

FUGRO WEST, INC.



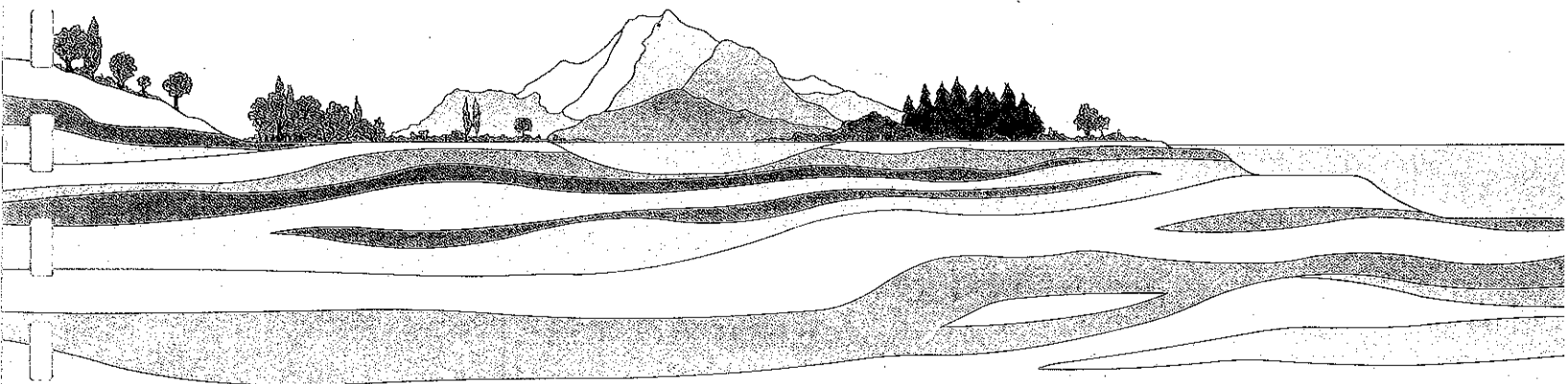
ADDITIONAL HYDROGEOLOGIC UPDATE

EL TORO AREA MONTEREY COUNTY, CALIFORNIA

Prepared for:

**MONTEREY COUNTY
WATER RESOURCES AGENCY**

FEBRUARY 1996





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February 1, 1996
Project No. M92-81-6270

Monterey County Water Resources Agency
Post Office Box 930
Salinas, California 93902

Attention: Mr. Gene Taylor, Senior Hydrologist

Subject: El Toro Area, Additional Hydrogeologic Analysis

Dear Mr. Taylor:

Presented in this letter report is a further analysis of the water supply and demand issue in the El Toro area of Monterey County. The study is intended to supplement and refine the 1991 preliminary assessment-level hydrogeologic investigation prepared by Staal Gardner and Dunne, Inc. ([SGD] now a wholly owned subsidiary of Fugro West, Inc.). The purpose of the study is to refine the understanding of the water balance in the area through the use of better data and more rigorous analysis. The study area is the same as the previous report and, as such, this document does not present additional discussion on the hydrogeology of the area. The reader is referred to the previous document for this discussion.

BACKGROUND

The 1991 investigation suggested that water supply in the area was less than previous estimates and that, if build-out were to occur in accordance with adopted land use plans, water supply deficits would develop. The report was based on existing data and was preliminary in nature. The report recommended that additional work be performed in the area to confirm the conclusion of the report prior to modifying land use plans. Specifically, the report recommended the development of a stream gaging program, a review of the monitoring well network, and a revision of the hydrogeologic subareas.

Based on these preliminary findings recommended by the Planning Commission and adopted by the Board of Supervisors, a 'B-8' land-use designation was placed on portions of the area. This designation limits development to existing lots of record. The purpose of the rezoning was twofold. First, until better information was available, the Board felt it prudent to place a temporary limitation on development until it could be confirmed that such development would not result in serious overdraft and/or public health problems. Second, the 'B-8' would allow time for



a more long-term water planning approach to be used by developing and approving an allocation and distribution plan for the area, which is required under policies in the El Toro Plan.¹

Of the various issues that needed to be addressed, three could be studied within budget constraints and were therefore incorporated as tasks in the scope of work. A summary of the three tasks follows.

- **Water Demand.** The current and "build-out" water demand in the previous study was estimated utilizing water duty factors and estimates of dwelling unit data. Water duty factors for single-family housing were developed solely from data provided by Ambler Park Water Company because water data were unavailable from the other purveyor in the area, Toro Water Service. Water duty factors for larger parcels were taken from literature research. Water duty factors for future units were assumed to be similar as those for current units. Housing unit data were provided by the Monterey County Planning Department (Planning) for both current and "build-out" scenarios. However, the build-out estimates were based solely on zoning and were not reviewed by Planning for consistency with other development limitations such as slope, ridgetop development restrictions, and site access. Because of the limitations on the data utilized to develop water demand, it was considered likely that the water demand estimates could be substantially refined if additional efforts were focused on improving these data sets.
- **Recharge.** Upon review of the previous report, engineering and hydrogeologic consultants representing other interests in the study area had suggested that the estimates of recharge in the study area were low and that the component of recharge associated with streambed infiltration had been neglected in the analysis. Criticism notwithstanding, the previous study did account for streambed infiltration, although the analysis accounted for this infiltration on an areal basis. The water balance performed included precipitation as the sole water input. This input of water was debited by the volume of water that left the basin as streamflow through the El Toro gage. Water remaining in the basin was accounted for as evaporation, transpiration, or infiltration. The location of a single stream gage located at the downstream end of the watershed does not, however, allow for the separation of the recharge resulting from infiltration of rainfall and recharge resulting from streambed infiltration. Therefore, the recharge occurring through streambed infiltration was considered to be part of deep percolation

¹ 6.1.3 The County shall expand its ongoing ground water monitoring system for particular aquifers in the El Toro ground water basin so as to permit an informed decision on a water allocation system.

6.1.5 The County shall prepare a water allocation system for the El Toro water basin to ensure equitable use of limited and interrelated water resources. [El Toro Area Plan]



and distributed equally across the study area. The resulting areal recharge rate is accordingly higher than it would be if streambed infiltration could be separated as a specific component of recharge.

The required combining of the infiltration of rainfall and streambed infiltration components of recharge into an overall areal recharge rate does not neglect a component of recharge. However, the combining of these recharge components and the subsequent designation of some of the study area as not receiving retrievable recharge may inappropriately account for the rainfall that runs off in the upper portion of the watershed and infiltrates within the streambed upstream of the gage. The analysis would account for this water as areal recharge occurring in the upper areas of the watershed. Because the upper portions of the watershed are considered to receive irretrievable recharge, this water is not available. With additional gaging stations, this water could be more correctly accounted for as streambed infiltration within the lower portions of the El Toro area. However, the balance of the streambed recharge, that component derived from runoff from areas assumed to receive retrievable recharge (those areas underlain by alluvium, Paso Robles Formation, or Santa Margarita Formation) is already accounted for in the overall retrievable water budget.

- **Surplus Transfer.** The 1991 study also suggested that a surplus of water existed in the Watson Creek subarea. Because of this identified surplus, it has been suggested that water could be developed in this area and transferred to the "water-short" Calera Canyon subarea. The impacts of such a water transfer needed to be evaluated.

SCOPE OF WORK

The scope of work for the project was developed through discussions with the Monterey County Water Resources Agency (MCWRA) and presented in a letter of proposal dated April 12, 1994. The original scope of work included a review of potential demand, a review of recharge mechanisms, the development and implementation of a stream gaging program, and an analysis of the proposed water transfer. As authorized, however, the work was limited to three tasks. The first task focuses on refining the water demand estimates in the study area. The second task included the reevaluation of the initial estimates of ground water recharge in the study area through the use of an integrated soil moisture/runoff model developed by the United States Geological Survey (USGS). The third task focused on the hydrogeologic impacts of developing ground water in the Watson Creek area for transfer to Calera Canyon. The stream gaging program was held in abeyance due to budgetary constraints.



FINDINGS

TASK 1 -REFINED ESTIMATES OF WATER DEMAND

The first task was the refinement of the estimate of the amount of water currently consumed and the amount that would be consumed if the area were developed to its full potential. Planning prepared a new analysis of the number of current units and a build-out analysis for the El Toro planning area. Fugro applied water duty factors to these estimates based upon recent research in water consumption.

The five subareas utilized throughout this and the previous report represent areas between significant topographic divides that control the movement of surface water. The subareas have been adopted as planning units. The subareas, however, do not correspond to hydrogeologic subbasins. The subareas are called El Toro Creek, Corral de Tierra, San Benancio Gulch, Watson Creek and Calera Canyon. They are described in the earlier SGD report.

Water Demand Analysis

Current water demand is based on the existing development in an area. An accurate estimate of current demand can be developed through an inventory of existing uses. Future water demand can be determined with reasonable accuracy by performing a build-out analysis. This analysis estimates the amount of additional development that could eventually take place in an area under current zoning regulations. This future development is added to the existing development. The total is called build-out. Planning has refined the previous inventory of existing development and possible build-out analysis for the El Toro area. The previous approach, described below, was broad-brush. The conclusions of the previous report made a closer examination of demand appropriate. The new approach looked at every parcel, and has a substantially greater degree of accuracy.

Existing Development. A parcel by parcel inventory was performed in the area categorizing land use and counting dwelling units. The results were similar to the 1991 estimates: the total difference being an increase in the number of existing units by 179. The majority of the additional units were in the San Benancio Gulch subarea. The reasons for the differences are not clear, but are believed to reflect the more rigorous approach to the inventory and possibly the inclusion of additional units completed since the time of the 1991 report.



Table 1. Existing Development (Comparison)

Subarea	1991 Study	1995 Study	Change	Percent Change
El Toro Creek	1	1	0	0
Lower Corral de Tierra	546	686	+140	+26
Calera Canyon	108	113	+5	+5
Watson Creek	195	188	-7	-5
San Benancio Gulch	372	413	+41	+11
Totals:	1,222	1,401	+179	+15

Source: Monterey County Planning Department (1995)

Previous Build-out. The previous build-out analysis began by computing the total area for each land use category. The minimum parcel size required by zoning was subtracted from the total area for each existing dwelling unit. The remaining area of each land use category was then divided by the allowable density. The resulting number was used for the number of additional dwelling units that might be built in each land use category. The sum of the existing and additional dwelling units was called build-out.

There are two types of inaccuracies with this approach:

This approach did not account for existing parcels that were smaller than required by zoning (but were nonetheless buildable). This would keep the number of dwelling units lower than the real number.

The build-out did not account for parcels that were larger than required under zoning, but could not be further subdivided. The remainder acreage was tallied and allowed for additional units. This would result in more units than could actually be built.

Refinement of Build-out. Rather than analyze build-out by the whole acreage of the land use categories, each parcel was analyzed for its development potential. The dwelling units on parcels that were already developed were tallied. Parcels that were undeveloped or partially developed (meaning they could legally support additional development) were examined. The number of potential, additional dwelling units was calculated for each parcel based upon its current zoning.

The refinement of the build-out also reviewed constraints to development to a greater extent than the previous attempt. One criticism of the earlier build-out analysis was that it did not take into account certain regulatory limitations on development. In particular, slope limitations were considered to be possibly limiting.

Limitations of 30 Percent Slope. The Monterey County Zoning Ordinance restricts construction on areas where the slope of the land exceeds 30 percent [Section 21.64.230]. It was assumed by several commentators that this would exclude a considerable portion of the area from



development. Several factors led Planning to the conclusion that the ordinance, as applied to this area, would have little, if any, reduction of potential development in the El Toro area. The following reasons were set forth to justify this conclusion:

- The regulation is not an outright prohibition. Development on slopes in excess of 30 percent must acquire a use permit. Development is allowed on slopes in excess of 30 percent where the permit granting authority finds a) there is *no feasible alternative* which would allow development to occur on slopes of less than 30 percent; or b) that the proposed development better achieves the goals, policies, and objectives of the Monterey County General Plan and applicable area plan than other development alternatives.
- Planning reviewed topographic maps and developed an overlay showing slope-constrained areas. The overlay was compared to the parcel maps to see how many properties would be affected. Planning observed that severe slopes existed mostly in the area of very large parcels with very low density. Planning determined that these parcels would be able to provide some area suitable for residential development.

Results. The new build-out analysis results are shown in the following table. The table is divided into subareas. The full build-out tables developed by Planning are contained in Appendix A.

Table 2. 1995 Build-out Results

Subarea	Current Dwellings	Future Dwellings	Total
El Toro Creek	1	174	175
Lower Corral de Tierra	686	303	986
Calera Canyon	113	301	414
Watson Creek	188	177	365
San Benancio Gulch	413	129	542
Totals:	1,401	1,084	2,482

Source: Monterey County Planning Department (1995)

The new build-out analysis estimates a total of 447 dwelling units less than the 1991 analysis. However, certain subareas gained dwelling units, while others lost units. Most of the new numbers for the subareas were within 15 percent of the 1991 numbers. The only significant change was in the Lower Corral de Tierra subarea, which dropped from 1,466 to 986, a difference of 480 dwelling units. The largest difference in this subarea was in the number of additional dwelling units estimated for Medium Density (1 - 5 units/acre). Table 3 shows a comparison of old and new build-out numbers by subarea.

Table 3. Build-out Results (Comparison)

Subarea	1991 Study	1995 Study	Change
El Toro Creek	191	175	-16
Lower Corral de Tierra	1,466	986	-480
Calera Canyon	418	414	-4
Watson Creek	308	365	+57
San Benancio Gulch	546	542	-4
Totals:	2,929	2,482	-447

Source: Monterey County Planning Department (1995)

Water Demand

Water Duty Factors. Water demand was estimated by multiplying the number of dwelling units in a subarea by a water duty factor. A water duty factor is an estimated volume of water used annually by a particular activity. It is measured in acre-feet per year. Water duties are necessarily estimated averages. Water consumption varies in a number of regards. Over the course of the year, water use is high in the summer and low in the winter. Use varies from residence to residence, depending on the number of persons in the dwelling and the intensity of outdoor landscaping. Swimming pools do not create as much variance in the estimate as would be expected as they consume 60 percent of the water used on a comparably sized lawn (DWR, 1984).

The water duty factors were refined since the last analysis. Most of the development in the El Toro planning area will take place on relatively large parcels (between 1 and 40 acres). The exceptions are two golf courses and a small amount of commercial development. In this report, the larger parcels are referred to as "ranchettes," a commonly used term. Specific water duty factors (see below) were developed for these parcels. Water duty factors will decline for new construction because of conservation requirements contained in the Uniform Building Code. Therefore, a distinction was made between existing construction and new construction. The rates for all the types of uses in the El Toro area are summarized in the table below:

Table 4. Estimated Average Annual Water Use (Acre Feet/Year)

Land Use Activity	Water Applied		Return Flow	Consumed	
	Existing	Future		Existing	Future
Dwelling					
Interior	0.38	0.20	80%	0.076	0.04
Yard	0.28	0.28	20%	0.224	0.224
Total	0.65*	0.48		0.3	0.264
Ranchette					
Interior	0.38	0.20	80%	0.076	0.04
Yard	0.28	0.28	20%	0.224	0.224
Other	1.0	1.0	20%	0.8	0.8
Total	1.65	1.48		1.4	1.328
Commercial	0.5		50%	0.25	
Golf Course	2.1/acre		15%	1.8	

*Numbers are rounded and do not always appear to total correctly.

Assumes discharge to septic system. Interior return flow is zero if sewered.

- **Existing Dwelling Units.** Information to develop water duty factors for residences in the El Toro area was derived from a number of sources. The Toro Water Company, which serves subdivisions in the study area, provided data on water use. Water consumption during the years 1990 through 1993 averaged 0.68 acre-feet per year. The Ambler Park Water Company provided its customers with an average of 0.63 acre-feet per dwelling per year during the years 1984 through 1990. Other sources were researched to support the appropriate duty for residential development.²
- **Future Dwelling Units.** Water conservation measures are required of new dwelling construction. These include low-flow shower heads and toilets. Shower heads now dispense between 1.5 and 2.5 gallons per minute. Previously they sprayed up to 8 gallons per minute. For a 10-minute shower, water consumption has dropped from 80

² The Santa Clara Valley Water District prepared a report in 1979 called "Methodology for Projecting Water Needs in Santa Clara Valley". For residential consumption, 29 areas were selected to record their actual water use. All areas were within the San Jose Water Works service area. The data are from 1979, prior to water conservation requirements. The following table illustrates the range of water consumption for the area:

DU/Acre	Location	Gal/Day/Dwelling Unit	AFY	Persons/DU
.7	Saratoga	933	1.04	2.97
2.25	Los Gatos	417	.46	2.83
6.5	Alum Rock	325	.36	3.46
7.3	Central San Jose	277	.31	2.29

Source: SCVWD "Methodology for Projecting Water Needs in Santa Clara Valley" March 1979





gallons to 20 gallons. Old toilets released approximately 7 gallons per flush and are now required to release no more than 1.6 gallons. The landscaping or yard requirements of new dwellings was assumed to remain relatively constant.

- **Ranchettes.** This term, for the purposes of this report, denotes parcels 2 acres and larger. There are considerable numbers of parcels in this size range that could be developed. Their development usually includes a residence, accessory buildings, extensive gardening and small orchards, and a few livestock. To make comparable analysis with smaller lot residential parcels possible, the water use was divided into three factors: interior of the house, immediate exterior or yard, and the irrigated activities beyond the yard that comprise the ranch-like activities. There are several advantages to this approach. The interior and yard water use are assumed to be similar no matter the size of the parcel. This allows comparison of ranchettes to typical suburban lots. Further, the least predictable water use from parcel to parcel is that beyond the house and yard. This is also the water most likely to be curtailed during a period of shortage, and therefore provides a cushion to both the supply and the analysis.
- **Interior.** The water duty for inside the residence is estimated to be similar to suburban dwellings. All of these units are serviced by individual septic systems, thus the recharge rate for the interior of the residence is estimated at 80 percent. Water use records from a number of sources were investigated to determine interior dwelling use. The water duty factor is based upon an average of 350 gallons used in the average residence per day.
- **Yard.** Landscaping immediately surrounding the residence is estimated to be similar to any other residence. This number represents a percentage of the total water applied by homes in several subdivisions in the area. According to the California Department of Water Resources, 47 percent of the water used in the average residence is applied outside (DWR, 1984). The return flow is estimated to be 20 percent of the water applied.
- **Ranching/Farming.** What differentiates the ranchette from the residence is the additional water used for gardening, livestock, and other activities beyond the immediate residence. This water duty is the most difficult to estimate. Because this water is used outside, and most is lost to evapotranspiration, its percentage of recharge is considerably less, estimated to average 20 percent. Water use for all portions of ranchettes beyond the residence and landscaping can vary considerably from parcel to parcel but, for the purposes of analysis, the average consumed was estimated to be 1 acre foot per year (above that used for the residence and yard). This amount is used in the analysis for all parcels within the size range analyzed. The water





use is assumed to be similar because the amount of land given over to water-consuming activities is usually similar. The larger parcels are not developed much more (and sometimes less) than the smaller ones. The remaining land on the larger parcels in the El Toro area is usually left to non-irrigated grazing and provides a buffer to the residence. Water use tends to increase for several years as more water applications are developed on the property.

- **Golf Course.** The Corral de Tierra Country Club recently installed a new irrigation system. Estimated applied water is 2.1 acre-feet per acre per year based on discussions with a golf course irrigation consultant. The return flow is estimated to be 15 percent. This water duty is used for all golf course acreage in the area.
- **Commercial.** Very few commercial activities exist in the El Toro planning area. The estimated water consumption is based upon averages for other commercial uses. Little specific research was expended on this land use. It represents a very small percentage of the total water used.

Return Flow/Consumptive Use. Some volume of water that is withdrawn from the ground and used is also returned or recharged back to the ground water system. The return flow is estimated as a percentage of the gross amount or total water extracted. Recharge occurs from septic systems and from percolation of water used for irrigation. Water that runs out of the basin, evaporates, or transpires through plants (in other words that does not recharge) is said to have been consumed or "consumptively used." Consumptive use for standard dwellings is estimated to be approximately 50 percent of the water extracted (Johnson, M.J., 1983). This figure assumes 47 percent of the water is used inside the house and 53 percent outside (80 percent of the water used *inside* the house is recharged because it goes directly into the septic tank, and only 20 percent of the water used *outside* is recharged) (DWR, 1984). Large parcels that contain both a dwelling and agricultural activities have been given a special recharge rate. For these parcels, it was assumed that the amount of water used inside or near the house was the same as other dwellings. Added to this figure was an amount of water used for agricultural purposes (orchards, gardens, and livestock). This water was assumed to have a 20 percent rate of recharge.

Sewers. A good portion of the Lower Corral de Tierra subarea is sewerred. The effluent is transferred out of the study area and disposed in spray fields along the Salinas River. Therefore, for these subareas, the consumptive use for the interior of the homes is shown as 100 percent.

Total Water Demand

The current, future (additional), and build-out (total) water demand estimated for the El Toro planning area is shown below. Estimated demand for both this report and the 1991 SGD



report are presented. The current demand estimate is approximately 130 acre-feet higher than the previous report. This increase derives predominately from the consideration of the transfer of the wastewater effluent from the study area to the Salinas Valley (the 1991 study assumed that all of the development in the lower Corral de Tierra subarea was on septic systems). Additional demand also derives from the increase in the total number of units and refinement of water duty factors. Although current demand is greater than in the previous report, the incremental demand required to achieve the proposed build-out is lower than suggested in the previous report. This is the result of the use of lower interior water duty factors reflecting the use of low and ultra low-flow fixtures for future dwelling units. Additionally, the total number of new units in the study was reduced by 447. The estimated overall water demand for the entire planning area at build-out decreased by approximately 14 acre-feet over the previous study. Tables showing analysis for the water demand of each subarea are in Appendix A.

Table 5. Estimated Water Demand (Acre-Feet/Year)

Subarea	1991 SGD Study			1995 Fugro Study		
	Current	Future	Build-out	Current	Future	Build-out
El Toro Creek*	0.82	83.22	84.04	1.1	68.2	69.3
Lower Corral de Tierra*	608.04	359.86	967.90	582.2	199.2	781.4
Calera Canyon	108.52	391.14	499.66	124.0	319.9	444.0
Watson Creek*	159.9	95.94	255.84	206.4	188.1	394.5
San Benancio Gulch*	248.1	103.82	351.92	342.2	113.9	456.1
Totals:	1,125	1,034	2,159.36	1,255.9	889	2,145.3

* Subareas hydrogeologically connected.

TASK 2 - RECHARGE REEVALUATION AND CONFIRMATION

Water Supply

The second section of this report discusses the estimates of available water supply. The analysis represents a refinement of SGD's 1991 study. The previous study utilized a simple spreadsheet-based soil-moisture accounting methodology to estimate the amount of ground water recharge in the various subareas. This method models the root zone of the soil column as a reservoir with infiltrating rainfall as an input, and the extraction of water by plants to meet evapotranspiration demands and deep percolation as outputs. As applied, the methodology estimated infiltrating rainfall by debiting total monthly precipitation by the volume of water leaving the basin as runoff through the stream gage. The monthly evapotranspiration from the root zone was estimated through the use of CIMIS (California Irrigation Management Information System) evapotranspiration data from proximate stations. The results of the soil-moisture methodology resulted in an average annual recharge rate of 2.18 inches.



In order to refine the estimate of recharge rates from the previous study, the United States Geological Survey's Deep-Percolation Model (Bauer and Vaccaro, 1987) was applied to the study area. This model was developed by the USGS to fill a gap between simpler generalized methods of determining recharge and rigorous unsaturated/saturated flow models that require soil/aquifer parameter data (which are generally not available). The model also utilizes a soil-moisture methodology, similar to that utilized in the 1991 study. However, the USGS model operates on a daily basis and integrates surface water runoff into the accounting method. Because recharge occurs as episodic events, the change from a monthly to a daily basis can significantly change estimates of recharge. The model calculates deep percolation, evapotranspiration and, if not available, will synthesize stream runoff.

Estimating Ground Water Recharge with the USGS Deep-Percolation Model

Previous estimates of recharge for the El Toro basin were reviewed and refined through application of the USGS Deep-Percolation Model (DPM). The DPM uses a soil-moisture accounting methodology that operates on a daily time step to quantify the significant climatic and hydrologic processes that affect deep percolation of precipitation to ground water.

The model begins by dividing precipitation falling as rain into three components: interception by plant foliage, surface runoff, and infiltration into the soil. Water intercepted by plant foliage is allowed to evaporate at the potential maximum rate. Surface runoff, specified by the user or calculated by the model with the U.S. Soil Conservation Service (SCS) curve number method, is debited from the moisture budget. The remainder infiltrates into the soil. Soil moisture is further subdivided into soil storage, plant transpiration, soil evaporation, and deep percolation. The DPM discretizes the soil column into 6-inch layers; water entering the soil is allowed to fill each layer to its field capacity, with any excess passed down to the next layer. Plant transpiration removes water from the soil column down to the maximum rooting depth for the vegetative type specified by the user. Soil evaporation is assumed to take place from the first 12 inches (two layers) of the soil column. Deep percolation, or ground water recharge, is the excess soil moisture still remaining after the soil column has been filled to its field capacity and the moisture budget has been debited by evapotranspiration.

In order to represent these processes, the DPM requires a minimum input data set consisting of daily precipitation, daily maximum and minimum air temperatures, available soil water capacities, soil column thicknesses, soil texture, and land use. The model is capable of interpolating between multiple precipitation and temperature stations and allows for the weighting of precipitation to reflect spatial variations due to altitude and other factors. The robustness of the model can be improved by the inclusion of optional input data including SCS soil-runoff curve numbers (to be used if stream flow data are not available), temperature lapse rates, and daily stream discharge data. The basic data sets, as well as temperature lapse rates and daily stream discharge data, were used in this study.





Study Area Discretization and Simulation Period

The DPM's input data structure requires the use of quadrilateral blocks to represent the watershed within the model. In order to meet this requirement, the study area's five drainage subareas were discretized into 15 model blocks. These blocks and the nodes that define them are shown on Plate 1 and Table 6. Although the model includes all the area within the five surface drainage subbasins, portions of some subareas receive recharge that is designated as irretrievable for water supply use. The areas considered to receive irretrievable recharge are those that contribute to surface runoff in the study area, but that are not counted in the ground water recharge totals due to geologic conditions (lithology and structure) that are incompatible with economical development of potable ground water supplies.

The area available for "retrievable" recharge include those areas underlain by alluvium, Paso Robles Formation, or Santa Margarita Formation. The portions of the subareas underlain by Monterey Formation, the basal sands, or granite were not included in the retrievable recharge acreage because water infiltrating into these units is difficult to extract in usable quantities, and quality is usually degraded by long residence times in these formations. These areas are delineated in the 1991 report and Table 6. Using these criteria, the total acreage of the San Benancio Gulch and Calera Canyon subareas were reduced. The acreage of the San Benancio Gulch subarea was reduced by approximately 1,144 acres. The acreage of the Calera Canyon subarea was reduced from the total watershed area of 8,153 acres to an effective recharge area of 271 acres.

The DPM allows simulation periods extending over multiple years in increments of whole calendar years. A simulation period of 1970 through 1992 was used in this study.

