomatic employees are directed to COVID Testing if symptomatic or with exposure. If ill, an employee must be approved to return to work and isolate a medical note or negative COVID test may be required.**

When NMDOH dropped mask requirements last year cases surged especially during the winter months. Taos region case **rates** change drastically with the influx of visitors as our population changes Vs the resident base but they have trended with down with the rest of the state. The COVID-19 Federal declaration of Public Health Emergency was supposed to expire on April 16, 2023. However, the Biden administration announced that it intends to end the presidential declaration of national emergency and the US Department of Health and Human Services (HHS) public health emergency attributable to the COVID-19 pandemic on May 11, 2023. This will likely decrease federal spending related to the pandemic. International concerns with relaxed precautions are not focused only on the financial costs but on prevention of virulence and generally argue to maintain pandemic caution. We will discontinue reporting COVID 19 updates unless the public emergency is extended.

Priority Grants:

NMDHS EM required for the Unified Hazard Mitigation Assistance Programs specifically regarding the Taos County Hazard Mitigation Plan Update for Taos County. The Village of Taos Ski Valley will be an active participant in the Taos County multi-jurisdictional Hazard Mitigation Plan.

NM DFA the Village of Taos Ski Valley is not eligible for many grants including the Local Planning Development Grant because the Village Median Household Income is far above the limit as well as having small population size. However, if a LEDA ordinance is adopted by the Village, the requirements can be waived.

NM Assistance to Firefighters Grants \$200K

CWRF Loan/Grant program as advised by DEC

NM EMS Vehicle Purchase Program \$300K w/\$75K

NM Fire Grant for equipment and Fire Bay 1M 7/1/22

USDA Federal Facilities Grant Fire: \$3M and Water repair

FEMA BRIC Building Resilient Infrastructure and Community under Unified Hazard Mitigation Assistance Program \$2M Public Safety Building

LEPF MUNICIPALITY APPLICATION FOR LAW ENFORCEMENT PROTECTION FUND (LEPF)

3/1/23

FEMA SAFER grant \$80K for FD equipment, training, staffing, etc. 3/16

NM Game and Fish **2023-2024 Off-Highway Vehicle Grants** for equipment \$40K 4/6/23

NM Fire Protection Fund application on April 1, 2023, for fiscal year 2024 funding cycle. The application for the fire protection funds shall be received in the office of the fire marshal on or before the 30th day of April each year.

NM Drinking Water State Revolving Fund (federally funded by the Environmental Protection Agency and is matched by the State of New Mexico) for water line replacement 3/31/28, 6/20/23.

Congressional Directed Funding to Senator Lujan, Heinrich and representative Ledger Fernandez 2/28/23 for Public Safety funding

- NM Legislature House Tax Committee passed a committee substitute for House Bill 505, the capital outlay bill, on Friday morning 3/10 including VTSV priority request. The bill includes approximately \$271 million for local governments projects, appropriated through the Department of Finance and Administration's Local Government Division. Capital Outlay Projects Chart by County Project Title Amount Fund Legislative Council Service City 56th Legislature, 1st Session. **TAOS SKI VALLEY WATER SYS IMPROVE \$1,700,000 Taos Ski Valley GF 19128**. Thanks to our Legislators, community and friends for the funding support.
- Water SMART Environmental Water Resources Projects from United States Bureau of Reclamation for FY 2023 for \$3m project - \$750,000 match Agenda Item Final 4/28/23
- Meetings in April with NMMML and DFA for options to apply 8/1/23 for catastrophic repair funding with the Water Trust Board
- NM Fire Grant for equipment and Fire Bay 1M 7/1/23

Not Eligible to Apply:

- The Local Government Planning Fund funds for Asset Management and Water Conservation Plans: The Village Median Household Income far exceeds qualifying level for eligibility. An exception may be possible for municipalities with an adopted LEDA program or classified as disadvantaged.
- Water SMART Environmental Water Resiliency project for reuse of Effluent by discharge to the Beaver Pond for Snow Making. The study, design, permits and construction of a water reuse system are not yet updated in the Water/Comprehensive Plan.
- Funding Opportunity: U.S. D.O.E.'s Industrial Demonstrations Program; the Village limited demographics and relatively small waste stream make this Recycle grant a stretch. The Landfill Board depends on the Town of Taos for Administration and did not have bench strength for grant writing but was willing to submit the grant using regional demographics if assistance in preparing grant was available. The RLFB is seeking help to increase grant benefits for the Joint Powers Agreement.



Thursday, June 15, 2023
Taos Regional Landfill Board

9:00 a.m.

Zoom Virtual Regular Meeting

Join Zoom Meeting

<https://us02web.zoom.us/j/81969373727?pwd=RkZZVWVhWVIWTKF6K1hZOHBOWStDUT09>

Meeting ID: 819 6937 3727

Passcode: 560984

1. Call to Order - Councilmember Marietta S. Fambro, Chair

2. Establish Quorum

3. Approval of the Agenda

4. Approval of Minutes

A. Approval of May 18, 2023 Taos Regional Landfill Board Minutes

5. Budget Matters

6. New Business

A. Discussion, consideration and possible approval of Resolution 2023-04, declaring the intent of the board to enter into a loan agreement with the New Mexico Finance Authority in an amount up to \$1,750,000 for the purpose of purchasing, acquiring and improving a solid waste cell and the purchase of related equipment.

B. Discussion, consideration and possible approval to allow staff to move forward with option number one as identified on the TRL 2022-26 infrastructure capital improvements plan. Option number one includes the development of cell 5A estimated at \$1,600,000.00 and the purchase of a fire box in the amount of \$210,000.00.

C. Discussion, consideration, and possible approval of contract TT-_____ with Souder Miller & Associates in the amount of \$225,959.70, exclusive of New Mexico gross receipts tax for Environmental and Engineering Services for 2023-2024 fiscal year. Contingent upon legal and finance review. (Assistant Town Manager French Espinoza)

7. Staff Report

A. Town of Taos

8. Entity Updates

9. Public Comments (limited to 3 minutes)

10. Adjournment

Council Notes for June 27, 2023 Meeting:

Revenues May 2023:

GRT: This month last year: \$387,016

This month this Year: \$346,834

Last Year YTD: \$1,856,867

This Year YTD: \$1,837,479

Lodgers Tax:

This month last year: \$17,101

This Month this year: \$24,435

YTD Last year: \$718,378

YTD This year YTD: \$698,500

REVENUES:

- We received **56,212** in hold harmless GRT revenue in May which has been transferred to the USDA fund for monthly loan payments and reserves for the WWTP.
- Fiscal YTD GRT is down 1.04% from last year.
- Fiscal YTD Combined Water and sewer sales are down 0.42% from last year. This reduction in YTD revenues is due largely to credits issued & reduced usage.
- Fiscal YTD Lodger's tax collections are down 2.77% from last year.
- Fiscal YTD Building permits actual are up 68.7% from last year. The actual YTD Building Permit revenue for this FYTD is \$67,257.
- Village received **\$52,309** in property tax collections in May 2023 for a YTD total of **\$493,374**. YTD Collections are up 26.5% from last year.
- The TIDD received **\$328,444** in GRT in May.

EXPENSES:

- Outside contractors FY23 through May 2023 vs the same period last year is up 132% from last month. Most of the increase for this line item (#6220 Outside Contractors) is in Lodger's tax fund payments, but Lodgers tax fund is operating within the adjusted budget for this line item.
- Small equipment & repair parts expense & equipment rentals is increased form Last Fiscal Year. This reflects items received after the COVID supply chain delays in previous years as well as increased construction activity.

May / June Events

The Preliminary Budget was submitted to DFA by the due date of June 1,2023. Both the Final Budget and the FY23 4th Quarter report approval resolutions will be on the July council Meeting Agenda.

Coordination for transition to Caselle Accounting Software with a start date of 7/1/23 continues. We are on track with the technicians. They have completed our chart of accounts, and the FY23 Budget has been entered into our database, using this chart of accounts that coordinates exactly with DFA's. Pre-live training was conducted at the Caselle facility in Provo, Utah for Lisa Olsen and Carroll Griesedieck, on June 14-16, 2023. Live training is scheduled for mid-August 2023; however the plan is to fill in from July 1, 2023 so that the entire FY24 is posted in Caselle.

January 2023 GRT rate reduction for VTSV location

GRT rates for VTSV went from 9.4375% to 9.3125% for the period of July – December 2022.

This reduction of 0.125% is due to state legislation lowering the state portion of the total from 5.125% to 5%. The portion of the state piece allotted to the Village remains unchanged @ 1.225% of the total. The reduction comes entirely out of the portion that goes to the state. Previously it was 3.9%. In this period, it is reduced to 3.775%.

The total % going to the Village is the municipal 2.4375% (Village ordinances total including Hold Harmless) plus the state piece allotted to municipalities of 1.225% = 3.6625%. This is the same % the Village was previously receiving before this period's reduction in overall rate.

GRT rates for VTSV went from 9.3125% to 8.8125% for the period of Jan – June 2023.

This reduction of 0.5% is due to the sunseting of a Taos County higher education tax. This reduction only affects the county portion. The village municipality does not receive any of the county portion at this time, and so the total % to VTSV is unaffected by this period's rate reduction.

GRT rates for VTSV will go from 8.8125% to 8.9375% for the period of July - Dec 2023.

This increase of 0.125% is due to a combination of:

State legislation lowering the state portion of the total from 5.0% to 4.875%, results in a decrease of 0.125%. The portion of the state piece allotted to the Village remains unchanged @ 1.225%. The reduction comes entirely out of the portion that goes to the state. Previously it was 3.775%. In this period, it will be reduced to 3.650%. The total % to VTSV is unaffected by this rate decrease.

The county rate increased adding 0.25% to the total. This is the result of the county gross receipts tax increase voted for in November. 2022 The Village Municipality does not receive any of the county grt portion currently, and so the total % to VTSV is unaffected by this rate increase.

Per the GRT revenues portions that the Village receives:

The total Municipal GRT rate is 2.4375% and the total Municipal portion of the state GRT is 1.225% . These are unchanged from the previous period.

10:29 AM

06/23/23

Cash Basis

VILLAGE OF TAOS SKI VALLEY

Preliminary Statement of Revenue & Expenses

July 2022 through May 2023

	Jul '22 - May 23	Jul '21 - May 22	\$ Change	% Change
Ordinary Income/Expense				
Income				
4016 · Revenue - GRT ITG Telecom	124.20	232.84	-108.64	-46.7%
4017 · Revenue GRT Comp Tax	25,085.91	8,855.75	16,230.16	183.3%
4012 · REVENUE -Water Sales	173,428.41	175,539.22	-2,110.81	-1.2%
4013 · Revenue - Sewer	693,716.90	682,812.74	10,904.16	1.6%
4018 · REVENUE- GRT HB 6	0.00	253.34	-253.34	-100.0%
4019 · REVENUE-Hold Harmless GRT	315,266.82	260,040.41	55,226.41	21.2%
4020 · REVENUE - GRT MUNICIPAL	1,022,141.18	1,054,274.51	-32,133.33	-3.1%
4021 · REVENUE - GRT- STATE	632,312.23	674,255.92	-41,943.69	-6.2%
4025 · REVENUE -LIQUOR LICENSES	0.00	1,250.00	-1,250.00	-100.0%
4026 · REVENUE - BUSINESS LICENSE	9,225.00	5,095.00	4,130.00	81.1%
4027 · REVENUE - OTHER	86,825.92	155,052.69	-68,226.77	-44.0%
4028 · REVENUE - GASOLINE TAX	5,004.44	5,069.31	-64.87	-1.3%
4029 · REVENUE - LODGER'S TAX	698,499.84	718,378.43	-19,878.59	-2.8%
4031 · REVENUE - PARKING FINES	2,454.00	185.00	2,269.00	1,226.5%
4032 · REVENUE - ANIMAL LICENSE	115.00	0.00	115.00	100.0%
4034 · REVENUE - MOTOR VEHICLE FEES	19,456.52	16,351.55	3,104.97	19.0%
4035 · REVENUE - BUILDING PERMITS	-766.73	39,864.29	-40,631.02	-101.9%
4036 · REVENUE -Licenses/Permits Other	5,820.00	1,030.00	4,790.00	465.1%
4037 · REVENUE - GENERAL GRANTS	62,556.50	118,104.50	-55,548.00	-47.0%
4038 · REVENUE - LEP Grant	48,000.00	0.00	48,000.00	100.0%
4039 · REVENUE - Small Cities Grant	90,000.00	0.00	90,000.00	100.0%
4046 · REVENUE - SOLID WASTE FEE	64,439.87	64,356.25	83.62	0.1%
4047 · REVENUE - OTHER OPERATING	217,891.20	15,789.75	202,101.45	1,280.0%
4049 · REVENUE - FIRE GRANTS	238,592.00	212,807.00	25,785.00	12.1%
4050 · REVENUE - IMPACT FEES	1,343,786.28	0.00	1,343,786.28	100.0%
4051 · REVENUE - IMPACT FEE ADMIN 3%	10,632.57	0.00	10,632.57	100.0%
4058 · Plan Review Fees	25,639.66	17,999.72	7,639.94	42.4%
4059 · Proceed NMFA Issuance of Debt	0.00	454,115.50	-454,115.50	-100.0%
4060 · WTB FY2016 revenue	4,950.07	0.00	4,950.07	100.0%
4100 · Miscellaneous Revenues				
4110 · Misc Revenue- TIDD reimburse	5,234.52	6,247.72	-1,013.20	-16.2%
Total 4100 · Miscellaneous Revenues	5,234.52	6,247.72	-1,013.20	-16.2%
4190 · Rental Fees	0.00	4,500.00	-4,500.00	-100.0%
7004 · REVENUE - FINANCE CHARGE ON W/S	748.34	2,890.76	-2,142.42	-74.1%
7005 · REVENUE - INTEREST INCOME	161,243.84	7,913.90	153,329.94	1,937.5%
7006 · REVENUE -INVESTMENT INTEREST	14,816.15	420.30	14,395.85	3,425.1%
7007 · REVENUE - INTEREST IMPACT FEES	716.06	47.54	668.52	1,406.2%
7010 · REVENUE - AD VALOREM TAX	493,374.48	390,034.78	103,339.70	26.5%
Total Income	6,471,331.18	5,093,768.72	1,377,562.46	27.0%
Gross Profit	6,471,331.18	5,093,768.72	1,377,562.46	27.0%
Expense				
6100 · Salary and Benefits				
6112 · SALARIES - STAFF	1,106,614.42	892,509.85	214,104.57	24.0%
6113 · SALARIES - ELECTED	23,787.48	29,968.92	-6,181.44	-20.6%
6115 · Overtime salaries	21,793.94	14,412.25	7,381.69	51.2%
6121 · WORKER'S COMP INSURANCE	13,836.00	20,612.00	-6,776.00	-32.9%
6122 · HEALTH INSURANCE	200,820.86	192,820.35	8,000.51	4.2%
6125 · FICA EMPLOYER'S SHARE	70,312.77	57,185.31	13,127.46	23.0%
6126 · WORKMAN'S COMP PERSONAL ASSESS	283.80	236.50	47.30	20.0%
6127 · SUTA STATE UNEMPLOYMENT	2,296.12	1,587.96	708.16	44.6%
6128 · PERA Employer Portion	105,895.08	82,620.11	23,274.97	28.2%
6130 · HEALTH INCENTIVE - SKI PASS/GYM	1,700.00	1,193.46	506.54	42.4%
6133 · Life Insurance	947.34	855.29	92.05	10.8%
6134 · Dental insurance	13,408.04	12,522.17	885.87	7.1%
6135 · Vision Insurance	2,298.37	2,197.49	100.88	4.6%
6136 · FICA -EMPLOYER SHARE MEDICARE	16,444.12	13,374.02	3,070.10	23.0%
Total 6100 · Salary and Benefits	1,580,438.34	1,322,095.68	258,342.66	19.5%
6220 · OUTSIDE CONTRACTORS	1,445,685.04	622,647.14	823,037.90	132.2%
6225 · ENGINEERING	0.00	2,064.92	-2,064.92	-100.0%
6230 · LEGAL SERVICES	76,563.32	79,483.21	-2,919.89	-3.7%
6242 · ACCOUNTING	37,428.45	19,383.61	18,044.84	93.1%
6244 · AUDIT	24,811.25	24,811.25	0.00	0.0%
6251 · WATER PURCHASE, STORAGE	501.54	399.16	102.38	25.7%
6252 · INTERNET	8,736.09	7,862.85	873.24	11.1%
6253 · ELECTRICITY	62,837.88	91,084.82	-28,246.94	-31.0%
6254 · PROPANE/Diesel	752.47	8,208.42	-7,455.95	-90.8%
6256 · TELEPHONE	17,027.81	15,185.54	1,842.27	12.1%
6257 · RENT PAID	419.80	750.00	-330.20	-44.0%
6258 · WATER CONSERVATION FEE	345.85	377.96	-32.11	-8.5%
6259 · Natural Gas	25,304.47	21,419.10	3,885.37	18.1%
6270 · LIABILITY & LOSS INSURANCE	116,633.28	81,688.31	34,944.97	42.8%
6310 · Advertising	6,580.31	6,646.54	-66.23	-1.0%
6312 · CHEMICALS & NON DURABLES	9,756.46	12,075.00	-2,318.54	-19.2%
6313 · MATERIAL & SUPPLIES	69,603.82	82,498.79	-12,894.97	-15.6%
6314 · Dues/fees/registration/renewals	6,044.43	6,791.14	-746.71	-11.0%
6315 · BANK CHARGES	2,591.33	2,137.15	454.18	21.3%
6316 · Software	28,030.31	53,526.91	-25,496.60	-47.6%
6317 · Personal Protective Equipment	9,740.10	22,520.46	-12,780.36	-56.8%
6318 · Postage	2,738.25	1,802.25	936.00	51.9%
6319 · Election Expense	0.00	4,142.09	-4,142.09	-100.0%

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06/23/23

Cash Basis

VILLAGE OF TAOS SKI VALLEY
Preliminary Statement of Revenue & Expenses
July 2022 through May 2023

	Jul '22 - May 23	Jul '21 - May 22	\$ Change	% Change
6320 · EQUIPMENT REPAIR & PARTS	21,972.74	6,496.88	15,475.86	238.2%
6321 · BUILDING MAINTENANCE	386.06	565.36	-179.30	-31.7%
6322 · SMALL EQUIP & TOOL PURCHASES	110,044.24	39,680.20	70,364.04	177.3%
6323 · SYSTEM REPAIR & PARTS	8,726.20	1,618.50	7,107.70	439.2%
6331 · OUTSIDE TESTING SERVICES	3,642.98	1,938.43	1,704.55	87.9%
6332 · EQUIPMENT RENTALS	80,031.25	47,139.02	32,892.23	69.8%
6417 · VEHICLE MAINTENANCE	10,960.28	13,194.26	-2,233.98	-16.9%
6418 · FUEL EXPENSE	31,053.61	22,592.94	8,460.67	37.5%
6432 · TRAVEL & PER DIEM	3,894.48	3,283.56	610.92	18.6%
6434 · TRAINING	16,372.54	4,122.20	12,250.34	297.2%
6435 · Training Elected Officials	0.00	1,543.19	-1,543.19	-100.0%
6570 · Other Operations Expenses	41,362.35	40,167.59	1,194.76	3.0%
6712 · LAB CHEMICALS & SUPPLIES	15,912.48	6,418.16	9,494.32	147.9%
6714 · LAB EQUIPMENT REPAIR & PARTS	50.00	0.00	50.00	100.0%
6715 · LAB SMALL EQUIP & TOOL PURCHASE	6,184.57	0.00	6,184.57	100.0%
6716 · LAB TESTING SERVICES	8,506.79	9,672.20	-1,165.41	-12.1%
8322 · CAPITAL EXPENDITURES	55,677.36	65,327.10	-9,649.74	-14.8%
8323 · Capital Assets \$1000-\$4999	4,770.94	2,523.03	2,247.91	89.1%
8325 · EQUIPMENT & TOOL PURCHASE	49,952.40	294,948.00	-244,995.60	-83.1%
8402 · DEBT SERV - 2007 WWTP LOAN PRIN	95,422.70	95,422.70	0.00	0.0%
8403 · DEBT SERV. - 2007 WWTP LOAN INT	5,864.43	5,864.43	0.00	0.0%
8415 · DEBT SERV-NMFA WTB#176 Principa	25,728.00	25,663.00	65.00	0.3%
8416 · DEBT SERV-NMFA WTB#176 Interest	519.08	583.24	-64.16	-11.0%
8418 · Debt Service-Principal WTB 0351	8,452.00	8,430.00	22.00	0.3%
8419 · Debt Service -Interest WTB 0351	278.84	299.92	-21.08	-7.0%
8420 · NMFA -Principal TML #TAOS55	30,898.00	30,269.00	629.00	2.1%
8421 · NMFA Interest TML #TAOS55	38,263.00	38,892.60	-629.60	-1.6%
8422 · CWSRF 052 Principal	71,679.88	70,829.92	849.96	1.2%
8423 · CWSRF 052 Interest	860.16	1,710.12	-849.96	-49.7%
8428 · Debt Service GRT FY2020 repay	28,563.15	28,563.15	0.00	0.0%
8430 · USDA FY20 Principal Expense	107,991.00	110,921.90	-2,930.90	-2.6%
8431 · USDA FY20 Interest Expense	154,667.00	151,736.10	2,930.90	1.9%
8432 · NMFA FY2022 Fire loan Principal	56,094.10	0.00	56,094.10	100.0%
8433 · NMFA FY2022 Fire Loan Interest	2,322.55	0.00	2,322.55	100.0%
Total Expense	4,629,675.76	3,620,019.00	1,009,656.76	27.9%
Net Ordinary Income	1,841,655.42	1,473,749.72	367,905.70	25.0%
Other Income/Expense				
Other Expense				
9001 · TRANSFER TO (IN) FUND	-2,334,244.04	-1,531,977.00	-802,267.04	-52.4%
9002 · TRANSFER FROM (OUT) FUND	2,334,244.04	1,531,977.00	802,267.04	52.4%
Total Other Expense	0.00	0.00	0.00	0.0%
Net Other Income	0.00	0.00	0.00	0.0%
Net Income	1,841,655.42	1,473,749.72	367,905.70	25.0%

VILLAGE OF TAOS SKI VALLEY GROSS RECEIPTS & LODGER'S TAX COLLECTION SUMMARY

Gross Receipts Tax
CURRENT RATE = 9.3125%

GROSS RECEIPTS

	July	August	September	October	November	December	January	February	March	April	May	June
FY 2012	\$64,073.01	\$26,203.38	\$23,181.89	\$42,430.30	\$60,186.45	\$32,954.89	\$47,797.29	\$207,267.40	\$162,805.78	\$182,358.83	\$200,924.87	\$42,673.54
YTD	\$64,073.01	\$90,276.39	\$113,458.28	\$155,888.58	\$216,075.03	\$249,029.92	\$296,827.21	\$504,094.61	\$666,900.39	\$849,259.22	\$1,050,184.09	\$1,092,857.63
FY 2013	\$36,835.14	\$20,863.12	\$45,705.38	\$27,699.69	\$66,674.98	\$48,677.59	\$50,727.81	\$178,549.60	\$163,125.28	\$166,032.40	\$203,817.88	\$21,818.85
YTD	\$36,835.14	\$57,698.26	\$103,403.64	\$131,103.33	\$197,778.31	\$246,455.90	\$297,183.71	\$475,733.31	\$638,858.59	\$804,890.99	\$1,008,708.87	\$1,030,527.72
FY 2014	\$32,785.51	\$20,399.76	\$33,382.63	\$32,521.83	\$42,153.17	\$47,625.85	\$41,859.55	\$187,697.06	\$165,940.26	\$157,119.60	\$217,538.39	\$33,070.40
YTD	\$32,785.51	\$53,185.27	\$86,567.90	\$119,089.73	\$161,242.90	\$208,868.75	\$250,728.30	\$438,425.36	\$604,365.62	\$761,485.22	\$979,023.61	\$1,012,094.01
FY 2015	\$50,101.37	\$20,302.81	\$45,180.40	\$67,963.83	\$54,978.94	\$102,903.79	\$88,137.83	\$228,895.80	\$200,123.07	\$208,944.00	\$231,566.84	\$70,845.96
YTD	\$50,101.37	\$70,404.18	\$115,584.58	\$183,548.41	\$238,527.35	\$341,431.14	\$429,568.97	\$658,464.77	\$858,587.84	\$1,067,531.84	\$1,299,098.68	\$1,369,944.64
FY 2016	\$37,891.82	\$20,239.04	\$97,742.38	\$25,839.07	\$197,397.64	\$95,985.99	\$224,614.99	\$103,161.00	\$166,682.00	\$180,838.00	\$201,624.53	\$38,366.93
YTD	\$37,891.82	\$58,130.86	\$155,873.24	\$181,712.31	\$379,109.95	\$475,095.94	\$699,710.93	\$802,871.93	\$969,553.93	\$1,150,391.93	\$1,352,016.46	\$1,390,383.39
FY 2017	\$119,909.94	\$55,423.48	\$87,873.13	\$142,357.47	\$41,995.22	\$148,618.10	\$142,636.32	\$187,613.18	\$204,129.97	\$165,451.68	\$208,890.93	\$76,774.96
YTD	\$119,909.94	\$175,333.42	\$263,208.55	\$405,564.02	\$447,559.24	\$596,177.34	\$738,813.66	\$926,426.84	\$1,130,556.81	\$1,296,008.49	\$1,504,899.42	\$1,581,674.38
FY 2018	\$29,864.17	\$48,702.07	\$58,630.68	\$75,354.62	\$89,599.77	\$118,550.59	\$207,717.57	\$250,972.85	\$212,959.98	\$187,022.24	\$243,419.70	\$35,925.42
YTD	\$29,864.17	\$78,566.24	\$137,196.92	\$212,551.54	\$302,151.31	\$420,701.90	\$628,419.47	\$879,392.32	\$1,092,352.30	\$1,279,374.54	\$1,522,794.24	\$1,558,719.66
FY2019	\$54,483.94	\$55,106.22	\$86,640.50	\$136,554.40	\$141,644.03	\$189,464.82	\$258,317.57	\$323,305.93	\$301,671.26	\$252,340.78	\$319,694.92	\$86,838.09
YTD	\$54,483.94	\$109,590.16	\$196,230.66	\$332,785.06	\$474,429.09	\$663,893.91	\$922,211.48	\$1,245,517.41	\$1,547,188.67	\$1,799,529.45	\$2,119,224.37	\$2,206,062.46
FY2020	\$73,181.77		\$83,775.61		\$88,409.53	\$146,106.99	\$125,934.38	\$319,335.98	\$239,931.17	\$274,561.13	\$264,594.35	\$36,980.50
YTD	\$73,181.77	\$73,181.77	\$156,957.38	\$156,957.38	\$245,366.91	\$391,473.90	\$517,408.28	\$836,744.26	\$1,076,675.43	\$1,351,236.56	\$1,615,830.91	\$1,652,811.41
FY2021	\$68,159.90	\$74,233.88	\$46,486.94	\$82,049.26	\$89,940.38	\$149,265.06	\$122,193.28	\$251,925.28	\$236,440.15	\$214,210.24	\$289,075.34	\$55,873.27
YTD	\$68,159.90	\$142,393.78	\$188,880.72	\$270,929.98	\$360,870.36	\$510,135.42	\$632,328.70	\$884,253.98	\$1,120,694.13	\$1,334,904.37	\$1,623,979.71	\$1,679,852.98
FY2022	\$68,717.19	\$41,194.60	\$84,767.28	\$114,462.17	\$87,852.52	\$130,134.55	\$101,812.08	\$288,224.10	\$264,254.52	\$288,432.00	\$387,016.42	\$60,037.50
YTD	\$68,717.19	\$109,911.79	\$194,679.07	\$309,141.24	\$396,993.76	\$527,128.31	\$628,940.39	\$917,164.49	\$1,181,419.01	\$1,469,851.01	\$1,856,867.43	\$1,916,904.93
FY2023	\$54,648.70	\$35,075.40	\$68,454.10	\$80,723.22	\$126,212.90	\$125,573.69	\$142,615.65	\$296,312.84	\$293,244.12	\$267,784.55	\$346,834.02	
YTD	\$54,648.70	\$89,724.10	\$158,178.20	\$238,901.42	\$365,114.32	\$490,688.01	\$633,303.66	\$929,616.50	\$1,222,860.62	\$1,490,645.17	\$1,837,479.19	\$1,837,479.19

Current month GRT collections reflects money generated 2 months prior.

