TOLT RIVER

HYDROLOGY REPORT

The Hydrology Module Report has been reviewed and written comments received. To the extent possible, the commments were incorporated into the Hydrology Module Report. Other comments were transcribed and addressed in the Appendix to the report.

T.W. Cundy

Terrance W. Cundy
Module Leader

4/7/93

Date

HYDROLOGY MODULE

Introduction

The Hydrology Module Report is broken into two major sections. The first describes the results of the Level 1 analyses as documented in the Watershed Analysis Manual. The second section describes the Level 2 analysis which focuses on the history of peak flows in the North Fork Tolt River near Carnation.

Level 1

For this analysis the watershed was broken into 14 components (see section "Component Map) and organized into 16 sub-basins. These sub-basins were chosen in coordination with the Channel and Fish module leaders. Some of the sub-basis were added following the initial steps in Synthesis.

1 : North Fork Tolt Above Titicaed Creek
2 : Titicaca Creek
4 : Dry Creek
1-4 : Upper North Fork Tolt
1-5 : Middle North Fork Tolt
1-6 : Lower North Fork Tolt
1-6,13 : Entire North Fork Tolt
7 : Stoessel Creek
8 : Upper South Fork Tolt
8-9 : South Fork Tolt Upstream of Reservoir
11 : Lynch Creek
8-11 : Middle South Fork Tolt
8-12 : Entire South Fork Tolt
1-13 : Entire Tolt Above North Fork and South Fork Confluence
1-14 : Entire Tolt
1-7,11-14: Entire Tolt except Reservoir

As directed in the Level 1 Analysis, the Precipitation Zones and Vegetation Classes were defined and summarized, and the Regional Flood Frequency Relations were calculated. It is important to remember that these analyses treat the sub-basins as being unregulated. The presence of the South Fork Reservoir significantly reduces the peak flows for the South Fork and Mainstem. This will be discussed in detail later in this report.

The raw data describing the acreages in each Precipitation Zone-Vegetation Class combination under present conditions were provided by Weyerhaeuser Co. The precipitation zones were defined using Department of Natural Resources criteria:

Lowlands 0 - 600 feet
Rain Dominated 600-1700
Rain-on-snow 1700-2800
Snow Dominated 2800-4000
Highland 4000 +

In the snowmelt calculation portion of the Level 1 analysis, the areas within the precipitation zones were assigned a single elevation:

Lowlands 500 feet
Rain Dominated 1100
Rain-on-snow 2250
Snow Dominated 3400
Highland 4500

Various parts of the Tolt River lie in Regions I, II and III as defined by the USGS for Regional Flood Frequency. A comparison of the "observed" flood frequency curve and the regional curves for each region was done to determine which region best describes the Tolt. The data for this analysis are shown in the "Evaluation of Regional Flood Frequency" section. Based on this test all Regional Flood Frequency curves were determined using Region I parameters.

The Flood Frequency Analyses are conducted assuming that the USGS estimates represent undisturbed conditions. This assumption is clearly false, and it is non-conservative. It means we are comparing flows from the managed forest with a baseline which already reflects some management impact. The influence of this assumption is impossible to assess. A second assumption is that the peak flows are generated by rainfall only. In this case, that assumption is clearly false, however, it is conservative. It will be shown in Level 2 that the vast majority of annual peak flows on the Tolt are a result of rain-on-snow events. Therefore, adding a rain-on-snow effect to the USGS curves is redundant. This assumption leads to an over-estimate of the impact of forest harvesting on peak flows. The net result of these two assumptions, is to over-estimate the impacts of forest harvesting on peak flows.

For clarity in presentation, the graphs discussed below contain only the USGS regional curve, the USGS curve plus one standard error, and the two curves representing mature forest conditions and present forest conditions for an unusually large rain-on-snow event. The data representing an average rain-on-snow event are given in the spreadsheets.

Sub-basin 1 : North Fork Tolt Above Titicaed Creek

The spreadsheet containing the complete data set and calculations is given in section "Sub-basin 1". Based on this data the following conclusions are drawn:

-the overall index is 3.7 within a possible range of 1.9 to 7.5; the watershed rates at the low end of Medium

- based on topography, the watershed is susceptible to rain-on-snow events; 21% of the watershed lies in the ROS zone and 67% lies within the ROS and Snow zones

- based on vegetation, the watershed is not particularly susceptible to enhancing ROS events; 8% of the watershed is in Sparse and Open classes; 34% is in the Non-Forest class which represents natural open areas in the highlands

The Flood Frequency Curves and worksheets are also given in section "Sub-basin 1". Based on these data the following conclusions are drawn:

- the current state of the vegetation is resulting in an increase of about 37 ft3/sec in all flood peaks, or 5% for the 2 year event over a fully mature (large dense) condition

- as the return period increases the 37 ft3/sec increase becomes proportionally smaller; at about the 5 year return period the predicted peak falls within one standard of the initial USGS estimate

Sub-basin 2 : Titicaca Creek

The spreadsheet containing the complete data set and calculations is given in section "Sub-basin 2". Based on this data the following conclusions are drawn:

-the overall index is 6.5 within a possible range of 2.1 to 8.4; the watershed rates at Medium

- based on topography, the watershed is susceptible to rain-on-snow events; 27% of the watershed lies in the ROS zone and 83% lies within the ROS and Snow zones

- based on vegetation, the watershed is particularly susceptible to enhancing ROS events; 90% of the watershed is in Sparse and Open classes

The Flood Frequency Curves and worksheets are also given in section

"Sub-basin 2". Based on these data the following conclusions are drawn:

- the current state of the vegetation is resulting in an increase of about 40 ft3/sec in all flood peaks, or 12% for the 2 year event over a fully mature (large dense) condition

- as the return period increases the 40 ft3/sec increase becomes proportionally smaller; at about the 10 year return period the predicted peak falls within one standard of the initial USGS estimate

Sub-basin 4 : Dry Creek

The spreadsheet containing the complete data set and calculations is given in section "Sub-basin 4". Based on this data the following conclusions are drawn:

-the overall index is 4.7 within a possible range of 2.4 to 9.5; the watershed rates at Medium

- based on topography, the watershed is susceptible to rain-on-snow events; 45% of the watershed lies in the ROS zone and 93% lies within the Rain, ROS and Snow zones

- based on vegetation, the watershed is susceptible to enhancing ROS events; 31% of the watershed is in Sparse and Open classes and an addition 9% is in Non-Forest

The Flood Frequency Curves and worksheets are also given in section "Sub-basin 4". Based on these data the following conclusions are drawn:

- the current state of the vegetation is resulting in an increase of about 55 ft3/sec in all flood peaks, or 6% for the 2 year event over a fully mature (large dense) condition

- as the return period increases the 55 ft3/sec increase becomes proportionally smaller; at about the 10 year return period the predicted peak falls within one standard of the initial USGS estimate

Sub-basins 1-4 : Upper North Fork Tolt

The spreadsheet containing the complete data set and calculations is given in section "Sub-basins 1-4". Based on this data the following conclusions are drawn:

-the overall index is 4.8 within a possible range of 2.2 to 8.7;

the watershed rates at Medium

- based on topography, the watershed is susceptible to rain-on-snow events; 34% of the watershed lies in the ROS zone and 82% lies within the Rain, ROS and Snow zones

- based on vegetation, the watershed is susceptible to enhancing ROS events; 40% of the watershed is in Sparse and Open classes and an additional 12% is in Non-Forest

The Flood Frequency Curves and worksheets are also given in section "Sub-basins 1-4". Based on these data the following conclusions are drawn:

- the current state of the vegetation is resulting in an increase of about 295 ft3/sec in all flood peaks, or 7% for the 2 year event over a fully mature (large dense) condition

- as the return period increases the 295 ft3/sec increase becomes proportionally smaller; at about the 5 year return period the predicted peak falls within one standard of the initial USGS estimate

Sub-basins 1-5 : Middle North Fork Tolt

The spreadsheet containing the complete data set and calculations is given in section "Sub-basins 1-5". Based on this data the following conclusions are drawn:

-the overall index is 4.6 within a possible range of 2.3 to 9.1; the watershed rates at Medium

- based on topography, the watershed is susceptible to rain-on-snow events; 38% of the watershed lies in the ROS zone and 88% lies within the Rain, ROS and Snow zones

- based on vegetation, the watershed is susceptible to enhancing ROS events; 37% of the watershed is in Sparse and Open classes and an additional 9% is in Non-Forest

The Flood Frequency Curves and worksheets are also given in section "Sub-basins 1-5". Based on these data the following conclusions are drawn:

- the current state of the vegetation is resulting in an increase of about 421 ft3/sec in all flood peaks, or 7% for the 2 year event over a fully mature (large dense) condition

- as the return period increases the 421 ft3/sec increase becomes proportionally smaller; at about the 10 year return period the

predicted peak falls within one standard of the initial USGS estimate

Sub-basins 1-6 : Lower North Fork Tolt

The spreadsheet containing the complete data set and calculations is given in section "Sub-basins 1-6". Based on this data the following conclusions are drawn:

-the overall index is 4.7 within a possible range of 2.3 to 9.0; the watershed rates at Medium

- based on topography, the watershed is susceptible to rain-on-snow events; 37% of the watershed lies in the ROS zone and 89% lies within the Rain, ROS and Snow zones

- based on vegetation, the watershed is susceptible to enhancing ROS events; 38% of the watershed is in Sparse and Open classes and an additional 9% is in Non-Forest

The Flood Frequency Curves and worksheets are also given in section "Sub-basins 1-6". Based on these data the following conclusions are drawn:

- the current state of the vegetation is resulting in an increase of about 467 ft3/sec in all flood peaks, or 7% for the 2 year event over a fully mature (large dense) condition

- as the return period increases the 467 ft3/sec increase becomes proportionally smaller; at about the 10 year return period the predicted peak falls within one standard of the initial USGS estimate

Sub-basins 1-6, 13 : Entire North Fork Tolt

The spreadsheet containing the complete data set and calculations is given in section "Sub-basins 1-6,13". Based on this data the following conclusions are drawn:

-the overall index is 4.5 within a possible range of 2.2 to 9.0; the watershed rates at Medium

- based on topography, the watershed is susceptible to rain-on-snow events; 33% of the watershed lies in the ROS zone and 91% lies within the Rain, ROS and Snow zones

- based on vegetation, the watershed is susceptible to enhancing ROS events; 35% of the watershed is in Sparse and Open classes and an additional 8% is in Non-Forest

The Flood Frequency Curves and worksheets are also given in section "Sub-basins 1-6,13". Based on these data the following conclusions are drawn:

- the current state of the vegetation is resulting in an increase of about 549 ft3/sec in all flood peaks, or 7% for the 2 year event over a fully mature (large dense) condition

- as the return period increases the 549 ft3/sec increase becomes proportionally smaller; between the 5 and 10 year return period the predicted peak falls within one standard of the initial USGS estimate

Sub-basin 7 : Stoessel Creek

The spreadsheet containing the complete data set and calculations is given in section "Sub-basin 7". Based on this data the following conclusions are drawn:

-the overall index is 4.6 within a possible range of 1.9 to 7.5; the watershed rates at Medium

- based on topography, the watershed is moderately susceptible to rain-on-snow events; 87% of the watershed lies in the Rain zone and 13% lies in the Lowland zone

- based on vegetation, the watershed is susceptible to enhancing ROS events; 51% of the watershed is in Sparse and Open classes and an additional 5% is in Non-Forest

The Flood Frequency Curves and worksheets are also given in section "Sub-basin 7". Based on these data the following conclusions are drawn:

- the current state of the vegetation is resulting in an increase of about 199 ft3/sec in all flood peaks, or 15% for the 2 year event over a fully mature (large dense) condition

- as the return period increases the 199 ft3/sec increase becomes proportionally smaller; at about the 50 year return period the predicted peak falls within one standard of the initial USGS estimate

Sub-basin 8 : Upper South Fork Tolt

The spreadsheet containing the complete data set and calculations is given in section "Sub-basin 8". Based on this data the following conclusions are drawn:

-the overall index is 5.2 within a possible range of 2.0 to 7.9; the watershed rates at Medium

- based on topography, the watershed is susceptible to rain-on-snow events; 28% of the watershed lies in the ROS zone and 72% lies in the Rain, ROS and Snow zones

- based on vegetation, the watershed is susceptible to enhancing ROS events; 35% of the watershed is in Sparse and Open classes and an additional 30% is in Non-Forest, this probably represent natural openings in the Highlands zone

The Flood Frequency Curves and worksheets are also given in section "Sub-basin 8". Based on these data the following conclusions are drawn:

- the current state of the vegetation is resulting in an increase of about 136 ft3/sec in all flood peaks, or 9% for the 2 year event over a fully mature (large dense) condition

- as the return period increases the 136 ft3/sec increase becomes proportionally smaller; at about the 5 year return period the predicted peak falls within one standard of the initial USGS estimate

<u>Sub-basins 8-9 : South Fork Tolt Above Reservoir</u>

The spreadsheet containing the complete data set and calculations is given in section "Sub-basins 8-9". Based on this data the following conclusions are drawn:

-the overall index is 4.5 within a possible range of 2.1 to 8.4; the watershed rates at Medium

- based on topography, the watershed is susceptible to rain-on-snow events; 29% of the watershed lies in the ROS zone and 81% lies in the Rain, ROS and Snow zones

- based on vegetation, the watershed is susceptible to enhancing ROS events; 44% of the watershed is in Sparse and Open classes and an additional 15% is in Non-Forest, this probably represents natural openings in the Highlands zone

The Flood Frequency Curves and worksheets are also given in section "Sub-basins 8-9". Based on these data the following conclusions are drawn:

- the current state of the vegetation is resulting in an increase of about 322 ft3/sec in all flood peaks, or 11% for the 2 year event over a fully mature (large dense) condition

- as the return period increases the 322 ft3/sec increase becomes proportionally smaller; between the 10 and 20 year return period the predicted peak falls within one standard of the initial USGS estimate

Sub-basin 11 : Lynch Creek

The spreadsheet containing the complete data set and calculations is given in section "Sub-basin 11". Based on this data the following conclusions are drawn:

-the overall index is 3.4 within a possible range of 2.2 to 8.9; the watershed rates at Medium

- based on topography, the watershed is susceptible to rain-on-snow events; 23% of the watershed lies in the ROS zone and 100% lies in the Rain, ROS and Snow zones

- based on vegetation, the watershed is not particularly susceptible to enhancing ROS events; 18% of the watershed is in Sparse and Open classes and an additional 4% is in Non-Forest

The Flood Frequency Curves and worksheets are also given in section "Sub-basin 11". Based on these data the following conclusions are drawn:

- the current state of the vegetation is resulting in an increase of about 69 ft3/sec in all flood peaks, or 6% for the 2 year event over a fully mature (large dense) condition

- as the return period increases the 69 ft3/sec increase becomes proportionally smaller; between the 10 and 20 year return period the predicted peak falls within one standard of the initial USGS estimate

Sub-basins 8-11 : Middle South Fork Tolt

At this point in the South Fork the flow is now regulated by the reservoir. The discharge calculations discussed below were made assuming a free flowing stream. It is clear from the USGS records on the North Fork, South Fork and Mainstem (see section "Raw Streamflow Data") that the reservoir typically reduces downstream peak flows by 2000-4000 ft3/sec. The predicted increases in peak flows due to forest harvesting are much smaller than the decrease in flows due to the reservoir.

The spreadsheet containing the complete data set and calculations is given in section "Sub-basins 8-11". Based on this data the

following conclusions are drawn:

-the overall index is 4.3 within a possible range of 2.1 to 8.6; the watershed rates at Medium

- based on topography, the watershed is susceptible to rain-on-snow events; 27% of the watershed lies in the ROS zone and 89% lies in the Rain, ROS and Snow zones

- based on vegetation, the watershed is susceptible to enhancing ROS events; 34% of the watershed is in Sparse and Open classes and an additional 11% is in Non-Forest

The Flood Frequency Curves and worksheets are also given in section "Sub-basins 8-11". Based on these data the following conclusions are drawn:

- the current state of the vegetation is resulting in an increase of about 432 ft3/sec in all flood peaks, or 9% for the 2 year event over a fully mature (large dense) condition

- as the return period increases the 432 ft3/sec increase becomes proportionally smaller; between the 10 and 20 year return period the predicted peak falls within one standard of the initial USGS estimate

Sub-basins 8-12 : Entire South Fork Tolt

At this point in the South Fork the flow is now regulated by the reservoir. The discharge calculations discussed below were made assuming a free flowing stream. It is clear from the USGS records on the North Fork, South Fork and Mainstem (see section "Raw Streamflow Data") that the reservoir typically reduces downstream peak flows by 2000-4000 ft3/sec. The predicted increases in peak flows due to forest harvesting are much smaller than the decrease in flows due to the reservoir.

The spreadsheet containing the complete data set and calculations is given in section "Sub-basins 8-12". Based on this data the following conclusions are drawn:

-the overall index is 4.3 within a possible range of 2.1 to 8.6; the watershed rates at Medium

- based on topography, the watershed is susceptible to rain-on-snow events; 25% of the watershed lies in the ROS zone and 89% lies in the Rain, ROS and Snow zones

- based on vegetation, the watershed is susceptible to enhancing ROS events; 34% of the watershed is in Sparse and Open classes and

an additional 11% is in Non-Forest

The Flood Frequency Curves and worksheets are also given in section "Sub-basins 8-12". Based on these data the following conclusions are drawn:

- the current state of the vegetation is resulting in an increase of about 468 ft3/sec in all flood peaks, or 9% for the 2 year event over a fully mature (large dense) condition

- as the return period increases the 468 ft3/sec increase becomes proportionally smaller; between the 10 and 20 year return period the predicted peak falls within one standard of the initial USGS estimate

Sub-basins 1-13 : Entire Tolt Above North Fork and South Fork Confluence

At this point in the South Fork the flow is now regulated by the reservoir. The discharge calculations discussed below were made assuming a free flowing stream. It is clear from the USGS records on the North Fork, South Fork and Mainstem (see section "Raw Streamflow Data") that the reservoir typically reduces downstream peak flows by 2000-4000 ft3/sec. The predicted increases in peak flows due to forest harvesting are much smaller than the decrease in flows due to the reservoir.

The spreadsheet containing the complete data set and calculations is given in section "Sub-basins 1-13". Based on this data the following conclusions are drawn:

-the overall index is 4.4 within a possible range of 2.2 to 8.7; the watershed rates at Medium

- based on topography, the watershed is susceptible to rain-on-snow events; 28% of the watershed lies in the ROS zone and 90% lies in the Rain, ROS and Snow zones

- based on vegetation, the watershed is susceptible to enhancing ROS events; 36% of the watershed is in Sparse and Open classes and an additional 9% is in Non-Forest

The Flood Frequency Curves and worksheets are also given in section "Sub-basins 1-13". Based on these data the following conclusions are drawn:

- the current state of the vegetation is resulting in an increase of about 1050 ft3/sec in all flood peaks, or 9% for the 2 year event over a fully mature (large dense) condition

- as the return period increases the 1050 ft3/sec increase becomes

proportionally smaller; between the 10 and 20 year return period the predicted peak falls within one standard of the initial USGS estimate

Sub-basins 1-14 : Entire Tolt River

At this point in the South Fork the flow is now regulated by the reservoir. The discharge calculations discussed below were made assuming a free flowing stream. It is clear from the USGS records on the North Fork, South Fork and Mainstem (see section "Raw Streamflow Data") that the reservoir typically reduces downstream peak flows by 2000-4000 ft3/sec. The predicted increases in peak flows due to forest harvesting are much smaller than the decrease in flows due to the reservoir.

The spreadsheet containing the complete data set and calculations is given in section "Sub-basins 1-14". Based on this data the following conclusions are drawn:

-the overall index is 4.2 within a possible range of 2.1 to 8.3; the watershed rates at Medium

- based on topography, the watershed is susceptible to rain-on-snow events; 25% of the watershed lies in the ROS zone and 82% lies in the Rain, ROS and Snow zones

- based on vegetation, the watershed is susceptible to enhancing ROS events; 37% of the watershed is in Sparse and Open classes and an additional 9% is in Non-Forest

The Flood Frequency Curves and worksheets are also given in section "Sub-basins 1-14". Based on these data the following conclusions are drawn:

- the current state of the vegetation is resulting in an increase of about 1305 ft3/sec in all flood peaks, or 10% for the 2 year event over a fully mature (large dense) condition

- as the return period increases the 1305 ft3/sec increase becomes proportionally smaller; between the 10 and 20 year return period the predicted peak falls within one standard of the initial USGS estimate

Sub-basins 1-7,11-14 : Entire Tolt River Except Reservoir

This analysis was requested by to evaluate the basin without the reservoir to isolate the impacts of forest harvesting alone. The impact of the reservoir operation can then be considered separately.

The spreadsheet containing the complete data set and calculations is given in section "Sub-basins 1-7,11-14". Based on this data the following conclusions are drawn:

-the overall index is 4.1 within a possible range of 2.1 to 8.2; the watershed rates at Medium

- based on topography, the watershed is susceptible to rain-on-snow events; 24% of the watershed lies in the ROS zone and 82% lies in the Rain, ROS and Snow zones

- based on vegetation, the watershed is susceptible to enhancing ROS events; 37% of the watershed is in Sparse and Open classes and an additional 7% is in Non-Forest

The Flood Frequency Curves and worksheets are also given in section "Sub-basins 1-7,11-14". Based on these data the following conclusions are drawn:

- the current state of the vegetation is resulting in an increase of about 1081 ft3/sec in all flood peaks, or 9% for the 2 year event over a fully mature (large dense) condition

- as the return period increases the 1081 ft3/sec increase becomes proportionally smaller; at approximately the 20 year return period the predicted peak falls within one standard of the initial USGS estimate

Summary - Level 1

The Level 1 analyses suggest that the present state of the forest is increasing peak flows from all the sub-basins. These increases range between 5 and 11% for 2-year floods. As the return period of the flood increases, this percentage becomes smaller. The magnitude of the increases is almost identical to the accuracy of the flow records. Therefore, increases of this size would be hard to measure. The magnitude of the increases is smaller than the uncertainty of the flood estimates themselves. For example, the standard error of the 2-year flood is 25%. These results suggest that the effects of forest harvesting will be difficult to detect in the analysis of real streamflow data.

Level 2

Historical Analysis

The hydrologic history of the Tolt River basin was investigated to evaluate the occurence of rain-on-snow (ROS) peak flow events and to determine if forest harvesting has increased the magnitude of the these events.

Data

The series of annual peak flows on the Tolt River near Carnation (12148500), the North Fork Tolt River near Carnation (12147500), and the South Fork Tolt River near Carnation (12148000) were collected from U.S. Geological Survey records. Some of the raw data is shown in section "Raw Streamflow Data". The data for water years not shown in that section were provided by Weyerhaeuser Co. and the USGS.

In addition, daily precipitation, daily maximum and minimum air temperatures and daily snowfall for the month containing the peak flow and the preceeding month were collected from records for the Snoqualmie Falls station. This data is given in the section "Raw Weather Data". In general, the precipitation and air temperature data are excellent. The snowfall records are sparse and only give a rough indication of snow on the watershed.

Analysis

Peak Flows

The South Fork Tolt River has been regulated since the construction of a reservoir in September 1963. This has in turn led to a regulation of the flows on the mainstem Tolt. To develop a consistent set of peak flows, a relationship between the mainstem and the North Fork Tolt was determined by regression using water years 1953-63. Details of the analysis are shown in section "Streamflow Regression".

Based on this regression the peak flows on the North Fork Tolt were estimated for water years 1929-52.

Also based on the regression, peak flows for the mainstem of the Tolt can be predicted for the years since it has been regulated. This comparison suggests that the reservoir typically reduces peak flows in the Mainstem by 2000-4000 ft3/sec.

Weather

The weather records were examined and summarized to evaluate the weather before and on the date of each annual peak flow. An

important part of the analysis was determining whether precipitation was falling as rain or snow. The best available criteria for this determination is the surface air temperature; for average daily air temperatures less than 35oF precipitation was assumed to fall as snow. For air temperatures greater than 35oF precipitation was assumed to fall as rain. For air temperatures of exactly 35oF the rain or snow determination was made looking at adjacent days. In section "Raw Weather Data", the dates of the peak flows are highlighted and the rain or snow determination is marked by hand.

Initial Conditions

USGS mean daily flow records were examined to determine the date and magnitude of flow corresponding to the beginning of the hydrograph containing the peak flow.

The time period of evaluation for each peak event was variable but generally ranged between 1 and 3 days. The summarized peak flow data, initial conditions and weather data are given in section "Historical Analysis".

Based on the weather data at Snoqualmie Falls, there were three classes of peak flow events: Rain, Rain-on-snow, and Snow. Rain events typically occurred early in the fall. ROS events occurred widely in time and had a high degree of variability. The amount of snow on the ground and the duration of the rainfall following the snow accumulation varied widely. Events classified as Snow probably were ROS and indicate the weakness in the 35oF criteria. Many of these snow events had rainfall in the previous days.

- **8 of the 50 peak flows were generated by rain only**
- **39 of the 50 peak flows were rain-on-snow**
- **3 of the 50 peak flows were generated by snow**

Land Use

Historical summaries of vegetation condition on the Tolt were provided by Weyerhaeuser Co. on a 5 year basis from 1993 back to 1937. These data were linearly interpolated to estimate the vegetation condition every year. From these data the vegetation index used in Level 1 analysis was calculated for each year. This index was then used as an independent variable in the regression analyses described below. These data are shown in section "Vegetation Interpolation".

Relating Peak Flows to Weather and Land Use

Regression analysis was used to build the best predictive model of peak flows based on only weather data. A variety of independent variables were tested including snow water equivalent, air temperature, storm intensities, and snowXtemperature interaction. Additional attempts were made using subjective evaluation of the data to define the rain plus snowmelt inputs.

The only significant independent variable is input to the soil surface immediately preceeding the peak flow. This could be represented equally well by the rainfall that occurred, rainfall plus snowfall, or rainfall plus estimated snowmelt. Therefore, in this analysis rainfall plus snowfall was used since it is easily retrieved from the weather data. Overall, the relationship is poor. Probably the most important explanation is the inability of the routine weather data to explain the variations in snowpack depths and areal extents. During any one of the peak flow events it is possible to have in the watershed snow-on-snow (high elevations), rain-on-snow (mid-elevations) and rain-on-bare ground (low elevations). Exactly where these elevations are and the proportion of the watershed they represent vary significantly from event to event. In addition, where rain-on-snow occurs, there can be areas where the snowpack is so deep that melt from the surface refreezes within the pack, or the routing of water through the pack significantly delays the delivery of water to the soil surface. Beyond the snowpack attributes other sources of variation include precipitation timing and antecedent conditions.

To index the antecedent conditions, the lowest discharge immediately preceeding the peak flow was added to the regression model. This did not significantly improve the model.

The vegetation index was also added to the model to evaluate the impacts of forest harvesting. The regression coefficient for the vegetation index is negative indicating that increased harvesting has decreased peak flows. However, the coefficient is not statistically different from zero, indicating no effect of harvesting.

The spreadsheet containing all the flood peak attributes, and the results of the regression analysis are given in section "Historical Analysis".

Summary - Level 2

There is no statistical evidence that forest harvesting has increased annual peak flows in the North Tolt.

The results of the regression analysis suggest that the annual peak flows on the North Fork Tolt River are generated by complex interactions between rain and snow. The magnitude of the peak flows is poorly explained by rainfall and snowfall as measured and estimated at Snoqualmie Falls. The poor relationship between inputs and outputs makes it extremely difficult to detect forest harvesting impacts, if they occur.

Overall Summary

The results of the Level 1 analyses predict that the present state of the vegetation is increasing the 2-year peak flows between 5 and 11%. This increase is approximately the same as measurement error and much smaller than the error associated with the estimate of the 2-year event itself. The Level 2 analysis, historic analysis of the North Fork Tolt, shows no statistical evidence that forest harvesting has increased annual peak flows. This is not unexpected given the small increases predicted in Level 1, and the high uncertainty between inputs (rainfall and snowmelt) and peak flows for the North Fork.

APPENDIX - Comments and Response

- Where did the rule calls come from ?

The hydrologic module does not require a rule call. There were a number of questions regarding this in the synthesis meetings. Kate Sullivan provided her best estimates of how rule calls might be made.

- More areas should be included, and stronger statements are needed regarding effects of forest practices on peak flows and resulting channel degredation, erosional processes, degredation of water quality and flood damage (see comments above under Hydrology Module). Peak flows can affect the entire North Fork, south Fork above the Reservoir, tribs to the South Fork below the reservoir, and the Mainstem. Should have an overall CMR that limits the rate of harvest to not increase, and to recommend decreasing, peak flows resulting from diminished hydrologic maturity, construction and maintenance of roads, and other factors.

No more areas will be included. The group concensus was the 15 sub-basins chosen provide an acceptable sample of the watershed.
The statements in the Hydrology Module regarding forest practice effects on peak flows are clear and factual. In terms of the resulting channel degredation, that issue is addressed in the channel module - it is clear that the channels have been affected by both sediment inputs and peak flows. It is not clear whether the peak flow effects are due to increases in small peak flows as predicted by the Hydrology Module or rather the large peak flows (e.g. November 1990) that are not affected much by forest practices.
It is not clear that CMR's are used to limit rates of harvest, this seems like a prescription issue.

- CMR's are very confusing, and the reason for picking areas to have CMR's and excluding others is not explained anywhere.

CMR's were written for channel clusters which had an increase in the 2-yr peak flow of 8% or greater. The CMR's have been edited to indicate which subbasin in the hydrologic analysis is being used to represent the particular channel cluster. Hydrologic CMR's were not written for clusters which are affected by the South Fork Reservoir.

- The Level 1 analyses for each subbasin contain the wording "as the return period increases ..." This wording seems misleading...

This wording is changed in the Hydrology Module Report.

- For the mainstem and South Fork below the reservoir, the report states "The reservoir typicallyy reduces downstream peak flows by 2000-4000 cfs. Therefore the actual effect of forest harvesting on peak flows for these reaches is essentially zero."... Please reword this statement...

This wording is changed in the Hydrology Module Report.

- A major objective of the Level 2 analysis was to determine if forest harvesting has increased the magnitude of rain-on-snow peak events... More information about the analysis must be discussed in the text... how can we make the statement that forest activities have not demonstrably increased peak flows...

The hydrology report has been expanded to address these questions.

- While we were not surprised that no effect could be demonstrated due to the time and data limitations of the modeling effort, the report summary as currently written is quite misleading...

The hydrology report has been expanded to address these questions.

- Only one increment of peak flow from ROS events is used for floods of all return intervals. Is this correct ? ...

The linear relationship between inputs and outputs used in the Level 1 analysis dictate this result. A second important factor is that the increase in rainfall between precipitation events has very little impact on snowmelt.

- Please revise and expand the hydrology report summary to give the reader a more balanced picture of the analysis results...

The hydrology report has been expanded to address this question.

- The effect of logging road density on increasing basin drainage density is dismissed in the manual...

This is a comment on the methodology in the manual. This issue is discussed in detail in the training session. There is only one study showing an effect of roads on peak flows (Harr). In his study there was an unusually high percent of roads (12%) compared to the more typical numbers of 3-6%. In addition he was working in a very small basin with small peak flows - most of the peaks were less than the average annual peak. In training we also discussed on-going work by Gordon Grant that suggests roads are having an effect. Until the analysis is reported in open literature it is not possible for us to incorporate the results into the manual.

- Water and sediment are linked to small tributaries through roads...

This is a synthesis issue. The water issue in terms of peak flows is addressed above. In terms of road runoff causing mass failures this is addressed in the mass wasting analysis. Prescriptions must specify how to deal with cross drains etc.

- ... it would seem essential to include ... seasonal discharges...

This issue is also addressed in training. The hydrology module is essentially a service module to fish and channels. The principal concerns to fish and channels are peak flows. In the case of fish, summer low flows may also be of concern. The vast majority of studies on summer low flows show that forest harvesting increases these flows. There are some exceptions on very small basins where harvesting to the stream edge and revegetation with hardwoods causes decreases. Given that riparian zone buffers are becoming more prominent we did not believe there was sufficient cause to require that summer low flows be addressed.

- The entire hydrologic analysis is based on the assumption that basin hydrology has not synergistic interaction with issues of sediment budget, ...

This is a synthesis comment. The hydrology module is not supposed to synthesize the results of water, sediment, channel condition and fish habitat. The synthesis meetings did address the interactions between these modules.

- Several statements about the effect of the reservoir are unjustified and are not supported by any given evidence...

This comment seems to be based on the synthesis discussions not the Hydrology Module Report.

- Clarification is needed as to why particular basins were chosen for CMR's...

This is explained in the Hydrology Module Report. Subbasins were chosen in consultation with the fish and channel module leaders. A variety of indicator reaches, reflecting a range of channel and fish habitat conditions, were chosen by the three module leaders. The upstream subbasins were then analysed for changes in peak flows. Following the initial sampling and synthesis meetings additional subbasins were selected by the larger group.

- Because peak flows can damage fish habitat and result in deterioration of water quality in many basin, all basins with...enhancement of peak flows over 5% ... should be included in CMR's...

This is apparently an individual interpretation of how watershed analysis should be done. Again, subbasins are chosen to be representative, not exhaustive. Through the synthesis process the importance of peak flow increases were assessed for the indicator reaches.

- Increased water yield from roads and increased shallow groundwater related to harvest impact zero order and greater channels...

This issue was addressed in the CMR's for the mass wasting units.

- As the above three points illustrate the effects of hydrological changes are incompletely integrated with the processes of erosion and mass wasting...

This is a synthesis issue. Through the synthesis process the interactions between hydrology, mass wasting, sediment, channel and fish habitat were evaluated for the indicator reaches.

- As provided for by the manual, (page cc-28), the Hydrology module should include an analysis of changes in seasonal flows, especially the potential for summer low flows...

This is a misinterpretation of the manual. This issue is discussed in the training session. The hydrology module should address peak flows. It may address summer low flows if there is evidence to suggest that summer low flows may be impacted and that they are important to fisheries. Prior to and during the synthesis meetings this issue was not raised. As this may relate to stream temperature - stream temperatures were specifically discussed in synthesis, especially as they related to small streams (represented by Titicaca). The group agreed that stream temperature was not an issue there. A second aspect of the synthesis discussion focused on the South Fork reservoir and the temperature of the water released. It was noted that the release water can come from a range of depths within the reservoir and therefore the temperature is subject to some control. Temperature measurements suggested that water was being released from the thermocline since they seemed to range widely day to day.

- Note that small increases of runoff can have large effects on return interval...

This depends on the nature of the flood frequency curve, in particular, the slope. For the subbasins analysed the increase in the 2 year event could be interpreted as changing the 2 year event to a 3 to 4 year event in most cases.

- What proportion and where in the basin are the critical subbasins and what is the hydrologically maturity level ?

The subbasins subject to hydrologic analysis are shown in the map included in the report and on various other map products from the entire watershed analysis. For each of these subbasins the vegetation index is given along with the possible range of the index.

- Can you explain the statement "as the return period increases..."

This statement has been changed in the report based on previous comments.

- What is the mean reduction in the two year event due to the reservoir and what is the variance ?

This question is outside the scope of the analysis. It might be answered by performing flood frequency analysis on the regulated and unregulated flows. As stated in the report, the reservoir typically decreases the annual peak flow between 2000-4000 ft3/s. The decrease depends on the time of year, the current storage available in the reservoir and the operating plan.

- How does the prescription deal with the ROS on a subbasin level based on the increase in peak flows ?

This is a question for the prescription team. The hydrology module allows the prescription team to analyze any harvesting scenario on any subbasin. The prescriptions given will have to be justified relative to the changes in peak flows and their impacts on channels and fish.

- Since hazard calls are not part of the hydrology module, how can we make the statement that forest activities have not demonstrably increased peak flows...?

In the hydrology report this statement has been changed and the discussion expanded. In essence this was a statistical statement. Based on examination of the recorded annual peak flows there is no evidence that forest management caused any increases.

- Level 2 analysis is inadequate to conclude that "The results of the Hydrology Module show that forest management activities have not demonstrably increased peak flows..."

The Level 2 analysis made use of the best available data and methods to address the historic changes in peak flows. The expected magnitude of peak flow changes from ROS are approximately as large as the measurement error. This means they will be difficult to detect. The analysis confirmed this. In the module report, the discussion about the Level 2 analysis has been expanded to address these issues.

- Many statements are made that whole basins ... are free from peak flow problems related to forest practices...

In the hydrology module report these statements have been changed and explained in more detail.

HISTORICAL ANALYSIS

WATER YEAR	DATE	MAINSTEM TOLT PEAKFLOW	MAINSTEM INITIAL FLOW	MAINSTEM DATE OF INITIAL FLOW	MAINSTEM LAG
38	4-18-38	10,600.00	457.00	4-14	4.00
39	11-16-38	4,800.00	384.00	11-12	4.00
40	11-7-39	4,680.00	261.00	11-5	2.00
41	11-28-40	8,250.00	450.00	11-26	2.00
42	12-19-41	5,190.00	656.00	12-17	2.00
43	10-31-42	12,300.00	190.00	10-28	3.00
44	12-2-43	9,210.00	180.00	11-27	5.00
45	1-7-45	12,700.00	341.00	1-4	3.00
46	10-25-45	4,960.00	262.00	10-23	2.00
47	10-25-46	8,450.00	441.00	10-23	2.00
48	10-19-47	7,720.00	274.00	10-12	7.00
49	11-23-48	7,250.00	672.00	11-18	5.00
50	3-4-50	10,600.00	924.00	3-2	2.00
51	2-9-51	16,800.00	547.00	2-6	3.00
52	2-4-52	4,890.00	990.00	2-3	1.00
53	1-23-53	10,000.00	1,550.00	1-21	2.00
54	12-9-53	9,870.00	1,240.00	12-7	2.00
55	2-8-55	9,190.00	503.00	2-3	5.00
56	12-11-55	15,000.00	610.00	12-8	3.00
57	12-10-56	6,780.00	402.00	12-8	2.00
58	1-17-58	3,840.00	834.00	1-13	4.00
59	11-20-58	8,960.00	580.00	11-17	3.00
60	12-15-59	17,400.00	592.00	12-9	6.00
61	2-21-61	8,200.00	706.00	2-18	3.00
62	1-7-62	7,400.00	1,660.00	1-5	2.00
63	11-19-62	10,200.00	430.00	11-18	1.00
64	11-26-63	MAINSTEM			
65	1-29-65	NOW			
66					
67					
68	12-25-67	REGULATED			
69	1-5-69				
70	10-1-69				
71	1-19-71				
72	11-4-71				
73	12-26-72				
74	1-24-74				
75	1-17-75				
76	12-2-75				
77	1-18-77				
78	12-2-77				
79	12-24-78				
80	12-14-79				
81	12-26-80				
82	2-14-82				
83	12-3-82				
84	1-25-84				

85	10-25-84
86	11-1-85
87	11-23-86
88	12-9-87
89	10-16-88
90	1-9-90
91	11-24-90
92	1-24-92

NORTH FORK PEAKFLOW	NORTH FORK DATE	NORTH FORK INITIAL FLOW	NORTH FORK DATE OF INITIAL FLOW	NORTH FORK LAG	NORTH FORK PEAKFLOW FROM REGRESSION	NORTH FORK INITIAL FLOW FROM REGRESSION
					5,754.00	290.00
					2,680.00	256.00
					2,616.00	198.00
					4,508.00	287.00
					2,886.00	383.00
					6,655.00	164.00
					5,017.00	160.00
					6,867.00	235.00
					2,764.00	198.00
					4,614.00	282.00
					4,227.00	204.00
					3,978.00	391.00
					5,754.00	509.00
					9,040.00	332.00
					2,727.00	540.00
						804.00
5,850.00						
5,310.00		647.00	12-7	2.00		
[illegible]640.00	2-7	275.00	2-5	3.00		
[illegible]60.00		400.00	12-10	1.00		
[illegible]0.00	12-9	244.00	12-7	3.00		
2,250.00	1-16	456.00	1-13	4.00		
4,360.00		330.00	11-17	3.00		
9,560.00		455.00	12-13	2.00		
4,130.00		379.00	2-18	3.00		
3,920.00		847.00	1-5	2.00		
7,030.00		238.00	11-18	1.00		
2,280.00		324.00	11-21	5.00		
4,370.00						
4,210.00		190.00	12-21	4.00		
6,540.00		230.00	12-30	6.00		
2,870.00		910.00	10-1	0.00		
4,580.00		288.00	1-14	5.00		
5,480.00		347.00	11-2	2.00		
3,310.00		740.00	12-25	1.00		
3,240.00		442.00	1-21	3.00		
4,720.00		428.00	1-15	2.00		
6,160.00		395.00	11-29	3.00		
2,790.00		249.00	1-14	4.00		
5,560.00		600.00	11-30	2.00		
2,490.00		215.00	12-20	4.00		
4,670.00		311.00	12-12	2.00		
[illegible]180.00		715.00	12-24	2.00		
[illegible]50.00		286.00	2-11	3.00		
4,630.00		283.00	12-2	1.00		
5,460.00		236.00	1-20	5.00		

2 0.00			
4,010.00	409.00	10-31	1.00
6,130.00	798.00	11-22	1.00
3,450.00	278.00	12-8	1.00
6,130.00			
7,560.00			
3,160.00			

ESTIMATED LAG DAYS	INPUT OVER LAG DAYS	EXPLAIN INPUT	VEGETATION INDEX
2.00	2.65	2.65 RAIN	1.68
0.00	2.18	2.18 RAIN + MELT (2.31 AVAIL)	1.69
1.00	0.97	.97 RAIN + MELT (.04 AVAIL)	1.71
2.00	1.68	1.68 RAIN + MELT (1.17 AVAIL)	1.73
1.00	3.17	MELT (3.51 AVAIL)	1.75
0.00	3.62	3.62 RAIN	1.79
2.00	1.85	1.85 RAIN	1.83
0.00	1.45	1.45 RAIN + MELT (.81 AVAIL)	1.87
0.00	0.57	.57 RAIN + MELT (.71 AVAIL)	1.91
1.00	2.25	2.25 RAIN	1.95
4.00	5.02	5.02 RAIN + MELT (1.66 AVAIL)	1.99
1.00	1.52	1.52 RAIN + MELT (4.17 AVAIL)	2.03
1.00	3.54	3.54 RAIN + MELT (.42 AVAIL)	2.07
1.00	5.33	5.33 RAIN + MELT (3.14 AVAIL)	2.12
0.00	1.58	1.58 RAIN + MELT (.43 AVAIL)	2.16
0.00	1.13	1.13 RAIN + MELT (1.65 AVAIL)	2.14
	2.85	MELT (6.65 AVAIL)	2.13
	5.02	2.40 RAIN + MELT (2.18 AVAIL) + MELT (2.01 AVAIL)	2.11
	2.78	2.60 RAIN + MELT (4.01 AVAIL)	2.10
	2.76	2.70 RAIN + MELT (.50 AVAIL)	2.08
	3.85	2.58 RAIN + MELT (1.95 AVAIL)	2.11
	4.57	1.48 RAIN + MELT (3.66 AVAIL)	2.13
	4.53	4.52 RAIN + MELT (2.84 AVAIL)	2.16
	3.28	2.23 RAIN + MELT (4.68 AVAIL)	2.18
	1.19	.31 RAIN + .44 RAIN + MELT (.44 AVAIL)	2.21
	1.27	1.27 RAIN + MELT (.35 AVAIL)	2.22
	2.66	2.66 RAIN + MELT (.14 AVAIL)	2.23
			2.25
			2.26
			2.28
	4.73	4.46 RAIN + MELT (1.56 AVAIL)	2.30
	4.57	3.32 RAIN + MELT (4.01 AVAIL)	2.33
	0.10	.10 RAIN + .67 RAIN +.73 RAIN + .34 RAIN	2.35
	3.66	1.37 RAIN + MELT (4.43 AVAIL) + .74 SNOW	2.38
	2.42	1.60 RAIN + MELT (2.31 AVAIL) + .82 SNOW	2.40
	2.18	2.18 RAIN + MELT (.97 AVAIL)	2.39
	1.64	1.29 RAIN + MELT (1.44 AVAIL)	2.38
	1.11	1.05 RAIN + MELT (6.60 AVAIL)	2.37
	5.58	4.42 RAIN + MELT (2.43 AVAIL)	2.35
	1.20	1.04 RAIN + MELT (1.37 AVAIL)	2.34
	1.50	1.07 RAIN + MELT (.46 AVAIL)	2.31
	2.10	MELT (3.77 AVAIL)	2.28
	5.54	1.64 RAIN + MELT (2.55 AVAIL) + 3.58 SNOW	2.25
	4.03	4.03 RAIN	2.22
	4.61	3.05 RAIN + MELT (3.96 AVAIL)	2.19
	4.61	4.61 RAIN + MELT (4.40 AVAIL)	2.17
	4.31	3.38 RAIN + MELT (1.59 AVAIL)	2.15

				2.13
	1.05	1.05	RAIN + MELT (.63 AVAIL)	2.12
	5.79	5.79	RAIN	2.10
	2.72	2.60	RAIN + MELT (.12 AVAIL)	2.09
3.00	3.39	3.39	RAIN	2.09
5.00	8.95	6.37	RAIN + MELT (1.84) + 2.58 SNOW	2.09
3.00	7.09	6.09	RAIN + MELT (1.73 AVAIL)	2.09
2.00	1.92	1.92	RAIN	2.08

MULTIPLE LINEAR REGRESSION

Dependent Variable:

Variable	Mean	Parameter Estimate	Standard Error	T for H0: parameter=0
Intercept		4,008.15	2,494.87	1.61
Variable 1	2.91	451.66	157.17	2.87
Variable 2	386.77	0.74	1.32	0.56
Variable 3	2.12	-407.78	1,255.78	-0.32

Source	DF	Sum of Squares	Mean Square	F-Value
Model	3.00	**********	**********	2.77
Error	43.00	**********	**********	
Total	46.00	**********		

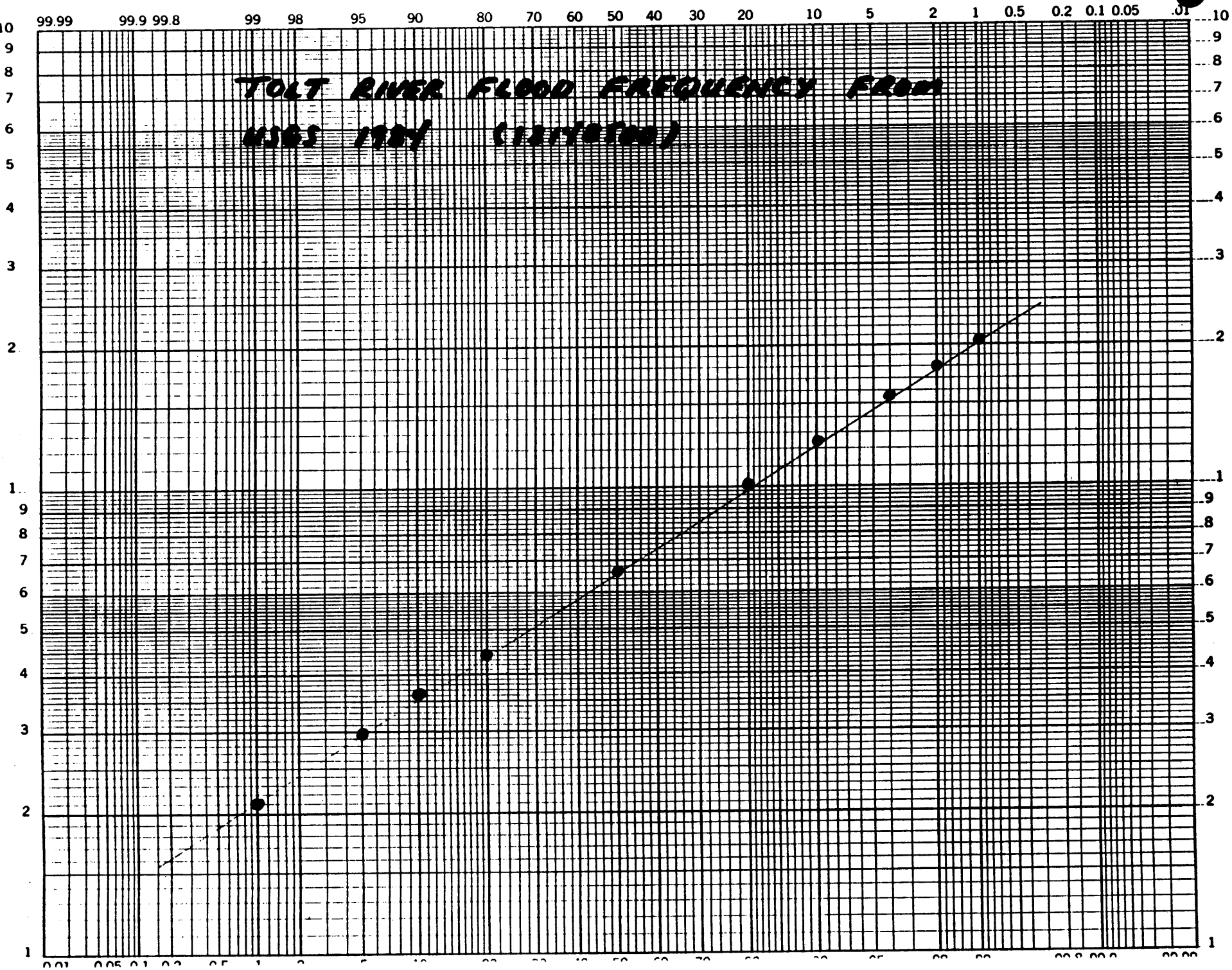
Dependent Mean	4,743.13
Root Mean Square Error	1,597.92
Coefficient of Variation	33.69
R-Square	0.16
Adjusted R-Square	0.10

Variable 1 = Input (Rain and Snow)
Variable 2 = Initial Discharge
Variable 3 = Vegetation Index

EVALUATION OF REGIONAL FLOOD FREQUENCY

K·E PROBABILITY X 2 LOG CYCLES
KEUFFEL & ESSER CO. MADE IN U.S.A.

46 8040

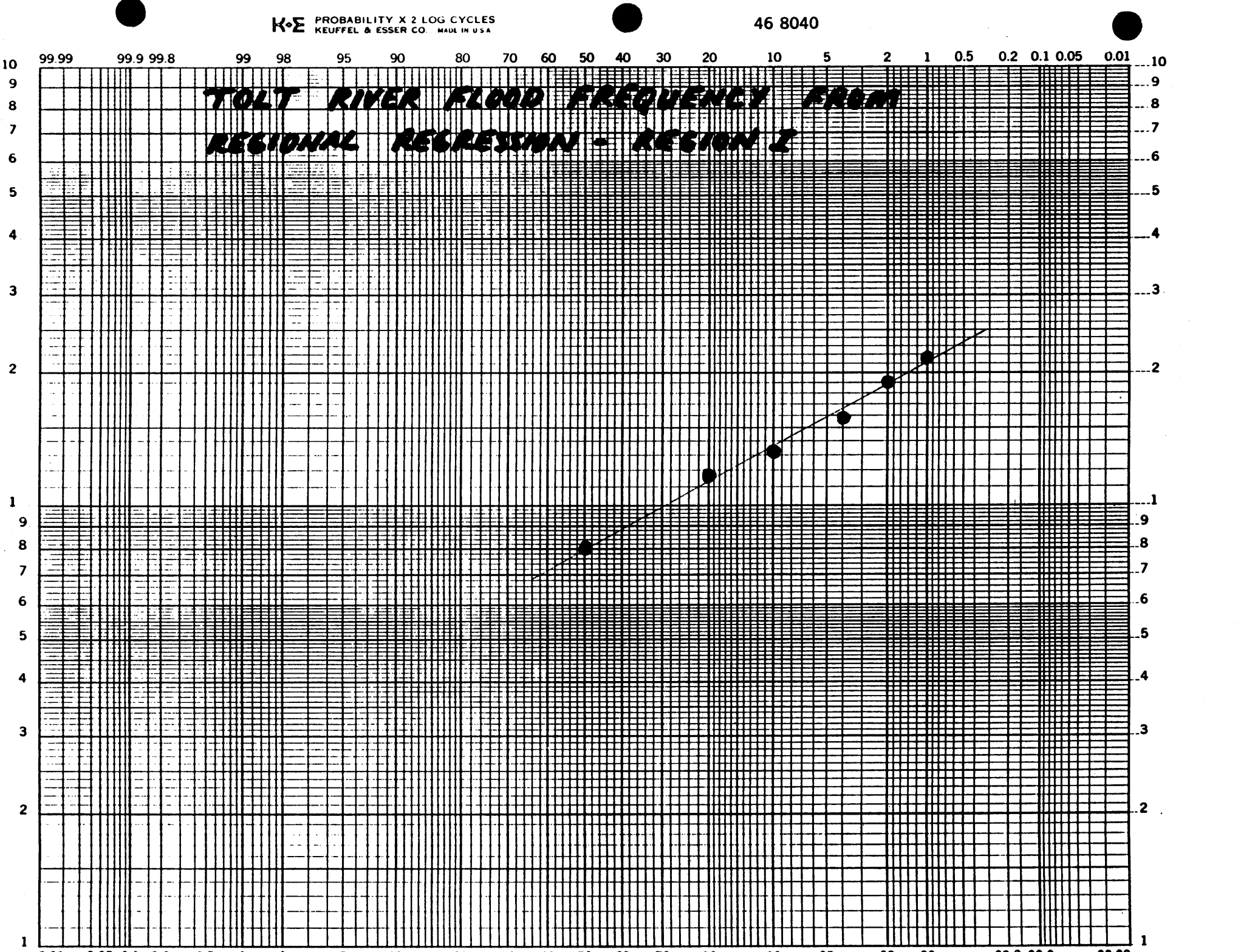


ional Flood Frequency Analysis for the Tolt River Near Carnation
s analysis is based on Region I

Recurrence Interval	Regress constant	Area (mi2)	Area exponent	Ann Precip (in)	Precip exponent	Forest cover	For Cover exponent
2	0.191	81.40	0.86	94.0	1.51	1.00	1.00
5	0.257	81.40	0.86	94.0	1.53	1.00	1.00
10	0.288	81.40	0.85	94.0	1.54	1.00	1.00
25	0.317	81.40	0.85	94.0	1.56	1.00	1.00
50	0.332	81.40	0.86	94.0	1.58	1.00	1.00
100	0.343	81.40	0.86	94.0	1.60	1.00	1.00

Area and Annual Precipitation are from USGS Open-File Report 84-144-B

Q est (ft3/s)	Standard error (%)	Q + SE
8,009.28	24.90	10,003.59
11,802.00	24.60	14,705.30
13,244.64	26.90	16,807.45
15,965.02	31.50	20,994.00
19,134.50	35.70	25,965.51
21,648.89	40.30	30,373.40


K•E PROBABILITY X 2 LOG CYCLES
KEUFFEL & ESSER CO. MADE IN U.S.A.
46 8040
99.99 99.9 99.8 99 98 95 90 80 70 60 50 40 30 20 10 5 2 1 0.5 0.2 0.1 0.05 0.01
TOLT RIVER FLOOD FREQUENCY FROM
REGIONAL REGRESSION - REGION I

R 'onal Flood Frequency Analysis for the Tolt River Near Carnation
' analysis is based on Region II

Recurrence Interval	Regress constant	Area (mi2)	Area exponent	Ann Precip (in)	Precip exponent	Forest cover	For Cover exponent
2	0.104	81.40	0.86	94.0	1.51	1.00	1.00
5	0.140	81.40	0.86	94.0	1.53	1.00	1.00
10	0.158	81.40	0.85	94.0	1.54	1.00	1.00
25	0.176	81.40	0.85	94.0	1.56	1.00	1.00
50	0.186	81.40	0.86	94.0	1.58	1.00	1.00
100	0.194	81.40	0.86	94.0	1.60	1.00	1.00

Area and Annual Precipitation are from USGS Open-File Report 84-144-B

Q est (ft3/s)	Standard error (%)	Q + SE
4,361.07	39.8	6,096.78
6,429.11	37.3	8,827.16
7,266.16	37.1	9,961.90
8,863.86	38.5	12,276.45
10,719.93	40.7	15,082.94
12,244.56	43.5	17,570.95

F ional Flood Frequency Analysis for the Tolt River Near Carnation
s analysis is based on Region III

Recurrence Interval	Regress constant	Area (mi2)	Area exponent	Ann Precip (in)	Precip exponent	Forest cover	For Cover exponent
2	0.054	81.40	0.86	94.0	1.51	1.00	1.00
5	0.073	81.40	0.86	94.0	1.53	1.00	1.00
10	0.082	81.40	0.85	94.0	1.54	1.00	1.00
25	0.092	81.40	0.85	94.0	1.56	1.00	1.00
50	0.098	81.40	0.86	94.0	1.58	1.00	1.00
100	0.102	81.40	0.86	94.0	1.60	1.00	1.00

Area and Annual Precipitation are from USGS Open-File Report 84-144-B

Q est (ft3/s)	Standard error (%)	Q + SE
2,264.40	41.6	3,206.40
3,352.32	42.8	4,787.11
3,771.04	45.4	5,483.10
4,633.38	50.3	6,963.97
5,648.14	55.1	8,760.26
6,437.86	60.7	10,345.65

R onal Flood Frequency Analysis for the Tolt River
l Stem
This analysis is based on Region I

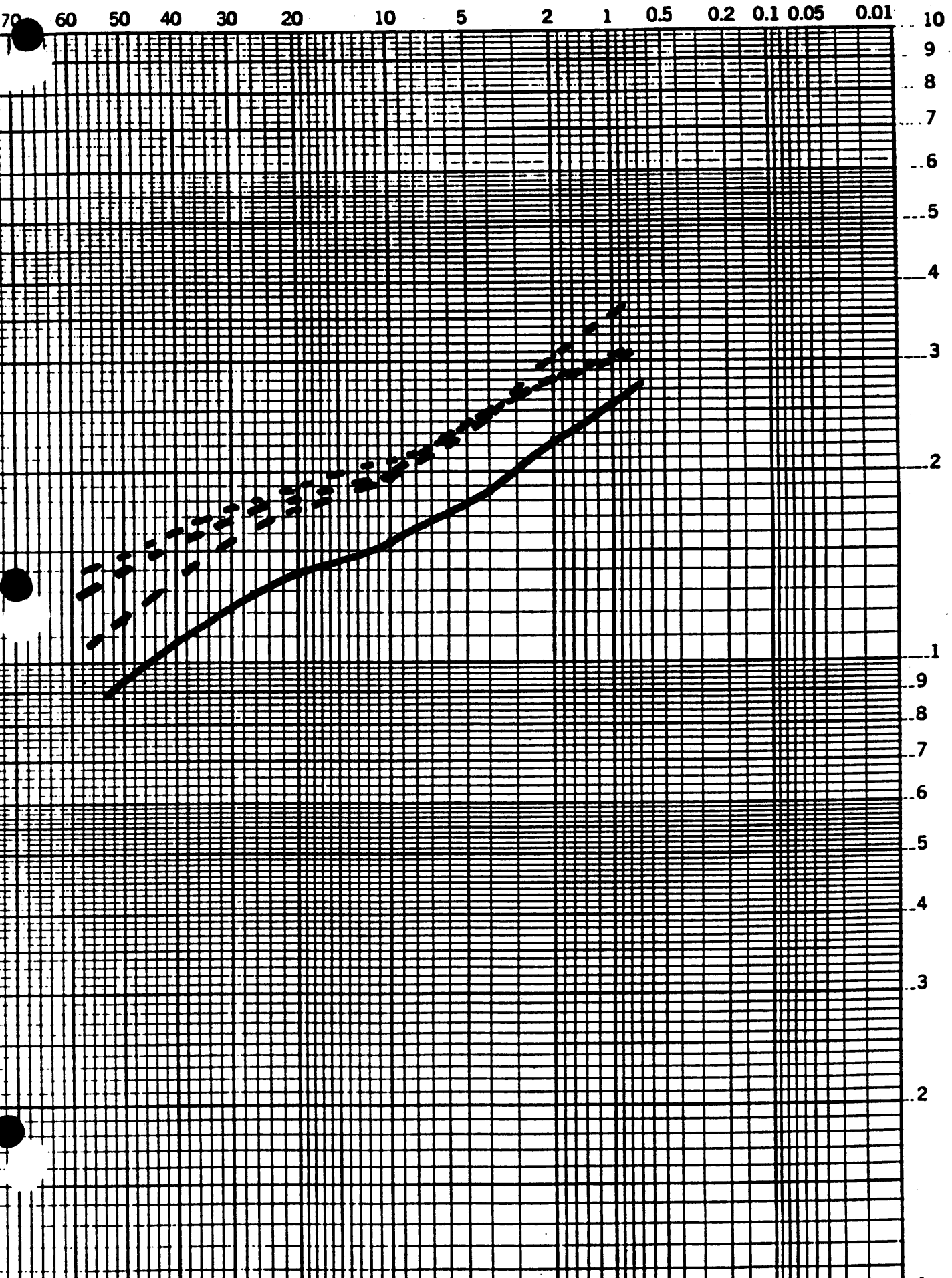
Recurrence Interval	Regress constant	Area (mi2)	Area exponent	Ann Precip (in)	Precip exponent	Forest cover	For Cover exponent
2	0.191	98.30	0.86	94.0	1.51	1.00	1.00
5	0.257	98.30	0.86	94.0	1.53	1.00	1.00
10	0.288	98.30	0.85	94.0	1.54	1.00	1.00
25	0.317	98.30	0.85	94.0	1.56	1.00	1.00
50	0.332	98.30	0.86	94.0	1.58	1.00	1.00
100	0.343	98.30	0.86	94.0	1.60	1.00	1.00