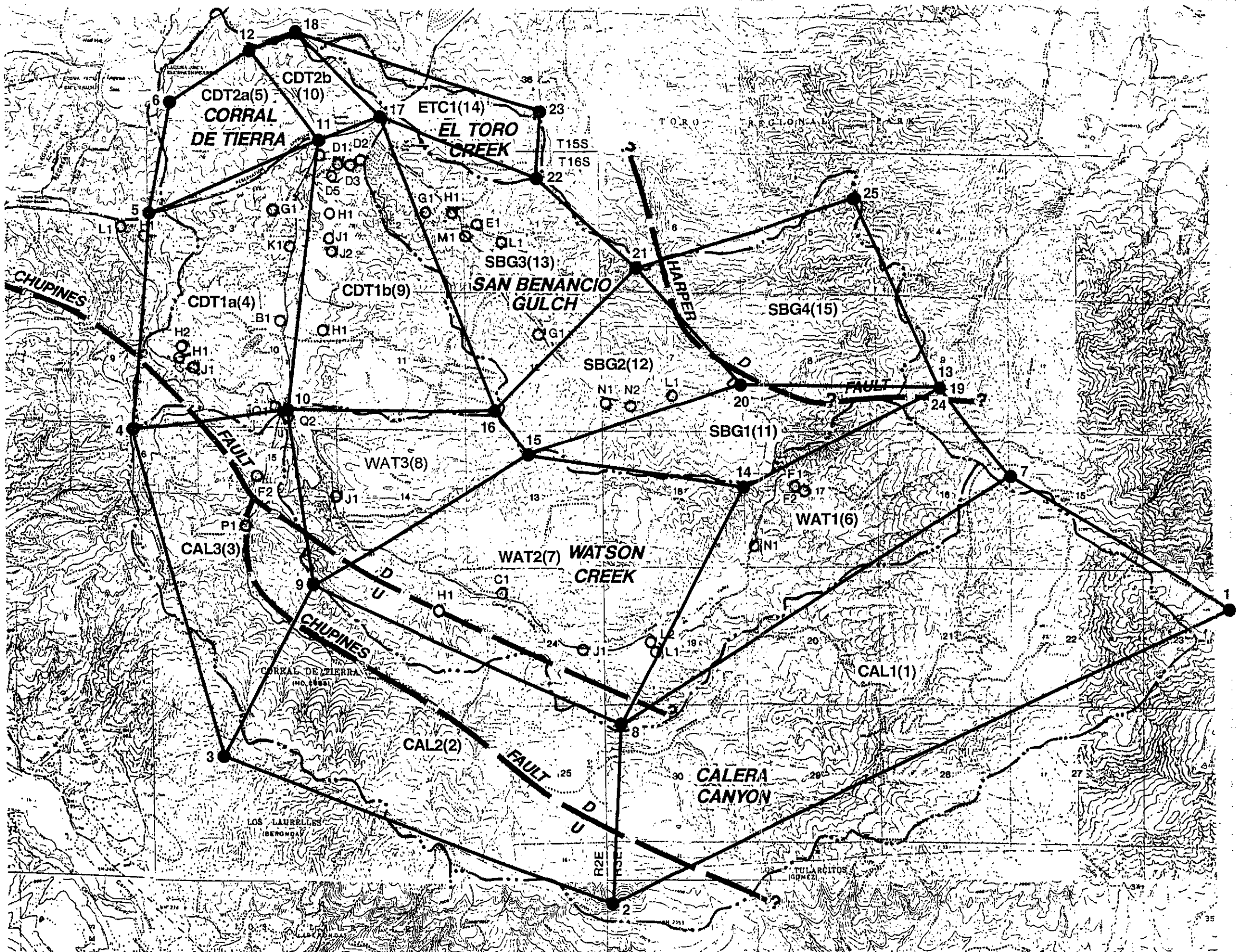




Table 6. Study Area Discretization

Subarea/Block	Block Number	Node Numbers	Gross Area (acres)	Retrievable Area (acres)
Calera Canyon				
CAL1	1	1,7,8,2	4,320	
CAL2	2	3,2,8,9	2,561	
CAL3	3	3,9,10,4	1,272	
			8,153	271
Corral de Tierra				
CDT1a	4	4,10,11,5	1,277	
CDT1b	9	10,16,17,11	468	
CDT2a	5	5,11,12,6	1,375	
CDT2b	10	11,17,18,12	229	
			3,350	3,350
Watson Creek				
WAT1	6	7,13,14,8	1,589	
WAT2	7	8,14,15,9	2,248	
WAT3	8	9,15,16,10	875	
			4,712	4,712
San Benancio Gulch				
SBG1	11	14,19,20,15	738	
SBG2	12	15,20,21,16	733	
SBG3	13	16,21,22,17	1,098	
SBG4	15	20,24,25,21	1,244	
			3,814	2,670
El Toro Creek				
ETC1	14	17,22,23,18	406	406
Totals:			20,435	11,409



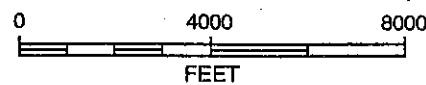


LEGEND

- Subarea Boundary
- $\frac{U}{D}$ Fault, Approximately Located,
Queried Where in Doubt, Showing
Relative Displacement
- N1
○ Water Well Monitored by the
Monterey County Water Resources
Agency

NOTE: Fault location from Dibblee (1973).

BASE MAP: USGS 7.5 minute Carmel Valley,
Seaside, Spreckels, and Chualar,
California quadrangle maps.



EL TORO AREA MODEL GRID
County of Monterey

928116270base.dwg(4,5)

Data Sources

Precipitation. Because no streams or rivers flow into the El Toro study area and because ground water does not enter from basins outside the study area, precipitation falling as rainfall is the only source of moisture input to the hydrologic budget. Long-term records of daily precipitation are available for the study area from two precipitation stations located at Los Laureles Grade and Mount Toro. These data were used within all the DPM simulations. Basic data for the two stations are tabulated below:

Table 7. Precipitation

Gage	Latitude	Longitude	Elevation	Average Precipitation
Los Laureles Grade	36.56°	121.75°	~700 feet	1,4.93 inches/yr.
Mount Toro	36.54°	121.63°	~2,400 feet	1,9.39 inches/yr.

The DPM is capable of performing a distance interpolation of precipitation between the two station locations. Additionally, it is possible within the DPM to adjust precipitation for the effects of elevation by specifying a different value for average annual precipitation for each model block. Interpolated daily precipitation values are then scaled by the ratio of the average annual precipitation at a given block and the average annual interpolated precipitation based on the two precipitation stations. These options were invoked for this study. Isohyetal maps provided by MCWRA (Appendix B) were used to specify the annual average precipitation for each block.

Temperature. Temperature is one of the major factors that controls evapotranspiration rates. The National Oceanic and Atmospheric Administration (NOAA) maintains records of daily maximum and minimum temperatures at the Salinas Airport from 1930 to present. Data from the Salinas Airport station for the 1970-1992 simulation period were used for temperature input. John Stremel, MCWRA's climatologist, advised Fugro that temperatures from this station are roughly equivalent with those along Highway 69 in the study area and are, therefore, appropriate for use in the water balance simulation. 68 ✓

The DPM handles elevation-dependent variations in temperature using temperature lapse rates, which specify the rate of temperature change as a function of change in elevation. Standard lapse rate values are 5.5 degrees Fahrenheit per 1,000 feet for dry air, and one half of that (2.25 degrees per 1,000 feet) for wet air. The model allows the lapse rate to be specified on a monthly basis. Thus, the dry air value is used during the dry season (May-October) and the wet air value during the rainy season (November-April).

Potential Evapotranspiration. As implemented by the USGS, the DPM calculates potential evapotranspiration (PET) using the Jensen-Haise equation. Among several other parameters, incident solar radiation data are necessary for solving the Jensen-Haise PET equation.



However, because incident solar radiation data are generally unavailable, the authors of the DPM included in the model a linear regression equation for estimating solar radiation based on the difference between daily temperature maxima and minima. (In the eastern Washington study area for which the DPM was originally developed, this methodology was valid because a good linear correlation was observed between daily temperature fluctuations and incident solar radiation.) Thus, instead of requiring solar radiation data as direct input, the model requires the user to specify regression coefficients as input values, then calculates daily percentage sunshine and converts this to solar radiation.

During development of the El Toro model, tests of the DPM proved that this regression-based methodology was invalid because of the marine-influenced climate of coastal Monterey County. Regardless of the regression coefficients specified as model input, the DPM consistently under-predicted potential evaporation values relative to measured values at climatological stations in nearby Gonzales and Carmel Valley.

Consequently, Fugro adapted the DPM program to accept monthly daily average measured PET values from local CIMIS stations as direct input. In order to evaluate the sensitivity of model-predicted recharge to specified PET values, the model was run using data from the two closest stations: the Gonzales area and Carmel Valley. Additionally, since the PET values from the Gonzales and Carmel Valley stations are reported as PET for grass while the DPM assumes the PET values are those for alfalfa, the PET values for each station were adjusted by multiplying the values by the crop coefficient of 1.2 for alfalfa (UC Cooperative Extension, 1987). As described below, this adaptation of the DPM ensured that PET values were consistent with actual conditions in the study area and led to reasonable estimates of deep percolation. The PET values for these stations are summarized below.

Table 8. Monthly Daily Average Potential Evapotranspiration Data (inches)

Location	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec
Gonzales	0.054	0.072	0.131	0.168	0.175	0.264	0.246	0.242	0.179	0.137	0.086	0.056
Carmel Valley	0.088	0.104	0.136	0.18	0.188	0.215	0.197	0.187	0.163	0.142	0.115	0.092

As can be seen above, the PET values for the Carmel Valley location show less annual variation than the Gonzales station, which displays higher values in the summer and lower values in the winter months. This is due to the closer proximity to the coastal influence.

Stream Gage Data. The DPM is capable of calculating stream runoff using the SCS-developed curve number methodology. However, when historical measurements of daily stream runoff are available for the area of interest, stream runoff data can be provided as direct model input. The DPM then apportions measured runoff to each model block by scaling the model-calculated estimates of runoff for each block by the ratio of total measured runoff to total



calculated runoff. For the El Toro study area, daily flow measurements from the USGS stream gage at Toro Creek (Station 11152540) were used as input data. The catchment area for this stream gage exactly corresponds to the study area.

Soils and Land Use Data. The depth of the soil column, along with its important hydrologic properties, such as texture and field capacity, play a significant role in the soil moisture budget and recharge to ground water. Soils within the study area are highly heterogeneous, consisting predominantly of clays to sandy loams assigned to the Santa Ynez, San Andreas, Gorgonio, Santa Lucia, and Sheridan soil series (USDA, 1972). Consequently, soils data published in the SCS soils report for Monterey County (USDA, 1972) were aggregated for each of the 15 model blocks by estimating the percentage area of each soil type in each block. While soil property data only extends to 5 feet in depth, this is adequate because this depth generally exceeds rooting depth. Weighted averages of those soil properties used by the model (soil thickness, texture, available water capacity) were then calculated.

Land use in the study area most closely corresponds to the "grassland" or "sageland" land use designations available within the DPM. These land use designations differ in their assumptions of rooting depth, foliage cover, and precipitation interception. As part of the model-sensitivity analysis, separate model runs were conducted using both of these land use types, as discussed below.

Modeling Results

After resolving computer code conflicts and the modification of the code to allow direct input of daily PET values, several simulations were performed to estimate the volume of deep percolation in the study area. As suggested above, multiple simulations were performed utilizing the two sets of PET values and the two most applicable land uses. The results of the simulations are summarized below. The complete model runs and input data sets are included in Appendix B.

Table 9. Summary of Deep Percolation Model Estimates

Simulation Number	Land Use	PET values	Yearly Recharge Range (inches)	Estimated Average Annual Deep Percolation (inches/year)
18	Sageland	Gonzales	0.0 - 10.73	3.13
19	Sageland	Carmel Valley	0.0-7.41	1.93
21	Grassland	Gonzales	0.12-13.94	5.19
22	Grassland	Carmel Valley	0.03-11.08	3.81

The simulation results indicate that the estimated volume of deep percolation is sensitive to both the land use and the PET values utilized. In both land use cases, the use of the PET data from Gonzales results in a greater volume of recharge when compared to the Carmel Valley results. This is the result of the reduced PET in the winter months, which allows excess moisture

to accumulate within the root zone. The use of the sageland (natives) land use designation also resulted in consistently lower recharge values compared to grasslands. This is primarily the result of the greater rooting depth for sageland (4 feet for sage verses 2 feet for grasses). The greater rooting depth allows the extraction of a greater amount of soil matrix water.

As can be seen in the above table, the annual recharge rate is highly variable. The variability is the result of the episodic aspect of recharge. Recharge occurs predominately in periods when precipitation exceeds both PET and soil storage. This is a function of the distribution of precipitation throughout the season. Four inches of rainfall in the month of January will usually result in deep percolation, whereas 4 inches of precipitation in April likely will not. Depending on the distribution of precipitation, significant recharge can occur in years of below average rainfall. Conversely, in a year of uniformly distributed annual average precipitation, the amount of deep percolation may be zero. In areas with significant ground water in storage, the annual variability of recharge is dampened by the ground water reservoir. In areas with limited storage, such as Calera Canyon, this variability can contribute to water availability problems.

Selection of the most appropriate value to apply to the study area is difficult and, to some extent, subjective. Climatic data are not available for the area and a detailed land cover survey is beyond the scope of this investigation. Based on our familiarity with the area, we believe that the dominant land use could best be characterized as "sageland" and that the climatic conditions are more closely approximated by the PET data from Carmel Valley. Given these assumptions, the best estimate of deep percolation is approximately 2 inches. In comparison, the deep percolation value of 3.13 developed from the Gonzales PET is considered high because it is the result of comparing Gonzales PET with El Toro precipitation; precipitation in the El Toro area is 20 percent higher than in the Gonzales area. The use of the "sageland" land use designation as the dominant land use is considered reasonable because, although some of the study area is covered with grasses, other areas are covered with deeply rooted oaks. Sageland designation was considered a good approximation. The modeling results, however, reveal a high sensitivity of the estimate of deep percolation to assumptions of land use, climatic period, and climatic conditions. The estimate should, therefore, be considered a rough approximation. Regardless, a reasonable case can be made for a recharge rate between 2 and 3 inches. These values compare with the estimate of recharge advanced in the 1991 report of 2.18 inches.

Use of the DPM with measured streamflow data provides for an accounting of the portion of the runoff that cannot be accounted by the model as either recharge or evapotranspiration. In all of the simulations, the maximum error in the accounting was 0.01 inches. Given the size of the watershed, this corresponds to approximately ± 16 acre-feet.

Streamflow Recharge

The methodology used to estimate recharge to the area in the previous study (this study uses similar methodology) created confusion among reviewers. This confusion focused on the apparent neglect of recharge from streambed infiltration from El Toro Creek in the study area. As discussed above, the recharge from streambed infiltration was accounted for in the previous spreadsheet methodology and in the current model. Both of these methods assume that rainfall is the only input and that all water leaves the basin as evapotranspiration or runoff. Both models accounted for runoff through the single gaging station at the downstream edge of the study area. All water not leaving the basin as evapotranspiration or runoff is assumed to become deep percolation. This includes percolation from the stream. No further resolution of the distribution of stream recharge to various subareas is possible without more gaging stations.

Although the previous analysis accounted for stream recharge, alternative estimates of streambed infiltration have been developed by other consultants. GeoConsultants, Inc. (GCI) performed field work consisting of percolation tests at several locations in the El Toro creek bed. This work is documented in the GCI report dated September 23, 1992. From the percolation tests, GCI suggested a stream infiltration rate of 11 feet/day. Utilizing this infiltration rate and assumptions regarding the duration (15 days per year) and width of flow (12 feet) in El Toro Creek, GCI advanced a value for streambed infiltration of 1,135 acre-feet per year. The work performed by GCI was subsequently reviewed by David Keith Todd Engineers, Inc. (Todd) who generally concurred with the methodology and estimates, although Todd acknowledged that the recharge volume could be significantly less.

For comparison, Table 10 - Estimate of Stream Infiltration Rates, presents a summary of stream infiltration rates available from studies of other streams in the Central Coast area. Presented are data regarding methodology, geologic setting, size of watershed, investigator, etc.

Table 10. Estimates of Stream Infiltration Rates

Watershed/Stream	Average Rainfall (inches)	Geologic Environment	Methodology	Infiltration Rate (ft/day)	Investigator
El Toro Creek	17	Alluvial	Percolation Tests	11	GCI
Los Osos Creek	16	Alluvial	Gaging, Modeling	0.49	USGS (Yates)
Hollister	12.93	Alluvial	Gaging	1.2	Todd
Mission Creek (SB Co.)	14.7	Alluvial	Gaging, Modeling	0.64	Todd; USGS
Carmel River	15.2	Alluvial	Gaging	2.9	MPWMD (Oliver)

Review of Table 10 shows stream infiltration rates for areas of similar climate and geologic setting ranging from 0.49 to 11 ft/day, with the highest value being the value derived



from percolation tests performed by GCI and the remaining values approximately an order of magnitude lower. The discrepancy in the values derives from the tendency for short-term infiltration rates to be elevated relative to values derived from longer-term measurements or actual stream loss measurements. The higher initial rates are the result of the initial filling of pore spaces within the sediments and the absence of localized inhomogeneities, which cause localized mounding and impediments to flow. Of interest is the infiltration value of 2.9 ft/day measured for the Carmel River, which overlies very coarse alluvial fill. This value is also significantly less than the value estimated by GCI.

The data from other stream systems indicate that the infiltration rate suggested by GCI is likely high. Based on comparison of measured stream infiltration losses in similar environments, we believe the value is more likely in the range of 1 ft/day. Utilizing this value and the assumptions of stream width and discharge suggested by GCI, stream recharge would be estimated at 103 acre-feet/year. *However, it should be noted that all of this streambed recharge has been accounted for as areal recharge in both of the previous methods. It is discussed here solely to establish the magnitude of the streambed recharge that has been combined with infiltration of rainfall.*

Comparison Of Water Supply And Demand

Water Supply. This study and the previous study provide for estimates of recharge to the total study area that range from 1,835 to 2,975 acre-feet per year. The estimates are very sensitive to assumptions of land use, climatic period, and climate. Utilizing these estimates of recharge with the acreages for the various subareas defined in the 1991 report results in a range of recharge values to the study area. The portions of the subareas utilized are those underlain by formations that have demonstrated to be viable aquifers: the alluvial deposits, and the Paso Robles and Santa Margarita Formations. The basis for this is discussed above and in the 1991 report. The estimated volume of recharge for the total area and subareas are presented below.

Table 11. Estimates of Recharge - El Toro Area (acre-feet/year)

Area	Total Size (acres)	"Retrievable Area" Acreage (acres)	Recharge @ 2.18 inches ¹	Recharge @ 3.13 inches ²	Recharge @ 1.93 inches ³
El Toro Creek*	408	408	74	106	66
Corral de Tierra*	3,344	3,344	607	872	538
Calera Canyon	8,136	271	49	71	44
Watson Creek*	4,708	4,708	855	1,228	757
San Benancio Gulch*	3,820	2,678	486	669	430
El Toro Area	20,396	11,407	2,072	2,975	1,835

¹ Recharge Rate from 1991 Report

² DPM Gonzales PET, Sage

³ DPM Carmel Valley PET, Sage

* North of Chupines Fault; one hydrogeologic unit



Water Demand. Water demand values were revised as discussed above. The revised build-out values are considered superior to the previous study as a result of the more rigorous land use analysis effort. The revised build-out values are compared to estimates of supply below.

Table 12. Summary of Supply and Demand (acre-feet/year)

Area	Fugro Current Demand	Fugro Build-out Demand	Recharge @ 1.93 inches ¹	Recharge @ 2.18 inches ¹	Recharge @ 3.13 inches ¹	Surplus/ Deficit (range)
El Toro Creek*	1.1	69.3	66	74	106	(-3.3) - (+36.7)
Corral de Tierra*	582.2	781.4	538	607	872	(-243.4) - (+90.6)
Watson Creek*	206.4	394.5	757	855	1,228	(+362.5) - (+833.5)
San Benancio Gulch*	342.2	456.1	430	486	699	(-26.1) - (+242.9)
Calera Canyon	124.0	444.0	44	49	71	(-400) - (-373)
El Toro Area	1,255.9	2,145.3	1,835	2,072	2,975	(-310) - (+830)

* North of Chupines Fault; one hydrogeologic unit

Review of Table 12 reveals that water demand at build-out closely approximates supply in most of the subareas. Depending on the assumptions utilized for supply, subareas either have a small deficit or small surplus at build-out. The exceptions are the Calera Canyon and Watson Creek subareas. Calera Canyon demand currently exceeds supply and at build-out will exceed supply by as much as 400 acre-feet. On the other hand, the Watson Creek subarea displays a surplus at build-out ranging between 360 and 830 acre-feet, depending on assumed recharge rate. The balance between supply and demand for the entire area ranges from between a deficit of approximately 300 acre-feet to a surplus of 830 acre-feet. The overall deficit is primarily from the large deficit in the Calera Canyon subarea.

The large deficit in Calera Canyon derives from the determination that recharge occurring on a large portion of this subarea is irretrievable. The areas designated as irretrievable are underlain by consolidated rocks that have not been proven to be economical producers of ground water. To date, development on these materials has been supported by importation of water through pipelines from wells in the alluvium along Calera Creek. Additional water in this subarea may be available from the consolidated rocks. However, success at recovering this water has been extremely limited. Because the primary use of this analysis is land use planning as it applies to domestic water supply management, it is considered appropriate to adopt this conservative approach. Since domestic water demand is fairly inelastic, a better policy dictates that development be planned for the leaner side of the supply range.³

³ The Department of Water Resources, in its most recent California Water Plan, has adopted an approach to supply estimates that considers both "drought" supplies and "normal" supplies. This approach accounts for the state's episodic extended periods of low precipitation. Water management thus avoids the application of a misleading "average" precipitation. The discussion here is, in essence, analogous to the DWR approach.





The 1991 report strongly recommended the revision of the subareas to reflect the regional hydrogeology rather than surface hydrology. If all of the subareas north of the Chupines fault were aggregated, the total estimated supply for these areas is between 1,791 and 2,850 acre-feet. Estimated demand for these same areas is projected to be approximately 1,700 acre-feet at build-out. Adoption of new subareas would remove the "paper" deficits that currently occur in some of the subareas of the study areas.

TASK 3 - IMPACTS ANALYSIS - WATER TRANSFER

It has been suggested that water supply deficits, particularly those that occur in areas of "irretrievable recharge," could be relieved through a water transfer that would move water from one subarea to another. The need for the water transfer derives from the inability to develop economical water supplies for development within the areas underlain by consolidated rocks. Test wells drilled in these areas, completed in both the Monterey Shale and the granite bedrock, typically fail to produce adequate yields. These formations have historically been poor producers of ground water throughout the Monterey County area. Additionally, when marginal yields have been achieved, the produced water is typically nonpotable and requires desalination treatment for domestic use. Indeed, the generalized poor performance and water quality characteristics of these formations was the basis utilized in the 1991 report to consider recharge tributary to these formations as economically irretrievable, unless proven otherwise. This designation allowed development on these areas, but, lacking a distribution system, only if a local source of water could be developed.

It has been suggested that development in the Calera Canyon area could be supported by a distribution system that would transport water from a well located in the northern portion of the Watson Canyon subarea. The recommended location is based on two factors:

1. The proposed location is hydrogeologically superior to any in the Calera Canyon subarea. This location would place the well north of the Chupines fault system and in a portion of the El Toro area underlain by a thick sequence of the two primary aquifer units in the area, the Paso Robles and Santa Margarita Formations. Well yields in these aquifers are demonstrated to be relatively high and sustainable.
2. The Watson Creek planning subarea is currently relatively undeveloped and, as such, the subarea was identified as having a water supply surplus, relative to other planning subareas in the greater El Toro area.

Feasibility

Based on the current interpretation of the hydrogeology of the Watson Creek subarea, it appears that conditions are favorable to develop a well with the required yield at the proposed





location. The northern portion of the Watson Creek subarea overlies the south limb of an east-west-trending anticlinal structure and, as such, there is sufficient saturated section to develop a well in either the Paso Robles or Santa Margarita Formation. Development of a well in the Santa Margarita Formation would minimize well interference effects on adjacent pumpers.

Impacts

The impacts of any ground water extractions must be evaluated from two perspectives: localized and regional impacts. The localized impact of ground water extraction is limited to well interference effects, the localized depression of the water table in the vicinity of a pumping well. These effects can be minimized by adequate well spacing and limiting the instantaneous discharge rate.

The regional impacts of the extraction and transfer of water from the Watson Creek subarea to the Calera Canyon subarea are more political than hydrogeologic. The transfer of water from the Watson Creek subarea to the Calera Canyon subarea represents the transfer of some of the estimated surplus supply of the Watson Creek subarea.

The transfer would move the "surplus" that is currently estimated in the Watson Creek subarea to an adjacent subarea. However, the identified "surplus" in the Watson Creek subarea is the result of the historical division of a larger hydrogeologic unit, one which includes all of the area north of the Chupines fault, into smaller planning units. This larger hydrogeologic area includes the planning units of Corral de Tierra, El Toro Creek, and most of San Benancio Gulch and Watson Creek. This division of the larger hydrogeologic area into subareas creates artificial deficits in some portions of the area and artificial surplus in others.

As stated above, when the ground water resources of the area north of the Chupines fault is aggregated, the total estimated supply is between 1,790 and 2,850 acre-feet, while estimated demand for these same areas is projected to be approximately 1,700 acre-feet at build-out. The transference of small amounts of water in itself is likely not significant. The significance would be the establishment of a policy that permits this type of transfer. Establishing a policy allowing this type of transfer may eventually be appropriate and would be required to provide water for the planned build-out of the area.

The transfer would move water from one hydrogeologically distinct area to another. However, both of the hydrogeologic subareas are within the same hydrologic watershed and would likely not be considered an out-of-basin transfer. Transferring water between distinct hydrogeologic subareas within a single hydrologic watershed is not without local precedence. Currently, ground water from the Salinas Valley aquifer system is transferred by the California Water Service Company to service the Toro Park area. Conversely, water from the El Toro area is transferred to the Salinas Valley as wastewater.



CONCLUSIONS AND RECOMMENDATIONS

GENERAL STATEMENT

This study has resulted in a better understanding of the components of supply and demand in the El Toro area of Monterey County. The analysis has revealed the estimates of both water supply and demand to be extremely sensitive to the assumptions utilized. The sensitivity of the supply estimates to varying assumptions has prompted the adoption of a possible range. Although further resolution of the balance between supply and demand are not possible without additional data and more rigorous analysis, the results of this study confirm the findings of the previous study that demand in the area currently approaches supply in most of the subareas and that at build-out demand will exceed some estimates of supply.

In general, the analysis suggests that water supply in the El Toro area *as a whole* may be adequate for build-out. However, providing adequate water supply will require a distribution system to areas overlying consolidated rocks. A water transfer from the Watson Creek subarea to Calera Canyon would be an initial step in the expansion of the existing water distribution system to serve the entire area. However, before this could occur, the El Toro Area Plan requires the development of an allocation system to assure equitable use of the resource.

CONCLUSIONS

The revised estimates of supply and demand are summarized below:

Table 13. Summary of Supply and Demand (acre-feet)

Area	Current Demand	Build-out Demand	Recharge @ 1.93 inches	Recharge @ 2.18 inches	Recharge @ 3.13 inches	Surplus/Deficit (range) at Build-out
El Toro Creek*	1.1	69.3	66	74	106	(-3.3) - (+36.7)
Corral de Tierra*	582.2	781.4	538	607	872	(-243.4) - (+90.6)
Watson Creek*	206.4	394.5	757	855	1,228	(+362.5) - (+833.5)
San Benancio Gulch*	342.2	456.1	430	486	699	(-26.1) - (+242.9)
Calera Canyon	124.0	444.0	44	49	71	(-400) - (-373)
El Toro Area	1,256	2,145	1,835	2,072	2,975	(-310) - (+830)

* North of Chupines fault; hydrogeologically connected

As reflected above, water supply for the area closely approximates or slightly exceeds demand at build-out. Certain subareas show deficits under the lower recharge estimates. However, these deficits are eliminated for most subareas (except Calera Canyon) when the subareas are merged into more hydrogeologically defensible units. With the development of a distribution system, water supply deficits in Calera Canyon would be overcome.