*Funds in this sheet are recorded as cash received

Lodger's Tax

CURRENT RATE = 5%

7/01/04 thru Current the tax rate is 5%; 2/97 thru 6/04 tax rate was 4.5%

LODGERS' TAX

	July	August	September	October	November	December	January	February	March	April	May	June
FY 2012	\$5,123.77	\$5,559.34	\$7,292.78	\$3,573.23	\$2,125.17	\$25,832.86	\$57,242.46	\$54,829.42	\$66,115.91	\$72,972.48	\$6,978.68	\$4,665.17
YTD	\$5,123.77	\$10,683.11	\$17,975.89	\$21,549.12	\$23,674.29	\$49,507.15	\$106,749.61	\$161,579.03	\$227,694.94	\$300,667.42	\$307,646.10	\$312,311.27
FY 2013	\$3,611.20	\$6,647.21	\$6,362.49	\$6,914.30	\$3,587.06	\$4,412.71	\$41,548.72	\$58,051.35	\$69,819.08	\$65,779.34	\$2,387.53	\$1,223.37
YTD	\$3,611.20	\$10,258.41	\$16,620.90	\$23,535.20	\$27,122.26	\$31,534.97	\$73,083.69	\$131,135.04	\$200,954.12	\$266,733.46	\$269,120.99	\$270,344.36
FY 2014	\$2,832.98	\$7,754.90	\$7,045.56	\$19,777.25	\$4,319.60	\$4,888.83	\$54,643.19	\$58,342.34	\$68,032.70	\$67,580.97	\$4,688.03	\$1,953.28
YTD	\$2,832.98	\$10,587.88	\$17,633.44	\$37,410.69	\$41,730.29	\$46,619.12	\$101,262.31	\$159,604.65	\$227,637.35	\$295,218.32	\$299,906.35	\$301,859.63
FY 2015	\$2,492.93	\$6,804.83	\$15,377.68	\$9,451.74	\$6,196.45	\$7,739.68	\$48,605.50	\$66,074.56	\$67,834.16	\$75,221.00	\$5,450.60	\$1,138.28
YTD	\$2,492.93	\$9,297.76	\$24,675.44	\$34,127.18	\$40,323.63	\$48,063.31	\$96,668.81	\$162,743.37	\$230,577.53	\$305,798.53	\$311,249.13	\$312,387.41
FY 2016	\$3,159.70	\$22,368.20	\$9,450.74	\$5,746.17	\$4,197.87	\$9,297.58	\$53,807.00	\$72,513.85	\$76,593.23	\$71,244.05	\$3,250.86	\$2,501.47
YTD	\$3,159.70	\$25,527.90	\$34,978.64	\$40,724.81	\$44,922.68	\$54,220.26	\$108,027.26	\$180,541.11	\$257,134.34	\$328,378.39	\$331,629.25	\$334,130.72
FY 2017	\$3,312.79	\$6,428.45	\$20,520.20	\$6,104.38	\$4,731.31	\$5,975.60	\$52,006.45	\$57,922.20	\$70,032.91	\$81,036.07	\$5,683.84	\$3,145.21
YTD	\$3,312.79	\$9,741.24	\$30,261.44	\$36,365.82	\$41,097.13	\$47,072.73	\$99,079.18	\$157,001.38	\$227,034.29	\$308,070.36	\$313,754.20	\$316,899.41
FY 2018	\$26,463.06	\$13,960.76	\$11,225.88	\$8,960.06	\$6,207.19	\$6,521.15	\$71,990.70	\$56,655.53	\$68,454.45	\$74,080.27	\$1,667.88	\$3,332.25
YTD	\$26,463.06	\$40,423.82	\$51,649.70	\$60,609.76	\$66,816.95	\$73,338.10	\$145,328.80	\$201,984.33	\$270,438.78	\$344,519.05	\$346,186.93	\$349,519.18
FY2019	\$8,692.23	\$17,791.85	\$15,936.00	\$15,977.48	\$11,905.77	\$18,255.86	\$89,403.18	\$100,794.38	\$105,205.05	\$122,892.45	\$12,426.36	\$5,097.57
YTD	\$8,692.23	\$26,484.08	\$42,420.08	\$58,397.56	\$70,303.33	\$88,559.19	\$177,962.37	\$278,756.75	\$383,961.80	\$506,854.25	\$519,280.61	\$524,378.18
FY2020	\$9,107.40	\$23,176.76	\$18,926.00	\$18,538.79	\$15,121.36	\$16,682.78	\$100,415.47	\$111,589.79	\$111,413.82	\$68,226.73	\$472.24	-\$453.54
YTD	\$9,107.40	\$32,284.16	\$51,210.16	\$69,748.95	\$84,870.31	\$101,553.09	\$201,968.56	\$313,558.35	\$424,972.17	\$493,198.90	\$493,671.14	\$493,217.60
FY2021	\$8,171.37	\$15,170.58	\$12,836.91	\$17,194.52	\$14,423.38	\$6,231.96	\$55,290.11	\$42,558.56	\$84,760.20	\$96,555.93	\$10,267.66	\$7,219.30
YTD	\$8,171.37	\$23,341.95	\$36,178.86	\$53,373.38	\$67,796.76	\$74,028.72	\$129,318.83	\$171,877.39	\$256,637.59	\$353,193.52	\$363,461.18	\$370,680.48
FY2022	\$18,245.95	\$38,815.26	\$26,765.37	\$22,996.72	\$22,728.29	\$23,037.99	\$110,392.10	\$131,470.22	\$148,781.28	\$158,043.82	\$17,101.43	\$6,264.48
YTD	\$18,245.95	\$57,061.21	\$83,826.58	\$106,823.30	\$129,551.59	\$152,589.58	\$262,981.68	\$394,451.90	\$543,233.18	\$701,277.00	\$718,378.43	\$724,642.91
FY2023	\$17,714.27	\$29,642.49	\$26,135.01	\$29,754.45	\$25,300.02	\$22,079.15	\$117,615.32	\$133,713.55	\$136,996.72	\$135,113.91	\$24,434.95	
YTD	\$17,714.27	\$47,356.76	\$73,491.77	\$103,246.22	\$128,546.24	\$150,625.39	\$268,240.71	\$401,954.26	\$538,950.98	\$674,064.89	\$698,499.84	\$698,499.84

Current month LT collections reflects money generated in the previous month.

FY2022 & FYTD2023 TIDD GRT Distribution

Date	VTSV Increment	State Increment	Admin Fees	Pay Backs	Total TIDD	NWFA & US	Hold Harmless	VTSV Cash
7/15/2021	22,594.97	17,869.77	(425.27)		40,039.47	8,360.12	10,081.12	68,717.19
8/15/2021	22,292.78	36,146.76	(413.32)		58,026.22	8,360.12	10,960.32	41,194.66
9/15/2021	32,826.02	51,922.38	(617.83)		84,130.57	8,360.12	13,044.53	84,767.28
10/15/2021	15,512.90	24,537.46	(291.97)		39,758.39	8,360.12	14,367.03	114,462.17
11/15/2021	16,468.83	25,649.56	(312.79)		41,805.60	8,360.12	11,695.48	87,852.52
12/15/2021	(21,530.95)	(34,056.60)	405.24		(55,182.31)	8,360.12	13,823.32	130,134.55
1/15/2022	1,860.66	2,940.96	(35.03)	(4,766.59)	-	8,360.12	11,237.56	101,812.08
2/16/2022	86,951.83	137,535.92	(1,636.55)	(50,415.77)	172,435.48	8,360.12	39,743.87	288,224.10
3/22/2022	80,796.27	127,813.98	(1,520.59)		207,089.66	8,360.12	36,620.19	264,254.52
4/20/2022	140,825.42	222,750.52	(2,650.52)		360,925.42	8,360.12	44,637.00	288,432.59
5/21/2022	132,368.07	210,669.88	(2,482.17)		340,555.78	8,360.12	53,829.95	387,016.42
6/16/2022	82,974.24	131,244.40	(1,561.68)		212,656.96	8,360.12	15,439.93	60,037.50
TOTAL FY22	613,941.04	955,024.99	(11,542.48)	(55,182.31)	1,502,241.24	100,321.44	275,480.30	1,916,905.58

7/18/2022	(17,240.41)	(27,906.36)	319.99	-	(44,826.78)	8,360.12	6,426.90	54,648.70
8/22/2022	36,658.10	57,852.94	(689.95)	(44,826.78)	48,994.31	8,360.12	14,070.55	35,075.40
9/21/2022	37,758.59	57,866.32	(710.67)	-	94,914.24	8,360.12	17,588.79	68,454.10
10/19/2022	15,202.78	24,597.60	(276.99)	-	39,523.39	8,360.12	10,637.18	80,723.22
11/17/2022	133,817.63	204,886.92	(2,518.62)	-	336,185.93	8,360.12	25,992.53	126,212.90
12/15/2022	3,251.75	4,949.84	(61.40)	-	8,140.19	8,360.12	13,992.93	125,573.69
1/19/2023	81,208.10	128,084.88	(1,503.67)		207,789.31	8,360.12	24,077.47	142,615.65
2/15/2023	158,116.52	242,092.64	(2,975.91)		397,233.25	8,361.12	47,915.09	296,312.84
3/15/2023	199,147.17	154,194.82	(3,725.47)		349,616.52	8,361.12	51,717.41	293,244.12
4/19/2023	175,757.64	134,549.40	(3,307.99)		306,999.05	8,361.12	46,635.51	267,784.55
5/19/2023	188,033.34	143,949.70	(3,539.02)		328,444.02	8,361.12	56,212.46	346,834.02
6/22/2023	47,894.35	36,665.06	(901.43)		83,657.98	8,361.12	11,450.54	55,904.39
TOTAL FY23	1,059,605.56	1,161,783.76	(19,891.13)	(44,826.78)	2,156,671.41	100,326.44	326,717.36	1,893,383.58
TOTAL FY2016-FY2023	5,990,077.73	5,513,990.13	(95,266.13)	(180,961.17)	11,228,573.20	576,024.17	1,517,916.14	13,231,060.36

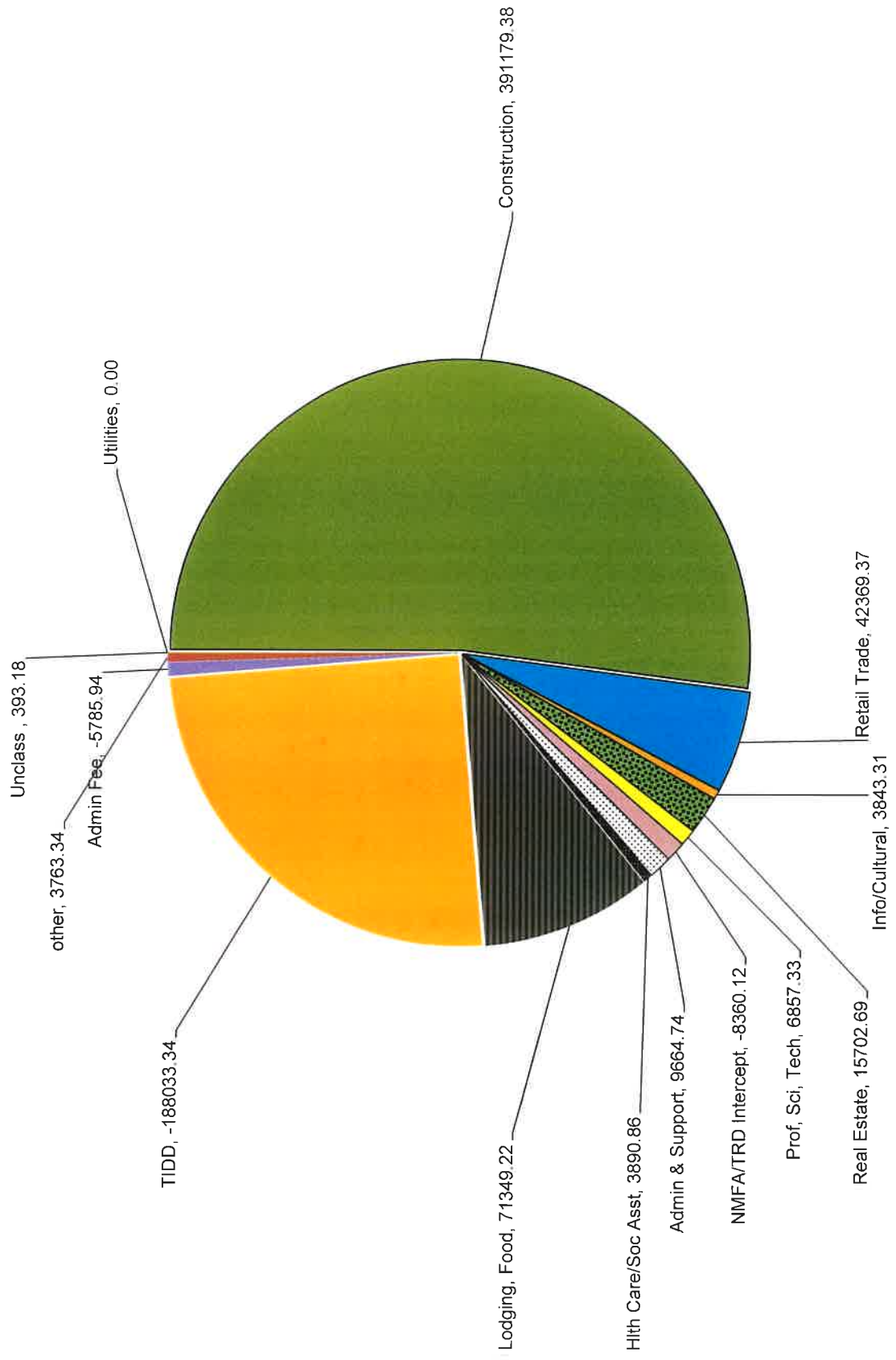
Village Baseline

Month GRT is Generated	Month GRT is Reported to State	Mth GRT is distributed fr State to Entities	Total	State	Village
December	January	February	371,622.37	201,645.53	169,976.84
January	February	March	328,741.64	178,378.07	150,363.57
February	March	April	310,404.18	168,428.01	141,976.17
March	April	May	429,910.95	233,273.42	196,637.53
April	May	June	64,234.89	34,854.41	29,380.48
May	June	July	93,353.53	50,654.43	42,699.09
June	July	August	40,142.02	21,781.41	18,360.61
July	August	September	89,560.14	48,596.11	40,964.03
August	September	October	134,697.23	73,087.89	61,609.34
September	October	November	108,590.92	58,922.38	49,668.54
October	November	December	204,035.98	110,711.70	93,324.28
November	December	January	174,517.70	94,694.82	79,822.88
Total	Total	Total	2,349,811.54	1,275,028.17	1,074,783.36

Village of Taos Ski Valley

Gross Receipts Distribution collected for March 2023

recieved in May 2023



Monthly Public Safety Report

May-23

Law Enforcement	R. Salazar	J Gladeu	J. Hutter	V. Vigil	Totals	Last Year
911 Hang up	0	0	0	0	0	3
Abandoned Vehicle	0	0	0	0	0	0
Alcohol Offense - Adult	0	0	0	0	0	0
Animal Calls	0	1	0	0	1	0
Arrests	0	0	0	0	0	0
Assists to other Agencies	4	1	1	2	8	1
B&E /Burglary	0	0	0	0	0	0
Battery or Assault	0	0	0	1	1	0
Business Alarm	2	2	1	0	5	0
Citizen Assists/Contacts	20	16	24	60	120	135
Civil Stand-by/Civil Complai	0	0	0	0	0	0
Disorderly /Disturbance	0	1	0	1	2	0
Domestic Calls	0	0	0	0	0	0
Embezzlement	0	0	0	0	0	0
Foot Patrol Hours	15	20	4	12	51	80
Found/Lost Property	0	0	0	0	0	0
Fraud Complaint	0	1	0	0	1	0
Harassment	0	0	0	0	0	0
Health Orders	0	0	0	0	0	0
Larceny	0	0	0	0	0	0
Law Unknown/Information	0	0	0	1	1	2
Missing Adult/Person	0	0	0	0	0	0
MVC's	0	0	0	0	0	0
Narcotics Adult	0	0	0	0	0	0
Natural Diasters	0	0	0	0	0	0
Parking Citations	0	0	0	0	0	0
Private Property Crash	0	0	0	0	0	0
Reckless Driver	0	0	0	0	0	1
Residential Alarm	1	1	0	0	2	3
Shots Fired	0	0	0	1	1	0
Suicide Subject	0	0	0	0	0	0
Suspicious Persons/Vehicles	1	0	0	1	2	0
Theft	0	0	0	0	1	0
Traffic Enforcement Hours	20	24	51	5	100	55
Traffic Hazard	8	1	0	2	11	6
Traffic Stops	5	4	39	0	48	35
Tresspass Warnings	0	0	0	0	0	0
Vehicle Theft	0	0	0	0	0	0
Verbal Warnings	5	0	0	0	5	5
Welfare Check	0	0	0	0	0	0
Written Citations	0	1	23	0	24	15
Written warnings	0	3	15	0	18	15
Fire/EMS	2	1	2	5	10	2

Monthly Accomplishments for May 2023

Police Department Chief / Director Virgil Vigil

- Lt. Salazar and I assisted the Taos County sheriff's Office with an escort the victims of the mass shooting incident of the Red River Biker Rally. We also assisted the Taos Police Department with the lock down of the Holy Cross Hospital lock during this incident. We later assisted with the complete lockdown of the Red River Biker Rally in Red River. We assisted at the request of the Taos County Sheriff, Steve Miera. Sheriff Miera also cross-commissioned myself and Lt. Salazar so that we acted with the power, authority, and liability of the Taos County Sheriff's Office.
- I completed and submitted the LEPP (Law Enforcement Retention Grant) to the Department of Public Safety and the State of New Mexico Office.
- LT. Salazar, Officer Hutter and I attended the New Mexico Gang Conference in Rio Rancho on May 7-10. This training gave us 24 hours of advanced training credits that are required for our biannual training to keep our Law Enforcement Certification current with the Department of Public Safety.
- My Police Officer and I are also in the process of complementing the 40-hour Biannual required DPS training required by the State. We can do this training in-house using the Virtual Academy that we purchased to reduce traveling costs and coverage for the Village.
- We also continued to assist Public Work with the water outage by placing two water tanks at the Wheeler Peak condo's and continued to keep them filled as they had been used regularly.
- I attended the Public Safety/Firewise meeting and updated them on the progress of the Fire/Police/ EMS developments, calls. I also attended E911 board, Lepc, and Taos Crime Stoppers Meetings.
- I also assisted the Taos Police Department on the annual Special Olympics Law enforcement Torch Run on May 17, 2023 to support the Special Olympians from the Taos area. I assisted with the escort and Officer Justin Hutter participated in the 22-mile bike ride.

Items In progress for June

- Will be working with the Fire Chief and EMS Chief on ideas to continue to keep these departments moving forward.
- I plan on attending Public Safety/Firewise, E911 board, Lepc, Dwi Council, Taos Crime Stoppers and Village Council Meeting this month.
- I will be meeting with TSV Risk Manager Ashley Ryland to establish an Incident command staff organizational chart in preparation of a Wildland Fire.
- I will be working will the Fire Wise/Public Safety Chairperson (Trudy) on the upcoming 4th of July event. We will be organizing a booth with education material for Firewise. We will also be working with Mitch Daniels for VTSV-Fire Department support.

From VTSV Fire Department Chief Eddy Wisdom

This month has been ramping up on our wildland program engine 315 is ready for any spot fires either down canyon or on ski area premises. The 130 190 class has been pushed back to August; however, the online course is still available. I've been working with Ashley Ryland on our evacuation plan and putting together for a Wildland Fire awareness program as to where to go and preparedness information and what to do in conjunction to the ready set go literature maybe working with the also as you know attending the community water coalition and general education in implication to fire ecology.

From EMS Department Chief Matt Rogers

Not much to report as far as large mile stones. Just a lot of organizing, talking to Dr. Lynch about being our new medical director and putting on a COR class for the chamber next week!

Other things, we are going to request the ambulance get moved up the capital expenditure list to the top to hopefully get funding for that for next year. But we're going to go to Public Safety first to get their recommendation.

Thanks. Matt

From TSVFD Fire Administrator Mitch Daniels

May report
Firewise and Public Safety Meetings
Community chipping program
NMFM office purchase approvals
Updating missing months of NFIRS reporting
Organizing reports for OSI inspection.

Mitch Daniels
Village of Taos Ski Valley
Department of Public Safety
Fire/EMS Division Administrator

Council report through June 23 - 2023

Inspections performed residential: 7

Inspection in response to complaint: 0

Enforcement actions: 0

Inspections performed multi-family / commercial:10

Enforcement actions : 1

Permits issued since last council report:

0_ new residential building.

2_ residential repair/remodel

0_ residential demolition

1_ new commercial buildings permitted.

7_ commercial or multifamily repair/remodel permitted.

0_ demolition commercial permitted.

1_ Projects currently in application or submission review.

0_ Commercial project currently pending submission.

1_ Residential projects currently pending submission.

Narrative of other activities:

1. Update of the Non-Federal Lands Grant. Work plan is complete with mapping and additional edits. The work plan is submitted to State Forestry for legal and proposal review which is continuing from prior report. Expectation is that NFL Grant approval will be forthcoming at fiscal year 2024 commences.
2. participated in the recent quarterly meeting of the Taos Valley Watershed Coalition. At this meeting we visited the McGaffey Ridge site where Forest service managed a lightning strike caused fire to burn at low intensity off of Hwy 518 in 2017. The resulting area is a mix of grassland with wildflowers and intermittent forest canopy appearing much healthier than adjoining forested areas, more suitable to recreational uses and wildlife habitat.