Annual Precipitation is from USGS Open-File Report 84-144-B

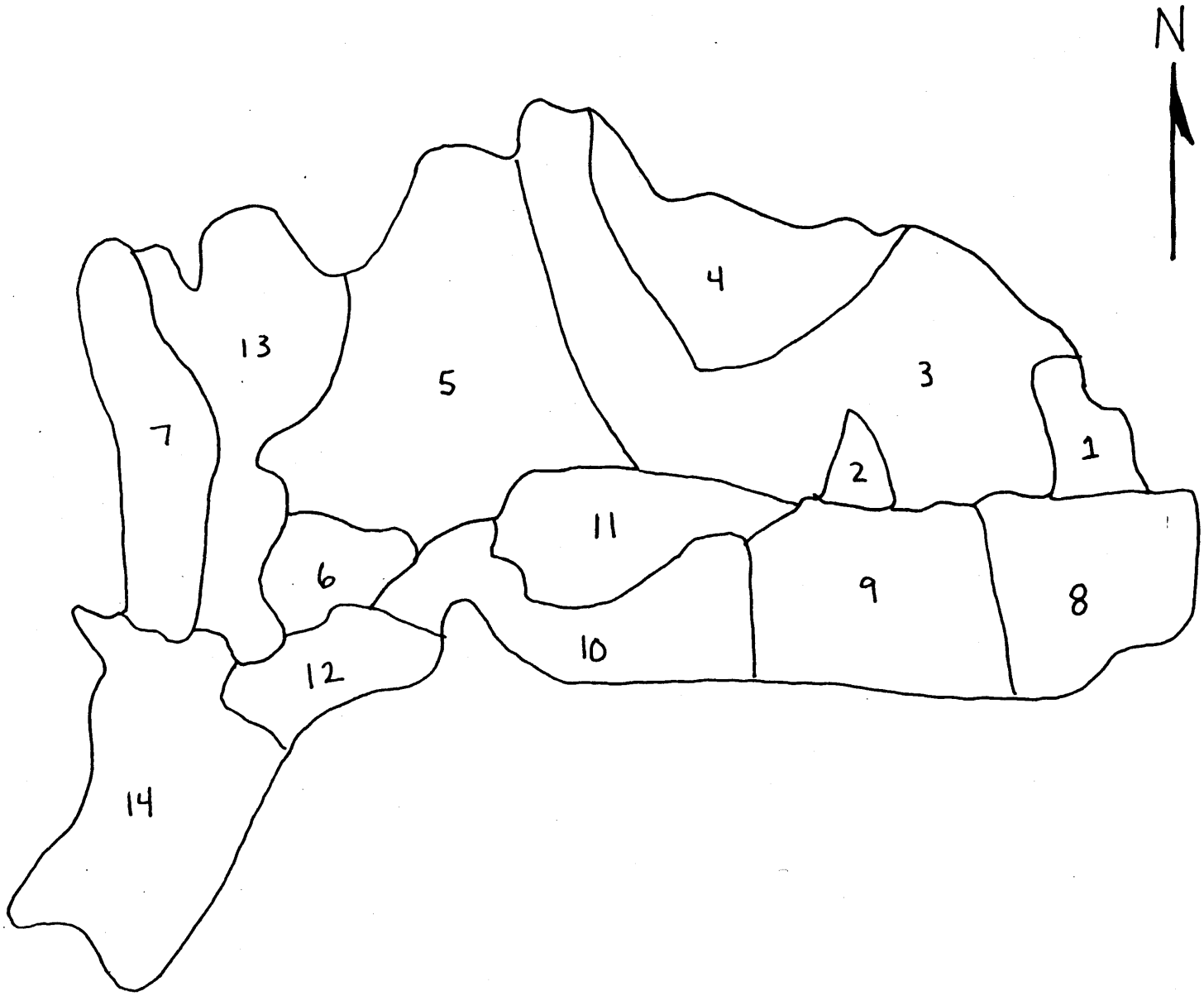
Q est (ft3/s)	Standard error (%)	Q + SE
9,420.03	24.90	11,765.62
13,880.81	24.60	17,295.49
15,548.19	26.90	19,730.65
18,741.71	31.50	24,645.35
22,504.85	35.70	30,539.08
25,462.13	40.30	35,723.37

46 8040

Mainstem



COMPONENT MAP


N
1
2
3
4
5
6
7
8
9
10
11
12
13
14

SUB-BASIN 1

R onal Flood Frequency Worksheet for Tolt River
S basin 1
based on Region I

Recurrence Interval	Regress constant	Area (mi2)	Area exponent	Ann Precip (in)	Precip exponent	Forest cover	For Cover exponent
2	0.191	3.48	0.86	94.00	1.51	1.00	1.00
5	0.257	3.48	0.86	94.00	1.53	1.00	1.00
10	0.288	3.48	0.85	94.00	1.54	1.00	1.00
25	0.317	3.48	0.85	94.00	1.56	1.00	1.00
50	0.332	3.48	0.86	94.00	1.58	1.00	1.00
100	0.343	3.48	0.86	94.00	1.60	1.00	1.00

St basin 1

Q est (ft3/s)	Standard error (%)	Q + SE
532.33	24.90	664.88
784.41	24.60	977.38
908.49	26.90	1,152.87
1,095.09	31.50	1,440.04
1,271.76	35.70	1,725.78
1,438.88	40.30	2,018.74

Level 1 Analysis
Sub-basin 1

INPUT INFORMATION
****

Return Period	Peak Flow (cfs)	24-hour Rainfall (in)	Regress. Peak Flow (cfs)
2	532.00	5.00	555.00
5	784.00	6.00	771.00
10	908.00	6.50	879.00
25	1095.00	7.50	1095.00
50	1272.00	8.50	1311.00
100	1439.00	9.00	1419.00

Regression intercept = -525.00
Regression slope = 216.00

Elevation of Zones
==========

Elevation of Lowland =	500	(ft)
Elevation of Rain Dominated =	1100	(ft)
Elevation of Rain on Snow =	2250	(ft)
Elevation of Snow Dominated =	3400	(ft)
Elevation of Highland =	4500	(ft)

Snow Water Equivalent vs Elevation Relationship
==========

Constant =	-3.970	(cm)
Slope =	0.042	(cm/m)
Standard Error =	11.278	(cm)

Air Temperature vs Elevation Relationship
==========

Constant =	8.100	(C)
Slope =	-0.006	(C/m)
Standard Error =	2.000	(C)

Wind Speed
==========

Average Wind Speed =	4	(m/s)
Unusual Wind Speed =	7	(m/s)

Level 1 Analysis

SUMMARY INFORMATION
****

Basin Score = 3.7274360
Worst Basin Score = 7.5473731
Best Basin Score = 1.8868432

Area in Lowland	0	0.00
Area in Rain Dominated	0	0.00
Area in Rain on Snow	478	0.21
Area in Snow Dominated	1019	0.46
Area in Highland	730	0.33
TOTAL =	2227	1

Area in Large Dense	0	0.00
Area in Small Dense	1307	0.59
Area in Sparse	135	0.06
Area in Open	38	0.02
Area in Non-Forest	747	0.34
Area in Water	0	0.00
TOTAL =	2227	1

·el 1 Analysis

Precip Zone- Veg Class	Area (acres)	Precip- Veg Score	Score X Area	P2	P5	P10	P25
L-LD	0.00	1.00	0.00	5.00	6.00	6.50	7.50
L-SD	0.00	1.00	0.00	5.00	6.00	6.50	7.50
L-S	0.00	3.00	0.00	5.00	6.00	6.50	7.50
L-O	0.00	4.00	0.00	5.00	6.00	6.50	7.50
L-NF	0.00	4.00	0.00	5.00	6.00	6.50	7.50
L-W	0.00	0.00	0.00	5.00	6.00	6.50	7.50
R-LD	0.00	2.00	0.00	5.00	6.00	6.50	7.50
R-SD	0.00	2.00	0.00	5.00	6.00	6.50	7.50
R-S	0.00	6.00	0.00	5.00	6.00	6.50	7.50
R-O	0.00	8.00	0.00	5.00	6.00	6.50	7.50
R-NF	0.00	8.00	0.00	5.00	6.00	6.50	7.50
R-W	0.00	0.00	0.00	5.00	6.00	6.50	7.50
RS-LD	0.00	3.00	0.00	5.00	6.00	6.50	7.50
RS-SD	361.00	3.00	1083.00	5.00	6.00	6.50	7.50
RS-S	71.00	9.00	639.00	5.00	6.00	6.50	7.50
[illegible]-O	30.00	12.00	360.00	5.00	6.00	6.50	7.50
[illegible]F	16.00	12.00	192.00	5.00	6.00	6.50	7.50
RS-W	0.00	0.00	0.00	5.00	6.00	6.50	7.50
S-LD	0.00	2.00	0.00	5.00	6.00	6.50	7.50
S-SD	699.00	2.00	1398.00	5.00	6.00	6.50	7.50
S-S	46.00	6.00	276.00	5.00	6.00	6.50	7.50
S-O	8.00	8.00	64.00	5.00	6.00	6.50	7.50
S-NF	266.00	8.00	2128.00	5.00	6.00	6.50	7.50
S-W	0.00	0.00	0.00	5.00	6.00	6.50	7.50
H-LD	0.00	1.00	0.00	5.00	6.00	6.50	7.50
H-SD	247.00	1.00	247.00	5.00	6.00	6.50	7.50
H-S	18.00	3.00	54.00	5.00	6.00	6.50	7.50
H-O	0.00	4.00	0.00	5.00	6.00	6.50	7.50
H-NF	465.00	4.00	1860.00	5.00	6.00	6.50	7.50
H-W	0.00	0.00	0.00	5.00	6.00	6.50	7.50
TOTAL =	2227.00		8301.00				

P50	P100	ELEV FT	ELEV M	SWE CM	SE SWE CM	SWE + SE SWE CM	SWE FACTOR
8.50	9.00	500	152.39	2.39	11.28	13.67	1.00
8.50	9.00	500	152.39	2.39	11.28	13.67	1.00
8.50	9.00	500	152.39	2.39	11.28	13.67	2.00
8.50	9.00	500	152.39	2.39	11.28	13.67	3.00
8.50	9.00	500	152.39	2.39	11.28	13.67	3.00
8.50	9.00	500	152.39	2.39	11.28	13.67	0.00
8.50	9.00	1100	335.26	10.02	11.28	21.29	1.00
8.50	9.00	1100	335.26	10.02	11.28	21.29	1.00
8.50	9.00	1100	335.26	10.02	11.28	21.29	1.75
8.50	9.00	1100	335.26	10.02	11.28	21.29	2.50
8.50	9.00	1100	335.26	10.02	11.28	21.29	2.50
8.50	9.00	1100	335.26	10.02	11.28	21.29	0.00
8.50	9.00	2250	685.77	24.64	11.28	35.91	1.00
8.50	9.00	2250	685.77	24.64	11.28	35.91	1.00
8.50	9.00	2250	685.77	24.64	11.28	35.91	1.50
8.50	9.00	2250	685.77	24.64	11.28	35.91	2.00
8.50	9.00	2250	685.77	24.64	11.28	35.91	2.00
8.50	9.00	2250	685.77	24.64	11.28	35.91	0.00
8.50	9.00	3400	1036.27	39.26	11.28	50.54	1.00
8.50	9.00	3400	1036.27	39.26	11.28	50.54	1.00
8.50	9.00	3400	1036.27	39.26	11.28	50.54	1.25
8.50	9.00	3400	1036.27	39.26	11.28	50.54	1.50
8.50	9.00	3400	1036.27	39.26	11.28	50.54	1.50
8.50	9.00	3400	1036.27	39.26	11.28	50.54	1.50
8.50	9.00	4500	1371.53	53.24	11.28	64.52	1.00
8.50	9.00	4500	1371.53	53.24	11.28	64.52	1.00
8.50	9.00	4500	1371.53	53.24	11.28	64.52	1.00
8.50	9.00	4500	1371.53	53.24	11.28	64.52	1.00
8.50	9.00	4500	1371.53	53.24	11.28	64.52	1.00
8.50	9.00	4500	1371.53	53.24	11.28	64.52	1.00

SWE MODIFIED CM	AIR TEMP C	SE TEMP C	MODIFIED TEMP C	AVERAGE WIND SPEED M/S	UNUSUAL WIND SPEED M/S	FOREST COVER DECIMAL	MODIFIED AVERAGE WIND M/S
13.67	7.19	2.00	9.19	4.00	7.00	0.85	1.28
13.67	7.19	2.00	9.19	4.00	7.00	0.85	1.28
27.33	7.19	2.00	9.19	4.00	7.00	0.40	2.72
41.00	7.19	2.00	9.19	4.00	7.00	0.07	3.78
41.00	7.19	2.00	9.19	4.00	7.00	0.07	3.78
0.00	7.19	2.00	9.19	4.00	7.00	0.00	4.00
21.29	6.09	2.00	8.09	4.00	7.00	0.85	1.28
21.29	6.09	2.00	8.09	4.00	7.00	0.85	1.28
37.26	6.09	2.00	8.09	4.00	7.00	0.40	2.72
53.23	6.09	2.00	8.09	4.00	7.00	0.07	3.78
53.23	6.09	2.00	8.09	4.00	7.00	0.07	3.78
0.00	6.09	2.00	8.09	4.00	7.00	0.00	4.00
35.91	3.99	2.00	5.99	4.00	7.00	0.85	1.28
35.91	3.99	2.00	5.99	4.00	7.00	0.85	1.28
53.87	3.99	2.00	5.99	4.00	7.00	0.40	2.72
71.83	3.99	2.00	5.99	4.00	7.00	0.07	3.78
71.83	3.99	2.00	5.99	4.00	7.00	0.07	3.78
0.00	3.99	2.00	5.99	4.00	7.00	0.00	4.00
50.54	1.88	2.00	3.88	4.00	7.00	0.85	1.28
50.54	1.88	2.00	3.88	4.00	7.00	0.85	1.28
63.17	1.88	2.00	3.88	4.00	7.00	0.40	2.72
75.80	1.88	2.00	3.88	4.00	7.00	0.07	3.78
75.80	1.88	2.00	3.88	4.00	7.00	0.07	3.78
75.80	1.88	2.00	3.88	4.00	7.00	0.00	4.00
64.52	-0.13	2.00	1.87	4.00	7.00	0.85	1.28
64.52	-0.13	2.00	1.87	4.00	7.00	0.85	1.28
64.52	-0.13	2.00	1.87	4.00	7.00	0.40	2.72
64.52	-0.13	2.00	1.87	4.00	7.00	0.07	3.78
64.52	-0.13	2.00	1.87	4.00	7.00	0.07	3.78
64.52	-0.13	2.00	1.87	4.00	7.00	0.00	4.00

MODIFIED UNUSUAL WIND M/S	AVERAGE MELT P2 CM	AVERAGE MELT P5 CM	AVERAGE MELT P10 CM	AVERAGE MELT P25 CM	AVERAGE MELT P50 CM	AVERAGE MELT P100 CM	UNUSUAL MELT P2 CM
2.24	2.43	2.52	2.57	2.66	2.75	2.79	3.80
2.24	2.43	2.52	2.57	2.66	2.75	2.79	3.80
4.76	3.32	3.41	3.46	3.55	3.64	3.68	5.79
6.61	3.97	4.06	4.11	4.20	4.29	4.33	7.25
6.61	3.97	4.06	4.11	4.20	4.29	4.33	7.25
7.00	4.11	4.20	4.25	4.34	4.43	4.47	7.56
2.24	2.09	2.17	2.21	2.29	2.36	2.40	3.37
2.24	2.09	2.17	2.21	2.29	2.36	2.40	3.37
4.76	2.85	2.92	2.96	3.04	3.12	3.15	5.13
6.61	3.40	3.48	3.52	3.59	3.67	3.71	6.41
6.61	3.40	3.48	3.52	3.59	3.67	3.71	6.41
7.00	3.52	3.59	3.63	3.71	3.79	3.82	6.68
2.24	1.45	1.50	1.53	1.58	1.63	1.65	2.56
2.24	1.45	1.50	1.53	1.58	1.63	1.65	2.56
4.76	1.94	1.99	2.02	2.07	2.12	2.14	3.85
6.61	2.31	2.36	2.38	2.43	2.48	2.51	4.80
6.61	2.31	2.36	2.38	2.43	2.48	2.51	4.80
7.00	2.38	2.43	2.46	2.51	2.56	2.58	5.01
2.24	0.81	0.83	0.84	0.87	0.89	0.90	1.74
2.24	0.81	0.83	0.84	0.87	0.89	0.90	1.74
4.76	1.04	1.06	1.07	1.10	1.12	1.13	2.58
6.61	1.21	1.23	1.25	1.27	1.29	1.31	3.20
6.61	1.21	1.23	1.25	1.27	1.29	1.31	3.20
7.00	1.25	1.27	1.28	1.31	1.33	1.34	3.33
2.24	0.19	0.19	0.19	0.19	0.18	0.18	0.96
2.24	0.19	0.19	0.19	0.19	0.18	0.18	0.96
4.76	0.17	0.17	0.17	0.17	0.17	0.17	1.36
6.61	0.16	0.16	0.16	0.16	0.16	0.16	1.66
6.61	0.16	0.16	0.16	0.16	0.16	0.16	1.66
7.00	0.16	0.16	0.16	0.16	0.15	0.15	1.72

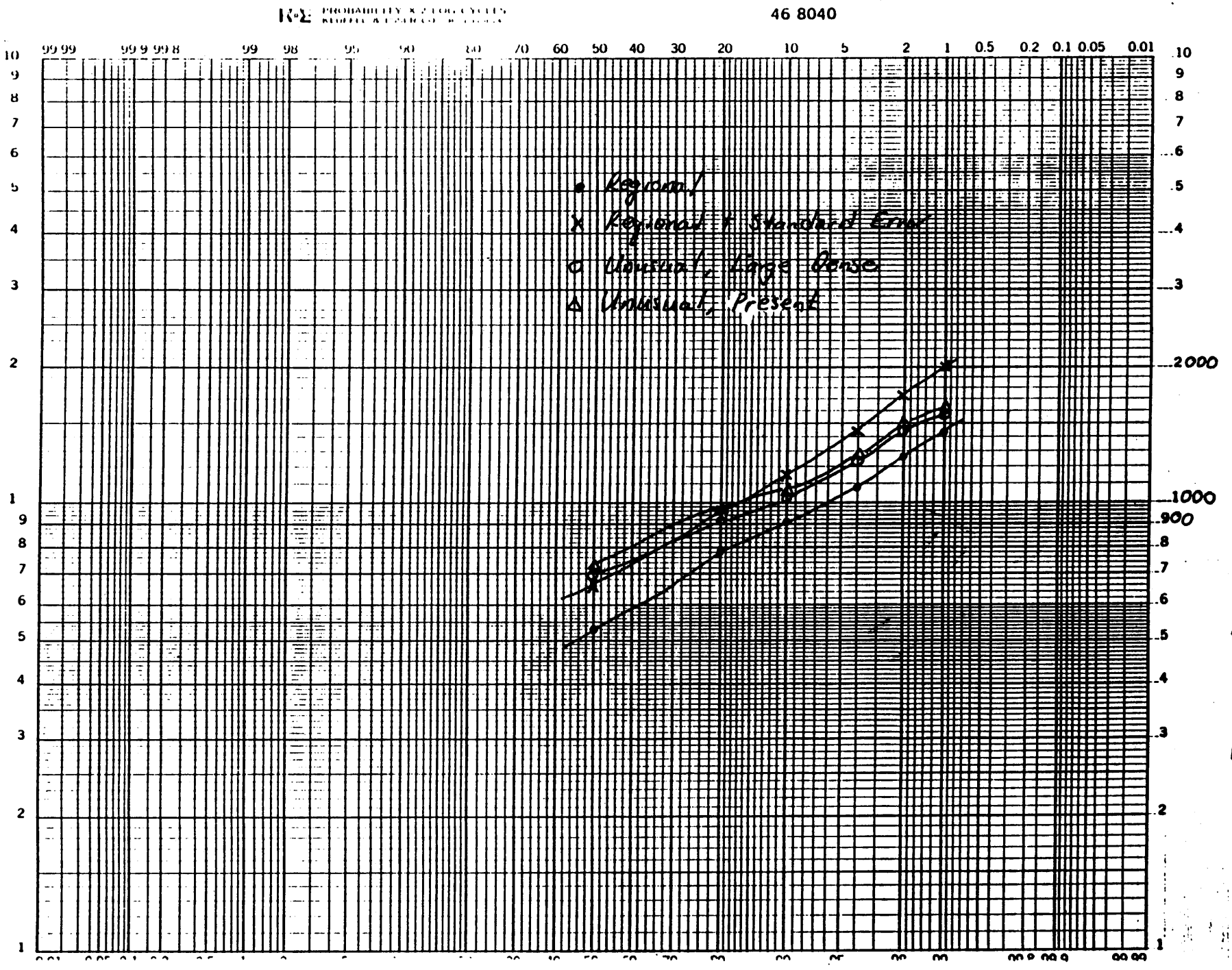
UNUSUAL MELT P5 CM	UNUSUAL MELT P10 CM	UNUSUAL MELT P25 CM	UNUSUAL MELT P50 CM	UNUSUAL MELT P100 CM	P2 + AVERAGE MELT IN	P5 + AVERAGE MELT IN	P10 + AVERAGE MELT IN
3.92	3.97	4.09	4.20	4.26	5.96	6.99	7.51
3.92	3.97	4.09	4.20	4.26	5.96	6.99	7.51
5.91	5.96	6.08	6.20	6.25	6.31	7.34	7.86
7.37	7.42	7.54	7.66	7.71	6.56	7.60	8.12
7.37	7.42	7.54	7.66	7.71	6.56	7.60	8.12
7.68	7.73	7.85	7.97	8.02	6.62	7.65	8.17
3.48	3.53	3.63	3.73	3.78	5.82	6.85	7.37
3.48	3.53	3.63	3.73	3.78	5.82	6.85	7.37
5.23	5.28	5.38	5.48	5.53	6.12	7.15	7.67
6.51	6.56	6.67	6.77	6.82	6.34	7.37	7.88
6.51	6.56	6.67	6.77	6.82	6.34	7.37	7.88
6.79	6.84	6.94	7.04	7.09	6.38	7.42	7.93
2.63	2.67	2.74	2.82	2.86	5.57	6.59	7.10
2.63	2.67	2.74	2.82	2.86	5.57	6.59	7.10
3.93	3.97	4.04	4.12	4.15	5.77	6.78	7.29
4.88	4.92	4.99	5.07	5.11	5.91	6.93	7.44
4.88	4.92	4.99	5.07	5.11	5.91	6.93	7.44
5.08	5.12	5.19	5.27	5.31	5.94	6.96	7.47
1.79	1.81	1.86	1.91	1.93	5.32	6.33	6.83
1.79	1.81	1.86	1.91	1.93	5.32	6.33	6.83
2.63	2.65	2.70	2.75	2.78	5.41	6.42	6.92
3.25	3.27	3.32	3.37	3.39	5.48	6.49	6.99
3.25	3.27	3.32	3.37	3.39	5.48	6.49	6.99
3.38	3.40	3.45	3.50	3.52	5.49	6.50	7.00
0.98	0.99	1.02	1.04	1.05	5.07	6.07	6.57
0.98	0.99	1.02	1.04	1.05	5.07	6.07	6.57
1.39	1.40	1.42	1.45	1.46	5.07	6.07	6.57
1.68	1.70	1.72	1.74	1.75	5.06	6.06	6.56
1.68	1.70	1.72	1.74	1.75	5.06	6.06	6.56
1.75	1.76	1.78	1.81	1.82	5.06	6.06	6.56
			Average Input =		5.29	6.30	6.80
			Peak Flow =		618.14	835.94	944.83

P25 + AVERAGE MELT IN	P50 + AVERAGE MELT IN	P100 + AVERAGE MELT IN	P2 + UNUSUAL MELT IN	P5 + UNUSUAL MELT IN	P10 + UNUSUAL MELT IN	P25 + UNUSUAL MELT IN	P50 + UNUSUAL MELT IN
8.55	9.58	10.10	6.50	7.54	8.06	9.11	10.16
8.55	9.58	10.10	6.50	7.54	8.06	9.11	10.16
8.90	9.93	10.45	7.28	8.33	8.85	9.89	10.94
9.15	10.19	10.71	7.85	8.90	9.42	10.47	11.51
9.15	10.19	10.71	7.85	8.90	9.42	10.47	11.51
9.21	10.24	10.76	7.98	9.02	9.54	10.59	11.64
8.40	9.43	9.95	6.33	7.37	7.89	8.93	9.97
8.40	9.43	9.95	6.33	7.37	7.89	8.93	9.97
8.70	9.73	10.24	7.02	8.06	8.58	9.62	10.66
8.91	9.94	10.46	7.52	8.56	9.08	10.12	11.16
8.91	9.94	10.46	7.52	8.56	9.08	10.12	11.16
8.96	9.99	10.51	7.63	8.67	9.19	10.23	11.27
8.12	9.14	9.65	6.01	7.04	7.55	8.58	9.61
8.12	9.14	9.65	6.01	7.04	7.55	8.58	9.61
8.31	9.33	9.84	6.52	7.55	8.06	9.09	10.12
8.46	9.48	9.99	6.89	7.92	8.44	9.47	10.50
8.46	9.48	9.99	6.89	7.92	8.44	9.47	10.50
8.49	9.51	10.02	6.97	8.00	8.52	9.55	10.57
7.84	8.85	9.35	5.68	6.70	7.21	8.23	9.25
7.84	8.85	9.35	5.68	6.70	7.21	8.23	9.25
7.93	8.94	9.45	6.02	7.04	7.54	8.56	9.58
8.00	9.01	9.51	6.26	7.28	7.79	8.81	9.83
8.00	9.01	9.51	6.26	7.28	7.79	8.81	9.83
8.01	9.02	9.53	6.31	7.33	7.84	8.86	9.88
7.57	8.57	9.07	5.38	6.39	6.89	7.90	8.91
7.57	8.57	9.07	5.38	6.39	6.89	7.90	8.91
7.57	8.57	9.07	5.54	6.55	7.05	8.06	9.07
7.56	8.56	9.06	5.65	6.66	7.17	8.18	9.19
7.56	8.56	9.06	5.65	6.66	7.17	8.18	9.19
7.56	8.56	9.06	5.68	6.69	7.19	8.20	9.21
7.81	8.82	9.33	5.65	6.67	7.18	8.20	9.22
1162.63	1380.42	1489.32	696.00	915.93	1025.90	1245.84	1465.78

P100 + UNUSUAL MELT IN	P2 + AVERAGE MELT IN	P5 + AVERAGE MELT IN	P10 + AVERAGE MELT IN	P25 + AVERAGE MELT IN	P50 + AVERAGE MELT IN	P100 + AVERAGE MELT IN	P2 + UNUSUAL MELT IN
	**********				AREA WEIGHTED		**********
10.68	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10.68	0.00	0.00	0.00	0.00	0.00	0.00	0.00
11.46	0.00	0.00	0.00	0.00	0.00	0.00	0.00
12.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00
12.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00
12.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10.49	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10.49	0.00	0.00	0.00	0.00	0.00	0.00	0.00
11.18	0.00	0.00	0.00	0.00	0.00	0.00	0.00
11.68	0.00	0.00	0.00	0.00	0.00	0.00	0.00
11.68	0.00	0.00	0.00	0.00	0.00	0.00	0.00
11.79	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10.13	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10.13	0.90	1.07	1.15	1.32	1.48	1.56	0.97
10.64	0.18	0.22	0.23	0.27	0.30	0.31	0.21
11.01	0.08	0.09	0.10	0.11	0.13	0.13	0.09
11.01	0.04	0.05	0.05	0.06	0.07	0.07	0.05
11.09	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9.76	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9.76	1.67	1.99	2.14	2.46	2.78	2.94	1.78
10.09	0.11	0.13	0.14	0.16	0.18	0.20	0.12
10.34	0.02	0.02	0.03	0.03	0.03	0.03	0.02
10.34	0.65	0.77	0.83	0.96	1.08	1.14	0.75
10.39	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9.41	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9.41	0.56	0.67	0.73	0.84	0.95	1.01	0.60
9.57	0.04	0.05	0.05	0.06	0.07	0.07	0.04
9.69	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9.69	1.06	1.27	1.37	1.58	1.79	1.89	1.18
9.72	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9.73	5.32	6.33	6.84	7.85	8.85	9.36	5.82
1575.74	625.12	842.91	951.81	1169.60	1387.40	1496.29	732.96

****

P5 + UNUSUAL MELT IN	P10 + UNUSUAL MELT IN	P25 + UNUSUAL MELT IN	P50 + UNUSUAL MELT IN	P100 + UNUSUAL MELT IN
0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00
1.14	1.22	1.39	1.56	1.64
0.24	0.26	0.29	0.32	0.34
0.11	0.11	0.13	0.14	0.15
0.06	0.06	0.07	0.08	0.08
0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00
2.10	2.26	2.58	2.90	3.06
0.15	0.16	0.18	0.20	0.21
0.03	0.03	0.03	0.04	0.04
0.87	0.93	1.05	1.17	1.23
0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00
0.71	0.76	0.88	0.99	1.04
0.05	0.06	0.07	0.07	0.08
0.00	0.00	0.00	0.00	0.00
1.39	1.50	1.71	1.92	2.02
0.00	0.00	0.00	0.00	0.00
6.84	7.35	8.37	9.39	9.90
952.89	1062.86	1282.80	1502.74	1612.71


46 8040
99.99 99.9 99.8 99 98 95 90 80 70 60 50 40 30 20 10 5 2 1 0.5 0.2 0.1 0.05 0.01
• Regional
X Regional + Standard Error
○ Unusual, Large Dense
△ Unusual, Present
2000
1000
900

Sub-basin 1

SUB-BASIN 2

Re nal Flood Frequency Worksheet for Tolt River
Su. asin 2
based on Region I

Recurrence Interval	Regress constant	Area (mi2)	Area exponent	Ann Precip (in)	Precip exponent	Forest cover	For Cover exponent
2	0.191	1.43	0.86	94.00	1.51	1.00	1.00
5	0.257	1.43	0.86	94.00	1.53	1.00	1.00
10	0.288	1.43	0.85	94.00	1.54	1.00	1.00
25	0.317	1.43	0.85	94.00	1.56	1.00	1.00
50	0.332	1.43	0.86	94.00	1.58	1.00	1.00
100	0.343	1.43	0.86	94.00	1.60	1.00	1.00

St basin 2

Q est (ft3/s)	Standard error (%)	Q + SE
248.42	24.90	310.28
366.06	24.60	456.11
427.73	26.90	542.79
515.59	31.50	678.00
593.49	35.70	805.36
671.47	40.30	942.08

Level 1 Analysis
Sub-basin 2

INPUT INFORMATION
****

Return Period	Peak Flow (cfs)	24-hour Rainfall (in)	Regress. Peak Flow (cfs)
2	247.00	5.00	259.30
5	365.00	6.00	359.96
10	426.00	6.50	410.28
25	514.00	7.50	510.94
50	592.00	8.50	611.59
100	670.00	9.00	661.92

Regression intercept = -243.97
Regression slope = 100.65

Elevation of Zones

Elevation of Lowland =	500	(ft)
Elevation of Rain Dominated =	1100	(ft)
Elevation of Rain on Snow =	2250	(ft)
Elevation of Snow Dominated =	3400	(ft)
Elevation of Highland =	4500	(ft)

Snow Water Equivalent vs Elevation Relationship

Constant =	-3.970	(cm)
Slope =	0.042	(cm/m)
Standard Error =	11.278	(cm)

Air Temperature vs Elevation Relationship

Constant =	8.100	(C)
Slope =	-0.006	(C/m)
Standard Error =	2.000	(C)

Wind Speed

Average Wind Speed =	4	(m/s)
Unusual Wind Speed =	7	(m/s)

Level 1 Analysis

SUMMARY INFORMATION
****

Basin Score = 6.4869281
Worst Basin Score = 8.4052287
Best Basin Score = 2.1013071

Area in Lowland	0	0.00
Area in Rain Dominated	7	0.01
Area in Rain on Snow	249	0.27
Area in Snow Dominated	506	0.55
Area in Highland	156	0.17
TOTAL =	918	1

Area in Large Dense	97	0.11
Area in Small Dense	0	0.00
Area in Sparse	476	0.52
Area in Open	345	0.38
Area in Non-Forest	0	0.00
Area in Water	0	0.00
TOTAL =	918	1

L l 1 Analysis

Precip Zone- Veg Class	Area (acres)	Precip- Veg Score	Score X Area	P2	P5	P10	P25
L-LD	0.00	1.00	0.00	5.00	6.00	6.50	7.50
L-SD	0.00	1.00	0.00	5.00	6.00	6.50	7.50
L-S	0.00	3.00	0.00	5.00	6.00	6.50	7.50
L-O	0.00	4.00	0.00	5.00	6.00	6.50	7.50
L-NF	0.00	4.00	0.00	5.00	6.00	6.50	7.50
L-W	0.00	0.00	0.00	5.00	6.00	6.50	7.50
R-LD	0.00	2.00	0.00	5.00	6.00	6.50	7.50
R-SD	0.00	2.00	0.00	5.00	6.00	6.50	7.50
R-S	7.00	6.00	42.00	5.00	6.00	6.50	7.50
R-O	0.00	8.00	0.00	5.00	6.00	6.50	7.50
R-NF	0.00	8.00	0.00	5.00	6.00	6.50	7.50
R-W	0.00	0.00	0.00	5.00	6.00	6.50	7.50
RS-LD	39.00	3.00	117.00	5.00	6.00	6.50	7.50
RS-SD	0.00	3.00	0.00	5.00	6.00	6.50	7.50
RS-S	200.00	9.00	1800.00	5.00	6.00	6.50	7.50
[illegible]-O	10.00	12.00	120.00	5.00	6.00	6.50	7.50
R F	0.00	12.00	0.00	5.00	6.00	6.50	7.50
RS-W	0.00	0.00	0.00	5.00	6.00	6.50	7.50
S-LD	56.00	2.00	112.00	5.00	6.00	6.50	7.50
S-SD	0.00	2.00	0.00	5.00	6.00	6.50	7.50
S-S	185.00	6.00	1110.00	5.00	6.00	6.50	7.50
S-O	265.00	8.00	2120.00	5.00	6.00	6.50	7.50
S-NF	0.00	8.00	0.00	5.00	6.00	6.50	7.50
S-W	0.00	0.00	0.00	5.00	6.00	6.50	7.50
H-LD	2.00	1.00	2.00	5.00	6.00	6.50	7.50
H-SD	0.00	1.00	0.00	5.00	6.00	6.50	7.50
H-S	84.00	3.00	252.00	5.00	6.00	6.50	7.50
H-O	70.00	4.00	280.00	5.00	6.00	6.50	7.50
H-NF	0.00	4.00	0.00	5.00	6.00	6.50	7.50
H-W	0.00	0.00	0.00	5.00	6.00	6.50	7.50
TOTAL =	918.00		5955.00				

P50	P100	ELEV FT	ELEV M	SWE CM	SE SWE CM	SWE + SE SWE CM	SWE FACTOR
8.50	9.00	500	152.39	2.39	11.28	13.67	1.00
8.50	9.00	500	152.39	2.39	11.28	13.67	1.00
8.50	9.00	500	152.39	2.39	11.28	13.67	2.00
8.50	9.00	500	152.39	2.39	11.28	13.67	3.00
8.50	9.00	500	152.39	2.39	11.28	13.67	3.00
8.50	9.00	500	152.39	2.39	11.28	13.67	0.00
8.50	9.00	1100	335.26	10.02	11.28	21.29	1.00
8.50	9.00	1100	335.26	10.02	11.28	21.29	1.00
8.50	9.00	1100	335.26	10.02	11.28	21.29	1.75
8.50	9.00	1100	335.26	10.02	11.28	21.29	2.50
8.50	9.00	1100	335.26	10.02	11.28	21.29	2.50
8.50	9.00	1100	335.26	10.02	11.28	21.29	0.00
8.50	9.00	2250	685.77	24.64	11.28	35.91	1.00
8.50	9.00	2250	685.77	24.64	11.28	35.91	1.00
8.50	9.00	2250	685.77	24.64	11.28	35.91	1.50
8.50	9.00	2250	685.77	24.64	11.28	35.91	2.00
8.50	9.00	2250	685.77	24.64	11.28	35.91	2.00
8.50	9.00	2250	685.77	24.64	11.28	35.91	0.00
8.50	9.00	3400	1036.27	39.26	11.28	50.54	1.00
8.50	9.00	3400	1036.27	39.26	11.28	50.54	1.00
8.50	9.00	3400	1036.27	39.26	11.28	50.54	1.25
8.50	9.00	3400	1036.27	39.26	11.28	50.54	1.50
8.50	9.00	3400	1036.27	39.26	11.28	50.54	1.50
8.50	9.00	3400	1036.27	39.26	11.28	50.54	1.50
8.50	9.00	4500	1371.53	53.24	11.28	64.52	1.00
8.50	9.00	4500	1371.53	53.24	11.28	64.52	1.00
8.50	9.00	4500	1371.53	53.24	11.28	64.52	1.00
8.50	9.00	4500	1371.53	53.24	11.28	64.52	1.00
8.50	9.00	4500	1371.53	53.24	11.28	64.52	1.00
8.50	9.00	4500	1371.53	53.24	11.28	64.52	1.00

SWE MODIFIED CM	AIR TEMP C	SE TEMP C	MODIFIED TEMP C	AVERAGE WIND SPEED M/S	UNUSUAL WIND SPEED M/S	FOREST COVER DECIMAL	MODIFIED AVERAGE WIND M/S
13.67	7.19	2.00	9.19	4.00	7.00	0.85	1.28
13.67	7.19	2.00	9.19	4.00	7.00	0.85	1.28
27.33	7.19	2.00	9.19	4.00	7.00	0.40	2.72
41.00	7.19	2.00	9.19	4.00	7.00	0.07	3.78
41.00	7.19	2.00	9.19	4.00	7.00	0.07	3.78
0.00	7.19	2.00	9.19	4.00	7.00	0.00	4.00
21.29	6.09	2.00	8.09	4.00	7.00	0.85	1.28
21.29	6.09	2.00	8.09	4.00	7.00	0.85	1.28
37.26	6.09	2.00	8.09	4.00	7.00	0.40	2.72
53.23	6.09	2.00	8.09	4.00	7.00	0.07	3.78
53.23	6.09	2.00	8.09	4.00	7.00	0.07	3.78
0.00	6.09	2.00	8.09	4.00	7.00	0.00	4.00
35.91	3.99	2.00	5.99	4.00	7.00	0.85	1.28
35.91	3.99	2.00	5.99	4.00	7.00	0.85	1.28
53.87	3.99	2.00	5.99	4.00	7.00	0.40	2.72
71.83	3.99	2.00	5.99	4.00	7.00	0.07	3.78
71.83	3.99	2.00	5.99	4.00	7.00	0.07	3.78
0.00	3.99	2.00	5.99	4.00	7.00	0.00	4.00
50.54	1.88	2.00	3.88	4.00	7.00	0.85	1.28
50.54	1.88	2.00	3.88	4.00	7.00	0.85	1.28
63.17	1.88	2.00	3.88	4.00	7.00	0.40	2.72
75.80	1.88	2.00	3.88	4.00	7.00	0.07	3.78
75.80	1.88	2.00	3.88	4.00	7.00	0.07	3.78
75.80	1.88	2.00	3.88	4.00	7.00	0.00	4.00
64.52	-0.13	2.00	1.87	4.00	7.00	0.85	1.28
64.52	-0.13	2.00	1.87	4.00	7.00	0.85	1.28
64.52	-0.13	2.00	1.87	4.00	7.00	0.40	2.72
64.52	-0.13	2.00	1.87	4.00	7.00	0.07	3.78
64.52	-0.13	2.00	1.87	4.00	7.00	0.07	3.78
64.52	-0.13	2.00	1.87	4.00	7.00	0.00	4.00

MODIFIED UNUSUAL WIND M/S	AVERAGE MELT P2 CM	AVERAGE MELT P5 CM	AVERAGE MELT P10 CM	AVERAGE MELT P25 CM	AVERAGE MELT P50 CM	AVERAGE MELT P100 CM	UNUSUAL MELT P2 CM
2.24	2.43	2.52	2.57	2.66	2.75	2.79	3.80
2.24	2.43	2.52	2.57	2.66	2.75	2.79	3.80
4.76	3.32	3.41	3.46	3.55	3.64	3.68	5.79
6.61	3.97	4.06	4.11	4.20	4.29	4.33	7.25
6.61	3.97	4.06	4.11	4.20	4.29	4.33	7.25
7.00	4.11	4.20	4.25	4.34	4.43	4.47	7.56
2.24	2.09	2.17	2.21	2.29	2.36	2.40	3.37
2.24	2.09	2.17	2.21	2.29	2.36	2.40	3.37
4.76	2.85	2.92	2.96	3.04	3.12	3.15	5.13
6.61	3.40	3.48	3.52	3.59	3.67	3.71	6.41
6.61	3.40	3.48	3.52	3.59	3.67	3.71	6.41
7.00	3.52	3.59	3.63	3.71	3.79	3.82	6.68
2.24	1.45	1.50	1.53	1.58	1.63	1.65	2.56
2.24	1.45	1.50	1.53	1.58	1.63	1.65	2.56
4.76	1.94	1.99	2.02	2.07	2.12	2.14	3.85
6.61	2.31	2.36	2.38	2.43	2.48	2.51	4.80
6.61	2.31	2.36	2.38	2.43	2.48	2.51	4.80
7.00	2.38	2.43	2.46	2.51	2.56	2.58	5.01
2.24	0.81	0.83	0.84	0.87	0.89	0.90	1.74
2.24	0.81	0.83	0.84	0.87	0.89	0.90	1.74
4.76	1.04	1.06	1.07	1.10	1.12	1.13	2.58
6.61	1.21	1.23	1.25	1.27	1.29	1.31	3.20
6.61	1.21	1.23	1.25	1.27	1.29	1.31	3.20
7.00	1.25	1.27	1.28	1.31	1.33	1.34	3.33
2.24	0.19	0.19	0.19	0.19	0.18	0.18	0.96
2.24	0.19	0.19	0.19	0.19	0.18	0.18	0.96
4.76	0.17	0.17	0.17	0.17	0.17	0.17	1.36
6.61	0.16	0.16	0.16	0.16	0.16	0.16	1.66
6.61	0.16	0.16	0.16	0.16	0.16	0.16	1.66
7.00	0.16	0.16	0.16	0.16	0.15	0.15	1.72

UNUSUAL MELT P5 CM	UNUSUAL MELT P10 CM	UNUSUAL MELT P25 CM	UNUSUAL MELT P50 CM	UNUSUAL MELT P100 CM	P2 + AVERAGE MELT IN	P5 + AVERAGE MELT IN	P10 + AVERAGE MELT IN
3.92	3.97	4.09	4.20	4.26	5.96	6.99	7.51
3.92	3.97	4.09	4.20	4.26	5.96	6.99	7.51
5.91	5.96	6.08	6.20	6.25	6.31	7.34	7.86
7.37	7.42	7.54	7.66	7.71	6.56	7.60	8.12
7.37	7.42	7.54	7.66	7.71	6.56	7.60	8.12
7.68	7.73	7.85	7.97	8.02	6.62	7.65	8.17
3.48	3.53	3.63	3.73	3.78	5.82	6.85	7.37
3.48	3.53	3.63	3.73	3.78	5.82	6.85	7.37
5.23	5.28	5.38	5.48	5.53	6.12	7.15	7.67
6.51	6.56	6.67	6.77	6.82	6.34	7.37	7.88
6.51	6.56	6.67	6.77	6.82	6.34	7.37	7.88
6.79	6.84	6.94	7.04	7.09	6.38	7.42	7.93
2.63	2.67	2.74	2.82	2.86	5.57	6.59	7.10
2.63	2.67	2.74	2.82	2.86	5.57	6.59	7.10
3.93	3.97	4.04	4.12	4.15	5.77	6.78	7.29
4.88	4.92	4.99	5.07	5.11	5.91	6.93	7.44
4.88	4.92	4.99	5.07	5.11	5.91	6.93	7.44
5.08	5.12	5.19	5.27	5.31	5.94	6.96	7.47
1.79	1.81	1.86	1.91	1.93	5.32	6.33	6.83
1.79	1.81	1.86	1.91	1.93	5.32	6.33	6.83
2.63	2.65	2.70	2.75	2.78	5.41	6.42	6.92
3.25	3.27	3.32	3.37	3.39	5.48	6.49	6.99
3.25	3.27	3.32	3.37	3.39	5.48	6.49	6.99
3.38	3.40	3.45	3.50	3.52	5.49	6.50	7.00
0.98	0.99	1.02	1.04	1.05	5.07	6.07	6.57
0.98	0.99	1.02	1.04	1.05	5.07	6.07	6.57
1.39	1.40	1.42	1.45	1.46	5.07	6.07	6.57
1.68	1.70	1.72	1.74	1.75	5.06	6.06	6.56
1.68	1.70	1.72	1.74	1.75	5.06	6.06	6.56
1.75	1.76	1.78	1.81	1.82	5.06	6.06	6.56
			Average Input =		5.35	6.36	6.86
			Peak Flow =		294.41	396.14	447.00

P25 + AVERAGE MELT IN	P50 + AVERAGE MELT IN	P100 + AVERAGE MELT IN	P2 + UNUSUAL MELT IN	P5 + UNUSUAL MELT IN	P10 + UNUSUAL MELT IN	P25 + UNUSUAL MELT IN	P50 + UNUSUAL MELT IN
8.55	9.58	10.10	6.50	7.54	8.06	9.11	10.16
8.55	9.58	10.10	6.50	7.54	8.06	9.11	10.16
8.90	9.93	10.45	7.28	8.33	8.85	9.89	10.94
9.15	10.19	10.71	7.85	8.90	9.42	10.47	11.51
9.15	10.19	10.71	7.85	8.90	9.42	10.47	11.51
9.21	10.24	10.76	7.98	9.02	9.54	10.59	11.64
8.40	9.43	9.95	6.33	7.37	7.89	8.93	9.97
8.40	9.43	9.95	6.33	7.37	7.89	8.93	9.97
8.70	9.73	10.24	7.02	8.06	8.58	9.62	10.66
8.91	9.94	10.46	7.52	8.56	9.08	10.12	11.16
8.91	9.94	10.46	7.52	8.56	9.08	10.12	11.16
8.96	9.99	10.51	7.63	8.67	9.19	10.23	11.27
8.12	9.14	9.65	6.01	7.04	7.55	8.58	9.61
8.12	9.14	9.65	6.01	7.04	7.55	8.58	9.61
8.31	9.33	9.84	6.52	7.55	8.06	9.09	10.12
8.46	9.48	9.99	6.89	7.92	8.44	9.47	10.50
8.46	9.48	9.99	6.89	7.92	8.44	9.47	10.50
8.49	9.51	10.02	6.97	8.00	8.52	9.55	10.57
7.84	8.85	9.35	5.68	6.70	7.21	8.23	9.25
7.84	8.85	9.35	5.68	6.70	7.21	8.23	9.25
7.93	8.94	9.45	6.02	7.04	7.54	8.56	9.58
8.00	9.01	9.51	6.26	7.28	7.79	8.81	9.83
8.00	9.01	9.51	6.26	7.28	7.79	8.81	9.83
8.01	9.02	9.53	6.31	7.33	7.84	8.86	9.88
7.57	8.57	9.07	5.38	6.39	6.89	7.90	8.91
7.57	8.57	9.07	5.38	6.39	6.89	7.90	8.91
7.57	8.57	9.07	5.54	6.55	7.05	8.06	9.07
7.56	8.56	9.06	5.65	6.66	7.17	8.18	9.19
7.56	8.56	9.06	5.65	6.66	7.17	8.18	9.19
7.56	8.56	9.06	5.68	6.69	7.19	8.20	9.21
7.88	8.89	9.39	5.72	6.75	7.26	8.28	9.30
548.72	650.45	701.31	332.22	434.95	486.31	589.03	691.76

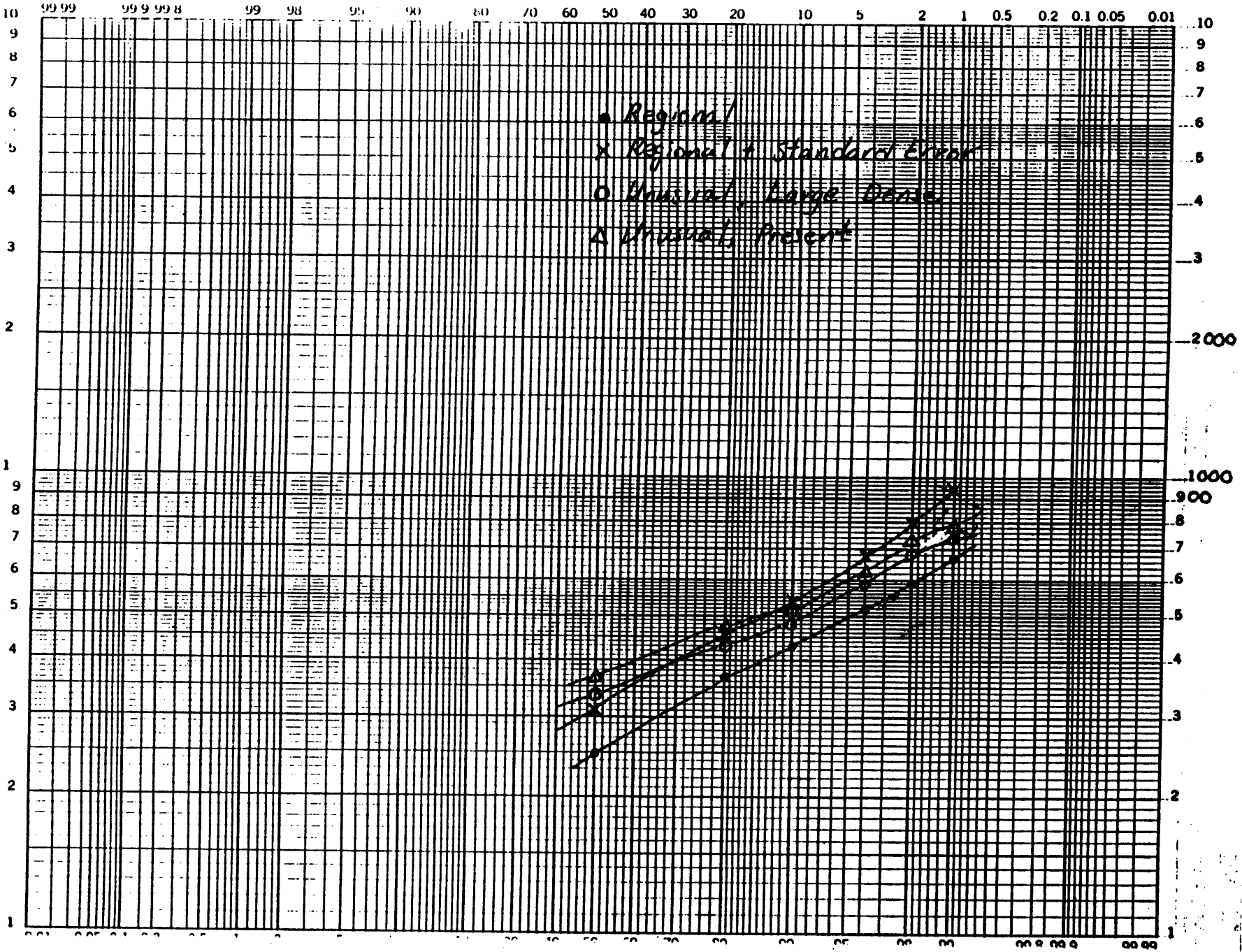
P100 + UNUSUAL MELT IN	P2 + AVERAGE MELT IN	P5 + AVERAGE MELT IN	P10 + AVERAGE MELT IN	P25 + AVERAGE MELT IN	P50 + AVERAGE MELT IN	P100 + AVERAGE MELT IN	P2 + UNUSUAL MELT IN
	**********				AREA WEIGHTED		**********
10.68	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10.68	0.00	0.00	0.00	0.00	0.00	0.00	0.00
11.46	0.00	0.00	0.00	0.00	0.00	0.00	0.00
12.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00
12.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00
12.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10.49	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10.49	0.00	0.00	0.00	0.00	0.00	0.00	0.00
11.18	0.05	0.05	0.06	0.07	0.07	0.08	0.05
11.68	0.00	0.00	0.00	0.00	0.00	0.00	0.00
11.68	0.00	0.00	0.00	0.00	0.00	0.00	0.00
11.79	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10.13	0.24	0.28	0.30	0.34	0.39	0.41	0.26
10.13	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10.64	1.26	1.48	1.59	1.81	2.03	2.14	1.42
11.01	0.06	0.08	0.08	0.09	0.10	0.11	0.08
11.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00
11.09	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9.76	0.32	0.39	0.42	0.48	0.54	0.57	0.35
9.76	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10.09	1.09	1.29	1.40	1.60	1.80	1.90	1.21
10.34	1.58	1.87	2.02	2.31	2.60	2.75	1.81
10.34	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10.39	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9.41	0.01	0.01	0.01	0.02	0.02	0.02	0.01
9.41	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9.57	0.46	0.56	0.60	0.69	0.78	0.83	0.51
9.69	0.39	0.46	0.50	0.58	0.65	0.69	0.43
9.69	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9.72	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9.81	5.46	6.47	6.98	7.99	9.00	9.50	6.12
743.12	305.61	407.34	458.20	559.92	661.65	712.51	371.92

****

P5 + UNUSUAL MELT IN	P10 + UNUSUAL MELT IN	P25 + UNUSUAL MELT IN	P50 + UNUSUAL MELT IN	-P100 + UNUSUAL MELT IN
0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00
0.06	0.07	0.07	0.08	0.09
0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00
0.30	0.32	0.36	0.41	0.43
0.00	0.00	0.00	0.00	0.00
1.64	1.76	1.98	2.21	2.32
0.09	0.09	0.10	0.11	0.12
0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00
0.41	0.44	0.50	0.56	0.60
0.00	0.00	0.00	0.00	0.00
1.42	1.52	1.73	1.93	2.03
2.10	2.25	2.54	2.84	2.98
0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00
0.01	0.02	0.02	0.02	0.02
0.00	0.00	0.00	0.00	0.00
0.60	0.65	0.74	0.83	0.88
0.51	0.55	0.62	0.70	0.74
0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00
7.14	7.65	8.67	9.69	10.20
474.64	526.00	628.73	731.45	782.81

K+E PROBABILITY X 2 LOG CYCLES KEUFFEL & ESSER CO.