RECOMMENDATIONS

- This study, like several before it, utilized a water balance approach to estimating recharge to the study area. As discussed above, the estimates are very sensitive to the adopted assumptions. Refinement and confirmation of assumptions might increase confidence in the water supply estimates; however, the accuracy of any of the estimates of recharge cannot be confirmed (calibrated) without better water level data for the area. Before additional study is conducted, it is our strong recommendation that a water level data collection program be designed and implemented to verify the water level trends. The current data set is inadequate to confirm the conclusions of any water balance study. Wells should be included in the program on the basis of known construction, aquifer system, historical records, and spatial distribution. Water supply in El Toro is tight, and ground water management in this complex area is impossible without an expanded and defensible data set. It is imperative that the Agency continue and, if possible, expand the ground water level data collection program in the El Toro area.
- We reiterate the recommendations of the previous report calling for the revision of the adopted subareas. Revision of the subareas would correct the "paper deficits" that occur in subareas that are hydraulically connected. As a starting point, it is suggested that the subareas north of the trace of the Chupines fault be aggregated into a single unit. This would combine the majority of the subareas of Corral de Tierra, Watson Creek, San Benancio Gulch, and El Toro Creek into a single hydrogeologic unit. The areas south of the fault are more complex and would require additional analysis to develop a basis for division. Analysis to date suggests that water supply for the area is likely adequate to meet build-out demand. However, without an area-wide water distribution system, many areas will be not be able to develop. Conceptually, a water distribution system could loop through upper Corral de Tierra, connecting to existing service in Corral de Tierra and San Benancio Gulch areas. This distribution system could be supported with a system of wells areally spaced throughout the water-bearing areas. The system of wells could be operated in such a manner to distribute pumping stress throughout the area. Design of such a distribution system will require significant engineering and hydrogeological analysis. Issues to be resolved include amounts and location of extractions as well as development of safety factors and operational rules. Development of such a system would also be subject to CEQA review.
- Following our recommendations for revising the subareas, we recommend that the current B-8 regulation be revised to apply only to the area south of the Chupines fault (Calera subarea). The B-8 is an emergency regulation and the presupposition is that either the water supply problem will be resolved, or the area will be permanently



rezoned to match the resource limitation. The provision of a distribution system to the Calera subarea would eliminate the supply problem and obviate the need for continuing the B-8.

- Additional water supply for the area is limited to the reclamation of the wastewater that is currently exported out of the area into the Salinas ground water basin. Although expensive, this could be a source of water to irrigate the existing golf courses, freeing-up approximately 200 to 300 acre-feet of ground water for potable use.
- Although we believe that a stream gaging program will provide additional understanding of the hydrology of the area, we believe that the magnitude of stream recharge in the study area is a minor component of the water budget and the costs of developing and maintaining a gaging system will far exceed the value of these data.
- Many of the recommendations advanced can be implemented utilizing existing policies within the El Toro Area Plan. Most importantly, the requirement to develop an area-wide water allocation plan should be pursued to assure that a distribution system, should it be constructed, be approached in a unified, rather than a piecemeal, manner.

We appreciate the opportunity to work with the County on this complex issue. Please call if you have any questions.

Sincerely,

FUGRO WEST, INC.

A handwritten signature in black ink, appearing to read "M. B. Feeney".

Martin B. Feeney
Certified Hydrogeologist 145

A handwritten signature in black ink, appearing to read "Chris Clark".

Chris Clark, JD, AICP
Senior Planner

MBF/CWC/es

Attachments: References
Appendices A and B



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APPENDIX A
WATER DEMAND

El Toro Area Water Demand																						
Includes Build-out and Water Duty Factors																						
Sub-basin		El Toro Creek																				
	BO					WDF					BO x WDF			R			BO X WDF - R					
Land Use	Density		Build-out				Water Duty Factors						Water Delivered			Return Flow			Water Consumed			
							Interior		Exterior		Total Water Duties		Existing	Future	Build-out	Residence	Ranch	Existing	Future	Build-out		
	Ac/Unit	Units/Ac	Acres	Build-out	Extg Unit	Future	Existing	Future	Yard	Ranch	Estg Unit	Future									Interior	Exterior
Commercial						0	0.5	0.5	0.5	0	1.00	1.0	0.0	0	0	80%	20%	20%	0.0	0.0	0.0	
Low Density	1		10	10	0	10	0.38	0.20	0.28	0	0.65	0.5	0.0	5	5	80%	20%	20%	0.0	2.6	2.6	
Low Density	2			0		0	0.38	0.20	0.28	1	1.65	1.5	0.0	0	0	80%	20%	20%	0.0	0.0	0.0	
Low Density	0.29	3	40	136	0	136	0.38	0.20	0.28	0	0.65	0.5	0.0	65	65	80%	20%	20%	0.0	35.7	35.7	
Low Density	5		11	2	1	1	0.38	0.20	0.28	1	1.65	1.5	1.7	2	3	80%	20%	20%	1.1	1.3	2.4	
Med. Density	0.20	5		0		0	0.38	0.20	0.28	0	0.65	0.5	0.0	0	0	80%	20%	20%	0.0	0.0	0.0	
Public/Quasi Public			122		0	0	0.00	0.00	2.10	0	2.10	2.1	0.0	0	0	80%	20%	20%	0.0	0.0	0.0	
Res. Cons.	10		119	12	0	12	0.38	0.20	0.28	1	1.65	1.5	0.0	18	18	80%	20%	20%	0.0	12.6	12.6	
Res. Cons.	40			0		0	0.38	0.20	0.28	1	1.65	1.5	0.0	0	0	80%	20%	20%	0.0	0.0	0.0	
Permanent Grazing	40			0		0	0.38	0.20	0.28	1	1.65	1.5	0.0	0	0	80%	20%	20%	0.0	0.0	0.0	
Rural Density	5		164	15	0	15	0.38	0.20	0.28	1	1.65	1.5	0.0	22	22	80%	20%	20%	0.0	15.9	15.9	
Rural Density	10			0		0	0.38	0.20	0.28	1	1.65	1.5	0.0	0	0	80%	20%	20%	0.0	0.0	0.0	
Rural Density	20			0		0	0.38	0.20	0.28	1	1.65	1.5	0.0	0	0	80%	20%	20%	0.0	0.0	0.0	
		Totals	466	175	1	174							1.7	112	113				1.1	68.2	69.3	

El Toro Area Water Demand																						
Includes Build-out and Water Duty Factors																						
Sub-basin		Lower Corral De Tierra																				
		BO										WDF		BO x WDF			R			BO X WDF - R		
Land Use	Density		Build-out				Water Duty Factors						Water Delivered			Return Flow			Water Consumed			
	Ac/Unit	Units/Ac	Acres	Build-out	Extg Unit	Future	Interior		Exterior		Total Water Duties		Existing	Future	Build-out	Residence		Ranch	Existing	Future	Build-out	
							Existing	Future	Yard	Ranch	Estg Unit	Future				A+C+D	B+C+D	Interior				Exterior
			21		3	0	0.5	0.5	0.5	0	1.00	1.0	3.0	0	3	80%	20%	20%	1.5	0.0	1.5	
Commercial			21		3	0	0.5	0.5	0.5	0	1.00	1.0	3.0	0	3	80%	20%	20%	1.5	0.0	1.5	
Low Density	1		605	461	294	167	0.38	0.20	0.28	0	0.65	0.5	192.4	80	273	0%	20%	20%	176.1	70.8	246.9	
Low Density	2		11	5	1	4	0.38	0.20	0.28	1	1.65	1.5	1.7	6	8	80%	20%	20%	1.1	4.3	5.3	
Low Density	0.29	3		0		0	0.38	0.20	0.28	0	0.65	0.5	0.0	0	0	80%	20%	20%	0.0	0.0	0.0	
Low Density	5		92	18	3	15	0.38	0.20	0.28	1	1.65	1.5	5.0	23	28	80%	20%	20%	3.3	16.4	19.7	
Med. Density	0.20	5	140	204	178	26	0.38	0.20	0.28	0	0.65	0.5	116.5	12	129	0%	20%	20%	106.6	11.0	117.6	
Public/Quasi Public			114	114	114	0	0.00	0.00	2.10	0	2.10	2.1	239.4	0	239	80%	20%	20%	191.5	0.0	191.5	
Res. Cons.	10			0		0	0.38	0.20	0.28	1	1.65	1.5	0.0	0	0	80%	20%	20%	0.0	0.0	0.0	
Res. Cons.	40		432	10	0	10	0.38	0.20	0.28	1	1.65	1.5	0.0	15	15	80%	20%	20%	0.0	10.6	10.6	
Permanent Grazing	40			0		0	0.38	0.20	0.28	1	1.65	1.5	0.0	0	0	80%	20%	20%	0.0	0.0	0.0	
Rural Density	5		270	79	45	34	0.38	0.20	0.28	1	1.65	1.5	74.5	50	125	80%	20%	20%	49.4	36.1	85.5	
Rural Density	10		745	95	48	47	0.38	0.20	0.28	1	1.65	1.5	79.4	70	149	80%	20%	20%	52.7	50.0	102.6	
Rural Density	20			0		0	0.38	0.20	0.28	1	1.65	1.5	0.0	0	0	80%	20%	20%	0.0	0.0	0.0	
		Totals	2430	986	686	303							711.8	256	968				582.2	199.2	781.4	

El Toro Area Water Demand																							
Includes Build-out and Water Duty Factors																							
Sub-basin		Calera Canyon																					
			BO										WDF		BO x WDF			R			BO X WDF - R		
Land Use	Density		Build-out				Water Duty Factors						Water Delivered			Return Flow			Water Consumed				
	Ac/Unit	Units/Ac	Acres	Build-out	Extg Unit	Future	Interior		Exterior		Total Water Duties					Residence		Ranch					
							Existing	Future	Yard	Ranch	stg Unit	Future	Existing	Future	Build-out	interior	Exterior	External	Existing	Future	Build-out		
							A	B	C	D	A+C+D	B+C+D											
Commercial						0	0.5	0.5	0.5	0	1.00	1.0	0.0	0	0	80%	20%	20%	0.0	0.0	0.0		
Low Density	1			0		0	0.38	0.20	0.28	0	0.65	0.5	0.0	0	0	80%	20%	20%	0.0	0.0	0.0		
Low Density	2		17	17	15	2	0.38	0.20	0.28	1	1.65	1.5	24.8	3	28	80%	20%	20%	16.5	2.1	18.6		
Low Density	0.29	3		0		0	0.38	0.20	0.28	0	0.65	0.5	0.0	0	0	80%	20%	20%	0.0	0.0	0.0		
Low Density	5		14	2	0	2	0.38	0.20	0.28	1	1.65	1.5	0.0	3	3	80%	20%	20%	0.0	2.1	2.1		
Med. Density	0.20	5		0		0	0.38	0.20	0.28	0	0.65	0.5	0.0	0	0	80%	20%	20%	0.0	0.0	0.0		
Public/Quasi Public						0	0.00	0.00	2.10	0	2.10	2.1	0.0	0	0	80%	20%	20%	0.0	0.0	0.0		
Res. Cons.	10		128	30	24	6	0.38	0.20	0.28	1	1.65	1.5	39.7	9	49	80%	20%	20%	26.3	6.4	32.7		
Res. Cons.	40		459	11	0	11	0.38	0.20	0.28	1	1.65	1.5	0.0	16	16	80%	20%	20%	0.0	11.7	11.7		
Permanent Grazing	40		6041	151	9	142	0.38	0.20	0.28	1	1.65	1.5	14.9	210	225	80%	20%	20%	9.9	150.9	160.8		
Rural Density	5		1103	203	65	138	0.38	0.20	0.28	1	1.65	1.5	107.5	204	312	80%	20%	20%	71.4	146.7	218.0		
Rural Density	10			0		0	0.38	0.20	0.28	1	1.65	1.5	0.0	0	0	80%	20%	20%	0.0	0.0	0.0		
Rural Density	20			0		0	0.38	0.20	0.28	1	1.65	1.5	0.0	0	0	80%	20%	20%	0.0	0.0	0.0		
		Totals	7762	414	113	301							187.0	445	632				124.0	319.9	444.0		

El Toro Area Water Demand																						
Includes Build-out and Water Duty Factors																						
Sub-basin		Watson Creek																				
			BO								WDF		BO x WDF			R			BO X WDF - R			
Land Use	Density		Build-out				Water Duty Factors						Water Delivered			Return Flow			Water Consumed			
	Ac/Unit	Units/Ac	Acres	Build-out	Extg Unit	Future	Interior		Exterior		Total Water Duties		Existing	Future	Build-out	Residence			Ranch	Existing	Future	Build-out
							Existing	Future	Yard	Ranch	slg Unit	Future				Existing	Future	External				
							A	B	C	D	A+C+D	B+C+D										
Commercial						0	0.5	0.5	0.5	0	1.00	1.0	0.0	0	0	80%	20%	20%	0.0	0.0	0.0	
Low Density	1			0		0	0.38	0.20	0.28	0	0.65	0.5	0.0	0	0	80%	20%	20%	0.0	0.0	0.0	
Low Density	2			0		0	0.38	0.20	0.28	1	1.65	1.5	0.0	0	0	80%	20%	20%	0.0	0.0	0.0	
Low Density	0.29	3		0		0	0.38	0.20	0.28	0	0.65	0.5	0.0	0	0	80%	20%	20%	0.0	0.0	0.0	
Low Density	5			0		0	0.38	0.20	0.28	1	1.65	1.5	0.0	0	0	80%	20%	20%	0.0	0.0	0.0	
Med. Density	0.20	5		0		0	0.38	0.20	0.28	0	0.65	0.5	0.0	0	0	80%	20%	20%	0.0	0.0	0.0	
Public/Quasi Public			21		0	0	0.00	0.00	2.10	0	2.10	2.1	0.0	0	0	80%	20%	20%	0.0	0.0	0.0	
Res. Cons.	10		2033	233	120	113	0.38	0.20	0.28	1	1.65	1.5	198.5	167	366	80%	20%	20%	131.7	120.1	251.8	
Res. Cons.	40		1370	50	22	28	0.38	0.20	0.28	1	1.65	1.5	36.4	41	78	80%	20%	20%	24.2	29.8	53.9	
Permanent Grazing	40		818	25	4	21	0.38	0.20	0.28	1	1.65	1.5	6.6	31	38	80%	20%	20%	4.4	22.3	26.7	
Rural Density	5		163	40	34	6	0.38	0.20	0.28	1	1.65	1.5	56.3	9	65	80%	20%	20%	37.3	6.4	43.7	
Rural Density	10		78	5	1	4	0.38	0.20	0.28	1	1.65	1.5	1.7	6	8	80%	20%	20%	1.1	4.3	5.3	
Rural Density	20		250	12	7	5	0.38	0.20	0.28	1	1.65	1.5	11.6	7	19	80%	20%	20%	7.7	5.3	13.0	
		Totals	4733	365	188	177							311.0	262	573				206.4	188.1	394.5	

Includes Build-out and Water Duty Factors																						
Sub-basin		San Benancio Gulch																				
			BO								WDF		BO x WDF			R			BO X WDF - R			
Land Use	Density		Build-out				Water Duty Factors						Water Delivered			Return Flow			Water Consumed			
	Ac/Unit	Units/Ac	Acres	Build-out	Extg Unit	Future	Interior		Exterior		Total Water Duties		Existing	Future	Build-out	Residence		Ranch				
							Existing A	Future B	Yard C	Ranch D	Estg Unit A+C+D	Future B+C+D				Interior	Exterior	External	Existing	Future	Build-out	
Commercial						0	0.5	0.5	0.5	0	1.00	1.0	0.0	0	0	80%	20%	20%	0.0	0.0	0.0	
Low Density	1		294	168	139	29	0.38	0.20	0.28	0	0.65	0.5	91.0	14	105	80%	20%	20%	41.4	7.6	49.0	
Low Density	2			0		0	0.38	0.20	0.28	1	1.65	1.5	0.0	0	0	80%	20%	20%	0.0	0.0	0.0	
Low Density	0.29	3		0		0	0.38	0.20	0.28	0	0.65	0.5	0.0	0	0	80%	20%	20%	0.0	0.0	0.0	
Low Density	5		930	305	262	43	0.38	0.20	0.28	1	1.65	1.5	433.5	64	497	80%	20%	20%	287.6	45.7	333.3	
Med. Density	0.20	5		0		0	0.38	0.20	0.28	0	0.65	0.5	0.0	0	0	80%	20%	20%	0.0	0.0	0.0	
Public/Quasi Public			790		0	0	0.00	0.00	2.10	0	2.10	2.1	0.0	0	0	80%	20%	20%	0.0	0.0	0.0	
Res. Cons.	10		46	4	0	4	0.38	0.20	0.28	1	1.65	1.5	0.0	6	6	80%	20%	20%	0.0	4.3	4.3	
Res. Cons.	40		1603	43	12	31	0.38	0.20	0.28	1	1.65	1.5	19.9	46	66	80%	20%	20%	13.2	32.9	46.1	
Permanent Grazing	40			0		0	0.38	0.20	0.28	1	1.65	1.5	0.0	0	0	80%	20%	20%	0.0	0.0	0.0	
Rural Density	5		110	22	0	22	0.38	0.20	0.28	1	1.65	1.5	0.0	33	33	80%	20%	20%	0.0	23.4	23.4	
Rural Density	10			0		0	0.38	0.20	0.28	1	1.65	1.5	0.0	0	0	80%	20%	20%	0.0	0.0	0.0	
Rural Density	20			0		0	0.38	0.20	0.28	1	1.65	1.5	0.0	0	0	80%	20%	20%	0.0	0.0	0.0	
		Totals	3773	542	413	129							544.3	162	706				342.2	113.9	456.1	

APPENDIX B

MODEL RUNS AND DATA

DOCUMENTATION OF A DEEP PERCOLATION MODEL
FOR ESTIMATING GROUND-WATER RECHARGE

By H. H. Bauer and J. J. Vaccaro

ABSTRACT

A deep percolation model, which operates on a daily basis, has been developed to estimate long-term average ground-water recharge from precipitation. It has been designed primarily to simulate recharge in large areas with variable weather, soils, and land uses, but it can also be used at any scale. This report documents the physical and mathematical concepts of the deep percolation model, describes its subroutines and data requirements, and describes the input data sequence and formats. The physical processes simulated are soil-moisture accumulation, evaporation from bare soil, plant transpiration, surface-water runoff, snow accumulation and melt, and accumulation and evaporation of intercepted precipitation.

The minimum data sets for the operation of the model are daily values of precipitation and maximum and minimum air temperature, soil thickness and available water capacity, soil texture, and land-use. Long-term average annual precipitation, actual daily stream-discharge, monthly estimates of base flow, Soil Conservation Service surface-runoff curve numbers, land-surface altitude-slope-aspect, and temperature lapse rates are optional.

The program is written in the FORTRAN 77 language with no enhancements and should run on most computer systems without modifications. Documentation has been prepared so that program modifications may be made for inclusions of additional physical processes or deletion of ones not considered important.

RECHARGE ESTIMATION MODEL

Theory and General Flow of Model

Several widely accepted and used empirical relations serve as the basis for the model. It should be stressed that the model is no more than an assemblage of these relations, along with a few reasonable assumptions, into a readily executable package. No calibration of unknown or poorly known parameters is necessary except for possible adjustments to estimates of the base-flow component of stream discharge. This is discussed in a later section. The empirical methods are, however, subject to some error, as are much of the required input data, especially soil properties, which are notoriously variable even on a small scale.

The model calculates areal distribution and the overall average of deep percolation for each year simulated as well as the averages for all years simulated. In general, it cannot be assumed that the deep percolation calculated for a particular year is equivalent to the amount of moisture recharging the water table aquifer during that year. For a water table near the land surface overlain by permeable soils or rock in a humid climate the lag time between deep percolation and ground-water recharge may only be a few days or hours, but for arid or semiarid areas where the water table may be several hundred feet below land surface the lag time could be tens or even hundreds of years. For the latter situation "pulses" of deep percolation tend to approach a constant rate at some depth which is equivalent to the average "pulse" rate. Therefore, while a long-term average distribution of deep percolation is probably always a good estimate of the long-term average recharge rate, care must be exercised when applying model output to specific years.

Model output results should be considered along with other methods of estimating recharge. For example, if the ground-water system is in a steady state condition the average discharge should equal the average recharge. If the geology were such that all recharge to an area must discharge to a stream then a base-flow analysis of the streamflow hydrograph could determine total ground-water recharge, although probably not the areal distribution of such recharge.

The conceptual processes simulated by the model are illustrated in figures 2 and 3. The processes are simulated one day at a time for one or more complete calendar years. Each day, each block of an area is simulated separately.

Daily precipitation and maximum-minimum air temperature input data from weather stations are first interpolated to each block. Potential evapotranspiration (PET), the evapotranspiration that would occur for a fully grown, fully covered field of alfalfa, water nonlimiting, is calculated at the temperature observation sites. If land slope and aspect (orientation) are input for selected blocks, PET calculations are made at those blocks and are corrected for the amount of incident solar radiation.

The form of precipitation, rain or snow, is then determined simply by noting whether the average air temperature is above or below 32 °F. If precipitation is snow, the snowpack is increased by the amount of

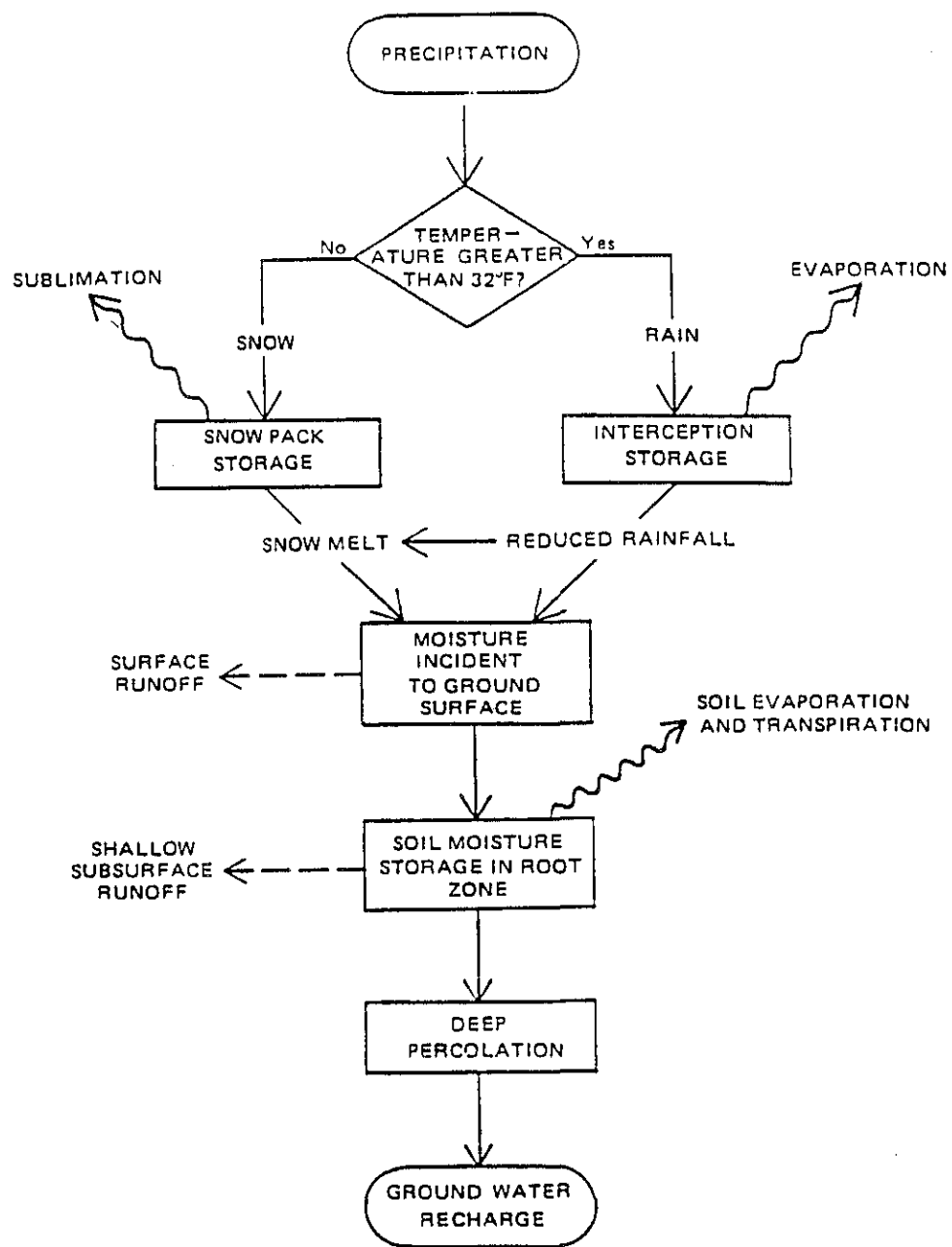


Figure 2.--Conceptual model of the water balance.

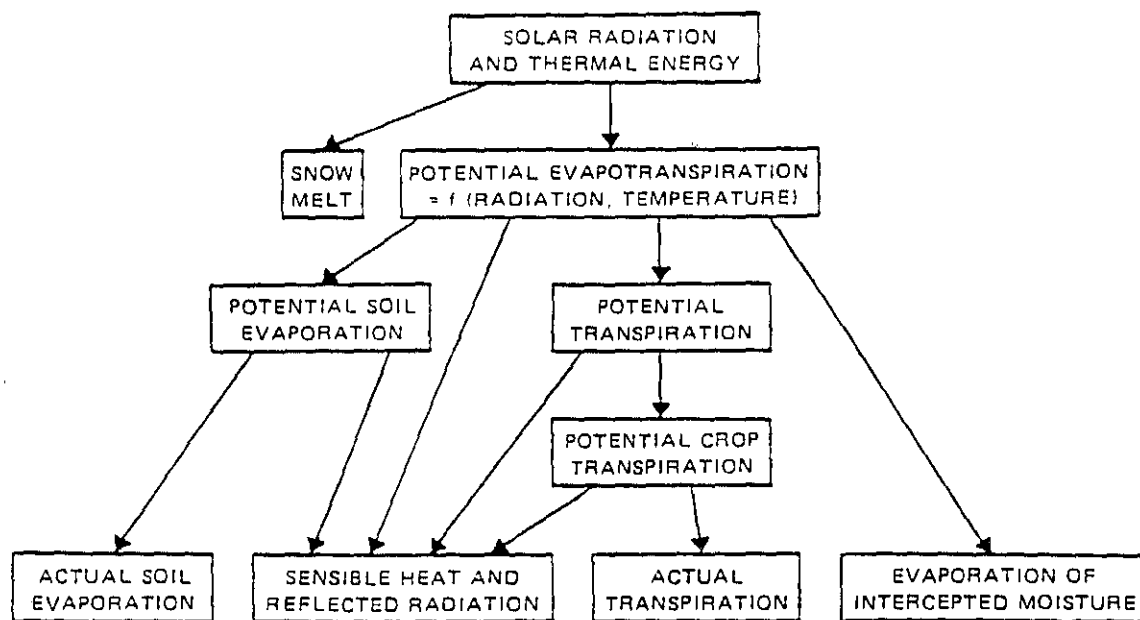


Figure 3.--Conceptual model of the energy balance for evapotranspiration.

precipitation and all further evaporation and transpiration calculations for that day are bypassed.

If precipitation is rain, an amount of moisture, dependent on the amount and type of foliage and leaf litter, is intercepted. This free water evaporates with little or no resistance (compared to soil moisture evapotranspiration) and is allowed to evaporate at the potential rate. Soil moisture evapotranspires at a rate less than PET, and is a function of soil moisture and texture. Moisture that reaches the soil surface (rainfall plus snowmelt minus interception--hereafter referred to as "incident moisture") partly infiltrates and partly runs off as surface water.

The surface runoff for each element is computed on the basis of the modified SCS method of Wight and Neff (1983). This method was developed for rangeland in eastern Montana and is based on the SCS curve number technique for determining surface runoff from small watersheds. When stream-discharge data are used, modified SCS surface-runoff values computed for each block are used to apportion or disaggregate the observed streamflow (minus the base flow) to the blocks of the model. If stream discharge data are not read in, the SCS-computed values are used directly. If the option to bypass runoff computations is in effect, surface runoff for all blocks is set to zero.

After these abstractions, any surplus moisture from precipitation and snowmelt is assumed to infiltrate the soil, where it is added to soil moisture storage in the root zone. When the surplus exceeds the remaining storage capacity, the difference is estimated to be deep percolation.

Potential soil evaporation (SOILPEV) is computed by subtracting the evaporated intercepted moisture from PET and multiplying by the proportion of land not covered by foliage. The difference between PET and SOILPEV becomes potential plant transpiration (PLNTPT). Actual soil evaporation (ACTEV) is estimated from a modification of the relation presented in Saxton and others (1974) and occurs only from the top 12 inches. In the computer program this relation is approximated by two linear functions (see fig. 6). Although Saxton and others (1974) limit bare soil evaporation losses to only the uppermost 6 inches, other investigators have used 12 inches (Wight and Neff, 1983). cursory inspection of bare soil profiles in east-central Washington indicates that 12 inches is a better estimate. Soil moisture will not evaporate at the potential rate when the soil-moisture content is below field capacity. The unused energy (SOILPEV-ACTEV) is partly reflected back to the foliar cover, where it is added to potential plant transpiration (PLNTPT). According to Saxton and others (1974), the portion reflected back to the cover is 1.67 times the foliar cover fraction when the fraction is less than 0.6. When the fraction is greater than 0.6 all of the reflected energy contributes to PLNTPT. PLNTPT also is dependent on plant type and stage of growth. Finally, PLNTPT, which is based on alfalfa, is multiplied by the appropriate crop-growth coefficient (U.S. Department of Agriculture, 1967) to give the potential transpiration for the particular crop (CROPPT).