VILLAGE OF TAOS SKI VALLEY
Village Council
Agenda Item

AGENDA ITEM TITLE: PUBLIC HEARING: Consideration to adopt Ordinance No. 2023-30, an ordinance amending section 7, subsection 6, ‘Avalanche Design Requirements’ of Ordinance No. 2022-30, as Amended; adopting Snow Avalanche Hazard Maps for the Village; adopting regulations for new land development and building reconstruction in designated avalanche hazard zones; prohibiting new construction that adversely affects avalanche safety on other properties in the Village.

DATE: June 27, 2023

PRESENTED BY: Patrick Nicholson, Director of Planning & Community Development

STATUS OF AGENDA ITEM: Old business

CAN THIS ITEM BE RESCHEDULED: Yes

BACKGROUND INFORMATION: A new Snow Avalanche Hazard Analysis and Mapping Report was undertaken to update the potential danger the community faces and recommend proactive protective measures. After extensive delays in procuring services and contracting, Wilbur Engineering, Inc. completed their report. The report provides a detailed review and update to the village’s avalanche hazard maps and informs the updated avalanche hazard zoning ordinance. The current avalanche hazard maps, which were never incorporated into the Planning Ordinance, are based on a 2001 Study by Arthur I. Mears, P.E. Since 2001, notable advances in avalanche science and new snow and avalanche data have led to improvements in the Village’s understanding and better land use regulations to protect the public’s health, safety, and welfare.

The proposed ordinance section revision generally restates and codifies existing practice and regulations. We wanted to provide more clarity and expectations for builders and developers earlier in the process and update the maps to reflect current science and data. As presently composed, there is flexibility built into all zones (minus the most threatened Red Zone) with approved and engineer stamped mitigation and design measures.

The updated report was presented to the Village Planning Commission on May 1st. The Commission recommended approval by the Village Council. Their recommendations and Councilor’s have been incorporated into the Avalanche Section of Ordinance 2023-30. The newly updated Ordinance and its redlined version are included in the meeting packets.

RECOMMENDATION: Staff recommends consideration to adopt Ordinance No. 2023-30, pending the required Public Hearing.

VILLAGE OF TAOS SKI VALLEY

ORDINANCE NO. 2023-30

AN ORDINANCE AMENDING SECTION 7, SUBSECTION 6, “AVALANCHE DESIGN REQUIREMENTS,” OF ORDINANCE NO. 22-030, AS AMENDED; ADOPTING SNOW AVALANCHE HAZARD MAPS FOR THE VILLAGE; ADOPTING REGULATIONS FOR NEW LAND DEVELOPMENT AND BUILDING RECONSTRUCTION IN DESIGNATED AVALANCHE HAZARD ZONES; PROHIBITING NEW CONSTRUCTION THAT ADVERSELY AFFECTS AVALANCHE SAFETY ON OTHER PROPERTIES IN THE VILLAGE.

WHEREAS, the Village of Taos Ski Valley (the “Village”) is located in a high mountain valley at the foot of steep slopes on which avalanches are known to occur frequently due to winter snow accumulations; and

WHEREAS, snow avalanches have the potential for significant loss of life and damage to property, both on the slopes where they originate and at the foot of the slopes where the snow comes to rest; and

WHEREAS, while the risks to life, structures and property cannot be entirely eliminated, it is incumbent on the Village and property owners within the Village to minimize such risks to the extent possible based on professional analysis of avalanche hazard areas and appropriate limitations on the design and construction of improvements and the activities of persons within the areas of known or predicted avalanche hazard; and

WHEREAS, the Village has therefore caused the creation of a 2023 Snow Avalanche Hazard Analysis and Mapping Study prepared by Wilbur Engineering, Inc. and reviewed by Arthur I. Mears, P.E., Inc. to provide recommendations and guidance to the Village in addressing avalanche hazards; and

WHEREAS, the Village Council, the governing body of the Village, finds that the 2023 Snow Avalanche Hazard Analysis and Mapping Study and, in particular, the Snow Avalanche Hazard Maps contained therein should be adopted by the Village and that the recommendations contained therein should be implemented to the extent feasible without impairment of property values or diminution of the aesthetic and scenic values that are integral to the enjoyment of high-altitude geography and snow climate including a world-renowned ski resort dependent on the winter snowfalls that occur in the Village and the surrounding mountains.

NOW, THEREFORE, BE IT ORDAINED BY THE VILLAGE COUNCIL, THE GOVERNING BODY OF THE VILLAGE OF TAOS SKI VALLEY, THAT:

Section 7, Subsection 6 of Village Ordinance No. 22-030, as amended, is amended to read, in its entirety, as follows:

6. Avalanche Safety and Design Requirements

1. The Village adopts by reference the 2023 Snow Avalanche Hazard Maps developed and detailed in the 2023 Snow Avalanche Hazard Analysis and Mapping Study by Wilbur Engineering, Inc.
2. The following regulations shall apply to all new land development or building reconstruction and/or expansion within the Village municipal limits:
 - a. No structures intended for human occupancy ~~shall~~ ~~should~~ be constructed in High Hazard (Red) Avalanche Hazard Zones.
 - b. ~~Without approved mitigating measures, structures intended for human occupancy or commercial use should not be constructed in~~ Structures constructed in Moderate Hazard (Blue) ~~or Low Hazard (Yellow)~~ Avalanche Hazard Zones are allowed with approved mitigating measures.
 - c. Structures constructed in the Low Hazard (Yellow) Zone are allowed with approved design considerations.
 - ~~de.~~ No critical structures should be constructed in the Moderate Hazard (Blue) ~~or Low Hazard (Yellow)~~ Avalanche Hazard Zones. Critical structures include all facilities where temporary emergency access restrictions are unacceptable, including facilities such as police, fire, ambulance, medical clinics, hospitals, shelters, and schools.
 - ~~ed.~~ No high-occupancy structures should be constructed in the Moderate Hazard (Blue) Avalanche Hazard Zone s, unless they are designed to withstand avalanche impact and static loads with approved mitigating measures and certified by a licensed structural engineer. High-occupancy structures include hotels, apartments, condominiums, restaurants, community facilities, and structures expected to have more than twenty five (25) occupants at a given time.
 - ~~_____~~ No high-occupancy structures should be constructed in the Moderate Hazard (Blue) Avalanche Hazard Zones. High-occupancy structures include hotels, apartments, condominiums, community service facilities, and similar structures that can be expected to have more than twenty five (25) occupants at a given time.
 - ~~fe.~~ Any residential or commercial structures that are constructed in the Moderate Hazard (Blue) Avalanche Hazard Zones should be located as low as practical in the Avalanche Hazard Zone and designed to withstand avalanche impact and static loads. Anticipated avalanche loads shall be determined by application of appropriate engineering methods based on the location, geometry and orientation of the structures.
 - ~~gf.~~ Occupied s Structures in the Low Hazard (Yellow) Avalanche Hazard Zone should be designed to mitigate any expected avalanche impacts. Avalanche impacts shall be determined at the time of application and in accordance with applicable snow characteristics and approved engineering design. Occupied

structures in the Low Hazard (Yellow) Avalanche Hazard Zone should be designed to withstand avalanche impact and static loads, including stagnation pressures from the suspension component (powder blast), which can act to heights of 100 feet or more. Design avalanche loads shall be determined by application of appropriate engineering methods based on avalanche characteristics and on the location, geometry and orientation of the structures.

- hg. Site plans and architectural designs in all Avalanche Hazard Zones should address avalanche hazards. Building access, parking, entries, public plazas, and outdoor living spaces, especially hot tubs and heated outdoor spaces, should be placed in protected areas away from the avalanche-facing side of the building. Commercial facilities and high-occupancy structures in all Avalanche Hazard Zones must have an approved avalanche warning system in place. Windows and doors in all Avalanche Hazard Zones on the uphill side should be avoided or designed to withstand avalanche impact.
 - ih. All utilities in all Avalanche Hazard Zones should be buried. Gas, water and electrical lines, utility meters and fire hydrants in avalanche zones should be protected to prevent damage.
 - ji. Compliance with the standards and recommendations set forth in this ordinance shall not be deemed to guarantee public safety. It is possible to achieve a high level of avalanche protection for building occupants inside specially designed, reinforced buildings, but people, pets, and property outside will not be protected. Therefore, it is prudent for occupants and guests of commercial and residential buildings in and near Avalanche Hazard Zones to become educated and keep current on local avalanche conditions, including the local and regional avalanche danger forecasts. However, reliance upon forecasts and avoiding Avalanche Hazard Zones during elevated avalanche danger conditions can reduce, but not eliminate avalanche risk.
3. Prior to the Village issuing a building permit for the construction of a new, remodeled, or expanded freestanding building to be occupied by one or more persons, all applicants must provide the following to the Village for review by the Planning Officer:
- a. A written report analyzing the potential avalanche hazards, drawn from the adopted Snow Avalanche Hazard Maps, and the potential physical forces, if any, created thereby upon the proposed improvement or structure, and
 - b. If a snow avalanche hazard exists, a structural analysis of the proposed building or structure is required to be prepared and stamped/sealed by a New Mexico licensed structural engineer reflecting an engineering analysis of the design. The stamped structural analysis must ~~which~~ states that the design of the building or structure can withstand the expected potential force from an avalanche for the

hazard zone therein, as set forth in the avalanche report referred above and as noted elsewhere in this Ordinance.:

- c. The issuance of a building permit by the Village shall not be construed to mean that the Village agrees or warrants that the proposed building or structure will withstand an avalanche.
4. All new construction and any avalanche hazard mitigating measures shall not adversely impact avalanche hazards on other properties, whether adjacent, downslope, or elsewhere, including public roads and utilities.
5. Avalanche Hazard Zones should be reviewed and adjusted periodically based on analyses by a qualified avalanche professional, especially following any significant changes to the forest or terrain due to fire, fire mitigation measures, or other weather-related events. Afterwards, amendments to the avalanche maps may be adopted by ordinance.

SEVERABILITY CLAUSE: Should any section, paragraph, clause, or provision of this Ordinance be held to be invalid or unenforceable for any reason, the invalidity or unenforceability of such section, paragraph, clause or provision shall not affect any of the remaining provisions of this Ordinance. The Governing Body of the Village of Taos Ski Valley hereby declares that it would have passed this Ordinance and each section, subsection, sentence, clause, word, or phrase thereof irrespective of any one or more sections, subsections, sentences, clauses, words, or phrases being declared unconstitutional or otherwise invalid.

EFFECTIVE DATE AND PUBLICATION: This Ordinance shall become effective and be in full force and effect from and after its passage, publication, and posting, according to law.

PASSED, APPROVED AND ADOPTED THE ___ DAY OF _____, 2023, BY THE VILLAGE COUNCIL OF THE VILLAGE OF TAOS SKI VALLEY, NEW MEXICO.

Tom Wittman, Mayor Pro Tem

ATTEST:

Ann Marie Wooldridge
Village Clerk

VILLAGE OF TAOS SKI VALLEY

ORDINANCE NO. 2023-30

AN ORDINANCE AMENDING SECTION 7, SUBSECTION 6, “AVALANCHE DESIGN REQUIREMENTS,” OF ORDINANCE NO. 22-030, AS AMENDED; ADOPTING SNOW AVALANCHE HAZARD MAPS FOR THE VILLAGE; ADOPTING REGULATIONS FOR NEW LAND DEVELOPMENT AND BUILDING RECONSTRUCTION IN DESIGNATED AVALANCHE HAZARD ZONES; PROHIBITING NEW CONSTRUCTION THAT ADVERSELY AFFECTS AVALANCHE SAFETY ON OTHER PROPERTIES IN THE VILLAGE.

WHEREAS, the Village of Taos Ski Valley (the “Village”) is located in a high mountain valley at the foot of steep slopes on which avalanches are known to occur frequently due to winter snow accumulations; and

WHEREAS, snow avalanches have the potential for significant loss of life and damage to property, both on the slopes where they originate and at the foot of the slopes where the snow comes to rest; and

WHEREAS, while the risks to life, structures and property cannot be entirely eliminated, it is incumbent on the Village and property owners within the Village to minimize such risks to the extent possible based on professional analysis of avalanche hazard areas and appropriate limitations on the design and construction of improvements and the activities of persons within the areas of known or predicted avalanche hazard; and

WHEREAS, the Village has therefore caused the creation of a 2023 Snow Avalanche Hazard Analysis and Mapping Study prepared by Wilbur Engineering, Inc. and reviewed by Arthur I. Mears, P.E., Inc. to provide recommendations and guidance to the Village in addressing avalanche hazards; and

WHEREAS, the Village Council, the governing body of the Village, finds that the 2023 Snow Avalanche Hazard Analysis and Mapping Study and, in particular, the Snow Avalanche Hazard Maps contained therein should be adopted by the Village and that the recommendations contained therein should be implemented to the extent feasible without impairment of property values or diminution of the aesthetic and scenic values that are integral to the enjoyment of high-altitude geography and snow climate including a world-renowned ski resort dependent on the winter snowfalls that occur in the Village and the surrounding mountains.

NOW, THEREFORE, BE IT ORDAINED BY THE VILLAGE COUNCIL, THE GOVERNING BODY OF THE VILLAGE OF TAOS SKI VALLEY, THAT:

Section 7, Subsection 6 of Village Ordinance No. 22-030, as amended, is amended to read, in its entirety, as follows:

6. Avalanche Safety and Design Requirements

1. The Village adopts by reference the 2023 Snow Avalanche Hazard Maps developed and detailed in the 2023 Snow Avalanche Hazard Analysis and Mapping Study by Wilbur Engineering, Inc.
2. The following regulations shall apply to all new land development or building reconstruction and/or expansion within the Village municipal limits:
 - a. No structures intended for human occupancy shall be constructed in High Hazard (Red) Avalanche Hazard Zones.
 - b. Structures constructed in Moderate Hazard (Blue) Avalanche Hazard Zone are allowed with approved mitigating measures.
 - c. Structures constructed in the Low Hazard (Yellow) Zone are allowed with approved design considerations.
 - d. No critical structures should be constructed in the Moderate Hazard (Blue) Avalanche Hazard Zone. Critical structures include all facilities where temporary emergency access restrictions are unacceptable, including facilities such as police, fire, ambulance, medical clinics, hospitals, shelters, and schools.
 - e. No high-occupancy structures should be constructed in the Moderate Hazard (Blue) Avalanche Hazard Zone unless they are designed to withstand avalanche impact and static loads with approved mitigating measures and certified by a licensed structural engineer. High-occupancy structures include hotels, apartments, condominiums, restaurants, community facilities, and structures expected to have more than twenty five (25) occupants at a given time.
 - f. Any residential or commercial structures that are constructed in the Moderate Hazard (Blue) Avalanche Hazard Zones should be located as low as practical in the Avalanche Hazard Zone and designed to withstand avalanche impact and static loads. Anticipated avalanche loads shall be determined by application of appropriate engineering methods based on the location, geometry and orientation of the structures.
 - g. Structures in the Low Hazard (Yellow) Avalanche Hazard Zone should be designed to mitigate any expected avalanche impacts. Avalanche impacts shall be determined at the time of application and in accordance with applicable snow characteristics and approved engineering design.
 - h. Site plans and architectural designs in all Avalanche Hazard Zones should address avalanche hazards. Building access, parking, entries, public plazas, and outdoor living spaces, especially hot tubs and heated outdoor spaces, should be placed in protected areas away from the avalanche-facing side of the building. Commercial facilities and high-occupancy structures in all Avalanche Hazard Zones must have an approved avalanche warning system in place. Windows and doors in all Avalanche Hazard Zones on the uphill side should be avoided or designed to withstand avalanche impact.

- i. All utilities in all Avalanche Hazard Zones should be buried. Gas, water and electrical lines, utility meters and fire hydrants in avalanche zones should be protected to prevent damage.
 - j. Compliance with the standards and recommendations set forth in this ordinance shall not be deemed to guarantee public safety. It is possible to achieve a high level of avalanche protection for building occupants inside specially designed, reinforced buildings, but people, pets, and property outside will not be protected. Therefore, it is prudent for occupants and guests of commercial and residential buildings in and near Avalanche Hazard Zones to become educated and keep current on local avalanche conditions, including the local and regional avalanche danger forecasts. However, reliance upon forecasts and avoiding Avalanche Hazard Zones during elevated avalanche danger conditions can reduce, but not eliminate avalanche risk.
3. Prior to the Village issuing a building permit for the construction of a new, remodeled, or expanded freestanding building to be occupied by one or more persons, all applicants must provide the following to the Village for review by the Planning Officer:
 - a. A written report analyzing the potential avalanche hazards, drawn from the adopted Snow Avalanche Hazard Maps, and the potential physical forces, if any, created thereby upon the proposed improvement or structure, and
 - b. If a snow avalanche hazard exists, a structural analysis of the proposed building or structure is required to be prepared and stamped/sealed by a New Mexico licensed structural engineer reflecting an engineering analysis of the design. The stamped structural analysis must state that the design of the building or structure can withstand the expected potential force from an avalanche for the hazard zone therein, as set forth in the avalanche report referred above and as noted elsewhere in this Ordinance.
 - c. The issuance of a building permit by the Village shall not be construed to mean that the Village agrees or warrants that the proposed building or structure will withstand an avalanche.
4. All new construction and any avalanche hazard mitigating measures shall not adversely impact avalanche hazards on other properties, whether adjacent, downslope, or elsewhere, including public roads and utilities.
5. Avalanche Hazard Zones should be reviewed and adjusted periodically based on analyses by a qualified avalanche professional, especially following any significant changes to the forest or terrain due to fire, fire mitigation measures, or other weather-related events. Afterwards, amendments to the avalanche maps may be adopted by ordinance.

SEVERABILITY CLAUSE: Should any section, paragraph, clause, or provision of this Ordinance be held to be invalid or unenforceable for any reason, the invalidity or unenforceability of such section, paragraph, clause or provision shall not affect any of the remaining provisions of this Ordinance. The Governing Body of the Village of Taos Ski Valley hereby declares that it would have passed this Ordinance and each section, subsection, sentence, clause, word, or phrase thereof irrespective of any one or more sections, subsections, sentences, clauses, words, or phrases being declared unconstitutional or otherwise invalid.

EFFECTIVE DATE AND PUBLICATION: This Ordinance shall become effective and be in full force and effect from and after its passage, publication, and posting, according to law.

PASSED, APPROVED AND ADOPTED THE ____ DAY OF _____, 2023, BY THE VILLAGE COUNCIL OF THE VILLAGE OF TAOS SKI VALLEY, NEW MEXICO.

Tom Wittman, Mayor Pro Tem

ATTEST:

Ann Marie Wooldridge
Village Clerk

DRAFT Rev. 1
Issued for Review and Comment

**SNOW AVALANCHE
HAZARD ANALYSIS
AND MAPPING**

for

**THE VILLAGE OF TAOS SKI VALLEY
TAOS COUNTY, NEW MEXICO, USA**

Prepared for:

Village of Taos Ski Valley
PO Box 100
Taos Ski Valley, NM 87525

Prepared by:

Wilbur Engineering, Inc.
Durango, Colorado

April 14, 2023

April 14, 2023

Patrick Nicholson
Planning Director
Village of Taos Ski Valley
PO Box 100
Taos Ski Valley, NM 87525
Via email Via email

RE: DRAFT Avalanche Hazard Mapping and Recommendations
The Village of Taos Ski Valley, New Mexico

Dear Mr. Nicholson:

This updated Draft Report and accompanying Preliminary Maps have been revised based on additional information, including site observations and comments from local avalanche professionals. The mapping builds on previous work and incorporates new data, methods and research to improve the quality of maps compared to the village's existing Avalanche Hazard Maps prepared by Arthur I. Mears, P.E., Inc. in 2001.

We recommend that you, your staff and all other stakeholders review this report and maps. We welcome any new information or feedback and will take it into account prior to finalizing the report and maps.

We have enjoyed working on this project. We hope that this provides the information that you need at this time. If you have any questions, please contact me.

Sincerely,
Wilbur Engineering, Inc.

A handwritten signature in black ink, appearing to read "CR Wilbur".

Chris Wilbur, P.E.

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Avalanche Hazard Maps

- Map 1 – Overview
- Map 2 – Amizette & Frontside
- Map 3 – Northside
- Map 4 – Lower Lake Fork
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- Map A – Comparison of 2001 and 2023 Maps

Appendixes

- A. Climate Data
- B. Site Photos
- C. RAMMS Parameters & Results

1. Background

This report describes a site-specific avalanche hazard mapping study for the Village of Taos Ski Valley. Figure 1 shows a site location map.

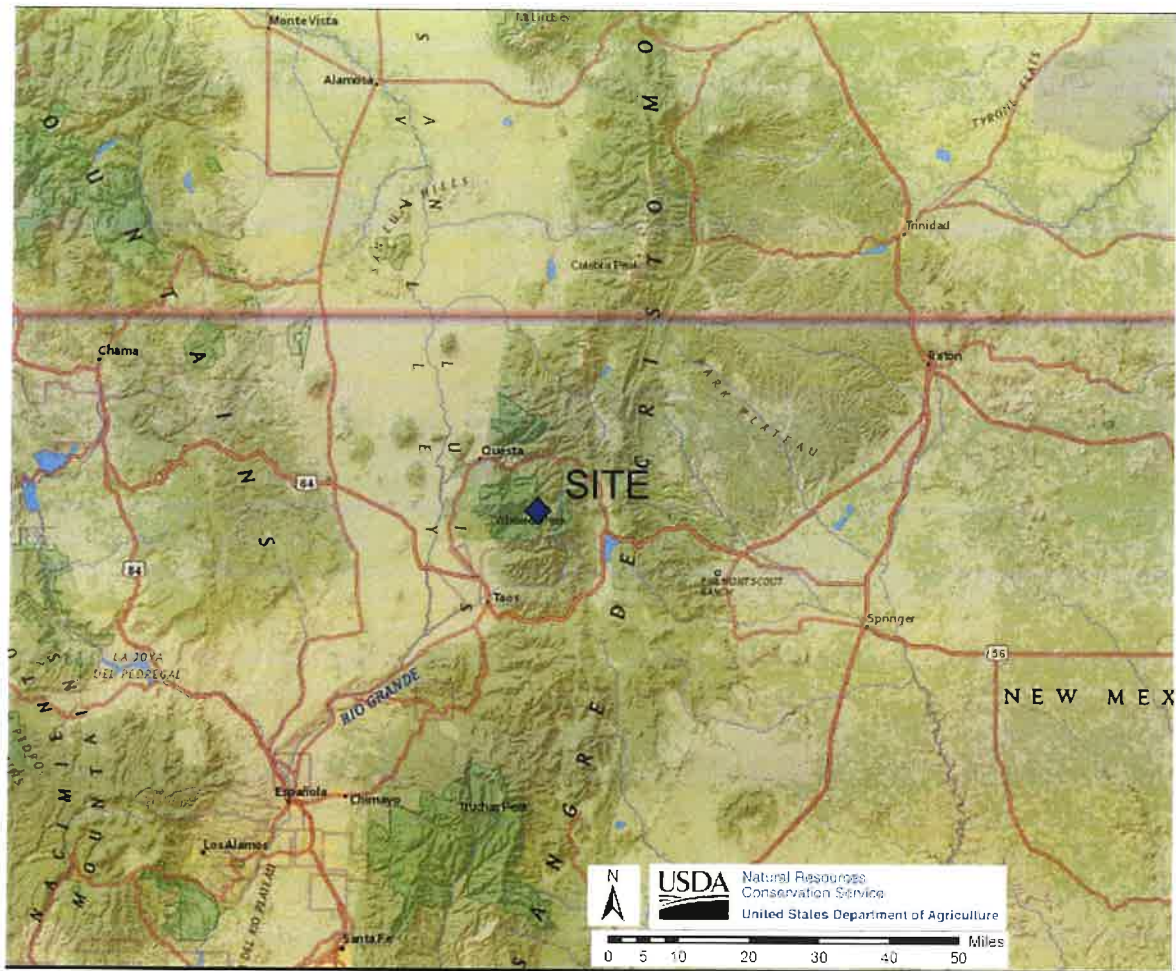


Figure 1 – Site Location

2. Objectives

This report has the following **objectives**:

1. Describe the regional snow and avalanche climate.
2. Determine the runout limits of snow avalanches with average return periods of 100-years and 300-years or annual exceedance probabilities of 1.0 percent and 0.3-percent;
3. Describe methods used to develop the Avalanche Hazard Map.
4. Delineate Avalanche Zones as defined in this report.
 - a. High Hazard (Red) – frequent or high energy¹ avalanches zones.
 - b. Moderate Hazard (Blue) – low frequency and low-medium energy².
 - c. Low Hazard (Yellow) – areas subject to low probability/low energy dense flowing avalanches or medium-frequency/low energy powder avalanche impacts³.
5. Describe avalanche risks in relation to the land use, along with uncertainties, and recommendations for mitigating avalanches hazards within and near the defined hazard zones.
6. Provide information and guidance on the existing avalanche ordinance and potential future revisions.

3. Limitations

This report also has the following **limitations**, which must be understood by all those relying on the results, conclusions, and recommendations:

1. Avalanches larger than the mapped avalanche runouts are possible, even though the probabilities are low.
2. This study is site and time specific; it should not be applied to adjacent lands nor should it be used without updating in the future when additional data and improved methods become available.
3. The avalanche hazard boundaries are based on current topography, vegetation and climatic conditions. Changes in any of these conditions could increase or decrease the avalanche hazard.