46 8040



Sub-basin #2

SUB-BASIN 4

'onal Flood Frequency Worksheet for Tolt River
S. -basin 4
based on Region I

Recurrence Interval	Regress constant	Area (mi2)	Area exponent	Ann Precip (in)	Precip exponent	Forest cover	For Cover exponent
2	0.191	4.02	0.86	94.00	1.51	1.00	1.00
5	0.257	4.02	0.86	94.00	1.53	1.00	1.00
10	0.288	4.02	0.85	94.00	1.54	1.00	1.00
25	0.317	4.02	0.85	94.00	1.56	1.00	1.00
50	0.332	4.02	0.86	94.00	1.58	1.00	1.00
100	0.343	4.02	0.86	94.00	1.60	1.00	1.00

u basin 4

Q est ft3/s)	Standard error (%)	Q + SE
603.13	24.90	753.31
888.74	24.60	1,107.36
1,027.82	26.90	1,304.30
1,238.93	31.50	1,629.19
1,440.90	35.70	1,955.30
1,630.24	40.30	2,287.23

Level 1 Analysis
Sub-basin 4

INPUT INFORMATION
****

Return Period	Peak Flow (cfs)	24-hour Rainfall (in)	Regress. Peak Flow (cfs)
2	603.00	5.00	628.93
5	889.00	6.00	873.44
10	1028.00	6.50	995.70
25	1239.00	7.50	1240.21
50	1441.00	8.50	1484.73
100	1630.00	9.00	1606.98

Regression intercept = -593.63
Regression slope = 244.51

Elevation of Zones

Elevation of Lowland =	500	(ft)
Elevation of Rain Dominated =	1100	(ft)
Elevation of Rain on Snow =	2250	(ft)
Elevation of Snow Dominated =	3400	(ft)
Elevation of Highland =	4500	(ft)

Snow Water Equivalent vs Elevation Relationship

Constant =	-3.970	(cm)
Slope =	0.042	(cm/m)
Standard Error =	11.278	(cm)

Air Temperature vs Elevation Relationship

Constant =	8.100	(C)
Slope =	-0.006	(C/m)
Standard Error =	2.000	(C)

Wind Speed

Average Wind Speed =	4	(m/s)
Unusual Wind Speed =	7	(m/s)

Level 1 Analysis

SUMMARY INFORMATION
****
Basin Score = 4.7180582
Worst Basin Score = 9.5347572
Best Basin Score = 2.3836893

Area in Lowland	0	0.00
Area in Rain Dominated	502	0.19
Area in Rain on Snow	1157	0.45
Area in Snow Dominated	747	0.29
Area in Highland	169	0.07
TOTAL =	2575	1

Area in Large Dense	184	0.07
Area in Small Dense	1345	0.52
Area in Sparse	540	0.21
Area in Open	263	0.10
Area in Non-Forest	243	0.09
Area in Water	0	0.00
TOTAL =	2575	1

1 1 Analysis

Precip Zone-Veg Class	Area (acres)	Precip-Veg Score	Score X Area	P2	P5	P10	P25
L-LD	0.00	1.00	0.00	5.00	6.00	6.50	7.50
L-SD	0.00	1.00	0.00	5.00	6.00	6.50	7.50
L-S	0.00	3.00	0.00	5.00	6.00	6.50	7.50
L-O	0.00	4.00	0.00	5.00	6.00	6.50	7.50
L-NF	0.00	4.00	0.00	5.00	6.00	6.50	7.50
L-W	0.00	0.00	0.00	5.00	6.00	6.50	7.50
R-LD	2.00	2.00	4.00	5.00	6.00	6.50	7.50
R-SD	408.00	2.00	816.00	5.00	6.00	6.50	7.50
R-S	89.00	6.00	534.00	5.00	6.00	6.50	7.50
R-O	0.00	8.00	0.00	5.00	6.00	6.50	7.50
R-NF	3.00	8.00	24.00	5.00	6.00	6.50	7.50
R-W	0.00	0.00	0.00	5.00	6.00	6.50	7.50
RS-LD	34.00	3.00	102.00	5.00	6.00	6.50	7.50
RS-SD	650.00	3.00	1950.00	5.00	6.00	6.50	7.50
RS-S	333.00	9.00	2997.00	5.00	6.00	6.50	7.50
-O	78.00	12.00	936.00	5.00	6.00	6.50	7.50
R F	62.00	12.00	744.00	5.00	6.00	6.50	7.50
RS-W	0.00	0.00	0.00	5.00	6.00	6.50	7.50
S-LD	70.00	2.00	140.00	5.00	6.00	6.50	7.50
S-SD	287.00	2.00	574.00	5.00	6.00	6.50	7.50
S-S	116.00	6.00	696.00	5.00	6.00	6.50	7.50
S-O	155.00	8.00	1240.00	5.00	6.00	6.50	7.50
S-NF	119.00	8.00	952.00	5.00	6.00	6.50	7.50
S-W	0.00	0.00	0.00	5.00	6.00	6.50	7.50
H-LD	78.00	1.00	78.00	5.00	6.00	6.50	7.50
H-SD	0.00	1.00	0.00	5.00	6.00	6.50	7.50
H-S	2.00	3.00	6.00	5.00	6.00	6.50	7.50
H-O	30.00	4.00	120.00	5.00	6.00	6.50	7.50
H-NF	59.00	4.00	236.00	5.00	6.00	6.50	7.50
H-W	0.00	0.00	0.00	5.00	6.00	6.50	7.50
TOTAL =	2575.00		12149.00				

P50	P100	ELEV FT	ELEV M	SWE CM	SE SWE CM	SWE + SE SWE CM	SWE FACTOR
8.50	9.00	500	152.39	2.39	11.28	13.67	1.00
8.50	9.00	500	152.39	2.39	11.28	13.67	1.00
8.50	9.00	500	152.39	2.39	11.28	13.67	2.00
8.50	9.00	500	152.39	2.39	11.28	13.67	3.00
8.50	9.00	500	152.39	2.39	11.28	13.67	3.00
8.50	9.00	500	152.39	2.39	11.28	13.67	0.00
8.50	9.00	1100	335.26	10.02	11.28	21.29	1.00
8.50	9.00	1100	335.26	10.02	11.28	21.29	1.00
8.50	9.00	1100	335.26	10.02	11.28	21.29	1.75
8.50	9.00	1100	335.26	10.02	11.28	21.29	2.50
8.50	9.00	1100	335.26	10.02	11.28	21.29	2.50
8.50	9.00	1100	335.26	10.02	11.28	21.29	0.00
8.50	9.00	2250	685.77	24.64	11.28	35.91	1.00
8.50	9.00	2250	685.77	24.64	11.28	35.91	1.00
8.50	9.00	2250	685.77	24.64	11.28	35.91	1.50
8.50	9.00	2250	685.77	24.64	11.28	35.91	2.00
8.50	9.00	2250	685.77	24.64	11.28	35.91	2.00
8.50	9.00	2250	685.77	24.64	11.28	35.91	0.00
8.50	9.00	3400	1036.27	39.26	11.28	50.54	1.00
8.50	9.00	3400	1036.27	39.26	11.28	50.54	1.00
8.50	9.00	3400	1036.27	39.26	11.28	50.54	1.25
8.50	9.00	3400	1036.27	39.26	11.28	50.54	1.50
8.50	9.00	3400	1036.27	39.26	11.28	50.54	1.50
8.50	9.00	3400	1036.27	39.26	11.28	50.54	1.50
8.50	9.00	4500	1371.53	53.24	11.28	64.52	1.00
8.50	9.00	4500	1371.53	53.24	11.28	64.52	1.00
8.50	9.00	4500	1371.53	53.24	11.28	64.52	1.00
8.50	9.00	4500	1371.53	53.24	11.28	64.52	1.00
8.50	9.00	4500	1371.53	53.24	11.28	64.52	1.00
8.50	9.00	4500	1371.53	53.24	11.28	64.52	1.00

SWE MODIFIED CM	AIR TEMP C	SE TEMP C	MODIFIED TEMP C	AVERAGE WIND SPEED M/S	UNUSUAL WIND SPEED M/S	FOREST COVER DECIMAL	MODIFIED AVERAGE WIND M/S
13.67	7.19	2.00	9.19	4.00	7.00	0.85	1.28
13.67	7.19	2.00	9.19	4.00	7.00	0.85	1.28
27.33	7.19	2.00	9.19	4.00	7.00	0.40	2.72
41.00	7.19	2.00	9.19	4.00	7.00	0.07	3.78
41.00	7.19	2.00	9.19	4.00	7.00	0.07	3.78
0.00	7.19	2.00	9.19	4.00	7.00	0.00	4.00
21.29	6.09	2.00	8.09	4.00	7.00	0.85	1.28
21.29	6.09	2.00	8.09	4.00	7.00	0.85	1.28
37.26	6.09	2.00	8.09	4.00	7.00	0.40	2.72
53.23	6.09	2.00	8.09	4.00	7.00	0.07	3.78
53.23	6.09	2.00	8.09	4.00	7.00	0.07	3.78
0.00	6.09	2.00	8.09	4.00	7.00	0.00	4.00
35.91	3.99	2.00	5.99	4.00	7.00	0.85	1.28
35.91	3.99	2.00	5.99	4.00	7.00	0.85	1.28
53.87	3.99	2.00	5.99	4.00	7.00	0.40	2.72
71.83	3.99	2.00	5.99	4.00	7.00	0.07	3.78
71.83	3.99	2.00	5.99	4.00	7.00	0.07	3.78
0.00	3.99	2.00	5.99	4.00	7.00	0.00	4.00
50.54	1.88	2.00	3.88	4.00	7.00	0.85	1.28
50.54	1.88	2.00	3.88	4.00	7.00	0.85	1.28
63.17	1.88	2.00	3.88	4.00	7.00	0.40	2.72
75.80	1.88	2.00	3.88	4.00	7.00	0.07	3.78
75.80	1.88	2.00	3.88	4.00	7.00	0.07	3.78
75.80	1.88	2.00	3.88	4.00	7.00	0.00	4.00
64.52	-0.13	2.00	1.87	4.00	7.00	0.85	1.28
64.52	-0.13	2.00	1.87	4.00	7.00	0.85	1.28
64.52	-0.13	2.00	1.87	4.00	7.00	0.40	2.72
64.52	-0.13	2.00	1.87	4.00	7.00	0.07	3.78
64.52	-0.13	2.00	1.87	4.00	7.00	0.07	3.78
64.52	-0.13	2.00	1.87	4.00	7.00	0.00	4.00

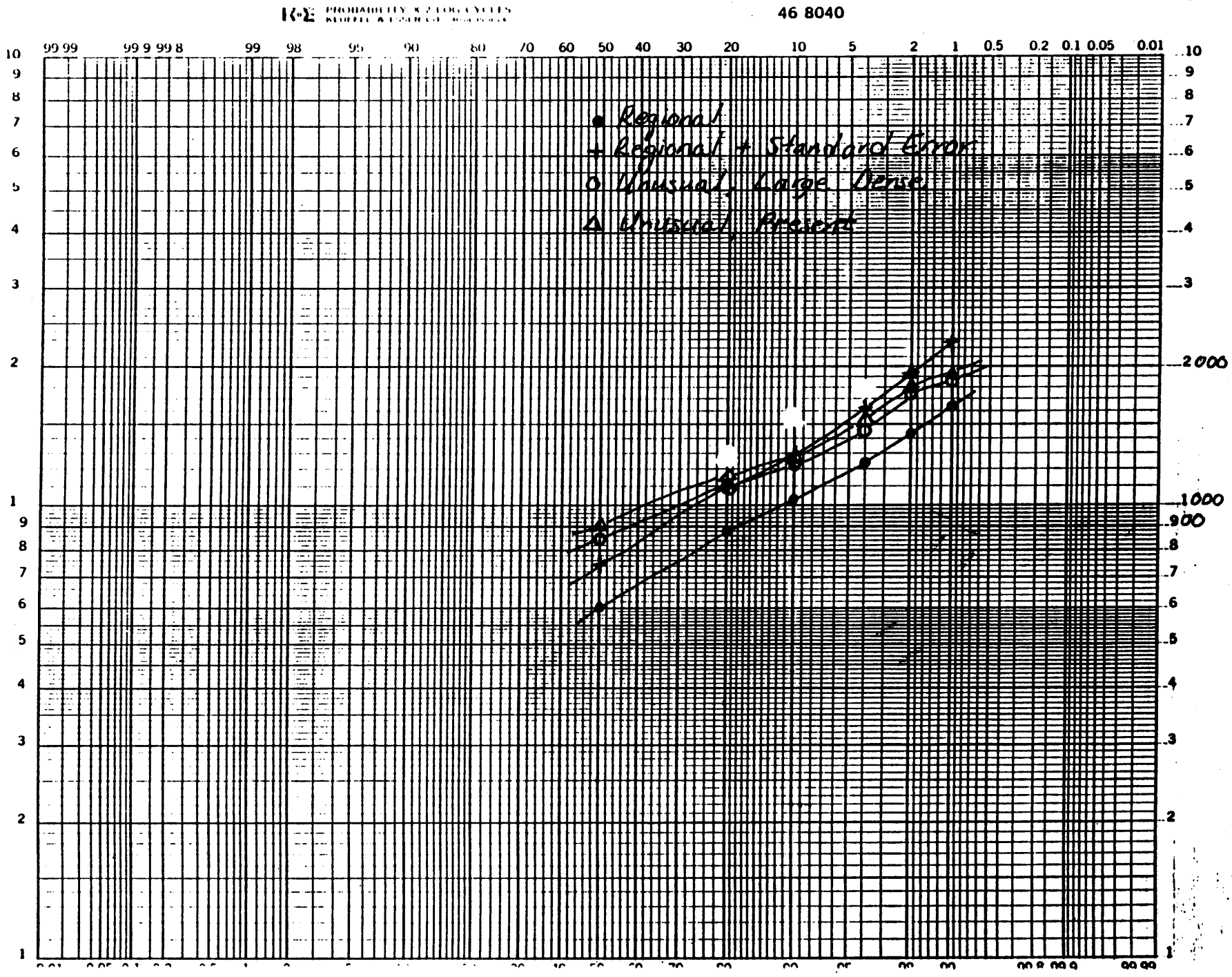
MODIFIED UNUSUAL WIND M/S	AVERAGE MELT P2 CM	AVERAGE MELT P5 CM	AVERAGE MELT P10 CM	AVERAGE MELT P25 CM	AVERAGE MELT P50 CM	AVERAGE MELT P100 CM	UNUSUAL MELT P2 CM
2.24	2.43	2.52	2.57	2.66	2.75	2.79	3.80
2.24	2.43	2.52	2.57	2.66	2.75	2.79	3.80
4.76	3.32	3.41	3.46	3.55	3.64	3.68	5.79
6.61	3.97	4.06	4.11	4.20	4.29	4.33	7.25
6.61	3.97	4.06	4.11	4.20	4.29	4.33	7.25
7.00	4.11	4.20	4.25	4.34	4.43	4.47	7.56
2.24	2.09	2.17	2.21	2.29	2.36	2.40	3.37
2.24	2.09	2.17	2.21	2.29	2.36	2.40	3.37
4.76	2.85	2.92	2.96	3.04	3.12	3.15	5.13
6.61	3.40	3.48	3.52	3.59	3.67	3.71	6.41
6.61	3.40	3.48	3.52	3.59	3.67	3.71	6.41
7.00	3.52	3.59	3.63	3.71	3.79	3.82	6.68
2.24	1.45	1.50	1.53	1.58	1.63	1.65	2.56
2.24	1.45	1.50	1.53	1.58	1.63	1.65	2.56
4.76	1.94	1.99	2.02	2.07	2.12	2.14	3.85
6.61	2.31	2.36	2.38	2.43	2.48	2.51	4.80
6.61	2.31	2.36	2.38	2.43	2.48	2.51	4.80
7.00	2.38	2.43	2.46	2.51	2.56	2.58	5.01
2.24	0.81	0.83	0.84	0.87	0.89	0.90	1.74
2.24	0.81	0.83	0.84	0.87	0.89	0.90	1.74
4.76	1.04	1.06	1.07	1.10	1.12	1.13	2.58
6.61	1.21	1.23	1.25	1.27	1.29	1.31	3.20
6.61	1.21	1.23	1.25	1.27	1.29	1.31	3.20
7.00	1.25	1.27	1.28	1.31	1.33	1.34	3.33
2.24	0.19	0.19	0.19	0.19	0.18	0.18	0.96
2.24	0.19	0.19	0.19	0.19	0.18	0.18	0.96
4.76	0.17	0.17	0.17	0.17	0.17	0.17	1.36
6.61	0.16	0.16	0.16	0.16	0.16	0.16	1.66
6.61	0.16	0.16	0.16	0.16	0.16	0.16	1.66
7.00	0.16	0.16	0.16	0.16	0.15	0.15	1.72

UNUSUAL MELT P5 CM	UNUSUAL MELT P10 CM	UNUSUAL MELT P25 CM	UNUSUAL MELT P50 CM	UNUSUAL MELT P100 CM	P2 + AVERAGE MELT IN	P5 + AVERAGE MELT IN	P10 + AVERAGE MELT IN
3.92	3.97	4.09	4.20	4.26	5.96	6.99	7.51
3.92	3.97	4.09	4.20	4.26	5.96	6.99	7.51
5.91	5.96	6.08	6.20	6.25	6.31	7.34	7.86
7.37	7.42	7.54	7.66	7.71	6.56	7.60	8.12
7.37	7.42	7.54	7.66	7.71	6.56	7.60	8.12
7.68	7.73	7.85	7.97	8.02	6.62	7.65	8.17
3.48	3.53	3.63	3.73	3.78	5.82	6.85	7.37
3.48	3.53	3.63	3.73	3.78	5.82	6.85	7.37
5.23	5.28	5.38	5.48	5.53	6.12	7.15	7.67
6.51	6.56	6.67	6.77	6.82	6.34	7.37	7.88
6.51	6.56	6.67	6.77	6.82	6.34	7.37	7.88
6.79	6.84	6.94	7.04	7.09	6.38	7.42	7.93
2.63	2.67	2.74	2.82	2.86	5.57	6.59	7.10
2.63	2.67	2.74	2.82	2.86	5.57	6.59	7.10
3.93	3.97	4.04	4.12	4.15	5.77	6.78	7.29
4.88	4.92	4.99	5.07	5.11	5.91	6.93	7.44
4.88	4.92	4.99	5.07	5.11	5.91	6.93	7.44
5.08	5.12	5.19	5.27	5.31	5.94	6.96	7.47
1.79	1.81	1.86	1.91	1.93	5.32	6.33	6.83
1.79	1.81	1.86	1.91	1.93	5.32	6.33	6.83
2.63	2.65	2.70	2.75	2.78	5.41	6.42	6.92
3.25	3.27	3.32	3.37	3.39	5.48	6.49	6.99
3.25	3.27	3.32	3.37	3.39	5.48	6.49	6.99
3.38	3.40	3.45	3.50	3.52	5.49	6.50	7.00
0.98	0.99	1.02	1.04	1.05	5.07	6.07	6.57
0.98	0.99	1.02	1.04	1.05	5.07	6.07	6.57
1.39	1.40	1.42	1.45	1.46	5.07	6.07	6.57
1.68	1.70	1.72	1.74	1.75	5.06	6.06	6.56
1.68	1.70	1.72	1.74	1.75	5.06	6.06	6.56
1.75	1.76	1.78	1.81	1.82	5.06	6.06	6.56
			Average Input =		5.51	6.53	7.04
			Peak Flow =		754.65	1003.43	1127.81

P25 + AVERAGE MELT IN	P50 + AVERAGE MELT IN	P100 + AVERAGE MELT IN	P2 + UNUSUAL MELT IN	P5 + UNUSUAL MELT IN	P10 + UNUSUAL MELT IN	P25 + UNUSUAL MELT IN	P50 + UNUSUAL MELT IN
8.55	9.58	10.10	6.50	7.54	8.06	9.11	10.16
8.55	9.58	10.10	6.50	7.54	8.06	9.11	10.16
8.90	9.93	10.45	7.28	8.33	8.85	9.89	10.94
9.15	10.19	10.71	7.85	8.90	9.42	10.47	11.51
9.15	10.19	10.71	7.85	8.90	9.42	10.47	11.51
9.21	10.24	10.76	7.98	9.02	9.54	10.59	11.64
8.40	9.43	9.95	6.33	7.37	7.89	8.93	9.97
8.40	9.43	9.95	6.33	7.37	7.89	8.93	9.97
8.70	9.73	10.24	7.02	8.06	8.58	9.62	10.66
8.91	9.94	10.46	7.52	8.56	9.08	10.12	11.16
8.91	9.94	10.46	7.52	8.56	9.08	10.12	11.16
8.96	9.99	10.51	7.63	8.67	9.19	10.23	11.27
8.12	9.14	9.65	6.01	7.04	7.55	8.58	9.61
8.12	9.14	9.65	6.01	7.04	7.55	8.58	9.61
8.31	9.33	9.84	6.52	7.55	8.06	9.09	10.12
8.46	9.48	9.99	6.89	7.92	8.44	9.47	10.50
8.46	9.48	9.99	6.89	7.92	8.44	9.47	10.50
8.49	9.51	10.02	6.97	8.00	8.52	9.55	10.57
7.84	8.85	9.35	5.68	6.70	7.21	8.23	9.25
7.84	8.85	9.35	5.68	6.70	7.21	8.23	9.25
7.93	8.94	9.45	6.02	7.04	7.54	8.56	9.58
8.00	9.01	9.51	6.26	7.28	7.79	8.81	9.83
8.00	9.01	9.51	6.26	7.28	7.79	8.81	9.83
8.01	9.02	9.53	6.31	7.33	7.84	8.86	9.88
7.57	8.57	9.07	5.38	6.39	6.89	7.90	8.91
7.57	8.57	9.07	5.38	6.39	6.89	7.90	8.91
7.57	8.57	9.07	5.54	6.55	7.05	8.06	9.07
7.56	8.56	9.06	5.65	6.66	7.17	8.18	9.19
7.56	8.56	9.06	5.65	6.66	7.17	8.18	9.19
7.56	8.56	9.06	5.68	6.69	7.19	8.20	9.21
8.06	9.08	9.58	5.93	6.96	7.48	8.50	9.53
1376.59	1625.37	1749.75	857.41	1108.61	1234.22	1485.42	1736.62

P100 + UNUSUAL MELT IN	P2 + AVERAGE MELT IN	P5 + AVERAGE MELT IN	P10 + AVERAGE MELT IN	P25 + AVERAGE MELT IN	P50 + AVERAGE MELT IN	P100 + AVERAGE MELT IN	P2 + UNUSUAL MELT IN
	**********	**********	**********	**********	AREA WEIGHTED		**********
10.68	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10.68	0.00	0.00	0.00	0.00	0.00	0.00	0.00
11.46	0.00	0.00	0.00	0.00	0.00	0.00	0.00
12.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00
12.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00
12.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10.49	0.00	0.01	0.01	0.01	0.01	0.01	0.00
10.49	0.92	1.09	1.17	1.33	1.49	1.58	1.00
11.18	0.21	0.25	0.26	0.30	0.34	0.35	0.24
11.68	0.00	0.00	0.00	0.00	0.00	0.00	0.00
11.68	0.01	0.01	0.01	0.01	0.01	0.01	0.01
11.79	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10.13	0.07	0.09	0.09	0.11	0.12	0.13	0.08
10.13	1.41	1.66	1.79	2.05	2.31	2.44	1.52
10.64	0.75	0.88	0.94	1.08	1.21	1.27	0.84
11.01	0.18	0.21	0.23	0.26	0.29	0.30	0.21
11.01	0.14	0.17	0.18	0.20	0.23	0.24	0.17
11.09	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9.76	0.14	0.17	0.19	0.21	0.24	0.25	0.15
9.76	0.59	0.71	0.76	0.87	0.99	1.04	0.63
10.09	0.24	0.29	0.31	0.36	0.40	0.43	0.27
10.34	0.33	0.39	0.42	0.48	0.54	0.57	0.38
10.34	0.25	0.30	0.32	0.37	0.42	0.44	0.29
10.39	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9.41	0.15	0.18	0.20	0.23	0.26	0.27	0.16
9.41	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9.57	0.00	0.00	0.01	0.01	0.01	0.01	0.00
9.69	0.06	0.07	0.08	0.09	0.10	0.11	0.07
9.69	0.12	0.14	0.15	0.17	0.20	0.21	0.13
9.72	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10.04	5.59	6.61	7.12	8.13	9.15	9.66	6.16
1862.22	772.98	1021.76	1146.15	1394.92	1643.70	1768.09	912.46

P5 + UNUSUAL MELT IN	P10 + UNUSUAL MELT IN	P25 + UNUSUAL MELT IN	P50 + UNUSUAL MELT IN	P100 + UNUSUAL MELT IN
0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00
0.01	0.01	0.01	0.01	0.01
1.17	1.25	1.41	1.58	1.66
0.28	0.30	0.33	0.37	0.39
0.00	0.00	0.00	0.00	0.00
0.01	0.01	0.01	0.01	0.01
0.00	0.00	0.00	0.00	0.00
0.09	0.10	0.11	0.13	0.13
1.78	1.91	2.17	2.43	2.56
0.98	1.04	1.18	1.31	1.38
0.24	0.26	0.29	0.32	0.33
0.19	0.20	0.23	0.25	0.27
0.00	0.00	0.00	0.00	0.00
0.18	0.20	0.22	0.25	0.27
0.75	0.80	0.92	1.03	1.09
0.32	0.34	0.39	0.43	0.45
0.44	0.47	0.53	0.59	0.62
0.34	0.36	0.41	0.45	0.48
0.00	0.00	0.00	0.00	0.00
0.19	0.21	0.24	0.27	0.29
0.00	0.00	0.00	0.00	0.00
0.01	0.01	0.01	0.01	0.01
0.08	0.08	0.10	0.11	0.11
0.15	0.16	0.19	0.21	0.22
0.00	0.00	0.00	0.00	0.00
7.19	7.70	8.73	9.76	10.27
1163.66	1289.26	1540.46	1791.66	1917.27


K+E PROBABILITY 3 CYCLES
46 8040
99.99 99.9 99.8 99 98 95 90 80 70 60 50 40 30 20 10 5 2 1 0.5 0.2 0.1 0.05 0.01
10 9 8 7 6 5 4 3 2 1
2000
1000
900
● Regional
+ Regional + Standard Error
o Unusual, Large Dense
Δ Unusual, Present

Sub-basin 4

SUB-BASINS 1-4

Re onal Flood Frequency Worksheet for Tolt River
Su basins 1,2,3,4
based on Region I

Recurrence Interval	Regress constant	Area (mi2)	Area exponent	Ann Precip (in)	Precip exponent	Forest cover	For Cover exponent
2	0.191	25.81	0.86	94.00	1.51	1.00	1.00
5	0.257	25.81	0.86	94.00	1.53	1.00	1.00
10	0.288	25.81	0.85	94.00	1.54	1.00	1.00
25	0.317	25.81	0.85	94.00	1.56	1.00	1.00
50	0.332	25.81	0.86	94.00	1.58	1.00	1.00
100	0.343	25.81	0.86	94.00	1.60	1.00	1.00

Su asins 1,2,3,4

Q est (ft3/s)	Standard error (%)	Q + SE
2,982.69	24.90	3,725.38
4,395.11	24.60	5,476.31
4,989.33	26.90	6,331.47
6,014.12	31.50	7,908.56
7,125.76	35.70	9,669.66
8,062.13	40.30	11,311.17

Level 1 Analysis
Sub-basins 1-4

INPUT INFORMATION
****

Return Period	Peak Flow (cfs)	24-hour Rainfall (in)	Regress. Peak Flow (cfs)
2	2983.00	5.00	3074.00
5	4395.00	6.00	4284.00
10	4989.00	6.50	4889.00
25	6014.00	7.50	6099.00
50	7126.00	8.50	7309.00
100	8062.00	9.00	7914.00

Regression intercept = -2976.00
Regression slope = 1210.00

Elevation of Zones
==========

Elevation of Lowland =	500	(ft)
Elevation of Rain Dominated =	1100	(ft)
Elevation of Rain on Snow =	2250	(ft)
Elevation of Snow Dominated =	3400	(ft)
Elevation of Highland =	4500	(ft)

Snow Water Equivalent vs Elevation Relationship
==========

Constant =	-3.970	(cm)
Slope =	0.042	(cm/m)
Standard Error =	11.278	(cm)

Air Temperature vs Elevation Relationship
==========

Constant =	8.100	(C)
Slope =	-0.006	(C/m)
Standard Error =	2.000	(C)

Wind Speed
==========

Average Wind Speed =	4	(m/s)
Unusual Wind Speed =	7	(m/s)

Level 1 Analysis

SUMMARY INFORMATION
****

Basin Score = 4.7921787
Worst Basin Score = 8.6574247
Best Basin Score = 2.1643562

Area in Lowland	0	0.00
Area in Rain Dominated	1202	0.07
Area in Rain on Snow	5636	0.34
Area in Snow Dominated	6760	0.41
Area in Highland	2921	0.18
TOTAL =	16519	1

Area in Large Dense	1457	0.09
Area in Small Dense	6517	0.39
Area in Sparse	4558	0.28
Area in Open	1922	0.12
Area in Non-Forest	2051	0.12
Area in Water	14	0.00
TOTAL =	16519	1

l 1 Analysis

Precip Zone- Veg Class	Area (acres)	Precip- Veg Score	Score X Area	P2	P5	P10	P25
L-LD	0.00	1.00	0.00	5.00	6.00	6.50	7.50
L-SD	0.00	1.00	0.00	5.00	6.00	6.50	7.50
L-S	0.00	3.00	0.00	5.00	6.00	6.50	7.50
L-O	0.00	4.00	0.00	5.00	6.00	6.50	7.50
L-NF	0.00	4.00	0.00	5.00	6.00	6.50	7.50
L-W	0.00	0.00	0.00	5.00	6.00	6.50	7.50
R-LD	2.00	2.00	4.00	5.00	6.00	6.50	7.50
R-SD	929.00	2.00	1858.00	5.00	6.00	6.50	7.50
R-S	211.00	6.00	1266.00	5.00	6.00	6.50	7.50
R-O	0.00	8.00	0.00	5.00	6.00	6.50	7.50
R-NF	60.00	8.00	480.00	5.00	6.00	6.50	7.50
R-W	0.00	0.00	0.00	5.00	6.00	6.50	7.50
RS-LD	227.00	3.00	681.00	5.00	6.00	6.50	7.50
RS-SD	2417.00	3.00	7251.00	5.00	6.00	6.50	7.50
RS-S	2333.00	9.00	20997.00	5.00	6.00	6.50	7.50
-O	376.00	12.00	4512.00	5.00	6.00	6.50	7.50
F	283.00	12.00	3396.00	5.00	6.00	6.50	7.50
RS-W	0.00	0.00	0.00	5.00	6.00	6.50	7.50
S-LD	881.00	2.00	1762.00	5.00	6.00	6.50	7.50
S-SD	2476.00	2.00	4952.00	5.00	6.00	6.50	7.50
S-S	1653.00	6.00	9918.00	5.00	6.00	6.50	7.50
S-O	1099.00	8.00	8792.00	5.00	6.00	6.50	7.50
S-NF	637.00	8.00	5096.00	5.00	6.00	6.50	7.50
S-W	14.00	0.00	0.00	5.00	6.00	6.50	7.50
H-LD	347.00	1.00	347.00	5.00	6.00	6.50	7.50
H-SD	695.00	1.00	695.00	5.00	6.00	6.50	7.50
H-S	361.00	3.00	1083.00	5.00	6.00	6.50	7.50
H-O	447.00	4.00	1788.00	5.00	6.00	6.50	7.50
H-NF	1071.00	4.00	4284.00	5.00	6.00	6.50	7.50
H-W	0.00	0.00	0.00	5.00	6.00	6.50	7.50
TOTAL =	16519.00		79162.00				

P50	P100	ELEV FT	ELEV M	SWE CM	SE SWE CM	SWE + SE SWE CM	SWE FACTOR
8.50	9.00	500	152.39	2.39	11.28	13.67	1.00
8.50	9.00	500	152.39	2.39	11.28	13.67	1.00
8.50	9.00	500	152.39	2.39	11.28	13.67	2.00
8.50	9.00	500	152.39	2.39	11.28	13.67	3.00
8.50	9.00	500	152.39	2.39	11.28	13.67	3.00
8.50	9.00	500	152.39	2.39	11.28	13.67	0.00
8.50	9.00	1100	335.26	10.02	11.28	21.29	1.00
8.50	9.00	1100	335.26	10.02	11.28	21.29	1.00
8.50	9.00	1100	335.26	10.02	11.28	21.29	1.75
8.50	9.00	1100	335.26	10.02	11.28	21.29	2.50
8.50	9.00	1100	335.26	10.02	11.28	21.29	2.50
8.50	9.00	1100	335.26	10.02	11.28	21.29	0.00
8.50	9.00	2250	685.77	24.64	11.28	35.91	1.00
8.50	9.00	2250	685.77	24.64	11.28	35.91	1.00
8.50	9.00	2250	685.77	24.64	11.28	35.91	1.50
8.50	9.00	2250	685.77	24.64	11.28	35.91	2.00
8.50	9.00	2250	685.77	24.64	11.28	35.91	2.00
8.50	9.00	2250	685.77	24.64	11.28	35.91	0.00
8.50	9.00	3400	1036.27	39.26	11.28	50.54	1.00
8.50	9.00	3400	1036.27	39.26	11.28	50.54	1.00
8.50	9.00	3400	1036.27	39.26	11.28	50.54	1.25
8.50	9.00	3400	1036.27	39.26	11.28	50.54	1.50
8.50	9.00	3400	1036.27	39.26	11.28	50.54	1.50
8.50	9.00	3400	1036.27	39.26	11.28	50.54	1.50
8.50	9.00	4500	1371.53	53.24	11.28	64.52	1.00
8.50	9.00	4500	1371.53	53.24	11.28	64.52	1.00
8.50	9.00	4500	1371.53	53.24	11.28	64.52	1.00
8.50	9.00	4500	1371.53	53.24	11.28	64.52	1.00
8.50	9.00	4500	1371.53	53.24	11.28	64.52	1.00
8.50	9.00	4500	1371.53	53.24	11.28	64.52	1.00

SWE MODIFIED CM	AIR TEMP C	SE TEMP C	MODIFIED TEMP C	AVERAGE WIND SPEED M/S	UNUSUAL WIND SPEED M/S	FOREST COVER DECIMAL	MODIFIED AVERAGE WIND M/S
13.67	7.19	2.00	9.19	4.00	7.00	0.85	1.28
13.67	7.19	2.00	9.19	4.00	7.00	0.85	1.28
27.33	7.19	2.00	9.19	4.00	7.00	0.40	2.72
41.00	7.19	2.00	9.19	4.00	7.00	0.07	3.78
41.00	7.19	2.00	9.19	4.00	7.00	0.07	3.78
0.00	7.19	2.00	9.19	4.00	7.00	0.00	4.00
21.29	6.09	2.00	8.09	4.00	7.00	0.85	1.28
21.29	6.09	2.00	8.09	4.00	7.00	0.85	1.28
37.26	6.09	2.00	8.09	4.00	7.00	0.40	2.72
53.23	6.09	2.00	8.09	4.00	7.00	0.07	3.78
53.23	6.09	2.00	8.09	4.00	7.00	0.07	3.78
0.00	6.09	2.00	8.09	4.00	7.00	0.00	4.00
35.91	3.99	2.00	5.99	4.00	7.00	0.85	1.28
35.91	3.99	2.00	5.99	4.00	7.00	0.85	1.28
53.87	3.99	2.00	5.99	4.00	7.00	0.40	2.72
71.83	3.99	2.00	5.99	4.00	7.00	0.07	3.78
71.83	3.99	2.00	5.99	4.00	7.00	0.07	3.78
0.00	3.99	2.00	5.99	4.00	7.00	0.00	4.00
50.54	1.88	2.00	3.88	4.00	7.00	0.85	1.28
50.54	1.88	2.00	3.88	4.00	7.00	0.85	1.28
63.17	1.88	2.00	3.88	4.00	7.00	0.40	2.72
75.80	1.88	2.00	3.88	4.00	7.00	0.07	3.78
75.80	1.88	2.00	3.88	4.00	7.00	0.07	3.78
75.80	1.88	2.00	3.88	4.00	7.00	0.00	4.00
64.52	-0.13	2.00	1.87	4.00	7.00	0.85	1.28
64.52	-0.13	2.00	1.87	4.00	7.00	0.85	1.28
64.52	-0.13	2.00	1.87	4.00	7.00	0.40	2.72
64.52	-0.13	2.00	1.87	4.00	7.00	0.07	3.78
64.52	-0.13	2.00	1.87	4.00	7.00	0.07	3.78
64.52	-0.13	2.00	1.87	4.00	7.00	0.00	4.00

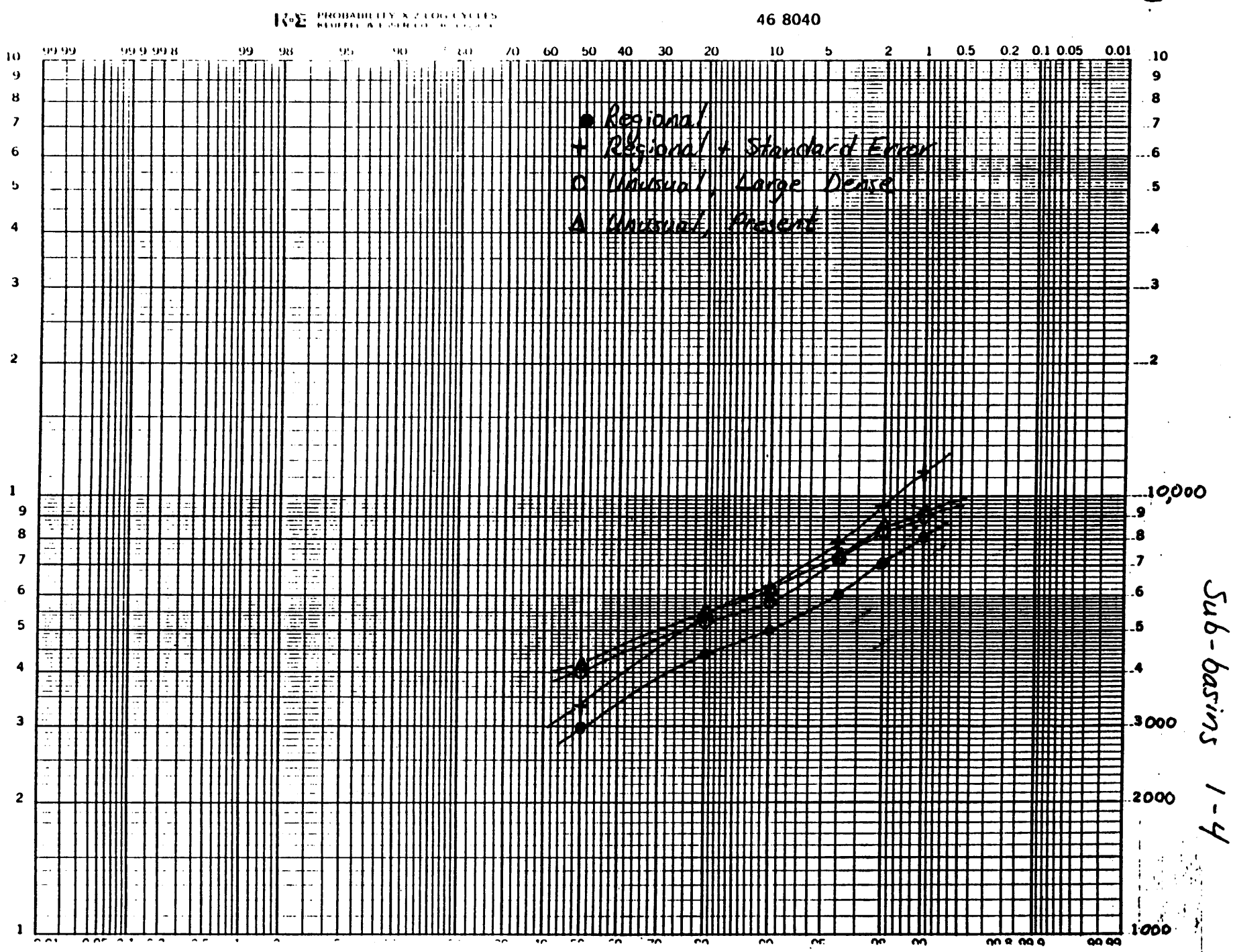
MODIFIED UNUSUAL WIND M/S	AVERAGE MELT P2 CM	AVERAGE MELT P5 CM	AVERAGE MELT P10 CM	AVERAGE MELT P25 CM	AVERAGE MELT P50 CM	AVERAGE MELT P100 CM	UNUSUAL MELT P2 CM
2.24	2.43	2.52	2.57	2.66	2.75	2.79	3.80
2.24	2.43	2.52	2.57	2.66	2.75	2.79	3.80
4.76	3.32	3.41	3.46	3.55	3.64	3.68	5.79
6.61	3.97	4.06	4.11	4.20	4.29	4.33	7.25
6.61	3.97	4.06	4.11	4.20	4.29	4.33	7.25
7.00	4.11	4.20	4.25	4.34	4.43	4.47	7.56
2.24	2.09	2.17	2.21	2.29	2.36	2.40	3.37
2.24	2.09	2.17	2.21	2.29	2.36	2.40	3.37
4.76	2.85	2.92	2.96	3.04	3.12	3.15	5.13
6.61	3.40	3.48	3.52	3.59	3.67	3.71	6.41
6.61	3.40	3.48	3.52	3.59	3.67	3.71	6.41
7.00	3.52	3.59	3.63	3.71	3.79	3.82	6.68
2.24	1.45	1.50	1.53	1.58	1.63	1.65	2.56
2.24	1.45	1.50	1.53	1.58	1.63	1.65	2.56
4.76	1.94	1.99	2.02	2.07	2.12	2.14	3.85
6.61	2.31	2.36	2.38	2.43	2.48	2.51	4.80
6.61	2.31	2.36	2.38	2.43	2.48	2.51	4.80
7.00	2.38	2.43	2.46	2.51	2.56	2.58	5.01
2.24	0.81	0.83	0.84	0.87	0.89	0.90	1.74
2.24	0.81	0.83	0.84	0.87	0.89	0.90	1.74
4.76	1.04	1.06	1.07	1.10	1.12	1.13	2.58
6.61	1.21	1.23	1.25	1.27	1.29	1.31	3.20
6.61	1.21	1.23	1.25	1.27	1.29	1.31	3.20
7.00	1.25	1.27	1.28	1.31	1.33	1.34	3.33
2.24	0.19	0.19	0.19	0.19	0.18	0.18	0.96
2.24	0.19	0.19	0.19	0.19	0.18	0.18	0.96
4.76	0.17	0.17	0.17	0.17	0.17	0.17	1.36
6.61	0.16	0.16	0.16	0.16	0.16	0.16	1.66
6.61	0.16	0.16	0.16	0.16	0.16	0.16	1.66
7.00	0.16	0.16	0.16	0.16	0.15	0.15	1.72

UNUSUAL MELT P5 CM	UNUSUAL MELT P10 CM	UNUSUAL MELT P25 CM	UNUSUAL MELT P50 CM	UNUSUAL MELT P100 CM	P2 + AVERAGE MELT IN	P5 + AVERAGE MELT IN	P10 + AVERAGE MELT IN
3.92	3.97	4.09	4.20	4.26	5.96	6.99	7.51
3.92	3.97	4.09	4.20	4.26	5.96	6.99	7.51
5.91	5.96	6.08	6.20	6.25	6.31	7.34	7.86
7.37	7.42	7.54	7.66	7.71	6.56	7.60	8.12
7.37	7.42	7.54	7.66	7.71	6.56	7.60	8.12
7.68	7.73	7.85	7.97	8.02	6.62	7.65	8.17
3.48	3.53	3.63	3.73	3.78	5.82	6.85	7.37
3.48	3.53	3.63	3.73	3.78	5.82	6.85	7.37
5.23	5.28	5.38	5.48	5.53	6.12	7.15	7.67
6.51	6.56	6.67	6.77	6.82	6.34	7.37	7.88
6.51	6.56	6.67	6.77	6.82	6.34	7.37	7.88
6.79	6.84	6.94	7.04	7.09	6.38	7.42	7.93
2.63	2.67	2.74	2.82	2.86	5.57	6.59	7.10
2.63	2.67	2.74	2.82	2.86	5.57	6.59	7.10
3.93	3.97	4.04	4.12	4.15	5.77	6.78	7.29
4.88	4.92	4.99	5.07	5.11	5.91	6.93	7.44
4.88	4.92	4.99	5.07	5.11	5.91	6.93	7.44
5.08	5.12	5.19	5.27	5.31	5.94	6.96	7.47
1.79	1.81	1.86	1.91	1.93	5.32	6.33	6.83
1.79	1.81	1.86	1.91	1.93	5.32	6.33	6.83
2.63	2.65	2.70	2.75	2.78	5.41	6.42	6.92
3.25	3.27	3.32	3.37	3.39	5.48	6.49	6.99
3.25	3.27	3.32	3.37	3.39	5.48	6.49	6.99
3.38	3.40	3.45	3.50	3.52	5.49	6.50	7.00
0.98	0.99	1.02	1.04	1.05	5.07	6.07	6.57
0.98	0.99	1.02	1.04	1.05	5.07	6.07	6.57
1.39	1.40	1.42	1.45	1.46	5.07	6.07	6.57
1.68	1.70	1.72	1.74	1.75	5.06	6.06	6.56
1.68	1.70	1.72	1.74	1.75	5.06	6.06	6.56
1.75	1.76	1.78	1.81	1.82	5.06	6.06	6.56
			Average Input =		5.40	6.41	6.92
			Peak Flow =		3555.42	4780.73	5393.38

P25 + AVERAGE MELT IN	P50 + AVERAGE MELT IN	P100 + AVERAGE MELT IN	P2 + UNUSUAL MELT IN	P5 + UNUSUAL MELT IN	P10 + UNUSUAL MELT IN	P25 + UNUSUAL MELT IN	P50 + UNUSUAL MELT IN
8.55	9.58	10.10	6.50	7.54	8.06	9.11	10.16
8.55	9.58	10.10	6.50	7.54	8.06	9.11	10.16
8.90	9.93	10.45	7.28	8.33	8.85	9.89	10.94
9.15	10.19	10.71	7.85	8.90	9.42	10.47	11.51
9.15	10.19	10.71	7.85	8.90	9.42	10.47	11.51
9.21	10.24	10.76	7.98	9.02	9.54	10.59	11.64
8.40	9.43	9.95	6.33	7.37	7.89	8.93	9.97
8.40	9.43	9.95	6.33	7.37	7.89	8.93	9.97
8.70	9.73	10.24	7.02	8.06	8.58	9.62	10.66
8.91	9.94	10.46	7.52	8.56	9.08	10.12	11.16
8.91	9.94	10.46	7.52	8.56	9.08	10.12	11.16
8.96	9.99	10.51	7.63	8.67	9.19	10.23	11.27
8.12	9.14	9.65	6.01	7.04	7.55	8.58	9.61
8.12	9.14	9.65	6.01	7.04	7.55	8.58	9.61
8.31	9.33	9.84	6.52	7.55	8.06	9.09	10.12
8.46	9.48	9.99	6.89	7.92	8.44	9.47	10.50
8.46	9.48	9.99	6.89	7.92	8.44	9.47	10.50
8.49	9.51	10.02	6.97	8.00	8.52	9.55	10.57
7.84	8.85	9.35	5.68	6.70	7.21	8.23	9.25
7.84	8.85	9.35	5.68	6.70	7.21	8.23	9.25
7.93	8.94	9.45	6.02	7.04	7.54	8.56	9.58
8.00	9.01	9.51	6.26	7.28	7.79	8.81	9.83
8.00	9.01	9.51	6.26	7.28	7.79	8.81	9.83
8.01	9.02	9.53	6.31	7.33	7.84	8.86	9.88
7.57	8.57	9.07	5.38	6.39	6.89	7.90	8.91
7.57	8.57	9.07	5.38	6.39	6.89	7.90	8.91
7.57	8.57	9.07	5.54	6.55	7.05	8.06	9.07
7.56	8.56	9.06	5.65	6.66	7.17	8.18	9.19
7.56	8.56	9.06	5.65	6.66	7.17	8.18	9.19
7.56	8.56	9.06	5.68	6.69	7.19	8.20	9.21
7.93	8.94	9.45	5.79	6.81	7.32	8.34	9.37
6618.69	7843.99	8456.65	4026.00	5263.31	5881.97	7119.28	8356.59

P100 + UNUSUAL MELT IN	P2 + AVERAGE MELT IN	P5 + AVERAGE MELT IN	P10 + AVERAGE MELT IN	P25 + AVERAGE MELT IN	AREA WEIGHTED P50 + AVERAGE MELT IN	P100 + AVERAGE MELT IN	P2 + UNUSUAL MELT IN
10.68	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10.68	0.00	0.00	0.00	0.00	0.00	0.00	0.00
11.46	0.00	0.00	0.00	0.00	0.00	0.00	0.00
12.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00
12.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00
12.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10.49	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10.49	0.33	0.39	0.41	0.47	0.53	0.56	0.36
11.18	0.08	0.09	0.10	0.11	0.12	0.13	0.09
11.68	0.00	0.00	0.00	0.00	0.00	0.00	0.00
11.68	0.02	0.03	0.03	0.03	0.04	0.04	0.03
11.79	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10.13	0.08	0.09	0.10	0.11	0.13	0.13	0.08
10.13	0.82	0.96	1.04	1.19	1.34	1.41	0.88
10.64	0.81	0.96	1.03	1.17	1.32	1.39	0.92
11.01	0.13	0.16	0.17	0.19	0.22	0.23	0.16
11.01	0.10	0.12	0.13	0.14	0.16	0.17	0.12
11.09	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9.76	0.28	0.34	0.36	0.42	0.47	0.50	0.30
9.76	0.80	0.95	1.02	1.18	1.33	1.40	0.85
10.09	0.54	0.64	0.69	0.79	0.89	0.95	0.60
10.34	0.36	0.43	0.47	0.53	0.60	0.63	0.42
10.34	0.21	0.25	0.27	0.31	0.35	0.37	0.24
10.39	0.00	0.01	0.01	0.01	0.01	0.01	0.01
9.41	0.11	0.13	0.14	0.16	0.18	0.19	0.11
9.41	0.21	0.26	0.28	0.32	0.36	0.38	0.23
9.57	0.11	0.13	0.14	0.17	0.19	0.20	0.12
9.69	0.14	0.16	0.18	0.20	0.23	0.25	0.15
9.69	0.33	0.39	0.43	0.49	0.56	0.59	0.37
9.72	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9.88	5.47	6.48	6.99	8.00	9.01	9.52	6.03
8975.25	3641.87	4867.18	5479.83	6705.14	7930.45	8543.10	4320.67

P5 + UNUSUAL MELT IN	P10 + UNUSUAL MELT IN	P25 + UNUSUAL MELT IN	P50 + UNUSUAL MELT IN	P100 + UNUSUAL MELT IN
0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00
0.41	0.44	0.50	0.56	0.59
0.10	0.11	0.12	0.14	0.14
0.00	0.00	0.00	0.00	0.00
0.03	0.03	0.04	0.04	0.04
0.00	0.00	0.00	0.00	0.00
0.10	0.10	0.12	0.13	0.14
1.03	1.10	1.26	1.41	1.48
1.07	1.14	1.28	1.43	1.50
0.18	0.19	0.22	0.24	0.25
0.14	0.14	0.16	0.18	0.19
0.00	0.00	0.00	0.00	0.00
0.36	0.38	0.44	0.49	0.52
1.00	1.08	1.23	1.39	1.46
0.70	0.75	0.86	0.96	1.01
0.48	0.52	0.59	0.65	0.69
0.28	0.30	0.34	0.38	0.40
0.01	0.01	0.01	0.01	0.01
0.13	0.14	0.17	0.19	0.20
0.27	0.29	0.33	0.37	0.40
0.14	0.15	0.18	0.20	0.21
0.18	0.19	0.22	0.25	0.26
0.43	0.46	0.53	0.60	0.63
0.00	0.00	0.00	0.00	0.00
7.05	7.56	8.59	9.61	10.12
5557.98	6176.64	7413.95	8651.26	9269.92



Sub-basins 1-4

SUB-BASINS 1-5

ional Flood Frequency Worksheet for Tolt River
basins 1,2,3,4,5
based on Region I

Recurrence Interval	Regress constant	Area (mi2)	Area exponent	Ann Precip (in)	Precip exponent	Forest cover	For Cover exponent
2	0.191	39.87	0.86	94.00	1.51	1.00	1.00
5	0.257	39.87	0.86	94.00	1.53	1.00	1.00
10	0.288	39.87	0.85	94.00	1.54	1.00	1.00
25	0.317	39.87	0.85	94.00	1.56	1.00	1.00
50	0.332	39.87	0.86	94.00	1.58	1.00	1.00
100	0.343	39.87	0.86	94.00	1.60	1.00	1.00

St basins 1,2,3,4,5

Q est (ft3/s)	Standard error (%)	Q + SE
4,335.26	24.90	5,414.74
6,388.18	24.60	7,959.68
7,220.41	26.90	9,162.69
8,703.44	31.50	11,445.02
10,357.11	35.70	14,054.60
11,718.10	40.30	16,440.50

Level 1 Analysis
Sub-basins 1-5

INPUT INFORMATION
****

Return Period	Peak Flow (cfs)	24-hour Rainfall (in)	Regress. Peak Flow (cfs)
2	4335.00	5.00	4455.59
5	6388.00	6.00	6214.59
10	7220.00	6.50	7094.09
25	8703.00	7.50	8853.08
50	10357.00	8.50	10612.08
100	11718.00	9.00	11491.58

Regression intercept = -4339.39
Regression slope = 1759.00

Elevation of Zones
==========

Elevation of Lowland =	500	(ft)
Elevation of Rain Dominated =	1100	(ft)
Elevation of Rain on Snow =	2250	(ft)
Elevation of Snow Dominated =	3400	(ft)
Elevation of Highland =	4500	(ft)

Snow Water Equivalent vs Elevation Relationship
==========

Constant =	-3.970	(cm)
Slope =	0.042	(cm/m)
Standard Error =	11.278	(cm)

Air Temperature vs Elevation Relationship
==========

Constant =	8.100	(C)
Slope =	-0.006	(C/m)
Standard Error =	2.000	(C)

Wind Speed
==========

Average Wind Speed =	4	(m/s)
Unusual Wind Speed =	7	(m/s)

Level 1 Analysis

SUMMARY INFORMATION
****
Basin Score = 4.6334600
Worst Basin Score = 9.0715993
Best Basin Score = 2.2678998

Area in Lowland	0	0.00
Area in Rain Dominated	4939	0.19
Area in Rain on Snow	9757	0.38
Area in Snow Dominated	7900	0.31
Area in Highland	2921	0.11
TOTAL =	25517	1

Area in Large Dense	1494	0.06
Area in Small Dense	12409	0.49
Area in Sparse	6521	0.26
Area in Open	2788	0.11
Area in Non-Forest	2285	0.09
Area in Water	20	0.00
TOTAL =	25517	1

1 Analysis

Precip Zone-Veg Class	Area (acres)	Precip-Veg Score	Score X Area	P2	P5	P10	P25
-LD	0.00	1.00	0.00	5.00	6.00	6.50	7.50
-SD	0.00	1.00	0.00	5.00	6.00	6.50	7.50
-S	0.00	3.00	0.00	5.00	6.00	6.50	7.50
-O	0.00	4.00	0.00	5.00	6.00	6.50	7.50
-NF	0.00	4.00	0.00	5.00	6.00	6.50	7.50
-W	0.00	0.00	0.00	5.00	6.00	6.50	7.50
R-LD	16.00	2.00	32.00	5.00	6.00	6.50	7.50
R-SD	3725.00	2.00	7450.00	5.00	6.00	6.50	7.50
R-S	257.00	6.00	1542.00	5.00	6.00	6.50	7.50
R-O	731.00	8.00	5848.00	5.00	6.00	6.50	7.50
R-NF	210.00	8.00	1680.00	5.00	6.00	6.50	7.50
R-W	0.00	0.00	0.00	5.00	6.00	6.50	7.50
RS-LD	248.00	3.00	744.00	5.00	6.00	6.50	7.50
RS-SD	5334.00	3.00	16002.00	5.00	6.00	6.50	7.50
RS-S	3345.00	9.00	30105.00	5.00	6.00	6.50	7.50
O	457.00	12.00	5484.00	5.00	6.00	6.50	7.50
R NF	367.00	12.00	4404.00	5.00	6.00	6.50	7.50
RS-W	6.00	0.00	0.00	5.00	6.00	6.50	7.50
S-LD	883.00	2.00	1766.00	5.00	6.00	6.50	7.50
S-SD	2655.00	2.00	5310.00	5.00	6.00	6.50	7.50
S-S	2558.00	6.00	15348.00	5.00	6.00	6.50	7.50
S-O	1153.00	8.00	9224.00	5.00	6.00	6.50	7.50
S-NF	637.00	8.00	5096.00	5.00	6.00	6.50	7.50
S-W	14.00	0.00	0.00	5.00	6.00	6.50	7.50
H-LD	347.00	1.00	347.00	5.00	6.00	6.50	7.50
H-SD	695.00	1.00	695.00	5.00	6.00	6.50	7.50
H-S	361.00	3.00	1083.00	5.00	6.00	6.50	7.50
H-O	447.00	4.00	1788.00	5.00	6.00	6.50	7.50
H-NF	1071.00	4.00	4284.00	5.00	6.00	6.50	7.50
H-W	0.00	0.00	0.00	5.00	6.00	6.50	7.50
TOTAL =	25517.00		118232.00				

P50	P100	ELEV FT	ELEV M	SWE CM	SE SWE CM	SWE + SE SWE CM	SWE FACTOR
8.50	9.00	500	152.39	2.39	11.28	13.67	1.00
8.50	9.00	500	152.39	2.39	11.28	13.67	1.00
8.50	9.00	500	152.39	2.39	11.28	13.67	2.00
8.50	9.00	500	152.39	2.39	11.28	13.67	3.00
8.50	9.00	500	152.39	2.39	11.28	13.67	3.00
8.50	9.00	500	152.39	2.39	11.28	13.67	0.00
8.50	9.00	1100	335.26	10.02	11.28	21.29	1.00
8.50	9.00	1100	335.26	10.02	11.28	21.29	1.00
8.50	9.00	1100	335.26	10.02	11.28	21.29	1.75
8.50	9.00	1100	335.26	10.02	11.28	21.29	2.50
8.50	9.00	1100	335.26	10.02	11.28	21.29	2.50
8.50	9.00	1100	335.26	10.02	11.28	21.29	0.00
8.50	9.00	2250	685.77	24.64	11.28	35.91	1.00
8.50	9.00	2250	685.77	24.64	11.28	35.91	1.00
8.50	9.00	2250	685.77	24.64	11.28	35.91	1.50
8.50	9.00	2250	685.77	24.64	11.28	35.91	2.00
8.50	9.00	2250	685.77	24.64	11.28	35.91	2.00
8.50	9.00	2250	685.77	24.64	11.28	35.91	0.00
8.50	9.00	3400	1036.27	39.26	11.28	50.54	1.00
8.50	9.00	3400	1036.27	39.26	11.28	50.54	1.00
8.50	9.00	3400	1036.27	39.26	11.28	50.54	1.25
8.50	9.00	3400	1036.27	39.26	11.28	50.54	1.50
8.50	9.00	3400	1036.27	39.26	11.28	50.54	1.50
8.50	9.00	3400	1036.27	39.26	11.28	50.54	1.50
8.50	9.00	4500	1371.53	53.24	11.28	64.52	1.00
8.50	9.00	4500	1371.53	53.24	11.28	64.52	1.00
8.50	9.00	4500	1371.53	53.24	11.28	64.52	1.00
8.50	9.00	4500	1371.53	53.24	11.28	64.52	1.00
8.50	9.00	4500	1371.53	53.24	11.28	64.52	1.00
8.50	9.00	4500	1371.53	53.24	11.28	64.52	1.00

SWE MODIFIED CM	AIR TEMP C	SE TEMP C	MODIFIED TEMP C	AVERAGE WIND SPEED M/S	UNUSUAL WIND SPEED M/S	FOREST COVER DECIMAL	MODIFIED AVERAGE WIND M/S
13.67	7.19	2.00	9.19	4.00	7.00	0.85	1.28
13.67	7.19	2.00	9.19	4.00	7.00	0.85	1.28
27.33	7.19	2.00	9.19	4.00	7.00	0.40	2.72
41.00	7.19	2.00	9.19	4.00	7.00	0.07	3.78
41.00	7.19	2.00	9.19	4.00	7.00	0.07	3.78
0.00	7.19	2.00	9.19	4.00	7.00	0.00	4.00
21.29	6.09	2.00	8.09	4.00	7.00	0.85	1.28
21.29	6.09	2.00	8.09	4.00	7.00	0.85	1.28
37.26	6.09	2.00	8.09	4.00	7.00	0.40	2.72
53.23	6.09	2.00	8.09	4.00	7.00	0.07	3.78
53.23	6.09	2.00	8.09	4.00	7.00	0.07	3.78
0.00	6.09	2.00	8.09	4.00	7.00	0.00	4.00
35.91	3.99	2.00	5.99	4.00	7.00	0.85	1.28
35.91	3.99	2.00	5.99	4.00	7.00	0.85	1.28
53.87	3.99	2.00	5.99	4.00	7.00	0.40	2.72
71.83	3.99	2.00	5.99	4.00	7.00	0.07	3.78
71.83	3.99	2.00	5.99	4.00	7.00	0.07	3.78
0.00	3.99	2.00	5.99	4.00	7.00	0.00	4.00
50.54	1.88	2.00	3.88	4.00	7.00	0.85	1.28
50.54	1.88	2.00	3.88	4.00	7.00	0.85	1.28
63.17	1.88	2.00	3.88	4.00	7.00	0.40	2.72
75.80	1.88	2.00	3.88	4.00	7.00	0.07	3.78
75.80	1.88	2.00	3.88	4.00	7.00	0.07	3.78
75.80	1.88	2.00	3.88	4.00	7.00	0.00	4.00
64.52	-0.13	2.00	1.87	4.00	7.00	0.85	1.28
64.52	-0.13	2.00	1.87	4.00	7.00	0.85	1.28
64.52	-0.13	2.00	1.87	4.00	7.00	0.40	2.72
64.52	-0.13	2.00	1.87	4.00	7.00	0.07	3.78
64.52	-0.13	2.00	1.87	4.00	7.00	0.07	3.78
64.52	-0.13	2.00	1.87	4.00	7.00	0.00	4.00

MODIFIED UNUSUAL WIND M/S	AVERAGE MELT P2 CM	AVERAGE MELT P5 CM	AVERAGE MELT P10 CM	AVERAGE MELT P25 CM	AVERAGE MELT P50 CM	AVERAGE MELT P100 CM	UNUSUAL MELT P2 CM
2.24	2.43	2.52	2.57	2.66	2.75	2.79	3.80
2.24	2.43	2.52	2.57	2.66	2.75	2.79	3.80
4.76	3.32	3.41	3.46	3.55	3.64	3.68	5.79
6.61	3.97	4.06	4.11	4.20	4.29	4.33	7.25
6.61	3.97	4.06	4.11	4.20	4.29	4.33	7.25
7.00	4.11	4.20	4.25	4.34	4.43	4.47	7.56
2.24	2.09	2.17	2.21	2.29	2.36	2.40	3.37
2.24	2.09	2.17	2.21	2.29	2.36	2.40	3.37
4.76	2.85	2.92	2.96	3.04	3.12	3.15	5.13
6.61	3.40	3.48	3.52	3.59	3.67	3.71	6.41
6.61	3.40	3.48	3.52	3.59	3.67	3.71	6.41
7.00	3.52	3.59	3.63	3.71	3.79	3.82	6.68
2.24	1.45	1.50	1.53	1.58	1.63	1.65	2.56
2.24	1.45	1.50	1.53	1.58	1.63	1.65	2.56
4.76	1.94	1.99	2.02	2.07	2.12	2.14	3.85
6.61	2.31	2.36	2.38	2.43	2.48	2.51	4.80
6.61	2.31	2.36	2.38	2.43	2.48	2.51	4.80
7.00	2.38	2.43	2.46	2.51	2.56	2.58	5.01
2.24	0.81	0.83	0.84	0.87	0.89	0.90	1.74
2.24	0.81	0.83	0.84	0.87	0.89	0.90	1.74
4.76	1.04	1.06	1.07	1.10	1.12	1.13	2.58
6.61	1.21	1.23	1.25	1.27	1.29	1.31	3.20
6.61	1.21	1.23	1.25	1.27	1.29	1.31	3.20
7.00	1.25	1.27	1.28	1.31	1.33	1.34	3.33
2.24	0.19	0.19	0.19	0.19	0.18	0.18	0.96
2.24	0.19	0.19	0.19	0.19	0.18	0.18	0.96
4.76	0.17	0.17	0.17	0.17	0.17	0.17	1.36
6.61	0.16	0.16	0.16	0.16	0.16	0.16	1.66
6.61	0.16	0.16	0.16	0.16	0.16	0.16	1.66
7.00	0.16	0.16	0.16	0.16	0.15	0.15	1.72

UNUSUAL MELT P5 CM	UNUSUAL MELT P10 CM	UNUSUAL MELT P25 CM	UNUSUAL MELT P50 CM	UNUSUAL MELT P100 CM	P2 + AVERAGE MELT IN	P5 + AVERAGE MELT IN	P10 + AVERAGE MELT IN
3.92	3.97	4.09	4.20	4.26	5.96	6.99	7.51
3.92	3.97	4.09	4.20	4.26	5.96	6.99	7.51
5.91	5.96	6.08	6.20	6.25	6.31	7.34	7.86
7.37	7.42	7.54	7.66	7.71	6.56	7.60	8.12
7.37	7.42	7.54	7.66	7.71	6.56	7.60	8.12
7.68	7.73	7.85	7.97	8.02	6.62	7.65	8.17
3.48	3.53	3.63	3.73	3.78	5.82	6.85	7.37
3.48	3.53	3.63	3.73	3.78	5.82	6.85	7.37
5.23	5.28	5.38	5.48	5.53	6.12	7.15	7.67
6.51	6.56	6.67	6.77	6.82	6.34	7.37	7.88
6.51	6.56	6.67	6.77	6.82	6.34	7.37	7.88
6.79	6.84	6.94	7.04	7.09	6.38	7.42	7.93
2.63	2.67	2.74	2.82	2.86	5.57	6.59	7.10
2.63	2.67	2.74	2.82	2.86	5.57	6.59	7.10
3.93	3.97	4.04	4.12	4.15	5.77	6.78	7.29
4.88	4.92	4.99	5.07	5.11	5.91	6.93	7.44
4.88	4.92	4.99	5.07	5.11	5.91	6.93	7.44
5.08	5.12	5.19	5.27	5.31	5.94	6.96	7.47
1.79	1.81	1.86	1.91	1.93	5.32	6.33	6.83
1.79	1.81	1.86	1.91	1.93	5.32	6.33	6.83
2.63	2.65	2.70	2.75	2.78	5.41	6.42	6.92
3.25	3.27	3.32	3.37	3.39	5.48	6.49	6.99
3.25	3.27	3.32	3.37	3.39	5.48	6.49	6.99
3.38	3.40	3.45	3.50	3.52	5.49	6.50	7.00
0.98	0.99	1.02	1.04	1.05	5.07	6.07	6.57
0.98	0.99	1.02	1.04	1.05	5.07	6.07	6.57
1.39	1.40	1.42	1.45	1.46	5.07	6.07	6.57
1.68	1.70	1.72	1.74	1.75	5.06	6.06	6.56
1.68	1.70	1.72	1.74	1.75	5.06	6.06	6.56
1.75	1.76	1.78	1.81	1.82	5.06	6.06	6.56
			Average Input =		5.48	6.50	7.01
			Peak Flow =		5308.07	7095.61	7989.37