The difference between PLNTPT and CROPPT, along with the unused portion of SOILPEV (if any), is accumulated in an energy sink term. The sink term was used for checking the total evaporative energy balance; it is currently not printed in the water-energy budget, but can be printed with minor code modifications.

The amount of transpiration from each soil layer (ACTPLT) is based on root depth, soil type, and actual versus potential relations as shown in figure 4. If all of the CROPPT cannot be used, the remaining portion is added to the energy sink.

ACTPLT is calculated on the basis of the previous day's soil moisture plus moisture added from the current day's rain and snowmelt before any transpiration has occurred (see fig. 8). In reality, the soil moisture is depleted during the day, thereby diminishing the rate of ACTPLT. The error introduced by the simplification is probably quite small because of a "correcting effect" due to the fact that an overestimate of ACTPLT for a given day over-reduces the soil moisture content carried over to the the next day, which then reduces the next day's overestimate of ACTPLT.

A problem arises for days when observed surface runoff (stream discharge minus estimated base flow) exceeds incident moisture. This problem stems from the fact that the model does not attempt to route the movement of water below the root zone or to route the surface runoff (other than reading in a lag time between precipitation and stream discharge). Various phenomena contribute to what appears to be stream discharge in excess of base flow when there is no direct surface runoff. For example, in steep terrain near a stream or tributary, water from precipitation may infiltrate to a shallow impermeable layer, move downslope, and re-emerge after a short time as temporary springs or seepage that feed the stream system. Another documented phenomenon is that of bank storage. When the stage of a stream rises, a portion of the streamflow goes into the banks and is stored there, as the stage declines this water contributes to streamflow. Whatever combination of phenomena, the fact is that this water is not available to ground-water recharge and must be

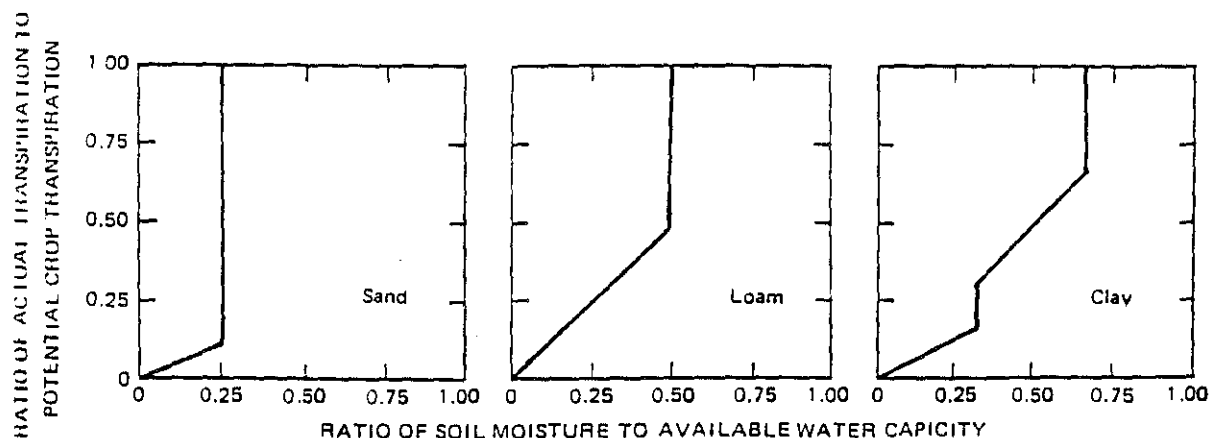


Figure 4.-- Relation between actual and potential transpiration based on soil texture and soil moisture (after Leavesley and others, 1983).

accounted for in the water budget. The approach used here is that for any day that observed surface runoff exceeds incident moisture, the excess observed surface runoff amount is removed from soil moisture storage, as long as soil moisture remains at or above 50 percent of field capacity. This, in effect, corrects for water that had previously been added to soil moisture when, in fact, it had gone through other processes before emerging as surface runoff. A slight underestimate of recharge may be introduced as a result of increased rates of simulated soil evaporation and transpiration resulting from temporarily elevated soil-moisture contents.¹ A slight overestimate of recharge could also result when subsequent moisture in excess of remaining soil-moisture holding capacity is added before sufficient time has elapsed to remove the overestimated soil moisture by evapotranspiration.

If there still is excess surface runoff after soil moisture has been reduced to 50 percent of field capacity, a "deficit" is tabulated separately. A deficit would indicate that certain input parameters need to be adjusted, and (or) that there are significant errors in streamflow data and (or) precipitation data and (or) in estimation of base flow.

Regarding the uncertainty of the routing of surface runoff, the model could be operated so as to at least bracket total recharge for an area with respect to runoff. Clearly, if a simulation is made assuming that surface runoff is zero, annual recharge will probably be overestimated. If for such a simulation the average annual total runoff is then subtracted from the computed average annual recharge an underestimate of average recharge should result. This is because a greater total amount of evapotranspiration would be simulated due to generally higher soil moistures and also because a greater total surface runoff would be assumed (surface runoff plus base flow) than for a normal simulation. The usefulness of such bracketing will depend upon the magnitude of the total runoff with respect to the magnitude of the recharge.

The major processes are further described in detail in the following subsections.

¹ Another approach would have been to reduce precipitation by the observed surface runoff, so that it never enters the soil. To do this, however, it must be known which of many days' surface-runoff values are to be associated with the current day's precipitation, and the model could not then operate on a simple daily basis as it does now.

On the line printer maps, notice the large variability of recharge from block to block (a "-1" on a line printer map indicates outside modeled area). Also, notice that north is to the right. The abbreviations used on the tables are defined as follows. Units are in inches of water for all columns except temperature.

PRECIP	PRECIPITATION
POTET	POTENTIAL EVAPOTRANSPIRATION
CHGINT	CHANGE OF MOISTURE ON FOLIAR COVER
RUNOFF	STREAM DISCHARGE CONVERTED TO INCHES IF READ IN, OR SCS METHOD COMPUTED RUNOFF IF NO STREAM DISCHARGE IS READ IN (VALUES WILL ALL BE ZERO IF RUNOFF=0 OPTION IS SELECTED)
RECHRG	DEEP PERCOLATION
SOLPEV	POTENTIAL BARE-SOIL EVAPORATION
ACTSEV	ACTUAL BARE-SOIL EVAPORATION
SNWEVP	DIRECT EVAPORATION OF SNOW (SUBLIMATION)
PPLTR	POTENTIAL PLANT TRANSPIRATION
APLTP	ACTUAL PLANT TRANSPIRATION
CHGSM	CHANGE IN TOTAL SOIL MOISTURE
EVINT	INTERCEPTED MOISTURE EVAPORATED
CHGSNO	CHANGE IN SNOWPACK
AVTMP	AVERAGE TEMPERATURE FOR THE PERIOD
EHRM-RO	RUNOFF VALUES COMPUTED BY THE SCS CURVE NUMBER TECHNIQUE TO APPORTION OBSERVED STREAM-RUNOFF DATA (VALUES WILL BE ZERO IF NO STREAM-DISCHARGE DATA ARE READ IN)
DEFCIT	THE AMOUNT OF STREAM DISCHARGE THAT CANNOT BE ACCODUNTED FOR (VALUES WILL BE ZERO IF NO STREAM DISCHARGE IS READ IN)

Notice that the annual values of DEFCIT for 1963 and 1965 are -0.42 and 0.33, respectively. Because they are large percentages of the annual values of RECHRG, it would be prudent, for non-hypothetical data, to investigate the initial zero values of base flow estimated for those months showing non-zero DEFCIT values, and to re-run the model with new base-flow estimates.

The last column of the monthly totals for a specific year is a mass-balance check. The values should all equal zero (or very nearly zero). It was incorporated into the output during developing and de-bugging of the model. Non-zero values may also indicate data problems and therefore this output item has been retained in the final version.

El Toro Deep Percolation Model Input Data

USGS Quadrangle Map Conversions

Latitude: 0.00552 degrees per 2,000 feet (1 inch in N-S map direction)
 Longitude: 0.00683 minutes per 2,000 feet (1 inch in E-W map direction)

Calculation of Model Node Coordinates

Starting Lat. 36.5 degrees
 Starting Lon 121.75 degrees

Node	Offset N. (in 50ths of inches)	Offset E.	Latitude	Longitude	Northing (ft.) Yvalue	Easting (ft.) Xvalue
1	234	1070	36.525834	121.603838	445660	1234600
2	-48	535	36.494701	121.676919	434380	1213200
3	120	70	36.513248	121.740438	441100	1194600
4	433	-20	36.547803	121.752732	453620	1191000
5	640	20	36.570656	121.747268	461900	1192600
6	745	30	36.582248	121.745902	466100	1193000
7	388	857	36.542835	121.632934	451820	1226080
8	144	464	36.515898	121.686618	442060	1210360
9	283	159	36.531243	121.728281	447620	1198160
10	450	138	36.549680	121.731149	454300	1197320
11	710	174	36.578384	121.726232	464700	1198760
12	795	110	36.587768	121.734974	468100	1196200
13	474	783	36.552330	121.643042	455260	1223120
14	380	587	36.541952	121.669816	451500	1215280
15	410	376	36.545264	121.698638	452700	1206840
16	452	345	36.549901	121.702873	454380	1205600
17	734	240	36.581034	121.717216	465660	1201400
18	815	155	36.589976	121.728827	468900	1198000
19	474	783	36.552330	121.643042	455260	1223120
20	478	582	36.552771	121.670499	455420	1215080
21	590	481	36.565136	121.684295	459900	1211040
22	672	392	36.574189	121.696453	463180	1207480
23	735	393	36.581144	121.696316	465700	1207520
24	474	783	36.552330	121.643042	455260	1223120
25	657	700	36.572533	121.654380	462580	1219800

El Toro Deep Percolation Model Input Data

Calculation of Model Block Areas and Comparison with Planimeter Values

Block	Node1	Node 2	Node 3	Node 4	Area (sq. ft.)	Acreage	Calc. Acres	Planimeter Acres
CAL1 (1)	1	7	8	2	188188800	4320		
CAL2 (2)	3	2	8	9	111550400	2561		
CAL3 (3)	3	9	10	4	55416000	1272	8153	8155 Calera Canyon
CDT1a (4)	4	10	11	5	55636800	1277		
CDT2a (5)	5	11	12	6	20376000	468		
WAT1 (6)	7	13	14	8	69238400	1589		
WAT2 (7)	8	14	15	9	97907200	2248		
WAT3 (8)	9	15	16	10	38129600	875	4712	4708 Watson Ck.
CDT1b (9)	10	16	17	11	59904000	1375		
CDT2b (10)	11	17	18	12	9992800	229	3350	3344 Corral de Tierra
SBG1 (11)	14	19	20	15	32164800	738		
SBG2 (12)	15	20	21	16	31944000	733		
SBG3 (13)	16	21	22	17	47830400	1098		
ETC1 (14)	17	22	23	18	17692800	406	406	408 El Toro Ck
SBG4 (15)	20	24	25	21	54196800	1244	3814	3820 San Benancio
							20435	20435

El Toro Deep Percolation Model Input Data

Calculation of Aggregate Soils Properties

Block	Soils Group	Thickness	Avail H2O Cap.	Texture	Text. Ind.	Percentage
CAL1	CcG	11	0.100000	GravSandy Loam (SM)	1.6	0.02
	GfE,GfF	29	0.185000	Silty Loam	2.2	0.08
	DbD,DbE	53	0.165	Clay	3	0.03
	JaF,JbG,Jc	30	0.13	Sandy Loam	1.75	0.04
	LcF	36	0.185	Silty clay loam	2.25	0.03
	Rc	0	0.000000	Rock	3	0.06
	ScE, ScG	22	0.140000	Fine Sandy Loam (SM,	1.75	0.1
	SfD,SfE,SfF,	24	0.120000	Shaly Clay Loam (GM)	2.25	0.04
	ShD,ShE	61	0.050000	Sandy (clay) loam	2	0.05
	SoD,SoE,So	39	0.120000	Coarse Sandy Loam (S	1.75	0.25
	VaD,VaE,Va	23	0.120000	Coarse sandy loam	1.75	0.3
		29.27	0.1198		1.943	1

Block	Soils Group	Thickness	Avail H2O Cap.	Texture	Text. Ind.	Percentage
CAL2	AaF	36	0.155	Silty Clay	2.9	0.01
	AeC	72	0.05	Sandy Loam	1.75	0.04
	AkD	48	0.07	Loamy Fine Sand	1.25	0.01
	CbB	80	0.12	Sandy Loam	1.75	0.01
	DbD	53	0.165	Clay	3	0.02
	HaE	41	0.05	Clayey Loam	2.25	0.05
	GkB	63	0.08	Loamy Sand	1.25	0.01
	LeC	82	0.120000	Shaly Loam	2.2	0.01
	ScE, ScG	22	0.140000	Fine Sandy Loam	1.75	0.02
	SfD,SfE,SfF,	24	0.120000	Shaly Clay Loam	2.25	0.2
	ShD	61	0.050000	Sandy (clay) loam	2	0.01
	SoD,SoE,So	39	0.120000	Coarse Sandy Loam (S	1.75	0.6
	Xc	60	0.125000	(Clay) Loam	2.1	0.01
		38.93	0.1138		1.912	1

El Toro Deep Percolation Model Input Data

Block	Soils Group	Thickness	Avail H2O Cap.	Texture	Text. Ind.	Percentage
CAL3	CcG	11	0.100000	GravSand Loam	1.6	0.025
	GkB	63	0.080000	Loamy Sand	1.25	0.05
	Rc	0	0.000000	Rock	3	0.025
	ScE, ScG	22	0.140000	Fine Sandy Loam	1.75	0.1
	SfD,SfE,SfF,	24	0.120000	Shaly Clay Loam	2.25	0.55
	SoD,SoE,So	39	0.120000	Coarse Sandy Loam	1.75	0.25
		28.575	0.1165		2.0275	1

Block	Soils Group	Thickness	Avail H2O Cap.	Texture	Text. Ind.	Percentage
CDT1a,b	AkD,AkF,A	48	0.07	Loamy Fine Sand	1.25	0.05
	GkB	63	0.08	Loamy Sand	1.25	0.12
	Pr,Ps	60	0.040000	Sand	1	0.03
	ScE, ScG	22	0.140000	Fine Sandy Loam (SM,	1.75	0.1
	SfD,SfE,SfF,	24	0.120000	Shaly Clay Loam (GM)	2.25	0.08
	ShD,ShE	61	0.050000	Sandy (clay) loam	2	0.4
	Xd	60	0.120000	Coarse sandy loam	1.75	0.22
		53.48	0.0843		1.7825	1

Block	Soils Group	Thickness	Avail H2O Cap.	Texture	Text. Ind.	Percentage
CDT2a,b	AkD,AkF,A	48	0.07	Loamy Fine Sand	1.25	0.18
	GkB	63	0.08	Loamy Sand	1.25	0.07
	ShD,ShE	61	0.050000	Sandy (clay) loam	2	0.75
		58.8	0.0557		1.8125	1

Block	Soils Group	Thickness	Avail H2O Cap.	Texture	Text. Ind.	Percentage
WAT1	AkD,AkF,A	48	0.07	Loamy Fine Sand	1.25	0.06
	AsC	60	0.07	Sandy loam	1.75	0.05
	GkB	63	0.08	Loamy Sand	1.25	0.06
	JaF,JbG,Jc	30	0.13	Sandy Loam	1.75	0.01
	Ma	27	0.180000	Clay loam	2.25	0.02
	Pn	68	0.050000	Sandy clay loam	2	0.1
	Rc,Ba	0	0.000000	Rock, Badland	3	0.02
	ScE, ScG	22	0.140000	Fine Sandy Loam (SM,	1.75	0.4
	SfD,SfE,SfF,	24	0.120000	Shaly Clay Loam (GM)	2.25	0.04
	ShD,ShE	61	0.050000	Sandy (clay) loam	2	0.08
	SoD,SoE,So	39	0.120000	Coarse Sandy Loam (S	1.75	0.06
	TbB	60	0.080000	Sand	1	0.02
	VaD,VaE,Va	23	0.120000	Coarse sandy loam	1.75	0.08
		37.32	0.1056		1.775	1

Block	Soils Group	Thickness	Avail H2O Cap.	Texture	Text. Ind.	Percentage
WAT2	AkD,AkF,A	48	0.07	Loamy Fine Sand	1.25	0.17
	AsC	60	0.07	Sandy loam	1.75	0.01
	GkB	63	0.08	Loamy Sand	1.25	0.1
	PdD	60	0.090000	Sandy loam	1.75	0.04
	Rc	60	0.040000	Sand	1	0.02

El Toro Deep Percolation Model Input Data

ScE, ScG	22	0.140000	Fine Sandy Loam (SM,	1.75	0.35
SfD,SfE,SfF,	24	0.120000	Shaly Clay Loam (GM)	2.25	0.15
Xd	60	0.120000	Coarse sandy loam	1.75	0.06
	33.56	0.0992		1.8	1

Block	Soils Group	Thickness	Avail H2O Cap.	Texture	Text. Ind.	Percentage
WAT3	GkB	63	0.08	Loamy Sand	1.25	0.08
	LaF,LcF	36	0.185	Silty clay loam	2.25	0.02
	Rc, Ba	0	0.000000	Rock,Badland	3	0.1
	ScE, ScG	22	0.140000	Fine Sandy Loam (SM,	1.75	0.4
	SfD,SfE,SfF,	24	0.120000	Shaly Clay Loam (GM)	2.25	0.3
	Xc	60	0.125000	(Clay) Loam	2.1	0.02
	Xd	60	0.120000	Coarse sandy loam	1.75	0.08
		27.76	0.1142		2.002	1

Block	Soils Group	Thickness	Avail H2O Cap.	Texture	Text. Ind.	Percentage
SBG1	AkD,AkF,A	48	0.07	Loamy Fine Sand	1.25	0.15
	Cb	80	0.12	Sandy Loam	1.75	0.1
	CcG	11	0.100000	GravSand Loam (SM)	1.6	0.05
	Ma	27	0.180000	Clay loam	2.25	0.02
	Pn	68	0.050000	Sandy clay loam	2	0.28
	Rc,Ba	0	0.000000	Rock, Badland	3	0.08
	ScE, ScG	22	0.140000	Fine Sandy Loam (SM,	1.75	0.05
	SoD,SoE,So	39	0.120000	Coarse Sandy Loam (S	1.75	0.02
	VaD,VaE,Va	23	0.120000	Coarse sandy loam	1.75	0.13
	Xd	60	0.120000	Coarse sandy loam	1.75	0.12
		47.4	0.0845		1.8475	1

El Toro Deep Percolation Model Input Data

Block	Soils Group	Thickness	Avail H2O Cap.	Texture	Text. Ind.	Percentage
SBG2	AkD,AkF,A	48	0.07	Loamy Fine Sand	1.25	0.35
	Cb	80	0.12	Sandy Loam	1.75	0.01
	GkB	63	0.08	Loamy Sand	1.25	0.1
	Pn	68	0.050000	Sandy clay loam	2	0.03
	Rc,Ba	0	0.000000	Rock, Badland	3	0.2
	ScE, ScG	22	0.140000	Fine Sandy Loam (SM,	1.75	0
	ShD,ShD2,S	61	0.050000	Sandy (clay) loam	2	0
	VaD,VaE,Va	23	0.120000	Coarse sandy loam	1.75	0.01
	Xd	60	0.120000	Coarse sandy loam	1.75	0.3
		44.17	0.0724		1.7825	1
SBG3	AkD,AkF,A	48	0.07	Loamy Fine Sand	1.25	0.17
	Cb	80	0.12	Sandy Loam	1.75	0
	GkB	63	0.08	Loamy Sand	1.25	0.18
	Pn	68	0.050000	Sandy clay loam	2	0.01
	Rc,Ba	0	0.000000	Rock, Badland	3	0.25
	ScE, ScG	22	0.140000	Fine Sandy Loam (SM,	1.75	0.02
	ShD,ShD2,S	61	0.050000	Sandy (clay) loam	2	0.02
	VaD,VaE,Va	23	0.120000	Coarse sandy loam	1.75	
	Xd	60	0.120000	Coarse sandy loam	1.75	0.35
		42.84	0.0726		1.895	1
Block ETC1	AkD,AkF,A	48	0.07	Loamy Fine Sand	1.25	0.75
	DbD,DbE,Db	53	0.165	Clay	3	0.08
	GkB	63	0.08	Loamy Sand	1.25	0.08
	Pr,Ps	60	0.040000	Sand	1	0.04
	Rc,Ba	0	0.000000	Rock, Badland	3	0.02
	ShD,ShD2,S	61	0.050000	Sandy (clay) loam	2	0.03
		49.51	0.0752		1.4375	1
Block SBG4	kD,AkF,Am	48	0.07	Loamy Fine Sand	1.25	0.05
	CcG	11	0.100000	GravSand Loam (SM)	1.6	0.22
	DaC	67	0.140000	Sandy clay loam	2	0.02
	Rc,Ba	0	0.000000	Rock, Badland	3	0.03
	ScE, ScG	22	0.140000	Sandy Loam	1.75	0.03
	SoD,SoE,SoG	39	0.120000	Coarse Sandy Loam	1.75	0.25
	VaD,VaE,VaG	23	0.120000	Coarse sandy loam	1.75	0.4
		25.77	0.1105		1.7345	1

El Toro Deep Percolation Model Input Data

Precipitation and Elevation Data

Los Laureles Mean Prcp. 14.93 inches
 Elevation 182 feet (MSL)

Block	Isohyet (in.)	Precip Factor	Elevation
CAL1 (1)	20	1.34	2000
CAL2 (2)	20	1.34	1300
CAL3 (3)	18	1.21	1100
CDT1a (4)	15	1.00	600
CDT2a (5)	14	0.94	600
WAT1 (6)	19	1.27	1600
WAT2 (7)	19	1.27	1000
WAT3 (8)	17	1.14	800
CDT1b (9)	15	1.00	600
CDT2b (10)	14	0.94	600
SBG1 (11)	16	1.07	1600
SBG2 (12)	15	1.00	1000
SBG3 (13)	15	1.00	700
ETC1 (14)	13.5	0.90	500
SBG4 (15)	15	1.00	1600

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EL TORO BASIN STUDY - NOLAPSE1 - STD REGRESS COEFFS

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0.0	0.0	0.0
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0.0	0.0	0.0
0.0	0.0	0.0

0

0.0 0 0 /

0

14 19

--\$----Novell--Attachment----\$

X-NVL-Content-Type: TEXT
X-NVL-Content-TypeName: TEXT
X-NVL-Content-Charset: X-IBM-437
X-NVL-Content-Filename: DATAIN_7.005

EL TORO BASIN STUDY - NOLAPSE3 - ASUN=-20.0, BSUN=6.5

6

7

19701992 0

Message: 34

To: 65lwwl@ptsem.edu, mfeeney@ix.netcom.com

From: essert@nps.navy.mil (Chris Essert)

Subject: Run 18

Date: Thu, 27 Jul 95 06:55:15 PDT

First, the differences between this run's output listing and the Base Case Run's output listing:

4c4

< EL TORO BASIN WATER BALANCE STUDY - BASE RUN

> EL TORO BASIN WATER BALANCE STUDY - Gonzales ET - Alfalfa

54c54

< ASUN (INTERCEPT)= -20.0 BSUN (SLOPE)=3.6360

> ASUN (INTERCEPT)= -20.0 BSUN (SLOPE)= 3.636

119,120c118,119

< OCT NOV DEC JAN FEB MAR

< 0.01 0.01 0.01 0.01 0.01 0.01

> JAN FEB MAR APR MAY JUN JUL AUG SEP OCT NOV DEC

> 0.05 0.07 0.13 0.17 0.17 0.26 0.25 0.24 0.18 0.14 0.09 0.06

And now for the actual results:

EL TORO BASIN WATER BALANCE STUDY - Gonzales ET - Alfalfa

FOLLOWING ARE MONTHLY TOTALS FOR MODELED REGION FOR YEAR 1970

MON PRECP POTET CHGINT RUNOFF RECHRG SOLPEV ACTSEV SNWEVP PPLTR APLTR CHGSM EVINT CHGSNW AVTMP EHRM-RO DEFCIT

JAN	5.10	1.67	0.00	0.04	3.76	0.62	0.62	0.00	0.23	0.23	-0.27	0.72	0.00	50.8	4.58	0.00	0.000
FEB	3.25	2.02	0.00	0.01	0.98	0.97	0.83	0.00	0.65	0.65	0.26	0.52	0.00	51.3	2.05	0.00	0.000
MAR	2.38	4.06	0.00	0.26	1.46	2.44	0.89	0.00	2.08	2.05	-2.59	0.30	0.00	51.5	1.86	0.00	0.000
APR	0.89	5.04	0.00	0.01	0.00	3.05	0.00	0.00	2.64	1.41	-0.87	0.34	0.00	49.9	0.30	-0.01	0.000
MAY	0.10	5.42	0.00	0.01	0.00	3.47	0.00	0.00	2.42	0.22	-0.21	0.09	0.00	52.9	0.04	-0.01	0.000
JUN	0.00	7.92	0.00	0.01	0.00	5.15	0.00	0.00	3.35	0.01	-0.01	0.00	0.00	53.4	0.00	-0.01	0.000
JUL	0.00	7.63	0.00	0.00	0.00	4.96	0.00	0.00	3.14	0.00	0.00	0.00	0.00	55.5	0.00	0.00	0.000
AUG	0.00	7.50	0.00	0.00	0.00	4.88	0.00	0.00	3.16	0.00	0.00	0.00	0.00	54.7	0.00	0.00	0.000
SEP	0.00	5.37	0.00	0.00	0.00	3.49	0.00	0.00	2.41	0.00	0.00	0.00	0.00	58.8	0.00	0.00	0.000
OCT	0.19	4.25	0.00	0.00	0.00	2.65	0.00	0.00	1.94	0.02	0.01	0.16	0.00	52.9	0.07	0.00	0.000
NOV	4.36	2.58	0.00	0.02	0.00	1.27	0.24	0.00	0.89	0.34	3.14	0.63	0.00	54.0	2.54	0.00	0.000
DEC	5.83	1.74	0.00	0.07	3.66	0.44	0.44	0.00	0.18	0.18	0.42	1.06	0.00	46.6	5.23	0.00	0.000

FOLLOWING ARE YEAR END TOTALS FOR MODELED REGION FOR YEAR 1970

PRECIP	POTET	CHGINT	RUNOFF	RECHRG	SOLPEV	ACTSEV	SNWEVP	PPLTR	APLTR	CHGSM	EVINT	CHGSNW	AVTMP	EHRM-RO	DEFCIT
22.10	55.20	0.00	0.45	9.86	33.39	3.01	0.00	23.10	5.11	-0.11	3.83	0.00	52.69	16.66	-0.04

FOLLOWING ARE MONTHLY TOTALS FOR MODELED REGION FOR YEAR 1971

MON	PRECIP	POTET	CHGINT	RUNOFF	RECHRG	SOLPEV	ACTSEV	SNWEVP	PPLTR	APLTR	CHGSM	EVINT	CHGSNW	AVTMP	EHRM-RO	DEFCIT	
JAN	1.43	1.67	0.00	0.03	0.61	0.88	0.85	0.00	0.34	0.34	-0.71	0.32	0.00	46.7	1.05	0.00	0.000
FEB	0.91	2.02	0.00	0.01	0.00	1.12	0.34	0.00	1.14	1.14	-0.86	0.29	0.00	47.3	0.31	0.00	0.000
MAR	1.53	4.06	0.00	0.01	0.00	2.50	0.63	0.00	2.34	2.07	-1.40	0.22	0.00	49.1	0.64	0.00	0.000
APR	1.52	5.04	0.00	0.02	0.00	3.10	0.56	0.00	2.43	1.16	-0.47	0.26	0.00	49.7	0.54	-0.01	0.000
MAY	0.28	5.42	0.00	0.01	0.00	3.37	0.00	0.00	2.36	0.13	-0.09	0.24	0.00	49.2	0.10	-0.01	0.000
JUN	0.00	7.92	0.00	0.00	0.00	5.15	0.00	0.00	3.35	0.03	-0.03	0.00	0.00	53.8	0.00	0.00	0.000
JUL	0.04	7.63	0.00	0.00	0.00	4.93	0.00	0.00	3.12	0.00	0.00	0.04	0.00	54.4	0.01	0.00	0.000
AUG	0.03	7.50	0.00	0.00	0.00	4.85	0.00	0.00	3.14	0.00	0.00	0.03	0.00	58.2	0.01	0.00	0.000
SEP	0.22	5.37	0.00	0.00	0.00	3.42	0.00	0.00	2.36	0.02	0.10	0.10	0.00	58.5	0.00	0.00	0.000