¹ The *Red Zone* is an area where avalanches have a return period of 30 years or less or produce impact pressures of 600 lbs/ft² or greater on a flat surface normal to flow.

² The *Blue Zone* is defined as an area where avalanches have a return period ranging from 30 to 100 years (3% to 1.0% annual probability) and where avalanches produce impact pressures of less than 600 lbs/ft² on a flat surface normal to flow.

³ The *Yellow Zone* is defined as an area where avalanches have estimated average return periods between 100 and 300-years and powder pressures are less than 60 psf.

4. The effects of ongoing fire mitigation efforts on avalanche hazards are difficult to quantify and we requested, but not received fire mitigation prescriptions or maps, except for the Northside area.
5. Site specific mitigation of structures including buildings, roads, and parking areas are beyond the scope of this study.
6. This report does not address avalanche risks to persons traveling, working in or recreating in avalanche terrain. This type of avalanche risk must be addressed with an ongoing operational avalanche plan that includes weather and snowpack monitoring, forecasting and temporary mitigation measures, such as terrain and road closures.

4. Methods

The avalanche hazard mapping and recommendations presented in this report are based on:

1. Site observations made by Chris Wilbur, P.E. on September 15 and 16, 2022 and January 13, March 19, and April 11, 2023.
2. Interviews and email correspondence with knowledgeable persons, including Rachel Moscarella, Kevin Beardsley, Alex Mithoefer (TSVI Snow Safety) and Andy Bond (Taos Avalanche Center).
3. Analysis of aerial photos of various dates and sources (Village of Taos Ski Valley, USGS, NAIP, Google Earth, Bing);
4. Review of historic weather data, include data from Taos Ski Valley, Inc., and the Powderhorn Snotel site.
5. Terrain analysis using 2015 LiDAR data from the USGS National Map.
6. Application of statistical avalanche runout models.
7. Avalanche dynamic modeling with the Swiss program, RAMMS, Version 1.80 utilizing a digital elevation model (DEM) developed from the LiDAR data.
8. Avalanche dynamic modeling of the suspension component with the Swiss program, RAMMS:Extended, version 2.7.90.
9. A review of published documents on the effects of forests on avalanche processes.
10. Our local and regional knowledge of terrain, climate and avalanche hazards.

5. Snow Climate

The Taos Ski Valley and Sangre de Cristo mountains are characterized by a continental snow climate typical of high elevations in northern New Mexico. Average annual precipitation at the Village of Taos Ski Valley is 20.5 inches and average snowfall is about 146 inches. Average January low and high temperatures are 4°F and 21°F,

respectively. Precipitation generally increases and temperatures decrease at higher elevations. This relatively dry, sunny snow climate commonly has a shallow weak early-season snowpack that can persist throughout the winter and spring. The weak lower snowpack can become overloaded by snow slabs that form during large storms and wind events, resulting in instability and widespread natural and triggered avalanche activity. Wet avalanches are common during springtime warm weather, including after the ski area is closed. Weather and climate data are presented in Appendix A.

6. Avalanche Terrain

Figure 2 shows a slope-angle map derived from the USGS 2015 LiDAR data. Figure 3 shows an aspect map. The orange and red colors on the slope map indicate potential avalanche starting zones. Most avalanche starting zones⁴ have slope angles of between 30 and 45 degrees. Northerly aspects that will accumulate a deeper and colder snowpack than other aspects. Southerly aspects will hold less snow causing surface roughness to reduce the probability and size of avalanches. However, prolonged storms can result in large avalanches on south-facing terrain. Prevailing winds will transport snow onto NE through SE aspects. Less common easterly winds can load starting zones above timberline on the east side of the Lake Fork.

Avalanche tracks⁵ at the site range from incised gullies to sub-planar slopes. Some of the lower tracks turn abruptly at the main valley. The avalanche runout zones⁶ include relatively steep channels, valley bottoms and debris fans. Many of the runout zones at the site are relatively steep (>10-degrees) because the size of avalanche releases is inhibited by forested starting zones. Exceptions occur above timberline and in disturbed areas such as the Mineslide path.

Figure 4 shows evidence of an undocumented large avalanche at the Northside that destroyed forests at the site in the early 1960s. This avalanche might have occurred during a major avalanche cycle in the southern Rocky Mountains that occurred in late January 1962. An avalanche cycle in the mid-1990s also extended into forested terrain at the southern end of the map area.

⁴ The *Starting Zone* of an avalanche is the area where snow releases, accelerates and increases in mass.

⁵ The *Track* of an avalanche is the area where maximum velocity and mass are attained.

⁶ The *Runout Zone* is the area where avalanches decelerate, deposit and come to a stop.

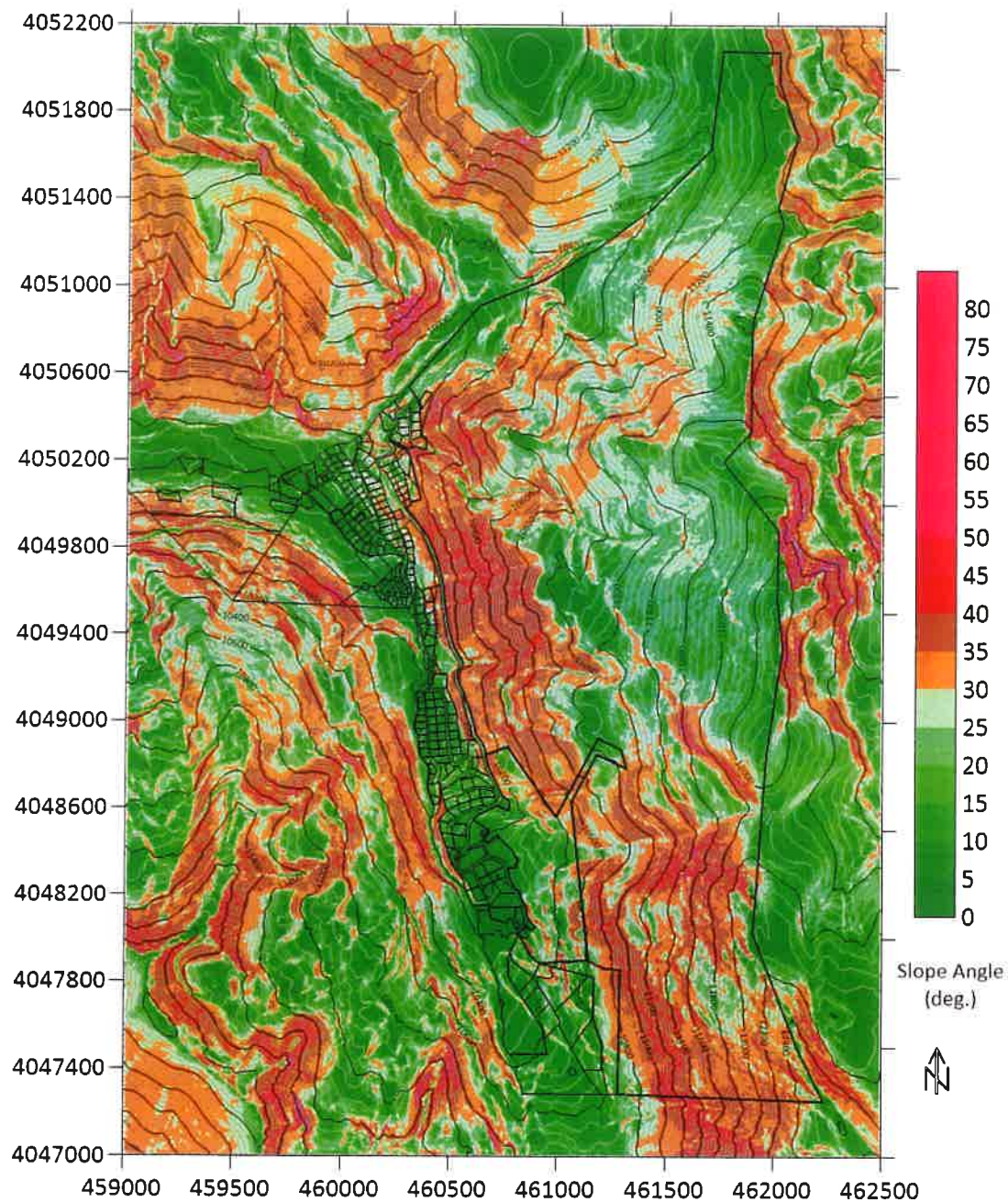


Figure 2 – Slope Map

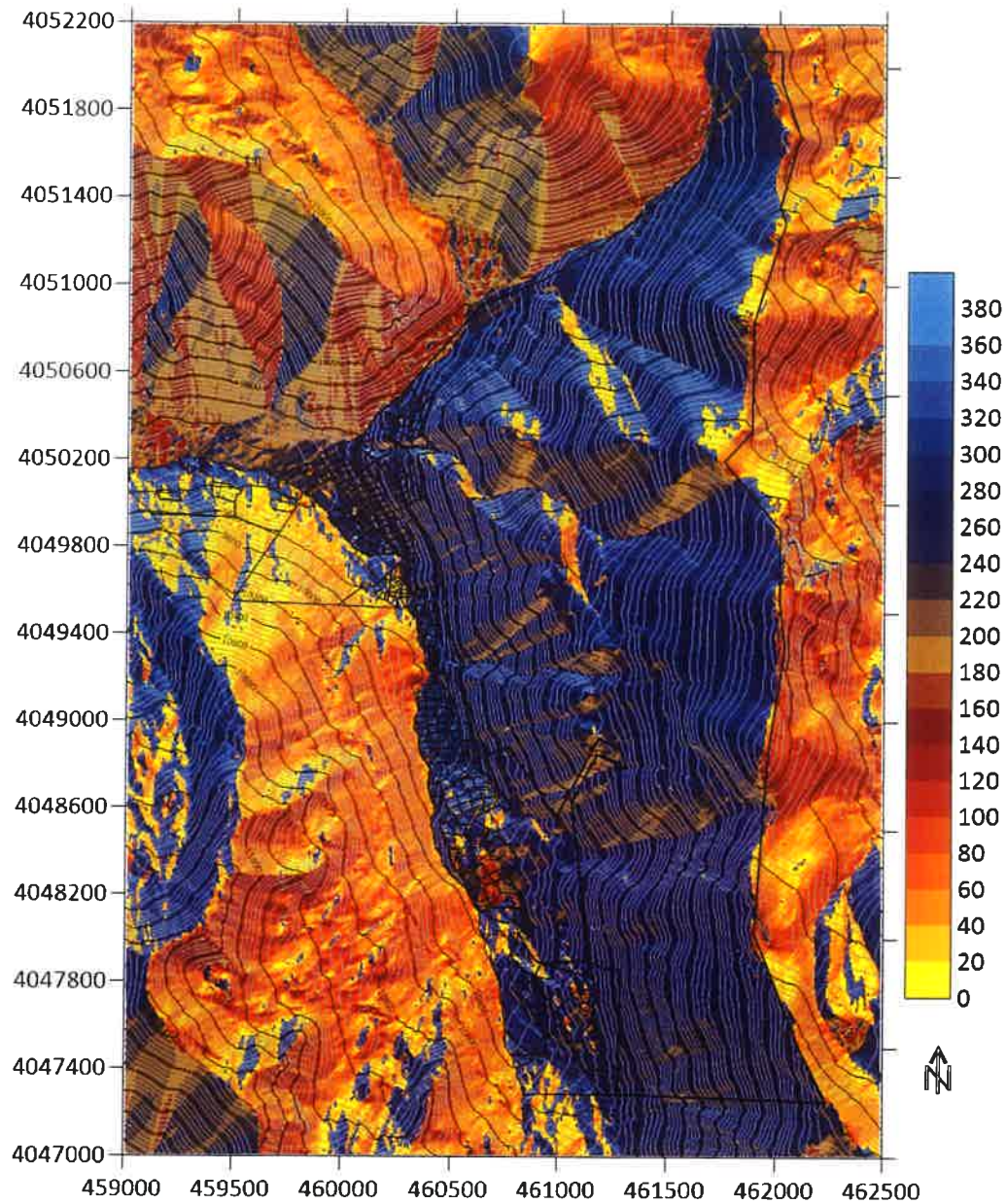


Figure 3 –Aspect Map

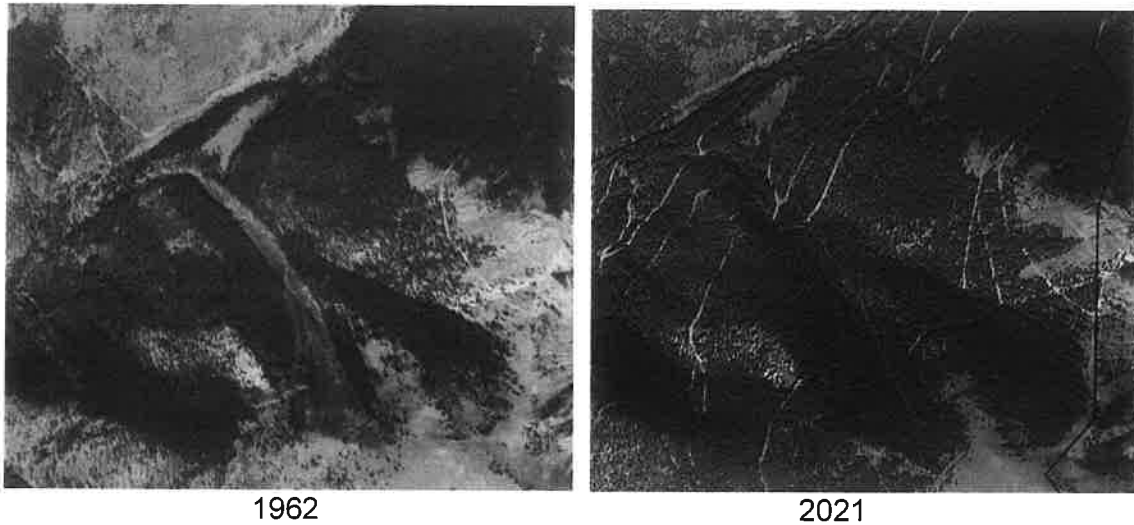


Figure 4 – 1962 Aerial Image of Trim Line near Jean's Meadow
(Sources: USGS 9-8-1962 Flight, Google Earth, 5-16-2021)

7. Statistical Avalanche Runout Models

We applied statistical avalanche runout models from eight avalanche climates to estimate potential ranges of extreme (100 to 300-year average return periods) avalanche runout distances for selected paths (Ref. 4). These models use a centerline profile of the avalanche path and incorporate the “beta-point” which is the location where the slope angle decreases to 10-degrees. No regional or site-specific models exist for the Taos Ski Valley area, so the statistical models are intended only as a supplemental method to bracket likely ranges of extreme runouts. Figure 5 shows centerline profiles with mapped and modeled runouts of selected avalanche paths.

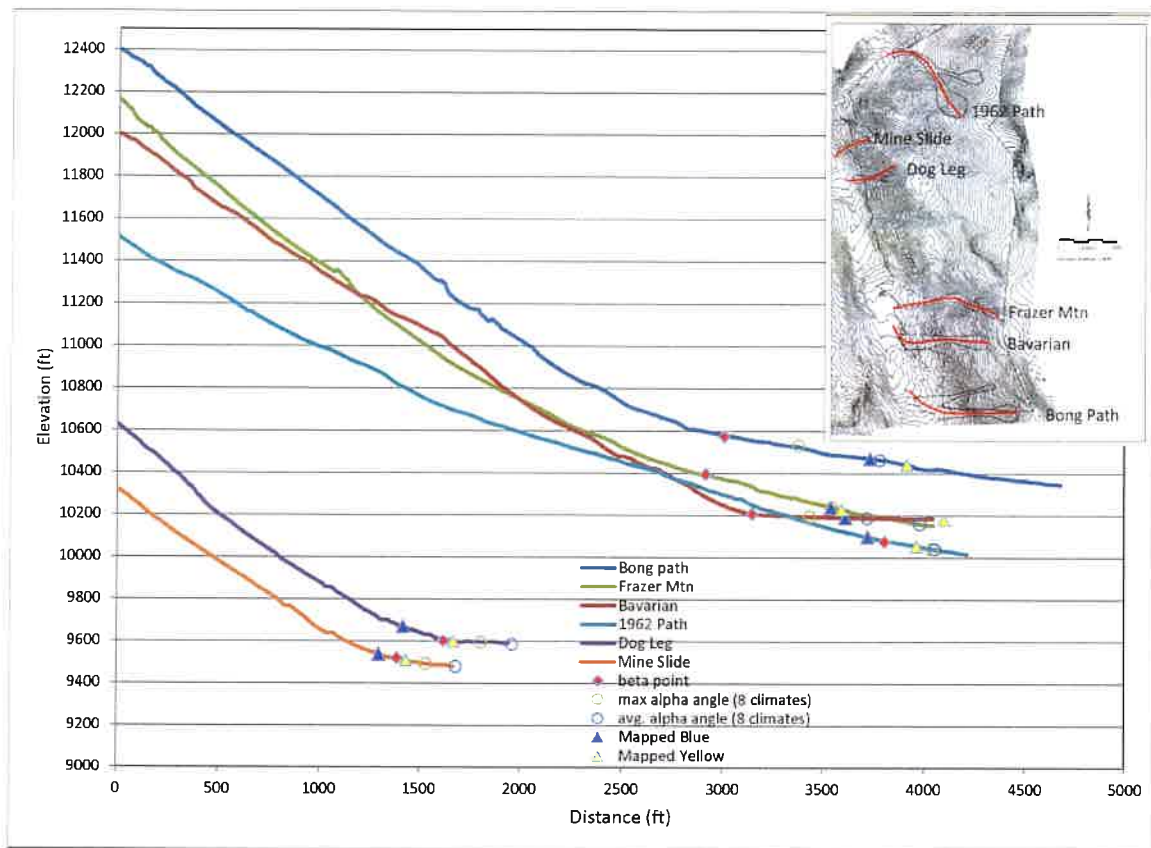


Figure 5 – Avalanche Profiles and Locations

8. Forest Conditions

The role of forests in preventing snow avalanches in steep terrain has long been recognized in Europe where destructive avalanches resulted from tree removal for buildings and firewood. More recently, fires and logging operations in the U.S. and Canada have led to a better understanding of the role of forests in avalanche prevention and mitigation. The following factors have been found to reduce avalanche release frequencies, sizes and runout distances:

1. Tree canopy coverage, especially conifers, influences snow accumulation depth and variability; Tree canopy disrupts snowpack structure and reduces crusts continuous weak layers; Tree canopy changes energy balance caused by incoming and outgoing radiation resulting in a generally stronger snowpack;

2. Tree trunks anchor the snowpack in *starting zones* by mechanical resistance to creep, glide and slab failure. This effect is dependent on relatively high density of medium-large trees per acre.
3. Forests in the *track* and *runout zones* have a relatively small effect on runout distance compared to the above factors. The effects of friction and energy dissipation due to forest impacts in avalanche tracks and runout zones generally decrease with increasing avalanche mass.

The combination of factors listed above cause healthy conifer forests to be more effective than deciduous or mixed forests, or snags at preventing avalanche release. A decrease in forest density and canopy coverage can result from several causes, including insect mortality, forest fire, logging and thinning, and blowdown.

The forest fire history of the upper Rio Hondo watershed is described in Ref. 2, including a map of a high-severity fire that impacted much of the site in 1842 during a severe drought. The 1842 fire burned bristlecone pines near timberline. The report includes several historic (~1903) photos indicating severe burn areas at the Northside and the east side of the Lake Fork. Figure 6 shows a historic photo of Twining and the Mineslide path.



Figure 6 – Historic Photo of Mineslide and Northside Area
(Source: USFS interpretive sign, © private photo)

A major forest blowdown event occurred in mid-December 2021, destroying and damaging numerous buildings in Taos county, resulting a county-wide state of emergency declaration. Thousands of trees were blown down above Twining Road near

the Bavarian Restaurant, the Phoenix, Lift 4 and on both sides of the valley up the William's Lake trail. Figure 7 shows a map of the blowdown area near the site. Figure 8 shows a photo of the blowdown area taken in August 2022.

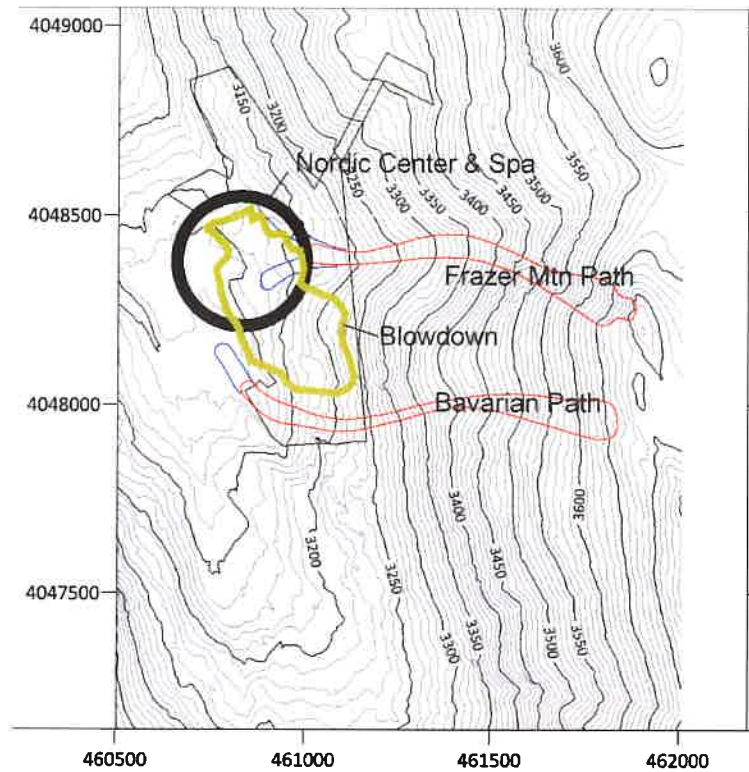


Figure 7 – Map of December 2021 Severe Blowdown Area
(Source DEI Report; Avalanche Paths from Mears 2000 Maps)

A Forest Management Plan for the Northside at Taos Ski Valley was prepared in 2020 by Dolecek Enterprises Inc. (DEI), Forest Management Specialists (Ref. 3). The plan describes declining forest health over the last 30 years at the Northside at Taos Ski Valley and throughout the Southwest. The Northside at Taos Ski Valley is classified as a very high fire risk, with potential for severe fire intensity on the New Mexico Fire Risk Portal. The DEI Report includes a prescription for the 1962 avalanche path starting zone based on the high basal area (238) and its location above the Bull of the Woods spring.



Figure 8 – Photo of December 2021 Blowdown Area
(Chris Wilbur Photo, August 2022)

Fire mitigation withing the ski resort's permit area have been ongoing. Figure 9 shows areas of mitigation that consist mainly of removal of dead standing and downed trees.

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Figure 9 – Taos Ski Valley, Inc. Fire Mitigation Map

We observed areas of thinning during our field observations, including lop and pile in potential avalanche starting zones. Figure 10 shows a forest canopy height from the Frontside derived from 2015 LiDAR data. Figure 11 shows a canopy height map from the Northside. These figures are based on pre-fire mitigation conditions. Additional forest and vegetation photos and their locations are shown in Appendix B.