P25 + AVERAGE MELT IN	P50 + AVERAGE MELT IN	P100 + AVERAGE MELT IN	P2 + UNUSUAL MELT IN	-P5 + UNUSUAL MELT IN	P10 + UNUSUAL MELT IN	P25 + UNUSUAL MELT IN	P50 + UNUSUAL MELT IN
8.55	9.58	10.10	6.50	7.54	8.06	9.11	10.16
8.55	9.58	10.10	6.50	7.54	8.06	9.11	10.16
8.90	9.93	10.45	7.28	8.33	8.85	9.89	10.94
9.15	10.19	10.71	7.85	8.90	9.42	10.47	11.51
9.15	10.19	10.71	7.85	8.90	9.42	10.47	11.51
9.21	10.24	10.76	7.98	9.02	9.54	10.59	11.64
8.40	9.43	9.95	6.33	7.37	7.89	8.93	9.97
8.40	9.43	9.95	6.33	7.37	7.89	8.93	9.97
8.70	9.73	10.24	7.02	8.06	8.58	9.62	10.66
8.91	9.94	10.46	7.52	8.56	9.08	10.12	11.16
8.91	9.94	10.46	7.52	8.56	9.08	10.12	11.16
8.96	9.99	10.51	7.63	8.67	9.19	10.23	11.27
8.12	9.14	9.65	6.01	7.04	7.55	8.58	9.61
8.12	9.14	9.65	6.01	7.04	7.55	8.58	9.61
8.31	9.33	9.84	6.52	7.55	8.06	9.09	10.12
8.46	9.48	9.99	6.89	7.92	8.44	9.47	10.50
8.46	9.48	9.99	6.89	7.92	8.44	9.47	10.50
8.49	9.51	10.02	6.97	8.00	8.52	9.55	10.57
7.84	8.85	9.35	5.68	6.70	7.21	8.23	9.25
7.84	8.85	9.35	5.68	6.70	7.21	8.23	9.25
7.93	8.94	9.45	6.02	7.04	7.54	8.56	9.58
8.00	9.01	9.51	6.26	7.28	7.79	8.81	9.83
8.00	9.01	9.51	6.26	7.28	7.79	8.81	9.83
8.01	9.02	9.53	6.31	7.33	7.84	8.86	9.88
7.57	8.57	9.07	5.38	6.39	6.89	7.90	8.91
7.57	8.57	9.07	5.38	6.39	6.89	7.90	8.91
7.57	8.57	9.07	5.54	6.55	7.05	8.06	9.07
7.56	8.56	9.06	5.65	6.66	7.17	8.18	9.19
7.56	8.56	9.06	5.65	6.66	7.17	8.18	9.19
7.56	8.56	9.06	5.68	6.69	7.19	8.20	9.21
8.03	9.04	9.55	5.90	6.92	7.44	8.46	9.49
9776.91	11564.44	12458.21	6033.34	7838.32	8740.81	10545.80	12350.78

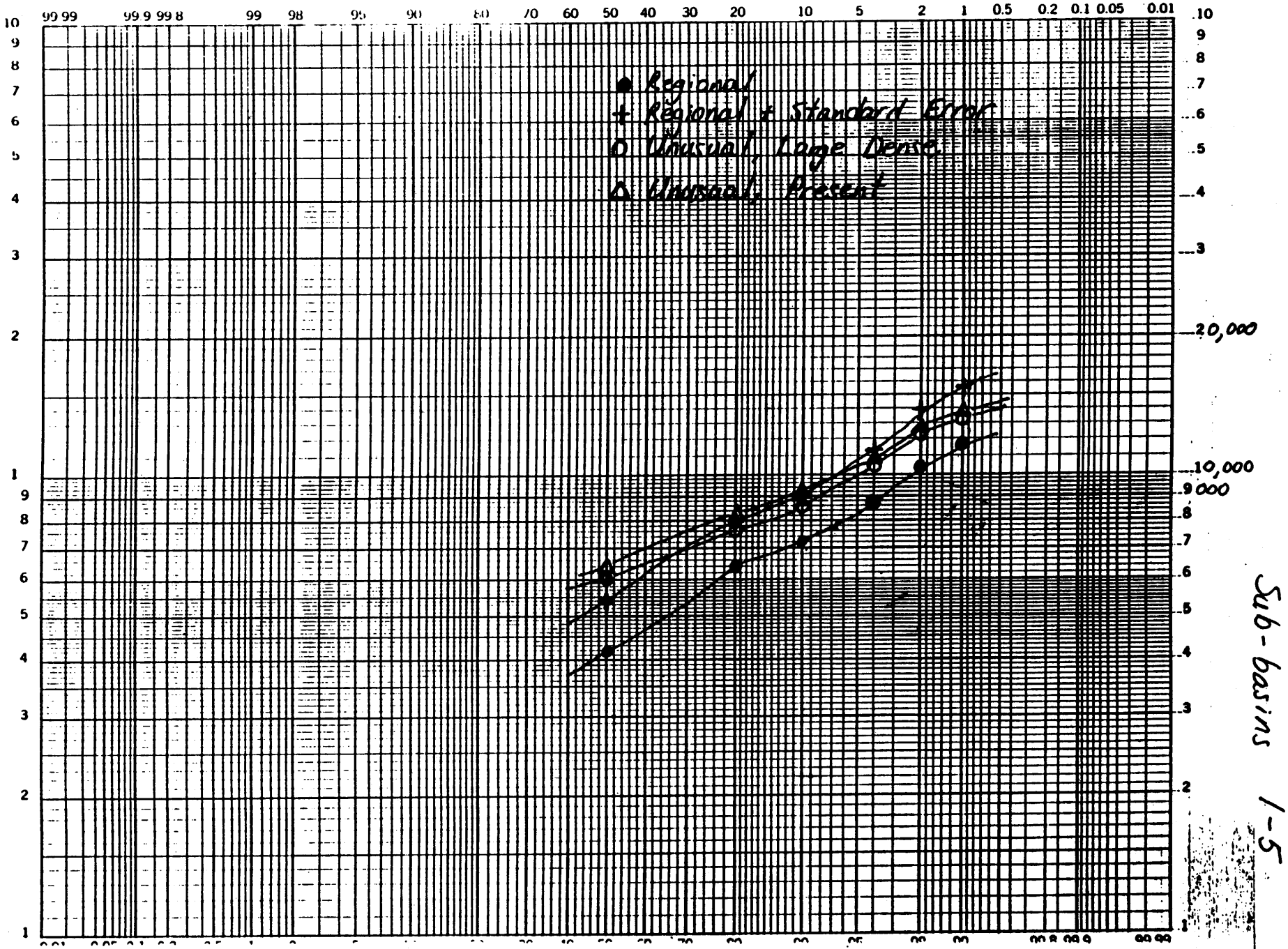
P100 + UNUSUAL MELT IN	P2 + AVERAGE MELT IN	P5 + AVERAGE MELT IN	P10 + AVERAGE MELT IN	-P25 + AVERAGE MELT IN	AREA WEIGHTED P50 + AVERAGE MELT IN	P100 + AVERAGE MELT IN	P2 + UNUSUAL MELT IN
10.68	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10.68	0.00	0.00	0.00	0.00	0.00	0.00	0.00
11.46	0.00	0.00	0.00	0.00	0.00	0.00	0.00
12.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00
12.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00
12.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10.49	0.00	0.00	0.00	0.01	0.01	0.01	0.00
10.49	0.85	1.00	1.08	1.23	1.38	1.45	0.92
11.18	0.06	0.07	0.08	0.09	0.10	0.10	0.07
11.68	0.18	0.21	0.23	0.26	0.28	0.30	0.22
11.68	0.05	0.06	0.06	0.07	0.08	0.09	0.06
11.79	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10.13	0.05	0.06	0.07	0.08	0.09	0.09	0.06
10.13	1.16	1.38	1.48	1.70	1.91	2.02	1.26
10.64	0.76	0.89	0.96	1.09	1.22	1.29	0.85
11.01	0.11	0.12	0.13	0.15	0.17	0.18	0.12
11.01	0.08	0.10	0.11	0.12	0.14	0.14	0.10
11.09	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9.76	0.18	0.22	0.24	0.27	0.31	0.32	0.20
9.76	0.55	0.66	0.71	0.82	0.92	0.97	0.59
10.09	0.54	0.64	0.69	0.80	0.90	0.95	0.60
10.34	0.25	0.29	0.32	0.36	0.41	0.43	0.28
10.34	0.14	0.16	0.17	0.20	0.22	0.24	0.16
10.39	0.00	0.00	0.00	0.00	0.00	0.01	0.00
9.41	0.07	0.08	0.09	0.10	0.12	0.12	0.07
9.41	0.14	0.17	0.18	0.21	0.23	0.25	0.15
9.57	0.07	0.09	0.09	0.11	0.12	0.13	0.08
9.69	0.09	0.11	0.11	0.13	0.15	0.16	0.10
9.69	0.21	0.25	0.28	0.32	0.36	0.38	0.24
9.72	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10.00	5.56	6.58	7.09	8.10	9.12	9.63	6.14
13253.27	5445.48	7233.01	8126.78	9914.31	11701.84	12595.61	6454.38

****

P5 + UNUSUAL MELT IN	P10 + UNUSUAL MELT IN	P25 + UNUSUAL MELT IN	P50 + UNUSUAL MELT IN	P100 + UNUSUAL MELT IN
0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.01	0.01	0.01
1.08	1.15	1.30	1.46	1.53
0.08	0.09	0.10	0.11	0.11
0.25	0.26	0.29	0.32	0.33
0.07	0.07	0.08	0.09	0.10
0.00	0.00	0.00	0.00	0.00
0.07	0.07	0.08	0.09	0.10
1.47	1.58	1.79	2.01	2.12
0.99	1.06	1.19	1.33	1.39
0.14	0.15	0.17	0.19	0.20
0.11	0.12	0.14	0.15	0.16
0.00	0.00	0.00	0.00	0.00
0.23	0.25	0.28	0.32	0.34
0.70	0.75	0.86	0.96	1.02
0.71	0.76	0.86	0.96	1.01
0.33	0.35	0.40	0.44	0.47
0.18	0.19	0.22	0.25	0.26
0.00	0.00	0.00	0.01	0.01
0.09	0.09	0.11	0.12	0.13
0.17	0.19	0.22	0.24	0.26
0.09	0.10	0.11	0.13	0.14
0.12	0.13	0.14	0.16	0.17
0.28	0.30	0.34	0.39	0.41
0.00	0.00	0.00	0.00	0.00
7.16	7.68	8.70	9.73	10.24
8259.37	9161.86	10966.84	12771.83	13674.32

K·E PROBABILITY X 2 LOG CYCLES KEUFFEL & ESSER CO.

46 8040



Sub-basins 1-5

SUB-BASINS 1-6,13

R onal Flood Frequency Worksheet for Tolt River
S basins 1,2,3,4,5,6,13
based on Region I

Recurrence Interval	Regress constant	Area (mi2)	Area exponent	Ann Precip (in)	Precip exponent	Forest cover	For Cover exponent
2	0.191	49.91	0.86	94.00	1.51	1.00	1.00
5	0.257	49.91	0.86	94.00	1.53	1.00	1.00
10	0.288	49.91	0.85	94.00	1.54	1.00	1.00
25	0.317	49.91	0.85	94.00	1.56	1.00	1.00
50	0.332	49.91	0.86	94.00	1.58	1.00	1.00
100	0.343	49.91	0.86	94.00	1.60	1.00	1.00

Sub-basins 1,2,3,4,5,6,13

Q est (ft3/s)	Standard error (%)	Q + SE
5,259.30	24.90	6,568.87
7,749.80	24.60	9,656.25
8,739.75	26.90	11,090.74
10,534.85	31.50	13,853.32
12,564.69	35.70	17,050.29
14,215.77	40.30	19,944.73

Level 1 Analysis
Sub-basin 1-6, 13

INPUT INFORMATION
****

Return Period	Peak Flow (cfs)	24-hour Rainfall (in)	Regress. Peak Flow (cfs)
2	5259.00	5.00	5398.10
5	7750.00	6.00	7532.21
10	8740.00	6.50	8599.27
25	10535.00	7.50	10733.38
50	12565.00	8.50	12867.49
100	14216.00	9.00	13934.55

Regression intercept = -5272.47
Regression slope = 2134.11

Elevation of Zones
==========

Elevation of Lowland =	500	(ft)
Elevation of Rain Dominated =	1100	(ft)
Elevation of Rain on Snow =	2250	(ft)
Elevation of Snow Dominated =	3400	(ft)
Elevation of Highland =	4500	(ft)

Snow Water Equivalent vs Elevation Relationship
==========

Constant =	-3.970	(cm)
Slope =	0.042	(cm/m)
Standard Error =	11.278	(cm)

Air Temperature vs Elevation Relationship
==========

Constant =	8.100	(C)
Slope =	-0.006	(C/m)
Standard Error =	2.000	(C)

Wind Speed
==========

Average Wind Speed =	4	(m/s)
Unusual Wind Speed =	7	(m/s)

Level 1 Analysis

SUMMARY INFORMATION
****

Basin Score = 4.4899671
Worst Basin Score = 8.9511347
Best Basin Score = 2.2377836

Area in Lowland	0	0.00
Area in Rain Dominated	10607	0.33
Area in Rain on Snow	10517	0.33
Area in Snow Dominated	7900	0.25
Area in Highland	2921	0.09
TOTAL =	31945	1

Area in Large Dense	1502	0.05
Area in Small Dense	16531	0.52
Area in Sparse	7694	0.24
Area in Open	3472	0.11
Area in Non-Forest	2674	0.08
Area in Water	72	0.00
TOTAL =	31945	1

I 1 1 Analysis

Precip Zone- Veg Class	Area (acres)	Precip- Veg Score	Score X Area	P2	P5	P10	P25
L-LD	0.00	1.00	0.00	5.00	6.00	6.50	7.50
L-SD	0.00	1.00	0.00	5.00	6.00	6.50	7.50
L-S	0.00	3.00	0.00	5.00	6.00	6.50	7.50
L-O	0.00	4.00	0.00	5.00	6.00	6.50	7.50
L-NF	0.00	4.00	0.00	5.00	6.00	6.50	7.50
L-W	0.00	0.00	0.00	5.00	6.00	6.50	7.50
R-LD	24.00	2.00	48.00	5.00	6.00	6.50	7.50
R-SD	7338.00	2.00	14676.00	5.00	6.00	6.50	7.50
R-S	1235.00	6.00	7410.00	5.00	6.00	6.50	7.50
R-O	1367.00	8.00	10936.00	5.00	6.00	6.50	7.50
R-NF	591.00	8.00	4728.00	5.00	6.00	6.50	7.50
R-W	52.00	0.00	0.00	5.00	6.00	6.50	7.50
RS-LD	248.00	3.00	744.00	5.00	6.00	6.50	7.50
RS-SD	5843.00	3.00	17529.00	5.00	6.00	6.50	7.50
[illegible]-S	3540.00	9.00	31860.00	5.00	6.00	6.50	7.50
[illegible]O	505.00	12.00	6060.00	5.00	6.00	6.50	7.50
[illegible]NF	375.00	12.00	4500.00	5.00	6.00	6.50	7.50
RS-W	6.00	0.00	0.00	5.00	6.00	6.50	7.50
S-LD	883.00	2.00	1766.00	5.00	6.00	6.50	7.50
S-SD	2655.00	2.00	5310.00	5.00	6.00	6.50	7.50
S-S	2558.00	6.00	15348.00	5.00	6.00	6.50	7.50
S-O	1153.00	8.00	9224.00	5.00	6.00	6.50	7.50
S-NF	637.00	8.00	5096.00	5.00	6.00	6.50	7.50
S-W	14.00	0.00	0.00	5.00	6.00	6.50	7.50
H-LD	347.00	1.00	347.00	5.00	6.00	6.50	7.50
H-SD	695.00	1.00	695.00	5.00	6.00	6.50	7.50
H-S	361.00	3.00	1083.00	5.00	6.00	6.50	7.50
H-O	447.00	4.00	1788.00	5.00	6.00	6.50	7.50
H-NF	1071.00	4.00	4284.00	5.00	6.00	6.50	7.50
H-W	0.00	0.00	0.00	5.00	6.00	6.50	7.50
	==========		==========				
TOTAL =	31945.00		143432.00				

P50	P100	ELEV FT	ELEV M	SWE CM	SE SWE CM	SWE + SE SWE CM	SWE FACTOR
8.50	9.00	500	152.39	2.39	11.28	13.67	1.00
8.50	9.00	500	152.39	2.39	11.28	13.67	1.00
8.50	9.00	500	152.39	2.39	11.28	13.67	2.00
8.50	9.00	500	152.39	2.39	11.28	13.67	3.00
8.50	9.00	500	152.39	2.39	11.28	13.67	3.00
8.50	9.00	500	152.39	2.39	11.28	13.67	0.00
8.50	9.00	1100	335.26	10.02	11.28	21.29	1.00
8.50	9.00	1100	335.26	10.02	11.28	21.29	1.00
8.50	9.00	1100	335.26	10.02	11.28	21.29	1.75
8.50	9.00	1100	335.26	10.02	11.28	21.29	2.50
8.50	9.00	1100	335.26	10.02	11.28	21.29	2.50
8.50	9.00	1100	335.26	10.02	11.28	21.29	0.00
8.50	9.00	2250	685.77	24.64	11.28	35.91	1.00
8.50	9.00	2250	685.77	24.64	11.28	35.91	1.00
8.50	9.00	2250	685.77	24.64	11.28	35.91	1.50
8.50	9.00	2250	685.77	24.64	11.28	35.91	2.00
8.50	9.00	2250	685.77	24.64	11.28	35.91	2.00
8.50	9.00	2250	685.77	24.64	11.28	35.91	0.00
8.50	9.00	3400	1036.27	39.26	11.28	50.54	1.00
8.50	9.00	3400	1036.27	39.26	11.28	50.54	1.00
8.50	9.00	3400	1036.27	39.26	11.28	50.54	1.25
8.50	9.00	3400	1036.27	39.26	11.28	50.54	1.50
8.50	9.00	3400	1036.27	39.26	11.28	50.54	1.50
8.50	9.00	3400	1036.27	39.26	11.28	50.54	1.50
8.50	9.00	4500	1371.53	53.24	11.28	64.52	1.00
8.50	9.00	4500	1371.53	53.24	11.28	64.52	1.00
8.50	9.00	4500	1371.53	53.24	11.28	64.52	1.00
8.50	9.00	4500	1371.53	53.24	11.28	64.52	1.00
8.50	9.00	4500	1371.53	53.24	11.28	64.52	1.00
8.50	9.00	4500	1371.53	53.24	11.28	64.52	1.00

SWE MODIFIED CM	AIR TEMP C	SE TEMP C	MODIFIED TEMP C	AVERAGE WIND SPEED M/S	UNUSUAL WIND SPEED M/S	FOREST COVER DECIMAL	MODIFIED AVERAGE WIND M/S
13.67	7.19	2.00	9.19	4.00	7.00	0.85	1.28
13.67	7.19	2.00	9.19	4.00	7.00	0.85	1.28
27.33	7.19	2.00	9.19	4.00	7.00	0.40	2.72
41.00	7.19	2.00	9.19	4.00	7.00	0.07	3.78
41.00	7.19	2.00	9.19	4.00	7.00	0.07	3.78
0.00	7.19	2.00	9.19	4.00	7.00	0.00	4.00
21.29	6.09	2.00	8.09	4.00	7.00	0.85	1.28
21.29	6.09	2.00	8.09	4.00	7.00	0.85	1.28
37.26	6.09	2.00	8.09	4.00	7.00	0.40	2.72
53.23	6.09	2.00	8.09	4.00	7.00	0.07	3.78
53.23	6.09	2.00	8.09	4.00	7.00	0.07	3.78
0.00	6.09	2.00	8.09	4.00	7.00	0.00	4.00
35.91	3.99	2.00	5.99	4.00	7.00	0.85	1.28
35.91	3.99	2.00	5.99	4.00	7.00	0.85	1.28
53.87	3.99	2.00	5.99	4.00	7.00	0.40	2.72
71.83	3.99	2.00	5.99	4.00	7.00	0.07	3.78
71.83	3.99	2.00	5.99	4.00	7.00	0.07	3.78
0.00	3.99	2.00	5.99	4.00	7.00	0.00	4.00
50.54	1.88	2.00	3.88	4.00	7.00	0.85	1.28
50.54	1.88	2.00	3.88	4.00	7.00	0.85	1.28
63.17	1.88	2.00	3.88	4.00	7.00	0.40	2.72
75.80	1.88	2.00	3.88	4.00	7.00	0.07	3.78
75.80	1.88	2.00	3.88	4.00	7.00	0.07	3.78
75.80	1.88	2.00	3.88	4.00	7.00	0.00	4.00
64.52	-0.13	2.00	1.87	4.00	7.00	0.85	1.28
64.52	-0.13	2.00	1.87	4.00	7.00	0.85	1.28
64.52	-0.13	2.00	1.87	4.00	7.00	0.40	2.72
64.52	-0.13	2.00	1.87	4.00	7.00	0.07	3.78
64.52	-0.13	2.00	1.87	4.00	7.00	0.07	3.78
64.52	-0.13	2.00	1.87	4.00	7.00	0.00	4.00

MODIFIED UNUSUAL WIND M/S	AVERAGE MELT P2 CM	AVERAGE MELT P5 CM	AVERAGE MELT P10 CM	AVERAGE MELT P25 CM	AVERAGE MELT P50 CM	AVERAGE MELT P100 CM	UNUSUAL MELT P2 CM
2.24	2.43	2.52	2.57	2.66	2.75	2.79	3.80
2.24	2.43	2.52	2.57	2.66	2.75	2.79	3.80
4.76	3.32	3.41	3.46	3.55	3.64	3.68	5.79
6.61	3.97	4.06	4.11	4.20	4.29	4.33	7.25
6.61	3.97	4.06	4.11	4.20	4.29	4.33	7.25
7.00	4.11	4.20	4.25	4.34	4.43	4.47	7.56
2.24	2.09	2.17	2.21	2.29	2.36	2.40	3.37
2.24	2.09	2.17	2.21	2.29	2.36	2.40	3.37
4.76	2.85	2.92	2.96	3.04	3.12	3.15	5.13
6.61	3.40	3.48	3.52	3.59	3.67	3.71	6.41
6.61	3.40	3.48	3.52	3.59	3.67	3.71	6.41
7.00	3.52	3.59	3.63	3.71	3.79	3.82	6.68
2.24	1.45	1.50	1.53	1.58	1.63	1.65	2.56
2.24	1.45	1.50	1.53	1.58	1.63	1.65	2.56
4.76	1.94	1.99	2.02	2.07	2.12	2.14	3.85
6.61	2.31	2.36	2.38	2.43	2.48	2.51	4.80
6.61	2.31	2.36	2.38	2.43	2.48	2.51	4.80
7.00	2.38	2.43	2.46	2.51	2.56	2.58	5.01
2.24	0.81	0.83	0.84	0.87	0.89	0.90	1.74
2.24	0.81	0.83	0.84	0.87	0.89	0.90	1.74
4.76	1.04	1.06	1.07	1.10	1.12	1.13	2.58
6.61	1.21	1.23	1.25	1.27	1.29	1.31	3.20
6.61	1.21	1.23	1.25	1.27	1.29	1.31	3.20
7.00	1.25	1.27	1.28	1.31	1.33	1.34	3.33
2.24	0.19	0.19	0.19	0.19	0.18	0.18	0.96
2.24	0.19	0.19	0.19	0.19	0.18	0.18	0.96
4.76	0.17	0.17	0.17	0.17	0.17	0.17	1.36
6.61	0.16	0.16	0.16	0.16	0.16	0.16	1.66
6.61	0.16	0.16	0.16	0.16	0.16	0.16	1.66
7.00	0.16	0.16	0.16	0.16	0.15	0.15	1.72

UNUSUAL MELT P5 CM	UNUSUAL MELT P10 CM	UNUSUAL MELT P25 CM	UNUSUAL MELT P50 CM	UNUSUAL MELT P100 CM	P2 + AVERAGE MELT IN	P5 + AVERAGE MELT IN	P10 + AVERAGE MELT IN
3.92	3.97	4.09	4.20	4.26	5.96	6.99	7.51
3.92	3.97	4.09	4.20	4.26	5.96	6.99	7.51
5.91	5.96	6.08	6.20	6.25	6.31	7.34	7.86
7.37	7.42	7.54	7.66	7.71	6.56	7.60	8.12
7.37	7.42	7.54	7.66	7.71	6.56	7.60	8.12
7.68	7.73	7.85	7.97	8.02	6.62	7.65	8.17
3.48	3.53	3.63	3.73	3.78	5.82	6.85	7.37
3.48	3.53	3.63	3.73	3.78	5.82	6.85	7.37
5.23	5.28	5.38	5.48	5.53	6.12	7.15	7.67
6.51	6.56	6.67	6.77	6.82	6.34	7.37	7.88
6.51	6.56	6.67	6.77	6.82	6.34	7.37	7.88
6.79	6.84	6.94	7.04	7.09	6.38	7.42	7.93
2.63	2.67	2.74	2.82	2.86	5.57	6.59	7.10
2.63	2.67	2.74	2.82	2.86	5.57	6.59	7.10
3.93	3.97	4.04	4.12	4.15	5.77	6.78	7.29
4.88	4.92	4.99	5.07	5.11	5.91	6.93	7.44
4.88	4.92	4.99	5.07	5.11	5.91	6.93	7.44
5.08	5.12	5.19	5.27	5.31	5.94	6.96	7.47
1.79	1.81	1.86	1.91	1.93	5.32	6.33	6.83
1.79	1.81	1.86	1.91	1.93	5.32	6.33	6.83
2.63	2.65	2.70	2.75	2.78	5.41	6.42	6.92
3.25	3.27	3.32	3.37	3.39	5.48	6.49	6.99
3.25	3.27	3.32	3.37	3.39	5.48	6.49	6.99
3.38	3.40	3.45	3.50	3.52	5.49	6.50	7.00
0.98	0.99	1.02	1.04	1.05	5.07	6.07	6.57
0.98	0.99	1.02	1.04	1.05	5.07	6.07	6.57
1.39	1.40	1.42	1.45	1.46	5.07	6.07	6.57
1.68	1.70	1.72	1.74	1.75	5.06	6.06	6.56
1.68	1.70	1.72	1.74	1.75	5.06	6.06	6.56
1.75	1.76	1.78	1.81	1.82	5.06	6.06	6.56
			Average Input =		5.55	6.57	7.08
			Peak Flow =		6565.34	8739.55	9826.65

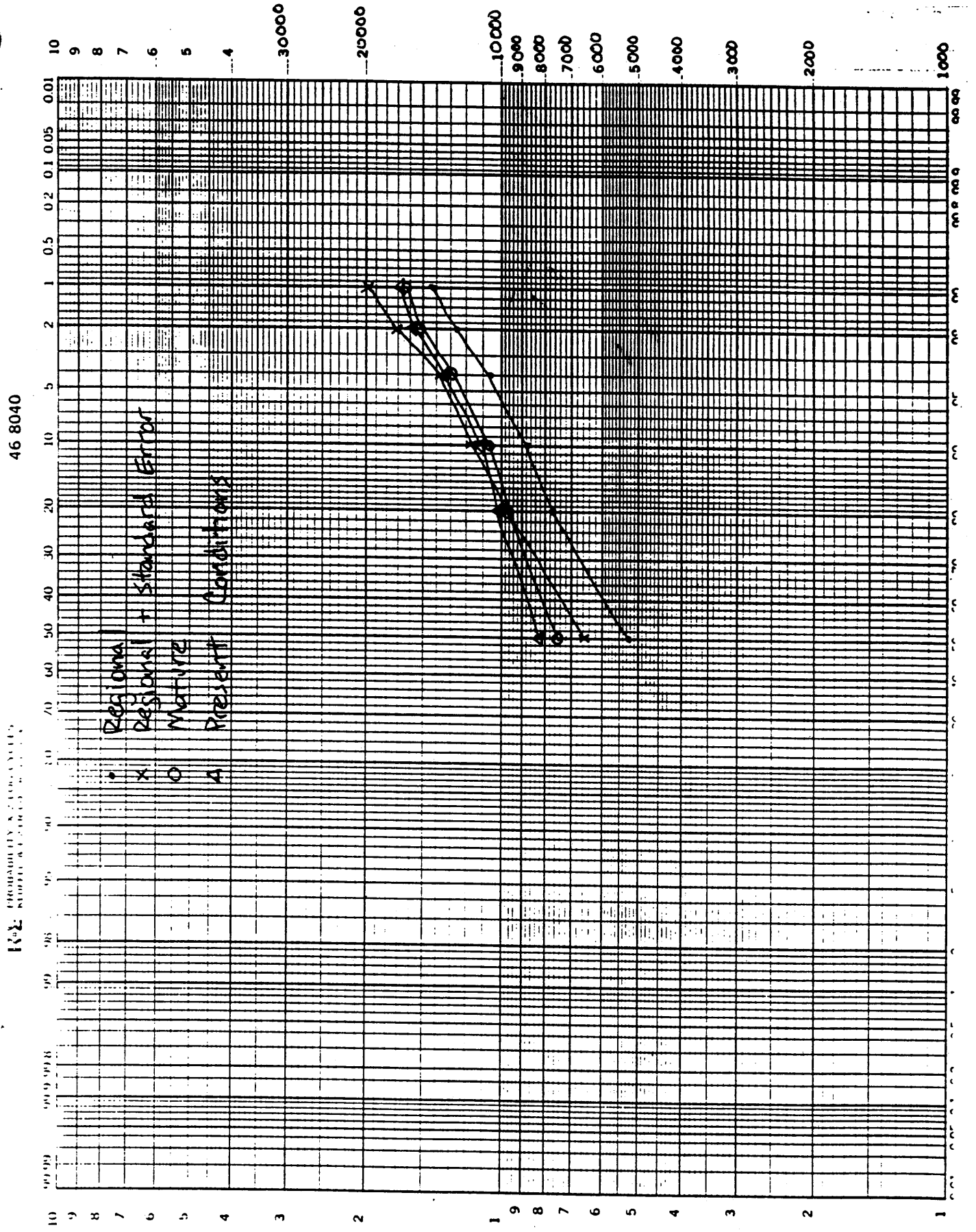
P25 + AVERAGE MELT IN	P50 + AVERAGE MELT IN	P100 + AVERAGE MELT IN	P2 + UNUSUAL MELT IN	P5 + UNUSUAL MELT IN	P10 + UNUSUAL MELT IN	P25 + UNUSUAL MELT IN	P50 + UNUSUAL MELT IN
8.55	9.58	10.10	6.50	7.54	8.06	9.11	10.16
8.55	9.58	10.10	6.50	7.54	8.06	9.11	10.16
8.90	9.93	10.45	7.28	8.33	8.85	9.89	10.94
9.15	10.19	10.71	7.85	8.90	9.42	10.47	11.51
9.15	10.19	10.71	7.85	8.90	9.42	10.47	11.51
9.21	10.24	10.76	7.98	9.02	9.54	10.59	11.64
8.40	9.43	9.95	6.33	7.37	7.89	8.93	9.97
8.40	9.43	9.95	6.33	7.37	7.89	8.93	9.97
8.70	9.73	10.24	7.02	8.06	8.58	9.62	10.66
8.91	9.94	10.46	7.52	8.56	9.08	10.12	11.16
8.91	9.94	10.46	7.52	8.56	9.08	10.12	11.16
8.96	9.99	10.51	7.63	8.67	9.19	10.23	11.27
8.12	9.14	9.65	6.01	7.04	7.55	8.58	9.61
8.12	9.14	9.65	6.01	7.04	7.55	8.58	9.61
8.31	9.33	9.84	6.52	7.55	8.06	9.09	10.12
8.46	9.48	9.99	6.89	7.92	8.44	9.47	10.50
8.46	9.48	9.99	6.89	7.92	8.44	9.47	10.50
8.49	9.51	10.02	6.97	8.00	8.52	9.55	10.57
7.84	8.85	9.35	5.68	6.70	7.21	8.23	9.25
7.84	8.85	9.35	5.68	6.70	7.21	8.23	9.25
7.93	8.94	9.45	6.02	7.04	7.54	8.56	9.58
8.00	9.01	9.51	6.26	7.28	7.79	8.81	9.83
8.00	9.01	9.51	6.26	7.28	7.79	8.81	9.83
8.01	9.02	9.53	6.31	7.33	7.84	8.86	9.88
7.57	8.57	9.07	5.38	6.39	6.89	7.90	8.91
7.57	8.57	9.07	5.38	6.39	6.89	7.90	8.91
7.57	8.57	9.07	5.54	6.55	7.05	8.06	9.07
7.56	8.56	9.06	5.65	6.66	7.17	8.18	9.19
7.56	8.56	9.06	5.65	6.66	7.17	8.18	9.19
7.56	8.56	9.06	5.68	6.69	7.19	8.20	9.21
8.09	9.11	9.62	5.98	7.00	7.52	8.55	9.58
12000.86	14175.07	15262.18	7481.13	9676.51	10774.20	12969.59	15164.97

P100 + UNUSUAL MELT IN	P2 + AVERAGE MELT IN	P5 + AVERAGE MELT IN	P10 + AVERAGE MELT IN	P25 + AVERAGE MELT IN	P50 + AVERAGE MELT IN	P100 + AVERAGE MELT IN	P2 + UNUSUAL MELT IN
	**********	**********	**********	**********	AREA WEIGHTED		**********
10.68	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10.68	0.00	0.00	0.00	0.00	0.00	0.00	0.00
11.46	0.00	0.00	0.00	0.00	0.00	0.00	0.00
12.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00
12.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00
12.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10.49	0.00	0.01	0.01	0.01	0.01	0.01	0.00
10.49	1.34	1.57	1.69	1.93	2.17	2.28	1.45
11.18	0.24	0.28	0.30	0.34	0.38	0.40	0.27
11.68	0.27	0.32	0.34	0.38	0.43	0.45	0.32
11.68	0.12	0.14	0.15	0.16	0.18	0.19	0.14
11.79	0.01	0.01	0.01	0.01	0.02	0.02	0.01
10.13	0.04	0.05	0.06	0.06	0.07	0.07	0.05
10.13	1.02	1.21	1.30	1.49	1.67	1.77	1.10
10.64	0.64	0.75	0.81	0.92	1.03	1.09	0.72
11.01	0.09	0.11	0.12	0.13	0.15	0.16	0.11
11.01	0.07	0.08	0.09	0.10	0.11	0.12	0.08
11.09	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9.76	0.15	0.17	0.19	0.22	0.24	0.26	0.16
9.76	0.44	0.53	0.57	0.65	0.74	0.78	0.47
10.09	0.43	0.51	0.55	0.64	0.72	0.76	0.48
10.34	0.20	0.23	0.25	0.29	0.33	0.34	0.23
10.34	0.11	0.13	0.14	0.16	0.18	0.19	0.12
10.39	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9.41	0.06	0.07	0.07	0.08	0.09	0.10	0.06
9.41	0.11	0.13	0.14	0.16	0.19	0.20	0.12
9.57	0.06	0.07	0.07	0.09	0.10	0.10	0.06
9.69	0.07	0.08	0.09	0.11	0.12	0.13	0.08
9.69	0.17	0.20	0.22	0.25	0.29	0.30	0.19
9.72	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10.09	5.64	6.66	7.17	8.18	9.20	9.71	6.23
16262.66	6758.59	8932.80	10019.91	12194.12	14368.33	15455.43	8030.04

****

P5 + UNUSUAL MELT IN	P10 + UNUSUAL MELT IN	P25 + UNUSUAL MELT IN	P50 + UNUSUAL MELT IN	P100 + UNUSUAL MELT IN
0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00
0.01	0.01	0.01	0.01	0.01
1.69	1.81	2.05	2.29	2.41
0.31	0.33	0.37	0.41	0.43
0.37	0.39	0.43	0.48	0.50
0.16	0.17	0.19	0.21	0.22
0.01	0.01	0.02	0.02	0.02
0.05	0.06	0.07	0.07	0.08
1.29	1.38	1.57	1.76	1.85
0.84	0.89	1.01	1.12	1.18
0.13	0.13	0.15	0.17	0.17
0.09	0.10	0.11	0.12	0.13
0.00	0.00	0.00	0.00	0.00
0.19	0.20	0.23	0.26	0.27
0.56	0.60	0.68	0.77	0.81
0.56	0.60	0.69	0.77	0.81
0.26	0.28	0.32	0.35	0.37
0.15	0.16	0.18	0.20	0.21
0.00	0.00	0.00	0.00	0.00
0.07	0.07	0.09	0.10	0.10
0.14	0.15	0.17	0.19	0.20
0.07	0.08	0.09	0.10	0.11
0.09	0.10	0.11	0.13	0.14
0.22	0.24	0.27	0.31	0.32
0.00	0.00	0.00	0.00	0.00
7.26	7.78	8.81	9.83	10.35
10225.42	11323.11	13518.49	15713.87	16811.56

Sub-basins 1-6, 13



SUB-BASIN 8

ional Flood Frequency Worksheet for Tolt River
Sub-basin 8
based on Region I

Recurrence Interval	Regress constant	Area (mi2)	Area exponent	Ann Precip (in)	Precip exponent	Forest cover	For Cover exponent
2	0.191	8.48	0.86	94.00	1.51	1.00	1.00
5	0.257	8.48	0.86	94.00	1.53	1.00	1.00
10	0.288	8.48	0.85	94.00	1.54	1.00	1.00
25	0.317	8.48	0.85	94.00	1.56	1.00	1.00
50	0.332	8.48	0.86	94.00	1.58	1.00	1.00
100	0.343	8.48	0.86	94.00	1.60	1.00	1.00

Su basin 8

Q est (ft3/s)	Standard error (%)	Q + SE
1,144.97	24.90	1,430.07
1,687.16	24.60	2,102.20
1,936.71	26.90	2,457.68
2,334.50	31.50	3,069.87
2,735.38	35.70	3,711.91
3,094.83	40.30	4,342.04

Level 1 Analysis
Sub-basin 8

INPUT INFORMATION
****

Return Period	Peak Flow (cfs)	24-hour Rainfall (in)	Regress. Peak Flow (cfs)
2	1145.00	5.00	1188.20
5	1687.00	6.00	1652.50
10	1937.00	6.50	1884.65
25	2334.00	7.50	2348.96
50	2735.00	8.50	2813.27
100	3095.00	9.00	3045.42

Regression intercept = -1133.33
Regression slope = 464.31

Elevation of Zones
==========

Elevation of Lowland =	500	(ft)
Elevation of Rain Dominated =	1100	(ft)
Elevation of Rain on Snow =	2250	(ft)
Elevation of Snow Dominated =	3400	(ft)
Elevation of Highland =	4500	(ft)

Snow Water Equivalent vs Elevation Relationship
==========

Constant =	-3.970	(cm)
Slope =	0.042	(cm/m)
Standard Error =	11.278	(cm)

Air Temperature vs Elevation Relationship
==========

Constant =	8.100	(C)
Slope =	-0.006	(C/m)
Standard Error =	2.000	(C)

Wind Speed
==========

Average Wind Speed =	4	(m/s)
Unusual Wind Speed =	7	(m/s)

Level 1 Analysis

SUMMARY INFORMATION
****

Basin Score = 5.1704754
Worst Basin Score = 7.9240693
Best Basin Score = 1.9810173

Area in Lowland	0	0.00
Area in Rain Dominated	138	0.03
Area in Rain on Snow	1493	0.28
Area in Snow Dominated	2199	0.41
Area in Highland	1596	0.29
TOTAL =	5426	1

Area in Large Dense	160	0.03
Area in Small Dense	1720	0.32
Area in Sparse	1700	0.31
Area in Open	190	0.04
Area in Non-Forest	1639	0.30
Area in Water	17	0.00
TOTAL =	5426	1

el 1 Analysis

Precip Zone- Veg Class	Area (acres)	Precip- Veg Score	Score X Area	P2	P5	P10	P25
L-LD	0.00	1.00	0.00	5.00	6.00	6.50	7.50
L-SD	0.00	1.00	0.00	5.00	6.00	6.50	7.50
L-S	0.00	3.00	0.00	5.00	6.00	6.50	7.50
L-O	0.00	4.00	0.00	5.00	6.00	6.50	7.50
L-NF	0.00	4.00	0.00	5.00	6.00	6.50	7.50
L-W	0.00	0.00	0.00	5.00	6.00	6.50	7.50
R-LD	0.00	2.00	0.00	5.00	6.00	6.50	7.50
R-SD	88.00	2.00	176.00	5.00	6.00	6.50	7.50
R-S	30.00	6.00	180.00	5.00	6.00	6.50	7.50
R-O	0.00	8.00	0.00	5.00	6.00	6.50	7.50
R-NF	20.00	8.00	160.00	5.00	6.00	6.50	7.50
R-W	0.00	0.00	0.00	5.00	6.00	6.50	7.50
RS-LD	7.00	3.00	21.00	5.00	6.00	6.50	7.50
RS-SD	283.00	3.00	849.00	5.00	6.00	6.50	7.50
[illegible]-S	1085.00	9.00	9765.00	5.00	6.00	6.50	7.50
[illegible] O	2.00	12.00	24.00	5.00	6.00	6.50	7.50
[illegible] NF	116.00	12.00	1392.00	5.00	6.00	6.50	7.50
RS-W	0.00	0.00	0.00	5.00	6.00	6.50	7.50
S-LD	100.00	2.00	200.00	5.00	6.00	6.50	7.50
S-SD	828.00	2.00	1656.00	5.00	6.00	6.50	7.50
S-S	477.00	6.00	2862.00	5.00	6.00	6.50	7.50
S-O	162.00	8.00	1296.00	5.00	6.00	6.50	7.50
S-NF	615.00	8.00	4920.00	5.00	6.00	6.50	7.50
S-W	17.00	0.00	0.00	5.00	6.00	6.50	7.50
H-LD	53.00	1.00	53.00	5.00	6.00	6.50	7.50
H-SD	521.00	1.00	521.00	5.00	6.00	6.50	7.50
H-S	108.00	3.00	324.00	5.00	6.00	6.50	7.50
H-O	26.00	4.00	104.00	5.00	6.00	6.50	7.50
H-NF	888.00	4.00	3552.00	5.00	6.00	6.50	7.50
H-W	0.00	0.00	0.00	5.00	6.00	6.50	7.50
TOTAL =	5426.00		28055.00				

P50	P100	ELEV FT	ELEV M	SWE CM	SE SWE CM	SWE + SE SWE CM	SWE FACTOR
8.50	9.00	500	152.39	2.39	11.28	13.67	1.00
8.50	9.00	500	152.39	2.39	11.28	13.67	1.00
8.50	9.00	500	152.39	2.39	11.28	13.67	2.00
8.50	9.00	500	152.39	2.39	11.28	13.67	3.00
8.50	9.00	500	152.39	2.39	11.28	13.67	3.00
8.50	9.00	500	152.39	2.39	11.28	13.67	0.00
8.50	9.00	1100	335.26	10.02	11.28	21.29	1.00
8.50	9.00	1100	335.26	10.02	11.28	21.29	1.00
8.50	9.00	1100	335.26	10.02	11.28	21.29	1.75
8.50	9.00	1100	335.26	10.02	11.28	21.29	2.50
8.50	9.00	1100	335.26	10.02	11.28	21.29	2.50
8.50	9.00	1100	335.26	10.02	11.28	21.29	0.00
8.50	9.00	2250	685.77	24.64	11.28	35.91	1.00
8.50	9.00	2250	685.77	24.64	11.28	35.91	1.00
8.50	9.00	2250	685.77	24.64	11.28	35.91	1.50
8.50	9.00	2250	685.77	24.64	11.28	35.91	2.00
8.50	9.00	2250	685.77	24.64	11.28	35.91	2.00
8.50	9.00	2250	685.77	24.64	11.28	35.91	0.00
8.50	9.00	3400	1036.27	39.26	11.28	50.54	1.00
8.50	9.00	3400	1036.27	39.26	11.28	50.54	1.00
8.50	9.00	3400	1036.27	39.26	11.28	50.54	1.25
8.50	9.00	3400	1036.27	39.26	11.28	50.54	1.50
8.50	9.00	3400	1036.27	39.26	11.28	50.54	1.50
8.50	9.00	3400	1036.27	39.26	11.28	50.54	1.50
8.50	9.00	4500	1371.53	53.24	11.28	64.52	1.00
8.50	9.00	4500	1371.53	53.24	11.28	64.52	1.00
8.50	9.00	4500	1371.53	53.24	11.28	64.52	1.00
8.50	9.00	4500	1371.53	53.24	11.28	64.52	1.00
8.50	9.00	4500	1371.53	53.24	11.28	64.52	1.00
8.50	9.00	4500	1371.53	53.24	11.28	64.52	1.00

SWE MODIFIED CM	AIR TEMP C	SE TEMP C	MODIFIED TEMP C	AVERAGE WIND SPEED M/S	UNUSUAL WIND SPEED M/S	FOREST COVER DECIMAL	MODIFIED AVERAGE WIND M/S
13.67	7.19	2.00	9.19	4.00	7.00	0.85	1.28
13.67	7.19	2.00	9.19	4.00	7.00	0.85	1.28
27.33	7.19	2.00	9.19	4.00	7.00	0.40	2.72
41.00	7.19	2.00	9.19	4.00	7.00	0.07	3.78
41.00	7.19	2.00	9.19	4.00	7.00	0.07	3.78
0.00	7.19	2.00	9.19	4.00	7.00	0.00	4.00
21.29	6.09	2.00	8.09	4.00	7.00	0.85	1.28
21.29	6.09	2.00	8.09	4.00	7.00	0.85	1.28
37.26	6.09	2.00	8.09	4.00	7.00	0.40	2.72
53.23	6.09	2.00	8.09	4.00	7.00	0.07	3.78
53.23	6.09	2.00	8.09	4.00	7.00	0.07	3.78
0.00	6.09	2.00	8.09	4.00	7.00	0.00	4.00
35.91	3.99	2.00	5.99	4.00	7.00	0.85	1.28
35.91	3.99	2.00	5.99	4.00	7.00	0.85	1.28
53.87	3.99	2.00	5.99	4.00	7.00	0.40	2.72
71.83	3.99	2.00	5.99	4.00	7.00	0.07	3.78
71.83	3.99	2.00	5.99	4.00	7.00	0.07	3.78
0.00	3.99	2.00	5.99	4.00	7.00	0.00	4.00
50.54	1.88	2.00	3.88	4.00	7.00	0.85	1.28
50.54	1.88	2.00	3.88	4.00	7.00	0.85	1.28
63.17	1.88	2.00	3.88	4.00	7.00	0.40	2.72
75.80	1.88	2.00	3.88	4.00	7.00	0.07	3.78
75.80	1.88	2.00	3.88	4.00	7.00	0.07	3.78
75.80	1.88	2.00	3.88	4.00	7.00	0.00	4.00
64.52	-0.13	2.00	1.87	4.00	7.00	0.85	1.28
64.52	-0.13	2.00	1.87	4.00	7.00	0.85	1.28
64.52	-0.13	2.00	1.87	4.00	7.00	0.40	2.72
64.52	-0.13	2.00	1.87	4.00	7.00	0.07	3.78
64.52	-0.13	2.00	1.87	4.00	7.00	0.07	3.78
64.52	-0.13	2.00	1.87	4.00	7.00	0.00	4.00

MODIFIED UNUSUAL WIND M/S	AVERAGE MELT P2 CM	AVERAGE MELT P5 CM	AVERAGE MELT P10 CM	AVERAGE MELT P25 CM	AVERAGE MELT P50 CM	AVERAGE MELT P100 CM	UNUSUAL MELT P2 CM
2.24	2.43	2.52	2.57	2.66	2.75	2.79	3.80
2.24	2.43	2.52	2.57	2.66	2.75	2.79	3.80
4.76	3.32	3.41	3.46	3.55	3.64	3.68	5.79
6.61	3.97	4.06	4.11	4.20	4.29	4.33	7.25
6.61	3.97	4.06	4.11	4.20	4.29	4.33	7.25
7.00	4.11	4.20	4.25	4.34	4.43	4.47	7.56
2.24	2.09	2.17	2.21	2.29	2.36	2.40	3.37
2.24	2.09	2.17	2.21	2.29	2.36	2.40	3.37
4.76	2.85	2.92	2.96	3.04	3.12	3.15	5.13
6.61	3.40	3.48	3.52	3.59	3.67	3.71	6.41
6.61	3.40	3.48	3.52	3.59	3.67	3.71	6.41
7.00	3.52	3.59	3.63	3.71	3.79	3.82	6.68
2.24	1.45	1.50	1.53	1.58	1.63	1.65	2.56
2.24	1.45	1.50	1.53	1.58	1.63	1.65	2.56
4.76	1.94	1.99	2.02	2.07	2.12	2.14	3.85
6.61	2.31	2.36	2.38	2.43	2.48	2.51	4.80
6.61	2.31	2.36	2.38	2.43	2.48	2.51	4.80
7.00	2.38	2.43	2.46	2.51	2.56	2.58	5.01
2.24	0.81	0.83	0.84	0.87	0.89	0.90	1.74
2.24	0.81	0.83	0.84	0.87	0.89	0.90	1.74
4.76	1.04	1.06	1.07	1.10	1.12	1.13	2.58
6.61	1.21	1.23	1.25	1.27	1.29	1.31	3.20
6.61	1.21	1.23	1.25	1.27	1.29	1.31	3.20
7.00	1.25	1.27	1.28	1.31	1.33	1.34	3.33
2.24	0.19	0.19	0.19	0.19	0.18	0.18	0.96
2.24	0.19	0.19	0.19	0.19	0.18	0.18	0.96
4.76	0.17	0.17	0.17	0.17	0.17	0.17	1.36
6.61	0.16	0.16	0.16	0.16	0.16	0.16	1.66
6.61	0.16	0.16	0.16	0.16	0.16	0.16	1.66
7.00	0.16	0.16	0.16	0.16	0.15	0.15	1.72

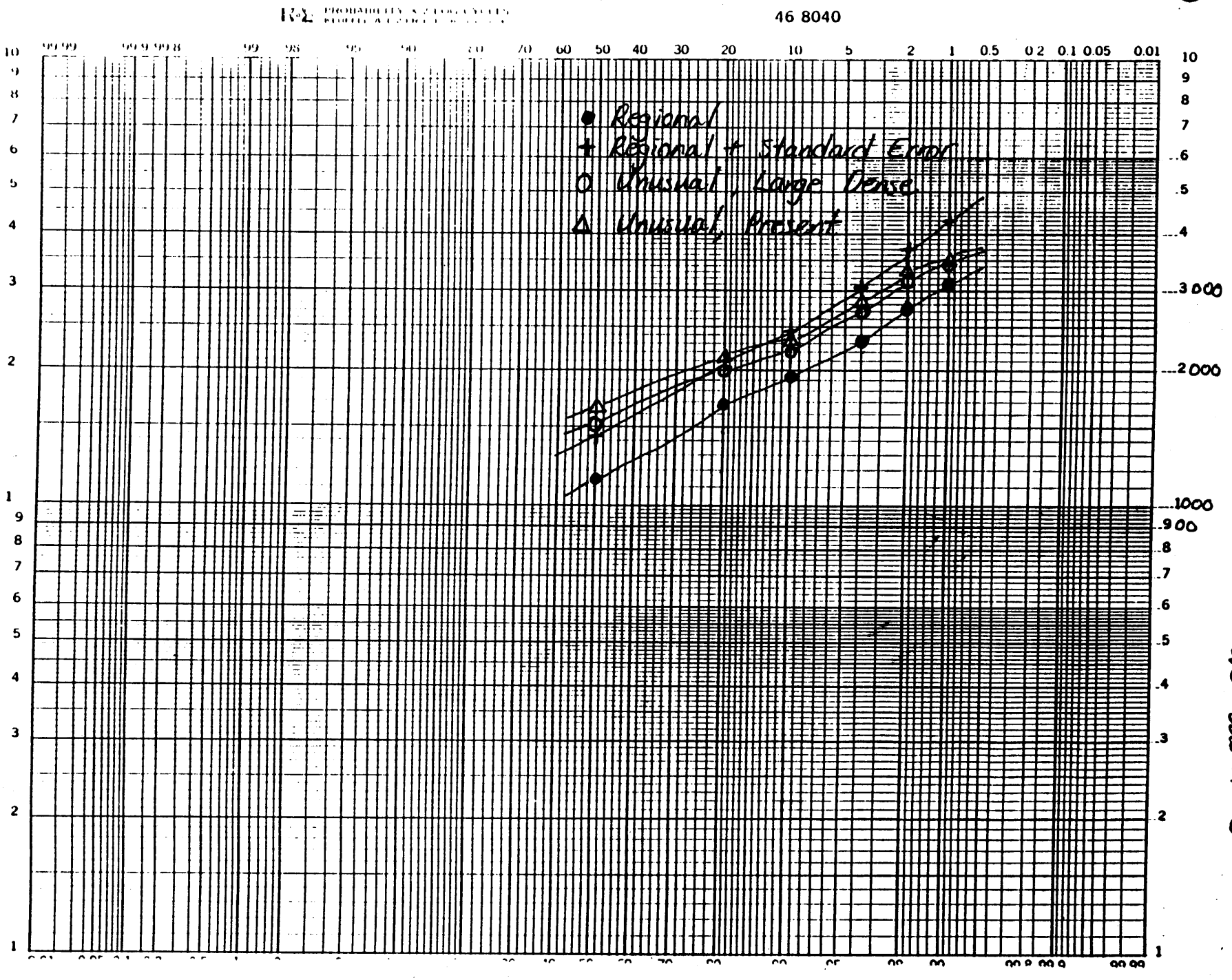
UNUSUAL MELT P5 CM	UNUSUAL MELT P10 CM	UNUSUAL MELT P25 CM	UNUSUAL MELT P50 CM	UNUSUAL MELT P100 CM	P2 + AVERAGE MELT IN	P5 + AVERAGE MELT IN	P10 + AVERAGE MELT IN
3.92	3.97	4.09	4.20	4.26	5.96	6.99	7.51
3.92	3.97	4.09	4.20	4.26	5.96	6.99	7.51
5.91	5.96	6.08	6.20	6.25	6.31	7.34	7.86
7.37	7.42	7.54	7.66	7.71	6.56	7.60	8.12
7.37	7.42	7.54	7.66	7.71	6.56	7.60	8.12
7.68	7.73	7.85	7.97	8.02	6.62	7.65	8.17
3.48	3.53	3.63	3.73	3.78	5.82	6.85	7.37
3.48	3.53	3.63	3.73	3.78	5.82	6.85	7.37
5.23	5.28	5.38	5.48	5.53	6.12	7.15	7.67
6.51	6.56	6.67	6.77	6.82	6.34	7.37	7.88
6.51	6.56	6.67	6.77	6.82	6.34	7.37	7.88
6.79	6.84	6.94	7.04	7.09	6.38	7.42	7.93
2.63	2.67	2.74	2.82	2.86	5.57	6.59	7.10
2.63	2.67	2.74	2.82	2.86	5.57	6.59	7.10
3.93	3.97	4.04	4.12	4.15	5.77	6.78	7.29
4.88	4.92	4.99	5.07	5.11	5.91	6.93	7.44
4.88	4.92	4.99	5.07	5.11	5.91	6.93	7.44
5.08	5.12	5.19	5.27	5.31	5.94	6.96	7.47
1.79	1.81	1.86	1.91	1.93	5.32	6.33	6.83
1.79	1.81	1.86	1.91	1.93	5.32	6.33	6.83
2.63	2.65	2.70	2.75	2.78	5.41	6.42	6.92
3.25	3.27	3.32	3.37	3.39	5.48	6.49	6.99
3.25	3.27	3.32	3.37	3.39	5.48	6.49	6.99
3.38	3.40	3.45	3.50	3.52	5.49	6.50	7.00
0.98	0.99	1.02	1.04	1.05	5.07	6.07	6.57
0.98	0.99	1.02	1.04	1.05	5.07	6.07	6.57
1.39	1.40	1.42	1.45	1.46	5.07	6.07	6.57
1.68	1.70	1.72	1.74	1.75	5.06	6.06	6.56
1.68	1.70	1.72	1.74	1.75	5.06	6.06	6.56
1.75	1.76	1.78	1.81	1.82	5.06	6.06	6.56
			Average Input =		5.33	6.34	6.84
			Peak Flow =		1340.82	1809.67	2044.10

P25 + AVERAGE MELT IN	P50 + AVERAGE MELT IN	P100 + AVERAGE MELT IN	P2 + UNUSUAL MELT IN	P5 + UNUSUAL MELT IN	P10 + UNUSUAL MELT IN	P25 + UNUSUAL MELT IN	P50 + UNUSUAL MELT IN
8.55	9.58	10.10	6.50	7.54	8.06	9.11	10.16
8.55	9.58	10.10	6.50	7.54	8.06	9.11	10.16
8.90	9.93	10.45	7.28	8.33	8.85	9.89	10.94
9.15	10.19	10.71	7.85	8.90	9.42	10.47	11.51
9.15	10.19	10.71	7.85	8.90	9.42	10.47	11.51
9.21	10.24	10.76	7.98	9.02	9.54	10.59	11.64
8.40	9.43	9.95	6.33	7.37	7.89	8.93	9.97
8.40	9.43	9.95	6.33	7.37	7.89	8.93	9.97
8.70	9.73	10.24	7.02	8.06	8.58	9.62	10.66
8.91	9.94	10.46	7.52	8.56	9.08	10.12	11.16
8.91	9.94	10.46	7.52	8.56	9.08	10.12	11.16
8.96	9.99	10.51	7.63	8.67	9.19	10.23	11.27
8.12	9.14	9.65	6.01	7.04	7.55	8.58	9.61
8.12	9.14	9.65	6.01	7.04	7.55	8.58	9.61
8.31	9.33	9.84	6.52	7.55	8.06	9.09	10.12
8.46	9.48	9.99	6.89	7.92	8.44	9.47	10.50
8.46	9.48	9.99	6.89	7.92	8.44	9.47	10.50
8.49	9.51	10.02	6.97	8.00	8.52	9.55	10.57
7.84	8.85	9.35	5.68	6.70	7.21	8.23	9.25
7.84	8.85	9.35	5.68	6.70	7.21	8.23	9.25
7.93	8.94	9.45	6.02	7.04	7.54	8.56	9.58
8.00	9.01	9.51	6.26	7.28	7.79	8.81	9.83
8.00	9.01	9.51	6.26	7.28	7.79	8.81	9.83
8.01	9.02	9.53	6.31	7.33	7.84	8.86	9.88
7.57	8.57	9.07	5.38	6.39	6.89	7.90	8.91
7.57	8.57	9.07	5.38	6.39	6.89	7.90	8.91
7.57	8.57	9.07	5.54	6.55	7.05	8.06	9.07
7.56	8.56	9.06	5.65	6.66	7.17	8.18	9.19
7.56	8.56	9.06	5.65	6.66	7.17	8.18	9.19
7.56	8.56	9.06	5.68	6.69	7.19	8.20	9.21
7.85	8.86	9.37	5.70	6.72	7.23	8.25	9.27
2512.96	2981.82	3216.25	1512.73	1986.19	2222.92	2696.39	3169.85