OCT	0.23	4.25	0.00	0.00	0.00	2.65	0.00	0.00	1.94	0.15	-0.08	0.17	0.00	49.8	0.08	0.00	0.000
NOV	2.06	2.58	0.00	0.00	0.00	1.46	0.31	0.00	1.01	0.29	1.11	0.34	0.00	48.8	0.84	0.00	0.000
DEC	4.02	1.74	0.00	0.00	0.39	0.64	0.64	0.00	0.26	0.26	1.98	0.75	0.00	43.5	1.75	0.00	0.000

FOLLOWING ARE YEAR END TOTALS FOR MODELED REGION FOR YEAR 1971

PRECIP	POTET	CHGINT	RUNOFF	RECHRG	SOLPEV	ACTSEV	SNWEVP	PPLTR	APLTR	CHGSM	EVINT	CHGSNW	AVTMP	EHRM-RO	DEFCIT
12.28	55.20	0.00	0.09	1.00	34.09	3.33	0.00	23.80	5.58	-0.45	2.76	0.00	50.76	5.33	-0.03

FOLLOWING ARE MONTHLY TOTALS FOR MODELED REGION FOR YEAR 1972

MON	PRECIP	POTET	CHGINT	RUNOFF	RECHRG	SOLPEV	ACTSEV	SNWEVP	PPLTR	APLTR	CHGSM	EVINT	CHGSNW	AVTMP	EHRM-RO	DEFCIT	
JAN	1.00	1.67	0.00	0.00	0.00	0.91	0.70	0.00	0.40	0.40	-0.38	0.27	0.00	46.7	0.37	0.00	0.000
FEB	0.74	2.09	0.00	0.00	0.00	1.24	0.63	0.00	1.14	1.13	-1.19	0.17	0.00	51.3	0.24	0.00	0.000
MAR	0.62	4.06	0.00	0.00	0.00	2.52	0.12	0.00	2.62	1.67	-1.37	0.19	0.00	53.1	0.00	0.00	0.000
APR	0.71	5.04	0.00	0.00	0.00	3.11	0.03	0.00	2.65	0.54	-0.11	0.26	0.00	52.9	0.00	0.00	0.000
MAY	0.18	5.42	0.00	0.00	0.00	3.44	0.00	0.00	2.39	0.10	-0.05	0.13	0.00	53.0	0.00	0.00	0.000
JUN	0.00	7.92	0.00	0.00	0.00	5.15	0.00	0.00	3.35	0.02	-0.02	0.00	0.00	54.2	0.00	0.00	0.000
JUL	0.00	7.63	0.00	0.00	0.00	4.96	0.00	0.00	3.14	0.00	0.00	0.00	0.00	58.8	0.00	0.00	0.000
AUG	0.00	7.50	0.00	0.00	0.00	4.88	0.00	0.00	3.17	0.00	0.00	0.00	0.00	58.8	0.00	0.00	0.000
SEP	0.00	5.37	0.00	0.00	0.00	3.49	0.00	0.00	2.41	0.00	0.00	0.00	0.00	59.7	0.00	0.00	0.000
OCT	2.10	4.25	0.00	0.00	0.00	2.53	0.83	0.00	1.54	0.62	0.30	0.35	0.00	56.8	0.83	0.00	0.000
NOV	6.04	2.58	0.00	0.04	1.53	1.31	1.01	0.00	0.62	0.56	2.33	0.57	0.00	51.1	4.44	0.00	0.000
DEC	2.63	1.74	0.00	0.00	0.45	0.48	0.40	0.00	0.30	0.30	0.84	0.62	0.00	44.2	1.48	0.00	0.000

FOLLOWING ARE YEAR END TOTALS FOR MODELED REGION FOR YEAR 1972

PRECIP	POTET	CHGINT	RUNOFF	RECHRG	SOLPEV	ACTSEV	SNWEVP	PPLTR	APLTR	CHGSM	EVINT	CHGSNW	AVTMP	EHRM-RO	DEFCIT
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14.01 55.27 0.00 0.05 1.98 34.01 3.73 0.00 23.72 5.33 0.36 2.57 0.00 53.37 7.37 0.00

FOLLOWING ARE MONTHLY TOTALS FOR MODELED REGION FOR YEAR 1973

MON	PRECIP	POTET	CHGINT	RUNOFF	RECHRG	SOLPEV	ACTSEV	SNWEVP	PPLTR	APLTR	CHGSM	EVINT	CHGSNW	AVTMP	EHRM-RO	DEFCIT	
JAN	5.27	1.67	0.01	0.24	3.25	0.58	0.58	0.00	0.21	0.21	0.21	0.78	0.00	46.9	4.40	0.00	0.000
FEB	6.82	2.02	-0.01	0.98	3.87	0.72	0.71	0.00	0.43	0.43	-0.07	0.91	0.00	52.2	5.78	0.00	0.000
MAR	5.30	4.06	0.00	0.89	1.67	2.07	1.86	0.00	1.17	1.17	-1.17	0.87	0.00	48.8	3.57	0.00	0.000
APR	0.36	5.04	0.00	0.06	0.00	3.14	0.01	0.00	2.71	2.20	-2.09	0.21	0.00	54.8	0.12	-0.02	0.000
MAY	0.06	5.42	0.00	0.01	0.00	3.50	0.00	0.00	2.45	0.34	-0.33	0.05	0.00	54.7	0.02	-0.01	0.000
JUN	0.05	7.92	0.00	0.01	0.00	5.12	0.00	0.00	3.33	0.02	-0.02	0.04	0.00	57.7	0.02	-0.01	0.000
JUL	0.00	7.63	0.00	0.01	0.00	4.96	0.00	0.00	3.14	0.00	0.00	0.00	0.00	55.9	0.00	-0.01	0.000
AUG	0.00	7.50	0.00	0.01	0.00	4.88	0.00	0.00	3.16	0.00	0.00	0.00	0.00	56.3	0.00	-0.01	0.000
SEP	0.12	5.37	0.00	0.01	0.00	3.43	0.00	0.00	2.37	0.02	0.01	0.09	0.00	58.1	0.03	0.00	0.000
OCT	2.08	4.25	0.00	0.01	0.00	2.57	1.00	0.00	1.51	0.60	0.19	0.29	0.00	55.7	0.82	0.00	0.000
NOV	4.36	2.58	0.00	0.01	0.00	1.20	0.90	0.00	0.57	0.40	2.31	0.73	0.00	51.4	2.14	0.00	0.000
DEC	4.66	1.74	0.00	0.02	1.94	0.79	0.77	0.00	0.33	0.33	1.07	0.53	0.00	50.4	3.62	0.00	0.000

FOLLOWING ARE YEAR END TOTALS FOR MODELED REGION FOR YEAR 1973

PRECIP	POTET	CHGINT	RUNOFF	RECHRG	SOLPEV	ACTSEV	SNWEVP	PPLTR	APLTR	CHGSM	EVINT	CHGSNW	AVTMP	EHRM-RO	DEFCIT
29.06	55.20	0.00	2.24	10.73	32.96	5.83	0.00	21.37	5.71	0.11	4.49	0.00	53.55	20.53	-0.05

FOLLOWING ARE MONTHLY TOTALS FOR MODELED REGION FOR YEAR 1974

MON	PRECIP	POTET	CHGINT	RUNOFF	RECHRG	SOLPEV	ACTSEV	SNWEVP	PPLTR	APLTR	CHGSM	EVINT	CHGSNW	AVTMP	EHRM-RO	DEFCIT
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JAN	3.74	1.67	0.00	0.56	2.37	0.71	0.70	0.00	0.27	0.27	-0.74	0.57	0.00	48.0	3.34	0.00	0.000
FEB	0.91	2.02	0.00	0.00	0.00	1.05	0.27	0.00	1.11	1.11	-0.87	0.40	0.00	49.9	0.13	0.00	0.000
MAR	4.12	4.06	0.00	0.03	0.00	2.28	1.23	0.00	1.74	1.67	0.63	0.56	0.00	53.1	1.24	0.00	0.000
APR	2.82	5.04	0.00	0.32	0.83	3.01	0.83	0.00	2.20	2.08	-1.63	0.40	0.00	54.0	1.78	-0.01	0.000
MAY	0.00	5.42	0.00	0.00	0.00	3.53	0.00	0.00	2.46	0.92	-0.92	0.00	0.00	52.8	0.00	0.00	0.000
JUN	0.33	7.92	0.00	0.01	0.00	5.11	0.04	0.00	3.31	0.24	-0.02	0.06	0.00	56.8	0.14	-0.01	0.000
JUL	0.19	7.63	0.00	0.00	0.00	4.90	0.00	0.00	3.10	0.12	-0.02	0.09	0.00	58.8	0.08	0.00	0.000
AUG	0.06	7.50	0.00	0.00	0.00	4.85	0.00	0.00	3.14	0.01	0.01	0.05	0.00	58.9	0.00	0.00	0.000
SEP	0.00	5.37	0.00	0.00	0.00	3.49	0.00	0.00	2.41	0.01	-0.01	0.00	0.00	58.7	0.00	0.00	0.000
OCT	1.91	4.25	0.00	0.00	0.00	2.48	0.26	0.00	1.72	0.42	0.79	0.42	0.00	57.7	0.79	0.00	0.000
NOV	0.77	2.58	0.00	0.00	0.00	1.45	0.56	0.00	0.92	0.44	-0.58	0.34	0.00	54.3	0.27	0.00	0.000
DEC	2.81	1.74	0.00	0.00	0.00	0.73	0.64	0.00	0.34	0.27	1.29	0.61	0.00	46.5	1.22	0.00	0.000

FOLLOWING ARE YEAR END TOTALS FOR MODELED REGION FOR YEAR 1974

	PRECIP	POTET	CHGINT	RUNOFF	RECHRG	SOLPEV	ACTSEV	SNWEVP	PPLTR	APLTR	CHGSM	EVINT	CHGSNW	AVTMP	EHRM-RO	DEFCIT
	17.65	55.20	0.00	0.94	3.20	33.60	4.54	0.00	22.73	7.56	-2.07	3.50	0.00	54.14	8.98	-0.03

FOLLOWING ARE MONTHLY TOTALS FOR MODELED REGION FOR YEAR 1975

MON	PRECIP	POTET	CHGINT	RUNOFF	RECHRG	SOLPEV	ACTSEV	SNWEVP	PPLTR	APLTR	CHGSM	EVINT	CHGSNW	AVTMP	EHRM-RO	DEFCIT
JAN	1.34	1.67	0.01	0.00	0.00	0.90	0.83	0.00	0.35	0.33	-0.10	0.28	0.00	47.8	0.00	0.00
FEB	3.19	2.02	-0.01	0.00	0.30	0.92	0.87	0.00	0.58	0.58	0.84	0.60	0.00	49.4	1.48	0.00
MAR	5.21	4.06	0.00	0.28	0.87	2.17	1.78	0.00	1.35	1.35	0.21	0.72	0.00	50.0	3.10	0.00
APR	1.71	5.04	0.00	0.02	0.00	2.75	0.37	0.00	2.20	2.10	-1.59	0.81	0.00	49.0	0.34	0.00
MAY	0.00	5.42	0.00	0.00	0.00	3.53	0.00	0.00	2.46	0.82	-0.82	0.00	0.00	52.6	0.00	0.00
JUN	0.23	7.92	0.00	0.00	0.00	5.03	0.00	0.00	3.27	0.08	-0.03	0.18	0.00	54.1	0.00	0.00
JUL	0.10	7.63	0.00	0.00	0.00	4.92	0.00	0.00	3.12	0.04	0.00	0.06	0.00	56.1	0.03	0.00
AUG	0.27	7.50	0.00	0.00	0.00	4.78	0.00	0.00	3.10	0.11	0.01	0.15	0.00	56.9	0.09	0.00
SEP	0.00	5.37	0.00	0.00	0.00	3.49	0.00	0.00	2.41	0.01	-0.01	0.00	0.00	56.8	0.00	0.00

OCT	1.75	4.25	0.00	0.00	0.00	2.55	0.37	0.00	1.72	0.27	0.79	0.32	0.00	52.3	0.62	0.00	0.000
NOV	0.87	2.58	0.00	0.00	0.00	1.50	0.64	0.00	0.92	0.43	-0.47	0.27	0.00	49.9	0.27	0.00	0.000
DEC	0.46	1.74	0.00	0.00	0.00	1.04	0.12	0.00	0.81	0.34	-0.14	0.14	0.00	47.7	0.16	0.00	0.000

FOLLOWING ARE YEAR END TOTALS FOR MODELED REGION FOR YEAR 1975

PRECIP	POTET	CHGINT	RUNOFF	RECHRG	SOLPEV	ACTSEV	SNWEVP	PPLTR	APLTR	CHGSM	EVINT	CHGSNW	AVTMP	EHRM-RO	DEFCIT
15.13	55.20	0.00	0.31	1.17	33.59	4.99	0.00	22.30	6.48	-1.32	3.53	0.00	51.90	6.09	-0.01

FOLLOWING ARE MONTHLY TOTALS FOR MODELED REGION FOR YEAR 1976

MON	PRECIP	POTET	CHGINT	RUNOFF	RECHRG	SOLPEV	ACTSEV	SNWEVP	PPLTR	APLTR	CHGSM	EVINT	CHGSNW	AVTMP	EHRM-RO	DEFCIT
JAN	0.20	1.67	0.00	0.00	0.00	1.00	0.00	0.00	0.75	0.16	-0.10	0.14	0.00	48.2	0.05	0.00
FEB	2.30	2.09	0.00	0.00	0.00	1.02	0.57	0.00	0.86	0.42	0.80	0.52	0.00	47.3	0.63	0.00
MAR	1.61	4.06	0.00	0.00	0.00	2.45	0.71	0.00	2.17	1.36	-0.75	0.30	0.00	47.4	0.77	0.00
APR	1.44	5.04	0.00	0.00	0.00	3.02	0.36	0.00	2.42	0.75	-0.07	0.40	0.00	51.5	0.17	0.00
MAY	0.32	5.42	0.00	0.00	0.00	3.40	0.00	0.00	2.36	0.19	-0.05	0.19	0.00	52.8	0.09	0.00
JUN	0.06	7.92	0.00	0.00	0.00	5.12	0.00	0.00	3.33	0.02	-0.01	0.05	0.00	57.3	0.02	0.00
JUL	0.00	7.63	0.00	0.00	0.00	4.96	0.00	0.00	3.14	0.00	0.00	0.00	0.00	56.7	0.00	0.00
AUG	0.98	7.50	0.00	0.00	0.00	4.68	0.26	0.00	2.95	0.35	0.06	0.30	0.00	59.7	0.00	0.00
SEP	0.66	5.37	0.00	0.00	0.00	3.37	0.08	0.00	2.30	0.14	0.27	0.18	0.00	57.9	0.13	0.00
OCT	0.96	4.25	0.00	0.00	0.00	2.72	0.65	0.00	1.76	0.53	-0.28	0.06	0.00	55.9	0.46	0.00
NOV	1.02	2.58	0.00	0.00	0.00	1.60	0.44	0.00	1.08	0.34	0.13	0.12	0.00	56.2	0.30	0.00
DEC	2.17	1.74	0.00	0.00	0.00	0.99	0.00	0.00	0.84	0.13	1.82	0.21	0.00	48.4	1.09	0.00

FOLLOWING ARE YEAR END TOTALS FOR MODELED REGION FOR YEAR 1976

PRECIP	POTET	CHGINT	RUNOFF	RECHRG	SOLPEV	ACTSEV	SNWEVP	PPLTR	APLTR	CHGSM	EVINT	CHGSNW	AVTMP	EHRM-RO	DEFCIT
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11.73 55.27 0.00 0.01 0.00 34.32 3.06 0.00 23.95 4.38 1.81 2.47 0.00 53.28 3.71 0.00

FOLLOWING ARE MONTHLY TOTALS FOR MODELED REGION FOR YEAR 1977

MON	PRECP	POTET	CHGINT	RUNOFF	RECHRG	SOLPEV	ACTSEV	SNWEVP	PPLTR	APLTR	CHGSM	EVINT	CHGSNW	AVTMP	EHRM-RO	DEFCIT
JAN	2.32	1.67	0.00	0.01	0.48	0.95	0.74	0.00	0.44	0.44	0.44	0.22	0.00	46.9	2.02	0.00 0.000
FEB	0.72	2.02	0.00	0.00	0.00	1.14	0.06	0.00	1.35	1.34	-0.94	0.27	0.00	50.8	0.00	0.00 0.000
MAR	1.95	4.06	0.00	0.00	0.00	2.29	0.69	0.00	2.08	1.73	-1.01	0.54	0.00	46.9	0.63	0.00 0.000
APR	0.09	5.04	0.00	0.00	0.00	3.22	0.00	0.00	2.79	0.48	-0.47	0.08	0.00	51.9	0.00	0.00 0.000
MAY	1.07	5.42	0.00	0.00	0.00	3.26	0.25	0.00	2.18	0.40	0.02	0.41	0.00	48.5	0.42	0.00 0.000
JUN	0.21	7.92	0.00	0.00	0.00	5.04	0.00	0.00	3.28	0.07	-0.03	0.17	0.00	52.4	0.07	0.00 0.000
JUL	0.00	7.63	0.00	0.00	0.00	4.96	0.00	0.00	3.14	0.00	0.00	0.00	0.00	54.6	0.00	0.00 0.000
AUG	0.00	7.50	0.00	0.00	0.00	4.88	0.00	0.00	3.16	0.00	0.00	0.00	0.00	57.4	0.00	0.00 0.000
SEP	0.35	5.37	0.00	0.00	0.00	3.34	0.00	0.00	2.31	0.08	0.04	0.22	0.00	58.2	0.00	0.00 0.000
OCT	0.06	4.25	0.00	0.00	0.00	2.73	0.00	0.00	2.00	0.05	-0.03	0.05	0.00	55.0	0.00	0.00 0.000
NOV	0.56	2.58	0.00	0.00	0.00	1.61	0.09	0.00	1.23	0.31	0.06	0.10	0.00	54.5	0.00	0.00 0.000
DEC	4.89	1.74	0.00	0.01	0.49	0.67	0.23	0.00	0.47	0.13	3.33	0.70	0.00	52.2	3.34	0.00 0.000

FOLLOWING ARE YEAR END TOTALS FOR MODELED REGION FOR YEAR 1977

PRECP	POTET	CHGINT	RUNOFF	RECHRG	SOLPEV	ACTSEV	SNWEVP	PPLTR	APLTR	CHGSM	EVINT	CHGSNW	AVTMP	EHRM-RO	DEFCIT
12.22	55.20	0.00	0.03	0.98	34.09	2.04	0.00	24.43	5.03	1.41	2.75	0.00	52.44	6.47	0.00

FOLLOWING ARE MONTHLY TOTALS FOR MODELED REGION FOR YEAR 1978

MON	PRECP	POTET	CHGINT	RUNOFF	RECHRG	SOLPEV	ACTSEV	SNWEVP	PPLTR	APLTR	CHGSM	EVINT	CHGSNW	AVTMP	EHRM-RO	DEFCIT
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JAN	6.18	1.67	0.00	0.16	4.73	0.58	0.58	0.00	0.23	0.23	-0.30	0.78	0.00	51.6	5.85	0.00	0.000
FEB	4.73	2.02	0.00	0.44	2.79	0.94	0.81	0.00	0.64	0.64	-0.52	0.57	0.00	52.0	3.92	0.00	0.000
MAR	5.18	4.06	0.00	0.32	0.82	2.14	1.72	0.00	1.33	1.33	0.22	0.77	0.00	56.2	2.87	0.00	0.000
APR	4.99	5.04	0.00	0.32	0.48	2.86	2.43	0.00	1.37	1.36	-0.25	0.64	0.00	53.1	2.68	0.00	0.000
MAY	0.16	5.42	0.00	0.01	0.00	3.49	0.04	0.00	2.42	2.12	-2.07	0.06	0.00	55.4	0.05	0.00	0.000
JUN	0.00	7.92	0.00	0.00	0.00	5.15	0.00	0.00	3.35	0.49	-0.49	0.00	0.00	56.1	0.00	0.00	0.000
JUL	0.00	7.63	0.00	0.00	0.00	4.96	0.00	0.00	3.14	0.00	0.00	0.00	0.00	57.3	0.00	0.00	0.000
AUG	0.00	7.50	0.00	0.00	0.00	4.88	0.00	0.00	3.16	0.00	0.00	0.00	0.00	58.5	0.00	0.00	0.000
SEP	0.31	5.37	0.00	0.00	0.00	3.41	0.00	0.00	2.36	0.18	0.01	0.12	0.00	60.2	0.10	0.00	0.000
OCT	0.00	4.25	0.00	0.00	0.00	2.76	0.00	0.00	2.02	0.01	-0.01	0.00	0.00	55.4	0.00	0.00	0.000
NOV	2.61	2.58	0.00	0.01	0.00	1.46	0.49	0.00	0.94	0.26	1.53	0.33	0.00	50.9	1.36	0.00	0.000
DEC	1.57	1.74	0.00	0.01	0.00	0.95	0.76	0.00	0.47	0.46	0.06	0.27	0.00	45.5	0.71	0.00	0.000

FOLLOWING ARE YEAR END TOTALS FOR MODELED REGION FOR YEAR 1978

PRECIP	POTET	CHGINT	RUNOFF	RECHRG	SOLPEV	ACTSEV	SNWEVP	PPLTR	APLTR	CHGSM	EVINT	CHGSNW	AVTMP	EHRM-RO	DEFCIT
25.74	55.20	0.00	1.29	8.82	33.58	6.84	0.00	21.42	7.09	-1.81	3.54	0.00	54.37	17.55	-0.02

FOLLOWING ARE MONTHLY TOTALS FOR MODELED REGION FOR YEAR 1979

MON	PRECIP	POTET	CHGINT	RUNOFF	RECHRG	SOLPEV	ACTSEV	SNWEVP	PPLTR	APLTR	CHGSM	EVINT	CHGSNW	AVTMP	EHRM-RO	DEFCIT	
JAN	5.17	1.67	0.01	0.02	1.62	0.62	0.60	0.00	0.23	0.23	1.97	0.72	0.00	46.3	3.79	0.00	0.000
FEB	3.83	2.02	-0.01	0.15	1.64	0.76	0.75	0.00	0.45	0.45	0.00	0.84	0.00	47.7	2.95	0.00	0.000
MAR	4.13	4.06	0.00	0.20	0.49	2.13	1.68	0.00	1.36	1.36	-0.37	0.78	0.00	52.2	2.28	0.00	0.000
APR	0.62	5.04	0.00	0.02	0.00	3.13	0.36	0.00	2.53	2.40	-2.38	0.22	0.00	54.2	0.00	0.00	0.000
MAY	0.41	5.42	0.00	0.00	0.00	3.43	0.02	0.00	2.39	0.98	-0.74	0.15	0.00	55.1	0.15	0.00	0.000
JUN	0.00	7.92	0.00	0.00	0.00	5.15	0.00	0.00	3.35	0.06	-0.06	0.00	0.00	55.8	0.00	0.00	0.000
JUL	0.05	7.63	0.00	0.00	0.00	4.93	0.00	0.00	3.12	0.01	0.00	0.04	0.00	58.3	0.02	0.00	0.000
AUG	0.05	7.50	0.00	0.00	0.00	4.85	0.00	0.00	3.14	0.01	0.00	0.04	0.00	58.6	0.00	0.00	0.000
SEP	0.05	5.37	0.00	0.00	0.00	3.46	0.00	0.00	2.39	0.01	0.00	0.04	0.00	62.4	0.00	0.00	0.000

OCT	1.62	4.25	0.00	0.05	0.00	2.51	0.62	0.00	1.60	0.29	0.32	0.39	0.00	56.5	0.62	-0.05	0.000
NOV	2.18	2.58	0.00	0.00	0.00	1.36	1.04	0.00	0.64	0.45	0.20	0.49	0.00	52.8	0.86	0.00	0.000
DEC	2.87	1.74	0.00	0.01	0.00	0.87	0.35	0.00	0.59	0.27	1.84	0.40	0.00	50.2	1.51	0.00	0.000

FOLLOWING ARE YEAR END TOTALS FOR MODELED REGION FOR YEAR 1979

PRECIP	POTET	CHGINT	RUNOFF	RECHRG	SOLPEV	ACTSEV	SNWEVP	PPLTR	APLTR	CHGSM	EVINT	CHGSNW	AVTMP	EHRM-RO	DEFCIT
20.97	55.20	0.00	0.46	3.75	33.21	5.42	0.00	21.80	6.52	0.77	4.11	0.00	54.21	12.18	-0.06

FOLLOWING ARE MONTHLY TOTALS FOR MODELED REGION FOR YEAR 1980

MON	PRECIP	POTET	CHGINT	RUNOFF	RECHRG	SOLPEV	ACTSEV	SNWEVP	PPLTR	APLTR	CHGSM	EVINT	CHGSNW	AVTMP	EHRM-RO	DEFCIT	
JAN	4.44	1.67	0.00	0.10	2.13	0.68	0.67	0.00	0.26	0.26	0.65	0.63	0.00	50.2	3.91	0.00	0.000
FEB	6.02	2.09	0.00	0.42	3.21	0.97	0.56	0.00	0.81	0.80	0.42	0.60	0.00	51.9	4.95	0.00	0.000
MAR	2.73	4.06	0.00	0.24	0.87	2.27	1.03	0.00	1.81	1.80	-1.78	0.57	0.00	49.9	1.64	0.00	0.000
APR	2.27	5.04	0.00	0.00	0.00	2.92	0.88	0.00	2.14	1.79	-0.96	0.54	0.00	53.7	0.76	0.00	0.000
MAY	0.67	5.42	0.00	0.00	0.00	3.35	0.13	0.00	2.28	0.90	-0.62	0.27	0.00	50.3	0.23	0.00	0.000
JUN	0.09	7.92	0.00	0.00	0.00	5.12	0.00	0.00	3.33	0.11	-0.07	0.05	0.00	55.0	0.04	0.00	0.000
JUL	0.88	7.63	0.00	0.00	0.00	4.89	0.39	0.00	2.97	0.39	0.00	0.11	0.00	58.4	0.34	0.00	0.000
AUG	0.00	7.50	0.00	0.00	0.00	4.88	0.00	0.00	3.17	0.00	0.00	0.00	0.00	57.0	0.00	0.00	0.000
SEP	0.06	5.37	0.00	0.00	0.00	3.46	0.00	0.00	2.39	0.01	0.00	0.05	0.00	58.1	0.02	0.00	0.000
OCT	0.00	4.25	0.00	0.00	0.00	2.76	0.00	0.00	2.03	0.00	0.00	0.00	0.00	56.2	0.00	0.00	0.000
NOV	0.15	2.58	0.00	0.00	0.00	1.60	0.00	0.00	1.26	0.02	0.01	0.12	0.00	54.5	0.00	0.00	0.000
DEC	1.41	1.74	0.00	0.00	0.00	0.93	0.55	0.00	0.54	0.30	0.25	0.30	0.00	52.3	0.33	0.00	0.000

FOLLOWING ARE YEAR END TOTALS FOR MODELED REGION FOR YEAR 1980

PRECIP	POTET	CHGINT	RUNOFF	RECHRG	SOLPEV	ACTSEV	SNWEVP	PPLTR	APLTR	CHGSM	EVINT	CHGSNW	AVTMP	EHRM-RO	DEFCIT
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18.71 55.27 0.00 0.78 6.20 33.82 4.21 0.00 22.96 6.39 -2.09 3.24 0.00 53.95 12.21 -0.01