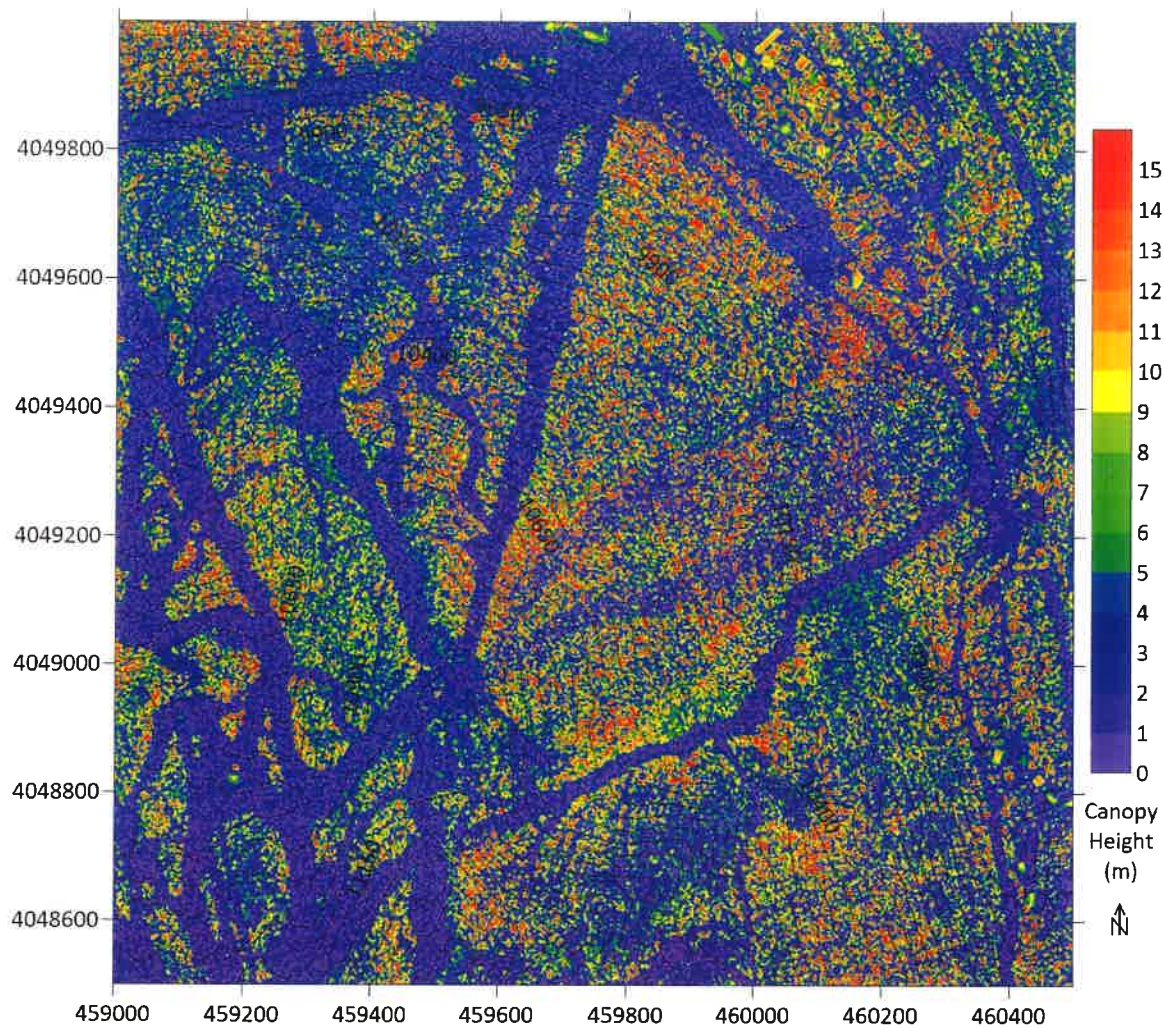


Figure 10 – Frontside Canopy Height
(derived from 2015 LiDAR data, WGS 84, UTM Zone 13N, 0.5m res. grid)

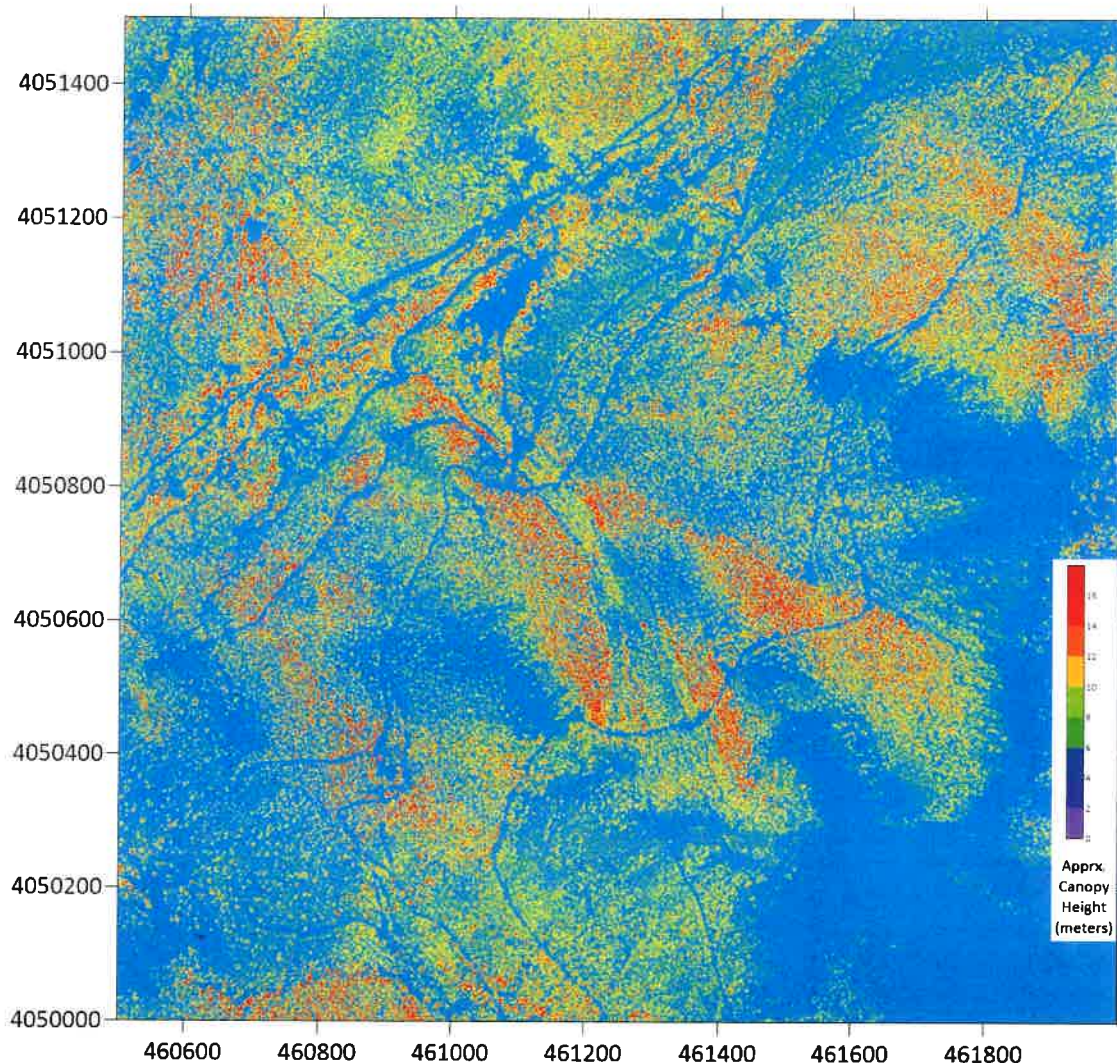


Figure 11 – Northside 1962 Path and Adjacent Areas Canopy Height
(derived from 2015 LiDAR data, WGS 84, UTM Zone 13N, 0.5m res. grid)

9. *Avalanche Dynamics Modeling*

We used the Swiss avalanche dynamics program RAMMS to evaluate flow directions, flow thicknesses, velocities and runouts for the various potential avalanche starting zones and paths. We applied a range of parameters to evaluate sensitivity and the influence of release areas, friction and flow regimes. Friction parameters were based on calibration guidelines provided in the RAMMS Version 1.7.2 User Manual and based on

elevation, avalanche size, terrain shape and return period. High elevation friction parameters (greater than 1500 meters in Switzerland) were assumed due to relatively dry cold snowpack conditions. We included cohesion and forest friction to improve calibration for small forested paths. The model calibration was based on our experience with other avalanches, including documented historic avalanches at Taos Ski Valley.

Figure 12 shows representative model results for the dense flowing core of the 100-year avalanche. Figure 13 shows representative model results for the suspension component of a 100-year avalanche. Model input assumptions and additional results are presented in Appendix C.

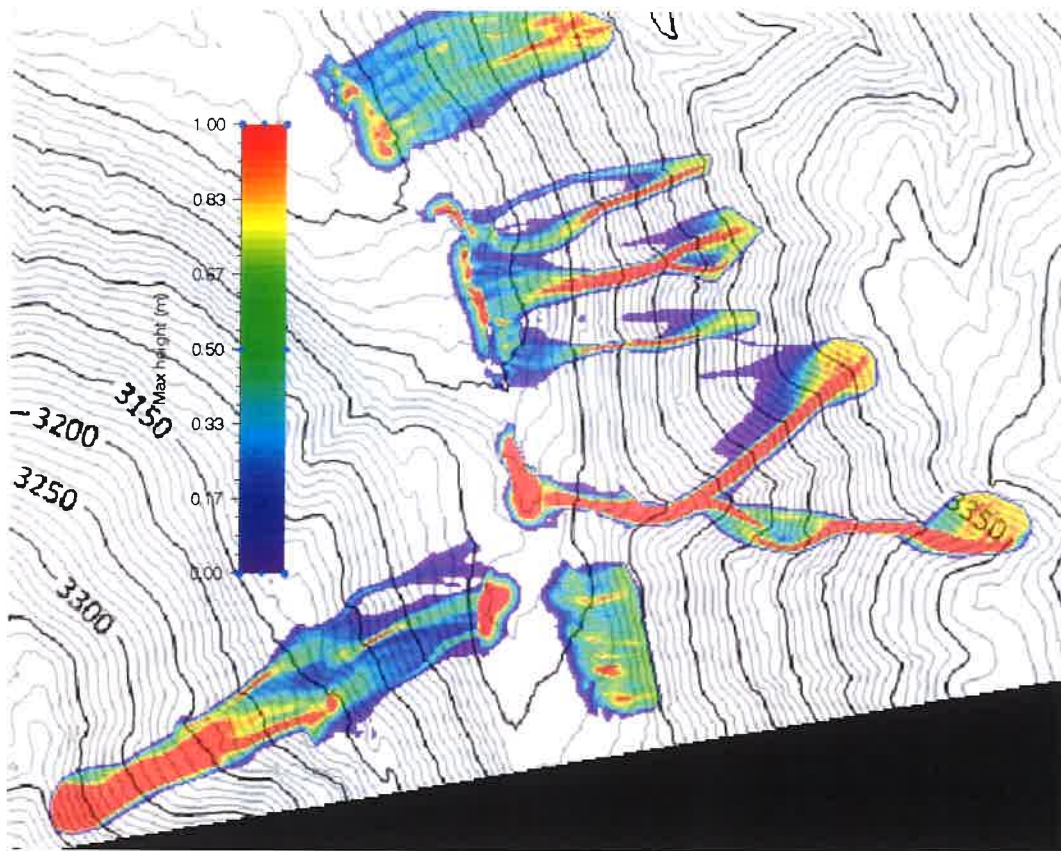


Figure 12 – Representative RAMMS Model Results

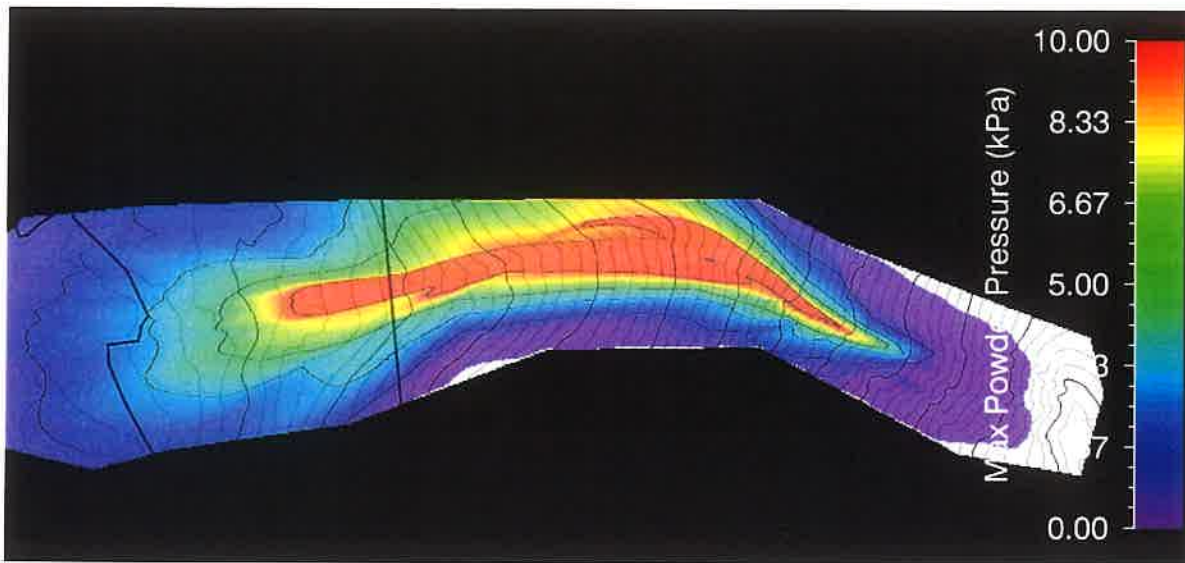


Figure 13 – Bavarian Path Powder Pressure from RAMMS:Extended Model

10. Findings

Based on the methods described in this report, we developed Avalanche Hazard Maps for the entire village limits (Maps 1 through 5). The avalanche hazard zone definitions are consistent with those in the report by Arthur I. Mears, P.E., Inc. *Snow Avalanche Mapping and Zoning with Land Use Recommendations*, prepared for the Village of Taos Ski Valley in 2001, except that the Yellow (Low) Avalanche Hazard Zone has been added. The Red and Blue Zone definitions are unchanged. The available topography, aerial imagery and avalanche dynamics models have significantly improved since the 2001 Avalanche Hazard Maps.

Each of the methods used to develop the avalanche hazard maps was weighted based on our relative confidence in the method. Weighting was similarly high for field vegetation observations, aerial image analysis, terrain analysis and dynamics modeling. Statistical methods were underweighted primarily due to forests that inhibit avalanche releases and the relatively low snow depths on southerly aspects.

Fire mitigation measures in many areas steeper than 30 degrees have reduced forest density necessary to prevent avalanche releases. As a result, the frequency and size of avalanches in these areas is likely to increase compared to historic conditions. Over time as the forest grow, the hazards may decrease and approach historic levels. The Avalanche hazard maps reflect current forest conditions, including thinning that has occurred to date. Prevention of high-intensity fires in the starting zones is critical

because complete loss of forest in the starting zones would increase the hazard boundaries well beyond the limits for current conditions.

Snow compaction and layer disruptions from ski area operations will significantly reduce the frequencies and sizes of avalanches with return periods up to about 30-years. Between return periods of 30- and 100-years declining reductions in hazard will occur. Compaction operations' effects on 300-year avalanches will be negligible.

11. Uncertainties

There are several sources of uncertainty that could affect current and future avalanche hazards. We describe these briefly below.

Avalanche Processes

Avalanche mapping science has advanced considerably in recent years, but it is still an immature science. The latest avalanche dynamics models under development consider snow temperature and avalanche flow regimes in a thermodynamic context, which has relevance in a warming climate. However, large uncertainties exist about the input parameters and applicability to various snow-avalanche climates. This high elevation-low latitude, windy snow climate differs from those in Europe where much of the science and models were developed.

Data and Records

The historic records are very limited, incomplete and private records are not readily available.

Climate

Avalanches of concern for land use planning are affected by forest conditions (especially in the starting zones), snow temperatures, precipitation intensities and snowpack structure. These factors are likely to change over time in a warming climate. Combined, some climate factors offset others, but any of them could result in higher frequencies and magnitudes of unusually long-running avalanches. There are large uncertainties, but it is likely that avalanche frequency-magnitudes will change over time. It is our opinion that avalanche hazards in this snow climate may increase in the next decades due to increases in storm intensities, precipitation and winds. Warming temperatures may have the effect of allowing thicker snow slabs to accumulate on low to modest angle starting zones (30-35 degrees) before large releases. Such avalanches will have long runouts for both wet and dry releases. Rain-on-snow events can trigger

avalanches and these events are expected to become more frequent in a warming climate.

Forest Conditions

The high-elevation, subalpine forests play a crucial role in avalanche mitigation on all aspects. Current forest conditions on many steep northerly slopes (>30-degrees) prevent the release of large avalanches. Loss of forests caused by fire, blowdown, clearing or any other cause will adversely affect the avalanche hazards, increasing the frequency and magnitude of avalanches. Conversely, active management of tree spacings, canopy densities, ages, species and ground cover could stabilize and eventually reduce avalanche hazards levels. While efforts to improve forest health are planned and underway, it is impossible for us to predict future forest conditions.

Table 1 summarizes literature related to forest density and avalanche release. The data in Table 1 are based on a very short period of observation and do not necessary apply to long-return period avalanches.

Table 1 - Protection Forest Guidelines

	Reference	slope angle	min. diameter (in)	trees per acre	avg spacing (ft)	canopy cover (%)	Comments
2	McClung & Schaerer	gentle	-	200	15	-	refers to mechanical prevention of trunks; no canopy effects
		steep	-	400	10	-	
3	Schneebli	32-42 deg	6	70-180	16-25	30-80	Swiss field study of 5 forest types; extreme events not represented
4	Weir	-	5-6	400	10	-	Cedar-hemlock forest interior B.C.
5	Jamieson	-	6	80	23	-	References Swiss data

12. Avalanche Risk

The following information is intended to provide context for the recommendations provided in the following section of this report, especially as they relate to hazard zoning, land use, occupied buildings, and exposure to avalanche hazards.

Avalanche risk is defined as the probability of injury, death or losses caused by an avalanche. Risk can be expressed as the product of probability, magnitude, exposure and vulnerability. Each component contributes to the risk.

$$R = f (P, M, E, V)$$

Risk, R , can be reduced to an acceptable level by reducing any one or more of the risk factors. Zoning maps reflect the probability-magnitude elements. Land use decisions (dwelling locations and unit-density) and mitigation designs (structural, architectural, civil) affect the exposure and vulnerability components. Exposure (E) includes both time and numbers of people or value of resources for a given location. Exposure can be reduced by structural and architectural designs that place high occupancy uses in protected areas. This is particularly important for outdoor uses such as hot tubs, entries and outdoor living spaces. Vulnerability (V) is the resistance to loss. Persons inside of buildings designed for avalanche impact have a high level of protection, but outside of buildings, vulnerability is high. Vulnerability for persons outside of buildings is best managed by designs and user awareness that minimize the time of exposure.

Each component of risk involves uncertainties. The probability-magnitude uncertainties for avalanche hazards are generally larger than the uncertainties for vulnerabilities due to the short historic record and limitations of avalanche mapping science.

13. Recommendations

Land Use

1. No occupied or valuable structures should be constructed in the Red Avalanche Hazard Zones.
2. Occupied and valuable structures should be located outside of the Blue and Yellow Zones, wherever practical.
3. No critical structures should be constructed in the Blue or Yellow Zones. Critical structures include emergency response facilities (police, fire, ambulance, clinics), hospitals and schools.
4. No high-occupancy structures (hotels, apartments, auditoriums, etc.) should be constructed in the Red or Blue Zones.
5. If low-occupancy, residential or commercial structures are constructed in the Blue Avalanche Hazard Zones, they should be located as low as practical in the Blue Zone and designed to withstand avalanche impact and static loads. Avalanche loads cannot be determined until the location, geometry and orientation of the structures are known.
6. Based on uncertainties, occupied structures in the Yellow (Low) Avalanche Hazard Zone should be designed to withstand avalanche impact and static loads. In larger avalanche paths (more than 1000 vertical foot fall), stagnation pressures from the suspension component (powder blast) can act to heights of 50-feet or more. Avalanche loads cannot be determined until the location, geometry and orientation of the structures are known.
7. Site and architectural designs should address avalanche hazards in the Blue and Yellow Zones. Building entries and outdoor living spaces, especially hot tubs and heated outdoor spaces, should be placed in protected areas away from the

avalanche-facing side of the building. In cases where this is not practical, evacuation plans for exposed areas should be made and implemented. Windows and doors on the uphill side should be avoided or designed for impact.

8. All utilities in avalanche zones should be buried. Gas lines, utility meters and fire hydrants in avalanche zones should be protected to prevent damage.
9. It is possible to achieve a high level of avalanche protection for occupants inside specially designed, reinforced buildings, but persons and pets outside will not be protected. Therefore, it is prudent for occupants and guests of residential buildings in and near avalanche hazard zones to become educated and keep current on local avalanche conditions, including the local and regional avalanche danger forecasts. However, reliance upon forecasts and avoiding avalanche zones during elevated avalanche danger conditions can reduce, but not eliminate avalanche risk, especially to persons outside of buildings.

Avalanche Ordinance

The following is from Ordinance 17-030:

SECTION 7. GENERAL PROVISIONS.

Part 6. Avalanche Design Requirements

Prior to the Village issuing a building permit for the construction of a new, freestanding building to be occupied by one or more persons, the applicant must provide the following to the Village for review by the Planning Officer:

- 1. A written report analyzing the potential avalanche hazards and the potential physical forces, if any, created thereby upon the proposed improvement or structure, and;*
- 2. A structural analysis of the proposed building or structure prepared and sealed by a New Mexico licensed engineer reflecting an engineering analysis and design which states that the design of the building or structure can withstand the potential force from an avalanche as set forth in the avalanche report referred above. This analysis shall be required only if the referenced report indicates that an avalanche hazard exists.*
- 3. The issuance of a building permit by the Village shall not be construed to mean that the Village agrees that the proposed building will withstand an avalanche.*

The ordinance does not incorporate the 2001 Avalanche Hazard Maps or distinguish between different (Red or Blue) hazard zones. In the U.S., local jurisdictions determine restrictions and requirements for development in avalanche zones. The ranges of restrictions vary from none or few to severe. These are policy decisions that have

significant impacts on public and private properties. We offer some general guidelines and recommendations:

1. The recommendations in the previous section should be incorporated, including distinguishing between hazard zones and allowable land uses, particularly for the Blow and Red Zones.
2. The issue of non-conforming structures (e.g. unreinforced buildings in Blue Zones) should be addressed by informing owners and occupants and addressing future additions, improvements or avalanche defenses prior to issuing building permits.
3. The ordinance should allow for review and adjustment of avalanche zones based on analyses by a qualified avalanche professional.
4. We recommend incorporating avalanche hazard maps into the ordinance with procedures for amendments to the avalanche hazard maps.
5. We recommend requiring that new construction does not adversely impact avalanche hazards on adjoining and downhill properties, including public roads and utilities.
6. We recommend developing a list of criteria for reviewing developments in avalanche zones.
7. We recommend that public officials review avalanche ordinances from other jurisdictions, including Vail Colorado, Pitkin County Colorado, Ketchum, Idaho and Blaine County, Idaho.
8. We recommend that thinning be limited on slopes steeper than 30 degrees to the minimum conifer tree densities for trees 6" diameter and larger per Figure 13 to the maximum extent practical. Deciduous and dead/snag tree densities should be double those shown in Figure 13 for avalanche protection. Tree spacing should be relatively even and staggered to avoid fall-line clearings longer than about 50 to 100-feet of slope distance.