P100 + UNUSUAL MELT IN	P2 + AVERAGE MELT IN	P5 + AVERAGE MELT IN	P10 + AVERAGE MELT IN	P25 + AVERAGE MELT IN	P50 + AVERAGE MELT IN	P100 + AVERAGE MELT IN	P2 + UNUSUAL MELT IN
	**********	**********	**********	**********	AREA WEIGHTED		**********
10.68	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10.68	0.00	0.00	0.00	0.00	0.00	0.00	0.00
11.46	0.00	0.00	0.00	0.00	0.00	0.00	0.00
12.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00
12.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00
12.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10.49	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10.49	0.09	0.11	0.12	0.14	0.15	0.16	0.10
11.18	0.03	0.04	0.04	0.05	0.05	0.06	0.04
11.68	0.00	0.00	0.00	0.00	0.00	0.00	0.00
11.68	0.02	0.03	0.03	0.03	0.04	0.04	0.03
11.79	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10.13	0.01	0.01	0.01	0.01	0.01	0.01	0.01
10.13	0.29	0.34	0.37	0.42	0.48	0.50	0.31
10.64	1.15	1.36	1.46	1.66	1.87	1.97	1.30
11.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00
11.01	0.13	0.15	0.16	0.18	0.20	0.21	0.15
11.09	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9.76	0.10	0.12	0.13	0.14	0.16	0.17	0.10
9.76	0.81	0.97	1.04	1.20	1.35	1.43	0.87
10.09	0.48	0.56	0.61	0.70	0.79	0.83	0.53
10.34	0.16	0.19	0.21	0.24	0.27	0.28	0.19
10.34	0.62	0.74	0.79	0.91	1.02	1.08	0.71
10.39	0.02	0.02	0.02	0.03	0.03	0.03	0.02
9.41	0.05	0.06	0.06	0.07	0.08	0.09	0.05
9.41	0.49	0.58	0.63	0.73	0.82	0.87	0.52
9.57	0.10	0.12	0.13	0.15	0.17	0.18	0.11
9.69	0.02	0.03	0.03	0.04	0.04	0.04	0.03
9.69	0.83	0.99	1.07	1.24	1.40	1.48	0.93
9.72	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9.78	5.41	6.42	6.92	7.93	8.94	9.45	5.99
3406.59	1377.56	1846.42	2080.85	2549.71	3018.57	3253.00	1648.62

****

P5 + UNUSUAL MELT IN	P10 + UNUSUAL MELT IN	P25 + UNUSUAL MELT IN	P50 + UNUSUAL MELT IN	P100 + UNUSUAL MELT IN
0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00
0.12	0.13	0.14	0.16	0.17
0.04	0.05	0.05	0.06	0.06
0.00	0.00	0.00	0.00	0.00
0.03	0.03	0.04	0.04	0.04
0.00	0.00	0.00	0.00	0.00
0.01	0.01	0.01	0.01	0.01
0.37	0.39	0.45	0.50	0.53
1.51	1.61	1.82	2.02	2.13
0.00	0.00	0.00	0.00	0.00
0.17	0.18	0.20	0.22	0.24
0.00	0.00	0.00	0.00	0.00
0.12	0.13	0.15	0.17	0.18
1.02	1.10	1.26	1.41	1.49
0.62	0.66	0.75	0.84	0.89
0.22	0.23	0.26	0.29	0.31
0.82	0.88	1.00	1.11	1.17
0.02	0.02	0.03	0.03	0.03
0.06	0.07	0.08	0.09	0.09
0.61	0.66	0.76	0.86	0.90
0.13	0.14	0.16	0.18	0.19
0.03	0.03	0.04	0.04	0.05
1.09	1.17	1.34	1.50	1.59
0.00	0.00	0.00	0.00	0.00
7.01	7.52	8.54	9.56	10.07
2122.09	2358.82	2832.28	3305.75	3542.48


46 8040
● Regional
+ Regional + Standard Error
○ Unusual, Large Dense
△ Unusual, Present
99.99 99.9 99.8 99 98 95 90 80 70 60 50 40 30 20 10 5 2 1 0.5 0.2 0.1 0.05 0.01
10 9 8 7 6 5 4 3 2 1
.6 .5 .4 3000 2000 1000 900 .8 .7 .6 .5 .4 .3 .2 1

Sub-basin 8

TABLE 2.--Continued

STATION NUMBER	AREA (SQ-MI)	SLOPE (FT/MI)	LENGTH (MI)	ELEV (FT)	STORAGE (%)	LAKEAREA (%)	FOREST (%)	PRECIP (IN)	I24.2 (IN)	SNOFALL (IN)	JANMIN (FAHR)
12148500	81.40	115	18.2	2300	1.79	1.79	73.0	94.0	5.0	30	28.0
12148700	5.58	--	--	--	--	--	--	--	--	--	--
12149000	603.00	40	60.8	2400	1.16	0.69	79.0	99.0	4.5	160	26.0
12150500	19.20	--	--	--	--	--	--	--	--	--	--
12150800	1537.00	57	44.7	3320	1.74	--	96.0	105.0	4.0	--	25.0
12152500	54.50	46	20.5	1500	0.18	0.18	96.0	68.0	4.0	25	29.0
12153000	17.00	40	8.7	376	0.12	8.00	94.0	42.0	3.0	15	30.0
12156400	0.97	193	1.8	300	0.00	0.00	10.0	38.0	2.1	14	34.0
12157000	15.40	78	6.0	220	6.00	6.00	75.0	37.0	3.0	13	31.0
12158300	1.07	593	1.5	3360	6.30	--	93.0	140.0	6.0	--	27.0
12159500	43.70	--	--	--	--	--	--	123.0	--	--	--
12161000	119.00	46	36.0	2600	8.00	8.00	94.0	106.0	3.5	40	25.0
12162500	199.00	43	47.2	2300	5.00	5.00	94.0	94.0	3.5	35	26.0
12164000	46.20	132	18.7	1400	0.87	0.87	92.0	91.0	3.0	25	29.0
12164500	251.00	45	47.5	1895	1.00	--	89.0	80.0	3.5	--	30.0
12165000	20.00	308	10.2	2530	0.00	1.00	70.0	100.0	4.5	45	24.0
12165500	82.20	101	18.4	2271	2.00	--	87.0	85.0	3.0	--	28.0
12166500	65.90	101	22.6	2540	0.00	0.00	98.0	89.0	3.0	30	30.0
12167000	262.00	33	42.0	2300	0.00	0.00	92.0	83.0	3.5	40	28.0
12167500	7.33	--	--	--	--	--	--	45.0	--	--	--
12168500	52.00	75	16.3	1290	2.48	2.48	91.0	64.0	2.5	20	30.0
12169500	7.52	74	6.0	270	3.45	3.45	60.0	37.0	2.1	10	36.0
12171000	129.00	--	--	--	--	--	--	78.0	--	--	--
12171500	655.00	--	--	--	--	--	--	--	--	--	--
12172000	63.20	115	18.5	4400	0.00	0.00	76.0	74.0	3.5	540	18.0
12172500	780.00	38	56.0	4800	0.20	0.20	78.0	75.0	3.0	460	16.0

NFTOLT.PRN

Station 12147500 NORTH FORK TOLT RIVER NEAR CARNATION, WASH.												
State WA		Drainage Area		40	Years	1953 - 1989						
County 53033		Contrib Area		0	Annual cnt	35						
Latitude N47:42:45		Hydrologic Unit 17110010			Partial cnt	90						
Longitude W121:47:15		Agency		USGS	Continuous A/P	N /N						
Gage Datum		600	Agency office	53	Base Discharge	3000						
Water Year	Mon Day	Peak Dischrg	Dischrg Code	Peak Stage	Stage Code	Num Part	Hist High	Alt Stage	Alt Date	Alt Code		
1953	01/23	5850.00	–	10.940	-	4	–	—	—	-		
1954	12/09	5310.00	–	10.600	-	0	–	—	—	-		
1955	02/07	4640.00	–	10.150	-	1	–	—	—	-		
1956	12/11	7360.00	–	12.200	-	2	–	—	—	-		
1957	12/09	3610.00	–	9.430	-	2	–	—	—	-		
1958	01/16	2250.00	–	8.070	-	0	–	—	—	-		
1959	11/20	4360.00	–	10.070	-	6	–	—	—	-		
1960	12/15	9560.00	–	13.150	-	3	–	—	—	-		
1961	02/21	4130.00	–	10.100	-	1	–	—	—	-		
1962	01/07	3920.00	–	9.920	-	3	–	—	—	-		
1963	11/19	7030.00	–	12.060	-	1	–	—	—	-		
1964	11/26	2280.00	–	8.930	-	0	–	—	—	-		
1965	01/28	4370.00	–	10.300	-	0	–	—	—	-		
1968	12/25	4210.00	–	10.170	-	2	–	—	—	-		
1969	01/05	6540.00	–	11.780	-	1	–	—	—	-		
1970	10/01	2870.00	–	8.920	-	0	–	—	—	-		
1971	01/19	4580.00	–	10.470	-	1	–	—	—	-		
1972	11/04	5480.00	–	11.120	-	4	–	—	—	-		
1973	12/26	3310.00	–	9.360	-	1	–	—	—	-		
1974	01/24	3240.00	–	9.300	-	1	–	—	—	-		
1975	01/17	4720.00	–	10.580	-	1	–	—	—	-		
1976	12/02	6160.00	–	11.430	-	3	–	—	—	-		
1977	01/18	2790.00	–	8.720	-	0	–	—	—	-		
1978	12/02	5560.00	–	11.030	-	2	–	—	—	-		
1979	12/24	2490.00	–	8.380	-	0	–	—	—	-		
1980	12/14	4670.00	–	10.360	-	2	–	—	—	-		
1981	12/26	5180.00	–	10.440	-	4	–	—	—	-		
1982	02/14	6060.00	–	11.070	-	1	–	—	—	-		
1983	12/03	4830.00	–	10.190	-	2	–	—	—	-		
1984	01/25	5460.00	–	10.960	-	1	–	—	—	-		
1985	10/25	2680.00	–	8.480	-	0	–	—	—	-		
1986	11/01	4810.00	–	10.300	-	5	–	—	—	-		
1987	11/23	7510.00	–	12.240	-	2	–	—	—	-		
1988	12/09	3450.00	–	9.120	-	2	–	—	—	-		
1989	10/16	6130.00	–	11.300	-	3	–	—	—	-		

Louis Fuentes
USGS Tacoma

↓

1/24/90 7560
1/24/92 3160

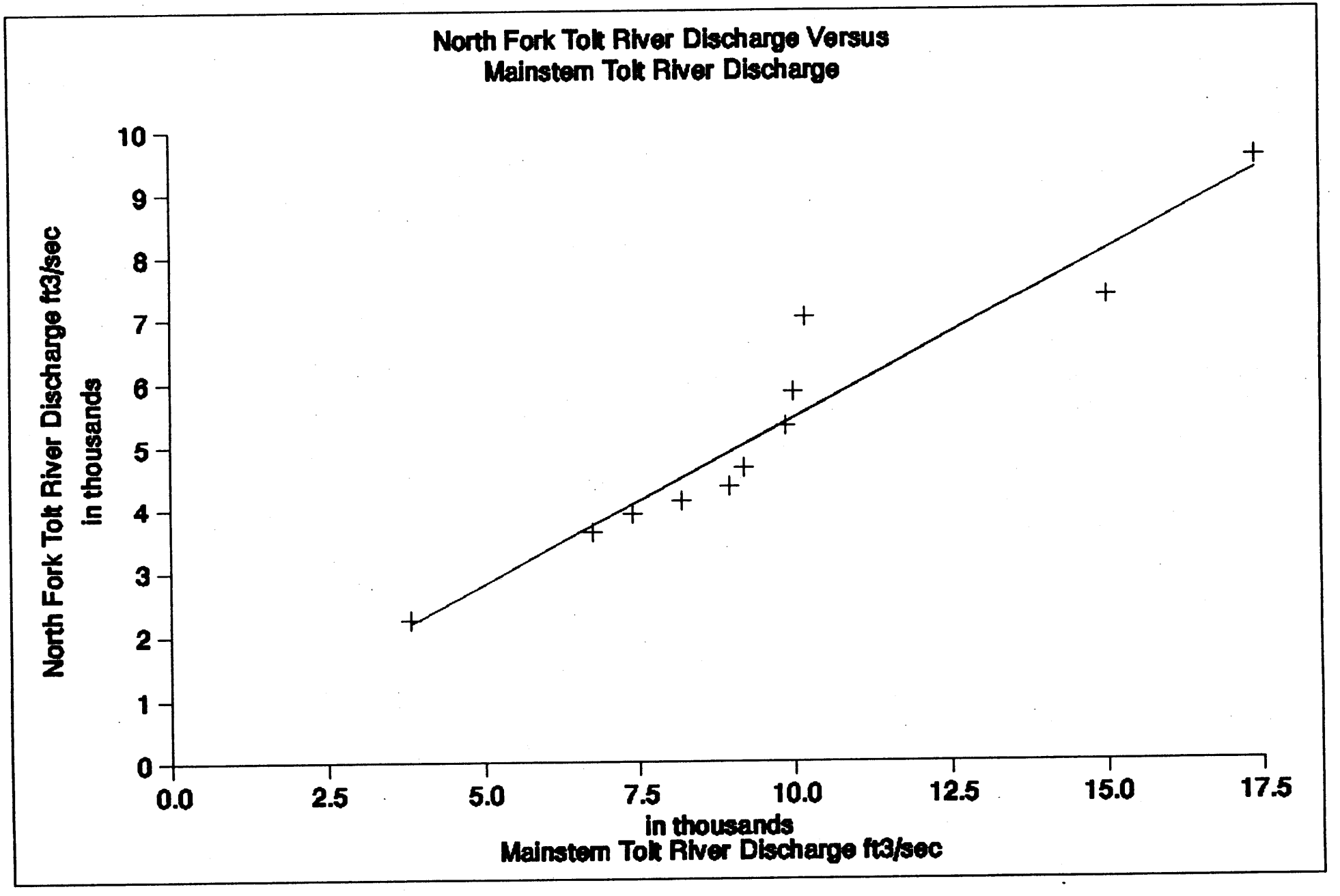
Post-It™ brand fax transmittal memo 7671 | # of pages ▸ 2

To Terry Cundy	From J. Light
Co. UW-Forestry	Co. Wey Co
Dept.	Phone # 9246705
Fax # 206 685-3091	Fax # 6736

STREAMFLOW REGRESSION

Overlap Years

Year	Date	North Fork discharge	mainstem discharge
1953	1/23/53	5850	10000
1954	12/9/53	5310	9870
1955	2/8/55	4640	9190
1956	12/11/55	7360	15000
1957	12/10/56	3610	6780
1958	1/17/58	2250	3840
1959	11/20/58	4360	8960
1960	12/15/59	9560	17400
1961	2/21/61	4130	8200
1962	1/7/62	3920	7400
1963	11/19/62	7030	10200


North Fork Tolt River Discharge Versus
Mainstem Tolt River Discharge
North Fork Tolt River Discharge ft3/sec
in thousands
10
9
8
7
6
5
4
3
2
1
0
0.0
2.5
5.0
7.5
10.0
12.5
15.0
17.5
in thousands
Mainstem Tolt River Discharge ft3/sec

MULTIPLE LINEAR REGRESSION

Dependent Variable:

Variable	Mean	Parameter Estimate	Standard Error	T for H0: parameter=
Intercept		135.53	549.40	0.25
Variable 1	9,712.73	0.53	0.05	9.96

Source	DF	Sum of Squares	Mean Square	F-Value
Model	1.00	**********		99.21
Error	9.00	**********		
Total	10.00	**********		

Dependent Mean	5,274.55
Root Mean Square Error	626.18
Coefficient of Variation	11.87
R-Square	0.92
Adjusted R-Square	0.91

RAW WEATHER DATA

3/1938

day	min temp (F)	max temp (F)	precip (in)	low snow elv (ft)	low snow depth (in)	high snow elv (ft)	high snow depth (in)
1	35	50	.27	-99	-.9	-99	-.9
2	22	43	.09	-99	-.9	-99	-.9
3	31	48	.00	-99	-.9	-99	-.9
4	30	45	.10	-99	-.9	-99	-.9
5	30	41	.54	2760	1.0	-99	-.9
6	27	44	.05	-99	-.9	-99	-.9
7	20	46	.00	-99	-.9	-99	-.9
8	22	49	.00	-99	-.9	-99	-.9
9	23	46	.12	-99	-.9	-99	-.9
10	20	49	.00	-99	-.9	-99	-.9
11	31	47	.01	-99	-.9	-99	-.9
12	31	53	.01	-99	-.9	-99	-.9
13	34	45	.26	-99	-.9	-99	-.9
14	31	38	.57	-99	-.9	-99	-.9
15	26	43	.30	2760	1.0	-99	-.9
16	28	36	.66	920	.5	-99	-.9
17	21	35	.30	1560	5.0	-99	-.9
18	26	36	1.53	1560	2.0	-99	-.9
19	24	35	.06	1560	4.5	-99	-.9
20	19	35	.01	1560	2.0	-99	-.9
21	18	35	.03	1560	.5	-99	-.9
22	20	33	.06	920	1.0	-99	-.9
23	23	40	1.03	920	.5	-99	-.9
24	29	39	.25	2760	3.0	-99	-.9
25	27	40	.25	2760	1.0	-99	-.9
26	28	43	.00	-99	-.9	-99	-.9
27	32	41	.08	-99	-.9	-99	-.9
28	23	36	.21	1560	2.5	-99	-.9
29	19	36	.12	-99	-.9	-99	-.9
30	18	36	.00	-99	-.9	-99	-.9
31	17	44	.00	-99	-.9	-99	-.9

4/1938

day	min temp (F)	max temp (F)	precip (in)	low snow elv (ft)	low snow depth (in)	high snow elv (ft)	high snow depth (in)
1	19	53	.00	-99	-.9	-99	-.9
2	22	56	.00	-99	-.9	-99	-.9
3	32	52	.22	-99	-.9	-99	-.9
4	30	46	.12	-99	-.9	-99	-.9
5	25	45	.19	-99	-.9	-99	-.9
6	27	49	.20	-99	-.9	-99	-.9
7	25	60	.00	-99	-.9	-99	-.9
8	48	63	.00	-99	-.9	-99	-.9
9	31	49	.48	-99	-.9	-99	-.9
10	22	49	.00	-99	-.9	-99	-.9
11	27	45	.15	-99	-.9	-99	-.9
12	29	44	.05	-99	-.9	-99	-.9
13	24	49	.12	-99	-.9	-99	-.9
14	25	54	.00	-99	-.9	-99	-.9
15	33	52	.25	-99	-.9	-99	-.9
16	35	42	.54	-99	-.9	-99	-.9
17	38	48	1.15	-99	-.9	-99	-.9
18	32	47	.96	-99	-.9	-99	-.9
19	28	47	.01	-99	-.9	-99	-.9
20	19	55	.00	-99	-.9	-99	-.9
21	28	57	.00	-99	-.9	-99	-.9
22	35	53	.24	-99	-.9	-99	-.9
23	30	58	.00	-99	-.9	-99	-.9
24	29	54	.00	-99	-.9	-99	-.9
25	37	48	.00	-99	-.9	-99	-.9
26	35	48	.00	-99	-.9	-99	-.9
27	23	57	.00	-99	-.9	-99	-.9
28	25	63	.00	-99	-.9	-99	-.9
29	28	61	.00	-99	-.9	-99	-.9
30	27	58	.00	-99	-.9	-99	-.9

10/1938

day	min temp (F)	max temp (F)	precip (in)	low snow elv (ft)	low snow depth (in)	high snow elv (ft)	high snow depth (in)
1	31	62	.00	-99	-.9	-99	-.9
2	38	60	.05	-99	-.9	-99	-.9
3	48	52	.38	-99	-.9	-99	-.9
4	48	52	.00	-99	-.9	-99	-.9
5	35	48	.00	-99	-.9	-99	-.9
6	32	53	.00	-99	-.9	-99	-.9
7	28	56	.00	-99	-.9	-99	-.9
8	29	52	.00	-99	-.9	-99	-.9
9	35	53	.00	-99	-.9	-99	-.9
10	42	50	.60	-99	-.9	-99	-.9
11	38	49	.38	-99	-.9	-99	-.9
12	38	47	.99	-99	-.9	-99	-.9
13	32	45	.16	-99	-.9	-99	-.9
14	22	42	.02	-99	-.9	-99	-.9
15	30	44	.00	-99	-.9	-99	-.9
16	18	44	.00	-99	-.9	-99	-.9
17	18	45	.01	-99	-.9	-99	-.9
18	17	61	.00	-99	-.9	-99	-.9
19	31	64	.00	-99	-.9	-99	-.9
20	28	66	.00	-99	-.9	-99	-.9
21	25	60	.00	-99	-.9	-99	-.9
22	22	66	.00	-99	-.9	-99	-.9
23	39	60	.00	-99	-.9	-99	-.9
24	36	48	.02	-99	-.9	-99	-.9
25	26	57	.00	-99	-.9	-99	-.9
26	39	55	.49	-99	-.9	-99	-.9
27	36	50	.31	-99	-.9	-99	-.9
28	35	55	.35	-99	-.9	-99	-.9
29	39	49	.21	-99	-.9	-99	-.9
30	36	49	.37	-99	-.9	-99	-.9
31	34	45	.11	-99	-.9	-99	-.9

11/1938

day	min temp (F)	max temp (F)	precip (in)	low snow elv (ft)	low snow depth (in)	high snow elv (ft)	high snow depth (in)
1	30	44	.03	-99	-.9	-99	-.9
2	33	47	.01	-99	-.9	-99	-.9
3	29	44	.56	-99	-.9	-99	-.9
4	26	40	.09	2760	6.0	-99	-.9
5	24	39	.15	2760	1.0	-99	-.9
6	19	39	.01	-99	-.9	-99	-.9
7	26	40	.17	-99	-.9	-99	-.9
8	28	34	.35	2760	3.0	-99	-.9
9	21	32	.65	690	2.5	-99	-.9
10	20	30	.23	690	1.0	-99	-.9
11	14	26	.01	-99	-.9	-99	-.9
12	17	31	.16	2760	6.0	-99	-.9
13	25	34	.16	-99	-.9	-99	-.9
14	30	38	.03	-99	-.9	-99	-.9
15	31	38	.30	-99	-.9	-99	-.9
16	29	43	2.18	-99	-.9	-99	-.9
17	27	38	.44	-99	-.9	-99	-.9
18	34	40	.00	-99	-.9	-99	-.9
19	28	40	.74	-99	-.9	-99	-.9
20	21	34	.38	2760	2.0	-99	-.9
21	13	28	.02	-99	-.9	-99	-.9
22	11	27	.00	-99	-.9	-99	-.9
23	17	35	.00	-99	-.9	-99	-.9
24	19	40	.00	-99	-.9	-99	-.9
25	19	44	.00	-99	-.9	-99	-.9
26	33	46	.00	-99	-.9	-99	-.9
27	36	46	.00	-99	-.9	-99	-.9
28	35	47	.00	-99	-.9	-99	-.9
29	33	45	.19	-99	-.9	-99	-.9
30	34	39	.44	-99	-.9	-99	-.9

10/1939

day	min temp (F)	max temp (F)	precip (in)	low snow elv (ft)	low snow depth (in)	high snow elv (ft)	high snow depth (in)
1	40	49	.01	-99	-.9	-99	-.9
2	36	48	.33	-99	-.9	-99	-.9
3	24	49	.01	-99	-.9	-99	-.9
4	41	47	1.23	-99	-.9	-99	-.9
5	35	46	.08	-99	-.9	-99	-.9
6	29	47	.57	-99	-.9	-99	-.9
7	24	45	.00	-99	-.9	-99	-.9
8	24	53	.00	-99	-.9	-99	-.9
9	30	48	.00	-99	-.9	-99	-.9
10	37	47	.00	-99	-.9	-99	-.9
11	25	51	.00	-99	-.9	-99	-.9
12	25	51	.00	-99	-.9	-99	-.9
13	26	57	.00	-99	-.9	-99	-.9
14	30	56	.00	-99	-.9	-99	-.9
15	37	52	.03	-99	-.9	-99	-.9
16	34	50	.00	-99	-.9	-99	-.9
17	37	51	.22	-99	-.9	-99	-.9
18	29	52	.00	-99	-.9	-99	-.9
19	39	49	.44	-99	-.9	-99	-.9
20	41	55	.03	-99	-.9	-99	-.9
21	46	55	.00	-99	-.9	-99	-.9
22	44	54	.00	-99	-.9	-99	-.9
23	29	53	1.19	-99	-.9	-99	-.9
24	22	36	.28	-99	-.9	-99	-.9
25	15	37	.02	-99	-.9	-99	-.9
26	28	42	.39	-99	-.9	-99	-.9
27	33	46	.13	-99	-.9	-99	-.9
28	36	49	.03	-99	-.9	-99	-.9
29	19	42	.00	-99	-.9	-99	-.9
30	24	46	.01	-99	-.9	-99	-.9
31	26	53	.00	-99	-.9	-99	-.9

11/1939

day	min temp (F)	max temp (F)	precip (in)	low snow elv (ft)	low snow depth (in)	high snow elv (ft)	high snow depth (in)
1	22	47	.00	-99	-.9	-99	-.9
2	24 S	45	.09	-99	-.9	-99	-.9
3	28 R	42	.44	-99	-.9	-99	-.9
4	27 R	47	.00	-99	-.9	-99	-.9
5	27 S	41	.04	-99	-.9	-99	-.9
6	34 R	40	.49	-99	-.9	-99	-.9
7	36 R	50	.48	-99	-.9	-99	-.9
8	27	50	.95	-99	-.9	-99	-.9
9	27	39	.00	-99	-.9	-99	-.9
10	31	39	.30	-99	-.9	-99	-.9
11	34	50	.54	-99	-.9	-99	-.9
12	24	49	.01	-99	-.9	-99	-.9
13	29	47	.20	-99	-.9	-99	-.9
14	27	44	.07	-99	-.9	-99	-.9
15	27	47	.00	-99	-.9	-99	-.9
16	25	51	.00	-99	-.9	-99	-.9
17	27	49	.00	-99	-.9	-99	-.9
18	32	47	.04	-99	-.9	-99	-.9
19	26	45	.00	-99	-.9	-99	-.9
20	23	50	.00	-99	-.9	-99	-.9
21	37	46	.48	-99	-.9	-99	-.9
22	32	47	.30	-99	-.9	-99	-.9
23	35	55	.00	-99	-.9	-99	-.9
24	47	57	.00	-99	-.9	-99	-.9
25	26	56	.00	-99	-.9	-99	-.9
26	29	53	.00	-99	-.9	-99	-.9
27	22	43	.00	-99	-.9	-99	-.9
28	21	39	.00	-99	-.9	-99	-.9
29	33	46	.08	-99	-.9	-99	-.9
30	38	44	1.07	-99	-.9	-99	-.9

10/1940

day	min temp (F)	max temp (F)	precip (in)	low snow elv (ft)	low snow depth (in)	high snow elv (ft)	high snow depth (in)
1	37	50	.17	-99	-.9	-99	-.9
2	23	47	.00	-99	-.9	-99	-.9
3	37	49	.12	-99	-.9	-99	-.9
4	38	51	.02	-99	-.9	-99	-.9
5	30	59	.00	-99	-.9	-99	-.9
6	49	67	.00	-99	-.9	-99	-.9
7	35	59	.00	-99	-.9	-99	-.9
8	34	55	.00	-99	-.9	-99	-.9
9	30	50	.10	-99	-.9	-99	-.9
10	42	54	1.47	-99	-.9	-99	-.9
11	42	56	.18	-99	-.9	-99	-.9
12	37	50	.06	-99	-.9	-99	-.9
13	38	56	.43	-99	-.9	-99	-.9
14	45	59	.00	-99	-.9	-99	-.9
15	37	55	.00	-99	-.9	-99	-.9
16	32	64	.00	-99	-.9	-99	-.9
17	47	59	.04	-99	-.9	-99	-.9
18	48	67	.29	-99	-.9	-99	-.9
19	48	61	.64	-99	-.9	-99	-.9
20	44	55	.48	-99	-.9	-99	-.9
21	39	49	.24	-99	-.9	-99	-.9
22	22	56	.00	-99	-.9	-99	-.9
23	37	52	.28	-99	-.9	-99	-.9
24	34	48	1.32	-99	-.9	-99	-.9
25	28	49	.01	-99	-.9	-99	-.9
26	20	41	.00	-99	-.9	-99	-.9
27	18	44	.00	-99	-.9	-99	-.9
28	31	42	.09	-99	-.9	-99	-.9
29	34	43	.30	-99	-.9	-99	-.9
30	33	44	.65	-99	-.9	-99	-.9
31	34	44	.10	-99	-.9	-99	-.9

11/1940

day	min temp (F)	max temp (F)	precip (in)	low snow elv (ft)	low snow depth (in)	high snow elv (ft)	high snow depth (in)
1	32	41	.09	-99	-.9	-99	-.9
2	28	41	.37	-99	-.9	-99	-.9
3	28	43	.03	-99	-.9	-99	-.9
4	25	44	.02	-99	-.9	-99	-.9
5	31	40	.01	-99	-.9	-99	-.9
6	31	46	.02	-99	-.9	-99	-.9
7	30	42	.66	-99	-.9	-99	-.9
8	27	34	.62	1730	2.0	-99	-.9
9	20	30	.55	2760	4.0	-99	-.9
10	12	25	.02	1730	1.0	-99	-.9
11	20	31	.15	1310	.5	-99	-.9
12	16	32	.00	-99	-.9	-99	-.9
13	23	38	.00	-99	-.9	-99	-.9
14	31	40	.00	-99	-.9	-99	-.9
15	24	44	.00	-99	-.9	-99	-.9
16	16	36	.00	-99	-.9	-99	-.9
17	23	31	.25	-99	-.9	-99	-.9
18	21	33	.07	-99	-.9	-99	-.9
19	15	29	.00	-99	-.9	-99	-.9
20	21	31	.23	-99	-.9	-99	-.9
21	17	27	.19	2760	1.0	-99	-.9
22	12	32	.00	-99	-.9	-99	-.9
23	25	36	.00	-99	-.9	-99	-.9
24	27	38	.31	-99	-.9	-99	-.9
25	30	40	.12	-99	-.9	-99	-.9
26	25	39	.00	-99	-.9	-99	-.9
27	29	42	.74	-99	-.9	-99	-.9
28	30	45	.94	-99	-.9	-99	-.9
29	34	45	.19	-99	-.9	-99	-.9
30	37	39	.00	-99	-.9	-99	-.9

11/1941

day	min temp (F)	max temp (F)	precip (in)	low snow elv (ft)	low snow depth (in)	high snow elv (ft)	high snow depth (in)
1	27	43	.01	-99	-.9	-99	-.9
2	26	43	.00	-99	-.9	-99	-.9
3	29	48	.65	-99	-.9	-99	-.9
4	36	45	.25	-99	-.9	-99	-.9
5	20	51	.20	-99	-.9	-99	-.9
6	23	40	.00	-99	-.9	-99	-.9
7	34	52	.00	-99	-.9	-99	-.9
8	33	55	.00	-99	-.9	-99	-.9
9	25	50	.00	-99	-.9	-99	-.9
10	29	46	.00	-99	-.9	-99	-.9
11	38	48	.30	-99	-.9	-99	-.9
12	28	41	.00	-99	-.9	-99	-.9
13	29	46	1.92	-99	-.9	-99	-.9
14	34	44	.49	-99	-.9	-99	-.9
15	31	37	.33	-99	-.9	-99	-.9
16	30	39	.10	-99	-.9	-99	-.9
17	29	35	.10	-99	-.9	-99	-.9
18	29	35	.08	-99	-.9	-99	-.9
19	22	32	.06	2760	.2	-99	-.9
20	19	35	.02	-99	-.9	-99	-.9
21	19	32	.04	-99	-.9	-99	-.9
22	15	32	.02	-99	-.9	-99	-.9
23	23	40	.01	-99	-.9	-99	-.9
24	29	26	.67	-99	-.9	-99	-.9
25	32	21	1.33	-99	-.9	-99	-.9
26	36	40	.05	-99	-.9	-99	-.9
27	20	40	.03	-99	-.9	-99	-.9
28	26	43	.14	-99	-.9	-99	-.9
29	39	50	.14	-99	-.9	-99	-.9
30	35	53	.13	-99	-.9	-99	-.9

12/1941

day	min temp (F)	max temp (F)	precip (in)	low snow elv (ft)	low snow depth (in)	high snow elv (ft)	high snow depth (in)
1	35	R 48	.75	-99	-.9	-99	-.9
2	40	R 47	1.57	-99	-.9	-99	-.9
3	25	S 40	.86	2760	5.0	-99	-.9
4	26	S 37	.53	2760	2.0	-99	-.9
5	31	S 37	.05	-99	-.9	-99	-.9
6	34	R 39	.36	-99	-.9	-99	-.9
7	25	S 40	.00	-99	-.9	-99	-.9
8	21	S 39	.03	-99	-.9	-99	-.9
9	27	S 36	.08	-99	-.9	-99	-.9
10	20	S 35	.00	-99	-.9	-99	-.9
11	27	S 35	.09	-99	-.9	-99	-.9
12	20	S 33	.00	-99	-.9	-99	-.9
13	30	S 37	.01	-99	-.9	-99	-.9
14	28	S 38	.10	-99	-.9	-99	-.9
15	33	R 44	.50	-99	-.9	-99	-.9
16	33	R 43	1.52	-99	-.9	-99	-.9
17	27	S 34	.35	1730	1.0	-99	-.9
18	29	S 35	1.15	1730	1.0	-99	-.9
19	28	S 41	2.02	-99	-.9	-99	-.9
20	28	33	.85	1730	3.0	-99	-.9
21	28	33	.10	2760	1.0	-99	-.9
22	30	36	.15	-99	-.9	-99	-.9
23	29	35	.40	2760	2.0	-99	-.9
24	23	31	.09	2760	2.0	-99	-.9
25	16	28	.00	-99	-.9	-99	-.9
26	15	29	.00	-99	-.9	-99	-.9
27	18	31	.00	-99	-.9	-99	-.9
28	19	30	.00	-99	-.9	-99	-.9
29	13	27	.00	-99	-.9	-99	-.9
30	19	24	.00	1730	1.5	-99	-.9
31	6	22	.00	2760	1.0	-99	-.9

9/1942

day	min temp (F)	max temp (F)	precip (in)	low snow elv (ft)	low snow depth (in)	high snow elv (ft)	high snow depth (in)
1	33	70	.00	-99	-.9	-99	-.9
2	35	69	.00	-99	-.9	-99	-.9
3	40	64	.00	-99	-.9	-99	-.9
4	43	60	.00	-99	-.9	-99	-.9
5	37	58	.00	-99	-.9	-99	-.9
6	34	64	.00	-99	-.9	-99	-.9
7	36	69	.00	-99	-.9	-99	-.9
8	35	67	.00	-99	-.9	-99	-.9
9	45	65	.00	-99	-.9	-99	-.9
10	41	57	.00	-99	-.9	-99	-.9
11	31	64	.00	-99	-.9	-99	-.9
12	34	64	.00	-99	-.9	-99	-.9
13	41	62	.00	-99	-.9	-99	-.9
14	37	57	.00	-99	-.9	-99	-.9
15	44	55	.02	-99	-.9	-99	-.9
16	33	55	.00	-99	-.9	-99	-.9
17	36	55	.00	-99	-.9	-99	-.9
18	25	61	.00	-99	-.9	-99	-.9
19	28	63	.00	-99	-.9	-99	-.9
20	30	62	.00	-99	-.9	-99	-.9
21	29	65	.00	-99	-.9	-99	-.9
22	30	71	.00	-99	-.9	-99	-.9
23	32	72	.00	-99	-.9	-99	-.9
24	34	70	.00	-99	-.9	-99	-.9
25	33	67	.00	-99	-.9	-99	-.9
26	33	59	.00	-99	-.9	-99	-.9
27	36	53	.02	-99	-.9	-99	-.9
28	40	47	.00	-99	-.9	-99	-.9
29	40	51	.00	-99	-.9	-99	-.9
30	40	50	.20	-99	-.9	-99	-.9

10/1942

day	min temp (F)	max temp (F)	precip (in)	low snow elv (ft)	low snow depth (in)	high snow elv (ft)	high snow depth (in)
1	40	52	.21	-99	-.9	-99	-.9
2	34	52	.00	-99	-.9	-99	-.9
3	43	54	.01	-99	-.9	-99	-.9
4	31	61	.00	-99	-.9	-99	-.9
5	31	62	.00	-99	-.9	-99	-.9
6	35	60	.00	-99	-.9	-99	-.9
7	31	57	.00	-99	-.9	-99	-.9
8	30	62	.00	-99	-.9	-99	-.9
9	39	62	.00	-99	-.9	-99	-.9
10	38	58	.16	-99	-.9	-99	-.9
11	31	47	.00	-99	-.9	-99	-.9
12	20	45	.00	-99	-.9	-99	-.9
13	20	58	.00	-99	-.9	-99	-.9
14	38	53	.05	-99	-.9	-99	-.9
15	35	52	.00	-99	-.9	-99	-.9
16	28	60	.00	-99	-.9	-99	-.9
17	49	64	.00	-99	-.9	-99	-.9
18	36	63	.00	-99	-.9	-99	-.9
19	34	55	.03	-99	-.9	-99	-.9
20	36	48	.00	-99	-.9	-99	-.9
21	32	47	.00	-99	-.9	-99	-.9
22	32	48	.00	-99	-.9	-99	-.9
23	41	46	.00	-99	-.9	-99	-.9
24	24	46	.00	-99	-.9	-99	-.9
25	20	52	.00	-99	-.9	-99	-.9
26	29	50	.09	-99	-.9	-99	-.9
27	30	43	.65	2760	1.5	-99	-.9
28	20	39	.03	-99	-.9	-99	-.9
29	31	44	.29	-99	-.9	-99	-.9
30	33	43	.24	2760	.5	-99	-.9
31	34	45	3.62	-99	-.9	-99	-.9

11/1943

day	min temp (F)	max temp (F)	precip (in)	low snow elv (ft)	low snow depth (in)	high snow elv (ft)	high snow depth (in)
1	29	42	.05	-99	-.9	-99	-.9
2	31	45	.22	-99	-.9	-99	-.9
3	33	41	.27	-99	-.9	-99	-.9
4	34	47	.58	-99	-.9	-99	-.9
5	29	42	.05	2760	1.1	-99	-.9
6	19	43	.01	-99	-.9	-99	-.9
7	36	49	.00	-99	-.9	-99	-.9
8	37	55	.00	-99	-.9	-99	-.9
9	25	53	.00	-99	-.9	-99	-.9
10	36	47	.00	-99	-.9	-99	-.9
11	18	44	.00	-99	-.9	-99	-.9
12	25	46	.00	-99	-.9	-99	-.9
13	19	42	.01	-99	-.9	-99	-.9
14	20	52	.00	-99	-.9	-99	-.9
15	41	54	.00	-99	-.9	-99	-.9
16	40	52	.00	-99	-.9	-99	-.9
17	36	46	.80	-99	-.9	-99	-.9
18	25	47	.00	-99	-.9	-99	-.9
19	30	52	.00	-99	-.9	-99	-.9
20	40	50	.04	-99	-.9	-99	-.9
21	32	46	.00	-99	-.9	-99	-.9
22	19	42	.00	-99	-.9	-99	-.9
23	22	36	.00	-99	-.9	-99	-.9
24	17	34	.00	-99	-.9	-99	-.9
25	21	48	.00	-99	-.9	-99	-.9
26	15	43	.00	-99	-.9	-99	-.9
27	30	40	.03	-99	-.9	-99	-.9
28	29	39	.00	-99	-.9	-99	-.9
29	34	42	.01	-99	-.9	-99	-.9
30	30	40	1.01	-99	-.9	-99	-.9

12/1943

day	min temp (F)	max temp (F)	precip (in)	low snow elv (ft)	low snow depth (in)	high snow elv (ft)	high snow depth (in)
1	g 30	40	.34	-99	-.9	-99	-.9
2	g 31	44	.50	-99	-.9	-99	-.9
3	35	45	.86	-99	-.9	-99	-.9
4	29	40	.13	-99	-.9	-99	-.9
5	17	34	.00	-99	-.9	-99	-.9
6	15	30	.00	-99	-.9	-99	-.9
7	27	36	.22	2760	.4	-99	-.9
8	22	34	.04	-99	-.9	-99	-.9
9	15	30	.00	-99	-.9	-99	-.9
10	13	28	.00	-99	-.9	-99	-.9
11	13	28	.00	-99	-.9	-99	-.9
12	14	27	.00	-99	-.9	-99	-.9
13	14	32	.00	-99	-.9	-99	-.9
14	16	32	.00	-99	-.9	-99	-.9
15	18	34	.00	-99	-.9	-99	-.9
16	25	36	.00	-99	-.9	-99	-.9
17	25	36	.00	-99	-.9	-99	-.9
18	14	33	.00	-99	-.9	-99	-.9
19	15	38	.00	-99	-.9	-99	-.9
20	16	31	.00	-99	-.9	-99	-.9
21	12	30	.00	-99	-.9	-99	-.9
22	19	31	.10	-99	-.9	-99	-.9
23	29	38	.04	-99	-.9	-99	-.9
24	30	43	.84	-99	-.9	-99	-.9
25	29	38	.46	2760	2.1	-99	-.9
26	21	37	.05	-99	-.9	-99	-.9
27	33	40	.00	-99	-.9	-99	-.9
28	29	39	.00	-99	-.9	-99	-.9
29	26	37	.00	-99	-.9	-99	-.9
30	23	35	.00	-99	-.9	-99	-.9
31	22	32	.25	-99	-.9	-99	-.9

12/1944

day	min temp (F)	max temp (F)	precip (in)	low snow elv (ft)	low snow depth (in)	high snow elv (ft)	high snow depth (in)
1	27	34	.33	3960	5.7	3960	5.7
2	27	35	.02	3960	.4	3960	.4
3	28	37	.03	3960	.6	3960	.6
4	32	42	.53	-99	-.9	-99	-.9
5	39	47	.46	3960	2.5	3960	2.5
6	29	46	.65	3960	5.0	3960	5.0
7	27	35	.01	-99	-.9	-99	-.9
8	15	31	.00	-99	-.9	-99	-.9
9	20	41	.00	-99	-.9	-99	-.9
10	30	41	.00	-99	-.9	-99	-.9
11	34	45	.00	-99	-.9	-99	-.9
12	37	47	.00	-99	-.9	-99	-.9
13	35	46	.00	-99	-.9	-99	-.9
14	22	40	.00	-99	-.9	-99	-.9
15	23	39	.00	-99	-.9	-99	-.9
16	14	33	.00	-99	-.9	-99	-.9
17	11	32	.00	-99	-.9	-99	-.9
18	22	33	.00	-99	-.9	-99	-.9
19	25	32	.31	-99	-.9	-99	-.9
20	25	33	.01	-99	-.9	-99	-.9
21	24	37	.00	-99	-.9	-99	-.9
22	18	33	.00	-99	-.9	-99	-.9
23	19	31	.00	-99	-.9	-99	-.9
24	9	25	.00	-99	-.9	-99	-.9
25	14	24	.00	3960	.4	3960	.4
26	15	31	.00	-99	-.9	-99	-.9
27	25	35	.00	3960	.7	3960	.7
28	23	35	.31	3960	1.3	3960	1.3
29	24	35	.02	3960	3.6	3960	3.6
30	24	34	.25	3960	19.1	3960	19.1
31	24	35	.05	1730	2.0	3960	7.3

1/1945

day	min temp (F)	max temp (F)	precip (in)	low snow elv (ft)	low snow depth (in)	high snow elv (ft)	high snow depth (in)
1	S 28	37	.36	2760	3.5	3960	1.2
2	S 21	36	.05	3960	1.0	3960	1.0
3	S 20	35	.00	3960	.3	3960	.3
4	S 25	41	.13	3960	2.8	3960	2.8
5	R 32	39	.65	3960	3.8	3960	3.8
6	S 31	38	.81	-99	-.9	-99	-.9
7	R 34	45	1.45	-99	-.9	-99	-.9
8	31	45	.00	-99	-.9	-99	-.9
9	30	45	.03	-99	-.9	-99	-.9
10	34	47	.18	-99	-.9	-99	-.9
11	33	45	.03	3960	1.1	3960	1.1
12	36	44	.88	-99	-.9	-99	-.9
13	34	44	.85	3960	1.6	3960	1.6
14	22	37	.03	3960	1.3	3960	1.3
15	28	40	.22	3960	.5	3960	.5
16	27	38	.30	2760	1.0	3960	11.3
17	28	35	1.27	3960	12.0	3960	12.0
18	27	33	.14	3960	6.3	3960	6.3
19	22	32	.03	-99	-.9	-99	-.9
20	14	29	.00	-99	-.9	-99	-.9
21	13	31	.00	-99	-.9	-99	-.9
22	21	37	.00	-99	-.9	-99	-.9
23	26	37	.00	-99	-.9	-99	-.9
24	18	34	.00	-99	-.9	-99	-.9
25	15	34	.00	-99	-.9	-99	-.9
26	16	38	.00	-99	-.9	-99	-.9
27	16	37	.00	-99	-.9	-99	-.9
28	19	34	.00	-99	-.9	-99	-.9
29	20	32	.00	-99	-.9	-99	-.9
30	23	35	.00	-99	-.9	-99	-.9
31	27	36	.03	2760	1.0	3960	.5

9/1945

day	min temp (F)	max temp (F)	precip (in)	low snow elv (ft)	low snow depth (in)	high snow elv (ft)	high snow depth (in)
1	35	70	.00	-99	-.9	-99	-.9
2	42	71	.00	-99	-.9	-99	-.9
3	34	57	.08	-99	-.9	-99	-.9
4	44	51	1.98	-99	-.9	-99	-.9
5	42	54	.10	-99	-.9	-99	-.9
6	40	60	.01	-99	-.9	-99	-.9
7	30	63	.00	-99	-.9	-99	-.9
8	39	63	.00	-99	-.9	-99	-.9
9	27	67	.00	-99	-.9	-99	-.9
10	31	66	.00	-99	-.9	-99	-.9
11	33	65	.00	-99	-.9	-99	-.9
12	33	72	.00	-99	-.9	-99	-.9
13	34	71	.00	-99	-.9	-99	-.9
14	36	66	.00	-99	-.9	-99	-.9
15	42	52	.56	-99	-.9	-99	-.9
16	40	51	.07	-99	-.9	-99	-.9
17	38	50	.13	-99	-.9	-99	-.9
18	35	53	.00	-99	-.9	-99	-.9
19	27	57	.00	-99	-.9	-99	-.9
20	36	56	1.84	-99	-.9	-99	-.9
21	25	46	.00	-99	-.9	-99	-.9
22	35	50	.31	-99	-.9	-99	-.9
23	35	48	.00	-99	-.9	-99	-.9
24	35	48	.72	-99	-.9	-99	-.9
25	36	45	1.38	-99	-.9	-99	-.9
26	28	50	.00	-99	-.9	-99	-.9
27	22	53	.00	-99	-.9	-99	-.9
28	22	56	.00	-99	-.9	-99	-.9
29	26	58	.00	-99	-.9	-99	-.9
30	26	58	.00	-99	-.9	-99	-.9

10/1945

day	min temp (F)	max temp (F)	precip (in)	low snow elv (ft)	low snow depth (in)	high snow elv (ft)	high snow depth (in)
1	28	71	.00	-99	-.9	-99	-.9
2	35	66	.00	-99	-.9	-99	-.9
3	37	54	.02	-99	-.9	-99	-.9
4	30	49	.00	-99	-.9	-99	-.9
5	28	56	.00	-99	-.9	-99	-.9
6	28	57	.00	-99	-.9	-99	-.9
7	28	56	.00	-99	-.9	-99	-.9
8	29	61	.00	-99	-.9	-99	-.9
9	28	62	.00	-99	-.9	-99	-.9
10	31	58	.00	-99	-.9	-99	-.9
11	30	54	.00	-99	-.9	-99	-.9
12	40	52	.00	-99	-.9	-99	-.9
13	33	57	.00	-99	-.9	-99	-.9
14	29	61	.00	-99	-.9	-99	-.9
15	30	57	.00	-99	-.9	-99	-.9
16	38	52	.18	-99	-.9	-99	-.9
17	28	44	.48	3960	1.4	3960	1.4
18	18	44	.00	-99	-.9	-99	-.9
19	32	41	1.15	-99	-.9	-99	-.9
20	23	43	.00	-99	-.9	-99	-.9
21	19	41	.32	3960	6.3	3960	6.3
22	29	38	.39	3960	6.8	3960	6.8
23	19	42	.00	-99	-.9	-99	-.9
24	33	50	.01	-99	-.9	-99	-.9
25	42	53	.57	-99	-.9	-99	-.9
26	31	49	.74	-99	-.9	-99	-.9
27	32	41	.27	3960	3.2	3960	3.2
28	25	45	.03	-99	-.9	-99	-.9
29	36	45	.04	-99	-.9	-99	-.9
30	34	46	.73	-99	-.9	-99	-.9
31	29	43	.01	-99	-.9	-99	-.9

9/1946

day	min temp (F)	max temp (F)	precip (in)	low snow elv (ft)	low snow depth (in)	high snow elv (ft)	high snow depth (in)
1	43	65	.01	-99	-.9	-99	-.9
2	39	60	.03	-99	-.9	-99	-.9
3	46	55	.01	-99	-.9	-99	-.9
4	44	53	.07	-99	-.9	-99	-.9
5	43	56	.28	-99	-.9	-99	-.9
6	41	51	.13	-99	-.9	-99	-.9
7	40	56	.00	-99	-.9	-99	-.9
8	33	58	.00	-99	-.9	-99	-.9
9	30	72	.00	-99	-.9	-99	-.9
10	35	78	.00	-99	-.9	-99	-.9
11	41	69	.00	-99	-.9	-99	-.9
12	46	64	.00	-99	-.9	-99	-.9
13	46	63	.00	-99	-.9	-99	-.9
14	43	52	.19	-99	-.9	-99	-.9
15	38	53	.18	-99	-.9	-99	-.9
16	43	47	1.11	3960	6.0	3960	6.0
17	35	59	.00	-99	-.9	-99	-.9
18	27	63	.00	-99	-.9	-99	-.9
19	28	66	.00	-99	-.9	-99	-.9
20	43	56	.00	-99	-.9	-99	-.9
21	37	53	.07	-99	-.9	-99	-.9
22	26	56	.00	-99	-.9	-99	-.9
23	28	68	.00	-99	-.9	-99	-.9
24	35	66	.00	-99	-.9	-99	-.9
25	32	56	.00	-99	-.9	-99	-.9
26	37	51	.00	-99	-.9	-99	-.9
27	33	50	.00	-99	-.9	-99	-.9
28	23	64	.00	-99	-.9	-99	-.9
29	41	68	.00	-99	-.9	-99	-.9
30	38	58	.25	-99	-.9	-99	-.9

10/1946

day	min temp (F)	max temp (F)	precip (in)	low snow elv (ft)	low snow depth (in)	high snow elv (ft)	high snow depth (in)
1	35	48	.22	-99	-.9	-99	-.9
2	32	49	.04	-99	-.9	-99	-.9
3	34	48	.01	-99	-.9	-99	-.9
4	34	47	.43	-99	-.9	-99	-.9
5	28	50	.00	-99	-.9	-99	-.9
6	23	54	.00	-99	-.9	-99	-.9
7	33	46	.55	-99	-.9	-99	-.9
8	32	47	.00	-99	-.9	-99	-.9
9	35	48	.02	-99	-.9	-99	-.9
10	20	51	.00	-99	-.9	-99	-.9
11	20	51	.00	-99	-.9	-99	-.9
12	25	48	.00	-99	-.9	-99	-.9
13	25	44	.25	-99	-.9	-99	-.9
14	31	44	.50	-99	-.9	-99	-.9
15	20	49	.00	-99	-.9	-99	-.9
16	17	46	.00	-99	-.9	-99	-.9
17	27	48	.00	-99	-.9	-99	-.9
18	25	49	.00	-99	-.9	-99	-.9
19	29	43	.16	3960	1.4	3960	1.4
20	35	44	1.63	-99	-.9	-99	-.9
21	28	45	.26	-99	-.9	-99	-.9
22	34	46	.51	3960	.2	3960	.2
23	32	41	.19	3960	7.1	3960	7.1
24	31	52	.37	-99	-.9	-99	-.9
25	25	48	1.88	3960	3.4	3960	3.4
26	26	36	.13	2760	2.0	3960	.3
27	18	41	.00	-99	-.9	-99	-.9
28	15	35	.00	3960	.8	3960	.8
29	24	31	.57	1560	1.0	3960	3.0
30	18	36	.04	-99	-.9	-99	-.9
31	30	38	.27	3960	7.2	3960	7.2

9/1947

day	min temp (F)	max temp (F)	precip (in)	low snow elv (ft)	low snow depth (in)	high snow elv (ft)	high snow depth (in)
1	37	71	.00	-99	-.9	-99	-.9
2	40	64	.00	-99	-.9	-99	-.9
3	43	60	.00	-99	-.9	-99	-.9
4	38	63	.02	-99	-.9	-99	-.9
5	24	56	.00	-99	-.9	-99	-.9
6	27	52	.12	-99	-.9	-99	-.9
7	40	51	.65	-99	-.9	-99	-.9
8	39	50	.38	-99	-.9	-99	-.9
9	41	49	.26	-99	-.9	-99	-.9
10	34	58	.00	-99	-.9	-99	-.9
11	30	67	.00	-99	-.9	-99	-.9
12	34	67	.00	-99	-.9	-99	-.9
13	37	56	.00	-99	-.9	-99	-.9
14	30	61	.00	-99	-.9	-99	-.9
15	31	55	.00	-99	-.9	-99	-.9
16	37	50	2.72	-99	-.9	-99	-.9
17	34	50	.15	-99	-.9	-99	-.9
18	24	54	.15	-99	-.9	-99	-.9
19	24	56	.02	-99	-.9	-99	-.9
20	25	58	.00	-99	-.9	-99	-.9
21	24	65	.00	-99	-.9	-99	-.9
22	25	68	.00	-99	-.9	-99	-.9
23	38	68	.00	-99	-.9	-99	-.9
24	33	65	.00	-99	-.9	-99	-.9
25	35	58	.00	-99	-.9	-99	-.9
26	42	55	.00	-99	-.9	-99	-.9
27	39	61	.00	-99	-.9	-99	-.9
28	40	59	.00	-99	-.9	-99	-.9
29	43	61	.00	-99	-.9	-99	-.9
30	34	65	.00	-99	-.9	-99	-.9

10/1947

day	min temp (F)	max temp (F)	precip (in)	low snow elv (ft)	low snow depth (in)	high snow elv (ft)	high snow depth (in)
1	43	60	.05	-99	-.9	-99	-.9
2	43	55	.83	-99	-.9	-99	-.9
3	46	59	.84	-99	-.9	-99	-.9
4	39	53	.16	-99	-.9	-99	-.9
5	30	49	.00	-99	-.9	-99	-.9
6	26	52	.00	-99	-.9	-99	-.9
7	36	49	.00	-99	-.9	-99	-.9
8	37	55	.05	-99	-.9	-99	-.9
9	38	49	.33	-99	-.9	-99	-.9
10	R 31	48	.37	-99	-.9	-99	-.9
11	R 26	51	.00	-99	-.9	-99	-.9
12	R 37	58	.50	-99	-.9	-99	-.9
13	R 48	52	.00	-99	-.9	-99	-.9
14	S 25	44	1.66	-99	-.9	-99	-.9
15	R 36	45	.82	-99	-.9	-99	-.9
16	R 32	43	1.65	3960	2.6	3960	2.6
17	R 30	45	.86	3960	4.2	3960	4.2
18	R 32	48	1.72	-99	-.9	-99	-.9
19	R 33	50	.79	3960	6.2	3960	6.2
20	31	42	.00	3960	.6	3960	.6
21	26	44	.06	3960	.1	3960	.1
22	25	42	.06	3960	.7	3960	.7
23	32	47	.26	3960	2.4	3960	2.4
24	30	53	.00	-99	-.9	-99	-.9
25	43	61	.09	-99	-.9	-99	-.9
26	25	49	.09	-99	-.9	-99	-.9
27	30	47	.01	-99	-.9	-99	-.9
28	32	46	.54	3960	.2	3960	.2
29	26	50	.00	-99	-.9	-99	-.9
30	32	45	.65	3960	3.3	3960	3.3
31	33	45	.65	-99	-.9	-99	-.9

10/1948

day	min temp (F)	max temp (F)	precip (in)	low snow elv (ft)	low snow depth (in)	high snow elv (ft)	high snow depth (in)
1	43	66	.00	-99	-.9	-99	-.9
2	47	66	.00	-99	-.9	-99	-.9
3	39	57	.02	-99	-.9	-99	-.9
4	32	52	1.47	-99	-.9	-99	-.9
5	31	45	.09	3960	4.6	3960	4.6
6	32	41	.20	3960	1.0	3960	1.0
7	38	51	.45	-99	-.9	-99	-.9
8	20	55	.00	-99	-.9	-99	-.9
9	26	58	.00	-99	-.9	-99	-.9
10	34	49	.23	-99	-.9	-99	-.9
11	33	47	.18	-99	-.9	-99	-.9
12	29	44	.01	-99	-.9	-99	-.9
13	29	41	.00	-99	-.9	-99	-.9
14	36	49	.00	-99	-.9	-99	-.9
15	22	47	.00	-99	-.9	-99	-.9
16	20	51	.00	-99	-.9	-99	-.9
17	19	58	.00	-99	-.9	-99	-.9
18	33	61	.00	-99	-.9	-99	-.9
19	34	52	.00	-99	-.9	-99	-.9
20	23	54	.00	-99	-.9	-99	-.9
21	25	53	.00	-99	-.9	-99	-.9
22	37	48	.00	-99	-.9	-99	-.9
23	32	50	.04	-99	-.9	-99	-.9
24	36	55	.20	-99	-.9	-99	-.9
25	26	48	.00	-99	-.9	-99	-.9
26	28	46	.36	-99	-.9	-99	-.9
27	15	45	.00	-99	-.9	-99	-.9
28	18	33	.20	-99	-.9	-99	-.9
29	23	44	.00	-99	-.9	-99	-.9
30	29	36	.39	3960	7.2	3960	7.2
31	29	37	.43	3960	1.7	3960	1.7

11/1948

day	min temp (F)	max temp (F)	precip (in)	low snow elv (ft)	low snow depth (in)	high snow elv (ft)	high snow depth (in)
1	23	35	.05	3960	.2	3960	.2
2	27	40	.79	3960	2.2	3960	2.2
3	27	39	.42	2760	3.0	3960	13.4
4	22	38	.08	3960	3.5	3960	3.5
5	24	41	.25	3960	4.0	3960	4.0
6	20	38	.00	3960	1.3	3960	1.3
7	22	36	.16	1730	2.8	3960	3.0
8	13	34	.02	-99	-.9	-99	-.9
9	12	33	.00	-99	-.9	-99	-.9
10	16	36	.00	-99	-.9	-99	-.9
11	16	34	.00	-99	-.9	-99	-.9
12	26	35	.15	3960	4.0	3960	4.0
13	28	38	.03	3960	1.4	3960	1.4
14	29	38	1.42	3960	8.0	3960	8.0
15	27	37	.50	2760	2.0	3960	6.4
16	27	38	.84	2760	2.0	3960	4.6
17	24	34	.20	2760	6.0	3960	8.0
18	20	35	.00	3960	.1	3960	.1
19	26	38	.28	3960	2.0	3960	2.0
20	29	37	.71	3960	3.0	3960	3.0
21	26	37	.04	-99	-.9	-99	-.9
22	30	42	.44	-99	-.9	-99	-.9
23	29	44	1.08	-99	-.9	-99	-.9
24	27	41	.24	2760	3.0	3960	10.5
25	21	36	.98	2760	8.0	3960	21.3
26	19	32	.09	1560	5.5	3960	9.3
27	22	36	.16	1560	2.0	3960	2.5
28	27	39	1.57	2760	5.0	3960	14.0
29	25	34	.05	3960	.6	3960	.6
30	25	34	.88	2760	10.0	3960	10.6

2/1950

day	min temp (F)	max temp (F)	precip (in)	low snow elv (ft)	low snow depth (in)	high snow elv (ft)	high snow depth (in)
1	-13	17	.00	-99	-.9	-99	-.9
2	1	23	.00	-99	-.9	-99	-.9
3	9	23	.00	-99	-.9	-99	-.9
4	14	28	.11	1560	3.0	3960	1.5
5	20	37	.08	-99	-.9	-99	-.9
6	24	38	.46	2760	3.0	3960	4.4
7	21	31	.29	1560	3.5	3960	2.5
8	22	34	.79	2760	8.0	3960	9.1
9	22	33	.04	3960	1.6	3960	1.6
10	22	35	.09	3960	2.3	3960	2.3
11	24	33	.10	1730	2.0	3960	5.7
12	25	34	.29	1730	.8	3960	1.2
13	27	42	.51	3960	2.3	3960	2.3
14	30	45	.08	3960	.1	3960	.1
15	34	40	.34	-99	-.9	-99	-.9
16	27	37	.49	3960	1.7	3960	1.7
17	25	41	.04	3960	.2	3960	.2
18	34	49	.00	-99	-.9	-99	-.9
19	23	44	.16	3960	1.1	3960	1.1
20	22	43	.06	1560	2.0	3960	4.1
21	24	36	.35	1560	.5	3960	8.4
22	28	40	.25	3960	3.1	3960	3.1
23	25	43	.53	3960	13.1	3960	13.1
24	31	42	.84	3960	6.8	3960	6.8
25	28	51	1.04	3960	2.4	3960	2.4
26	25	51	.35	2760	1.0	3960	4.7
27	21	38	.21	1730	.5	3960	.3
28	17	43	.00	-99	-.9	-99	-.9