FOLLOWING ARE MONTHLY TOTALS FOR MODELED REGION FOR YEAR 1981

MON	PRECP	POTET	CHGINT	RUNOFF	RECHRG	SOLPEV	ACTSEV	SNWEVP	PPLTR	APLTR	CHGSM	EVINT	CHGSNW	AVTMP	EHRM-RO	DEFCIT
JAN	5.01	1.67	0.00	0.01	1.05	0.80	0.06	0.00	0.52	0.16	3.28	0.44	0.00	53.4	3.53	0.00 0.000
FEB	1.79	2.02	0.00	0.00	0.07	1.05	1.01	0.00	0.64	0.64	-0.33	0.41	0.00	52.4	0.56	0.00 0.000
MAR	4.58	4.06	0.00	0.10	0.76	2.03	1.95	0.00	1.09	1.09	-0.26	0.93	0.00	49.4	2.51	0.00 0.000
APR	1.03	5.04	0.00	0.01	0.00	3.14	0.63	0.00	2.43	2.35	-2.15	0.21	0.00	52.4	0.37	0.00 0.000
MAY	0.05	5.42	0.00	0.00	0.00	3.50	0.00	0.00	2.45	0.77	-0.76	0.04	0.00	52.4	0.00	0.00 0.000
JUN	0.00	7.92	0.00	0.00	0.00	5.15	0.00	0.00	3.35	0.03	-0.03	0.00	0.00	58.6	0.00	0.00 0.000
JUL	0.00	7.63	0.00	0.00	0.00	4.96	0.00	0.00	3.14	0.00	0.00	0.00	0.00	55.9	0.00	0.00 0.000
AUG	0.00	7.50	0.00	0.00	0.00	4.88	0.00	0.00	3.16	0.00	0.00	0.00	0.00	56.1	0.00	0.00 0.000
SEP	0.00	5.37	0.00	0.00	0.00	3.49	0.00	0.00	2.41	0.00	0.00	0.00	0.00	55.9	0.00	0.00 0.000
OCT	1.03	4.25	0.00	0.00	0.00	2.64	0.31	0.00	1.82	0.15	0.39	0.18	0.00	52.7	0.34	0.00 0.000
NOV	4.02	2.58	0.00	0.01	0.00	1.33	0.76	0.00	0.72	0.44	2.27	0.54	0.00	53.8	2.30	0.00 0.000
DEC	1.81	1.74	0.00	0.00	0.01	0.94	0.76	0.00	0.46	0.46	0.29	0.29	0.00	48.5	0.87	0.00 0.000

FOLLOWING ARE YEAR END TOTALS FOR MODELED REGION FOR YEAR 1981

PRECP	POTET	CHGINT	RUNOFF	RECHRG	SOLPEV	ACTSEV	SNWEVP	PPLTR	APLTR	CHGSM	EVINT	CHGSNW	AVTMP	EHRM-RO	DEFCIT
19.32	55.20	0.00	0.14	1.88	33.90	5.48	0.00	22.19	6.09	2.69	3.04	0.00	53.45	10.48	0.00

FOLLOWING ARE MONTHLY TOTALS FOR MODELED REGION FOR YEAR 1982

MON	PRECP	POTET	CHGINT	RUNOFF	RECHRG	SOLPEV	ACTSEV	SNWEVP	PPLTR	APLTR	CHGSM	EVINT	CHGSNW	AVTMP	EHRM-RO	DEFCIT
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JAN	3.90	1.67	0.00	0.31	1.57	0.64	0.64	0.00	0.22	0.22	0.46	0.69	0.00	42.9	3.00	0.00	0.000
FEB	2.43	2.02	0.00	0.10	0.64	0.97	0.91	0.00	0.59	0.59	-0.34	0.53	0.00	49.8	1.49	0.00	0.000
MAR	6.64	4.06	0.00	0.19	1.97	1.95	1.78	0.00	1.10	1.10	0.54	1.07	0.00	48.4	4.18	0.00	0.000
APR	1.78	5.04	0.00	0.51	0.14	2.91	1.18	0.00	1.95	1.86	-2.46	0.56	0.00	52.2	0.86	0.00	0.000
MAY	0.05	5.42	0.00	0.00	0.00	3.50	0.00	0.00	2.45	1.09	-1.09	0.04	0.00	50.5	0.02	0.00	0.000
JUN	0.17	7.92	0.00	0.00	0.00	5.11	0.00	0.00	3.32	0.10	0.01	0.06	0.00	52.0	0.05	0.00	0.000
JUL	0.17	7.63	0.00	0.00	0.00	4.89	0.00	0.00	3.10	0.10	-0.03	0.10	0.00	52.3	0.05	0.00	0.000
AUG	0.00	7.50	0.00	0.00	0.00	4.88	0.00	0.00	3.16	0.05	-0.05	0.00	0.00	52.9	0.00	0.00	0.000
SEP	1.38	5.37	0.00	0.00	0.00	3.37	0.68	0.00	2.08	0.23	0.30	0.18	0.00	56.6	0.53	0.00	0.000
OCT	2.11	4.25	0.00	0.01	0.00	2.51	0.41	0.00	1.67	0.42	0.90	0.39	0.00	56.0	0.89	0.00	0.000
NOV	5.54	2.58	0.00	0.08	0.87	1.26	1.25	0.00	0.47	0.46	2.24	0.65	0.00	50.9	3.65	0.00	0.000
DEC	3.17	1.74	0.00	0.25	1.50	0.84	0.83	0.00	0.34	0.34	-0.20	0.45	0.00	48.6	2.47	0.00	0.000

FOLLOWING ARE YEAR END TOTALS FOR MODELED REGION FOR YEAR 1982

PRECIP	POTET	CHGINT	RUNOFF	RECHRG	SOLPEV	ACTSEV	SNWEVP	PPLTR	APLTR	CHGSM	EVINT	CHGSNW	AVTMP	EHRM-RO	DEFCIT
27.35	55.20	0.00	1.47	6.68	32.82	7.67	0.00	20.46	6.56	0.29	4.71	0.00	51.08	17.19	-0.02

FOLLOWING ARE MONTHLY TOTALS FOR MODELED REGION FOR YEAR 1983

MON	PRECIP	POTET	CHGINT	RUNOFF	RECHRG	SOLPEV	ACTSEV	SNWEVP	PPLTR	APLTR	CHGSM	EVINT	CHGSNW	AVTMP	EHRM-RO	DEFCIT	
JAN	6.59	1.67	0.00	0.72	4.18	0.67	0.57	0.00	0.26	0.26	0.22	0.64	0.00	51.2	5.79	0.00	0.000
FEB	5.52	2.02	0.00	0.83	2.42	0.75	0.75	0.00	0.44	0.44	0.22	0.86	0.00	52.7	4.39	0.00	0.000
MAR	7.99	4.06	0.00	2.23	2.54	1.86	1.86	0.00	0.96	0.96	-0.80	1.20	0.00	53.7	5.95	0.00	0.000
APR	3.76	5.04	0.00	0.42	0.00	2.60	0.87	0.00	1.87	1.80	-0.30	1.05	0.00	53.9	1.59	-0.07	0.000
MAY	0.44	5.42	0.00	0.18	0.00	3.40	0.67	0.00	2.10	1.62	-2.15	0.20	0.00	55.3	0.17	-0.08	0.000
JUN	0.56	7.92	0.00	0.02	0.00	5.02	0.02	0.00	3.26	0.73	-0.40	0.20	0.00	58.4	0.20	-0.02	0.000
JUL	0.00	7.63	0.00	0.01	0.00	4.96	0.00	0.00	3.14	0.01	-0.01	0.00	0.00	60.9	0.00	-0.01	0.000
AUG	0.15	7.50	0.00	0.01	0.00	4.82	0.00	0.00	3.12	0.05	0.01	0.09	0.00	62.9	0.05	-0.01	0.000
SEP	0.15	5.37	0.00	0.01	0.00	3.43	0.00	0.00	2.37	0.02	0.04	0.09	0.00	64.5	0.05	0.00	0.000

OCT	1.02	4.25	0.00	0.01	0.00	2.54	0.26	0.00	1.77	0.40	0.03	0.34	0.00	60.6	0.43	0.00	0.000
NOV	4.38	2.58	0.00	0.02	0.02	1.16	0.66	0.00	0.64	0.28	2.61	0.79	0.00	53.6	2.34	0.00	0.000
DEC	4.00	1.74	0.00	0.12	1.33	0.60	0.60	0.00	0.25	0.25	0.88	0.81	0.00	50.0	2.92	0.00	0.000

FOLLOWING ARE YEAR END TOTALS FOR MODELED REGION FOR YEAR 1983

PRECIP	POTET	CHGINT	RUNOFF	RECHRG	SOLPEV	ACTSEV	SNWEVP	PPLTR	APLTR	CHGSM	EVINT	CHGSNW	AVTMP	EHRM-RO	DEFCIT
34.56	55.20	0.00	4.57	10.49	31.81	6.27	0.00	20.17	6.83	0.33	6.26	0.00	56.47	23.89	-0.20

FOLLOWING ARE MONTHLY TOTALS FOR MODELED REGION FOR YEAR 1984

MON	PRECIP	POTET	CHGINT	RUNOFF	RECHRG	SOLPEV	ACTSEV	SNWEVP	PPLTR	APLTR	CHGSM	EVINT	CHGSNW	AVTMP	EHRM-RO	DEFCIT	
JAN	0.38	1.67	0.00	0.13	0.00	0.99	0.80	0.00	0.44	0.44	-1.13	0.15	0.00	48.1	0.16	0.00	0.000
FEB	2.31	2.09	0.00	0.01	0.01	1.05	0.70	0.00	0.81	0.81	0.31	0.47	0.00	50.7	0.48	0.00	0.000
MAR	1.62	4.06	0.00	0.00	0.00	2.36	0.59	0.00	2.19	2.07	-1.47	0.43	0.00	55.5	0.00	0.00	0.000
APR	0.81	5.04	0.00	0.00	0.00	3.09	0.13	0.00	2.59	1.50	-1.10	0.28	0.00	54.2	0.00	0.00	0.000
MAY	2.06	5.42	0.00	0.00	0.00	3.28	0.62	0.00	2.05	0.88	0.19	0.38	0.00	56.6	0.00	0.00	0.000
JUN	0.27	7.92	0.00	0.00	0.00	5.05	0.00	0.00	3.28	0.47	-0.35	0.15	0.00	55.8	0.00	0.00	0.000
JUL	0.00	7.63	0.00	0.00	0.00	4.96	0.00	0.00	3.14	0.01	-0.01	0.00	0.00	60.1	0.00	0.00	0.000
AUG	0.00	7.50	0.00	0.00	0.00	4.88	0.00	0.00	3.17	0.00	0.00	0.00	0.00	59.4	0.00	0.00	0.000
SEP	0.00	5.37	0.00	0.00	0.00	3.49	0.00	0.00	2.41	0.00	0.00	0.00	0.00	63.3	0.00	0.00	0.000
OCT	1.77	4.25	0.00	0.00	0.00	2.57	0.70	0.00	1.63	0.66	0.13	0.29	0.00	55.1	0.43	0.00	0.000
NOV	3.94	2.58	0.00	0.00	0.00	1.06	0.77	0.00	0.51	0.33	1.88	0.95	0.00	51.3	0.54	0.00	0.000
DEC	1.14	1.74	0.00	0.00	0.00	0.91	0.90	0.00	0.37	0.36	-0.46	0.34	0.00	46.3	0.23	0.00	0.000

FOLLOWING ARE YEAR END TOTALS FOR MODELED REGION FOR YEAR 1984

PRECIP	POTET	CHGINT	RUNOFF	RECHRG	SOLPEV	ACTSEV	SNWEVP	PPLTR	APLTR	CHGSM	EVINT	CHGSNW	AVTMP	EHRM-RO	DEFCIT
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14.29 55.27 0.00 0.15 0.01 33.69 5.20 0.00 22.58 7.52 -2.02 3.44 0.00 54.71 1.85 0.00

FOLLOWING ARE MONTHLY TOTALS FOR MODELED REGION FOR YEAR 1985

MON	PREC	POTET	CHGINT	RUNOFF	RECHRG	SOLPEV	ACTSEV	SNWEVP	PPLTR	APLTR	CHGSM	EVINT	CHGSNW	AVTMP	EHRM-RO	DEFCIT
JAN	1.39	1.67	0.00	0.00	0.00	0.83	0.72	0.00	0.34	0.33	-0.05	0.40	0.00	45.7	0.00	0.00
FEB	1.70	2.02	0.00	0.00	0.00	0.93	0.68	0.00	0.70	0.63	-0.20	0.58	0.00	48.7	0.00	0.00
MAR	3.46	4.06	0.00	0.00	0.00	2.13	1.59	0.00	1.39	1.18	-0.09	0.78	0.00	48.0	1.15	0.00
APR	0.94	5.04	0.00	0.00	0.00	3.10	0.26	0.00	2.56	1.41	-1.00	0.28	0.00	56.5	0.00	0.00
MAY	0.31	5.42	0.00	0.00	0.00	3.39	0.00	0.00	2.37	0.25	-0.14	0.21	0.00	52.6	0.00	0.00
JUN	0.20	7.92	0.00	0.00	0.00	5.08	0.00	0.00	3.30	0.15	-0.06	0.11	0.00	58.0	0.00	0.00
JUL	0.00	7.63	0.00	0.00	0.00	4.96	0.00	0.00	3.14	0.00	0.00	0.00	0.00	59.0	0.00	0.00
AUG	0.00	7.50	0.00	0.00	0.00	4.88	0.00	0.00	3.16	0.00	0.00	0.00	0.00	57.6	0.00	0.00
SEP	0.29	5.37	0.00	0.00	0.00	3.38	0.00	0.00	2.33	0.10	0.01	0.18	0.00	57.6	0.00	0.00
OCT	1.18	4.25	0.00	0.00	0.00	2.72	0.60	0.00	1.76	0.29	0.23	0.06	0.00	53.7	0.54	0.00
NOV	3.59	2.58	0.00	0.01	0.00	1.30	0.78	0.00	0.70	0.39	1.84	0.57	0.00	49.5	1.55	0.00
DEC	1.72	1.74	0.00	0.00	0.01	0.78	0.70	0.00	0.35	0.35	0.12	0.54	0.00	49.9	0.04	0.00

FOLLOWING ARE YEAR END TOTALS FOR MODELED REGION FOR YEAR 1985

PREC	POTET	CHGINT	RUNOFF	RECHRG	SOLPEV	ACTSEV	SNWEVP	PPLTR	APLTR	CHGSM	EVINT	CHGSNW	AVTMP	EHRM-RO	DEFCIT
14.79	55.20	0.00	0.01	0.01	33.47	5.33	0.00	22.10	5.07	0.66	3.70	0.00	53.07	3.28	0.00

FOLLOWING ARE MONTHLY TOTALS FOR MODELED REGION FOR YEAR 1986

MON	PREC	POTET	CHGINT	RUNOFF	RECHRG	SOLPEV	ACTSEV	SNWEVP	PPLTR	APLTR	CHGSM	EVINT	CHGSNW	AVTMP	EHRM-RO	DEFCIT
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JAN	2.08	1.67	0.01	0.00	0.00	0.81	0.66	0.00	0.35	0.35	0.64	0.42	0.00	52.9	0.53	0.00	0.000
FEB	6.39	2.02	-0.01	0.10	4.03	0.84	0.84	0.00	0.49	0.49	0.21	0.72	0.00	52.8	5.56	0.00	0.000
MAR	4.76	4.06	0.00	0.42	1.95	2.30	1.26	0.00	1.74	1.74	-1.13	0.53	0.00	55.1	3.40	0.00	0.000
APR	0.77	5.04	0.00	0.01	0.00	3.14	0.21	0.00	2.61	2.04	-1.70	0.21	0.00	53.8	0.32	0.00	0.000
MAY	0.26	5.42	0.00	0.00	0.00	3.46	0.00	0.00	2.41	0.37	-0.22	0.11	0.00	52.5	0.09	0.00	0.000
JUN	0.00	7.92	0.00	0.00	0.00	5.15	0.00	0.00	3.35	0.01	-0.01	0.00	0.00	56.2	0.00	0.00	0.000
JUL	0.05	7.63	0.00	0.00	0.00	4.93	0.00	0.00	3.12	0.01	0.00	0.04	0.00	56.5	0.02	0.00	0.000
AUG	0.00	7.50	0.00	0.00	0.00	4.88	0.00	0.00	3.16	0.00	0.00	0.00	0.00	57.4	0.00	0.00	0.000
SEP	0.77	5.37	0.00	0.00	0.00	3.38	0.18	0.00	2.27	0.18	0.23	0.17	0.00	55.5	0.28	0.00	0.000
OCT	1.12	4.25	0.00	0.00	0.00	2.39	0.20	0.00	1.67	0.44	-0.10	0.58	0.00	56.0	0.47	0.00	0.000
NOV	0.50	2.58	0.00	0.00	0.00	1.49	0.01	0.00	1.17	0.21	-0.01	0.28	0.00	54.9	0.18	0.00	0.000
DEC	1.06	1.74	0.00	0.00	0.00	0.87	0.19	0.00	0.65	0.31	0.16	0.40	0.00	49.3	0.33	0.00	0.000

FOLLOWING ARE YEAR END TOTALS FOR MODELED REGION FOR YEAR 1986

PRECIP	POTET	CHGINT	RUNOFF	RECHRG	SOLPEV	ACTSEV	SNWEVP	PPLTR	APLTR	CHGSM	EVINT	CHGSNW	AVTMP	EHRM-RO	DEFCIT
17.74	55.20	0.00	0.55	5.98	33.64	3.55	0.00	22.98	6.14	-1.92	3.45	0.00	54.42	11.18	-0.01

FOLLOWING ARE MONTHLY TOTALS FOR MODELED REGION FOR YEAR 1987

MON	PRECIP	POTET	CHGINT	RUNOFF	RECHRG	SOLPEV	ACTSEV	SNWEVP	PPLTR	APLTR	CHGSM	EVINT	CHGSNW	AVTMP	EHRM-RO	DEFCIT
JAN	2.81	1.67	0.00	0.00	0.00	0.72	0.67	0.00	0.27	0.25	1.32	0.57	0.00	47.1	1.04	0.00
FEB	3.03	2.02	0.00	0.01	0.23	1.06	0.97	0.00	0.68	0.68	0.76	0.39	0.00	50.5	1.98	0.00
MAR	2.60	4.06	0.00	0.00	0.00	2.34	1.29	0.00	1.80	1.77	-0.93	0.46	0.00	52.1	0.97	0.00
APR	0.66	5.04	0.00	0.00	0.00	3.12	0.02	0.00	2.68	1.45	-1.05	0.24	0.00	56.4	0.20	0.00
MAY	0.45	5.42	0.00	0.00	0.00	3.38	0.01	0.00	2.36	0.48	-0.27	0.23	0.00	54.4	0.16	0.00
JUN	0.00	7.92	0.00	0.00	0.00	5.15	0.00	0.00	3.35	0.12	-0.12	0.00	0.00	54.6	0.00	0.00
JUL	0.00	7.63	0.00	0.00	0.00	4.96	0.00	0.00	3.14	0.00	0.00	0.00	0.00	55.5	0.00	0.00
AUG	0.00	7.50	0.00	0.00	0.00	4.88	0.00	0.00	3.16	0.00	0.00	0.00	0.00	57.9	0.00	0.00
SEP	0.00	5.37	0.00	0.00	0.00	3.49	0.00	0.00	2.41	0.00	0.00	0.00	0.00	57.8	0.00	0.00

OCT	0.96	4.25	0.00	0.00	0.00	2.57	0.11	0.00	1.84	0.10	0.46	0.30	0.00	58.0	0.00	0.00	0.000
NOV	2.23	2.58	0.00	0.00	0.00	1.25	0.71	0.00	0.69	0.44	0.42	0.65	0.00	53.6	0.14	0.00	0.000
DEC	3.59	1.74	0.00	0.00	0.07	0.64	0.63	0.00	0.26	0.26	1.87	0.75	0.00	47.3	1.33	0.00	0.000

FOLLOWING ARE YEAR END TOTALS FOR MODELED REGION FOR YEAR 1987

PRECIP	POTET	CHGINT	RUNOFF	RECHRG	SOLPEV	ACTSEV	SNWEVP	PPLTR	APLTR	CHGSM	EVINT	CHGSNW	AVTMP	EHRM-RO	DEFCIT
16.34	55.20	0.00	0.02	0.30	33.55	4.42	0.00	22.64	5.55	2.46	3.58	0.00	53.78	5.83	0.00

FOLLOWING ARE MONTHLY TOTALS FOR MODELED REGION FOR YEAR 1988

MON	PRECIP	POTET	CHGINT	RUNOFF	RECHRG	SOLPEV	ACTSEV	SNWEVP	PPLTR	APLTR	CHGSM	EVINT	CHGSNW	AVTMP	EHRM-RO	DEFCIT	
JAN	1.65	1.67	0.00	0.00	0.23	0.86	0.86	0.00	0.31	0.31	-0.10	0.35	0.00	49.2	0.70	0.00	0.000
FEB	0.21	2.09	-0.01	0.00	0.00	1.28	0.34	0.00	1.37	1.29	-1.54	0.12	0.00	52.9	0.03	0.00	0.000
MAR	0.98	4.06	0.00	0.00	0.00	2.48	0.34	0.00	2.43	1.38	-0.98	0.24	0.00	54.5	0.13	0.00	0.000
APR	1.44	5.04	0.00	0.00	0.00	3.04	0.49	0.00	2.41	0.58	0.02	0.36	0.00	56.0	0.26	0.00	0.000
MAY	0.57	5.42	0.00	0.00	0.00	3.37	0.00	0.00	2.34	0.34	-0.01	0.24	0.00	53.2	0.03	0.00	0.000
JUN	0.10	7.92	0.00	0.00	0.00	5.11	0.00	0.00	3.32	0.18	-0.13	0.06	0.00	56.0	0.00	0.00	0.000
JUL	0.00	7.63	0.00	0.00	0.00	4.96	0.00	0.00	3.14	0.01	-0.01	0.00	0.00	59.3	0.00	0.00	0.000
AUG	0.00	7.50	0.00	0.00	0.00	4.88	0.00	0.00	3.17	0.00	0.00	0.00	0.00	58.3	0.00	0.00	0.000
SEP	0.00	5.37	0.00	0.00	0.00	3.49	0.00	0.00	2.41	0.00	0.00	0.00	0.00	57.4	0.00	0.00	0.000
OCT	0.00	4.25	0.00	0.00	0.00	2.76	0.00	0.00	2.03	0.00	0.00	0.00	0.00	55.3	0.00	0.00	0.000
NOV	1.59	2.58	0.00	0.00	0.00	1.44	0.39	0.00	0.97	0.28	0.56	0.36	0.00	52.9	0.00	0.00	0.000
DEC	2.47	1.74	0.00	0.00	0.00	0.87	0.27	0.00	0.63	0.26	1.54	0.39	0.00	47.3	1.29	0.00	0.000

FOLLOWING ARE YEAR END TOTALS FOR MODELED REGION FOR YEAR 1988

PRECIP	POTET	CHGINT	RUNOFF	RECHRG	SOLPEV	ACTSEV	SNWEVP	PPLTR	APLTR	CHGSM	EVINT	CHGSNW	AVTMP	EHRM-RO	DEFCIT
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9.01 55.27 0.00 0.01 0.23 34.55 2.69 0.00 24.52 4.62 -0.65 2.12 0.00 54.36 2.44 0.00

FOLLOWING ARE MONTHLY TOTALS FOR MODELED REGION FOR YEAR 1989

MON	PREC	POTET	CHGINT	RUNOFF	RECHRG	SOLPEV	ACTSEV	SNWEVP	PPLTR	APLTR	CHGSM	EVINT	CHGSNW	AVTMP	EHRM-RO	DEFCIT
JAN	1.28	1.67	0.00	0.00	0.00	0.86	0.77	0.00	0.36	0.36	-0.20	0.35	0.00	45.9	0.37	0.00
FEB	1.49	2.02	0.00	0.00	0.02	1.06	0.61	0.00	0.91	0.90	-0.44	0.39	0.00	46.0	0.70	0.00
MAR	2.24	4.06	0.00	0.00	0.00	2.33	0.85	0.00	2.00	1.74	-0.83	0.47	0.00	53.7	0.90	0.00
APR	1.07	5.04	0.00	0.00	0.00	3.10	0.34	0.00	2.55	0.84	-0.38	0.27	0.00	57.4	0.41	0.00
MAY	0.22	5.42	0.00	0.00	0.00	3.45	0.00	0.00	2.41	0.34	-0.24	0.11	0.00	53.3	0.00	0.00
JUN	0.04	7.92	0.00	0.00	0.00	5.13	0.00	0.00	3.33	0.02	-0.02	0.04	0.00	56.6	0.00	0.00
JUL	0.00	7.63	0.00	0.00	0.00	4.96	0.00	0.00	3.14	0.00	0.00	0.00	0.00	55.8	0.00	0.00
AUG	0.00	7.50	0.00	0.00	0.00	4.88	0.00	0.00	3.16	0.00	0.00	0.00	0.00	56.6	0.00	0.00
SEP	1.44	5.37	0.00	0.00	0.00	3.30	0.39	0.00	2.13	0.38	0.38	0.30	0.00	56.7	0.00	0.00
OCT	1.31	4.25	0.00	0.00	0.00	2.58	0.62	0.00	1.65	0.51	-0.09	0.27	0.00	55.3	0.00	0.00
NOV	1.18	2.58	0.00	0.00	0.00	1.59	0.29	0.00	1.12	0.33	0.43	0.14	0.00	55.6	0.00	0.00
DEC	0.13	1.74	0.00	0.00	0.00	1.09	0.28	0.00	0.79	0.30	-0.51	0.06	0.00	51.1	0.00	0.00

FOLLOWING ARE YEAR END TOTALS FOR MODELED REGION FOR YEAR 1989

PREC	POTET	CHGINT	RUNOFF	RECHRG	SOLPEV	ACTSEV	SNWEVP	PPLTR	APLTR	CHGSM	EVINT	CHGSNW	AVTMP	EHRM-RO	DEFCIT
10.40	55.20	0.00	0.01	0.02	34.32	4.14	0.00	23.56	5.72	-1.89	2.40	0.00	53.69	2.37	0.00

FOLLOWING ARE MONTHLY TOTALS FOR MODELED REGION FOR YEAR 1990

MON	PREC	POTET	CHGINT	RUNOFF	RECHRG	SOLPEV	ACTSEV	SNWEVP	PPLTR	APLTR	CHGSM	EVINT	CHGSNW	AVTMP	EHRM-RO	DEFCIT
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JAN	2.61	1.67	0.00	0.00	0.00	0.83	0.58	0.00	0.38	0.29	1.34	0.40	0.00	48.2	0.01	0.00	0.000
FEB	2.52	2.02	0.00	0.01	0.00	1.09	1.05	0.00	0.66	0.66	0.45	0.35	0.00	47.4	1.43	0.00	0.000
MAR	1.96	4.06	0.00	0.00	0.00	2.33	1.09	0.00	1.84	1.64	-1.26	0.48	0.00	51.7	0.57	0.00	0.000
APR	1.10	5.04	0.00	0.00	0.00	3.11	0.30	0.00	2.56	1.06	-0.52	0.26	0.00	57.0	0.30	0.00	0.000
MAY	1.67	5.42	0.00	0.00	0.00	3.38	0.50	0.00	2.20	0.46	0.47	0.22	0.00	53.5	0.65	0.00	0.000
JUN	0.00	7.92	0.00	0.00	0.00	5.15	0.31	0.00	3.24	0.39	-0.69	0.00	0.00	56.3	0.00	0.00	0.000
JUL	0.00	7.63	0.00	0.00	0.00	4.96	0.00	0.00	3.14	0.00	0.00	0.00	0.00	58.2	0.00	0.00	0.000
AUG	0.12	7.50	0.00	0.00	0.00	4.84	0.00	0.00	3.13	0.05	0.00	0.06	0.00	59.2	0.00	0.00	0.000
SEP	0.12	5.37	0.00	0.00	0.00	3.45	0.00	0.00	2.38	0.04	0.02	0.06	0.00	58.9	0.00	0.00	0.000
OCT	0.12	4.25	0.00	0.00	0.00	2.72	0.00	0.00	1.99	0.02	0.04	0.06	0.00	55.8	0.00	0.00	0.000
NOV	0.24	2.58	0.00	0.00	0.00	1.61	0.00	0.00	1.26	0.08	0.05	0.11	0.00	53.0	0.00	0.00	0.000
DEC	1.59	1.74	0.00	0.00	0.00	0.54	0.15	0.00	0.49	0.21	0.73	0.43	0.07	44.2	0.00	0.00	0.000