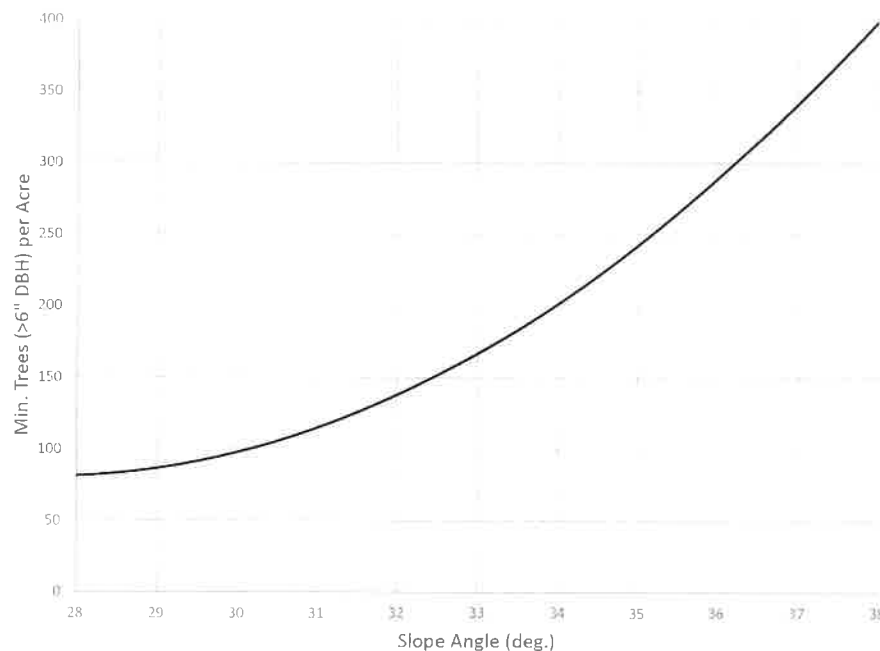


Figure 14 – Minimum Conifer Densities vs. Slope for Avalanche Protection

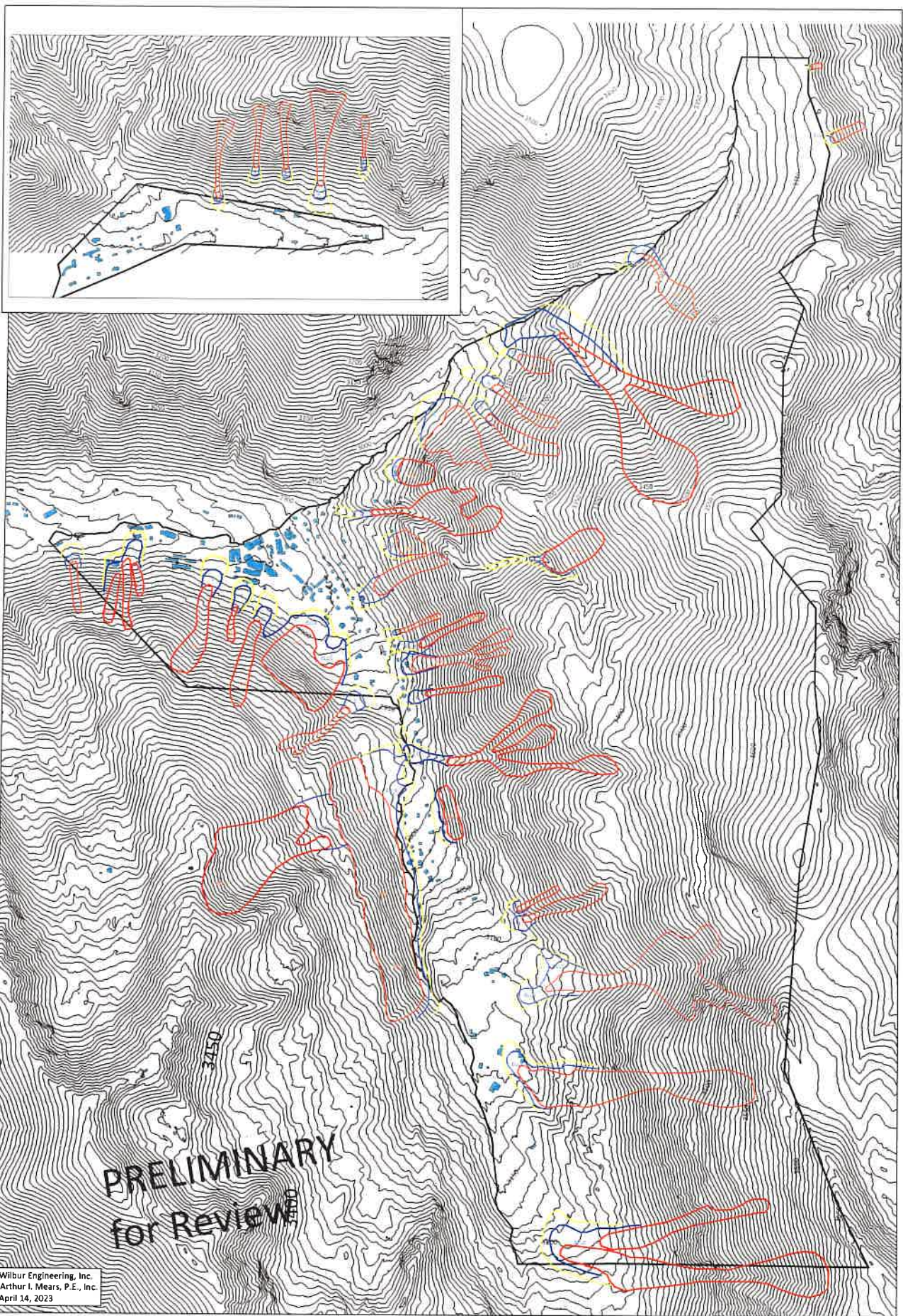
14. References

1. Johnson, Lane B. and Margolis, Ellis Q., *Surface Fire to Crown Fire: Fire History in the Taos Valley Watersheds, New Mexico, USA*, Fire 2019, 2, 14; doi:10.3390/fire2010014 www.mdpi.com/journal/fire
2. Dolecek Enterprises Inc., Northside at Taos Ski Valley, Forest Management Plan, 2020.
3. Jamieson, Bruce (editor), 2018, *Planning Methods for Assessing and Mitigating Snow Avalanche Risk*, Canadian Avalanche Association.
4. McClung, David & Schaerer, Peter, 2006, *The Avalanche Handbook*, 3rd edition, The Mountaineers.
5. Schneebli, Martin & Meyer-Grass, Martin, 1992, *Avalanche Starting Zones Below the Timberline Structure of Forest*, International Snow Science Workshop.
6. Weir, Peter, 2002, *Snow Avalanche Management in Forested Terrain*, BC Ministry of Forests Land Mgmt. Handbook 55.
7. Teich, M., Bartelt, P., Grêt-Regamey, A. and Bebi, P., 2012. Snow avalanches in forested terrain: Influence of forest parameters, topography and avalanche

characteristics on runout distance. Arctic, Antarctic, and Alpine Research 44(4), 509-519.

15. *Warranty*

You as my client should know that while our company can and does attempt to uphold high professional standards, the state of scientific and engineering knowledge is incomplete, and does not permit certainty. The complex phenomena involved in avalanches cannot be perfectly evaluated and predicted, and methods used to predict avalanche behavior change as new research becomes available. While we can and will offer our best professional judgment, we cannot and do not offer any warranty or guarantee of results.



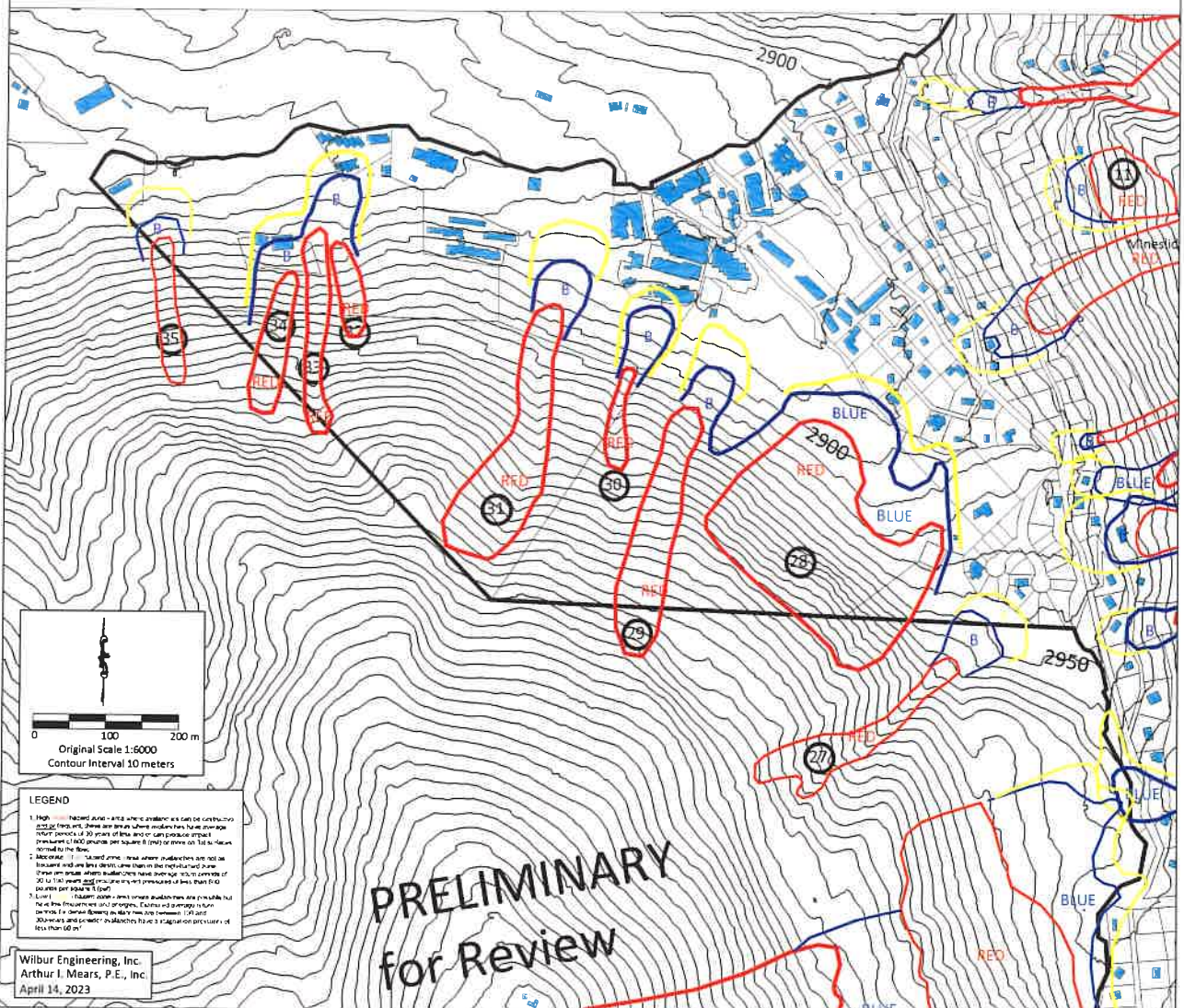
Wilbur Engineering, Inc.
Arthur I. Mears, P.E., Inc.
April 14, 2023

NOTES

1. Avalanche Hazard Zones are subject to limitations described in the accompanying report
2. The avalanche hazard zones are based on 2021 and 2015 LiDAR topography
3. Land use constraints and recommendations for Red, Blue and Yellow avalanche zones are described in the report
4. Off-site Avalanche Hazard Zones are subject to revision and should not be relied upon for any purpose
5. Site boundary is approximate and based on Village of Taos Ski Valley GIS data and is not survey grade
6. Image from USGS, 1:62,500

Avalanche Hazard Map
Index Map
Village of Taos Ski Valley, New Mexico, USA

Map
1

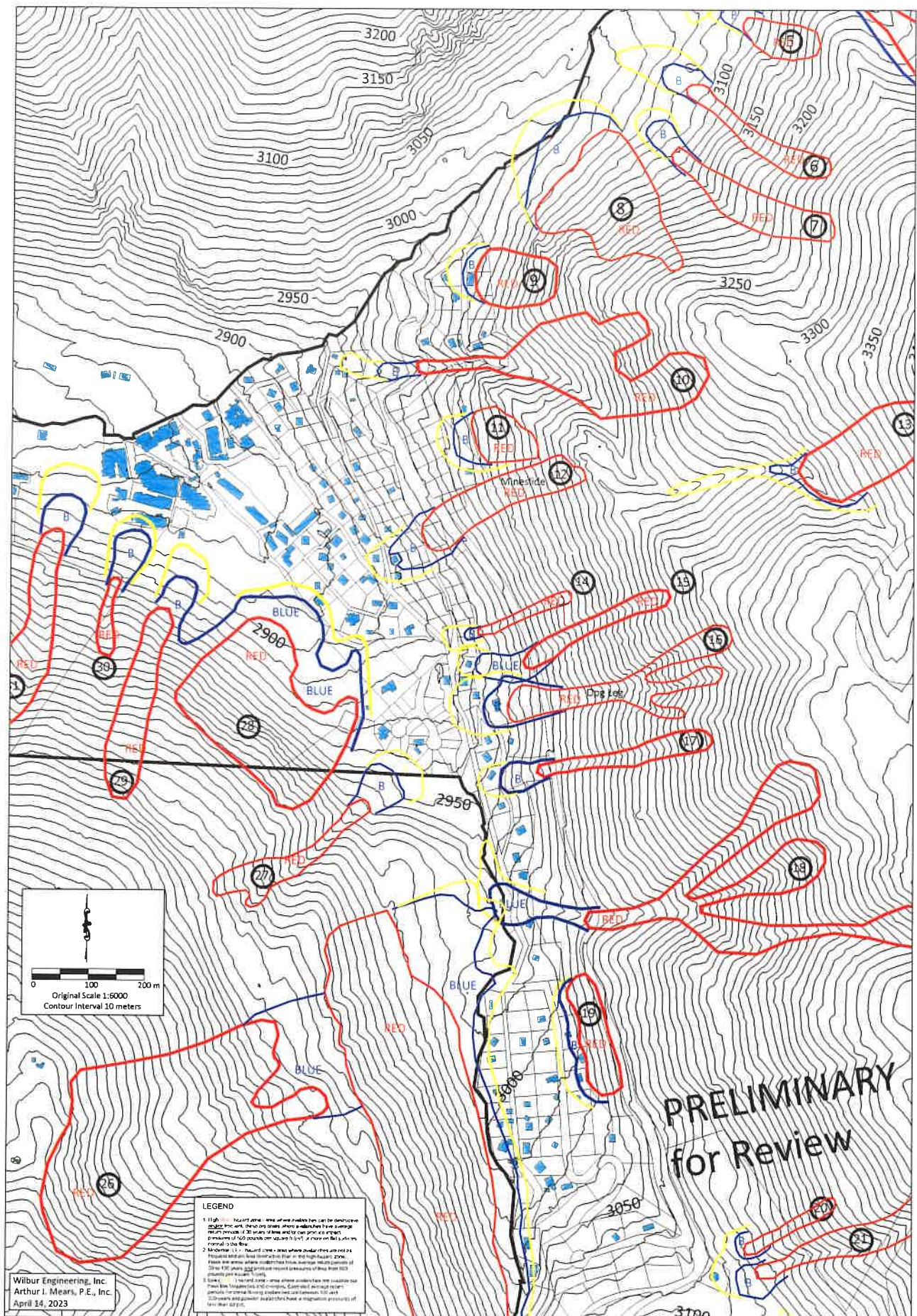


NOTES

1. Avalanche Hazard Zones are subject to limitations described in the accompanying report.
2. The avalanche hazard zones are based on 2015 LiDAR topography.
3. Land use constraints and recommendations for Red, Blue and Yellow avalanche zones are described in the report.
4. Village limits, parcel boundaries and building locations are approximate and based on Village of Taos Ski Valley GIS data.

Avalanche Hazard Map
Amizette & Frontside
Village of Taos Ski Valley, New Mexico, USA

Map
2

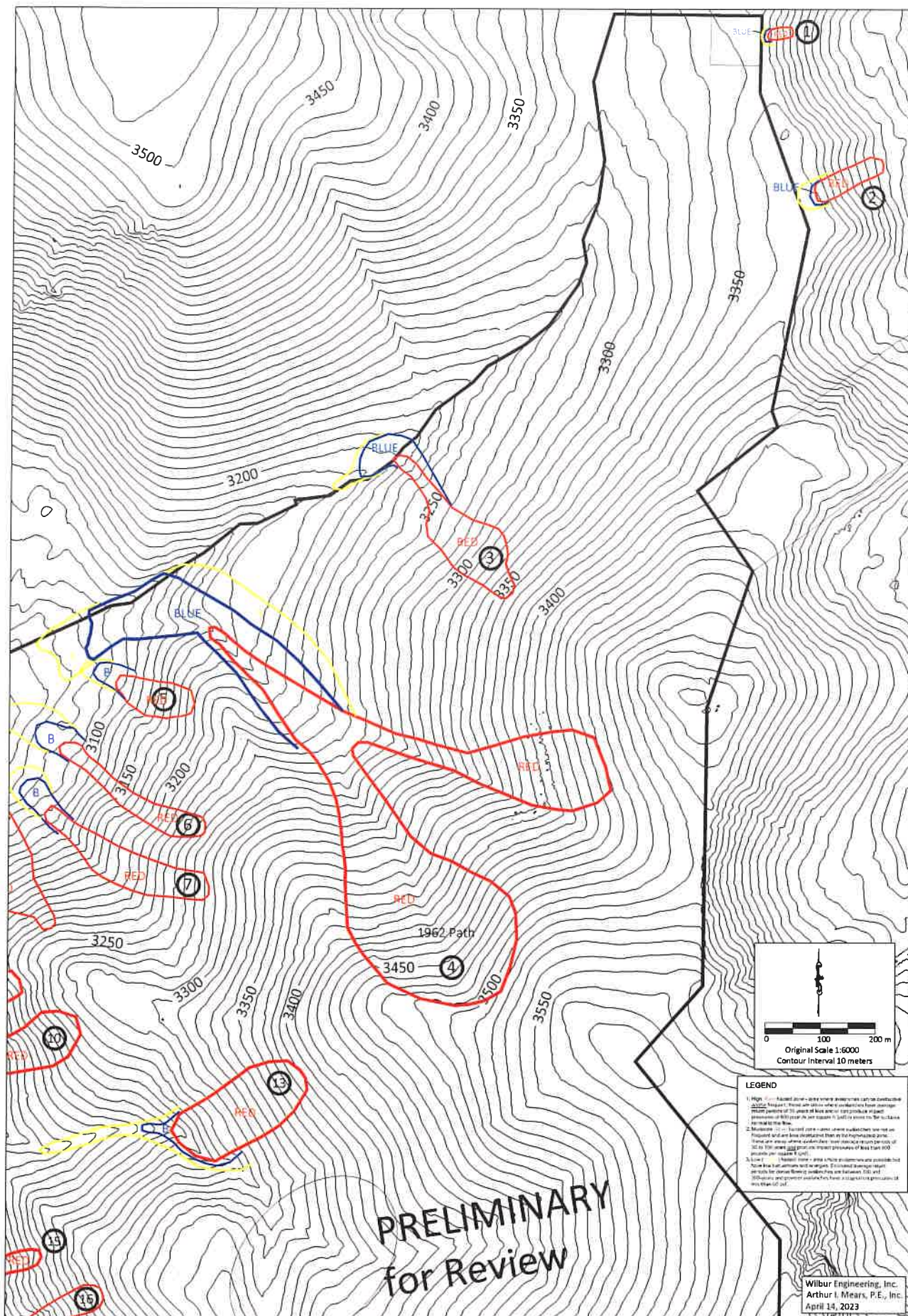


NOTES

1. Avalanche Hazard Zones are subject to limitations described in the accompanying report.
2. The avalanche hazard zones are based on 2015 LiDAR topography.
3. Land use constraints and recommendations for Red, Blue and Yellow avalanche zones are described in the report.
4. Village limits, parcel boundaries and building locations are approximate and based on Village of Taos Ski Valley GIS data.

Avalanche Hazard Map Lower Lake Fork Village of Taos Ski Valley, New Mexico, USA

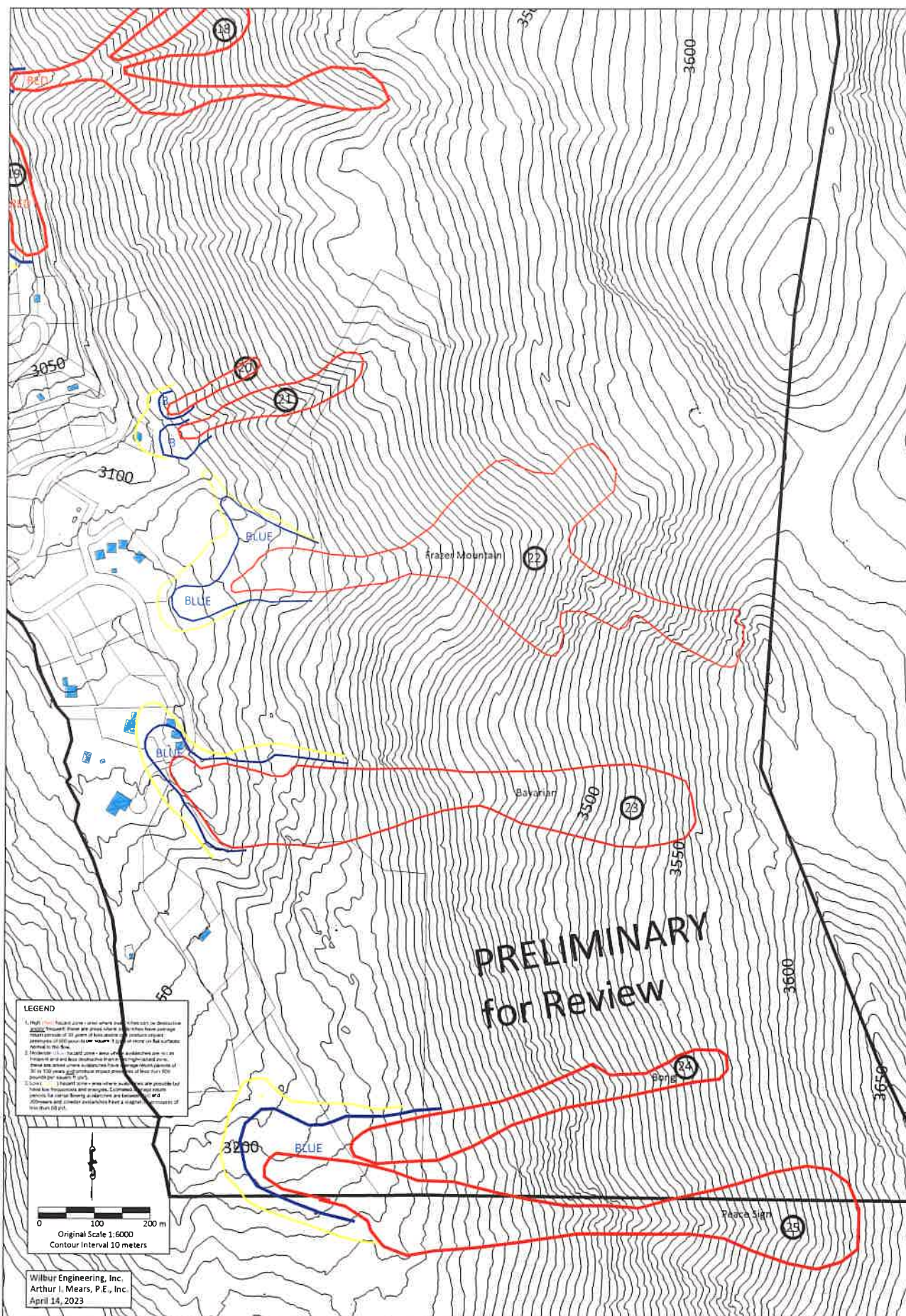
Map
3



Avalanche Hazard Map Northside

Village of Taos Ski Valley, New Mexico, USA

Map
4



NOTES

1. Avalanche Hazard Zones are subject to limitations described in the accompanying report.
2. The avalanche hazard zones are based on 2015 LIDAR topography.
3. Land use constraints and recommendations for Red, Blue and Yellow avalanche zones are described in the report.
4. Village limits, parcel boundaries and building locations are approximate and based on Village of Taos Ski Valley GIS data.