3/1950

day	min temp (F)	max temp (F)	precip (in)	low snow elv (ft)	low snow depth (in)	high snow elv (ft)	high snow depth (in)
1	R 29	49	.00	-99	-.9	-99	-.9
2	S 25	40	.21	3960	2.5	3960	2.5
3	R 32	49	1.22	-99	-.9	-99	-.9
4	R 29	42	2.32	3960	5.0	3960	5.0
5	31	38	.65	2760	.5	3960	6.5
6	26	36	.03	2760	2.0	3960	6.7
7	17	40	.01	-99	-.9	-99	-.9
8	29	38	.04	3960	1.0	3960	1.0
9	25	36	.19	1730	.2	3960	1.9
10	20	32	.10	3960	1.7	3960	1.7
11	17	30	.00	3960	.7	3960	.7
12	18	33	.07	3960	.3	3960	.3
13	21	37	.08	1560	2.0	3960	.9
14	25	40	.02	3960	1.5	3960	1.5
15	27	39	.06	3960	1.9	3960	1.9
16	28	37	.58	3960	4.7	3960	4.7
17	29	46	1.43	3960	4.5	3960	4.5
18	27	33	.83	3960	4.8	3960	4.8
19	26	37	.81	2760	2.0	3960	3.5
20	18	38	.06	3960	.4	3960	.4
21	23	45	.18	3960	.5	3960	.5
22	26	41	.59	2760	7.0	3960	3.3
23	23	48	.04	1730	1.2	3960	.3
24	26	39	.12	3960	2.2	3960	2.2
25	23	39	.05	-99	-.9	-99	-.9
26	23	36	.21	3960	8.7	3960	8.7
27	26	37	.20	1730	2.0	3960	16.8
28	25	45	.02	1730	.8	3960	7.6
29	16	45	.00	3960	.1	3960	.1
30	27	41	.42	3960	2.6	3960	2.6
31	28	42	.13	3960	1.8	3960	1.8

1/1951

day	min temp (F)	max temp (F)	precip (in)	low snow elv (ft)	low snow depth (in)	high snow elv (ft)	high snow depth (in)
1	23	32	.34	1730	.8	3960	8.3
2	27	37	1.83	1730	1.5	3960	15.8
3	26	35	.11	2760	11.0	3960	5.6
4	24	30	.20	1560	7.5	3960	5.9
5	24	33	.11	3960	.4	3960	.4
6	19	35	.00	-99	-.9	-99	-.9
7	25	32	.09	3960	.5	3960	.5
8	21	35	.01	-99	-.9	-99	-.9
9	21	33	.00	-99	-.9	-99	-.9
10	28	36	.03	2760	1.0	3960	.6
11	26	37	.16	3960	.2	3960	.2
12	27	35	.21	3960	4.2	3960	4.2
13	26	37	.53	1730	.7	3960	18.9
14	25	37	.02	2760	2.0	3960	2.9
15	24	41	1.05	1730	.5	3960	10.2
16	21	30	.76	1560	4.5	3960	15.7
17	25	32	.30	1730	1.0	3960	5.8
18	21	31	.09	1560	2.0	3960	1.2
19	20	30	.24	1560	4.5	3960	.2
20	22	33	.06	1560	.5	3960	.9
21	21	30	1.30	1560	4.5	3960	15.1
22	22	34	.24	1560	4.0	3960	4.7
23	23	33	.07	1560	1.0	3960	1.7
24	26	45	.50	3960	2.0	3960	2.0
25	33	45	.68	-99	-.9	-99	-.9
26	21	40	.30	3960	.5	3960	.5
27	10	38	.03	1560	1.0	3960	.3
28	3	21	.00	-99	-.9	-99	-.9
29	-1	21	.00	-99	-.9	-99	-.9
30	3	23	.00	-99	-.9	-99	-.9
31	14	21	.00	-99	-.9	-99	-.9

2/1951

day	min temp (F)	max temp (F)	precip (in)	low snow elv (ft)	low snow depth (in)	high snow elv (ft)	high snow depth (in)
1	S 11	22	.07	2760	3.0	3960	3.0
2	S 16	36	1.27	1560	4.0	3960	19.7
3	S 25	34	.52	2760	7.0	3960	7.0
4	S 22	36	.03	3960	.1	3960	.1
5	S 23	35	.00	3960	1.3	3960	1.3
6	S 17	34	.19	3960	.7	3960	.7
7	S 28	42	1.06	3960	.7	3960	.7
8	R 33	42	1.12	3960	3.0	3960	3.0
9	R 34	45	4.21	-99	-.9	-99	-.9
10	38	50	.85	-99	-.9	-99	-.9
11	30	41	.60	3960	16.7	3960	16.7
12	20	37	.02	-99	-.9	-99	-.9
13	18	43	.00	-99	-.9	-99	-.9
14	32	47	.00	-99	-.9	-99	-.9
15	24	39	.30	2760	3.0	3960	2.0
16	18	42	.00	-99	-.9	-99	-.9
17	26	36	.30	2760	3.0	3960	2.9
18	24	36	.02	1560	2.0	3960	1.5
19	24	31	.32	1560	1.0	3960	2.8
20	24	39	.47	1730	.3	3960	.4
21	23	37	.00	-99	-.9	-99	-.9
22	15	38	.00	-99	-.9	-99	-.9
23	13	38	.00	-99	-.9	-99	-.9
24	16	33	.12	2760	2.0	3960	2.1
25	20	33	.00	1560	1.0	3960	1.3
26	12	35	.06	-99	-.9	-99	-.9
27	11	35	.00	-99	-.9	-99	-.9
28	10	34	.00	-99	-.9	-99	-.9

1/1952

day	min temp (F)	max temp (F)	precip (in)	low snow elv (ft)	low snow depth (in)	high snow elv (ft)	high snow depth (in)
1	-4	15	.00	-99	-.9	-99	-.9
2	10	17	.00	-99	-.9	-99	-.9
3	9	17	.02	2760	1.1	3960	.5
4	13	22	.01	-99	-.9	-99	-.9
5	18	25	.02	2760	3.0	3960	.5
6	20	27	.07	-99	-.9	-99	-.9
7	19	28	.11	2760	1.0	3960	2.7
8	21	31	.02	1560	3.5	3960	3.4
9	22	31	.37	2760	16.0	3960	4.6
10	21	29	.21	1560	12.0	3960	5.2
11	20	31	.03	1560	1.0	3960	.1
12	19	30	.02	-99	-.9	-99	-.9
13	16	25	.00	3960	.4	3960	.4
14	18	29	.03	2760	3.0	3960	.2
15	18	32	.00	-99	-.9	-99	-.9
16	17	29	.00	-99	-.9	-99	-.9
17	15	32	.00	-99	-.9	-99	-.9
18	20	31	.14	2760	2.0	3960	5.2
19	23	29	.24	2760	3.0	3960	2.5
20	22	32	.43	1560	4.5	3960	2.5
21	15	28	.18	1560	5.5	3960	.3
22	17	24	.05	1560	3.5	3960	.6
23	18	27	.06	1560	4.0	3960	2.4
24	22	31	.64	3960	4.8	3960	4.8
25	20	39	.02	3960	.1	3960	.1
26	26	39	.16	3960	1.4	3960	1.4
27	30	44	.13	3960	.4	3960	.4
28	23	48	.00	3960	.9	3960	.9
29	31	46	.03	3960	1.5	3960	1.5
30	31	40	1.55	3960	7.9	3960	7.9
31	30	38	.18	3960	2.5	3960	2.5

2/1952

day	min temp (F)	max temp (F)	precip (in)	low snow elv (ft)	low snow depth (in)	high snow elv (ft)	high snow depth (in)
1	R 33	41	.40	3960	.8	3960	.8
2	S 26	39	.14	3960	4.3	3960	4.3
3	S 28	37	.29	2760	1.0	3960	13.7
4	R 30	41	1.58	3960	11.9	3960	11.9
5	22	39	.00	-99	-.9	-99	-.9
6	22	45	.00	-99	-.9	-99	-.9
7	28	41	.00	-99	-.9	-99	-.9
8	23	41	.00	-99	-.9	-99	-.9
9	22	40	.15	3960	1.5	3960	1.5
10	26	53	.00	-99	-.9	-99	-.9
11	26	52	.36	3960	8.2	3960	8.2
12	22	34	.22	1560	3.5	3960	4.6
13	17	35	.00	-99	-.9	-99	-.9
14	24	34	.03	2760	1.0	3960	.3
15	24	30	.34	1560	2.0	3960	1.3
16	20	28	.07	1560	2.5	3960	.5
17	15	30	.00	3960	.3	3960	.3
18	17	32	.00	3960	.1	3960	.1
19	18	34	.00	2760	.5	3960	.1
20	17	28	.03	2760	2.7	3960	.7
21	14	33	.00	-99	-.9	-99	-.9
22	18	32	.00	3960	.2	3960	.2
23	25	39	.00	-99	-.9	-99	-.9
24	25	43	.00	3960	.8	3960	.8
25	29	37	.48	3960	1.2	3960	1.2
26	28	34	.33	3960	.1	3960	.1
27	24	38	.00	-99	-.9	-99	-.9
28	14	37	.01	3960	3.8	3960	3.8
29	22	37	.00	1560	1.0	3960	2.4

12/1952

day	min temp (F)	max temp (F)	precip (in)	low snow elv (ft)	low snow depth (in)	high snow elv (ft)	high snow depth (in)
1	23	38	.00	3960	.8	3960	.8
2	27	36	.28	3960	2.2	3960	2.2
3	27	35	.41	2760	1.0	3960	7.8
4	28	40	.70	3960	.8	3960	.8
5	27	39	.27	3960	.1	3960	.1
6	24	35	.20	2760	2.5	3960	1.4
7	26	35	.72	2760	2.5	3960	12.4
8	26	33	.24	1560	.5	3960	6.8
9	24	34	.26	2760	2.5	3960	2.5
10	26	35	.15	2760	2.5	3960	4.9
11	21	39	.25	1730	1.0	3960	4.8
12	32	47	.35	-99	-.9	-99	-.9
13	37	43	.00	-99	-.9	-99	-.9
14	30	42	.00	-99	-.9	-99	-.9
15	17	33	.00	-99	-.9	-99	-.9
16	24	37	.02	-99	-.9	-99	-.9
17	17	33	.00	-99	-.9	-99	-.9
18	14	30	.00	3960	.2	3960	.2
19	22	35	.02	3960	.2	3960	.2
20	16	28	.02	2760	1.0	3960	.4
21	20	30	.38	1560	.5	3960	5.0
22	23	33	.10	1730	1.0	3960	.1
23	18	34	.05	-99	-.9	-99	-.9
24	23	32	.00	-99	-.9	-99	-.9
25	21	28	.00	3960	.2	3960	.2
26	19	32	.00	-99	-.9	-99	-.9
27	26	38	.00	-99	-.9	-99	-.9
28	24	36	.43	2760	.5	3960	5.6
29	24	39	.35	2760	.5	3960	1.4
30	31	41	.15	3960	1.2	3960	1.2
31	26	36	.13	1730	.6	3960	4.0

1/1953

day		min temp (F)	max temp (F)	precip (in)	low snow elv (ft)	low snow depth (in)	high snow elv (ft)	high snow depth (in)
1		24	35	.02	2760	1.0	3960	4.3
2		28	38	1.24	1730	2.0	3960	4.5
3		33	42	.51	-99	-.9	-99	-.9
4		19	37	.02	-99	-.9	-99	-.9
5		26	33	.00	-99	-.9	-99	-.9
6		17	38	.41	3960	2.2	3960	2.2
7	S	24	38	1.13	2760	2.0	3960	5.3
8	R	31	47	1.77	3960	6.8	3960	6.8
9	S	24	44	1.43	2760	1.0	3960	.6
10	S	26	37	.05	1730	1.0	3960	.7
11	R	30	47	2.02	-99	-.9	-99	-.9
12	R	35	45	.59	3960	.3	3960	.3
13	R	33	40	.23	3960	2.1	3960	2.1
14	R	32	42	.08	3960	5.4	3960	5.4
15	S	30	43	.34	3960	3.9	3960	3.9
16	S	28	39	.59	3960	4.0	3960	4.0
17	S	28	40	.52	3960	.2	3960	.2
18	R	35	43	.52	3960	3.7	3960	3.7
19	S	33	40	.45	3960	2.1	3960	2.1
20	S	31	37	.25	2760	.5	3960	10.0
21	S	29	36	.33	3960	5.0	3960	5.0
22	S	29	37	1.07	2760	3.0	3960	15.9
23	R	34	44	1.13	-99	-.9	-99	-.9
24		33	42	.20	3960	3.0	3960	3.0
25		25	36	.70	2760	7.0	3960	6.4
26		21	32	.56	1560	2.5	3960	12.7
27		22	36	.68	2760	5.0	3960	22.0
28		27	37	.67	1730	1.0	3960	5.0
29		34	41	.42	3960	1.4	3960	1.4
30		33	40	.42	3960	1.4	3960	1.4
31		37	48	1.18	3960	.4	3960	.4

11/1953

day	min temp (F)	max temp (F)	precip (in)	low snow elv (ft)	low snow depth (in)	high snow elv (ft)	high snow depth (in)
1	30	44	1.57	3960	.2	3960	.2
2	19	41	.02	-99	-.9	-99	-.9
3	17	48	.00	-99	-.9	-99	-.9
4	24	50	.00	-99	-.9	-99	-.9
5	30	44	.23	3960	.8	3960	.8
6	30	40	.48	3960	4.5	3960	4.5
7	33	47	.08	-99	-.9	-99	-.9
8	42	56	.00	-99	-.9	-99	-.9
9	42	54	.02	-99	-.9	-99	-.9
10	40	53	.22	-99	-.9	-99	-.9
11	36	52	.06	-99	-.9	-99	-.9
12	34	50	.20	-99	-.9	-99	-.9
13	35	51	.00	-99	-.9	-99	-.9
14	39	54	.16	-99	-.9	-99	-.9
15	34	47	.51	3960	.7	3960	.7
16	29	36	.64	1730	1.5	3960	7.4
17	23	34	.50	2760	1.0	3960	1.8
18	20	38	.06	2760	1.0	3960	.4
19	30	37	.26	3960	1.1	3960	1.1
20	27	37	.19	3960	.7	3960	.7
21	25	35	.43	3960	5.1	3960	5.1
22	32	45	.47	3960	2.4	3960	2.4
23	31	44	.02	3960	1.7	3960	1.7
24	32	43	.12	-99	-.9	-99	-.9
25	29	44	1.52	3960	1.0	3960	1.0
26	21	41	.05	3960	1.4	3960	1.4
27	33	41	.26	3960	1.9	3960	1.9
28	27	39	.06	3960	1.5	3960	1.5
29	31	44	.49	-99	-.9	-99	-.9
30	29	44	.70	3960	5.1	3960	5.1

12/1953

day	min temp (F)	max temp (F)	precip (in)	low snow elv (ft)	low snow depth (in)	high snow elv (ft)	high snow depth (in)
1	S 29	38	.09	2760	3.0	3960	9.7
2	S 29	40	.18	2760	1.0	3960	1.6
3	S 21	37	1.11	2760	5.0	3960	11.2
4	S 22	33	.46	2760	14.0	3960	18.6
5	S 28	39	.82	1730	1.0	3960	17.9
6	S 25	38	1.14	1730	11.5	3960	10.7
7	S 25	31	.05	1560	1.5	3960	2.2
8	S 20	32	.60	3960	1.7	3960	1.7
9	S 26	42	2.20	1730	1.0	3960	13.3
10	26	34	.14	2760	5.0	3960	4.1
11	27	41	.62	1730	1.4	3960	3.2
12	29	41	.28	3960	.8	3960	.8
13	21	41	.00	-99	-.9	-99	-.9
14	32	39	.41	-99	-.9	-99	-.9
15	27	44	.03	-99	-.9	-99	-.9
16	38	46	.00	-99	-.9	-99	-.9
17	37	45	.00	-99	-.9	-99	-.9
18	32	40	.15	3960	.6	3960	.6
19	33	40	.62	3960	1.0	3960	1.0
20	30	41	.74	2760	2.0	3960	8.8
21	28	37	.00	2760	3.0	3960	1.4
22	17	41	.00	-99	-.9	-99	-.9
23	30	39	.15	3960	2.4	3960	2.4
24	28	36	.00	3960	.3	3960	.3
25	27	38	.00	-99	-.9	-99	-.9
26	27	37	.19	3960	5.1	3960	5.1
27	27	34	.02	3960	.1	3960	.1
28	26	39	.53	3960	5.9	3960	5.9
29	24	33	.03	2760	1.0	3960	.9
30	25	34	.07	3960	.3	3960	.3
31	31	39	.17	3960	.4	3960	.4

1/1955

day	min temp (F)	max temp (F)	precip (in)	low snow elv (ft)	low snow depth (in)	high snow elv (ft)	high snow depth (in)
1	26	34	.32	2760	6.0	3960	4.9
2	21	28	.36	1560	5.0	3960	1.0
3	19	31	.00	-99	-.9	-99	-.9
4	19	30	.04	1730	.6	3960	1.5
5	21	28	.16	920	6.0	3960	1.9
6	20	31	.00	-99	-.9	-99	-.9
7	20	32	.00	-99	-.9	-99	-.9
8	20	34	.00	3960	.7	3960	.7
9	21	31	.00	-99	-.9	-99	-.9
10	18	30	.00	-99	-.9	-99	-.9
11	23	30	.00	3960	2.4	3960	2.4
12	27	37	.05	3960	1.1	3960	1.1
13	26	36	.30	2760	8.0	3960	12.9
14	24	33	.09	2760	1.5	3960	.3
15	24	30	.35	1730	.8	3960	.7
16	21	30	.35	1560	4.0	3960	5.7
17	23	34	.11	1560	1.5	3960	.9
18	27	38	.00	2760	1.0	3960	.4
19	13	32	.00	3960	5.7	3960	5.7
20	23	31	.17	1560	2.5	3960	7.9
21	18	32	.00	2760	1.0	3960	.4
22	26	39	.14	3960	.3	3960	.3
23	34	39	.42	3960	2.0	3960	2.0
24	22	35	.39	3960	6.2	3960	6.2
25	31	38	.05	3960	1.3	3960	1.3
26	19	37	.00	-99	-.9	-99	-.9
27	17	28	.00	-99	-.9	-99	-.9
28	19	27	.02	-99	-.9	-99	-.9
29	20	41	.00	-99	-.9	-99	-.9
30	24	38	.01	-99	-.9	-99	-.9
31	27	38	.49	3960	5.1	3960	5.1

2/1955

day	min temp (F)	max temp (F)	precip (in)	low snow elv (ft)	low snow depth (in)	high snow elv (ft)	high snow depth (in)
1	S 27	35	.07	1730	1.0	3960	2.5
2	S 21	31	.27	1560	1.5	3960	1.4
3	S 16	33	.00	-99	-.9	-99	-.9
4	S 26	36	.27	1730	1.5	3960	7.3
5	S 25	30	.33	2760	6.5	3960	4.1
6	S 24	39	.28	1730	.5	3960	9.3
7	R 32	40	2.40	2760	2.5	3960	3.1
8	S 22	39	2.01	1730	2.0	3960	19.0
9	20	29	.55	690	.5	3960	3.9
10	12	32	.00	-99	-.9	-99	-.9
11	25	36	.00	-99	-.9	-99	-.9
12	24	35	.08	3960	.5	3960	.5
13	27	40	.18	3960	.7	3960	.7
14	27	38	.11	3960	1.8	3960	1.8
15	27	34	.14	-99	-.9	-99	-.9
16	16	33	.16	3960	5.3	3960	5.3
17	19	30	.21	1560	5.5	3960	5.4
18	11	34	.00	-99	-.9	-99	-.9
19	7	31	.00	-99	-.9	-99	-.9
20	13	35	.00	-99	-.9	-99	-.9
21	15	30	.00	3960	1.7	3960	1.7
22	25	34	.18	2760	2.0	3960	.3
23	20	34	.00	2760	.3	3960	4.2
24	25	33	.40	1730	2.0	3960	16.8
25	19	32	.04	1560	1.0	3960	5.2
26	18	30	.05	2760	1.5	3960	.6
27	14	27	.00	2760	3.0	3960	.8
28	22	31	.61	1560	4.5	3960	16.3

11/1955

day	min temp (F)	max temp (F)	precip (in)	low snow elv (ft)	low snow depth (in)	high snow elv (ft)	high snow depth (in)
1	22	39	.10	2760	2.0	3960	.1
2	26	35	1.10	1730	1.0	3960	3.0
3	34	50	.75	-99	-.9	-99	-.9
4	31	50	1.07	3960	.1	3960	.1
5	21	38	.00	-99	-.9	-99	-.9
6	27	38	.10	-99	-.9	-99	-.9
7	32	38	.00	-99	-.9	-99	-.9
8	35	45	.02	-99	-.9	-99	-.9
9	37	52	.35	-99	-.9	-99	-.9
10	21	51	1.81	3960	5.0	3960	5.0
11	16	35	.10	1560	6.5	3960	10.6
12	0	17	.00	920	8.0	3960	.1
13	0	15	.00	-99	-.9	-99	-.9
14	-3	13	.15	-99	-.9	-99	-.9
15	-8	14	.00	-99	-.9	-99	-.9
16	9	18	.00	-99	-.9	-99	-.9
17	12	21	.01	1730	.5	3960	1.8
18	12	28	1.16	1560	2.0	3960	12.3
19	25	37	.88	2760	5.0	3960	6.0
20	24	34	.15	3960	1.0	3960	1.0
21	22	33	.10	1730	1.5	3960	4.3
22	23	33	.05	-99	-.9	-99	-.9
23	24	33	.33	1560	1.5	3960	4.4
24	25	37	1.30	3960	9.7	3960	9.7
25	29	39	1.10	2760	1.0	3960	14.4
26	23	35	1.15	3960	8.6	3960	8.6
27	25	35	.34	3960	.4	3960	.4
28	29	37	.03	-99	-.9	-99	-.9
29	34	38	.23	-99	-.9	-99	-.9
30	29	36	1.00	3960	6.1	3960	6.1

12/1955

day	min temp (F)	max temp (F)	precip (in)	low snow elv (ft)	low snow depth (in)	high snow elv (ft)	high snow depth (in)
1	S 27	36	.57	1560	1.0	3960	7.6
2	S 21	32	.14	-99	-.9	-99	-.9
3	S 25	32	.02	3960	.2	3960	.2
4	S 21	35	.00	-99	-.9	-99	-.9
5	S 20	27	.17	1560	1.5	3960	2.2
6	S 23	34	.87	1560	.5	3960	7.3
7	S 27	38	.08	1730	1.5	3960	1.4
8	S 27	36	.56	2760	1.0	3960	3.8
9	S 26	35	.42	1730	.5	3960	1.9
10	S 26	35	.18	2760	.5	3960	1.2
11	R 29	46	2.60	3960	.2	3960	.2
12	23	44	1.34	-99	-.9	-99	-.9
13	15	25	.00	-99	-.9	-99	-.9
14	11	28	.00	-99	-.9	-99	-.9
15	21	27	.03	2760	1.0	3960	.1
16	22	25	.18	3960	1.9	3960	1.9
17	20	27	.10	690	2.0	3960	4.1
18	11	21	.28	30	5.0	3960	.2
19	17	30	.27	3960	1.4	3960	1.4
20	24	40	1.80	3960	4.4	3960	4.4
21	30	40	.97	3960	1.1	3960	1.1
22	23	43	.92	2760	.5	3960	6.7
23	22	29	.27	1560	2.5	3960	3.3
24	-99	-99	-.90	2760	4.0	3960	.3
25	31	38	.12	3960	.6	3960	.6
26	23	33	.72	2760	1.5	3960	6.4
27	21	28	.26	690	1.0	3960	2.5
28	18	24	.00	-99	-.9	-99	-.9
29	11	22	.00	-99	-.9	-99	-.9
30	12	32	.00	-99	-.9	-99	-.9
31	12	29	.00	-99	-.9	-99	-.9

11/1956

day	min temp (F)	max temp (F)	precip (in)	low snow elv (ft)	low snow depth (in)	high snow elv (ft)	high snow depth (in)
1	25	36	.46	2760	2.0	3960	1.9
2	25	40	.03	-99	-.9	-99	-.9
3	32	47	.02	-99	-.9	-99	-.9
4	33	44	.02	-99	-.9	-99	-.9
5	33	41	.38	-99	-.9	-99	-.9
6	35	40	.11	-99	-.9	-99	-.9
7	34	48	.00	-99	-.9	-99	-.9
8	30	49	.00	-99	-.9	-99	-.9
9	34	50	.00	-99	-.9	-99	-.9
10	33	43	.47	-99	-.9	-99	-.9
11	30	40	.00	-99	-.9	-99	-.9
12	28	43	.18	3960	1.0	3960	1.0
13	22	39	.76	1730	.5	3960	9.0
14	20	34	.11	-99	-.9	-99	-.9
15	28	35	.25	2760	.3	3960	4.5
16	28	34	.51	2760	.5	3960	3.9
17	22	42	1.25	2760	2.0	3960	9.8
18	22	28	.29	1560	8.0	3960	10.0
19	16	30	.00	-99	-.9	-99	-.9
20	17	34	.00	-99	-.9	-99	-.9
21	19	33	.00	-99	-.9	-99	-.9
22	20	34	.01	-99	-.9	-99	-.9
23	20	49	.01	-99	-.9	-99	-.9
24	19	51	.00	-99	-.9	-99	-.9
25	17	45	.00	-99	-.9	-99	-.9
26	17	29	.00	-99	-.9	-99	-.9
27	16	25	.01	-99	-.9	-99	-.9
28	14	40	.02	-99	-.9	-99	-.9
29	16	42	.00	-99	-.9	-99	-.9
30	21	39	.00	-99	-.9	-99	-.9

12/1956

day	min temp (F)	max temp (F)	precip (in)	low snow elv (ft)	low snow depth (in)	high snow elv (ft)	high snow depth (in)
1	S 19	29	.00	-99	-.9	-99	-.9
2	S 24	38	.01	-99	-.9	-99	-.9
3	R 29	44	.81	2760	1.0	3960	5.4
4	S 23	32	.05	1730	3.0	3960	1.1
5	S 13	27	.39	30	1.5	3960	.5
6	S 4	17	.00	-99	-.9	-99	-.9
7	S 9	20	.00	-99	-.9	-99	-.9
8	S 14	35	.06	2760	.5	3960	8.9
9	R 33	42	1.92	-99	-.9	-99	-.9
10	R 32	43	.78	-99	-.9	-99	-.9
11	28	33	.75	3960	7.0	3960	7.0
12	28	41	.35	3960	2.0	3960	2.0
13	32	41	.36	2760	.2	3960	5.5
14	33	38	.10	3960	.8	3960	.8
15	34	42	.48	3960	1.2	3960	1.2
16	31	39	.04	3960	3.2	3960	3.2
17	31	45	.83	-99	-.9	-99	-.9
18	36	43	.30	-99	-.9	-99	-.9
19	30	41	.01	-99	-.9	-99	-.9
20	29	40	.75	3960	3.3	3960	3.3
21	25	33	.03	2760	4.0	3960	6.9
22	25	33	.12	1560	1.0	3960	1.3
23	30	41	.33	-99	-.9	-99	-.9
24	27	39	.00	-99	-.9	-99	-.9
25	24	39	.00	-99	-.9	-99	-.9
26	17	39	.00	-99	-.9	-99	-.9
27	16	32	.00	-99	-.9	-99	-.9
28	21	25	.00	-99	-.9	-99	-.9
29	14	22	.00	-99	-.9	-99	-.9
30	18	29	.05	3960	.9	3960	.9
31	27	43	.14	-99	-.9	-99	-.9

12/1957

day	min temp (F)	max temp (F)	precip (in)	low snow elv (ft)	low snow depth (in)	high snow elv (ft)	high snow depth (in)
1	32	41	.55	2760	2.0	3960	8.5
2	32	39	.09	3960	1.2	3960	1.2
3	33	43	.01	-99	-.9	-99	-.9
4	22	37	.00	3960	.1	3960	.1
5	26	35	.18	3960	1.8	3960	1.8
6	28	44	.63	2760	3.0	3960	9.2
7	30	45	.03	3960	.1	3960	.1
8	38	49	.01	-99	-.9	-99	-.9
9	22	43	.00	-99	-.9	-99	-.9
10	18	54	.00	-99	-.9	-99	-.9
11	35	48	.10	3960	.2	3960	.2
12	31	40	.02	3960	.2	3960	.2
13	19	33	.01	3960	2.5	3960	2.5
14	26	38	.42	2760	1.5	3960	2.8
15	19	41	.01	3960	.4	3960	.4
16	35	44	.02	3960	.6	3960	.6
17	31	41	.30	3960	3.6	3960	3.6
18	28	39	.11	2760	5.0	3960	8.5
19	26	41	1.22	1730	5.0	3960	11.4
20	29	37	.46	2760	4.0	3960	16.6
21	26	34	.51	1730	7.4	3960	16.7
22	25	34	.23	1310	4.0	3960	4.3
23	25	35	.72	2760	3.0	3960	5.5
24	28	38	.46	2760	2.0	3960	9.8
25	31	45	1.30	3960	3.3	3960	3.3
26	27	38	.35	2760	8.5	3960	12.9
27	25	32	.65	1560	1.5	3960	5.3
28	29	38	1.18	2760	3.0	3960	7.7
29	23	32	.21	1560	1.7	3960	8.9
30	21	34	.05	1560	1.5	3960	1.2
31	16	37	.00	-99	-.9	-99	-.9

1/1958

day	min temp (F)	max temp (F)	precip (in)	low snow elv (ft)	low snow depth (in)	high snow elv (ft)	high snow depth (in)
1	23	39	.00	-99	-.9	-99	-.9
2	23	39	.08	3960	.4	3960	.4
3	30	40	.01	-99	-.9	-99	-.9
4	30	40	.00	-99	-.9	-99	-.9
5	28	40	.00	-99	-.9	-99	-.9
6	31	43	.00	-99	-.9	-99	-.9
7	31	39	.00	-99	-.9	-99	-.9
8	S 25	34	.42	3960	2.6	3960	2.6
9	S 21	35	.30	3960	1.3	3960	1.3
10	R 31	42	.39	3960	1.6	3960	1.6
11	S 30	38	.18	3960	4.7	3960	4.7
12	S 31	38	.50	3960	2.0	3960	2.0
13	S 28	37	.17	3960	1.2	3960	1.2
14	S 29	36	1.10	3960	5.2	3960	5.2
15	R 34	48	.64	3960	.2	3960	.2
16	R 36	46	.86	-99	-.9	-99	-.9
17	R 34	39	1.08	3960	.6	3960	.6
18	23	37	.01	-99	-.9	-99	-.9
19	24	41	.00	-99	-.9	-99	-.9
20	29	39	.08	3960	4.3	3960	4.3
21	26	35	.34	2760	3.0	3960	3.0
22	22	35	.06	3960	1.5	3960	1.5
23	31	39	.85	3960	7.1	3960	7.1
24	32	43	.56	3960	4.0	3960	4.0
25	31	38	.38	3960	1.8	3960	1.8
26	25	46	.00	-99	-.9	-99	-.9
27	28	41	.35	3960	4.0	3960	4.0
28	31	43	.83	3960	8.5	3960	8.5
29	28	43	.26	3960	3.4	3960	3.4
30	28	35	.91	2760	5.0	3960	10.6
31	27	45	.35	2760	2.0	3960	1.4

10/1958

day	min temp (F)	max temp (F)	precip (in)	low snow elv (ft)	low snow depth (in)	high snow elv (ft)	high snow depth (in)
1	33	59	.00	-99	-.9	-99	-.9
2	34	67	.00	-99	-.9	-99	-.9
3	30	61	.00	-99	-.9	-99	-.9
4	31	60	.00	-99	-.9	-99	-.9
5	31	55	.00	-99	-.9	-99	-.9
6	37	47	.00	-99	-.9	-99	-.9
7	40	45	.32	-99	-.9	-99	-.9
8	32	50	.36	3960	.5	3960	.5
9	32	42	.28	3960	.8	3960	.8
10	40	50	.10	-99	-.9	-99	-.9
11	44	55	.00	-99	-.9	-99	-.9
12	42	50	.52	-99	-.9	-99	-.9
13	41	55	.30	-99	-.9	-99	-.9
14	37	56	.01	-99	-.9	-99	-.9
15	40	50	.02	-99	-.9	-99	-.9
16	36	60	.00	-99	-.9	-99	-.9
17	43	63	.09	-99	-.9	-99	-.9
18	40	44	.93	-99	-.9	-99	-.9
19	32	48	1.45	3960	5.3	3960	5.3
20	30	47	.43	3960	.2	3960	.2
21	20	56	.00	-99	-.9	-99	-.9
22	24	50	.10	3960	.6	3960	.6
23	30	46	.02	3960	.7	3960	.7
24	19	53	.00	-99	-.9	-99	-.9
25	31	61	.00	-99	-.9	-99	-.9
26	27	57	.00	-99	-.9	-99	-.9
27	27	51	.10	-99	-.9	-99	-.9
28	23	49	.00	-99	-.9	-99	-.9
29	31	61	.00	-99	-.9	-99	-.9
30	48	62	.00	-99	-.9	-99	-.9
31	40	56	.34	-99	-.9	-99	-.9

11/1958

day	min temp (F)	max temp (F)	precip (in)	low snow elv (ft)	low snow depth (in)	high snow elv (ft)	high snow depth (in)
1	32	54	.04	-99	-.9	-99	-.9
2	36	46	.13	-99	-.9	-99	-.9
3	32	44	.33	3960	3.2	3960	3.2
4	30	48	.32	3960	2.3	3960	2.3
5	23	43	.08	3960	.4	3960	.4
6	36	50	.77	3960	2.6	3960	2.6
7	30	41	.41	3960	1.6	3960	1.6
8	R 34	44	.31	3960	.5	3960	.5
9	S 30	37	1.04	3960	14.1	3960	14.1
10	S 27	39	.63	3960	7.7	3960	7.7
11	S 32	42	.73	3960	.8	3960	.8
12	S 30	42	1.71	2760	2.5	3960	11.1
13	S 25	35	.17	1730	.6	3960	13.3
14	S 22	30	.40	1560	1.5	3960	6.9
15	S 18	25	.00	-99	-.9	-99	-.9
16	S 12	28	.00	-99	-.9	-99	-.9
17	S 17	30	.03	3960	1.9	3960	1.9
18	S 16	43	2.26	3960	9.6	3960	9.6
19	S 25	37	.80	3960	2.7	3960	2.7
20	R 26	49	1.48	-99	-.9	-99	-.9
21	35	47	.02	-99	-.9	-99	-.9
22	34	42	.52	-99	-.9	-99	-.9
23	27	38	.05	3960	3.8	3960	3.8
24	22	40	1.29	690	.5	3960	8.2
25	16	28	.00	-99	-.9	-99	-.9
26	14	29	.00	-99	-.9	-99	-.9
27	16	29	.00	-99	-.9	-99	-.9
28	23	39	.16	-99	-.9	-99	-.9
29	21	44	.21	-99	-.9	-99	-.9
30	31	44	.33	-99	-.9	-99	-.9

11/1959

day	min temp (F)	max temp (F)	precip (in)	low snow elv (ft)	low snow depth (in)	high snow elv (ft)	high snow depth (in)
1	26	51	.00	-99	-.9	-99	-.9
2	33	47	.00	-99	-.9	-99	-.9
3	34	44	1.26	3960	3.4	3960	3.4
4	21	38	.01	2760	.5	3960	.6
5	20	45	.00	-99	-.9	-99	-.9
6	22	41	.00	-99	-.9	-99	-.9
7	17	43	.00	-99	-.9	-99	-.9
8	20	43	.01	-99	-.9	-99	-.9
9	20	38	.01	-99	-.9	-99	-.9
10	29	39	.00	-99	-.9	-99	-.9
11	21	38	.24	-99	-.9	-99	-.9
12	25	39	.67	3960	1.5	3960	1.5
13	16	32	.00	-99	-.9	-99	-.9
14	20	37	.00	3960	.2	3960	.2
15	20	35	.37	2760	.5	3960	3.5
16	16	23	.00	-99	-.9	-99	-.9
17	21	30	.44	3960	.6	3960	.6
18	27	42	.86	3960	4.9	3960	4.9
19	31	46	.47	3960	1.3	3960	1.3
20	38	45	3.27	3960	2.3	3960	2.3
21	33	43	1.00	3960	5.4	3960	5.4
22	33	48	.61	-99	-.9	-99	-.9
23	43	50	.30	-99	-.9	-99	-.9
24	43	50	.46	-99	-.9	-99	-.9
25	28	43	.14	3960	.2	3960	.2
26	20	33	.03	-99	-.9	-99	-.9
27	28	48	.00	-99	-.9	-99	-.9
28	31	46	.07	3960	.8	3960	.8
29	31	43	.05	3960	.9	3960	.9
30	22	38	.00	3960	.1	3960	.1

12/1959

day	min temp (F)	max temp (F)	precip (in)	low snow elv (ft)	low snow depth (in)	high snow elv (ft)	high snow depth (in)
1	23	45	.00	-99	-.9	-99	-.9
2	35	40	.84	3960	1.5	3960	1.5
3	23	40	.15	2760	1.0	3960	8.1
4	21	32	.00	-99	-.9	-99	-.9
5	17	29	.00	-99	-.9	-99	-.9
6	17	30	.25	2760	.5	3960	1.3
7	27	37	.12	3960	1.4	3960	1.4
8	16	40	.03	-99	-.9	-99	-.9
9	29	35	.06	3960	.6	3960	.6
10	30	36	.25	3960	1.9	3960	1.9
11	31	38	1.05	3960	10.2	3960	10.2
12	28	35	.92	1730	.2	3960	9.7
13	21	32	.01	-99	-.9	-99	-.9
14	27	44	.71	3960	1.1	3960	1.1
15	34	45	3.81	3960	.8	3960	.8
16	23	36	.11	-99	-.9	-99	-.9
17	23	40	.02	-99	-.9	-99	-.9
18	31	39	.19	3960	1.0	3960	1.0
19	36	43	.00	-99	-.9	-99	-.9
20	29	38	.32	3960	.2	3960	.2
21	23	32	.04	-99	-.9	-99	-.9
22	23	40	.00	-99	-.9	-99	-.9
23	32	39	.03	3960	.6	3960	.6
24	31	38	.29	3960	4.4	3960	4.4
25	23	32	.13	1730	.3	3960	6.4
26	21	36	.02	3960	.3	3960	.3
27	31	37	.00	-99	-.9	-99	-.9
28	25	33	.00	-99	-.9	-99	-.9
29	20	30	.00	3960	.5	3960	.5
30	22	26	.43	1730	3.5	3960	3.2
31	20	27	.00	2760	1.0	3960	.1

1/1961

day	min temp (F)	max temp (F)	precip (in)	low snow elv (ft)	low snow depth (in)	high snow elv (ft)	high snow depth (in)
1	23	32	.18	2760	1.0	3960	2.9
2	17	36	.00	-99	-.9	-99	-.9
3	22	33	.00	-99	-.9	-99	-.9
4	25	40	.32	3960	6.8	3960	6.8
5	30	44	1.78	3960	13.8	3960	13.8
6	30	44	.28	3960	1.8	3960	1.8
7	35	46	.11	3960	.1	3960	.1
8	31	45	.84	3960	6.7	3960	6.7
9	32	40	.47	3960	3.5	3960	3.5
10	35	43	.23	3960	1.1	3960	1.1
11	32	46	.34	3960	1.3	3960	1.3
12	29	42	.05	3960	1.2	3960	1.2
13	30	41	.41	3960	5.4	3960	5.4
14	36	48	.32	-99	-.9	-99	-.9
15	38	48	1.58	3960	.8	3960	.8
16	30	42	.51	3960	1.0	3960	1.0
17	30	42	.67	3960	5.0	3960	5.0
18	23	45	.03	-99	-.9	-99	-.9
19	31	51	.00	-99	-.9	-99	-.9
20	40	55	.00	-99	-.9	-99	-.9
21	25	53	.00	-99	-.9	-99	-.9
22	23	44	.00	-99	-.9	-99	-.9
23	22	34	.03	-99	-.9	-99	-.9
24	23	40	.04	-99	-.9	-99	-.9
25	22	45	.00	-99	-.9	-99	-.9
26	19	44	.00	-99	-.9	-99	-.9
27	24	42	.00	-99	-.9	-99	-.9
28	20	30	.20	3960	3.9	3960	3.9
29	26	40	.73	3960	5.4	3960	5.4
30	33	47	.83	3960	3.4	3960	3.4
31	35	44	.37	3960	.4	3960	.4

2/1961

day	min temp (F)	max temp (F)	precip (in)	low snow elv (ft)	low snow depth (in)	high snow elv (ft)	high snow depth (in)
1	30	43	.30	3960	3.8	3960	3.8
2	34	45	.62	3960	.3	3960	.3
3	30	36	.24	3960	6.8	3960	6.8
4	32	44	.24	3960	.9	3960	.9
5	36	46	.19	-99	-.9	-99	-.9
6	36	46	.93	3960	3.3	3960	3.3
7	29	44	.00	3960	.1	3960	.1
8	30	42	.17	3960	1.7	3960	1.7
9	35	45	.28	3960	3.4	3960	3.4
10	30	44	.03	3960	1.2	3960	1.2
11	32	44	.37	3960	4.5	3960	4.5
12	27	34	.05	2760	4.0	3960	3.7
13	26	33	1.15	2760	2.0	3960	16.5
14	28	36	.14	2760	1.5	3960	4.5
15	28	37	1.17	2760	1.0	3960	7.7
16	27	35	.16	2760	1.5	3960	3.4
17	26	38	.59	1730	1.6	3960	8.8
18	27	33	.20	2760	1.0	3960	11.5
19	28	41	.85	1730	1.3	3960	8.7
20	36	44	.52	-99	-.9	-99	-.9
21	35	44	1.71	3960	5.7	3960	5.7
22	24	43	.04	3960	1.6	3960	1.6
23	31	43	.02	3960	.9	3960	.9
24	22	39	1.56	1730	1.6	3960	25.4
25	23	33	.17	1730	5.5	3960	14.1
26	22	35	.00	1730	1.8	3960	.3
27	26	32	.49	1730	7.5	3960	14.6
28	26	34	.07	2760	1.0	3960	1.3

12/1961

day	min temp (F)	max temp (F)	precip (in)	low snow elv (ft)	low snow depth (in)	high snow elv (ft)	high snow depth (in)
1	32	41	.27	3960	.6	3960	.6
2	23	36	.03	3960	3.2	3960	3.2
3	23	37	.34	2760	3.0	3960	12.0
4	30	39	.73	3960	5.6	3960	5.6
5	28	36	.00	2760	3.0	3960	.4
6	23	33	.11	3960	.1	3960	.1
7	18	28	.50	1560	6.5	3960	4.4
8	21	26	.01	-99	-.9	-99	-.9
9	17	26	.00	-99	-.9	-99	-.9
10	13	22	.10	-99	-.9	-99	-.9
11	11	20	.00	-99	-.9	-99	-.9
12	16	24	.00	-99	-.9	-99	-.9
13	16	25	.28	1560	3.0	3960	.9
14	22	28	.02	3960	.5	3960	.5
15	20	28	.22	3960	5.6	3960	5.6
16	24	29	.48	1730	1.5	3960	6.7
17	21	32	2.53	1560	4.0	3960	24.6
18	24	30	.53	1560	3.0	3960	7.0
19	26	45	.70	3960	3.1	3960	3.1
20	30	42	.40	3960	4.6	3960	4.6
21	26	38	.29	1730	2.0	3960	5.6
22	24	35	.17	3960	1.1	3960	1.1
23	32	42	.59	-99	-.9	-99	-.9
24	29	38	.55	2760	2.0	3960	7.6
25	26	29	.06	1730	5.0	3960	13.2
26	24	34	.05	1560	2.0	3960	3.0
27	21	33	.00	3960	.2	3960	.2
28	30	43	.42	3960	.1	3960	.1
29	35	43	.33	3960	.3	3960	.3
30	33	40	.00	3960	.4	3960	.4
31	20	34	.00	-99	-.9	-99	-.9

1/1962

day	min temp (F)	max temp (F)	precip (in)	low snow elv (ft)	low snow depth (in)	high snow elv (ft)	high snow depth (in)
1	20	31	.00	-99	-.9	-99	-.9
2	20	39	.84	-99	-.9	-99	-.9
3	33	44	1.43	3960	6.5	3960	6.5
4	22	37	.00	-99	-.9	-99	-.9
5	31	40	.31	-99	-.9	-99	-.9
6	28	40	.44	3960	1.5	3960	1.5
7	32	42	.44	-99	-.9	-99	-.9
8	36	42	.05	-99	-.9	-99	-.9
9	32	37	.00	-99	-.9	-99	-.9
10	28	38	.00	-99	-.9	-99	-.9
11	22	31	.00	-99	-.9	-99	-.9
12	22	26	.18	1730	2.8	3960	2.1
13	20	27	.02	3960	.2	3960	.2
14	20	33	.23	1560	1.5	3960	12.7
15	21	33	.03	1560	1.0	3960	.3
16	24	31	.09	1560	.3	3960	5.4
17	22	31	.45	1560	4.0	3960	1.5
18	15	26	.03	-99	-.9	-99	-.9
19	10	18	.00	-99	-.9	-99	-.9
20	-2	20	.00	-99	-.9	-99	-.9
21	-1	22	.00	-99	-.9	-99	-.9
22	3	27	.00	-99	-.9	-99	-.9
23	8	26	.00	3960	.7	3960	.7
24	21	36	.15	1560	.5	3960	2.8
25	34	39	.12	2760	1.0	3960	3.3
26	34	40	.15	-99	-.9	-99	-.9
27	35	42	.02	-99	-.9	-99	-.9
28	21	49	.01	-99	-.9	-99	-.9
29	20	46	.00	-99	-.9	-99	-.9
30	22	44	.00	-99	-.9	-99	-.9
31	21	49	.00	-99	-.9	-99	-.9

10/1962

day	min temp (F)	max temp (F)	precip (in)	low snow elv (ft)	low snow depth (in)	high snow elv (ft)	high snow depth (in)
1	34	64	.00	-99	-.9	-99	-.9
2	36	60	.00	-99	-.9	-99	-.9
3	39	54	.36	-99	-.9	-99	-.9
4	36	48	.00	-99	-.9	-99	-.9
5	26	51	.00	-99	-.9	-99	-.9
6	36	46	.31	3960	.2	3960	.2
7	30	43	.44	3960	7.2	3960	7.2
8	32	46	.93	3960	1.1	3960	1.1
9	33	47	1.06	3960	.6	3960	.6
10	31	51	.02	-99	-.9	-99	-.9
11	35	48	.17	3960	.3	3960	.3
12	38	48	.02	3960	1.4	3960	1.4
13	37	52	.28	-99	-.9	-99	-.9
14	26	42	.01	-99	-.9	-99	-.9
15	33	47	.24	3960	.5	3960	.5
16	23	48	.01	-99	-.9	-99	-.9
17	24	46	.00	-99	-.9	-99	-.9
18	31	43	.13	-99	-.9	-99	-.9
19	38	51	.02	-99	-.9	-99	-.9
20	35	48	.00	-99	-.9	-99	-.9
21	41	53	.00	-99	-.9	-99	-.9
22	43	54	.00	-99	-.9	-99	-.9
23	29	47	.00	-99	-.9	-99	-.9
24	31	50	.00	-99	-.9	-99	-.9
25	33	48	.00	-99	-.9	-99	-.9
26	39	45	.14	-99	-.9	-99	-.9
27	37	61	.02	-99	-.9	-99	-.9
28	33	59	.00	-99	-.9	-99	-.9
29	32	62	.00	-99	-.9	-99	-.9
30	36	49	.00	-99	-.9	-99	-.9
31	39	45	.00	-99	-.9	-99	-.9

11/1962

day	min temp (F)	max temp (F)	precip (in)	low snow elv (ft)	low snow depth (in)	high snow elv (ft)	high snow depth (in)
1	34	48	.00	-99	-.9	-99	-.9
2	32	59	.00	-99	-.9	-99	-.9
3	30	49	.00	-99	-.9	-99	-.9
4	34	44	.34	-99	-.9	-99	-.9
5	36	47	.35	3960	2.3	3960	2.3
6	33	52	.07	3960	1.2	3960	1.2
7	33	53	.00	-99	-.9	-99	-.9
8	R 36	49	.28	-99	-.9	-99	-.9
9	35	47	.47	3960	.1	3960	.1
10	33	41	.86	3960	1.0	3960	1.0
11	33	43	.64	3960	1.2	3960	1.2
12	25	45	.15	3960	.7	3960	.7
13	30	44	.06	3960	.1	3960	.1
14	32	42	.09	3960	.3	3960	.3
15	30	39	.18	3960	3.8	3960	3.8
16	27	39	.03	3960	.7	3960	.7
17	27	38	.14	3960	3.9	3960	3.9
18	22	38	.00	3960	.1	3960	.1
19	R 35	47	1.27	-99	-.9	-99	-.9
20	33	48	.93	3960	12.0	3960	12.0
21	31	41	.03	3960	3.3	3960	3.3
22	27	37	.00	3960	3.3	3960	3.3
23	23	41	.00	-99	-.9	-99	-.9
24	29	42	.49	3960	12.0	3960	12.0
25	27	47	2.15	3960	8.0	3960	8.0
26	29	40	.79	2760	.5	3960	4.5
27	29	38	.18	2760	2.0	3960	2.2
28	23	34	.00	-99	-.9	-99	-.9
29	21	33	.56	2760	2.0	3960	6.9
30	22	30	1.43	1560	1.0	3960	16.4

Nov 1963

Day	P	T_{min}	T_{max}
18	.03	41	46
19	1.07	33	44
20	.14	28	38
21	.04	30	44
22	.30	36	49
23	.69	41	54
24	.21	41	49
25	.47	43	52
26	.95	46	60

12/1963

day	min temp (F)	max temp (F)	precip (in)	low snow elv (ft)	low snow depth (in)	high snow elv (ft)	high snow depth (in)
1	14	32	.05	-99	-.9	-99	-.9
2	18	37	.06	-99	-.9	-99	-.9
3	18	27	.02	-99	-.9	-99	-.9
4	19	37	.05	-99	-.9	-99	-.9
5	30	36	.56	3960	4.4	3960	4.4
6	22	36	.75	1560	2.0	3960	15.2
7	20	36	.08	2760	1.5	3960	1.7
8	27	35	.42	1560	.3	3960	.5
9	23	31	.03	-99	-.9	-99	-.9
10	17	33	.00	-99	-.9	-99	-.9
11	14	26	.00	-99	-.9	-99	-.9
12	15	28	.00	-99	-.9	-99	-.9
13	14	26	.00	-99	-.9	-99	-.9
14	22	31	.22	3960	2.6	3960	2.6
15	28	32	.55	3960	3.9	3960	3.9
16	29	36	.33	3960	5.1	3960	5.1
17	30	37	.52	3960	3.0	3960	3.0
18	29	40	.09	3960	.4	3960	.4
19	30	36	.23	3960	1.9	3960	1.9
20	30	39	.75	3960	.6	3960	.6
21	22	39	.02	-99	-.9	-99	-.9
22	28	37	.47	3960	1.1	3960	1.1
23	35	52	.05	-99	-.9	-99	-.9
24	33	50	.07	3960	2.0	3960	2.0
25	37	41	.47	3960	4.6	3960	4.6
26	32	38	.13	3960	3.0	3960	3.0
27	30	40	.27	3960	1.5	3960	1.5
28	31	43	.06	-99	-.9	-99	-.9
29	22	42	.00	-99	-.9	-99	-.9
30	34	42	.09	-99	-.9	-99	-.9
31	37	50	.25	-99	-.9	-99	-.9

1/1964

day	min temp (F)	max temp (F)	precip (in)	low snow elv (ft)	low snow depth (in)	high snow elv (ft)	high snow depth (in)
1	30	42	2.47	3960	6.0	3960	6.0
2	26	38	.05	2760	1.0	3960	3.8
3	30	38	.05	3960	2.8	3960	2.8
4	23	39	.13	2760	2.5	3960	4.9
5	29	34	.40	2760	8.0	3960	16.0
6	24	37	.83	1730	1.5	3960	10.0
7	22	31	.09	1560	3.5	3960	.8
8	24	33	.01	1560	.5	3960	.5
9	24	33	.54	1560	2.3	3960	8.7
10	28	33	.19	1560	2.0	3960	18.4
11	28	38	.00	3960	1.5	3960	1.5
12	28	38	.00	-99	-.9	-99	-.9
13	25	34	.71	3960	.4	3960	.4
14	23	34	.19	920	2.0	3960	1.2
15	28	34	.65	1730	.4	3960	3.9
16	32	37	.56	2760	7.0	3960	4.0
17	27	33	1.01	1560	.2	3960	10.4
18	26	32	.56	1560	.3	3960	14.3
19	23	36	1.09	920	1.0	3960	9.8
20	23	33	.26	920	3.0	3960	4.6
21	22	34	.30	2760	2.0	3960	.4
22	22	31	.31	690	.3	3960	1.3
23	21	34	.00	-99	-.9	-99	-.9
24	25	31	1.17	920	2.0	3960	12.1
25	27	39	1.79	920	3.0	3960	11.4
26	22	38	.00	-99	-.9	-99	-.9
27	31	38	.33	3960	3.0	3960	3.0
28	25	40	.03	-99	-.9	-99	-.9
29	30	39	.86	3960	3.2	3960	3.2
30	27	35	.22	2760	1.0	3960	3.1
31	30	38	.56	2760	1.0	3960	7.1

12/1964

day	min temp (F)	max temp (F)	precip (in)	low snow elv (ft)	low snow depth (in)	high snow elv (ft)	high snow depth (in)
1	37	43	.89	3960	1.0	3960	1.0
2	34	41	.10	3960	1.0	3960	1.0
3	23	38	.00	3960	.4	3960	.4
4	22	35	.00	-99	-.9	-99	-.9
5	20	35	.00	-99	-.9	-99	-.9
6	23	42	.00	-99	-.9	-99	-.9
7	30	39	.02	3960	1.5	3960	1.5
8	28	43	.47	3960	4.5	3960	4.5
9	27	41	.72	3960	2.3	3960	2.3
10	29	39	.21	2760	1.0	3960	7.3
11	21	30	.00	2760	4.0	3960	3.3
12	21	35	.09	1560	.5	3960	6.2
13	28	37	.00	2760	3.0	3960	2.4
14	22	29	.42	1560	1.1	3960	5.3
15	14	26	.16	690	3.5	3960	7.4
16	-4	15	.00	-99	-.9	-99	-.9
17	0	10	.00	-99	-.9	-99	-.9
18	6	14	.02	-99	-.9	-99	-.9
19	13	23	.26	1560	1.0	3960	.2
20	20	28	.24	920	6.0	3960	3.4
21	22	29	.76	920	4.0	3960	15.7
22	24	30	2.07	3960	6.2	3960	6.2
23	21	26	.65	690	2.0	3960	4.4
24	22	26	.37	1310	.3	3960	5.8
25	15	28	.00	3960	.2	3960	.2
26	23	36	.83	1560	2.5	3960	1.4
27	22	32	.23	690	1.5	3960	1.3
28	21	30	.06	690	3.0	3960	.3
29	19	26	.03	920	1.0	3960	.2
30	19	24	.03	1560	2.6	3960	.4
31	17	27	.14	30	.5	3960	1.1

1/1965

day	min temp (F)	max temp (F)	precip (in)	low snow elv (ft)	low snow depth (in)	high snow elv (ft)	high snow depth (in)
1	18	27	.41	1560	1.5	3960	10.0
2	25	34	.62	2760	10.0	3960	4.9
3	20	30	.38	690	4.0	3960	2.6
4	18	26	.05	2760	1.0	3960	.3
5	23	36	.31	3960	.5	3960	.5
6	21	28	.27	1310	.2	3960	2.1
7	20	27	.12	920	5.0	3960	8.5
8	22	31	.27	920	1.5	3960	5.1
9	20	34	.00	-99	-.9	-99	-.9
10	21	35	.00	3960	.1	3960	.1
11	20	31	.00	-99	-.9	-99	-.9
12	23	29	.00	-99	-.9	-99	-.9
13	23	34	.15	-99	-.9	-99	-.9
14	30	41	.00	-99	-.9	-99	-.9
15	25	37	.00	-99	-.9	-99	-.9
16	22	31	.07	-99	-.9	-99	-.9
17	20	28	.08	-99	-.9	-99	-.9
18	20	42	.05	-99	-.9	-99	-.9
19	33	37	.02	-99	-.9	-99	-.9
20	31	36	.11	3960	.6	3960	.6
21	26	35	.48	2760	1.0	3960	7.1
22	24	31	.03	920	.3	3960	1.7
23	21	30	.45	920	2.0	3960	1.9
24	26	32	.24	920	5.0	3960	12.0
25	23	31	.08	1310	1.0	3960	2.6
26	25	39	.69	1560	1.8	3960	11.1
27	32	39	1.38	2760	1.0	3960	15.4
28	30	41	1.02	3960	5.0	3960	5.0
29	32	40	1.83	3960	2.4	3960	2.4
30	32	45	1.37	3960	1.9	3960	1.9
31	29	35	.00	2760	1.0	3960	3.8

12/1965

day	min temp (F)	max temp (F)	precip (in)	low snow elv (ft)	low snow depth (in)	high snow elv (ft)	high snow depth (in)
1	31	42	.55	3960	2.3	3960	2.3
2	36	43	.08	-99	-.9	-99	-.9
3	37	55	.43	-99	-.9	-99	-.9
4	34	42	.86	3960	3.2	3960	3.2
5	28	44	.06	-99	-.9	-99	-.9
6	35	48	.33	-99	-.9	-99	-.9
7	30	45	.72	3960	2.1	3960	2.1
8	27	42	.01	-99	-.9	-99	-.9
9	24	38	.00	-99	-.9	-99	-.9
10	25	40	.13	3960	.5	3960	.5
11	19	33	.00	-99	-.9	-99	-.9
12	20	30	.00	-99	-.9	-99	-.9
13	18	28	.10	-99	-.9	-99	-.9
14	16	25	.00	-99	-.9	-99	-.9
15	9	26	.00	-99	-.9	-99	-.9
16	14	25	.00	-99	-.9	-99	-.9
17	15	30	.00	-99	-.9	-99	-.9
18	27	34	.00	3960	.8	3960	.8
19	29	38	.00	-99	-.9	-99	-.9
20	30	39	.18	3960	8.4	3960	8.4
21	22	35	.49	2760	3.0	3960	1.1
22	21	26	.03	-99	-.9	-99	-.9
23	19	28	.25	2760	9.0	3960	3.3
24	20	32	.26	690	2.2	3960	2.3
25	19	27	.00	1560	.4	3960	.2
26	19	28	.00	30	.5	3960	1.3
27	20	32	.68	920	18.0	3960	6.0
28	23	31	1.04	2760	1.0	3960	3.0
29	21	30	.22	1560	2.5	3960	1.2
30	22	33	.09	690	1.5	3960	3.8
31	21	28	.02	920	2.0	3960	3.1

1/1966

day	min temp (F)	max temp (F)	precip (in)	low snow elv (ft)	low snow depth (in)	high snow elv (ft)	high snow depth (in)
1	21	37	.41	690	.2	3960	12.1
2	23	31	.93	690	3.5	3960	10.9
3	22	27	.28	690	2.5	3960	5.2
4	22	30	.34	690	.2	3960	2.8
5	22	36	1.55	920	4.0	3960	7.6
6	34	40	1.02	3960	1.4	3960	1.4
7	30	41	.42	3960	.4	3960	.4
8	27	40	.50	2760	4.0	3960	14.2
9	21	34	.00	2760	1.0	3960	1.8
10	30	33	.26	2760	4.0	3960	2.6
11	30	35	.34	2760	1.0	3960	4.7
12	29	35	.88	3960	1.1	3960	1.1
13	33	44	.43	-99	-.9	-99	-.9
14	33	38	.40	2760	2.0	3960	4.0
15	23	35	.00	-99	-.9	-99	-.9
16	18	32	.01	-99	-.9	-99	-.9
17	19	33	.02	3960	.1	3960	.1
18	22	33	.17	3960	1.0	3960	1.0
19	20	27	.00	-99	-.9	-99	-.9
20	17	27	.00	-99	-.9	-99	-.9
21	23	32	.00	3960	.3	3960	.3
22	23	29	.00	3960	.1	3960	.1
23	23	29	.30	1560	.9	3960	6.6
24	17	28	.00	920	1.0	3960	.6
25	22	36	.06	-99	-.9	-99	-.9
26	25	40	.00	-99	-.9	-99	-.9
27	29	42	.33	3960	1.3	3960	1.3
28	32	46	.02	-99	-.9	-99	-.9
29	32	43	.37	3960	.4	3960	.4
30	31	41	.23	2760	.5	3960	3.2
31	28	38	.18	3960	.2	3960	.2