FOLLOWING ARE YEAR END TOTALS FOR MODELED REGION FOR YEAR 1990

	PRECIP	POTET	CHGINT	RUNOFF	RECHRG	SOLPEV	ACTSEV	SNWEVP	PPLTR	APLTR	CHGSM	EVINT	CHGSNW	AVTMP	EHRM-RO	DEFCIT
	12.03	55.20	0.00	0.01	0.00	33.99	3.98	0.00	23.29	4.91	0.63	2.42	0.07	53.64	2.96	0.00

FOLLOWING ARE MONTHLY TOTALS FOR MODELED REGION FOR YEAR 1991

MON	PRECIP	POTET	CHGINT	RUNOFF	RECHRG	SOLPEV	ACTSEV	SNWEVP	PPLTR	APLTR	CHGSM	EVINT	CHGSNW	AVTMP	EHRM-RO	DEFCIT
JAN	0.23	1.67	0.00	0.00	0.00	0.96	0.50	0.00	0.56	0.30	-0.61	0.11	-0.07	48.5	0.00	0.00
FEB	1.86	2.02	0.00	0.00	0.00	1.09	0.29	0.00	1.17	0.44	0.78	0.35	0.00	53.8	0.00	0.00
MAR	7.49	4.06	0.00	0.16	1.71	1.98	1.95	0.00	1.04	1.03	1.64	1.02	0.00	49.0	4.95	0.00
APR	0.47	5.04	0.00	0.00	0.00	3.16	0.15	0.00	2.66	2.32	-2.18	0.18	0.00	51.9	0.16	0.00
MAY	0.50	5.42	0.00	0.00	0.00	3.39	0.02	0.00	2.36	0.55	-0.27	0.21	0.00	50.7	0.02	0.00
JUN	0.00	7.92	0.00	0.00	0.00	5.15	0.00	0.00	3.35	0.20	-0.20	0.00	0.00	52.6	0.00	0.00
JUL	0.00	7.63	0.00	0.00	0.00	4.96	0.00	0.00	3.14	0.00	0.00	0.00	0.00	56.1	0.00	0.00
AUG	0.06	7.50	0.00	0.00	0.00	4.85	0.00	0.00	3.14	0.01	0.00	0.05	0.00	58.6	0.00	0.00
SEP	0.00	5.37	0.00	0.00	0.00	3.49	0.00	0.00	2.41	0.00	0.00	0.00	0.00	57.9	0.00	0.00

OCT	1.28	4.25	0.00	0.00	0.00	2.64	0.45	0.00	1.76	0.15	0.50	0.18	0.00	56.0	0.00	0.00	0.000
NOV	0.07	2.58	0.00	0.00	0.00	1.65	0.13	0.00	1.24	0.33	-0.42	0.05	0.00	54.5	0.00	0.00	0.000
DEC	3.63	1.74	0.00	0.00	0.00	0.88	0.05	0.00	0.73	0.21	2.98	0.38	0.00	49.2	1.51	0.00	0.000

FOLLOWING ARE YEAR END TOTALS FOR MODELED REGION FOR YEAR 1991

PRECIP	POTET	CHGINT	RUNOFF	RECHRG	SOLPEV	ACTSEV	SNWEVP	PPLTR	APLTR	CHGSM	EVINT	CHGSNW	AVTMP	EHRM-RO	DEFCIT
15.61	55.20	0.00	0.16	1.71	34.19	3.55	0.00	23.56	5.54	2.22	2.50	-0.07	53.21	6.64	0.00

FOLLOWING ARE MONTHLY TOTALS FOR MODELED REGION FOR YEAR 1992

MON	PRECIP	POTET	CHGINT	RUNOFF	RECHRG	SOLPEV	ACTSEV	SNWEVP	PPLTR	APLTR	CHGSM	EVINT	CHGSNW	AVTMP	EHRM-RO	DEFCIT	
JAN	1.81	1.67	0.00	0.02	0.65	0.90	0.83	0.00	0.36	0.36	-0.32	0.28	0.00	49.2	1.41	0.00	0.000
FEB	5.47	2.09	0.00	0.50	2.80	0.87	0.72	0.00	0.59	0.59	0.10	0.74	0.00	54.3	4.45	0.00	0.000
MAR	3.20	4.06	0.00	0.12	0.28	2.18	1.35	0.00	1.55	1.54	-0.81	0.71	0.00	54.1	1.52	0.00	0.000
APR	0.00	5.04	0.00	0.00	0.00	3.28	0.00	0.00	2.81	1.90	-1.90	0.00	0.00	58.7	0.00	0.00	0.000
MAY	0.00	5.42	0.00	0.00	0.00	3.53	0.00	0.00	2.45	0.12	-0.12	0.00	0.00	56.8	0.00	0.00	0.000
JUN	0.12	7.92	0.00	0.00	0.00	5.11	0.00	0.00	3.32	0.05	0.01	0.05	0.00	57.2	0.00	0.00	0.000
JUL	0.02	7.63	0.00	0.00	0.00	4.94	0.00	0.00	3.13	0.01	-0.01	0.02	0.00	60.1	0.01	0.00	0.000
AUG	0.00	7.50	0.00	0.00	0.00	4.88	0.00	0.00	3.17	0.00	0.00	0.00	0.00	58.3	0.00	0.00	0.000
SEP	0.06	5.37	0.00	0.00	0.00	3.46	0.00	0.00	2.39	0.01	0.00	0.05	0.00	58.2	0.00	0.00	0.000
OCT	0.39	4.25	0.00	0.00	0.00	2.66	0.00	0.00	1.95	0.15	0.09	0.15	0.00	58.7	0.00	0.00	0.000
NOV	0.09	2.58	0.00	0.00	0.00	1.63	0.00	0.00	1.28	0.09	-0.08	0.08	0.00	54.2	0.00	0.00	0.000
DEC	4.46	1.74	0.00	0.01	0.00	0.72	0.66	0.00	0.32	0.28	2.88	0.63	0.00	47.0	1.80	0.00	0.000

FOLLOWING ARE YEAR END TOTALS FOR MODELED REGION FOR YEAR 1992

PRECIP	POTET	CHGINT	RUNOFF	RECHRG	SOLPEV	ACTSEV	SNWEVP	PPLTR	APLTR	CHGSM	EVINT	CHGSNW	AVTMP	EHRM-RO	DEFCIT
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15.61 55.27 0.00 0.66 3.73 34.16 3.57 0.00 23.32 5.10 -0.15 2.71 0.00 55.56 9.20 -0.01

FOLLOWING ARE MONTHLY AVERAGES FOR MODELED REGION FOR SIMULATION

	PRECIP	POTET	CHGINT	RUNOFF	RECHRG	SOLPEV	ACTSEV	SNWEVP	PPLTR	APLTR	CHGSM	EVINT	CHGSNW	AVTMP	EHRM-RO	DEFCIT
JAN	2.77	1.67	0.00	0.11	1.04	0.80	0.63	0.00	0.36	0.29	0.26	0.43	0.00	48.25	1.88	0.00
FEB	2.95	2.04	0.00	0.16	1.00	1.00	0.66	0.00	0.80	0.74	-0.11	0.50	0.00	50.54	1.89	0.00
MAR	3.63	4.06	0.00	0.24	0.63	2.23	1.24	0.00	1.69	1.49	-0.60	0.63	0.00	51.44	1.95	0.00
APR	1.38	5.04	0.00	0.08	0.07	3.05	0.47	0.00	2.41	1.54	-1.13	0.35	0.00	53.88	0.49	-0.01
MAY	0.44	5.43	0.00	0.01	0.00	3.42	0.10	0.00	2.35	0.64	-0.47	0.16	0.00	52.99	0.10	-0.01
JUN	0.11	7.92	0.00	0.00	0.00	5.11	0.02	0.00	3.32	0.16	-0.12	0.05	0.00	55.70	0.02	0.00
JUL	0.07	7.63	0.00	0.00	0.00	4.94	0.02	0.00	3.13	0.03	0.00	0.02	0.00	57.24	0.03	0.00
AUG	0.08	7.50	0.00	0.00	0.00	4.85	0.01	0.00	3.14	0.03	0.00	0.03	0.00	57.97	0.01	0.00
SEP	0.27	5.37	0.00	0.00	0.00	3.44	0.06	0.00	2.35	0.07	0.06	0.08	0.00	58.58	0.05	0.00
OCT	1.05	4.25	0.00	0.00	0.00	2.62	0.34	0.00	1.79	0.28	0.21	0.22	0.00	55.66	0.33	0.00
NOV	2.18	2.58	0.00	0.01	0.11	1.42	0.51	0.00	0.91	0.32	0.84	0.39	0.00	52.83	0.96	0.00
DEC	2.56	1.74	0.00	0.02	0.28	0.81	0.48	0.00	0.48	0.29	1.03	0.45	0.00	48.17	1.27	0.00

FOLLOWING ARE ANNUAL AVERAGES FOR MODELED REGION FOR SIMULATION

	PRECIP	POTET	CHGINT	RUNOFF	RECHRG	SOLPEV	ACTSEV	SNWEVP	PPLTR	APLTR	CHGSM	EVINT	CHGSNW	AVTMP	EHRM-RO	DEFCIT
	17.48	55.22	0.00	0.63	3.13	33.70	4.54	0.00	22.72	5.90	-0.03	3.33	0.00	53.61	8.99	-0.02

AVG ANNUAL RECHARGE DISTRIBUTION, HUNDRETHS OF INCHES

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1 415 417 335 155 199

2 368 392 274 149 196

3 -1 193 215 217 128

4 -1 -1 221 -1 -1

AVG ANNUAL AET DISTRIBUTION, TENTHS OF INCHES

1 2 3 4 5

1 146 151 134 130 116

2 147 144 131 131 117

3 -1 136 124 124 119

4 -1 -1 122 -1 -1

Message: 35

To: 651ww1@ptsmail.ptsem.edu, mfeeney@ix.netcom.com

From: essert@nps.navy.mil (Chris Essert)

Subject: Run 19

Date: Thu, 27 Jul 95 06:58:42 PDT

First, the differences between this run's output listing and that of the Base Case run:

4c4

< EL TORO BASIN WATER BALANCE STUDY - BASE RUN

> EL TORO BASIN WATER BALANCE STUDY - Carmel Valley ET - Alfalfa

1.93

Page

54c54

< ASUN (INTERCEPT)= -20.0 BSUN (SLOPE)=3.6360

> ASUN (INTERCEPT)= -20.0 BSUN (SLOPE)= 3.636

119,120c118,119

< OCT NOV DEC JAN FEB MAR

< 0.01 0.01 0.01 0.01 0.01 0.01

> JAN FEB MAR APR MAY JUN JUL AUG SEP OCT NOV DEC

> 0.09 0.10 0.14 0.18 0.19 0.22 0.20 0.19 0.16 0.14 0.12 0.09

And now for the actual results:

EL TORO BASIN WATER BALANCE STUDY - Carmel Valley ET - Alfalfa

FOLLOWING ARE MONTHLY TOTALS FOR MODELED REGION FOR YEAR 1970

MON PRECP POTET CHGINT RUNOFF RECHRG SOLPEV ACTSEV SNWEVP PPLTR APLTR CHGSM EVINT CHGSNW AVTMP EHRM-RO DEFCIT

JAN	5.10	2.73	0.00	0.04	3.16	1.28	1.23	0.00	0.49	0.49	-0.58	0.76	0.00	50.8	4.10	0.00	0.000
FEB	3.25	2.91	0.00	0.01	0.13	1.56	1.02	0.00	1.23	1.23	0.34	0.52	0.00	51.3	1.56	0.00	0.000
MAR	2.38	4.22	0.00	0.26	1.21	2.54	0.90	0.00	2.18	2.15	-2.44	0.30	0.00	51.5	1.76	0.00	0.000
APR	0.89	5.40	0.00	0.01	0.00	3.29	0.00	0.00	2.85	1.36	-0.81	0.34	0.00	49.9	0.30	-0.01	0.000
MAY	0.10	5.83	0.00	0.01	0.00	3.73	0.00	0.00	2.61	0.19	-0.17	0.09	0.00	52.9	0.04	-0.01	0.000
JUN	0.00	6.45	0.00	0.01	0.00	4.19	0.00	0.00	2.73	0.00	0.00	0.00	0.00	53.4	0.00	-0.01	0.000
JUL	0.00	6.11	0.00	0.00	0.00	3.97	0.00	0.00	2.52	0.00	0.00	0.00	0.00	55.5	0.00	0.00	0.000
AUG	0.00	5.80	0.00	0.00	0.00	3.77	0.00	0.00	2.44	0.00	0.00	0.00	0.00	54.7	0.00	0.00	0.000
SEP	0.00	4.89	0.00	0.00	0.00	3.18	0.00	0.00	2.19	0.00	0.00	0.00	0.00	58.8	0.00	0.00	0.000
OCT	0.19	4.40	0.00	0.00	0.00	2.76	0.00	0.00	2.02	0.02	0.01	0.16	0.00	52.9	0.07	0.00	0.000
NOV	4.36	3.45	0.00	0.02	0.00	1.83	0.33	0.00	1.29	0.44	2.94	0.63	0.00	54.0	2.45	0.00	0.000
DEC	5.83	2.85	0.00	0.07	2.58	1.14	1.14	0.00	0.46	0.46	0.48	1.10	0.00	46.6	4.46	0.00	0.000

FOLLOWING ARE YEAR END TOTALS FOR MODELED REGION FOR YEAR 1970

PRECIP	POTET	CHGINT	RUNOFF	RECHRG	SOLPEV	ACTSEV	SNWEVP	PPLTR	APLTR	CHGSM	EVINT	CHGSNW	AVTMP	EHRM-RO	DEFCIT
22.10	55.03	0.00	0.45	7.08	33.23	4.62	0.00	23.00	6.33	-0.25	3.91	0.00	52.69	14.74	-0.04

FOLLOWING ARE MONTHLY TOTALS FOR MODELED REGION FOR YEAR 1971

MON	PRECIP	POTET	CHGINT	RUNOFF	RECHRG	SOLPEV	ACTSEV	SNWEVP	PPLTR	APLTR	CHGSM	EVINT	CHGSNW	AVTMP	EHRM-RO	DEFCIT	
JAN	1.43	2.73	0.00	0.03	0.15	1.56	1.17	0.00	0.74	0.74	-0.99	0.33	0.00	46.7	0.75	0.00	0.000
FEB	0.91	2.91	0.00	0.01	0.00	1.71	0.16	0.00	1.96	1.90	-1.45	0.29	0.00	47.3	0.31	0.00	0.000
MAR	1.53	4.22	0.00	0.01	0.00	2.60	0.60	0.00	2.46	1.44	-0.74	0.22	0.00	49.1	0.63	0.00	0.000
APR	1.52	5.40	0.00	0.02	0.00	3.34	0.55	0.00	2.63	0.87	-0.17	0.26	0.00	49.7	0.54	-0.01	0.000
MAY	0.28	5.83	0.00	0.01	0.00	3.63	0.00	0.00	2.54	0.08	-0.04	0.24	0.00	49.2	0.10	-0.01	0.000
JUN	0.00	6.45	0.00	0.00	0.00	4.19	0.00	0.00	2.73	0.02	-0.02	0.00	0.00	53.8	0.00	0.00	0.000
JUL	0.04	6.11	0.00	0.00	0.00	3.94	0.00	0.00	2.50	0.00	0.00	0.04	0.00	54.4	0.01	0.00	0.000
AUG	0.03	5.80	0.00	0.00	0.00	3.75	0.00	0.00	2.43	0.00	0.00	0.03	0.00	58.2	0.01	0.00	0.000

SEP	0.22	4.89	0.00	0.00	0.00	3.11	0.00	0.00	2.15	0.01	0.10	0.10	0.00	58.5	0.00	0.00	0.000
OCT	0.23	4.40	0.00	0.00	0.00	2.75	0.00	0.00	2.02	0.15	-0.09	0.17	0.00	49.8	0.08	0.00	0.000
NOV	2.06	3.45	0.00	0.00	0.00	2.02	0.37	0.00	1.43	0.37	0.98	0.34	0.00	48.8	0.83	0.00	0.000
DEC	4.02	2.85	0.00	0.00	0.02	1.35	1.21	0.00	0.61	0.51	1.51	0.77	0.00	43.5	1.41	0.00	0.000

FOLLOWING ARE YEAR END TOTALS FOR MODELED REGION FOR YEAR 1971

PRECIP	POTET	CHGINT	RUNOFF	RECHRG	SOLPEV	ACTSEV	SNWEVP	PPLTR	APLTR	CHGSM	EVINT	CHGSNW	AVTMP	EHRM-RO	DEFCIT
12.28	55.03	0.00	0.09	0.17	33.95	4.07	0.00	24.20	6.11	-0.92	2.80	0.00	50.76	4.66	-0.03

FOLLOWING ARE MONTHLY TOTALS FOR MODELED REGION FOR YEAR 1972

MON	PRECIP	POTET	CHGINT	RUNOFF	RECHRG	SOLPEV	ACTSEV	SNWEVP	PPLTR	APLTR	CHGSM	EVINT	CHGSNW	AVTMP	EHRM-RO	DEFCIT	
JAN	1.00	2.73	0.00	0.00	0.00	1.59	0.69	0.00	0.88	0.87	-0.86	0.29	0.00	46.7	0.35	0.00	0.000
FEB	0.74	3.02	0.00	0.00	0.00	1.85	0.40	0.00	2.03	1.49	-1.31	0.17	0.00	51.3	0.20	0.00	0.000
MAR	0.62	4.22	0.00	0.00	0.00	2.62	0.11	0.00	2.73	0.61	-0.29	0.19	0.00	53.1	0.00	0.00	0.000
APR	0.71	5.40	0.00	0.00	0.00	3.34	0.03	0.00	2.85	0.41	0.01	0.26	0.00	52.9	0.00	0.00	0.000
MAY	0.18	5.83	0.00	0.00	0.00	3.70	0.00	0.00	2.58	0.09	-0.04	0.13	0.00	53.0	0.00	0.00	0.000
JUN	0.00	6.45	0.00	0.00	0.00	4.19	0.00	0.00	2.72	0.01	-0.01	0.00	0.00	54.2	0.00	0.00	0.000
JUL	0.00	6.11	0.00	0.00	0.00	3.97	0.00	0.00	2.51	0.00	0.00	0.00	0.00	58.8	0.00	0.00	0.000
AUG	0.00	5.80	0.00	0.00	0.00	3.77	0.00	0.00	2.45	0.00	0.00	0.00	0.00	58.8	0.00	0.00	0.000
SEP	0.00	4.89	0.00	0.00	0.00	3.18	0.00	0.00	2.20	0.00	0.00	0.00	0.00	59.7	0.00	0.00	0.000
OCT	2.10	4.40	0.00	0.00	0.00	2.64	0.84	0.00	1.61	0.64	0.28	0.35	0.00	56.8	0.83	0.00	0.000
NOV	6.04	3.45	0.00	0.04	1.24	1.87	1.24	0.00	0.98	0.89	2.07	0.57	0.00	51.1	4.20	0.00	0.000
DEC	2.63	2.85	0.00	0.00	0.06	1.04	0.83	0.00	0.63	0.63	0.46	0.64	0.00	44.2	1.15	0.00	0.000

FOLLOWING ARE YEAR END TOTALS FOR MODELED REGION FOR YEAR 1972

PRECIP	POTET	CHGINT	RUNOFF	RECHRG	SOLPEV	ACTSEV	SNWEVP	PPLTR	APLTR	CHGSM	EVINT	CHGSNW	AVTMP	EHRM-RO	DEFCIT
14.01	55.14	0.00	0.05	1.30	33.75	4.12	0.00	24.18	5.64	0.31	2.60	0.00	53.37	6.73	0.00

FOLLOWING ARE MONTHLY TOTALS FOR MODELED REGION FOR YEAR 1973

MON	PRECIP	POTET	CHGINT	RUNOFF	RECHRG	SOLPEV	ACTSEV	SNWEVP	PPLTR	APLTR	CHGSM	EVINT	CHGSNW	AVTMP	EHRM-RO	DEFCIT
JAN	5.27	2.73	0.00	0.24	1.75	1.23	1.14	0.00	0.47	0.47	0.84	0.83	0.00	46.9	3.54	0.00
FEB	6.82	2.91	0.00	0.98	3.03	1.31	1.21	0.00	0.83	0.83	-0.14	0.90	0.00	52.2	5.14	0.00
MAR	5.30	4.22	0.00	0.89	1.48	2.17	1.92	0.00	1.25	1.25	-1.12	0.87	0.00	48.8	3.50	0.00
APR	0.36	5.40	0.00	0.06	0.00	3.38	0.00	0.00	2.91	2.25	-2.14	0.21	0.00	54.8	0.12	-0.02
MAY	0.06	5.83	0.00	0.01	0.00	3.76	0.00	0.00	2.63	0.26	-0.24	0.05	0.00	54.7	0.02	-0.01
JUN	0.05	6.45	0.00	0.01	0.00	4.17	0.00	0.00	2.71	0.02	-0.01	0.04	0.00	57.7	0.02	-0.01
JUL	0.00	6.11	0.00	0.01	0.00	3.97	0.00	0.00	2.52	0.00	0.00	0.00	0.00	55.9	0.00	-0.01
AUG	0.00	5.80	0.00	0.01	0.00	3.77	0.00	0.00	2.44	0.00	0.00	0.00	0.00	56.3	0.00	-0.01
SEP	0.12	4.89	0.00	0.01	0.00	3.12	0.00	0.00	2.15	0.02	0.01	0.09	0.00	58.1	0.03	0.00
OCT	2.08	4.40	0.00	0.01	0.00	2.67	0.99	0.00	1.58	0.61	0.18	0.29	0.00	55.7	0.82	0.00
NOV	4.36	3.45	0.00	0.01	0.00	1.77	1.31	0.00	0.84	0.59	1.71	0.73	0.00	51.4	1.95	0.00
DEC	4.66	2.85	0.00	0.02	0.78	1.50	1.17	0.00	0.76	0.75	1.39	0.54	0.00	50.4	3.02	0.00

FOLLOWING ARE YEAR END TOTALS FOR MODELED REGION FOR YEAR 1973

PRECIP	POTET	CHGINT	RUNOFF	RECHRG	SOLPEV	ACTSEV	SNWEVP	PPLTR	APLTR	CHGSM	EVINT	CHGSNW	AVTMP	EHRM-RO	DEFCIT
29.06	55.03	0.00	2.24	7.05	32.82	7.76	0.00	21.09	7.04	0.48	4.55	0.00	53.55	18.17	-0.06

FOLLOWING ARE MONTHLY TOTALS FOR MODELED REGION FOR YEAR 1974

MON	PRECIP	POTET	CHGINT	RUNOFF	RECHRG	SOLPEV	ACTSEV	SNWEVP	PPLTR	APLTR	CHGSM	EVINT	CHGSNW	AVTMP	EHRM-RO	DEFCIT
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0.01	2.27	1.73	0.00	1.49	1.36	1.11	0.72	0.00	50.0	2.84	0.00	0.000
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APR	1.71	5.40	0.00	0.02	0.00	2.98	0.32	0.00	2.42	2.00	-1.45	0.81	0.00	49.0	0.34	0.00	0.000
MAY	0.00	5.83	0.00	0.00	0.00	3.79	0.00	0.00	2.65	0.55	-0.55	0.00	0.00	52.6	0.00	0.00	0.000
JUN	0.23	6.45	0.00	0.00	0.00	4.07	0.00	0.00	2.65	0.06	-0.01	0.18	0.00	54.1	0.00	0.00	0.000
JUL	0.10	6.11	0.00	0.00	0.00	3.93	0.00	0.00	2.49	0.04	0.00	0.06	0.00	56.1	0.03	0.00	0.000
AUG	0.27	5.80	0.00	0.00	0.00	3.67	0.00	0.00	2.38	0.10	0.02	0.15	0.00	56.9	0.09	0.00	0.000

SEP	0.00	4.89	0.00	0.00	0.00	3.18	0.00	0.00	2.19	0.02	-0.02	0.00	0.00	56.8	0.00	0.00	0.000
OCT	1.75	4.40	0.00	0.00	0.00	2.65	0.38	0.00	1.79	0.28	0.77	0.32	0.00	52.3	0.62	0.00	0.000
NOV	0.87	3.45	0.00	0.00	0.00	2.07	0.56	0.00	1.40	0.55	-0.51	0.27	0.00	49.9	0.27	0.00	0.000
DEC	0.46	2.85	0.00	0.00	0.00	1.76	0.06	0.00	1.45	0.44	-0.18	0.15	0.00	47.7	0.16	0.00	0.000

FOLLOWING ARE YEAR END TOTALS FOR MODELED REGION FOR YEAR 1975

PRECIP	POTET	CHGINT	RUNOFF	RECHRG	SOLPEV	ACTSEV	SNWEVP	PPLTR	APLTR	CHGSM	EVINT	CHGSNW	AVTMP	EHRM-RO	DEFCIT
15.13	55.03	0.00	0.31	0.01	33.47	5.17	0.00	22.86	6.93	-0.83	3.55	0.00	51.90	5.51	-0.01

FOLLOWING ARE MONTHLY TOTALS FOR MODELED REGION FOR YEAR 1976

MON	PRECIP	POTET	CHGINT	RUNOFF	RECHRG	SOLPEV	ACTSEV	SNWEVP	PPLTR	APLTR	CHGSM	EVINT	CHGSNW	AVTMP	EHRM-RO	DEFCIT	
JAN	0.20	2.73	0.00	0.00	0.00	1.68	0.00	0.00	1.26	0.12	-0.07	0.14	0.00	48.2	0.05	0.00	0.000
FEB	2.30	3.02	0.00	0.00	0.00	1.62	0.47	0.00	1.66	0.66	0.65	0.52	0.00	47.3	0.62	0.00	0.000
MAR	1.61	4.22	0.00	0.00	0.00	2.55	0.72	0.00	2.27	1.21	-0.61	0.30	0.00	47.4	0.71	0.00	0.000
APR	1.44	5.40	0.00	0.00	0.00	3.25	0.34	0.00	2.63	0.73	-0.03	0.40	0.00	51.5	0.17	0.00	0.000
MAY	0.32	5.83	0.00	0.00	0.00	3.66	0.00	0.00	2.54	0.17	-0.04	0.19	0.00	52.8	0.09	0.00	0.000
JUN	0.06	6.45	0.00	0.00	0.00	4.16	0.00	0.00	2.71	0.02	-0.01	0.05	0.00	57.3	0.02	0.00	0.000
JUL	0.00	6.11	0.00	0.00	0.00	3.97	0.00	0.00	2.51	0.00	0.00	0.00	0.00	56.7	0.00	0.00	0.000
AUG	0.98	5.80	0.00	0.00	0.00	3.57	0.26	0.00	2.23	0.32	0.09	0.30	0.00	59.7	0.00	0.00	0.000
SEP	0.66	4.89	0.00	0.00	0.00	3.06	0.08	0.00	2.09	0.16	0.24	0.18	0.00	57.9	0.13	0.00	0.000
OCT	0.96	4.40	0.00	0.00	0.00	2.82	0.65	0.00	1.83	0.55	-0.29	0.06	0.00	55.9	0.47	0.00	0.000
NOV	1.02	3.45	0.00	0.00	0.00	2.16	0.44	0.00	1.53	0.40	0.06	0.12	0.00	56.2	0.30	0.00	0.000
DEC	2.17	2.85	0.00	0.00	0.00	1.71	0.04	0.00	1.42	0.12	1.78	0.23	0.00	48.4	1.08	0.00	0.000

FOLLOWING ARE YEAR END TOTALS FOR MODELED REGION FOR YEAR 1976

PRECIP	POTET	CHGINT	RUNOFF	RECHRG	SOLPEV	ACTSEV	SNWEVP	PPLTR	APLTR	CHGSM	EVINT	CHGSNW	AVTMP	EHRM-RO	DEFCIT
11.73	55.14	0.00	0.01	0.00	34.22	2.99	0.00	24.68	4.46	1.80	2.48	0.00	53.28	3.62	0.00