Avalanche Hazard Map
 Lake Fork
 Village of Taos Ski Valley, New Mexico, USA

Map
5



Wilbur Engineering, Inc.
Arthur I. Mears, P.E., Inc.
April 14, 2023

Appendix A Climate Data

Poco Gusto Weather Station, el. 10,860'

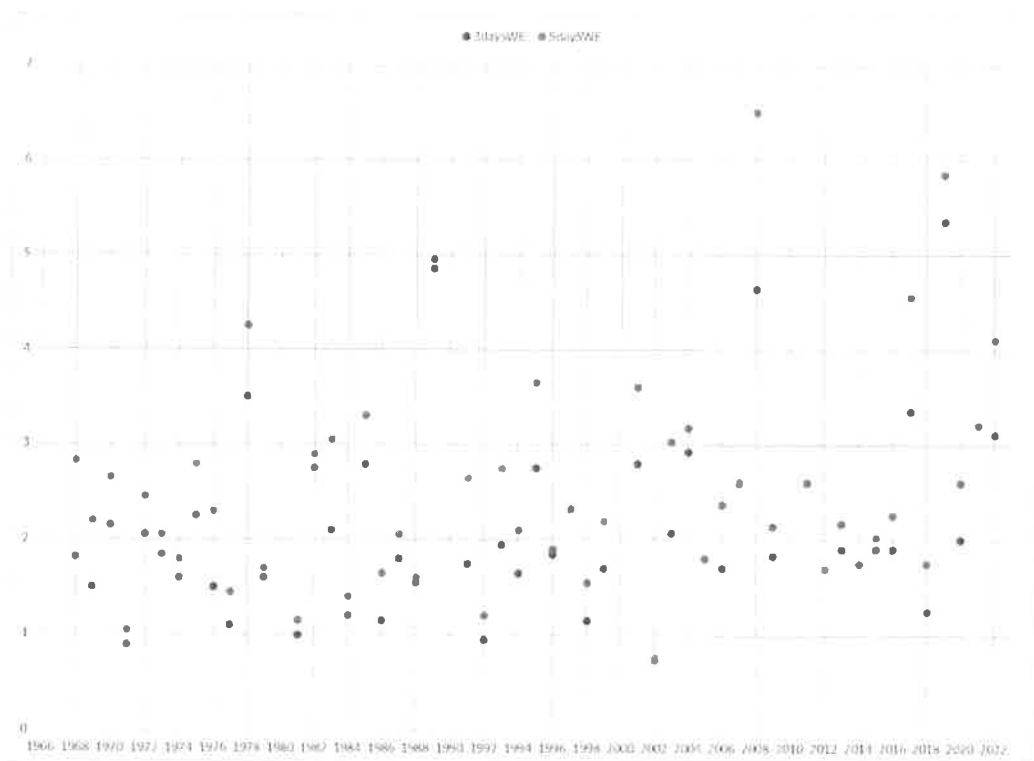
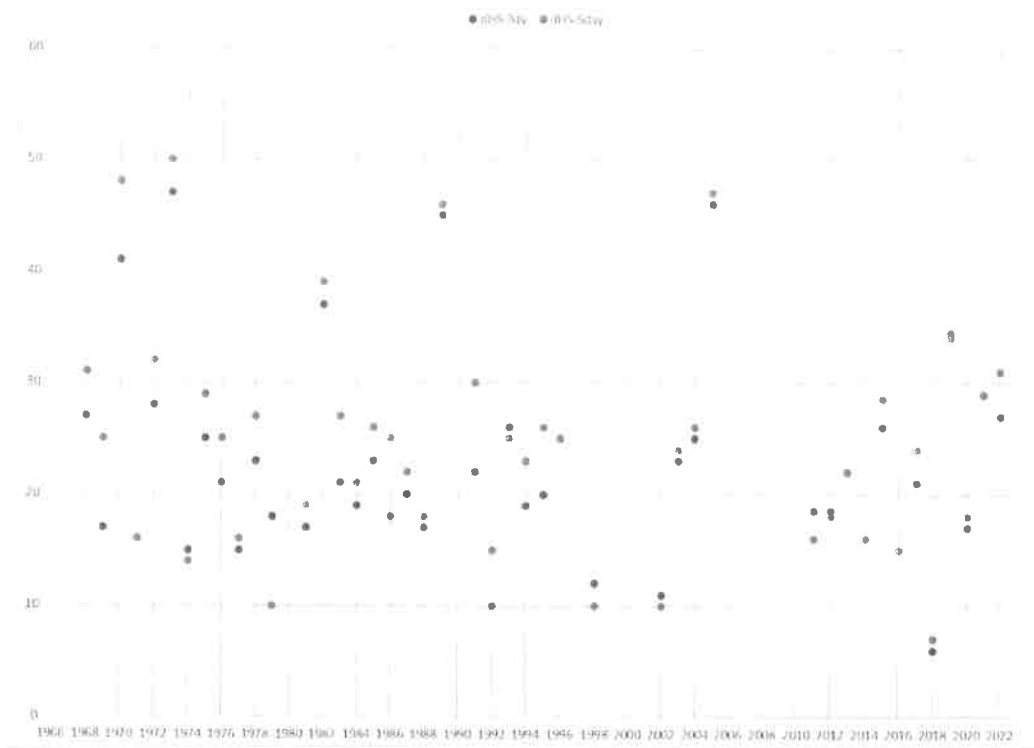
rank	3-day SWE		5-day SWE		delta-HS 3-day		delta-HS 5-day	
1	2019	5.35	2008	6.51	1973	47	1973	50
2	1989	4.85	2019	5.85	2005	46	1970	48
3	2008	4.64	1989	4.95	1989	45	2005	47
4	1978	3.50	2017	4.55	1970	41	1989	46
5	2017	3.35	1978	4.25	1982	37	1982	39
6	2021	3.20	2022	4.10	2019	35	2019	34
7	2022	3.10	1995	3.65	2021	29	1972	32
8	2004	2.92	2001	3.60	1972	28	2022	31
9	2001	2.80	1985	3.30	2022	27	1968	31
10	1985	2.79	2021	3.20	1968	27	1991	30

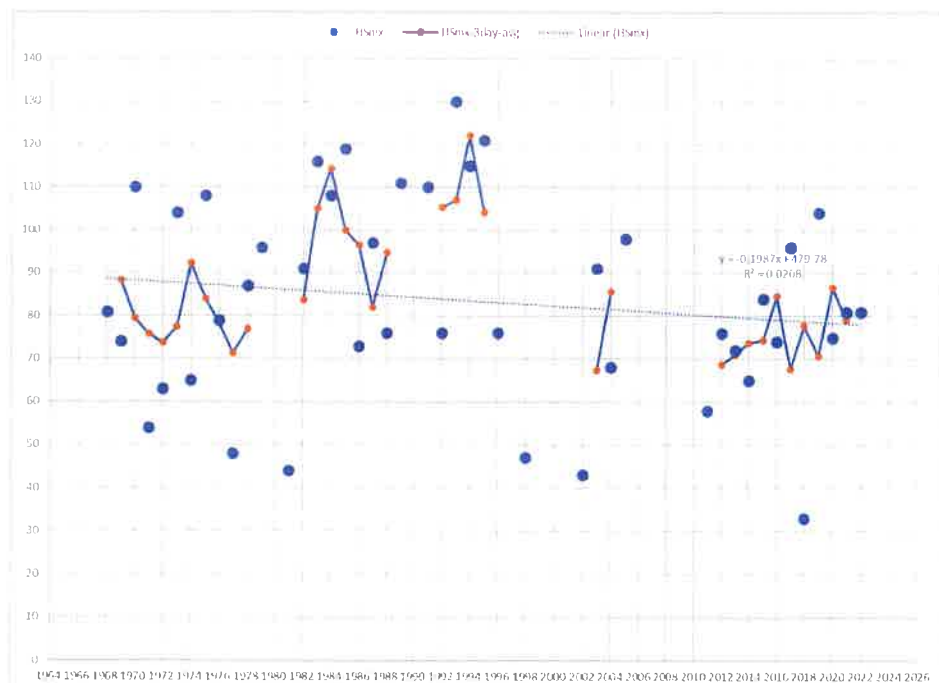
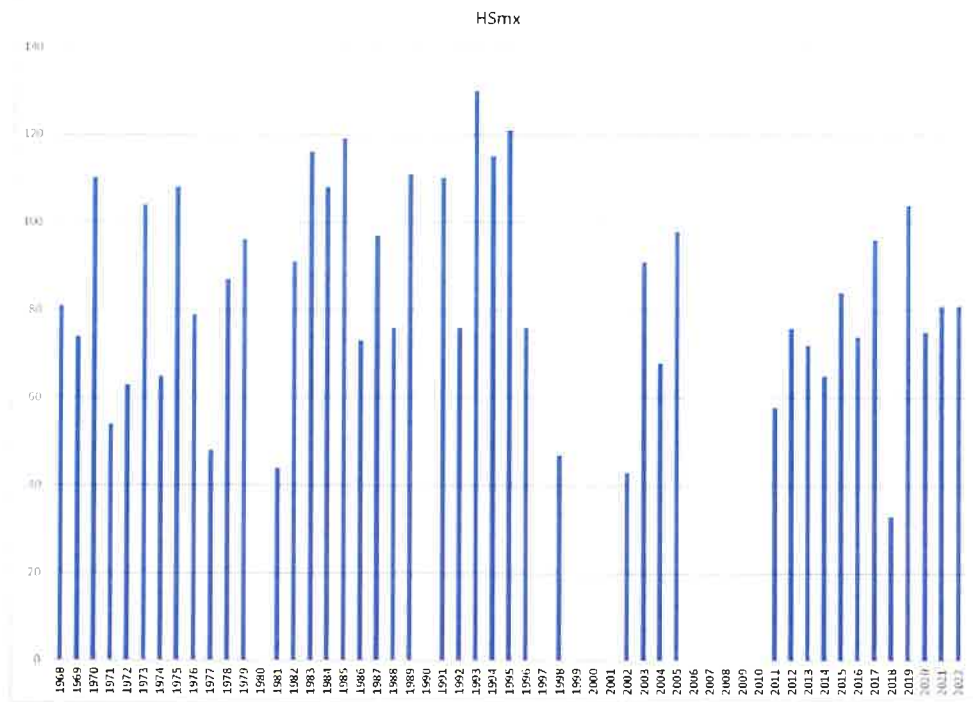
Notes:

1. Data provided by TSV Ski Patrol in inches from Poco Gusto, el. 10,860 ft.
2. SWE period of record: 51/55 years
3. HS period of record 43/55 years
4. missing all data:1980, 1990, 2000, 2010
5. missing HS data: 1999-2001, 2006-2009

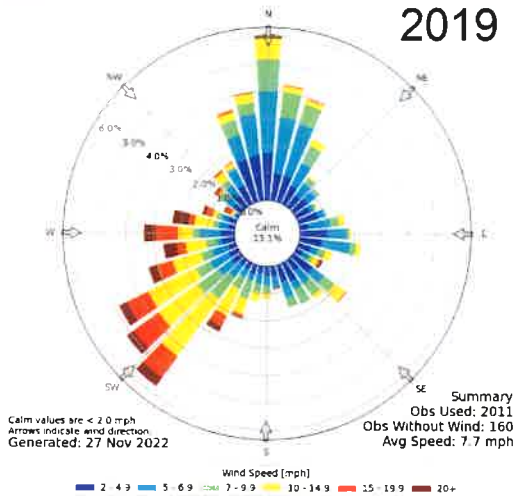
Chronological Storm Dates

	HSmx	HSmx- 3day- avg	HN- max	HW- max	dHS- 3dy	dHS- 5day	3dayS WE	5day- SWE	mid-storm
1970	110	79	22	1.15	41	48	2.15	2.65	3/31/1970
1973	104	77	18	1.05	47	50	1.85	2.05	12/29/1972
1975	108	84	20.5	1.15	25	29	2.25	2.8	3/10/1975
1978	87	77	16	1.8	23	27	3.5	4.25	3/2/1978
1982	91	84	34	2.05	37	39	2.75	2.9	2/4/1982
1983	116	105	12	0.9	21	27	2.1	3.05	3/20/1983
1985	119	100	16	2	23	26	2.79	3.3	3/12/1985
1989	111		36	2.85	45	46	4.85	4.95	2/5/1989
1991	110		18	1.7	22	30	1.75	2.65	12/15/1990
1993	130	107	16	1.15	26	25	1.95	2.75	1/10/1993
1994	115	122	16	1.2	19	23	1.65	2.1	3/27/1994
1995	121	104	12	1.5	20	26	2.75	3.65	3/4/1995
2001							2.8	3.6	4/7/2001
2005	98		11	1.75	46	47	1.8	1.8	12/30/2004
2008			18	2.9			4.64	6.51	12/10/2007
2017	96	68	19	2.3	21	24	3.35	4.55	1/8/2017
2019	104	71	28	3	34.5	34	5.35	5.85	3/14/2019

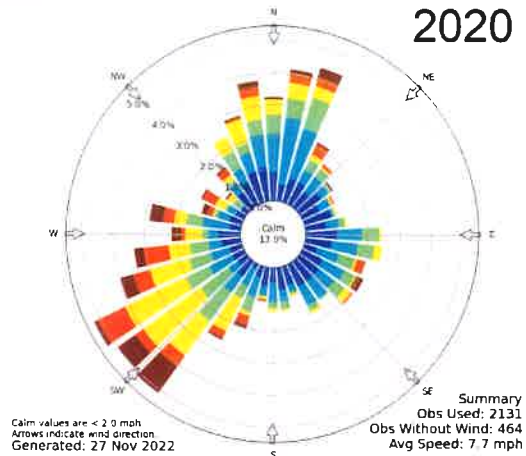




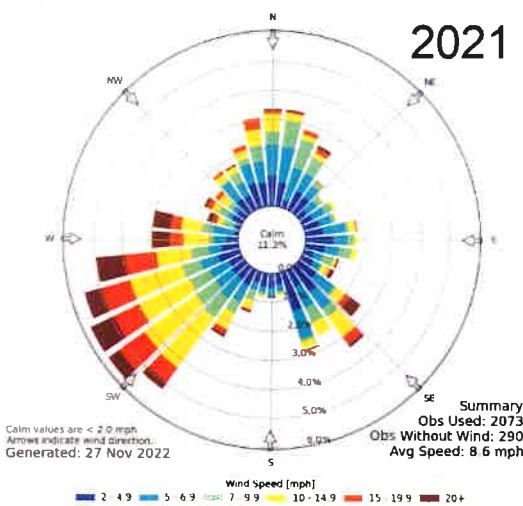
Windrose Plot for [SKX] TAOS MUNI APT(AWOS)
Obs Between: 01 Jan 2019 12:56 AM - 26 Mar 2019 11:56 PM America/Denver



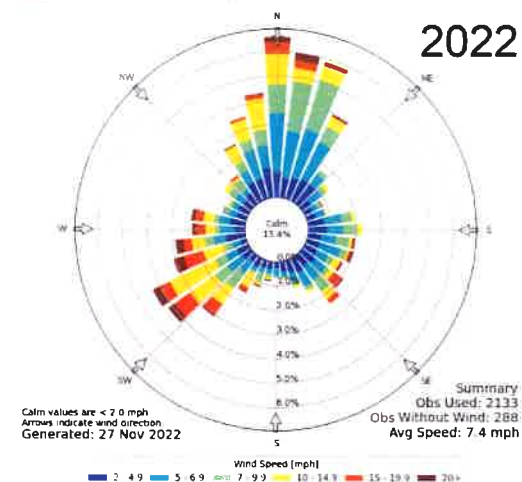
Windrose Plot for [SKX] TAOS MUNI APT(AWOS)
Obs Between: 01 Jan 2020 12:56 AM - 30 Mar 2020 11:56 PM America/Denver



Windrose Plot for [SKX] TAOS MUNI APT(AWOS)
Obs Between: 01 Jan 2021 12:56 AM - 30 Mar 2021 11:56 PM America/Denver



Windrose Plot for [SKX] TAOS MUNI APT(AWOS)
Obs Between: 01 Jan 2022 12:56 AM - 30 Mar 2022 11:56 PM America/Denver



Taos Airport Wind Roses for Jan-Mar, 2019-2022

Taos Powderhorn SNOTEL
Site Number: 1168
Elevation: 11045 feet
Reporting since: 2010-08-09

DRAFT Avalanche Hazard Assessment
Village of Taos Ski Valley
Taos Ski Valley, New Mexico

Wilbur Engineering, Inc.
Arthur I. Mears, P.E., Inc.
April 14, 2023

***Appendix B
Site Photos***



Location low in Jean's meadow; branches stripped on large tree to 16+ feet



Lop and pile area in 1962 avalanche path



Frazier, Bavarian, Bong, Peace paths
Jan. 11, 2008



Dog Leg Path
Jan. 11, 2008 C. Wilbur photo



Mineslide Feb. 9, 2011



Fire Mitigation and Blowdown Area (lop and pile)

April 12, 2023

Appendix C

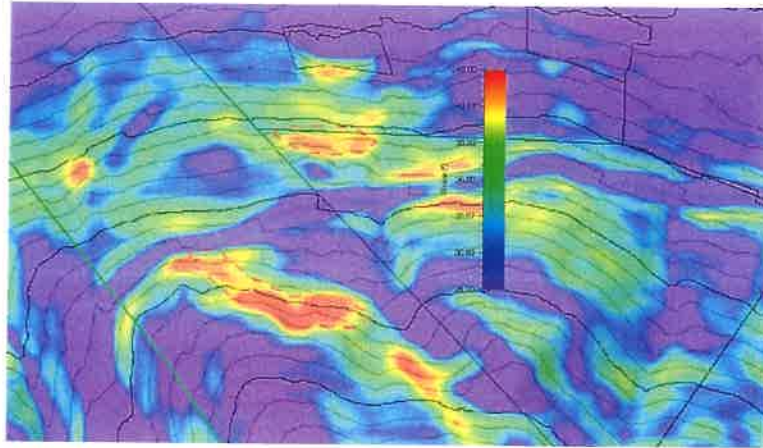
RAMMS Parameters & Results for Design Magnitude Avalanche

***** Important Note: *****

Interpretation of avalanche dynamics model results requires an understanding of the model assumptions, simplifications and limitations of the underlying equations of motion. The models do not accurately show wet avalanche runouts, flow heights or impact pressures, or the variations in avalanche properties with depth, including density and velocity.

Run No.	res.	Release			Friction	cohesion (Pa)	Comments
		name	ht. (m)	vol(m3)			
Snowbear Condos							
run1	5	R1	0.8	6,200	S100	0	upper rel. Snowbear
run2	5	R1	0.8	6,200	S100-for	0	add forest friction
run3	5	R2	0.7	2,300	T100	0	lower rel Snowbear
run4	5	R1	0.7	2,300	T100-for	0	add forest friction
NTSV-front							
run6	3	R2	0.8	15,700	T100	100	7 tiny rel. front side
run7	3	R3	0.6-1.0	24,500	S100	0	8 rel. mid valley - runs too far
run8	3	R3	0.6-1.0	24,500	T100	0	8 rel. mid valley - still runs too far
run9	3	R3	0.6-1.0	24,500	T100	200	Add C
Amizet							
run10	3	R1	0.5	5,400	T100	100	5 tiny rel.
run11	3	R1	0.5	5,400	T100	200	incr C
HSB							
run8	2	R1	0.5		T30	0	30-yr
run9	2	R1	0.65		T100		same rel, diff hts
run5	2	R1	0.75	2000	T30	0	30-100-yr
run10	2	R1	0.85		T300		same rel, diff hts
run6	2	R1	0.9	2400	T100	0	100-yr
run7	2	R1	1.05	2800	T300	0	300-yr

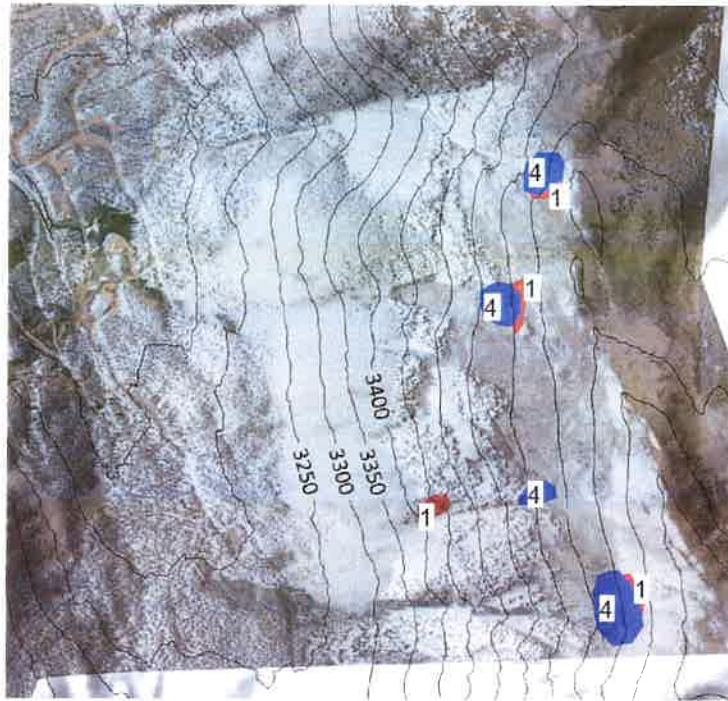
1962 path - Cabin 1.3							
run 1	5	R1	1.0	36,600	M100	0	Jeans mdw - hits cabin 1.3
run 2	5	R1	1.0	36,600	M300	0	300-yr friction
run 3	5	R1	1.0	36,600	M300	100	300-yr add C
run 4	5	R1	0.7	25,600	M100	0	smaller rel
run 5	5	R1	0.7	25,600	M100	100	add C
run 6	5	R1	0.7	25,600	M100	200	addl C
run 7	5	R2	1.0	11,300	S100	0	100yr Wind-loading rel
run 8	5	R3	1.0	9,300	S100	0	E rel. sparse forest
run 9	5	R3	1.2	11,100	S100	0	incr rel ht
run 10	5	R3	1.2	11,100	S300	0	300-yr friction
Late Afternoon paths							
run 11	5	R4	1.0	3,200	T100	0	W of L Afternoon
run 12	5	R5	1.0	5,500	T100	0	N of L Afternoon
run 13	5	R6	1.2	9,600	S100	0	cornice-drift rel 100-yr
run 14	5	R6	1.2	9,600	S100	150	Hi C
run 15		R6	1.2	9,600	S100	75	Low C
run 16	5	R7	0.8	14,800	T100	0	2 east rel.
run 17	5	R7	0.8	14,800	T100	150	1 east rel.
Mineside, Dog leg							
run 18	3	R1	0.7	1,030	T100	0	
run 19	3	R2	0.7	1,850	T100	0	N release
run 20	3	R3	0.7	920	T100	0	S release
run 21	3	R4	0.7	800	T100	0	wider S rel.
run 22	3	R4	0.7	800	T100	0	10% cutoff vol; dep matches 2019
run 23	3	R4	0.8	915	T100	0	calibrated to 2019
run 24	3	R4	0.9	1,030	T100	0	100-yr design-magnitude
run 25	3	R2	0.5	1,320	T100	0	
run 26	3	R2	0.5	1,320	T100	0	10% cutoff vol
run 27	3	R5	0.8	4,840	T300	0	300-yr
run 28	3	R6	0.8	2,300	T100	0	ext rel N
run 29	3	R7	1.0	1,500	T100	0	adj rel per terrain
Frazer, Bavarian, Bong				N-vol(m3)	S-vol(m3)		
run 30	3	R1	1.2	14,500	11,700	M100	initial run
run 31	3	R2	1/0/1.2	12,000	11,700	M100	adj rel. ht for terrain
run 32	3	R3	1/0/1.2	17,800	13,700	M100	revise R2 to fit forest
run 33	3	R4	.75/85	8,100	13,100	S30	30-yr
run 34	3	R5	.9/1.1	9,700	16,900	M100	100-yr
run 35	3	R6	.8/1.1	8,700	16,900	M100	100-yr reduce N rel sli
run 36	3	R7	1.0/1.3	10,800	20,000	M300	300-yr
run 37	3	R6-for	.8/1.1	8,700	16,900	M100	add forest friction
run 38	3	R7-for	1.0/1.3	10,800	20,000	M300	300-yr-forest friction
run 39	3	R8	1.1	14,900	-	M300	incr. 300-yr vol.
run 40	3	R8	1.5	18,700	-	M300	incr rel ht. 300-yr vol.
run 41	3	R4	1.3-1.5	14,100	37,100	M300	300-yr Bav big
run 42	3	R1	1.2	27,000	S100	0	rel from RB
run 43	3	R1	1.2	28,300	S100	0	adj rel per aerial, esp Bong
run 44	3	R3	1.3	40,400	S300	0	300-yr