11/1966

day	min temp (F)	max temp (F)	precip (in)	low snow elv (ft)	low snow depth (in)	high snow elv (ft)	high snow depth (in)
1	33	52	.00	-99	-.9	-99	-.9
2	26	46	.00	-99	-.9	-99	-.9
3	21	45	.00	-99	-.9	-99	-.9
4	23	40	.00	-99	-.9	-99	-.9
5	28	40	.15	3960	.8	3960	.8
6	23	35	.02	3960	.1	3960	.1
7	23	36	.04	3960	1.8	3960	1.8
8	21	35	.00	-99	-.9	-99	-.9
9	29	41	.34	3960	.5	3960	.5
10	20	37	.07	3960	1.2	3960	1.2
11	17	41	.41	3960	4.8	3960	4.8
12	27	44	.20	3960	5.6	3960	5.6
13	32	43	1.26	3960	3.6	3960	3.6
14	33	40	.76	3960	.4	3960	.4
15	30	42	.06	3960	1.4	3960	1.4
16	30	41	.72	2760	.5	3960	7.6
17	21	48	.07	3960	.7	3960	.7
18	35	50	.05	-99	-.9	-99	-.9
19	39	49	.06	-99	-.9	-99	-.9
20	34	48	.03	-99	-.9	-99	-.9
21	28	41	.10	3960	1.7	3960	1.7
22	25	33	.06	3960	1.7	3960	1.7
23	31	39	.04	3960	.5	3960	.5
24	31	39	.00	3960	1.2	3960	1.2
25	24	42	1.19	3960	4.7	3960	4.7
26	26	36	.00	3960	4.0	3960	4.0
27	29	40	.39	3960	7.7	3960	7.7
28	35	42	.28	-99	-.9	-99	-.9
29	32	45	.73	3960	.3	3960	.3
30	35	44	.74	-99	-.9	-99	-.9

12/1966

day	min temp (F)	max temp (F)	precip (in)	low snow elv (ft)	low snow depth (in)	high snow elv (ft)	high snow depth (in)
1	35	45	.08	3960	.7	3960	.7
2	33	43	.50	-99	-.9	-99	-.9
3	29	41	.20	3960	.3	3960	.3
4	25	42	.41	3960	2.1	3960	2.1
5	26	37	.52	1560	.3	3960	2.2
6	26	36	.37	1730	1.3	3960	3.6
7	21	28	.64	30	.7	3960	7.9
8	20	29	.00	1560	4.4	3960	6.8
9	25	33	.14	2760	3.0	3960	1.6
10	27	38	.33	1730	2.0	3960	6.3
11	32	43	.83	3960	1.6	3960	1.6
12	32	39	1.68	3960	3.5	3960	3.5
13	34	41	1.28	3960	2.0	3960	2.0
14	32	40	.00	3960	2.0	3960	2.0
15	33	44	.45	-99	-.9	-99	-.9
16	37	44	.53	-99	-.9	-99	-.9
17	35	44	.48	-99	-.9	-99	-.9
18	36	45	.18	-99	-.9	-99	-.9
19	36	41	.65	-99	-.9	-99	-.9
20	28	38	.16	3960	3.5	3960	3.5
21	24	37	.00	2760	1.0	3960	1.3
22	35	42	.00	-99	-.9	-99	-.9
23	32	40	.01	-99	-.9	-99	-.9
24	30	34	.55	3960	5.4	3960	5.4
25	26	34	.28	1730	.5	3960	1.7
26	21	31	.00	2760	.5	3960	.4
27	21	31	.05	3960	.5	3960	.5
28	25	39	.25	1730	.9	3960	5.2
29	30	39	.51	2760	1.0	3960	8.0
30	26	35	.07	3960	3.6	3960	3.6
31	29	39	.96	3960	5.0	3960	5.0

11/1967

day	min temp (F)	max temp (F)	precip (in)	low snow elv (ft)	low snow depth (in)	high snow elv (ft)	high snow depth (in)
1	28	42	.00	-99	-.9	-99	-.9
2	21	47	.00	-99	-.9	-99	-.9
3	21	41	.00	-99	-.9	-99	-.9
4	20	49	.00	-99	-.9	-99	-.9
5	38	54	.00	-99	-.9	-99	-.9
6	37	54	.00	-99	-.9	-99	-.9
7	35	45	.29	-99	-.9	-99	-.9
8	34	50	.49	3960	.4	3960	.4
9	35	43	.53	3960	5.2	3960	5.2
10	35	48	.81	3960	2.0	3960	2.0
11	34	45	.04	-99	-.9	-99	-.9
12	42	52	.00	-99	-.9	-99	-.9
13	36	55	.00	-99	-.9	-99	-.9
14	39	53	.23	-99	-.9	-99	-.9
15	36	46	.24	-99	-.9	-99	-.9
16	36	44	.00	-99	-.9	-99	-.9
17	29	54	.00	-99	-.9	-99	-.9
18	30	42	.02	3960	1.4	3960	1.4
19	22	39	.00	-99	-.9	-99	-.9
20	20	35	.00	-99	-.9	-99	-.9
21	17	31	.00	-99	-.9	-99	-.9
22	28	36	.02	-99	-.9	-99	-.9
23	25	41	.04	3960	1.0	3960	1.0
24	29	41	.87	3960	12.7	3960	12.7
25	19	32	.01	2760	2.0	3960	3.5
26	20	36	.00	-99	-.9	-99	-.9
27	30	34	.00	2760	1.0	3960	1.0
28	24	33	.69	3960	5.9	3960	5.9
29	25	36	.36	2760	.5	3960	3.2
30	29	31	.32	2760	2.0	3960	.5

12/1967

day	min temp (F)	max temp (F)	precip (in)	low snow elv (ft)	low snow depth (in)	high snow elv (ft)	high snow depth (in)
1	30	35	.65	-99	-.9	-99	-.9
2	27	36	1.16	2760	.5	3960	5.6
3	30	38	.37	2760	1.5	3960	3.5
4	27	37	.22	2760	2.0	3960	2.2
5	24	36	.12	1310	1.0	3960	7.9
6	27	37	.00	2760	1.0	3960	2.7
7	23	35	.11	2760	1.0	3960	2.1
8	26	35	.13	1730	1.0	3960	2.5
9	29	44	.20	2760	1.5	3960	2.6
10	26	43	.83	3960	5.3	3960	5.3
11	21	32	.12	3960	3.4	3960	3.4
12	16	26	.02	690	3.0	3960	.9
13	11	26	.00	-99	-.9	-99	-.9
14	13	29	.00	-99	-.9	-99	-.9
15	14	30	.00	-99	-.9	-99	-.9
16	20	24	.32	690	.3	3960	4.6
17	18	25	.00	2760	1.0	3960	.5
18	15	22	.00	3960	.3	3960	.3
19	15	25	.00	3960	.5	3960	.5
20	14	21	.00	2760	2.0	3960	.4
21	17	37	.27	1560	.9	3960	7.1
22	31	41	1.09	-99	-.9	-99	-.9
23	34	46	.19	-99	-.9	-99	-.9
24	38	46	1.65	-99	-.9	-99	-.9
25	37	42	1.53	-99	-.9	-99	-.9
26	36	40	.42	-99	-.9	-99	-.9
27	35	39	.14	-99	-.9	-99	-.9
28	33	37	.09	-99	-.9	-99	-.9
29	31	34	.01	-99	-.9	-99	-.9
30	27	31	.10	3960	.2	3960	.2
31	26	34	.28	3960	7.4	3960	7.4

12/1968

day	min temp (F)	max temp (F)	precip (in)	low snow elv (ft)	low snow depth (in)	high snow elv (ft)	high snow depth (in)
1	24	29	.21	1560	5.0	3960	7.6
2	24	42	.37	1560	3.8	3960	5.9
3	20	43	3.10	3960	13.0	3960	13.0
4	21	33	.22	920	2.0	3960	2.4
5	24	33	.16	1560	1.0	3960	15.5
6	19	33	.00	2760	1.0	3960	.1
7	32	37	.60	3960	2.0	3960	2.0
8	30	39	.19	3960	5.2	3960	5.2
9	31	43	.55	3960	7.5	3960	7.5
10	28	37	.70	3960	4.5	3960	4.5
11	26	35	.47	1560	.4	3960	13.2
12	19	34	.00	1730	.2	3960	2.4
13	26	37	.18	3960	.1	3960	.1
14	27	42	.24	-99	-.9	-99	-.9
15	22	44	.72	3960	2.2	3960	2.2
16	23	31	.02	1730	2.0	3960	2.1
17	22	35	.08	1730	.3	3960	2.6
18	19	35	1.00	1560	.2	3960	5.6
19	12	24	.00	690	1.0	3960	.8
20	9	24	.00	-99	-.9	-99	-.9
21	18	25	.01	-99	-.9	-99	-.9
22	19	28	.09	30	1.5	3960	1.1
23	25	35	.52	920	4.0	3960	1.0
24	28	40	.66	3960	1.1	3960	1.1
25	19	34	.00	3960	.3	3960	.3
26	20	31	.34	1560	.1	3960	3.1
27	8	23	.12	30	.5	3960	2.4
28	0	10	.02	30	.6	3960	.8
29	-6	6	.00	3960	.3	3960	.3
30	-6	6	.03	2760	1.0	3960	.3
31	0	14	.40	1730	9.0	3960	3.6

1/1969

day	min temp (F)	max temp (F)	precip (in)	low snow elv (ft)	low snow depth (in)	high snow elv (ft)	high snow depth (in)
1	11	29	.25	2760	1.0	3960	2.4
2	21	34	.00	3960	2.3	3960	2.3
3	23	30	.57	3960	1.9	3960	1.9
4	26	45	1.02	-99	-.9	-99	-.9
5	26	47	2.30	3960	5.1	3960	5.1
6	25	33	1.19	3960	8.3	3960	8.3
7	21	29	.70	1310	.5	3960	9.3
8	20	27	.38	1560	11.5	3960	4.6
9	22	28	.41	1560	9.0	3960	5.8
10	21	28	.52	920	4.0	3960	9.7
11	21	28	.12	30	.5	3960	4.9
12	18	29	.02	1560	4.6	3960	1.8
13	24	31	.02	1730	.8	3960	2.2
14	22	32	.07	690	.2	3960	.4
15	21	28	.34	30	4.1	3960	1.4
16	22	26	.37	690	.3	3960	3.5
17	17	25	.47	1730	3.4	3960	3.0
18	12	23	.01	3960	.1	3960	.1
19	17	29	.00	1560	2.0	3960	.4
20	15	26	.04	690	1.2	3960	.1
21	12	20	.20	3960	.4	3960	.4
22	9	16	.00	3960	.8	3960	.8
23	4	19	.00	2760	.5	3960	.5
24	7	17	.01	3960	.9	3960	.9
25	12	20	.00	3960	2.2	3960	2.2
26	11	18	.22	1730	3.0	3960	3.3
27	7	17	.00	2760	3.0	3960	2.0
28	5	12	.19	1730	.2	3960	1.2
29	7	15	.05	30	2.1	3960	1.6
30	7	18	.23	30	1.5	3960	6.7
31	16	30	.28	920	3.0	3960	12.1

9/1969

day	min temp (F)	max temp (F)	precip (in)	low snow elv (ft)	low snow depth (in)	high snow elv (ft)	high snow depth (in)
1	38	71	.00	-99	-.9	-99	-.9
2	40	62	.24	-99	-.9	-99	-.9
3	38	50	.14	-99	-.9	-99	-.9
4	38	47	.10	-99	-.9	-99	-.9
5	36	59	.00	-99	-.9	-99	-.9
6	31	64	.00	-99	-.9	-99	-.9
7	35	69	.00	-99	-.9	-99	-.9
8	38	69	.00	-99	-.9	-99	-.9
9	46	68	.00	-99	-.9	-99	-.9
10	43	70	.00	-99	-.9	-99	-.9
11	44	69	.00	-99	-.9	-99	-.9
12	42	60	.03	-99	-.9	-99	-.9
13	39	51	.47	-99	-.9	-99	-.9
14	33	54	.00	-99	-.9	-99	-.9
15	27	57	.00	-99	-.9	-99	-.9
16	40	53	.09	-99	-.9	-99	-.9
17	45	55	1.45	-99	-.9	-99	-.9
18	40	62	.25	-99	-.9	-99	-.9
19	42	48	.78	-99	-.9	-99	-.9
20	39	53	.01	-99	-.9	-99	-.9
21	43	58	.17	-99	-.9	-99	-.9
22	45	53	1.50	-99	-.9	-99	-.9
23	43	53	.47	-99	-.9	-99	-.9
24	42	53	.05	-99	-.9	-99	-.9
25	39	55	.22	-99	-.9	-99	-.9
26	35	55	.00	-99	-.9	-99	-.9
27	38	51	.08	-99	-.9	-99	-.9
28	43	50	.34	-99	-.9	-99	-.9
29	43	49	.73	-99	-.9	-99	-.9
30	43	53	.67	-99	-.9	-99	-.9

10/1969

day	min temp (F)	max temp (F)	precip (in)	low snow elv (ft)	low snow depth (in)	high snow elv (ft)	high snow depth (in)
1 R	39	54	.10	-99	-.9	-99	-.9
2	35	45	.10	3960	6.1	3960	6.1
3	30	48	.00	-99	-.9	-99	-.9
4	25	49	.00	-99	-.9	-99	-.9
5	29	58	.00	-99	-.9	-99	-.9
6	30	62	.00	-99	-.9	-99	-.9
7	35	54	.28	-99	-.9	-99	-.9
8	30	48	.32	-99	-.9	-99	-.9
9	34	49	.50	-99	-.9	-99	-.9
10	31	45	.25	3960	.4	3960	.4
11	24	47	.00	-99	-.9	-99	-.9
12	27	50	.00	-99	-.9	-99	-.9
13	19	49	.00	-99	-.9	-99	-.9
14	18	51	.00	-99	-.9	-99	-.9
15	38	57	.00	-99	-.9	-99	-.9
16	30	47	.00	-99	-.9	-99	-.9
17	22	47	.00	-99	-.9	-99	-.9
18	20	40	.00	-99	-.9	-99	-.9
19	20	42	.01	-99	-.9	-99	-.9
20	36	48	.00	-99	-.9	-99	-.9
21	33	61	.00	-99	-.9	-99	-.9
22	33	43	.14	-99	-.9	-99	-.9
23	30	44	.00	-99	-.9	-99	-.9
24	28	40	.18	-99	-.9	-99	-.9
25	26	50	.02	-99	-.9	-99	-.9
26	38	49	.06	-99	-.9	-99	-.9
27	36	45	.23	3960	2.2	3960	2.2
28	33	48	.09	-99	-.9	-99	-.9
29	36	44	.07	-99	-.9	-99	-.9
30	34	49	.03	-99	-.9	-99	-.9
31	39	55	.00	-99	-.9	-99	-.9

12/1970

day	min temp (F)	max temp (F)	precip (in)	low snow elv (ft)	low snow depth (in)	high snow elv (ft)	high snow depth (in)
1	22	29	.61	920	1.0	3960	3.0
2	21	30	.07	920	2.5	3960	2.2
3	22	30	.43	1560	4.5	3960	8.9
4	20	30	.07	2760	1.0	3960	5.8
5	23	35	2.42	3960	7.0	3960	7.0
6	33	40	2.15	3960	1.3	3960	1.3
7	24	39	.51	3960	.8	3960	.8
8	18	31	.00	-99	-.9	-99	-.9
9	16	34	.00	-99	-.9	-99	-.9
10	29	37	.72	3960	7.0	3960	7.0
11	20	37	.02	2760	2.0	3960	4.2
12	20	37	.00	-99	-.9	-99	-.9
13	27	34	.00	-99	-.9	-99	-.9
14	23	34	.46	1560	1.3	3960	4.8
15	27	38	.31	2760	4.0	3960	2.9
16	28	38	.75	2760	3.0	3960	1.4
17	19	37	.03	-99	-.9	-99	-.9
18	16	29	.00	-99	-.9	-99	-.9
19	20	28	.20	3960	.6	3960	.6
20	20	30	.22	920	4.0	3960	1.5
21	12	25	.00	-99	-.9	-99	-.9
22	11	26	.04	3960	.1	3960	.1
23	21	28	.07	1560	1.1	3960	1.5
24	21	30	.00	2760	.1	3960	.2
25	20	24	.00	-99	-.9	-99	-.9
26	19	27	.03	3960	.8	3960	.8
27	22	30	.29	1560	2.3	3960	.5
28	24	31	1.16	2760	3.0	3960	4.9
29	24	32	.49	1560	2.7	3960	9.1
30	26	38	1.86	1560	1.7	3960	29.1
31	20	33	.05	1560	.5	3960	4.1

1/1971

day	min temp (F)	max temp (F)	precip (in)	low snow elv (ft)	low snow depth (in)	high snow elv (ft)	high snow depth (in)
1	17	31	.00	-99	-.9	-99	-.9
2	13	24	.00	3960	.2	3960	.2
3	9	21	.00	-99	-.9	-99	-.9
4	9	22	.00	-99	-.9	-99	-.9
5	8	24	.00	-99	-.9	-99	-.9
6	15	25	.00	3960	.2	3960	.2
7	21	35	.38	-99	-.9	-99	-.9
8	29	35	1.30	3960	7.6	3960	7.6
9	32	38	.72	2760	5.0	3960	14.8
10	21	33	.22	1730	1.0	3960	5.9
11	17	27	.12	30	1.5	3960	2.6
12	17	24	.06	920	1.0	3960	.8
13	14	24	.08	920	3.0	3960	1.4
14	18	28	.06	30	1.5	3960	2.5
15	23	43	1.49	3960	5.2	3960	5.2
16	29	49	.51	2760	2.0	3960	1.0
17	36	49	.04	3960	.4	3960	.4
18	35	43	.82	-99	-.9	-99	-.9
19	25	44	.74	3960	1.4	3960	1.4
20	26	32	.11	1730	.6	3960	9.0
21	22	31	.32	1560	2.7	3960	6.9
22	23	34	1.08	1560	3.4	3960	19.4
23	28	35	.78	1730	1.0	3960	24.8
24	25	35	1.45	2760	11.0	3960	28.2
25	22	39	1.32	1560	4.0	3960	10.8
26	34	43	.32	-99	-.9	-99	-.9
27	24	45	.00	-99	-.9	-99	-.9
28	22	42	.00	-99	-.9	-99	-.9
29	22	40	.15	-99	-.9	-99	-.9
30	37	47	.02	-99	-.9	-99	-.9
31	35	49	.00	-99	-.9	-99	-.9

10/1971

day	min temp (F)	max temp (F)	precip (in)	low snow elv (ft)	low snow depth (in)	high snow elv (ft)	high snow depth (in)
1	31	54	.00	-99	-.9	-99	-.9
2	32	56	.00	-99	-.9	-99	-.9
3	35	55	.01	-99	-.9	-99	-.9
4	44	64	.00	-99	-.9	-99	-.9
5	42	63	.00	-99	-.9	-99	-.9
6	40	54	.00	-99	-.9	-99	-.9
7	39	54	.01	-99	-.9	-99	-.9
8	35	59	.00	-99	-.9	-99	-.9
9	32	61	.00	-99	-.9	-99	-.9
10	39	61	.00	-99	-.9	-99	-.9
11	35	52	.00	-99	-.9	-99	-.9
12	33	56	.00	-99	-.9	-99	-.9
13	33	49	1.13	3960	.2	3960	.2
14	30	38	.53	3960	.9	3960	.9
15	25	44	.00	3960	.1	3960	.1
16	21	44	.00	-99	-.9	-99	-.9
17	20	39	.00	-99	-.9	-99	-.9
18	31	45	.32	3960	1.4	3960	1.4
19	34	45	1.45	3960	3.2	3960	3.2
20	30	45	.13	2760	1.0	3960	3.5
21	29	47	.00	-99	-.9	-99	-.9
22	37	47	.21	-99	-.9	-99	-.9
23	29	40	.29	-99	-.9	-99	-.9
24	28	42	.00	-99	-.9	-99	-.9
25	33	44	.47	3960	.1	3960	.1
26	22	43	.84	3960	10.5	3960	10.5
27	18	32	.05	3960	.8	3960	.8
28	14	36	.00	-99	-.9	-99	-.9
29	17	32	.00	-99	-.9	-99	-.9
30	24	31	.32	1560	.7	3960	3.5
31	25	43	.53	3960	2.0	3960	2.0

11/1971

day	min temp (F)	max temp (F)	precip (in)	low snow elv (ft)	low snow depth (in)	high snow elv (ft)	high snow depth (in)
1	27	42	.57	3960	5.4	3960	5.4
2	31	39	.02	2760	2.0	3960	.2
3	31	43	1.58	-99	-.9	-99	-.9
4	20	42	.82	3960	5.4	3960	5.4
5	18	37	.02	-99	-.9	-99	-.9
6	25	42	.00	-99	-.9	-99	-.9
7	28	43	.40	3960	5.6	3960	5.6
8	30	41	.04	3960	.3	3960	.3
9	35	45	.18	3960	.5	3960	.5
10	33	44	.31	-99	-.9	-99	-.9
11	35	47	.13	-99	-.9	-99	-.9
12	35	40	.33	-99	-.9	-99	-.9
13	33	49	.24	-99	-.9	-99	-.9
14	30	35	.13	3960	1.5	3960	1.5
15	29	39	.06	3960	1.2	3960	1.2
16	25	36	.00	3960	.7	3960	.7
17	20	31	.02	-99	-.9	-99	-.9
18	26	34	.02	-99	-.9	-99	-.9
19	31	44	.05	-99	-.9	-99	-.9
20	31	47	.00	-99	-.9	-99	-.9
21	23	40	.41	3960	.8	3960	.8
22	22	37	.00	-99	-.9	-99	-.9
23	23	38	.35	3960	4.4	3960	4.4
24	29	38	.78	3960	5.7	3960	5.7
25	28	38	.25	1730	1.0	3960	4.5
26	30	42	.19	3960	2.3	3960	2.3
27	34	39	.02	3960	4.0	3960	4.0
28	31	36	.64	3960	5.7	3960	5.7
29	30	35	.09	3960	.1	3960	.1
30	22	35	.00	-99	-.9	-99	-.9

11/1972

day	min temp (F)	max temp (F)	precip (in)	low snow elv (ft)	low snow depth (in)	high snow elv (ft)	high snow depth (in)
1	33	45	.35	3960	1.5	3960	1.5
2	41	47	.03	-99	-.9	-99	-.9
3	40	47	.23	-99	-.9	-99	-.9
4	37	46	.43	3960	3.7	3960	3.7
5	36	45	.01	3960	2.0	3960	2.0
6	36	45	.24	3960	.3	3960	.3
7	36	43	.22	3960	.3	3960	.3
8	32	44	.00	3960	.2	3960	.2
9	35	42	.45	3960	1.3	3960	1.3
10	33	48	.04	3960	.4	3960	.4
11	23	43	.00	-99	-.9	-99	-.9
12	20	43	.00	-99	-.9	-99	-.9
13	32	49	.00	3960	.5	3960	.5
14	23	38	.00	-99	-.9	-99	-.9
15	21	43	.00	-99	-.9	-99	-.9
16	20	35	.00	-99	-.9	-99	-.9
17	18	38	.00	-99	-.9	-99	-.9
18	25	40	.08	3960	2.1	3960	2.1
19	21	42	.01	-99	-.9	-99	-.9
20	22	29	.00	-99	-.9	-99	-.9
21	21	45	.00	-99	-.9	-99	-.9
22	34	43	.00	-99	-.9	-99	-.9
23	33	43	.04	3960	12.8	3960	12.8
24	25	41	.15	3960	1.4	3960	1.4
25	25	40	.16	-99	-.9	-99	-.9
26	31	37	1.66	3960	3.7	3960	3.7
27	20	37	.08	3960	.4	3960	.4
28	21	33	.03	-99	-.9	-99	-.9
29	25	35	.00	-99	-.9	-99	-.9
30	24	34	.00	-99	-.9	-99	-.9

12/1972

day	min temp (F)	max temp (F)	precip (in)	low snow elv (ft)	low snow depth (in)	high snow elv (ft)	high snow depth (in)
1	30	43	.07	3960	3.0	3960	3.0
2	25	42	1.20	3960	7.9	3960	7.9
3	19	33	.20	3960	3.3	3960	3.3
4	9	21	.03	-99	-.9	-99	-.9
5	8	23	.00	3960	.5	3960	.5
6	10	17	.00	-99	-.9	-99	-.9
7	-1	18	.00	-99	-.9	-99	-.9
8	-2	16	.00	-99	-.9	-99	-.9
9	2	15	.00	3960	.3	3960	.3
10	7	19	.00	-99	-.9	-99	-.9
11	12	20	.00	1730	.9	3960	2.4
12	11	20	.06	30	2.5	3960	.5
13	5	25	.00	1730	.9	3960	3.6
14	10	28	.00	920	1.0	3960	1.0
15	20	28	.00	3960	1.6	3960	1.6
16	21	31	.64	1560	2.3	3960	7.6
17	28	36	.59	3960	2.6	3960	2.6
18	31	42	.48	3960	.9	3960	.9
19	34	49	.90	-99	-.9	-99	-.9
20	33	44	.29	-99	-.9	-99	-.9
21	35	45	.61	3960	2.6	3960	2.6
22	34	47	.96	-99	-.9	-99	-.9
23	34	42	.36	3960	14.5	3960	14.5
24	30	38	.97	3960	7.9	3960	7.9
25	30	40	.07	3960	2.2	3960	2.2
26	31	44	2.11	3960	7.2	3960	7.2
27	31	43	.24	1730	2.2	3960	11.9
28	24	38	1.08	1560	1.4	3960	2.2
29	23	30	.03	-99	-.9	-99	-.9
30	22	33	.02	1730	1.5	3960	11.4
31	27	36	.19	3960	1.5	3960	1.5

12/1973

day	min temp (F)	max temp (F)	precip (in)	low snow elv (ft)	low snow depth (in)	high snow elv (ft)	high snow depth (in)
1	31	43	.26	3960	4.2	3960	4.2
2	30	37	.25	1730	.3	3960	2.5
3	22	37	.01	2760	1.0	3960	15.4
4	24	38	.00	3960	.8	3960	.8
5	30	38	.48	3960	2.6	3960	2.6
6	34	42	1.04	3960	2.3	3960	2.3
7	21	38	.54	3960	3.9	3960	3.9
8	21	40	.00	-99	-.9	-99	-.9
9	28	45	.00	-99	-.9	-99	-.9
10	32	42	.14	-99	-.9	-99	-.9
11	30	45	.94	3960	3.1	3960	3.1
12	29	38	1.27	2760	2.0	3960	4.0
13	29	36	.44	2760	3.0	3960	3.4
14	29	37	.68	2760	3.0	3960	7.6
15	33	46	1.22	3960	9.6	3960	9.6
16	32	40	.54	-99	-.9	-99	-.9
17	27	38	.07	3960	.8	3960	.8
18	26	42	.00	-99	-.9	-99	-.9
19	32	43	.31	3960	.6	3960	.6
20	35	41	.54	3960	3.2	3960	3.2
21	28	42	.32	3960	1.0	3960	1.0
22	27	38	.51	3960	3.7	3960	3.7
23	26	39	.11	1730	.2	3960	8.4
24	24	39	1.42	3960	21.1	3960	21.1
25	21	33	.00	2760	2.0	3960	1.8
26	21	35	.45	3960	3.4	3960	3.4
27	22	36	.57	920	3.0	3960	8.1
28	23	35	.01	2760	4.0	3960	10.2
29	21	28	.03	1730	1.3	3960	2.3
30	22	30	.05	1560	1.6	3960	2.1
31	13	31	.00	-99	-.9	-99	-.9

1/1974

day	min temp (F)	max temp (F)	precip (in)	low snow elv (ft)	low snow depth (in)	high snow elv (ft)	high snow depth (in)
1	13	29	.00	-99	-.9	-99	-.9
2	5	26	.00	-99	-.9	-99	-.9
3	6	26	.00	-99	-.9	-99	-.9
4	3	25	.00	-99	-.9	-99	-.9
5	3	23	.00	-99	-.9	-99	-.9
6	7	27	.00	-99	-.9	-99	-.9
7	5	25	.00	-99	-.9	-99	-.9
8	2	26	.00	-99	-.9	-99	-.9
9	6	22	.03	-99	-.9	-99	-.9
10	12	22	.01	3960	.7	3960	.7
11	12	25	.21	-99	-.9	-99	-.9
12	18	40	.63	1560	1.9	3960	5.5
13	35	46	1.83	3960	1.0	3960	1.0
14	38	48	2.53	-99	-.9	-99	-.9
15	38	47	1.54	-99	-.9	-99	-.9
16	27	43	.87	3960	2.0	3960	2.0
17	23	39	.16	2760	.2	3960	1.3
18	25	42	.73	3960	7.2	3960	7.2
19	21	28	.05	2760	1.0	3960	.4
20	17	28	.15	3960	2.8	3960	2.8
21	19	33	.35	3960	7.3	3960	7.3
22	31	39	.07	2760	5.0	3960	9.1
23	35	40	.44	2760	1.0	3960	8.0
24	30	40	.78	3960	.8	3960	.8
25	23	34	.92	2760	.7	3960	19.5
26	25	35	.50	1310	.5	3960	7.8
27	32	37	.18	2760	4.0	3960	18.4
28	31	36	.22	2760	2.0	3960	12.1
29	22	35	1.68	3960	19.0	3960	19.0
30	22	30	1.27	30	.8	3960	12.8
31	28	38	1.07	690	2.0	3960	9.2

12/1974

day	min temp (F)	max temp (F)	precip (in)	low snow elv (ft)	low snow depth (in)	high snow elv (ft)	high snow depth (in)
1	30	43	.32	-99	-.9	-99	-.9
2	33	43	.03	3960	.7	3960	.7
3	34	46	.18	3960	.5	3960	.5
4	32	41	.10	3960	3.4	3960	3.4
5	31	41	.09	3960	.4	3960	.4
6	31	40	.26	3960	10.7	3960	10.7
7	31	45	.00	-99	-.9	-99	-.9
8	30	41	.11	3960	1.1	3960	1.1
9	32	44	.22	3960	1.8	3960	1.8
10	33	42	.62	3960	6.2	3960	6.2
11	18	40	.52	3960	.4	3960	.4
12	22	38	.53	3960	8.1	3960	8.1
13	27	37	.17	2760	7.0	3960	4.1
14	27	36	.26	2760	1.0	3960	6.3
15	28	46	.28	1730	1.2	3960	2.6
16	30	49	.34	3960	4.2	3960	4.2
17	30	36	.31	3960	1.2	3960	1.2
18	29	39	.17	1730	1.5	3960	10.5
19	30	42	.54	2760	2.5	3960	10.0
20	23	47	2.48	3960	.1	3960	.1
21	20	30	.08	1560	1.0	3960	12.9
22	17	29	.02	1560	1.4	3960	2.0
23	17	31	.00	-99	-.9	-99	-.9
24	22	34	.13	3960	1.1	3960	1.1
25	22	36	.08	1730	2.2	3960	3.3
26	20	36	2.36	1730	3.0	3960	12.3
27	19	31	.00	690	15.0	3960	9.3
28	19	34	.00	2760	3.5	3960	1.5
29	23	32	.51	3960	11.2	3960	11.2
30	17	32	.05	2760	9.0	3960	5.4
31	17	33	.18	-99	-.9	-99	-.9

1/1975

day	min temp (F)	max temp (F)	precip (in)	low snow elv (ft)	low snow depth (in)	high snow elv (ft)	high snow depth (in)
1	23	34	.06	3960	7.5	3960	7.5
2	23	34	.07	2760	4.0	3960	4.2
3	24	37	.51	2760	2.5	3960	2.6
4	24	33	.94	920	.5	3960	7.6
5	25	39	.12	2760	2.0	3960	14.2
6	24	29	.07	1560	1.0	3960	6.9
7	24	35	.96	1310	.5	3960	4.3
8	19	30	.06	1560	1.5	3960	16.3
9	18	23	.18	1560	2.2	3960	4.4
10	16	24	.04	690	3.0	3960	1.3
11	15	33	.92	1310	.5	3960	1.0
12	26	39	.81	2760	1.5	3960	3.0
13	25	29	1.14	1730	2.0	3960	10.7
14	25	33	.16	1730	5.2	3960	3.1
15	28	35	.06	1730	1.7	3960	.5
16	28	45	.61	3960	3.3	3960	3.3
17	36	45	.44	-99	-.9	-99	-.9
18	24	42	.01	-99	-.9	-99	-.9
19	24	40	.26	-99	-.9	-99	-.9
20	18	37	.00	3960	.1	3960	.1
21	21	39	.00	-99	-.9	-99	-.9
22	30	42	.38	3960	.3	3960	.3
23	28	45	.17	3960	2.0	3960	2.0
24	27	33	.15	3960	8.4	3960	8.4
25	21	31	.26	2760	2.0	3960	4.8
26	13	27	.08	2760	8.0	3960	2.2
27	13	29	.07	-99	-.9	-99	-.9
28	14	26	.00	690	.7	3960	.2
29	15	30	.00	-99	-.9	-99	-.9
30	22	27	.00	3960	.1	3960	.1
31	23	29	.00	2760	.2	3960	.5

11/1975

day	min temp (F)	max temp (F)	precip (in)	low snow elv (ft)	low snow depth (in)	high snow elv (ft)	high snow depth (in)
1	34	46	.32	-99	-.9	-99	-.9
2	36	52	.14	-99	-.9	-99	-.9
3	40	56	.04	-99	-.9	-99	-.9
4	34	62	.00	-99	-.9	-99	-.9
5	30	50	.20	3960	.4	3960	.4
6	31	38	.82	3960	7.7	3960	7.7
7	26	37	.63	2760	2.0	3960	7.3
8	23	34	.40	1560	.3	3960	11.7
9	23	38	.00	1560	.1	3960	2.3
10	25	33	.03	1560	.5	3960	3.7
11	29	36	.01	2760	4.0	3960	.4
12	31	46	.00	-99	-.9	-99	-.9
13	32	50	1.73	-99	-.9	-99	-.9
14	31	50	1.30	-99	-.9	-99	-.9
15	26	38	.71	3960	1.4	3960	1.4
16	20	34	.20	1730	1.5	3960	2.4
17	15	35	.18	1560	4.2	3960	2.3
18	15	33	.01	-99	-.9	-99	-.9
19	30	40	.00	-99	-.9	-99	-.9
20	29	42	.00	-99	-.9	-99	-.9
21	30	39	.00	-99	-.9	-99	-.9
22	28	36	.81	3960	13.5	3960	13.5
23	30	45	.16	3960	6.8	3960	6.8
24	20	43	.32	-99	-.9	-99	-.9
25	22	39	.63	3960	.3	3960	.3
26	25	37	.42	3960	5.8	3960	5.8
27	14	30	.22	1560	1.0	3960	1.9
28	8	26	.00	1560	4.5	3960	.3
29	8	23	.11	3960	1.1	3960	1.1
30	21	43	1.05	1730	8.0	3960	23.2

12/1975

day	min temp (F)	max temp (F)	precip (in)	low snow elv (ft)	low snow depth (in)	high snow elv (ft)	high snow depth (in)
1	R 38	43	1.74	-99	-.9	-99	-.9
2	R 39	46	2.68	-99	-.9	-99	-.9
3	22	49	2.40	-99	-.9	-99	-.9
4	19	29	.26	1730	.4	3960	6.1
5	15	35	.00	1730	1.0	3960	.3
6	17	32	.51	3960	.6	3960	.6
7	28	44	.81	3960	10.5	3960	10.5
8	33	49	.00	-99	-.9	-99	-.9
9	26	42	.09	-99	-.9	-99	-.9
10	22	30	.00	3960	.1	3960	.1
11	15	27	.00	3960	.1	3960	.1
12	15	25	.26	1730	1.0	3960	3.9
13	17	25	.01	690	.6	3960	3.7
14	20	35	.45	3960	2.7	3960	2.7
15	23	32	.15	2760	3.0	3960	.7
16	18	29	.00	-99	-.9	-99	-.9
17	17	31	.03	-99	-.9	-99	-.9
18	17	38	.01	-99	-.9	-99	-.9
19	33	48	.00	-99	-.9	-99	-.9
20	30	42	.00	-99	-.9	-99	-.9
21	27	43	.19	-99	-.9	-99	-.9
22	27	33	.41	3960	1.7	3960	1.7
23	28	40	1.06	3960	4.7	3960	4.7
24	28	44	.06	3960	.1	3960	.1
25	30	41	1.53	3960	1.9	3960	1.9
26	29	48	.49	3960	6.9	3960	6.9
27	27	39	.01	1730	.4	3960	5.9
28	30	44	.26	3960	.2	3960	.2
29	26	46	.61	3960	3.7	3960	3.7
30	24	33	.04	1560	.2	3960	8.0
31	16	32	.00	-99	-.9	-99	-.9

12/1976

day	min temp (F)	max temp (F)	precip (in)	low snow elv (ft)	low snow depth (in)	high snow elv (ft)	high snow depth (in)
1	15	29	.00	-99	-.9	-99	-.9
2	19	25	.00	-99	-.9	-99	-.9
3	19	26	.02	-99	-.9	-99	-.9
4	20	27	.00	-99	-.9	-99	-.9
5	20	35	.00	-99	-.9	-99	-.9
6	29	41	.80	-99	-.9	-99	-.9
7	35	43	.11	-99	-.9	-99	-.9
8	30	44	.20	3960	7.5	3960	7.5
9	28	40	.00	2760	1.5	3960	4.8
10	34	40	.01	3960	3.1	3960	3.1
11	20	45	.00	-99	-.9	-99	-.9
12	22	39	.22	-99	-.9	-99	-.9
13	31	39	.03	-99	-.9	-99	-.9
14	31	40	.05	-99	-.9	-99	-.9
15	33	50	.00	-99	-.9	-99	-.9
16	28	47	.00	-99	-.9	-99	-.9
17	30	39	.23	3960	1.0	3960	1.0
18	19	39	.03	3960	2.4	3960	2.4
19	32	46	.00	-99	-.9	-99	-.9
20	29	41	.04	3960	1.2	3960	1.2
21	23	38	.01	-99	-.9	-99	-.9
22	24	37	.98	3960	6.4	3960	6.4
23	18	32	.60	1730	.5	3960	8.5
24	20	34	.00	-99	-.9	-99	-.9
25	30	46	1.11	-99	-.9	-99	-.9
26	33	42	.48	3960	2.7	3960	2.7
27	20	42	.02	3960	.5	3960	.5
28	32	47	.02	-99	-.9	-99	-.9
29	22	43	.00	-99	-.9	-99	-.9
30	15	35	.00	-99	-.9	-99	-.9
31	17	32	.00	-99	-.9	-99	-.9

1/1977

day	min temp (F)	max temp (F)	precip (in)	low snow elv (ft)	low snow depth (in)	high snow elv (ft)	high snow depth (in)
1	19	34	.01	-99	-.9	-99	-.9
2	19	27	.01	1560	.8	3960	1.4
3	17	23	.07	1560	.4	3960	.1
4	10	22	.00	-99	-.9	-99	-.9
5	11	28	.00	-99	-.9	-99	-.9
6	9	26	.00	-99	-.9	-99	-.9
7	9	28	.00	-99	-.9	-99	-.9
8	8	27	.00	-99	-.9	-99	-.9
9	7	23	.00	-99	-.9	-99	-.9
10 S	12	28	.03	3960	.1	3960	.1
11 S	22	34	.56	3960	1.4	3960	1.4
12 S	26	32	.47	3960	4.6	3960	4.6
13 S	26	35	.15	1730	.5	3960	2.6
14 S	27	40	.01	3960	.2	3960	.2
15 S	27	41	.15	-99	-.9	-99	-.9
16 R	33	44	.41	-99	-.9	-99	-.9
17 R	40	50	.32	-99	-.9	-99	-.9
18 R	26	44	.31	-99	-.9	-99	-.9
19	21	39	.04	-99	-.9	-99	-.9
20	21	48	.03	-99	-.9	-99	-.9
21	22	34	.03	-99	-.9	-99	-.9
22	19	26	.00	-99	-.9	-99	-.9
23	16	25	.00	-99	-.9	-99	-.9
24	14	24	.00	-99	-.9	-99	-.9
25	14	29	.00	-99	-.9	-99	-.9
26	13	33	.00	-99	-.9	-99	-.9
27	14	32	.00	-99	-.9	-99	-.9
28	14	22	.00	-99	-.9	-99	-.9
29	15	23	.00	-99	-.9	-99	-.9
30	16	30	.17	-99	-.9	-99	-.9
31	28	32	.18	3960	.5	3960	.5

11/1977

day	min temp (F)	max temp (F)	precip (in)	low snow elv (ft)	low snow depth (in)	high snow elv (ft)	high snow depth (in)
1	32	52	.94	3960	5.7	3960	5.7
2	20	43	.00	3960	3.3	3960	3.3
3	21	33	.11	-99	-.9	-99	-.9
4	25	45	.12	3960	.2	3960	.2
5	32	45	.21	3960	.2	3960	.2
6	26	40	1.12	3960	.8	3960	.8
7	20	40	.01	3960	10.7	3960	10.7
8	22	38	.09	3960	1.5	3960	1.5
9	30	43	.22	1730	1.0	3960	3.3
10	40	50	.07	-99	-.9	-99	-.9
11	29	52	.40	-99	-.9	-99	-.9
12	32	46	.24	3960	1.4	3960	1.4
13	34	43	.75	3960	3.9	3960	3.9
14	29	48	.26	3960	10.6	3960	10.6
15	31	42	.26	3960	12.9	3960	12.9
16	24	40	.05	2760	3.0	3960	7.2
17	19	36	.03	3960	14.7	3960	14.7
18	12	26	.00	3960	.3	3960	.3
19	13	29	.00	-99	-.9	-99	-.9
20	10	23	.00	-99	-.9	-99	-.9
21	10	27	.00	-99	-.9	-99	-.9
22	12	23	.19	1730	1.6	3960	1.2
23	21	40	.58	1560	4.0	3960	8.1
24	32	41	.37	-99	-.9	-99	-.9
25	33	50	1.56	-99	-.9	-99	-.9
26	31	43	.16	3960	2.8	3960	2.8
27	32	39	.16	3960	8.3	3960	8.3
28	33	44	.58	-99	-.9	-99	-.9
29	23	40	.03	3960	2.9	3960	2.9
30	24	35	.43	3960	.2	3960	.2

12/1977

day	min temp (F)	max temp (F)	precip (in)	low snow elv (ft)	low snow depth (in)	high snow elv (ft)	high snow depth (in)
1	33	45	.87	3960	6.2	3960	6.2
2	35	47	.20	-99	-.9	-99	-.9
3	27	40	.02	3960	12.0	3960	12.0
4	21	30	.09	2760	2.0	3960	18.1
5	21	43	.62	2760	6.0	3960	5.3
6	22	40	.28	3960	10.9	3960	10.9
7	20	30	.12	2760	2.0	3960	5.8
8	18	25	.14	2760	7.0	3960	1.4
9	21	35	.00	1560	2.0	3960	2.8
10	33	46	1.86	3960	.5	3960	.5
11	34	40	.64	3960	5.4	3960	5.4
12	33	39	.62	3960	7.0	3960	7.0
13	35	47	.97	3960	3.1	3960	3.1
14	32	42	.42	-99	-.9	-99	-.9
15	26	37	1.66	3960	15.2	3960	15.2
16	25	39	.01	2760	6.0	3960	.5
17	25	28	.17	2760	.5	3960	1.1
18	24	32	.03	1730	.6	3960	1.8
19	22	36	.00	1560	.5	3960	1.0
20	31	39	.00	-99	-.9	-99	-.9
21	23	37	.00	-99	-.9	-99	-.9
22	17	33	.00	-99	-.9	-99	-.9
23	18	30	.03	3960	.6	3960	.6
24	24	31	.11	3960	1.2	3960	1.2
25	19	29	.00	-99	-.9	-99	-.9
26	15	37	.00	-99	-.9	-99	-.9
27	17	38	.00	-99	-.9	-99	-.9
28	26	34	.13	3960	.3	3960	.3
29	24	29	.09	3960	1.9	3960	1.9
30	16	28	.01	1560	1.0	3960	.8
31	17	31	.00	-99	-.9	-99	-.9

11/1978

day	min temp (F)	max temp (F)	precip (in)	low snow elv (ft)	low snow depth (in)	high snow elv (ft)	high snow depth (in)
1	22	51	.00	-99	-.9	-99	-.9
2	26	41	1.13	-99	-.9	-99	-.9
3	28	50	1.94	-99	-.9	-99	-.9
4	20	41	.00	3960	4.4	3960	4.4
5	23	37	.00	-99	-.9	-99	-.9
6	30	48	.00	-99	-.9	-99	-.9
7	34	53	.00	-99	-.9	-99	-.9
8	23	39	.67	3960	4.0	3960	4.0
9	17	36	.00	1560	2.0	3960	.1
10	10	34	.00	-99	-.9	-99	-.9
11	11	32	.00	-99	-.9	-99	-.9
12	10	29	.00	-99	-.9	-99	-.9
13	11	32	.00	-99	-.9	-99	-.9
14	15	36	.00	-99	-.9	-99	-.9
15	26	40	.82	3960	5.0	3960	5.0
16	28	41	.41	3960	6.3	3960	6.3
17	28	37	.18	3960	2.9	3960	2.9
18	21	32	.27	3960	6.3	3960	6.3
19	16	25	.00	920	1.0	3960	2.0
20	13	31	.00	-99	-.9	-99	-.9
21	12	30	.00	-99	-.9	-99	-.9
22	13	28	.04	-99	-.9	-99	-.9
23	20	27	.00	2760	1.0	3960	.5
24	22	39	.00	-99	-.9	-99	-.9
25	23	39	.00	3960	.2	3960	.2
26	17	36	.00	-99	-.9	-99	-.9
27	18	34	-.90	-99	-.9	-99	-.9
28	29	36	-.90	-99	-.9	-99	-.9
29	30	38	-.90	3960	2.3	3960	2.3
30	26	37	-.90	3960	22.9	3960	22.9

12/1978

day	min temp (F)	max temp (F)	precip (in)	low snow elv (ft)	low snow depth (in)	high snow elv (ft)	high snow depth (in)
1	26	31	.00	1730	1.7	3960	2.7
2	26	35	.00	3960	.7	3960	.7
3	26	40	.00	3960	.6	3960	.6
4	21	28	.00	1560	1.1	3960	8.7
5	18	27	.00	1560	9.0	3960	.4
6	13	24	.00	-99	-.9	-99	-.9
7	16	29	.00	-99	-.9	-99	-.9
8	20	28	.22	-99	-.9	-99	-.9
9	25	32	.05	1730	3.0	3960	8.0
10	28	39	.51	3960	6.2	3960	6.2
11	17	35	.14	3960	5.9	3960	5.9
12	18	34	.00	-99	-.9	-99	-.9
13	28	38	.42	-99	-.9	-99	-.9
14	22	37	.00	3960	9.3	3960	9.3
15	23	33	.00	3960	.2	3960	.2
16	28	35	.00	-99	-.9	-99	-.9
17	23	33	.20	3960	1.5	3960	1.5
18	22	33	.04	-99	-.9	-99	-.9
19	20	29	.09	-99	-.9	-99	-.9
20	23	34	.45	920	1.0	3960	1.3
21	25	36	.74	1560	1.3	3960	3.8
22	25	33	.59	3960	8.7	3960	8.7
23	28	41	.32	3960	1.5	3960	1.5
24	18	36	.00	3960	1.2	3960	1.2
25	17	30	.00	-99	-.9	-99	-.9
26	17	27	.07	-99	-.9	-99	-.9
27	5	28	.00	690	2.0	3960	5.4
28	5	19	.00	-99	-.9	-99	-.9
29	2	17	.00	-99	-.9	-99	-.9
30	1	13	.00	-99	-.9	-99	-.9
31	1	15	.00	-99	-.9	-99	-.9

11/1979

day	min temp (F)	max temp (F)	precip (in)	low snow elv (ft)	low snow depth (in)	high snow elv (ft)	high snow depth (in)
1	22	50	.00	-99	-.9	-99	-.9
2	34	45	.32	3960	.5	3960	.5
3	34	47	.05	3960	.5	3960	.5
4	35	47	.01	3960	.8	3960	.8
5	27	47	.00	-99	-.9	-99	-.9
6	21	55	.00	-99	-.9	-99	-.9
7	20	48	.00	-99	-.9	-99	-.9
8	18	40	.00	-99	-.9	-99	-.9
9	19	43	.00	-99	-.9	-99	-.9
10	20	36	.00	-99	-.9	-99	-.9
11	19	37	.00	-99	-.9	-99	-.9
12	18	34	.00	-99	-.9	-99	-.9
13	18	43	.00	-99	-.9	-99	-.9
14	41	54	.00	-99	-.9	-99	-.9
15	35	52	.00	-99	-.9	-99	-.9
16	34	41	.00	-99	-.9	-99	-.9
17	25	44	.22	3960	1.3	3960	1.3
18	24	36	.05	1730	.5	3960	2.0
19	16	41	.00	-99	-.9	-99	-.9
20	16	42	.00	-99	-.9	-99	-.9
21	30	43	.10	-99	-.9	-99	-.9
22	28	36	.32	3960	1.7	3960	1.7
23	24	38	.05	3960	.3	3960	.3
24	23	33	.32	1730	1.8	3960	8.4
25	22	35	.41	3960	1.5	3960	1.5
26	17	29	.00	920	2.5	3960	2.4
27	17	34	.00	-99	-.9	-99	-.9
28	31	38	.00	-99	-.9	-99	-.9
29	26	36	.08	-99	-.9	-99	-.9
30	25	35	.00	1730	.3	3960	.3

12/1979

day	min temp (F)	max temp (F)	precip (in)	low snow elv (ft)	low snow depth (in)	high snow elv (ft)	high snow depth (in)
1	23	38	2.12	1730	1.9	3960	13.3
2	27	40	.11	3960	4.7	3960	4.7
3	33	52	.98	3960	.8	3960	.8
4	32	43	.00	3960	1.7	3960	1.7
5	33	39	.06	3960	.8	3960	.8
6	33	39	.41	-99	-.9	-99	-.9
7	28	39	.00	-99	-.9	-99	-.9
8	27	43	.03	-99	-.9	-99	-.9
9	21	45	1.35	3960	.9	3960	.9
10	18	31	.00	1560	2.0	3960	2.0
11	22	33	.88	1730	.1	3960	13.4
12	22	31	.32	3960	4.9	3960	4.9
13	29	41	1.64	1730	1.9	3960	5.3
14	22	41	3.58	-99	-.9	-99	-.9
15	22	31	.81	3960	11.7	3960	11.7
16	27	37	1.06	3960	1.6	3960	1.6
17	33	46	1.46	3960	.4	3960	.4
18	36	46	.71	-99	-.9	-99	-.9
19	34	41	.26	-99	-.9	-99	-.9
20	32	40	.35	3960	.6	3960	.6
21	21	35	1.15	3960	9.7	3960	9.7
22	20	34	.00	3960	1.7	3960	1.7
23	28	35	.01	3960	.7	3960	.7
24	29	41	.06	-99	-.9	-99	-.9
25	29	39	.07	3960	.3	3960	.3
26	21	38	.00	-99	-.9	-99	-.9
27	29	45	.00	-99	-.9	-99	-.9
28	33	40	.00	3960	.7	3960	.7
29	33	43	.00	-99	-.9	-99	-.9
30	32	40	.07	3960	.4	3960	.4
31	32	41	.41	3960	1.0	3960	1.0

11/1980

day	min temp (F)	max temp (F)	precip (in)	low snow elv (ft)	low snow depth (in)	high snow elv (ft)	high snow depth (in)
1	36	50	.64	-99	-.9	-99	-.9
2	36	52	.06	-99	-.9	-99	-.9
3	37	46	.55	-99	-.9	-99	-.9
4	36	64	.00	-99	-.9	-99	-.9
5	37	59	.62	-99	-.9	-99	-.9
6	39	48	2.24	-99	-.9	-99	-.9
7	37	45	2.02	-99	-.9	-99	-.9
8	31	45	.30	3960	1.8	3960	1.8
9	28	40	.31	3960	3.3	3960	3.3
10	20	42	.00	3960	1.4	3960	1.4
11	17	39	.00	-99	-.9	-99	-.9
12	16	32	.00	-99	-.9	-99	-.9
13	29	41	.02	-99	-.9	-99	-.9
14	26	35	.11	3960	.2	3960	.2
15	28	44	.00	3960	.1	3960	.1
16	29	38	.14	3960	.2	3960	.2
17	30	41	.07	3960	3.6	3960	3.6
18	35	46	.42	-99	-.9	-99	-.9
19	35	47	.00	-99	-.9	-99	-.9
20	36	46	1.32	-99	-.9	-99	-.9
21	22	46	1.17	-99	-.9	-99	-.9
22	22	36	.01	-99	-.9	-99	-.9
23	22	35	.05	3960	.6	3960	.6
24	23	39	.19	-99	-.9	-99	-.9
25	23	36	.01	1730	.3	3960	1.5
26	29	45	.45	-99	-.9	-99	-.9
27	23	45	.92	3960	.6	3960	.6
28	26	39	.72	-99	-.9	-99	-.9
29	27	36	.85	3960	9.3	3960	9.3
30	24	31	.54	1730	.2	3960	6.2

12/1980

day	min temp (F)	max temp (F)	precip (in)	low snow elv (ft)	low snow depth (in)	high snow elv (ft)	high snow depth (in)
1	26	35	.15	1730	1.5	3960	1.8
2	24	37	1.35	1560	1.0	3960	14.8
3	23	31	.47	1310	1.5	3960	5.1
4	22	33	.12	1560	3.0	3960	5.4
5	17	28	.12	1560	3.2	3960	1.8
6	11	19	.00	1560	2.0	3960	.3
7	11	26	.00	-99	-.9	-99	-.9
8	16	29	.00	-99	-.9	-99	-.9
9	18	40	.25	3960	.1	3960	.1
10	25	42	.25	-99	-.9	-99	-.9
11	30	44	.14	-99	-.9	-99	-.9
12	26	37	.01	-99	-.9	-99	-.9
13	25	45	.30	-99	-.9	-99	-.9
14	36	45	.17	-99	-.9	-99	-.9
15	26	54	.00	-99	-.9	-99	-.9
16	25	40	.00	-99	-.9	-99	-.9
17	26	35	.02	-99	-.9	-99	-.9
18	22	35	.01	-99	-.9	-99	-.9
19	22	35	.08	-99	-.9	-99	-.9
20	31	39	.59	-99	-.9	-99	-.9
21	32	44	.93	3960	1.7	3960	1.7
22	32	43	.15	3960	.1	3960	.1
23	33	45	.31	-99	-.9	-99	-.9
24	36	51	.90	3960	3.1	3960	3.1
25	43	52	1.95	-99	-.9	-99	-.9
26	39	57	1.18	-99	-.9	-99	-.9
27	36	44	.25	-99	-.9	-99	-.9
28	35	49	.00	-99	-.9	-99	-.9
29	33	40	.43	-99	-.9	-99	-.9
30	37	45	.40	-99	-.9	-99	-.9
31	30	42	.00	-99	-.9	-99	-.9

1/1982

day	min temp (F)	max temp (F)	precip (in)	low snow elv (ft)	low snow depth (in)	high snow elv (ft)	high snow depth (in)
1	19	29	.05	1560	1.1	3960	.6
2	19	25	.42	690	3.0	3960	4.1
3	15	26	.15	30	1.0	3960	3.5
4	13	24	.50	690	5.1	3960	2.2
5	-3	18	.00	30	1.0	3960	1.3
6	-2	19	.00	-99	-.9	-99	-.9
7	15	32	.00	3960	1.5	3960	1.5
8	19	37	.01	3960	.5	3960	.5
9	20	30	.00	-99	-.9	-99	-.9
10	20	35	.71	3960	2.8	3960	2.8
11	24	31	.26	3960	3.9	3960	3.9
12	23	31	.09	1560	.4	3960	1.6
13	28	39	.02	3960	.2	3960	.2
14	32	40	.01	3960	2.9	3960	2.9
15	25	35	1.32	3960	9.4	3960	9.4
16	27	38	.65	3960	15.2	3960	15.2
17	28	34	.50	3960	7.0	3960	7.0
18	20	34	.01	3960	2.0	3960	2.0
19	22	37	.00	-99	-.9	-99	-.9
20	23	37	.00	3960	.3	3960	.3
21	20	30	.05	3960	.8	3960	.8
22	19	42	-.90	3960	15.0	3960	15.0
23	30	46	2.56	3960	2.2	3960	2.2
24	25	42	.05	3960	1.6	3960	1.6
25	30	44	.79	3960	1.0	3960	1.0
26	25	35	.48	3960	8.1	3960	8.1
27	26	35	.05	3960	2.1	3960	2.1
28	27	36	.10	3960	2.6	3960	2.6
29	29	38	.40	3960	9.2	3960	9.2
30	28	40	.39	3960	6.1	3960	6.1
31	26	38	.20	3960	6.9	3960	6.9

2/1982

day	min temp (F)	max temp (F)	precip (in)	low snow elv (ft)	low snow depth (in)	high snow elv (ft)	high snow depth (in)
1	27	32	.49	3960	8.3	3960	8.3
2	28	35	.10	3960	4.4	3960	4.4
3	17	37	.00	-99	-.9	-99	-.9
4	17	28	.00	-99	-.9	-99	-.9
5	18	34	.00	-99	-.9	-99	-.9
6	12	35	.00	-99	-.9	-99	-.9
7	13	38	.00	-99	-.9	-99	-.9
8	16	33	.00	-99	-.9	-99	-.9
9	12	32	.00	-99	-.9	-99	-.9
10	13	36	.10	-99	-.9	-99	-.9
11	19	32	.57	1560	2.0	3960	6.1
12	28	35	1.08	1560	4.5	3960	4.3
13	33	45	1.99	3960	4.9	3960	4.9
14	36	44	1.06	-99	-.9	-99	-.9
15	34	46	1.07	3960	.6	3960	.6
16	33	45	1.08	3960	3.0	3960	3.0
17	25	39	.38	3960	3.0	3960	3.0
18	28	45	.99	3960	9.3	3960	9.3
19	34	47	.90	3960	.4	3960	.4
20	23	51	.84	3960	.9	3960	.9
21	24	35	.13	-99	-.9	-99	-.9
22	21	35	.04	1560	2.0	3960	.5
23	22	31	.02	1560	2.4	3960	2.8
24	25	37	.00	1560	1.3	3960	.1
25	33	46	.00	-99	-.9	-99	-.9
26	23	39	.40	3960	.8	3960	.8
27	23	41	.00	1560	.4	3960	.1
28	22	52	.69	3960	.1	3960	.1

11/1982

day	min temp (F)	max temp (F)	precip (in)	low snow elv (ft)	low snow depth (in)	high snow elv (ft)	high snow depth (in)
1	20	45	.02	3960	.0	3960	.0
2	23	48	.00	-99	-.9	-99	-.9
3	35	49	.41	-99	-.9	-99	-.9
4	28	42	.32	3960	.2	3960	.2
5	30	43	.43	3960	1.5	3960	1.5
6	29	39	.19	3960	.4	3960	.4
7	23	46	.00	-99	-.9	-99	-.9
8	16	47	.00	-99	-.9	-99	-.9
9	15	37	.00	-99	-.9	-99	-.9
10	14	40	.00	-99	-.9	-99	-.9
11	16	37	.00	-99	-.9	-99	-.9
12	20	33	.05	3960	.3	3960	.3
13	13	29	.00	-99	-.9	-99	-.9
14	16	39	.00	-99	-.9	-99	-.9
15	25	37	.46	3960	.1	3960	.1
16	28	38	1.25	3960	.9	3960	.9
17	26	38	.50	3960	.5	3960	.5
18	27	38	.50	3960	.2	3960	.2
19	27	35	.49	3960	.8	3960	.8
20	20	36	.05	3960	.4	3960	.4
21	16	30	.01	1560	.0	3960	.1
22	16	30	.00	-99	-.9	-99	-.9
23	23	37	.00	-99	-.9	-99	-.9
24	23	35	.00	-99	-.9	-99	-.9
25	26	34	.00	-99	-.9	-99	-.9
26	30	38	.01	3960	.1	3960	.1
27	29	38	.70	3960	.2	3960	.2
28	29	37	.27	3960	.1	3960	.1
29	30	38	.16	3960	.2	3960	.2
30	31	43	.33	3960	.1	3960	.1