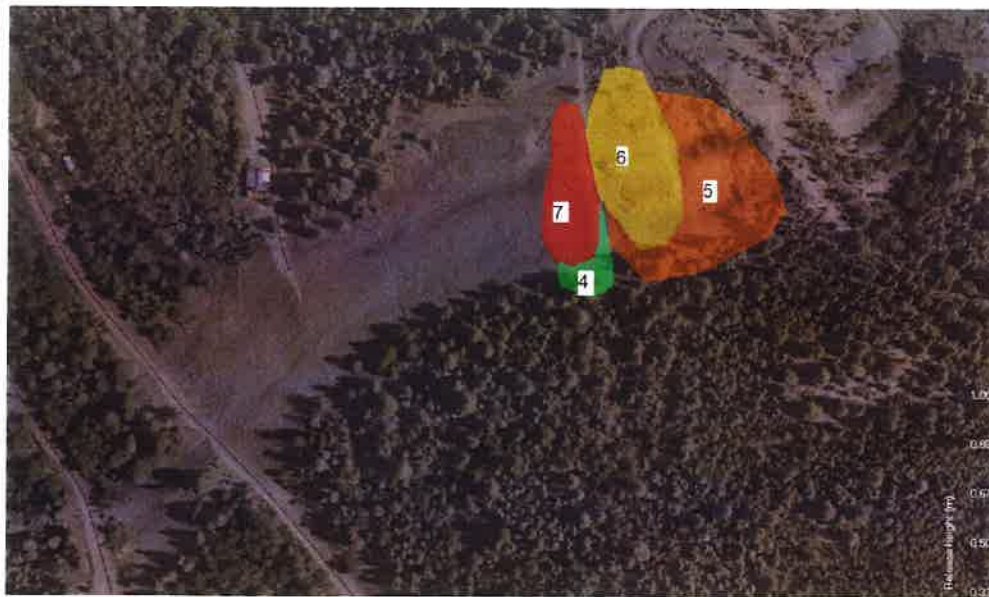
Release areas – above Snow Bear Lodge



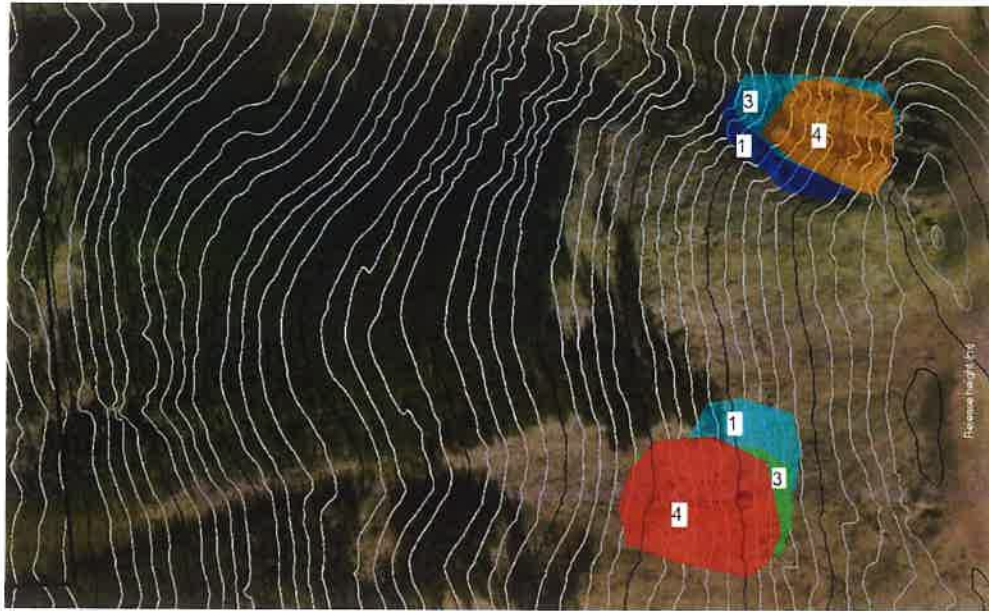
Release areas - Northside



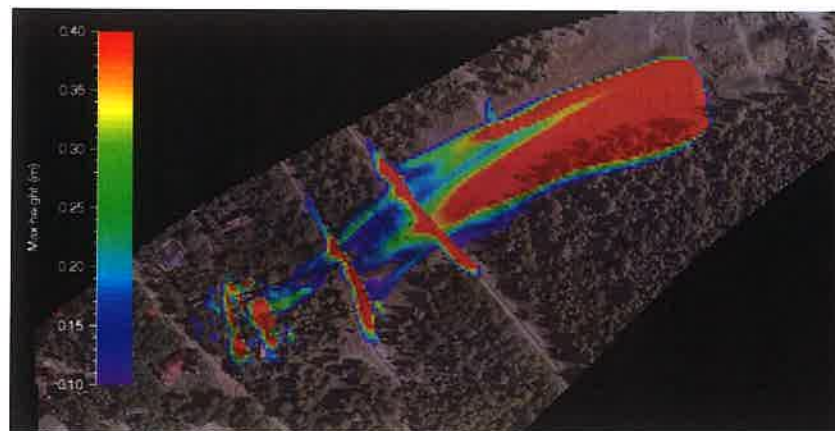
Release areas – Dog leg area



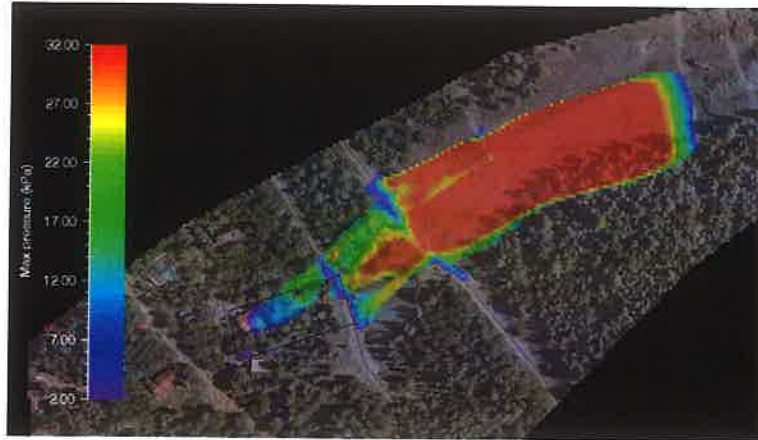
Release areas - Mineslide



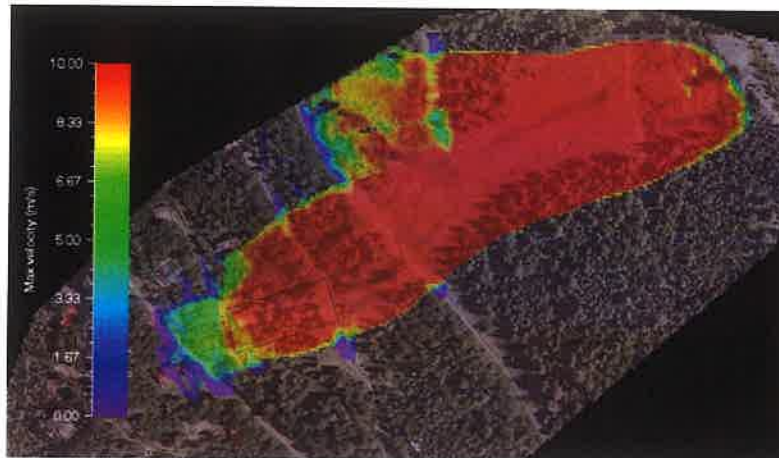
Release areas – Frazer, Bavarian



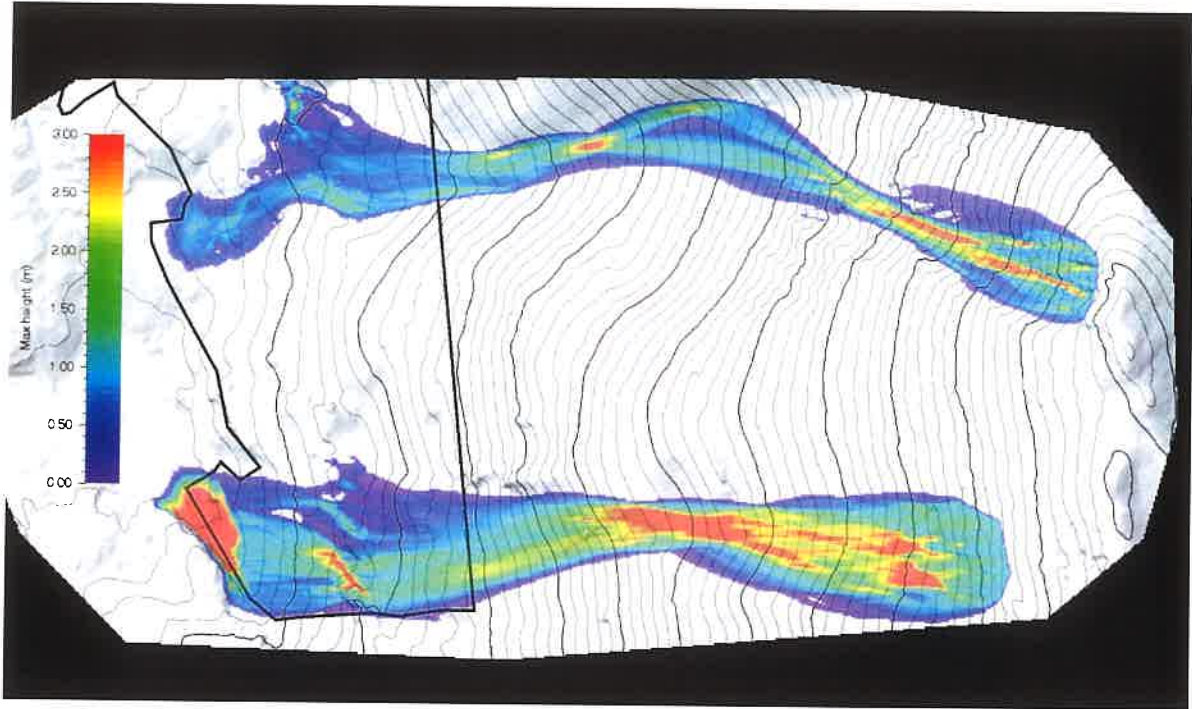
Mineslide Run 24 – height



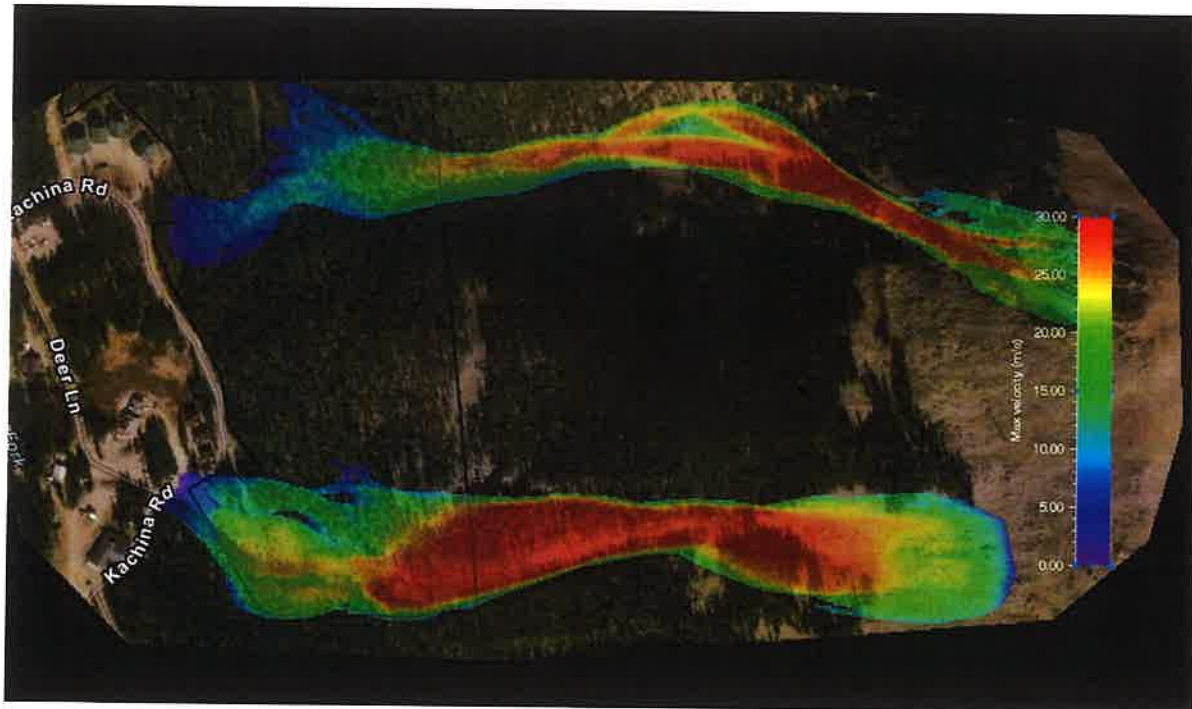
Mineslide Run 24 – pressure



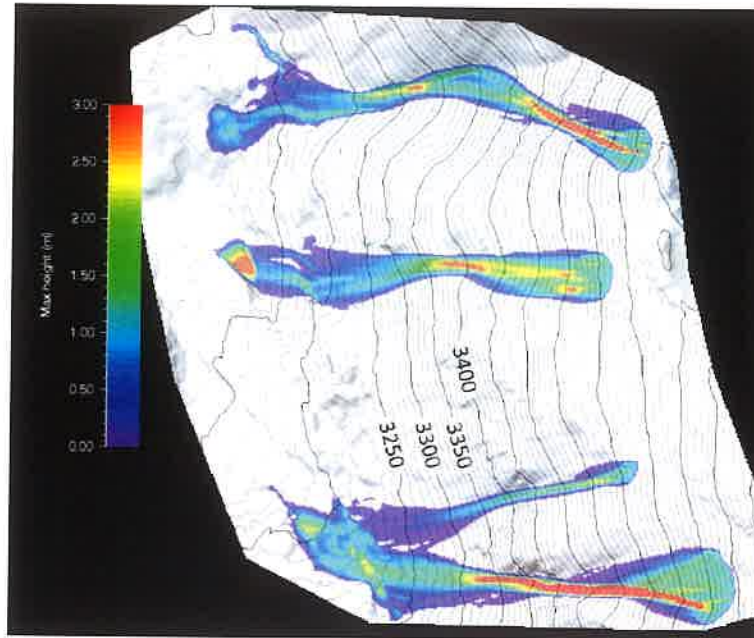
Mineslide Run 27 – velocity



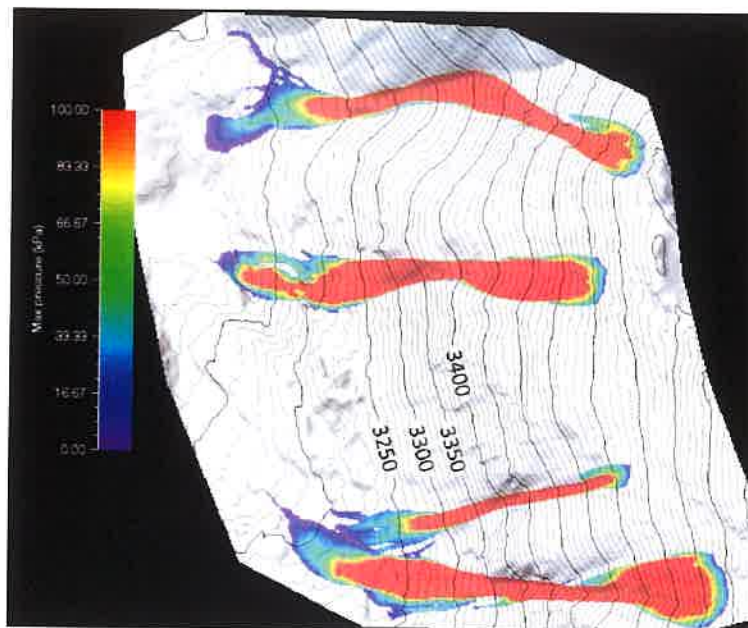
Run 36 – height



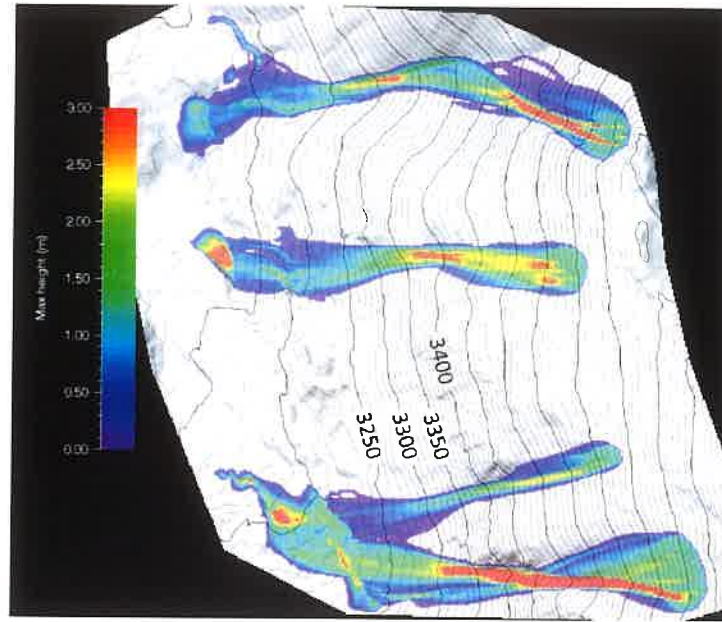
Run 36 – velocity



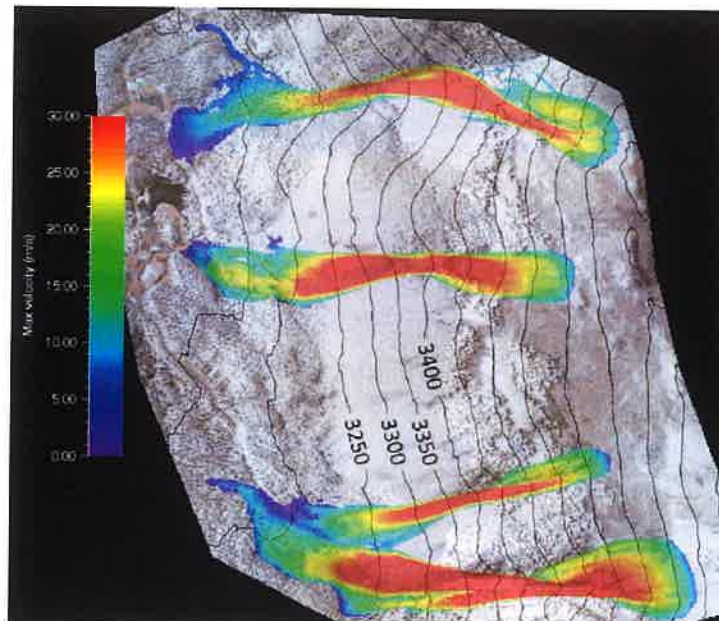
Run 43 – height



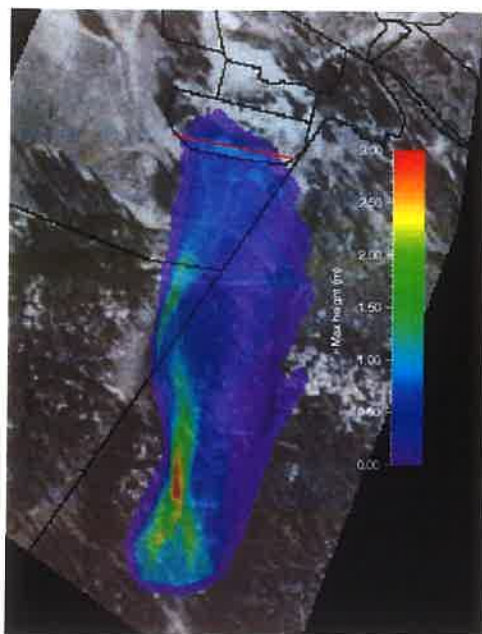
Run 43 – pressure



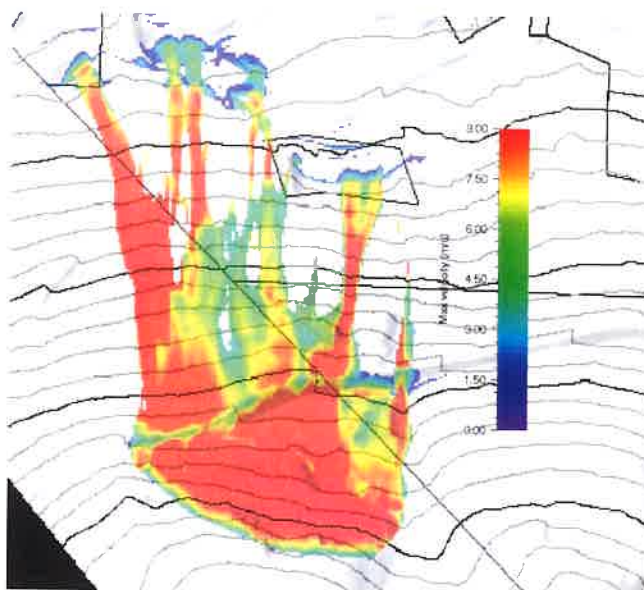
Run 44 – height



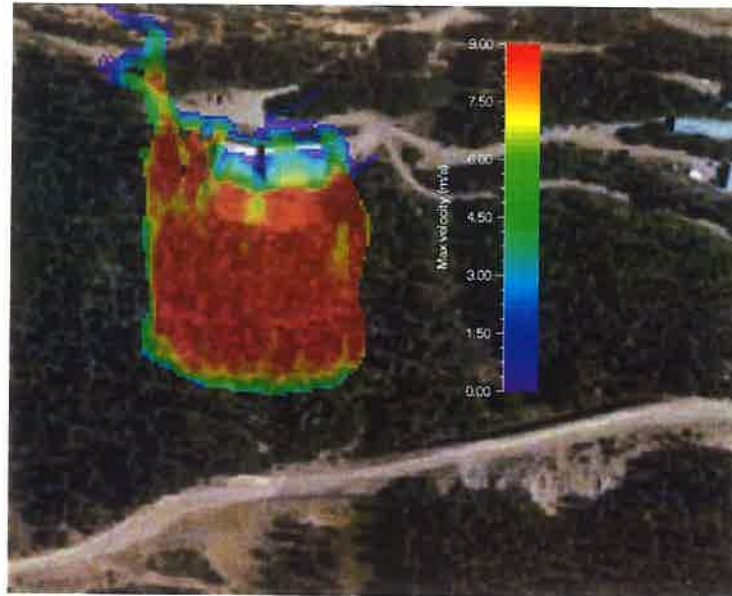
Run 44 – pressure



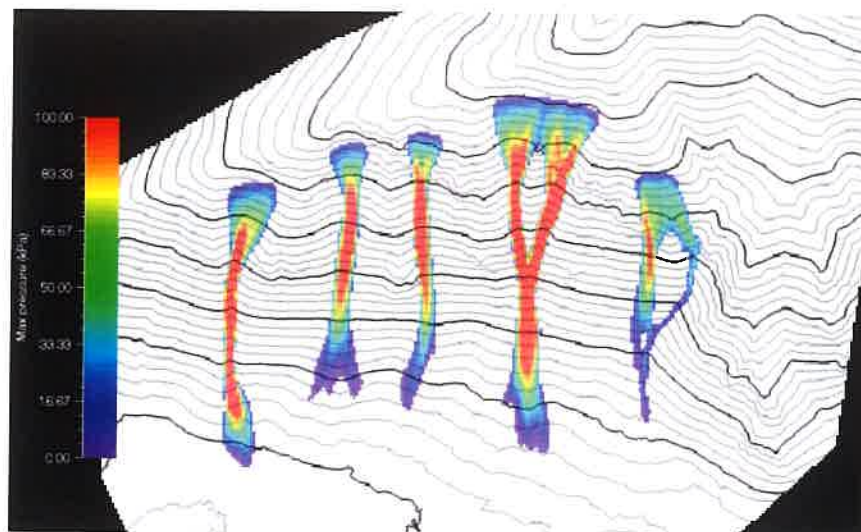
HSB Run 6 – height



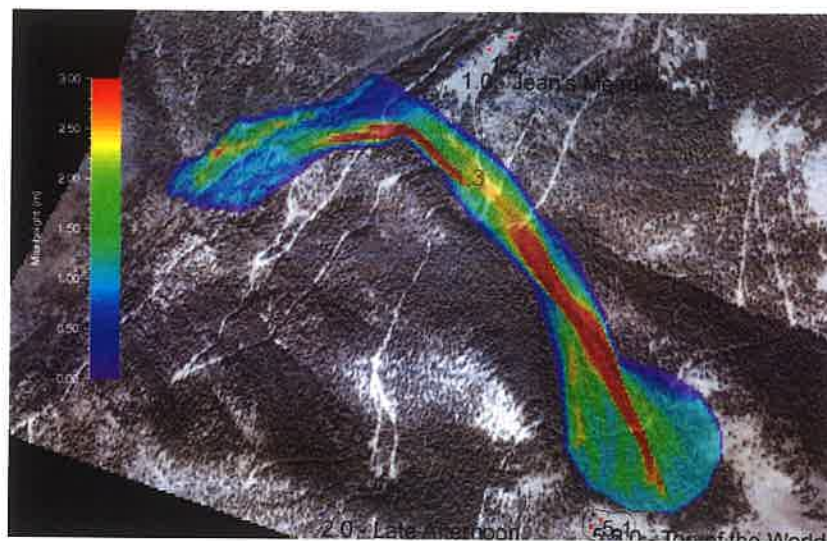
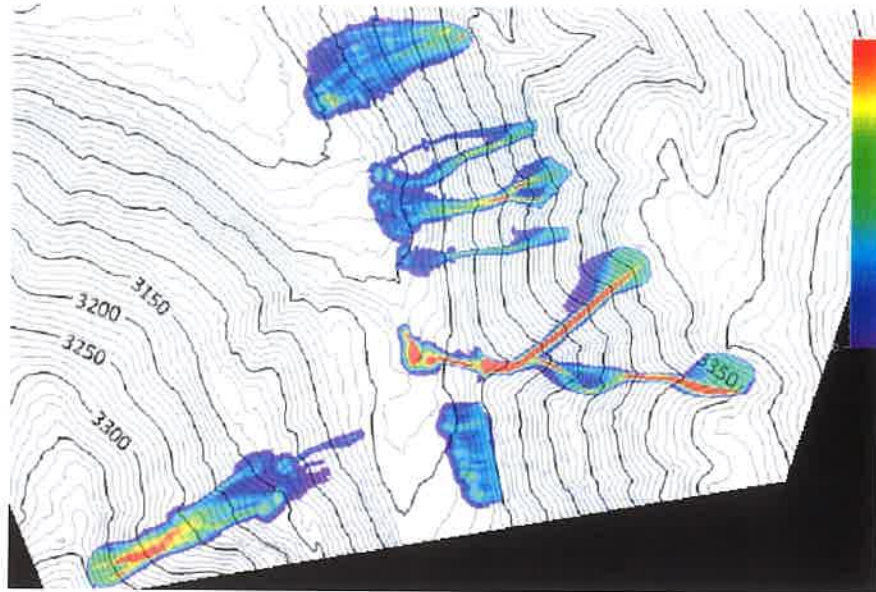
Snowbear Run 4 – height



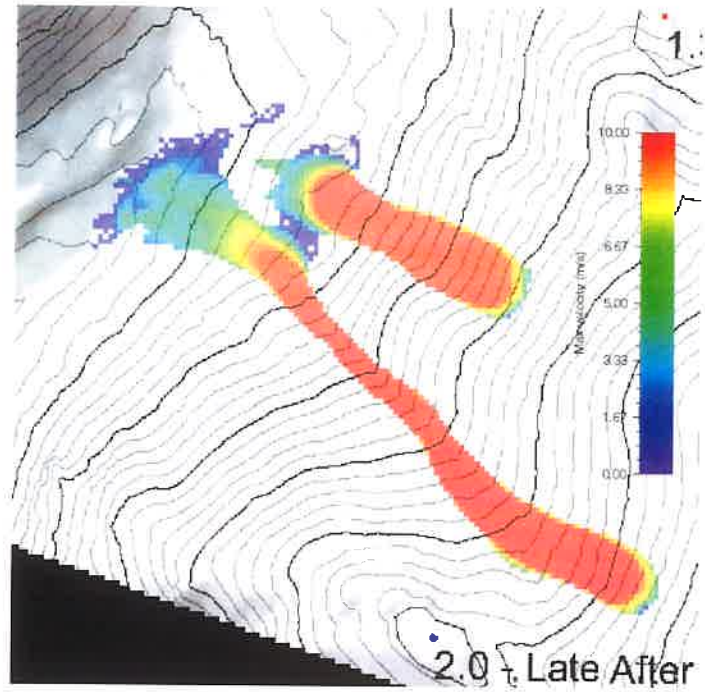
Snowbear Run 3 – height



Amizette Run 11 – height



Northside Run 3 – height



Northside Run 12 – velocity