12/1982

day	min temp (F)	max temp (F)	precip (in)	low snow elv (ft)	low snow depth (in)	high snow elv (ft)	high snow depth (in)
1	S 29	37	.04	3960	.2	3960	.2
2	R 31	50	1.90	3960	1.0	3960	1.0
3	R 28	46	2.71	3960	.1	3960	.1
4	22	35	.02	-99	-.9	-99	-.9
5	21	31	.60	3960	.2	3960	.2
6	17	30	.02	1560	.4	3960	.2
7	17	31	.00	-99	-.9	-99	-.9
8	24	37	.00	-99	-.9	-99	-.9
9	18	37	.00	-99	-.9	-99	-.9
10	21	44	.00	-99	-.9	-99	-.9
11	24	39	.23	-99	-.9	-99	-.9
12	23	34	.82	3960	.3	3960	.3
13	26	37	.19	3960	.5	3960	.5
14	29	37	.81	3960	.5	3960	.5
15	32	44	1.31	3960	.5	3960	.5
16	29	43	.27	3960	.1	3960	.1
17	27	39	.58	3960	.2	3960	.2
18	26	37	1.04	3960	.2	3960	.2
19	27	35	.13	3960	.3	3960	.3
20	24	33	.52	3960	.3	3960	.3
21	28	39	.23	3960	.1	3960	.1
22	20	38	.09	3960	.2	3960	.2
23	18	33	.02	1560	.0	3960	.2
24	25	38	.00	-99	-.9	-99	-.9
25	22	38	.32	3960	.3	3960	.3
26	14	32	.00	3960	.0	3960	.0
27	12	27	.00	-99	-.9	-99	-.9
28	16	31	.00	-99	-.9	-99	-.9
29	10	25	.00	-99	-.9	-99	-.9
30	11	28	.00	3960	.0	3960	.0
31	18	30	.00	-99	-.9	-99	-.9

12/1982

day	min temp (F)	max temp (F)	precip (in)	low snow elv (ft)	low snow depth (in)	high snow elv (ft)	high snow depth (in)
1	29	37	.04	3960	2.3	3960	2.3
2	31	50	1.90	3960	9.8	3960	9.8
3	28	46	2.71	3960	.7	3960	.7
4	22	35	.02	-99	-.9	-99	-.9
5	21	31	.60	3960	2.3	3960	2.3
6	17	30	.02	920	2.0	3960	2.0
7	17	31	.00	-99	-.9	-99	-.9
8	24	37	.00	-99	-.9	-99	-.9
9	18	37	.00	-99	-.9	-99	-.9
10	21	44	.00	-99	-.9	-99	-.9
11	24	39	.23	-99	-.9	-99	-.9
12	23	34	.82	3960	2.6	3960	2.6
13	26	37	.19	3960	5.4	3960	5.4
14	29	37	.81	3960	4.8	3960	4.8
15	32	44	1.31	3960	4.7	3960	4.7
16	29	43	.27	3960	1.3	3960	1.3
17	27	39	.58	3960	1.8	3960	1.8
18	26	37	1.04	3960	2.2	3960	2.2
19	27	35	.13	3960	2.7	3960	2.7
20	24	33	.52	3960	2.8	3960	2.8
21	28	39	.23	3960	1.1	3960	1.1
22	20	38	.09	3960	1.6	3960	1.6
23	18	33	.02	1560	.3	3960	2.2
24	25	38	.00	-99	-.9	-99	-.9
25	22	38	.32	3960	2.6	3960	2.6
26	14	32	.00	3960	.1	3960	.1
27	12	27	.00	-99	-.9	-99	-.9
28	16	31	.00	-99	-.9	-99	-.9
29	10	25	.00	-99	-.9	-99	-.9
30	11	28	.00	3960	.1	3960	.1
31	18	30	.00	-99	-.9	-99	-.9

1/1983

day	min temp (F)	max temp (F)	precip (in)	low snow elv (ft)	low snow depth (in)	high snow elv (ft)	high snow depth (in)
1	20	30	.04	-99	-.9	-99	-.9
2	21	34	.76	3960	4.1	3960	4.1
3	27	36	.42	1560	1.7	3960	8.6
4	26	43	3.38	3960	13.3	3960	13.3
5	24	43	1.13	3960	3.8	3960	3.8
6	29	42	.85	3960	5.9	3960	5.9
7	32	48	1.28	3960	1.2	3960	1.2
8	27	36	.19	3960	19.2	3960	19.2
9	31	41	.83	3960	5.7	3960	5.7
10	30	43	.02	-99	-.9	-99	-.9
11	19	48	.00	-99	-.9	-99	-.9
12	19	48	.06	-99	-.9	-99	-.9
13	18	39	.02	-99	-.9	-99	-.9
14	16	34	.01	-99	-.9	-99	-.9
15	16	42	.06	-99	-.9	-99	-.9
16	27	41	.09	3960	.7	3960	.7
17	39	43	.02	-99	-.9	-99	-.9
18	31	43	.65	3960	.4	3960	.4
19	29	37	.07	3960	2.0	3960	2.0
20	18	37	.03	3960	.1	3960	.1
21	18	36	.00	-99	-.9	-99	-.9
22	23	41	.63	3960	3.8	3960	3.8
23	32	45	.23	3960	.7	3960	.7
24	30	47	.15	3960	.3	3960	.3
25	33	45	.20	3960	1.1	3960	1.1
26	33	47	.34	3960	1.3	3960	1.3
27	24	40	.83	3960	5.0	3960	5.0
28	26	45	.00	-99	-.9	-99	-.9
29	30	47	.03	-99	-.9	-99	-.9
30	24	47	.00	-99	-.9	-99	-.9
31	18	44	.00	-99	-.9	-99	-.9

12/1983

day	min temp (F)	max temp (F)	precip (in)	low snow elv (ft)	low snow depth (in)	high snow elv (ft)	high snow depth (in)
1	15	35	.00	-99	-.9	-99	-.9
2	21	26	.35	1560	.4	3960	3.1
3	21	25	.00	920	5.0	3960	.2
4	23	29	.05	3960	.8	3960	.8
5	21	30	.08	920	1.0	3960	4.7
6	19	32	.00	-99	-.9	-99	-.9
7	23	35	.64	3960	3.2	3960	3.2
8	30	37	.38	1560	1.0	3960	2.4
9	25	35	1.24	3960	3.2	3960	3.2
10	26	37	.27	3960	6.6	3960	6.6
11	21	37	.00	-99	-.9	-99	-.9
12	28	37	.78	3960	6.2	3960	6.2
13	30	39	.30	3960	14.4	3960	14.4
14	24	33	.15	3960	4.1	3960	4.1
15	19	29	.00	-99	-.9	-99	-.9
16	17	23	.00	-99	-.9	-99	-.9
17	18	27	.02	-99	-.9	-99	-.9
18	17	28	.08	3960	.7	3960	.7
19	11	21	-.90	690	1.0	3960	.4
20	6	16	-.90	3960	.2	3960	.2
21	-4	14	-.90	-99	-.9	-99	-.9
22	-4	14	-.90	-99	-.9	-99	-.9
23	1	11	-.90	-99	-.9	-99	-.9
24	2	24	.00	-99	-.9	-99	-.9
25	21	29	.17	3960	1.2	3960	1.2
26	21	34	.06	920	1.8	3960	.6
27	20	29	.00	-99	-.9	-99	-.9
28	15	27	.02	3960	.1	3960	.1
29	22	33	1.36	3960	12.4	3960	12.4
30	30	38	.18	3960	.8	3960	.8
31	23	38	.00	3960	5.4	3960	5.4

1/1984

day	min temp (F)	max temp (F)	precip (in)	low snow elv (ft)	low snow depth (in)	high snow elv (ft)	high snow depth (in)
1	31	41	.63	-99	-.9	-99	-.9
2	31	45	1.10	-99	-.9	-99	-.9
3	43	52	.33	-99	-.9	-99	-.9
4	35	54	.80	-99	-.9	-99	-.9
5	34	41	.20	-99	-.9	-99	-.9
6	32	42	.04	-99	-.9	-99	-.9
7	29	41	.04	-99	-.9	-99	-.9
8	32	41	.02	3960	.2	3960	.2
9	34	43	.04	-99	-.9	-99	-.9
10	30	37	.45	3960	6.2	3960	6.2
11	29	35	.20	3960	.6	3960	.6
12	21	31	.01	-99	-.9	-99	-.9
13	15	29	.00	-99	-.9	-99	-.9
14	15	31	.00	-99	-.9	-99	-.9
15	12	34	.00	-99	-.9	-99	-.9
16	9	26	.00	-99	-.9	-99	-.9
17	10	30	.00	-99	-.9	-99	-.9
18	17	27	.00	-99	-.9	-99	-.9
19	17	30	.00	-99	-.9	-99	-.9
20	19	27	.08	3960	.2	3960	.2
21	22	37	.85	1560	.4	3960	3.4
22	32	38	.21	3960	15.0	3960	15.0
23	32	41	.84	3960	7.1	3960	7.1
24	36	43	2.08	-99	-.9	-99	-.9
25	31	39	.25	3960	13.3	3960	13.3
26	32	38	.12	3960	3.8	3960	3.8
27	36	44	.04	-99	-.9	-99	-.9
28	34	42	.03	-99	-.9	-99	-.9
29	25	39	.00	-99	-.9	-99	-.9
30	21	38	.00	-99	-.9	-99	-.9
31	20	29	.00	-99	-.9	-99	-.9

9/1984

day	min temp (F)	max temp (F)	precip (in)	low snow elv (ft)	low snow depth (in)	high snow elv (ft)	high snow depth (in)
1	26	60	.00	-99	-.9	-99	-.9
2	27	65	.00	-99	-.9	-99	-.9
3	35	70	.00	-99	-.9	-99	-.9
4	39	62	.00	-99	-.9	-99	-.9
5	39	56	.31	-99	-.9	-99	-.9
6	34	56	.01	3960	.0	3960	.0
7	33	58	.15	-99	-.9	-99	-.9
8	41	61	.05	-99	-.9	-99	-.9
9	38	55	.06	-99	-.9	-99	-.9
10	20	57	.01	-99	-.9	-99	-.9
11	37	54	.06	3960	.0	3960	.0
12	27	58	.00	-99	-.9	-99	-.9
13	28	59	.00	-99	-.9	-99	-.9
14	28	72	.00	-99	-.9	-99	-.9
15	42	66	.00	-99	-.9	-99	-.9
16	38	72	.00	-99	-.9	-99	-.9
17	37	73	.00	-99	-.9	-99	-.9
18	39	65	.00	-99	-.9	-99	-.9
19	37	50	.00	-99	-.9	-99	-.9
20	36	52	.22	-99	-.9	-99	-.9
21	30	54	.50	-99	-.9	-99	-.9
22	29	42	.19	3960	.3	3960	.3
23	23	51	.12	3960	.1	3960	.1
24	23	52	.00	-99	-.9	-99	-.9
25	33	55	.00	-99	-.9	-99	-.9
26	26	56	.00	-99	-.9	-99	-.9
27	24	58	.00	-99	-.9	-99	-.9
28	24	62	.00	-99	-.9	-99	-.9
29	31	68	.00	-99	-.9	-99	-.9
30	32	57	.00	-99	-.9	-99	-.9

10/1984

day	min temp (F)	max temp (F)	precip (in)	low snow elv (ft)	low snow depth (in)	high snow elv (ft)	high snow depth (in)
1	29	55	.00	-99	-.9	-99	-.9
2	29	59	.00	-99	-.9	-99	-.9
3	32	60	.10	-99	-.9	-99	-.9
4	29	58	.19	-99	-.9	-99	-.9
5	30	54	.00	-99	-.9	-99	-.9
6	38	56	.02	-99	-.9	-99	-.9
7	41	67	.00	-99	-.9	-99	-.9
8	37	60	.19	-99	-.9	-99	-.9
9	36	59	.36	-99	-.9	-99	-.9
10	34	47	.37	-99	-.9	-99	-.9
11	33	48	.10	3960	.1	3960	.1
12	32	46	1.06	3960	.8	3960	.8
13	29	40	.01	3960	1.2	3960	1.2
14	26	43	.06	3960	.5	3960	.5
15	17	40	.00	-99	-.9	-99	-.9
16	18	41	.00	-99	-.9	-99	-.9
17	23	42	.02	3960	.1	3960	.1
18	19	47	.00	-99	-.9	-99	-.9
19	19	47	.00	-99	-.9	-99	-.9
20	17	45	.00	-99	-.9	-99	-.9
21	17	43	.00	-99	-.9	-99	-.9
22	18	44	.00	-99	-.9	-99	-.9
23 S	23	40	.10	3960	.1	3960	.1
24 R	31	45	.20	-99	-.9	-99	-.9
25 R	29	46	.09	3960	.1	3960	.1
26	24	38	.41	3960	.9	3960	.9
27	26	37	.22	3960	.7	3960	.7
28	19	40	.25	3960	.5	3960	.5
29	20	35	.21	3960	.2	3960	.2
30	18	35	.50	3960	1.1	3960	1.1
31	17	30	.01	3960	.1	3960	.1

5/1985

day	min temp (F)	max temp (F)	precip (in)	low snow elv (ft)	low snow depth (in)	high snow elv (ft)	high snow depth (in)
1	32	61	.00	-99	-.9	-99	-.9
2	32	60	.36	-99	-.9	-99	-.9
3	31	45	.08	3960	2.8	3960	2.8
4	27	46	.09	3960	8.1	3960	8.1
5	30	47	.01	3960	.1	3960	.1
6	30	48	.00	-99	-.9	-99	-.9
7	29	50	.03	-99	-.9	-99	-.9
8	22	46	.00	-99	-.9	-99	-.9
9	26	55	.00	-99	-.9	-99	-.9
10	25	41	.65	3960	2.8	3960	2.8
11	24	47	.08	3960	1.4	3960	1.4
12	26	51	.00	-99	-.9	-99	-.9
13	30	49	.53	3960	.7	3960	.7
14	24	49	.08	3960	.4	3960	.4
15	28	63	.00	-99	-.9	-99	-.9
16	35	72	.00	-99	-.9	-99	-.9
17	37	65	.00	-99	-.9	-99	-.9
18	33	56	.00	-99	-.9	-99	-.9
19	36	52	.00	-99	-.9	-99	-.9
20	38	50	.00	-99	-.9	-99	-.9
21	37	63	.00	-99	-.9	-99	-.9
22	43	70	.00	-99	-.9	-99	-.9
23	43	70	.01	-99	-.9	-99	-.9
24	41	62	.63	-99	-.9	-99	-.9
25	39	53	.03	-99	-.9	-99	-.9
26	39	57	.00	-99	-.9	-99	-.9
27	39	52	.00	-99	-.9	-99	-.9
28	39	55	.24	-99	-.9	-99	-.9
29	35	45	.62	-99	-.9	-99	-.9
30	32	52	.02	-99	-.9	-99	-.9
31	33	58	.01	-99	-.9	-99	-.9

6/1985

day	min temp (F)	max temp (F)	precip (in)	low snow elv (ft)	low snow depth (in)	high snow elv (ft)	high snow depth (in)
1	40	45	.00	-99	-.9	-99	-.9
2	38	54	.00	-99	-.9	-99	-.9
3	42	60	.23	-99	-.9	-99	-.9
4	39	60	.10	-99	-.9	-99	-.9
5	34	54	.02	-99	-.9	-99	-.9
6	40	49	1.67	-99	-.9	-99	-.9
7	37	48	.62	-99	-.9	-99	-.9
8	28	54	.00	-99	-.9	-99	-.9
9	30	57	.00	-99	-.9	-99	-.9
10	36	66	.00	-99	-.9	-99	-.9
11	43	74	.00	-99	-.9	-99	-.9
12	36	63	.02	-99	-.9	-99	-.9
13	40	52	.28	-99	-.9	-99	-.9
14	41	59	.12	-99	-.9	-99	-.9
15	30	56	.01	-99	-.9	-99	-.9
16	34	62	.00	-99	-.9	-99	-.9
17	38	73	.00	-99	-.9	-99	-.9
18	42	79	.00	-99	-.9	-99	-.9
19	39	69	.00	-99	-.9	-99	-.9
20	36	65	.00	-99	-.9	-99	-.9
21	40	65	.00	-99	-.9	-99	-.9
22	36	59	.01	-99	-.9	-99	-.9
23	31	57	.10	-99	-.9	-99	-.9
24	31	57	.00	-99	-.9	-99	-.9
25	34	65	.00	-99	-.9	-99	-.9
26	36	66	.00	-99	-.9	-99	-.9
27	37	56	.00	-99	-.9	-99	-.9
28	38	63	.00	-99	-.9	-99	-.9
29	35	57	.00	-99	-.9	-99	-.9
30	35	62	.00	-99	-.9	-99	-.9

10/1985

day	min temp (F)	max temp (F)	precip (in)	low snow elv (ft)	low snow depth (in)	high snow elv (ft)	high snow depth (in)
1	34	56	.00	-99	-.9	-99	-.9
2	31	50	.13	-99	-.9	-99	-.9
3	25	53	.01	-99	-.9	-99	-.9
4	25	54	.01	-99	-.9	-99	-.9
5	29	54	.16	-99	-.9	-99	-.9
6	24	44	.08	3960	.5	3960	.5
7	20	46	.02	3960	1.4	3960	1.4
8	20	48	.00	-99	-.9	-99	-.9
9	23	47	.00	-99	-.9	-99	-.9
10	31	53	.00	-99	-.9	-99	-.9
11	29	49	1.29	3960	5.7	3960	5.7
12	24	52	.02	3960	6.2	3960	6.2
13	25	48	.10	-99	-.9	-99	-.9
14	40	50	.01	-99	-.9	-99	-.9
15	35	53	.42	-99	-.9	-99	-.9
16	32	44	.04	-99	-.9	-99	-.9
17	32	49	.01	-99	-.9	-99	-.9
18	34	56	.05	-99	-.9	-99	-.9
19	35	47	.81	-99	-.9	-99	-.9
20	33	51	.07	-99	-.9	-99	-.9
21	31	46	.61	-99	-.9	-99	-.9
22	32	42	.83	3960	12.3	3960	12.3
23	33	46	.68	3960	2.7	3960	2.7
24	32	49	1.77	3960	4.5	3960	4.5
25	29	43	.38	3960	.1	3960	.1
26	31	53	1.21	3960	3.7	3960	3.7
27	30	55	.82	3960	3.0	3960	3.0
28	17	45	.00	3960	3.0	3960	3.0
29	18	48	.38	-99	-.9	-99	-.9
30	25	41	.25	3960	5.8	3960	5.8
31	27	44	.21	3960	3.2	3960	3.2

11/1985

day	min temp (F)	max temp (F)	precip (in)	low snow elv (ft)	low snow depth (in)	high snow elv (ft)	high snow depth (in)
1	R 37	46	.84	-99	-.9	-99	-.9
2	37	45	.70	-99	-.9	-99	-.9
3	31	45	.79	-99	-.9	-99	-.9
4	24	34	.08	3960	7.4	3960	7.4
5	24	38	.42	3960	10.2	3960	10.2
6	31	43	.16	3960	4.8	3960	4.8
7	26	39	.23	3960	4.8	3960	4.8
8	23	33	.15	1560	.5	3960	3.0
9	19	36	.01	1560	.5	3960	3.1
10	10	31	.00	-99	-.9	-99	-.9
11	10	24	.00	-99	-.9	-99	-.9
12	12	32	.00	-99	-.9	-99	-.9
13	15	39	.00	-99	-.9	-99	-.9
14	23	40	.28	-99	-.9	-99	-.9
15	24	36	1.01	3960	4.7	3960	4.7
16	20	39	.52	3960	4.8	3960	4.8
17	12	25	.07	690	4.0	3960	6.0
18	12	26	.16	-99	-.9	-99	-.9
19	15	23	-.90	690	2.6	3960	5.2
20	9	22	-.90	1560	8.8	3960	2.1
21	3	18	.50	1560	1.5	3960	2.4
22	-5	16	.00	1560	2.5	3960	.8
23	-4	15	.00	-99	-.9	-99	-.9
24	7	20	.00	-99	-.9	-99	-.9
25	7	24	.10	3960	6.1	3960	6.1
26	8	27	.25	920	1.5	3960	4.4
27	5	15	.02	690	4.1	3960	5.8
28	4	17	.00	-99	-.9	-99	-.9
29	3	20	.00	-99	-.9	-99	-.9
30	7	19	.00	3960	.2	3960	.2

10/1986

day	min temp (F)	max temp (F)	precip (in)	low snow elv (ft)	low snow depth (in)	high snow elv (ft)	high snow depth (in)
1	34	48	.00	-99	-.9	-99	-.9
2	30	46	.00	-99	-.9	-99	-.9
3	31	49	.00	-99	-.9	-99	-.9
4	38	56	.01	-99	-.9	-99	-.9
5	38	54	.01	-99	-.9	-99	-.9
6	33	54	.00	-99	-.9	-99	-.9
7	33	55	.00	-99	-.9	-99	-.9
8	35	45	.00	-99	-.9	-99	-.9
9	35	54	.00	-99	-.9	-99	-.9
10	25	56	.00	-99	-.9	-99	-.9
11	25	52	.00	-99	-.9	-99	-.9
12	25	60	.00	-99	-.9	-99	-.9
13	26	57	.00	-99	-.9	-99	-.9
14	26	56	.00	-99	-.9	-99	-.9
15	26	58	.00	-99	-.9	-99	-.9
16	27	51	.00	-99	-.9	-99	-.9
17	34	45	.00	-99	-.9	-99	-.9
18	33	44	.00	-99	-.9	-99	-.9
19	25	50	.00	-99	-.9	-99	-.9
20	27	53	.00	-99	-.9	-99	-.9
21	29	52	.00	-99	-.9	-99	-.9
22	26	58	.00	-99	-.9	-99	-.9
23	26	60	.00	-99	-.9	-99	-.9
24	39	57	.33	-99	-.9	-99	-.9
25	45	53	1.35	-99	-.9	-99	-.9
26	44	54	1.36	-99	-.9	-99	-.9
27	35	53	.12	-99	-.9	-99	-.9
28	36	50	.02	-99	-.9	-99	-.9
29	39	56	.47	-99	-.9	-99	-.9
30	39	45	.72	-99	-.9	-99	-.9
31	30	45	.02	-99	-.9	-99	-.9

11/1986

day	min temp (F)	max temp (F)	precip (in)	low snow elv (ft)	low snow depth (in)	high snow elv (ft)	high snow depth (in)
1	31	47	.00	-99	-.9	-99	-.9
2	32	37	.01	-99	-.9	-99	-.9
3	32	36	.00	-99	-.9	-99	-.9
4	32	46	.57	-99	-.9	-99	-.9
5	35	41	.85	3960	7.2	3960	7.2
6	31	42	.42	3960	5.0	3960	5.0
7	27	36	.36	3960	9.4	3960	9.4
8	25	36	.01	3960	4.5	3960	4.5
9	20	32	.00	1560	.7	3960	.1
10	23	32	.16	-99	-.9	-99	-.9
11	29	35	.19	-99	-.9	-99	-.9
12	33	39	.01	-99	-.9	-99	-.9
13	30	38	.42	3960	2.3	3960	2.3
14	27	35	.01	3960	.4	3960	.4
15	29	39	.06	3960	4.6	3960	4.6
16	26	37	.40	3960	16.0	3960	16.0
17	27	39	.50	3960	2.7	3960	2.7
18	36	43	1.00	3960	10.1	3960	10.1
19	36	52	1.29	3960	4.5	3960	4.5
20	35	41	.38	3960	5.9	3960	5.9
21	30	41	.66	3960	8.1	3960	8.1
22	30	45	1.15	3960	10.4	3960	10.4
23	25	46	4.64	-99	-.9	-99	-.9
24	26	33	.06	1560	1.0	3960	5.6
25	31	41	.36	3960	2.0	3960	2.0
26	31	42	.94	3960	8.8	3960	8.8
27	30	40	.11	3960	7.6	3960	7.6
28	24	32	.21	3960	2.1	3960	2.1
29	25	34	.00	3960	.2	3960	.2
30	27	41	.32	-99	-.9	-99	-.9

11/1987

day	min temp (F)	max temp (F)	precip (in)	low snow elv (ft)	low snow depth (in)	high snow elv (ft)	high snow depth (in)
1	39	43	.07	-99	-.9	-99	-.9
2	38	41	.00	-99	-.9	-99	-.9
3	31	45	.00	-99	-.9	-99	-.9
4	35	46	.00	-99	-.9	-99	-.9
5	30	51	.00	-99	-.9	-99	-.9
6	34	43	.01	-99	-.9	-99	-.9
7	38	47	.00	-99	-.9	-99	-.9
8	37	57	.13	-99	-.9	-99	-.9
9	39	47	.06	-99	-.9	-99	-.9
10	40	53	.82	-99	-.9	-99	-.9
11	38	47	.10	-99	-.9	-99	-.9
12	38	48	.23	-99	-.9	-99	-.9
13	32	41	.78	3960	.2	3960	.2
14	32	41	.01	3960	.8	3960	.8
15	29	40	.37	3960	.3	3960	.3
16	15	38	.01	1560	.0	3960	1.2
17	30	40	.00	-99	-.9	-99	-.9
18	30	42	.00	-99	-.9	-99	-.9
19	42	47	.00	-99	-.9	-99	-.9
20	36	52	.15	-99	-.9	-99	-.9
21	34	38	.38	3960	.3	3960	.3
22	33	39	.41	3960	.8	3960	.8
23	33	41	.42	3960	1.1	3960	1.1
24	24	41	.11	3960	.5	3960	.5
25	22	41	.01	3960	.0	3960	.0
26	24	43	.00	-99	-.9	-99	-.9
27	17	42	.00	-99	-.9	-99	-.9
28	18	36	.00	-99	-.9	-99	-.9
29	32	39	.00	-99	-.9	-99	-.9
30	31	40	1.25	3960	.1	3960	.1

12/1987

day	min temp (F)	max temp (F)	precip (in)	low snow elv (ft)	low snow depth (in)	high snow elv (ft)	high snow depth (in)
1	S 31	38	1.03	3960	1.0	3960	1.0
2	R 32	41	2.18	3960	.7	3960	.7
3	S 32	35	.47	3960	.8	3960	.8
4	S 21	37	.09	3960	.0	3960	.0
5	S 25	45	.72	3960	.0	3960	.0
6	R 34	45	.32	-99	-.9	-99	-.9
7	R 32	41	.05	3960	.1	3960	.1
8	S 25	36	.12	3960	.0	3960	.0
9	R 30	47	2.60	3960	2.4	3960	2.4
10	29	36	.02	3960	1.6	3960	1.6
11	22	34	.08	3960	.7	3960	.7
12	16	28	.01	1560	.1	3960	.1
13	15	29	.00	-99	-.9	-99	-.9
14	15	28	.08	3960	.3	3960	.3
15	16	28	.03	-99	-.9	-99	-.9
16	13	23	.04	1560	.0	3960	.2
17	13	23	.00	-99	-.9	-99	-.9
18	13	25	.04	3960	.0	3960	.0
19	17	27	.00	-99	-.9	-99	-.9
20	24	34	.50	3960	.9	3960	.9
21	22	34	.52	3960	.2	3960	.2
22	21	26	.59	690	.1	3960	.4
23	18	26	.00	-99	-.9	-99	-.9
24	10	23	-.90	-99	-.9	-99	-.9
25	11	16	-.90	-99	-.9	-99	-.9
26	11	33	*****	-99	-.9	-99	-.9
27	23	30	.00	-99	-.9	-99	-.9
28	22	34	.00	3960	.1	3960	.1
29	21	33	.01	3960	.0	3960	.0
30	19	33	.00	-99	-.9	-99	-.9
31	19	32	.00	-99	-.9	-99	-.9

3/1988

day	min temp (F)	max temp (F)	precip (in)	low snow elv (ft)	low snow depth (in)	high snow elv (ft)	high snow depth (in)
1	32	41	.00	-99	-.9	-99	-.9
2	27	41	.18	3960	1.1	3960	1.1
3	25	40	.04	-99	-.9	-99	-.9
4	30	37	.35	3960	3.1	3960	3.1
5	26	37	.48	3960	6.1	3960	6.1
6	23	45	.00	1560	1.0	3960	8.1
7	22	45	.22	-99	-.9	-99	-.9
8	24	37	.84	3960	1.6	3960	1.6
9	24	34	.34	1560	.5	3960	9.7
10	18	37	.01	-99	-.9	-99	-.9
11	18	46	.00	-99	-.9	-99	-.9
12	22	46	.00	-99	-.9	-99	-.9
13	22	45	.00	-99	-.9	-99	-.9
14	17	43	.00	-99	-.9	-99	-.9
15	22	50	.00	-99	-.9	-99	-.9
16	22	54	.00	-99	-.9	-99	-.9
17	22	53	.00	-99	-.9	-99	-.9
18	24	56	.00	-99	-.9	-99	-.9
19	36	56	.14	-99	-.9	-99	-.9
20	29	45	.17	3960	.7	3960	.7
21	29	45	.20	3960	4.5	3960	4.5
22	29	45	1.31	3960	4.7	3960	4.7
23	27	40	.17	3960	15.6	3960	15.6
24	28	34	.67	1560	.7	3960	13.1
25	29	41	2.05	3960	2.0	3960	2.0
26	24	34	.44	3960	9.7	3960	9.7
27	24	35	.06	3960	1.8	3960	1.8
28	25	39	.66	1560	.2	3960	2.8
29	27	38	.33	1560	2.3	3960	10.5
30	28	44	.01	3960	.2	3960	.2
31	28	52	.01	-99	-.9	-99	-.9

4/1988

day	min temp (F)	max temp (F)	precip (in)	low snow elv (ft)	low snow depth (in)	high snow elv (ft)	high snow depth (in)
1	27	47	.27	-99	-.9	-99	-.9
2	31	44	.91	3960	1.0	3960	1.0
3	27	38	.43	3960	10.7	3960	10.7
4	28	40	.04	1560	.3	3960	6.1
5	31	44	.54	3960	.9	3960	.9
6	23	42	.43	3960	2.2	3960	2.2
7	24	40	.18	3960	2.3	3960	2.3
8	21	45	.00	3960	.1	3960	.1
9	22	58	.00	-99	-.9	-99	-.9
10	27	68	.00	-99	-.9	-99	-.9
11	29	58	.00	-99	-.9	-99	-.9
12	36	66	.00	-99	-.9	-99	-.9
13	38	51	.00	-99	-.9	-99	-.9
14	39	51	.00	-99	-.9	-99	-.9
15	41	48	.01	-99	-.9	-99	-.9
16	35	44	.27	-99	-.9	-99	-.9
17	34	38	.37	3960	.8	3960	.8
18	27	53	.01	-99	-.9	-99	-.9
19	27	55	.00	-99	-.9	-99	-.9
20	32	60	.00	-99	-.9	-99	-.9
21	31	44	.10	3960	2.4	3960	2.4
22	32	40	.00	3960	.5	3960	.5
23	29	39	.19	3960	2.8	3960	2.8
24	29	36	.21	3960	9.4	3960	9.4
25	22	43	.00	-99	-.9	-99	-.9
26	28	59	.00	-99	-.9	-99	-.9
27	40	65	.02	-99	-.9	-99	-.9
28	34	54	.38	-99	-.9	-99	-.9
29	29	41	.39	3960	2.2	3960	2.2
30	25	40	.11	3960	8.5	3960	8.5

9/1988

day	min temp (F)	max temp (F)	precip (in)	low snow elv (ft)	low snow depth (in)	high snow elv (ft)	high snow depth (in)
1	41	75	.00	-99	-.9	-99	-.9
2	41	86	.00	-99	-.9	-99	-.9
3	45	84	.00	-99	-.9	-99	-.9
4	46	74	.00	-99	-.9	-99	-.9
5	45	52	.00	-99	-.9	-99	-.9
6	45	60	.02	-99	-.9	-99	-.9
7	33	63	.00	-99	-.9	-99	-.9
8	35	66	.00	-99	-.9	-99	-.9
9	36	59	.10	-99	-.9	-99	-.9
10	30	57	.00	-99	-.9	-99	-.9
11	31	63	.00	-99	-.9	-99	-.9
12	35	69	.00	-99	-.9	-99	-.9
13	38	74	.00	-99	-.9	-99	-.9
14	39	75	.00	-99	-.9	-99	-.9
15	40	51	.09	-99	-.9	-99	-.9
16	37	48	.51	3960	.8	3960	.8
17	31	51	.01	3960	2.3	3960	2.3
18	32	48	.52	-99	-.9	-99	-.9
19	39	45	.58	-99	-.9	-99	-.9
20	31	54	.01	-99	-.9	-99	-.9
21	29	57	.00	-99	-.9	-99	-.9
22	29	56	.00	-99	-.9	-99	-.9
23	29	53	.03	-99	-.9	-99	-.9
24	30	48	1.23	-99	-.9	-99	-.9
25	32	49	.18	-99	-.9	-99	-.9
26	41	52	.73	-99	-.9	-99	-.9
27	37	53	.20	-99	-.9	-99	-.9
28	35	63	.00	-99	-.9	-99	-.9
29	34	66	.00	-99	-.9	-99	-.9
30	34	66	.00	-99	-.9	-99	-.9

10/1988

day	min temp (F)	max temp (F)	precip (in)	low snow elv (ft)	low snow depth (in)	high snow elv (ft)	high snow depth (in)
1	40	65	.00	-99	-.9	-99	-.9
2	40	66	.00	-99	-.9	-99	-.9
3	43	47	.00	-99	-.9	-99	-.9
4	44	56	.10	-99	-.9	-99	-.9
5	44	52	.02	-99	-.9	-99	-.9
6	44	50	.00	-99	-.9	-99	-.9
7	44	50	.02	-99	-.9	-99	-.9
8	41	47	.00	-99	-.9	-99	-.9
9	R 35	53	.00	-99	-.9	-99	-.9
10	R 35	62	.00	-99	-.9	-99	-.9
11	R 44	47	.02	-99	-.9	-99	-.9
12	R 42	51	.00	-99	-.9	-99	-.9
13	R 42	53	.31	-99	-.9	-99	-.9
14	R 45	50	.77	-99	-.9	-99	-.9
15	R 42	52	1.76	-99	-.9	-99	-.9
16	R 32	42	.55	-99	-.9	-99	-.9
17	30	46	.01	-99	-.9	-99	-.9
18	33	42	.39	-99	-.9	-99	-.9
19	42	51	.02	-99	-.9	-99	-.9
20	39	51	.01	-99	-.9	-99	-.9
21	36	57	.91	-99	-.9	-99	-.9
22	27	46	.00	-99	-.9	-99	-.9
23	27	52	.00	-99	-.9	-99	-.9
24	33	45	.00	-99	-.9	-99	-.9
25	34	51	.06	-99	-.9	-99	-.9
26	21	46	.00	-99	-.9	-99	-.9
27	21	42	.00	-99	-.9	-99	-.9
28	21	45	.00	-99	-.9	-99	-.9
29	29	53	.15	-99	-.9	-99	-.9
30	38	49	.32	-99	-.9	-99	-.9
31	35	60	.00	-99	-.9	-99	-.9

12/1989

day	min temp (F)	max temp (F)	precip (in)	low snow elv (ft)	low snow depth (in)	high snow elv (ft)	high snow depth (in)
1	20	42	.00	-99	-.9	-99	-.9
2	32	44	1.20	-99	-.9	-99	-.9
3	36	50	2.13	-99	-.9	-99	-.9
4	38	48	1.04	-99	-.9	-99	-.9
5	37	47	.02	-99	-.9	-99	-.9
6	34	43	.03	-99	-.9	-99	-.9
7	37	45	.70	-99	-.9	-99	-.9
8	29	39	.09	-99	-.9	-99	-.9
9	23	39	.15	-99	-.9	-99	-.9
10	19	32	.00	-99	-.9	-99	-.9
11	16	27	.00	-99	-.9	-99	-.9
12	18	27	.00	-99	-.9	-99	-.9
13	18	26	.00	-99	-.9	-99	-.9
14	18	27	.00	-99	-.9	-99	-.9
15	22	27	.00	-99	-.9	-99	-.9
16	20	25	.00	-99	-.9	-99	-.9
17	19	25	.00	-99	-.9	-99	-.9
18	19	31	.10	-99	-.9	-99	-.9
19	30	35	.10	-99	-.9	-99	-.9
20	27	36	.01	-99	-.9	-99	-.9
21	26	39	.01	-99	-.9	-99	-.9
22	25	41	.06	-99	-.9	-99	-.9
23	27	42	.01	-99	-.9	-99	-.9
24	24	33	.00	-99	-.9	-99	-.9
25	21	30	.00	-99	-.9	-99	-.9
26	19	27	.00	-99	-.9	-99	-.9
27	21	29	.29	-99	-.9	-99	-.9
28	23	35	.01	-99	-.9	-99	-.9
29	25	34	.03	-99	-.9	-99	-.9
30	24	37	.01	-99	-.9	-99	-.9
31	27	38	.47	-99	-.9	-99	-.9

1/1990

day	min temp (F)	max temp (F)	precip (in)	low snow elv (ft)	low snow depth (in)	high snow elv (ft)	high snow depth (in)
1	S 21	32	.22	-99	-.9	-99	-.9
2	S 22	30	.07	1560	.3	-99	-.9
3	S 28	38	.74	-99	-.9	-99	-.9
4	R 32	40	.12	-99	-.9	-99	-.9
5	R 33	47	.97	-99	-.9	-99	-.9
6	R 32	44	1.52	-99	-.9	-99	-.9
7	R 31	43	1.23	-99	-.9	-99	-.9
8	R 33	43	2.53	-99	-.9	-99	-.9
9	S 25	44	2.58	-99	-.9	-99	-.9
10	25	36	.03	-99	-.9	-99	-.9
11	32	40	.02	-99	-.9	-99	-.9
12	35	45	.01	-99	-.9	-99	-.9
13	33	42	.01	-99	-.9	-99	-.9
14	32	36	.26	-99	-.9	-99	-.9
15	28	36	.08	-99	-.9	-99	-.9
16	27	31	.02	-99	-.9	-99	-.9
17	16	39	.00	-99	-.9	-99	-.9
18	16	33	.00	-99	-.9	-99	-.9
19	19	42	.00	-99	-.9	-99	-.9
20	21	38	.00	-99	-.9	-99	-.9
21	26	37	.42	-99	-.9	-99	-.9
22	26	34	.43	-99	-.9	-99	-.9
23	27	36	.00	-99	-.9	-99	-.9
24	27	38	.10	-99	-.9	-99	-.9
25	20	32	.59	-99	-.9	-99	-.9
26	23	30	.31	1560	.2	-99	-.9
27	27	35	.63	1560	.2	-99	-.9
28	25	35	1.36	-99	-.9	-99	-.9
29	25	32	.63	-99	-.9	-99	-.9
30	22	30	.44	1560	.3	-99	-.9
31	22	30	.44	1560	.2	-99	-.9

10/1990

day	min temp (F)	max temp (F)	precip (in)	low snow elv (ft)	low snow depth (in)	high snow elv (ft)	high snow depth (in)
1	35	52	.70	-99	-.9	-99	-.9
2	35	47	.27	-99	-.9	-99	-.9
3	44	53	.18	-99	-.9	-99	-.9
4	31	55	1.20	-99	-.9	-99	-.9
5	26	47	.07	-99	-.9	-99	-.9
6	23	44	.00	-99	-.9	-99	-.9
7	23	47	.00	-99	-.9	-99	-.9
8	30	52	.00	-99	-.9	-99	-.9
9	30	48	.52	-99	-.9	-99	-.9
10	26	46	.12	-99	-.9	-99	-.9
11	26	44	.27	-99	-.9	-99	-.9
12	37	44	.11	-99	-.9	-99	-.9
13	35	48	.23	-99	-.9	-99	-.9
14	34	37	1.38	-99	-.9	-99	-.9
15	32	38	.68	-99	-.9	-99	-.9
16	29	41	.04	1560	.1	-99	-.9
17	35	45	.60	-99	-.9	-99	-.9
18	31	43	.51	-99	-.9	-99	-.9
19	24	44	.00	-99	-.9	-99	-.9
20	24	44	.58	-99	-.9	-99	-.9
21	30	45	.32	-99	-.9	-99	-.9
22	29	44	.01	-99	-.9	-99	-.9
23	29	52	.00	-99	-.9	-99	-.9
24	30	59	.00	-99	-.9	-99	-.9
25	35	60	.52	-99	-.9	-99	-.9
26	34	55	.01	-99	-.9	-99	-.9
27	36	54	.68	-99	-.9	-99	-.9
28	30	46	.37	-99	-.9	-99	-.9
29	33	49	.75	-99	-.9	-99	-.9
30	33	40	.54	-99	-.9	-99	-.9
31	28	40	.38	-99	-.9	-99	-.9

11/1990

day	min temp (F)	max temp (F)	precip (in)	low snow elv (ft)	low snow depth (in)	high snow elv (ft)	high snow depth (in)
1	23	41	.00	-99	-.9	-99	-.9
2	23	40	.03	-99	-.9	-99	-.9
3	33	46	.36	-99	-.9	-99	-.9
4	31	48	.98	-99	-.9	-99	-.9
5	22	48	.06	-99	-.9	-99	-.9
6	21	32	.22	-99	-.9	-99	-.9
7	32	42	.02	-99	-.9	-99	-.9
8	35	46	1.25	-99	-.9	-99	-.9
9	43	47	3.27	-99	-.9	-99	-.9
10	39	50	.07	-99	-.9	-99	-.9
11	32	56	.00	-99	-.9	-99	-.9
12 R	35	51	1.44	-99	-.9	-99	-.9
13 S	31	40	.34	-99	-.9	-99	-.9
14 S	31	41	.21	-99	-.9	-99	-.9
15 R	32	42	.00	-99	-.9	-99	-.9
16 R	35	51	.37	-99	-.9	-99	-.9
17 S	25	36	.14	-99	-.9	-99	-.9
18 S	25	31	.01	-99	-.9	-99	-.9
19 S	27	36	.21	-99	-.9	-99	-.9
20 S	27	33	.37	-99	-.9	-99	-.9
21 S	27	42	1.00	-99	-.9	-99	-.9
22 R	39	44	.56	-99	-.9	-99	-.9
23 R	38	45	3.15	-99	-.9	-99	-.9
24 R	33	46	2.38	-99	-.9	-99	-.9
25	23	35	.24	-99	-.9	-99	-.9
26	23	33	.20	1560	.0	-99	-.9
27	25	36	.01	1560	.1	-99	-.9
28	25	48	.39	-99	-.9	-99	-.9
29	25	36	.28	1560	.1	-99	-.9
30	26	32	.68	-99	-.9	-99	-.9

January 1992

Day	P	T_{min}	T_{max}
15	.03	41	49
16	.76	44	55
17	.01	28	46
18	.02	28	48
19	0	40	51
20	0	38	49
21	.16	37	48
22	.01	37	47
23	.65	39	52
24	1.26	46	55

RAW VEGETATION DATA

Table 1. Vegetation Classes, Interpreted from Landsat Imagery

Vegetation class	Canopy density	Tree size (in. dbh)	USFS stand class (Gifford Pinchot NF)	Hydrologic recovery (maturity)
1 large dense	≥70%	≥10% ≥21"	old growth	100%
2 small dense	≥70%	8 - 21"	mature sawtimber	100%
3 sparse	≥10 - 15%	4 - 7"	open pole	45 - 95% ⇒ 50%
4 other# forest	<10 - 15%	0 - 3"	clearcut, shrub, open sapling	0 - 27% ⇒ 0%
15 other# non-forest	<10 - 15%	----	grass-forb, urban, agric'l, etc.	≡ 100%*
5 open water	----	----	----	≡ 100%*

Notes: Except for class 1, tree sizes are not part of the definitions of stand classes; USFS class names and hydrologic recovery shown for comparison.

Interpretation of Landsat imagery classified all land with few trees the same; digital land-use information was used to differentiate cleared forest from non-forest (urban, agricultural, etc.) land.

* Although the true hydrologic maturity of urban land, open water, etc., relative to mature forest, is practically nil, these lands are as mature as they are going to get, i.e. the change in vegetation in non-forest lands is not being considered in this model.

---

[1] Prepared by Pacific Meridian Resources, Portland. The images were taken in summer 1988 and 1990. Interpretations for four basins in the Blue Mountains of SE Washington have not been completed yet.

PRECIP CATAGORY
1=RAIN-ON-SNOW
2=SNOW DOMINATED
3=LOW LANDS
4=RAIN DOMINATED
5=HIGH LANDS

VEG CLASS
1=FOREST
2=SPARSE
3=SMALL DENSE
4=LARGE DENSE
5=NON FOREST
6=OPEN WATER

Acres by Condition Zone, Precipitation zone and Vegetation class for Toit Basin

Zone	Precip	Veg.	Acres
1	1	1	30
		2	71
		3	361
		5	16
1	2	1	8
		2	46
		3	699
		5	266
1	5	2	18
		3	247
		5	465
2	1	1	10
		2	200
		4	39
2	2	1	265
		2	185
		4	56
2	4	2	7
2	5	1	70
		2	84
		4	2
3	1	1	258
		2	1729
		3	1406
		4	154
		5	205
3	2	1	671
		2	1306
		3	1490
		4	755
		5	252
		6	14
3	4	2	115
		3	521
		5	57
3	5	1	347
		2	257
		3	448
		4	267
		5	547
4	1	1	78
		2	333
		3	650
		4	34
		5	62
4	2	1	155
		2	116
		3	287
4	4	2	89
		3	408
		4	2
		5	3
4	5	1	30
		2	2
		4	78
		5	59
5	1	1	81
		2	1012
		3	2917
		4	21
		5	84
		6	4
5	2	1	54
		2	905
		3	179
		4	2
5	4	1	731
		2	46
		3	2796
		4	14
		5	150
6	4	1	91
		2	696
		5	27
		6	46
7	3	1	197
		2	88
		3	102
		5	63
		6	8
7	4	1	1071
		2	477
		3	1499
		4	2
		5	121
		6	5
8	1	1	2
		2	1085
		3	283
		4	7
		5	116
8	2	1	162
		2	477
		3	828
		4	100
8	4	2	30
		3	88
		5	20
8	5	1	26
		2	108
		3	521
		4	53
		5	888
9	1	1	66
		2	392
		3	1394
		4	2
		5	71
9	2	1	654
		2	1136
		3	609
		4	70
		5	82
9	4	2	22
		3	193
		5	1047
9	5	1	149
		2	364
		3	51
		4	110
		5	25
10	1	2	265
		3	646
		4	16
		5	37
10	2	2	340
		3	48
		4	4
10	4	1	478
		2	75
		3	1813
		4	50
		5	137

Acres by Condition Zone, Precipitation zone and Vegetation class for Toll Basin

Zone	Precip	Veg.	Acres	Zone	Precip	Veg.	Acres	Zone	Precip	Veg	Acres
11	1	2	17								
		3	752								
11	2	2	80								
		3	593								
		5	2								
11	4	1	398								
		2	121								
		3	1270								
		5	134								
11	5	3	9								
12	4	1	348								
		2	136								
		3	795								
		4	78								
		5	51								
13	1	1	48								
		2	195								
		3	509								
		5	8								
13	4	1	545								
		2	282								
		3	3613								
		4	8								
		5	354								
		6	6								
14	3	1	1485								
		2	1602								
		3	2032								
		4	58								
		5	468								
		6	118								
14	4	1	144								
		2	243								
		3	1023								
		4	1								
		5	61								

		1	2	3	4	5	6
L-LD	1.00						
L-SD	1.00						
L-S	3.00						
L-O	4.00						
L-NF	4.00						
L-W	0.00						
R-LD	2.00		0.00	0.00	2.00	14.00	0.00
R-SD	2.00		0.00	521.00	408.00	2,796.00	0.00
R-S	6.00		7.00	115.00	89.00	46.00	696.00
R-O	8.00		0.00	0.00	0.00	731.00	91.00
R-NF	8.00		0.00	57.00	3.00	150.00	27.00
R-W	0.00		0.00	0.00	0.00	0.00	46.00
RS-LD	3.00	0.00	39.00	154.00	34.00	21.00	
RS-SD	3.00	361.00	0.00	1,406.00	650.00	2,917.00	
RS-S	9.00	71.00	200.00	1,729.00	333.00	1,012.00	
RS-O	12.00	30.00	10.00	258.00	78.00	81.00	
RS-NF	12.00	16.00	0.00	205.00	62.00	84.00	
RS-W	0.00	0.00	0.00	0.00	0.00	6.00	
S-LD	2.00	0.00	56.00	755.00	70.00	2.00	
S-SD	2.00	699.00	0.00	1,490.00	287.00	179.00	
S-S	6.00	46.00	185.00	1,306.00	116.00	905.00	
S-O	8.00	8.00	265.00	671.00	155.00	54.00	
S-NF	8.00	266.00	0.00	252.00	119.00	0.00	
[illegible]-W	0.00	0.00	0.00	14.00	0.00	0.00	
[illegible]-D	1.00	0.00	2.00	267.00	78.00		
H-LD	1.00	247.00	0.00	448.00	0.00		
H-S	3.00	18.00	84.00	257.00	2.00		
H-O	4.00	0.00	70.00	347.00	30.00		
H-NF	4.00	465.00	0.00	547.00	59.00		
H-W	0.00	0.00	0.00	0.00	0.00		
		2,227.00	918.00	10,799.00	2,575.00	8,998.00	860.00

7	8	9	10	11	12	13	14
0.00							58.00
102.00							2,032.00
88.00							1,602.00
197.00							1,485.00
63.00							468.00
8.00							118.00
2.00	0.00	0.00	50.00	0.00	78.00	8.00	1.00
1,499.00	88.00	193.00	1,813.00	1,270.00	795.00	3,613.00	1,023.00
477.00	30.00	22.00	75.00	121.00	136.00	282.00	243.00
1,071.00	0.00	0.00	478.00	398.00	348.00	545.00	144.00
121.00	20.00	0.00	137.00	134.00	51.00	354.00	61.00
5.00	0.00	1,047.00	0.00	0.00	0.00	6.00	0.00
	7.00	2.00	16.00	0.00		0.00	
	283.00	1,394.00	646.00	752.00		509.00	
	1,085.00	392.00	265.00	17.00		195.00	
	2.00	66.00	0.00	0.00		48.00	
	116.00	71.00	37.00	0.00		8.00	
	0.00	0.00	0.00	0.00		0.00	
	100.00	70.00	4.00	0.00			
	828.00	609.00	48.00	593.00			
	477.00	1,136.00	340.00	80.00			
	162.00	654.00	0.00	0.00			
	615.00	82.00	0.00	2.00			
	17.00	0.00	0.00	0.00			
	53.00	110.00		0.00			
	521.00	51.00		9.00			
	108.00	364.00		0.00			
	26.00	149.00		0.00			
	888.00	25.00		0.00			
	0.00	0.00		0.00			
3,633.00	5,426.00	6,437.00	3,909.00	3,376.00	1,408.00	5,568.00	7,235.00

1234	12345	1-6	1-6 13	89	891011	8-12	1-13
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	102.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	88.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	197.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	63.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	8.00
2.00	16.00	16.00	24.00	0.00	50.00	128.00	154.00
929.00	3,725.00	3,725.00	7,338.00	281.00	3,364.00	4,159.00	12,996.00
211.00	257.00	953.00	1,235.00	52.00	248.00	384.00	2,096.00
0.00	731.00	822.00	1,367.00	0.00	876.00	1,224.00	3,662.00
60.00	210.00	237.00	591.00	20.00	291.00	342.00	1,054.00
0.00	0.00	46.00	52.00	1,047.00	1,047.00	1,047.00	1,104.00
227.00	248.00	248.00	248.00	9.00	25.00	25.00	273.00
2,417.00	5,334.00	5,334.00	5,843.00	1,677.00	3,075.00	3,075.00	8,918.00
2,333.00	3,345.00	3,345.00	3,540.00	1,477.00	1,759.00	1,759.00	5,299.00
376.00	457.00	457.00	505.00	68.00	68.00	68.00	573.00
283.00	367.00	367.00	375.00	187.00	224.00	224.00	599.00
0.00	6.00	6.00	6.00	0.00	0.00	0.00	6.00
881.00	883.00	883.00	883.00	170.00	174.00	174.00	1,057.00
2,476.00	2,655.00	2,655.00	2,655.00	1,437.00	2,078.00	2,078.00	4,733.00
1,653.00	2,558.00	2,558.00	2,558.00	1,613.00	2,033.00	2,033.00	4,591.00
1,099.00	1,153.00	1,153.00	1,153.00	816.00	816.00	816.00	1,969.00
637.00	637.00	637.00	637.00	697.00	699.00	699.00	1,336.00
14.00	14.00	14.00	14.00	17.00	17.00	17.00	31.00
347.00	347.00	347.00	347.00	163.00	163.00	163.00	510.00
695.00	695.00	695.00	695.00	572.00	581.00	581.00	1,276.00
361.00	361.00	361.00	361.00	472.00	472.00	472.00	833.00
447.00	447.00	447.00	447.00	175.00	175.00	175.00	622.00
1,071.00	1,071.00	1,071.00	1,071.00	913.00	913.00	913.00	1,984.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
16,519.00	25,517.00	26,377.00	31,945.00	11,863.00	19,148.00	20,556.00	56,134.00

-14	1-710-14
58.00	58.00
2,134.00	2,134.00
1,690.00	1,690.00
1,682.00	1,682.00
531.00	531.00
126.00	126.00
155.00	155.00
14,019.00	13,738.00
2,339.00	2,287.00
3,806.00	3,806.00
1,115.00	1,095.00
1,104.00	57.00
273.00	264.00
8,918.00	7,241.00
5,299.00	3,822.00
573.00	505.00
599.00	412.00
6.00	6.00
1,057.00	887.00
4,733.00	3,296.00
4,591.00	2,978.00
1,969.00	1,153.00
1,336.00	639.00
31.00	14.00
510.00	347.00
-,276.00	704.00
833.00	361.00
622.00	447.00
1,984.00	1,071.00
0.00	0.00
63,369.00	51,506.00

VEGETATION INTERPOLATION

Ar[illegible] vegetation classes by year in 5 yea[illegible] increments since 1937 in [illegible]

Vegetation Class	Year											
	1993	1987	1982	1977	1972	1967	1962	1957	1952	1947	1942	1937
Large Dense	1492	2465	3193	4331	5801	8509	10781	12557	14301	16714	18520	20254
Small dense	13100	11910	10485	7895	5935	4465	3158	3120	258	258	258	258
Sparse	6521	6856	6369	6782	6675	6274	5267	3334	4676	2937	2862	0
Other Forest	2880	2772	3956	4995	5592	4755	4797	4992	4768	4094	2363	3491
Other Non-For.	2314	2314	2314	2314	2314	2314	2314	2314	2314	2314	2314	2314
Open water	65	65	65	65	65	65	65	65	65	65	65	65

Vegetation Interpolation

93.00	92.00	91.00	90.00	89.00	88.00	87.00	86.00
1,492.00	1,652.67	1,813.33	1,974.00	2,134.67	2,295.33	2,456.00	2,603.40
3,110.00	12,910.00	12,710.00	12,510.00	12,310.00	12,110.00	11,910.00	11,625.00
6,521.00	6,576.83	6,632.67	6,688.50	6,744.33	6,800.17	6,856.00	6,758.60
2,880.00	2,862.00	2,844.00	2,826.00	2,808.00	2,790.00	2,772.00	3,008.80
2,314.00	2,314.00	2,314.00	2,314.00	2,314.00	2,314.00	2,314.00	2,314.00
65.00	65.00	65.00	65.00	65.00	65.00	65.00	65.00
6,382.00	26,380.50	26,379.00	26,377.50	26,376.00	26,374.50	26,373.00	26,374.80
2.08	2.08	2.09	2.09	2.09	2.09	2.10	2.12

Rows are

Year
LD
SO
S
O
NF
W
Sum of Acres
Veg Score

85.00	84.00	83.00	82.00	81.00	80.00	79.00	78.00
2,750.80	2,898.20	3,045.60	3,193.00	3,420.60	3,648.20	3,875.80	4,103.40
1,340.00	11,055.00	10,770.00	10,485.00	9,967.00	9,449.00	8,931.00	8,413.00
6,661.20	6,563.80	6,466.40	6,369.00	6,451.60	6,534.20	6,616.80	6,699.40
3,245.60	3,482.40	3,719.20	3,956.00	4,163.80	4,371.60	4,579.40	4,787.20
2,314.00	2,314.00	2,314.00	2,314.00	2,314.00	2,314.00	2,314.00	2,314.00
65.00	65.00	65.00	65.00	65.00	65.00	65.00	65.00
6,376.60	26,378.40	26,380.20	26,382.00	26,382.00	26,382.00	26,382.00	26,382.00
2.13	2.15	2.17	2.19	2.22	2.25	2.28	2.31

77.00	76.00	75.00	74.00	73.00	72.00	71.00	70.00
4,331.00	4,625.00	4,919.00	5,213.00	5,507.00	5,801.00	6,342.60	6,884.20
7,895.00	7,503.00	7,111.00	6,719.00	6,327.00	5,935.00	5,641.00	5,347.00
6,782.00	6,760.60	6,739.20	6,717.80	6,696.40	6,675.00	6,594.80	6,514.60
4,995.00	5,114.40	5,233.80	5,353.20	5,472.60	5,592.00	5,424.60	5,257.20
2,314.00	2,314.00	2,314.00	2,314.00	2,314.00	2,314.00	2,314.00	2,314.00
65.00	65.00	65.00	65.00	65.00	65.00	65.00	65.00
26,382.00	26,382.00	26,382.00	26,382.00	26,382.00	26,382.00	26,382.00	26,382.00
2.34	2.35	2.37	2.38	2.39	2.40	2.38	2.35

69.00	68.00	67.00	66.00	65.00	64.00	63.00	62.00
7,425.80	7,967.40	8,509.00	8,963.40	9,417.80	9,872.20	10,326.60	10,781.00
5,053.00	4,759.00	4,465.00	4,203.60	3,942.20	3,680.80	3,419.40	3,158.00
6,434.40	6,354.20	6,274.00	6,072.60	5,871.20	5,669.80	5,468.40	5,267.00
5,089.80	4,922.40	4,755.00	4,763.40	4,771.80	4,780.20	4,788.60	4,797.00
2,314.00	2,314.00	2,314.00	2,314.00	2,314.00	2,314.00	2,314.00	2,314.00
65.00	65.00	65.00	65.00	65.00	65.00	65.00	65.00
26,382.00	26,382.00	26,382.00	26,382.00	26,382.00	26,382.00	26,382.00	26,382.00
2.33	2.30	2.28	2.26	2.25	2.23	2.22	2.21

61.00	60.00	59.00	58.00	57.00	56.00	55.00	54.00
1,136.20	11,491.40	11,846.60	12,201.80	12,557.00	12,905.80	13,254.60	13,603.40
3,150.40	3,142.80	3,135.20	3,127.60	3,120.00	2,547.60	1,975.20	1,402.80
4,880.40	4,493.80	4,107.20	3,720.60	3,334.00	3,602.40	3,870.80	4,139.20
4,836.00	4,875.00	4,914.00	4,953.00	4,992.00	4,947.20	4,902.40	4,857.60
2,314.00	2,314.00	2,314.00	2,314.00	2,314.00	2,314.00	2,314.00	2,314.00
65.00	65.00	65.00	65.00	65.00	65.00	65.00	65.00
6,382.00	26,382.00	26,382.00	26,382.00	26,382.00	26,382.00	26,382.00	26,382.00
2.18	2.16	2.13	2.11	2.08	2.10	2.11	2.13

53.00	52.00	51.00	50.00	49.00	48.00	47.00	46.00
13,952.20	14,301.00	14,783.60	15,266.20	15,748.80	16,231.40	16,714.00	17,075.20
830.40	258.00	258.00	258.00	258.00	258.00	258.00	258.00
4,407.60	4,676.00	4,328.20	3,980.40	3,632.60	3,284.80	2,937.00	2,922.00
4,812.80	4,768.00	4,633.20	4,498.40	4,363.60	4,228.80	4,094.00	3,747.80
2,314.00	2,314.00	2,314.00	2,314.00	2,314.00	2,314.00	2,314.00	2,314.00
65.00	65.00	65.00	65.00	65.00	65.00	65.00	65.00
26,382.00	26,382.00	26,382.00	26,382.00	26,382.00	26,382.00	26,382.00	26,382.00
2.14	2.16	2.12	2.07	2.03	1.99	1.95	1.91

45.00	44.00	43.00	42.00	41.00	40.00	39.00	38.00
17,436.40	17,797.60	18,158.80	18,520.00	18,866.80	19,213.60	19,560.40	19,907.20
258.00	258.00	258.00	258.00	258.00	258.00	258.00	258.00
2,907.00	2,892.00	2,877.00	2,862.00	2,289.60	1,717.20	1,144.80	572.40
3,401.60	3,055.40	2,709.20	2,363.00	2,588.60	2,814.20	3,039.80	3,265.40
2,314.00	2,314.00	2,314.00	2,314.00	2,314.00	2,314.00	2,314.00	2,314.00
65.00	65.00	65.00	65.00	65.00	65.00	65.00	65.00
26,382.00	26,382.00	26,382.00	26,382.00	26,382.00	26,382.00	26,382.00	26,382.00
1.87	1.83	1.79	1.75	1.73	1.71	1.69	1.68

37.00
20,254.00
258.00
0.00
3,491.00
2,314.00
65.00
26,382.00
1.66