FOLLOWING ARE MONTHLY TOTALS FOR MODELED REGION FOR YEAR 1977

MON	PRECIP	POTET	CHGINT	RUNOFF	RECHRG	SOLPEV	ACTSEV	SNWEVP	PPLTR	APLTR	CHGSM	EVINT	CHGSNW	AVTMP	EHRM-RO	DEFCIT
JAN	2.32	2.73	0.00	0.01	0.29	1.63	0.85	0.00	0.93	0.93	0.02	0.22	0.00	46.9	1.86	0.00
FEB	0.72	2.91	0.00	0.00	0.00	1.72	0.01	0.00	2.09	1.83	-1.39	0.27	0.00	50.8	0.00	0.00
MAR	1.95	4.22	0.00	0.00	0.00	2.39	0.67	0.00	2.19	1.05	-0.32	0.54	0.00	46.9	0.62	0.00
APR	0.09	5.40	0.00	0.00	0.00	3.46	0.00	0.00	2.99	0.21	-0.19	0.08	0.00	51.9	0.00	0.00
MAY	1.07	5.83	0.00	0.00	0.00	3.52	0.24	0.00	2.36	0.40	0.02	0.41	0.00	48.5	0.42	0.00
JUN	0.21	6.45	0.00	0.00	0.00	4.08	0.00	0.00	2.66	0.06	-0.02	0.17	0.00	52.4	0.07	0.00
JUL	0.00	6.11	0.00	0.00	0.00	3.97	0.00	0.00	2.52	0.01	-0.01	0.00	0.00	54.6	0.00	0.00
AUG	0.00	5.80	0.00	0.00	0.00	3.77	0.00	0.00	2.44	0.00	0.00	0.00	0.00	57.4	0.00	0.00
SEP	0.35	4.89	0.00	0.00	0.00	3.03	0.00	0.00	2.09	0.08	0.05	0.22	0.00	58.2	0.00	0.00
OCT	0.06	4.40	0.00	0.00	0.00	2.83	0.00	0.00	2.07	0.05	-0.04	0.05	0.00	55.0	0.00	0.00
NOV	0.56	3.45	0.00	0.00	0.00	2.18	0.09	0.00	1.68	0.34	0.03	0.10	0.00	54.5	0.00	0.00
DEC	4.89	2.85	0.00	0.01	0.20	1.38	0.58	0.00	0.92	0.28	3.10	0.73	0.00	52.2	3.04	0.00

FOLLOWING ARE YEAR END TOTALS FOR MODELED REGION FOR YEAR 1977

PRECIP	POTET	CHGINT	RUNOFF	RECHRG	SOLPEV	ACTSEV	SNWEVP	PPLTR	APLTR	CHGSM	EVINT	CHGSNW	AVTMP	EHRM-RO	DEFCIT
12.22	55.03	0.00	0.03	0.49	33.96	2.45	0.00	24.94	5.23	1.25	2.78	0.00	52.44	6.01	0.00

FOLLOWING ARE MONTHLY TOTALS FOR MODELED REGION FOR YEAR 1978

MON	PRECIP	POTET	CHGINT	RUNOFF	RECHRG	SOLPEV	ACTSEV	SNWEVP	PPLTR	APLTR	CHGSM	EVINT	CHGSNW	AVTMP	EHRM-RO	DEFCIT
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JAN	6.18	2.73	0.00	0.16	3.93	1.24	1.18	0.00	0.49	0.49	-0.41	0.82	0.00	51.6	5.26	0.00	0.000
FEB	4.73	2.91	0.00	0.44	2.13	1.53	0.85	0.00	1.31	1.31	-0.57	0.57	0.00	52.0	3.54	0.00	0.000
MAR	5.18	4.22	0.00	0.32	0.38	2.24	1.74	0.00	1.43	1.43	0.54	0.77	0.00	56.2	2.73	0.00	0.000
APR	4.99	5.40	0.00	0.32	0.31	3.09	2.49	0.00	1.55	1.53	-0.30	0.64	0.00	53.1	2.59	0.00	0.000
MAY	0.16	5.83	0.00	0.01	0.00	3.75	0.01	0.00	2.62	2.14	-2.06	0.06	0.00	55.4	0.05	0.00	0.000
JUN	0.00	6.45	0.00	0.00	0.00	4.19	0.00	0.00	2.73	0.34	-0.34	0.00	0.00	56.1	0.00	0.00	0.000
JUL	0.00	6.11	0.00	0.00	0.00	3.97	0.00	0.00	2.52	0.01	-0.01	0.00	0.00	57.3	0.00	0.00	0.000
AUG	0.00	5.80	0.00	0.00	0.00	3.77	0.00	0.00	2.44	0.00	0.00	0.00	0.00	58.5	0.00	0.00	0.000
SEP	0.31	4.89	0.00	0.00	0.00	3.10	0.00	0.00	2.14	0.18	0.01	0.12	0.00	60.2	0.10	0.00	0.000
OCT	0.00	4.40	0.00	0.00	0.00	2.86	0.00	0.00	2.10	0.01	-0.01	0.00	0.00	55.4	0.00	0.00	0.000
NOV	2.61	3.45	0.00	0.01	0.00	2.03	0.67	0.00	1.31	0.37	1.24	0.33	0.00	50.9	1.34	0.00	0.000
DEC	1.57	2.85	0.00	0.01	0.00	1.67	0.82	0.00	1.05	0.92	-0.47	0.28	0.00	45.5	0.64	0.00	0.000

FOLLOWING ARE YEAR END TOTALS FOR MODELED REGION FOR YEAR 1978

PRECIP	POTET	CHGINT	RUNOFF	RECHRG	SOLPEV	ACTSEV	SNWEVP	PPLTR	APLTR	CHGSM	EVINT	CHGSNW	AVTMP	EHRM-RO	DEFCIT
25.74	55.03	0.00	1.29	6.75	33.43	7.77	0.00	21.67	8.72	-2.36	3.60	0.00	54.37	16.25	-0.02

FOLLOWING ARE MONTHLY TOTALS FOR MODELED REGION FOR YEAR 1979

MON	PRECIP	POTET	CHGINT	RUNOFF	RECHRG	SOLPEV	ACTSEV	SNWEVP	PPLTR	APLTR	CHGSM	EVINT	CHGSNW	AVTMP	EHRM-RO	DEFCIT	
JAN	5.17	2.73	0.00	0.02	0.44	1.28	1.01	0.00	0.56	0.51	2.43	0.77	0.00	46.3	3.18	0.00	0.000
FEB	3.83	2.91	0.00	0.15	0.76	1.34	1.24	0.00	0.85	0.85	-0.02	0.84	0.00	47.7	2.38	0.00	0.000
MAR	4.13	4.22	0.00	0.20	0.32	2.23	1.65	0.00	1.49	1.49	-0.31	0.78	0.00	52.2	2.13	0.00	0.000
APR	0.62	5.40	0.00	0.02	0.00	3.37	0.35	0.00	2.74	2.41	-2.38	0.22	0.00	54.2	0.00	0.00	0.000
MAY	0.41	5.83	0.00	0.00	0.00	3.69	0.02	0.00	2.57	0.72	-0.47	0.15	0.00	55.1	0.15	0.00	0.000
JUN	0.00	6.45	0.00	0.00	0.00	4.19	0.00	0.00	2.73	0.03	-0.03	0.00	0.00	55.8	0.00	0.00	0.000
JUL	0.05	6.11	0.00	0.00	0.00	3.94	0.00	0.00	2.50	0.01	0.00	0.04	0.00	58.3	0.02	0.00	0.000
AUG	0.05	5.80	0.00	0.00	0.00	3.74	0.00	0.00	2.42	0.01	0.00	0.04	0.00	58.6	0.00	0.00	0.000

SEP	0.05	4.89	0.00	0.00	0.00	3.15	0.00	0.00	2.18	0.01	0.00	0.04	0.00	62.4	0.00	0.00	0.000
OCT	1.62	4.40	0.00	0.05	0.00	2.61	0.62	0.00	1.67	0.30	0.31	0.39	0.00	56.5	0.62	-0.05	0.000
NOV	2.18	3.45	0.00	0.00	0.00	1.92	1.12	0.00	1.05	0.60	-0.03	0.49	0.00	52.8	0.85	0.00	0.000
DEC	2.87	2.85	0.00	0.01	0.00	1.58	0.46	0.00	1.15	0.39	1.59	0.42	0.00	50.2	1.35	0.00	0.000

FOLLOWING ARE YEAR END TOTALS FOR MODELED REGION FOR YEAR 1979

PRECIP	POTET	CHGINT	RUNOFF	RECHRG	SOLPEV	ACTSEV	SNWEVP	PPLTR	APLTR	CHGSM	EVINT	CHGSNW	AVTMP	EHRM-RO	DEFCIT
20.97	55.03	0.00	0.46	1.52	33.06	6.46	0.00	21.91	7.33	1.09	4.17	0.00	54.21	10.68	-0.06

FOLLOWING ARE MONTHLY TOTALS FOR MODELED REGION FOR YEAR 1980

MON	PRECIP	POTET	CHGINT	RUNOFF	RECHRG	SOLPEV	ACTSEV	SNWEVP	PPLTR	APLTR	CHGSM	EVINT	CHGSNW	AVTMP	EHRM-RO	DEFCIT	
JAN	4.44	2.73	0.00	0.10	1.28	1.33	1.21	0.00	0.55	0.55	0.62	0.68	0.00	50.2	3.43	0.00	0.000
FEB	6.02	3.02	0.00	0.42	2.19	1.57	0.69	0.00	1.44	1.43	0.68	0.60	0.00	51.9	4.47	0.00	0.000
MAR	2.73	4.22	0.00	0.24	0.58	2.37	1.03	0.00	1.91	1.90	-1.60	0.57	0.00	49.9	1.52	0.00	0.000
APR	2.27	5.40	0.00	0.00	0.00	3.16	0.87	0.00	2.34	1.85	-1.01	0.54	0.00	53.7	0.75	0.00	0.000
MAY	0.67	5.83	0.00	0.00	0.00	3.62	0.10	0.00	2.47	0.81	-0.51	0.27	0.00	50.3	0.23	0.00	0.000
JUN	0.09	6.45	0.00	0.00	0.00	4.16	0.00	0.00	2.70	0.09	-0.04	0.05	0.00	55.0	0.04	0.00	0.000
JUL	0.88	6.11	0.00	0.00	0.00	3.90	0.37	0.00	2.35	0.40	0.01	0.11	0.00	58.4	0.34	0.00	0.000
AUG	0.00	5.80	0.00	0.00	0.00	3.77	0.00	0.00	2.45	0.01	-0.01	0.00	0.00	57.0	0.00	0.00	0.000
SEP	0.06	4.89	0.00	0.00	0.00	3.15	0.00	0.00	2.18	0.01	0.00	0.05	0.00	58.1	0.02	0.00	0.000
OCT	0.00	4.40	0.00	0.00	0.00	2.86	0.00	0.00	2.10	0.00	0.00	0.00	0.00	56.2	0.00	0.00	0.000
NOV	0.15	3.45	0.00	0.00	0.00	2.16	0.00	0.00	1.70	0.02	0.00	0.12	0.00	54.5	0.00	0.00	0.000
DEC	1.41	2.85	0.00	0.00	0.00	1.65	0.50	0.00	1.16	0.46	0.13	0.31	0.00	52.3	0.32	0.00	0.000

FOLLOWING ARE YEAR END TOTALS FOR MODELED REGION FOR YEAR 1980

PRECIP	POTET	CHGINT	RUNOFF	RECHRG	SOLPEV	ACTSEV	SNWEVP	PPLTR	APLTR	CHGSM	EVINT	CHGSNW	AVTMP	EHRM-RO	DEFCIT
18.71	55.14	0.00	0.78	4.06	33.70	4.78	0.00	23.35	7.54	-1.73	3.29	0.00	53.95	11.12	-0.01

FOLLOWING ARE MONTHLY TOTALS FOR MODELED REGION FOR YEAR 1981

MON	PRECIP	POTET	CHGINT	RUNOFF	RECHRG	SOLPEV	ACTSEV	SNWEVP	PPLTR	APLTR	CHGSM	EVINT	CHGSNW	AVTMP	EHRM-RO	DEFCIT
JAN	5.01	2.73	0.00	0.01	0.77	1.46	0.26	0.00	0.92	0.21	3.28	0.48	0.00	53.4	3.32	0.00
FEB	1.79	2.91	0.00	0.00	0.00	1.63	1.21	0.00	1.23	1.23	-1.06	0.41	0.00	52.4	0.43	0.00
MAR	4.58	4.22	0.00	0.10	0.20	2.13	1.96	0.00	1.20	1.19	0.19	0.93	0.00	49.4	2.19	0.00
APR	1.03	5.40	0.00	0.01	0.00	3.38	0.61	0.00	2.64	2.27	-2.05	0.21	0.00	52.4	0.37	0.00
MAY	0.05	5.83	0.00	0.00	0.00	3.76	0.00	0.00	2.63	0.49	-0.48	0.04	0.00	52.4	0.00	0.00
JUN	0.00	6.45	0.00	0.00	0.00	4.19	0.00	0.00	2.73	0.01	-0.01	0.00	0.00	58.6	0.00	0.00
JUL	0.00	6.11	0.00	0.00	0.00	3.97	0.00	0.00	2.52	0.00	0.00	0.00	0.00	55.9	0.00	0.00
AUG	0.00	5.80	0.00	0.00	0.00	3.77	0.00	0.00	2.44	0.00	0.00	0.00	0.00	56.1	0.00	0.00
SEP	0.00	4.89	0.00	0.00	0.00	3.18	0.00	0.00	2.19	0.00	0.00	0.00	0.00	55.9	0.00	0.00
OCT	1.03	4.40	0.00	0.00	0.00	2.74	0.32	0.00	1.89	0.16	0.38	0.18	0.00	52.7	0.34	0.00
NOV	4.02	3.45	0.00	0.01	0.00	1.89	1.11	0.00	1.02	0.61	1.75	0.54	0.00	53.8	2.11	0.00
DEC	1.81	2.85	0.00	0.00	0.00	1.66	0.72	0.00	1.09	1.02	-0.23	0.30	0.00	48.5	0.75	0.00

FOLLOWING ARE YEAR END TOTALS FOR MODELED REGION FOR YEAR 1981

PRECIP	POTET	CHGINT	RUNOFF	RECHRG	SOLPEV	ACTSEV	SNWEVP	PPLTR	APLTR	CHGSM	EVINT	CHGSNW	AVTMP	EHRM-RO	DEFCIT
19.32	55.03	0.00	0.14	0.97	33.77	6.18	0.00	22.50	7.19	1.76	3.08	0.00	53.45	9.51	0.00

FOLLOWING ARE MONTHLY TOTALS FOR MODELED REGION FOR YEAR 1982

MON	PRECIP	POTET	CHGINT	RUNOFF	RECHRG	SOLPEV	ACTSEV	SNWEVP	PPLTR	APLTR	CHGSM	EVINT	CHGSNW	AVTMP	EHRM-RO	DEFCIT
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JAN	3.90	2.73	0.00	0.31	0.29	1.30	1.20	0.00	0.49	0.49	0.88	0.73	0.00	42.9	2.33	0.00	0.000
FEB	2.43	2.91	0.00	0.10	0.10	1.55	0.93	0.00	1.29	1.28	-0.50	0.53	0.00	49.8	1.20	0.00	0.000
MAR	6.64	4.22	0.00	0.19	1.20	2.05	1.67	0.00	1.28	1.26	1.27	1.07	0.00	48.4	3.85	0.00	0.000
APR	1.78	5.40	0.00	0.51	0.12	3.15	1.17	0.00	2.15	2.01	-2.58	0.56	0.00	52.2	0.84	-0.01	0.000
MAY	0.05	5.83	0.00	0.00	0.00	3.76	0.00	0.00	2.63	0.93	-0.92	0.04	0.00	50.5	0.02	0.00	0.000
JUN	0.17	6.45	0.00	0.00	0.00	4.15	0.00	0.00	2.70	0.06	0.05	0.06	0.00	52.0	0.05	0.00	0.000
JUL	0.17	6.11	0.00	0.00	0.00	3.90	0.00	0.00	2.47	0.10	-0.03	0.10	0.00	52.3	0.05	0.00	0.000
AUG	0.00	5.80	0.00	0.00	0.00	3.77	0.00	0.00	2.44	0.06	-0.06	0.00	0.00	52.9	0.00	0.00	0.000
SEP	1.38	4.89	0.00	0.00	0.00	3.06	0.65	0.00	1.87	0.21	0.34	0.18	0.00	56.6	0.53	0.00	0.000
OCT	2.11	4.40	0.00	0.01	0.00	2.61	0.45	0.00	1.73	0.44	0.83	0.39	0.00	56.0	0.89	0.00	0.000
NOV	5.54	3.45	0.00	0.08	0.35	1.82	1.76	0.00	0.71	0.67	2.04	0.65	0.00	50.9	3.27	0.00	0.000
DEC	3.17	2.85	0.00	0.25	0.91	1.55	1.21	0.00	0.78	0.78	-0.44	0.46	0.00	48.6	2.13	0.00	0.000

FOLLOWING ARE YEAR END TOTALS FOR MODELED REGION FOR YEAR 1982

PRECIP	POTET	CHGINT	RUNOFF	RECHRG	SOLPEV	ACTSEV	SNWEVP	PPLTR	APLTR	CHGSM	EVINT	CHGSNW	AVTMP	EHRM-RO	DEFCIT
27.35	55.03	0.00	1.47	2.96	32.68	9.03	0.00	20.55	8.28	0.88	4.76	0.00	51.08	15.15	-0.03

FOLLOWING ARE MONTHLY TOTALS FOR MODELED REGION FOR YEAR 1983

MON	PRECIP	POTET	CHGINT	RUNOFF	RECHRG	SOLPEV	ACTSEV	SNWEVP	PPLTR	APLTR	CHGSM	EVINT	CHGSNW	AVTMP	EHRM-RO	DEFCIT	
JAN	6.59	2.73	0.00	0.72	3.26	1.33	0.66	0.00	0.69	0.69	0.58	0.68	0.00	51.2	5.30	0.00	0.000
FEB	5.52	2.91	0.00	0.83	1.43	1.33	1.33	0.00	0.79	0.79	0.28	0.86	0.00	52.7	3.74	0.00	0.000
MAR	7.99	4.22	0.00	2.23	2.40	1.96	1.96	0.00	1.01	1.01	-0.81	1.20	0.00	53.7	5.83	0.00	0.000
APR	3.76	5.40	0.00	0.42	0.00	2.83	0.88	0.00	2.07	1.97	-0.47	1.05	0.00	53.9	1.55	-0.09	0.000
MAY	0.44	5.83	0.00	0.18	0.00	3.66	0.66	0.00	2.29	1.59	-2.10	0.20	0.00	55.3	0.16	-0.09	0.000
JUN	0.56	6.45	0.00	0.02	0.00	4.06	0.02	0.00	2.64	0.57	-0.23	0.20	0.00	58.4	0.20	-0.02	0.000
JUL	0.00	6.11	0.00	0.01	0.00	3.97	0.00	0.00	2.52	0.02	-0.02	0.00	0.00	60.9	0.00	-0.01	0.000
AUG	0.15	5.80	0.00	0.01	0.00	3.71	0.00	0.00	2.40	0.05	0.01	0.09	0.00	62.9	0.05	-0.01	0.000

SEP	0.15	4.89	0.00	0.01	0.00	3.12	0.00	0.00	2.15	0.02	0.04	0.09	0.00	64.5	0.05	0.00	0.000
OCT	1.02	4.40	0.00	0.01	0.00	2.64	0.26	0.00	1.84	0.41	0.02	0.34	0.00	60.6	0.43	0.00	0.000
NOV	4.38	3.45	0.00	0.02	0.00	1.73	1.04	0.00	0.92	0.44	2.09	0.79	0.00	53.6	2.14	0.00	0.000
DEC	4.00	2.85	0.00	0.12	0.32	1.31	1.26	0.00	0.55	0.55	0.90	0.84	0.00	50.0	2.24	0.00	0.000

FOLLOWING ARE YEAR END TOTALS FOR MODELED REGION FOR YEAR 1983

PRECIP	POTET	CHGINT	RUNOFF	RECHRG	SOLPEV	ACTSEV	SNWEVP	PPLTR	APLTR	CHGSM	EVINT	CHGSNW	AVTMP	EHRM-RO	DEFCIT
34.56	55.03	0.00	4.57	7.41	31.65	8.07	0.00	19.87	8.11	0.28	6.34	0.00	56.47	21.70	-0.22

FOLLOWING ARE MONTHLY TOTALS FOR MODELED REGION FOR YEAR 1984

MON	PRECIP	POTET	CHGINT	RUNOFF	RECHRG	SOLPEV	ACTSEV	SNWEVP	PPLTR	APLTR	CHGSM	EVINT	CHGSNW	AVTMP	EHRM-RO	DEFCIT
JAN	0.38	2.73	0.00	0.13	0.00	1.67	0.65	0.00	1.01	1.00	-1.55	0.15	0.00	48.1	0.15	0.00
FEB	2.31	3.02	0.00	0.01	0.00	1.65	0.92	0.00	1.40	1.27	-0.36	0.47	0.00	50.7	0.37	0.00
MAR	1.62	4.22	0.00	0.00	0.00	2.46	0.34	0.00	2.44	1.42	-0.58	0.43	0.00	55.5	0.00	0.00
APR	0.81	5.40	0.00	0.00	0.00	3.33	0.11	0.00	2.80	0.92	-0.50	0.28	0.00	54.2	0.00	0.00
MAY	2.06	5.83	0.00	0.00	0.00	3.54	0.62	0.00	2.23	0.85	0.20	0.38	0.00	56.6	0.00	0.00
JUN	0.27	6.45	0.00	0.00	0.00	4.09	0.00	0.00	2.66	0.38	-0.26	0.15	0.00	55.8	0.00	0.00
JUL	0.00	6.11	0.00	0.00	0.00	3.97	0.00	0.00	2.51	0.01	-0.01	0.00	0.00	60.1	0.00	0.00
AUG	0.00	5.80	0.00	0.00	0.00	3.77	0.00	0.00	2.45	0.00	0.00	0.00	0.00	59.4	0.00	0.00
SEP	0.00	4.89	0.00	0.00	0.00	3.18	0.00	0.00	2.20	0.00	0.00	0.00	0.00	63.3	0.00	0.00
OCT	1.77	4.40	0.00	0.00	0.00	2.68	0.69	0.00	1.70	0.67	0.12	0.29	0.00	55.1	0.43	0.00
NOV	3.94	3.45	0.00	0.00	0.00	1.62	1.18	0.00	0.79	0.49	1.31	0.95	0.00	51.3	0.49	0.00
DEC	1.14	2.85	0.00	0.00	0.00	1.63	1.08	0.00	0.89	0.68	-0.96	0.34	0.00	46.3	0.18	0.00

FOLLOWING ARE YEAR END TOTALS FOR MODELED REGION FOR YEAR 1984

PRECIP	POTET	CHGINT	RUNOFF	RECHRG	SOLPEV	ACTSEV	SNWEVP	PPLTR	APLTR	CHGSM	EVINT	CHGSNW	AVTMP	EHRM-RO	DEFCIT
14.29	55.14	0.00	0.15	0.00	33.60	5.60	0.00	23.08	7.70	-2.59	3.44	0.00	54.71	1.63	0.00

FOLLOWING ARE MONTHLY TOTALS FOR MODELED REGION FOR YEAR 1985

MON	PRECIP	POTET	CHGINT	RUNOFF	RECHRG	SOLPEV	ACTSEV	SNWEVP	PPLTR	APLTR	CHGSM	EVINT	CHGSNW	AVTMP	EHRM-RO	DEFCIT
JAN	1.39	2.73	0.00	0.00	0.00	1.51	0.51	0.00	0.94	0.56	-0.08	0.41	0.00	45.7	0.00	0.00
FEB	1.70	2.91	0.00	0.00	0.00	1.52	0.50	0.00	1.53	0.73	-0.10	0.58	0.00	48.7	0.00	0.00
MAR	3.46	4.22	0.00	0.00	0.00	2.23	1.51	0.00	1.54	0.99	0.17	0.78	0.00	48.0	1.03	0.00
APR	0.94	5.40	0.00	0.00	0.00	3.33	0.23	0.00	2.77	0.81	-0.38	0.28	0.00	56.5	0.00	0.00
MAY	0.31	5.83	0.00	0.00	0.00	3.65	0.00	0.00	2.56	0.13	-0.02	0.21	0.00	52.6	0.00	0.00
JUN	0.20	6.45	0.00	0.00	0.00	4.12	0.00	0.00	2.68	0.14	-0.05	0.11	0.00	58.0	0.00	0.00
JUL	0.00	6.11	0.00	0.00	0.00	3.97	0.00	0.00	2.52	0.00	0.00	0.00	0.00	59.0	0.00	0.00
AUG	0.00	5.80	0.00	0.00	0.00	3.77	0.00	0.00	2.44	0.00	0.00	0.00	0.00	57.6	0.00	0.00
SEP	0.29	4.89	0.00	0.00	0.00	3.06	0.00	0.00	2.12	0.10	0.01	0.18	0.00	57.6	0.00	0.00
OCT	1.18	4.40	0.00	0.00	0.00	2.82	0.61	0.00	1.83	0.30	0.22	0.06	0.00	53.7	0.54	0.00
NOV	3.59	3.45	0.00	0.01	0.00	1.87	0.91	0.00	1.09	0.54	1.55	0.57	0.00	49.5	1.45	0.00
DEC	1.72	2.85	0.00	0.00	0.00	1.49	0.90	0.00	0.86	0.84	-0.57	0.55	0.00	49.9	0.04	0.00

FOLLOWING ARE YEAR END TOTALS FOR MODELED REGION FOR YEAR 1985

PRECIP	POTET	CHGINT	RUNOFF	RECHRG	SOLPEV	ACTSEV	SNWEVP	PPLTR	APLTR	CHGSM	EVINT	CHGSNW	AVTMP	EHRM-RO	DEFCIT
14.79	55.03	0.00	0.01	0.00	33.35	5.17	0.00	22.86	5.14	0.75	3.72	0.00	53.07	3.06	0.00

FOLLOWING ARE MONTHLY TOTALS FOR MODELED REGION FOR YEAR 1986

MON	PRECIP	POTET	CHGINT	RUNOFF	RECHRG	SOLPEV	ACTSEV	SNWEVP	PPLTR	APLTR	CHGSM	EVINT	CHGSNW	AVTMP	EHRM-RO	DEFCIT
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JAN	2.08	2.73	0.00	0.00	0.00	1.48	0.52	0.00	0.90	0.78	0.33	0.45	0.00	52.9	0.43	0.00	0.000
FEB	6.39	2.91	0.00	0.10	2.14	1.42	1.36	0.00	0.87	0.84	1.23	0.72	0.00	52.8	4.78	0.00	0.000
MAR	4.76	4.22	0.00	0.42	1.66	2.40	1.12	0.00	1.94	1.94	-0.90	0.53	0.00	55.1	3.30	0.00	0.000
APR	0.77	5.40	0.00	0.01	0.00	3.38	0.21	0.00	2.81	2.06	-1.71	0.21	0.00	53.8	0.32	0.00	0.000
MAY	0.26	5.83	0.00	0.00	0.00	3.72	0.00	0.00	2.60	0.30	-0.15	0.11	0.00	52.5	0.09	0.00	0.000
JUN	0.00	6.45	0.00	0.00	0.00	4.19	0.00	0.00	2.73	0.01	-0.01	0.00	0.00	56.2	0.00	0.00	0.000
JUL	0.05	6.11	0.00	0.00	0.00	3.94	0.00	0.00	2.50	0.01	0.00	0.04	0.00	56.5	0.02	0.00	0.000
AUG	0.00	5.80	0.00	0.00	0.00	3.77	0.00	0.00	2.44	0.00	0.00	0.00	0.00	57.4	0.00	0.00	0.000
SEP	0.77	4.89	0.00	0.00	0.00	3.07	0.18	0.00	2.05	0.17	0.25	0.17	0.00	55.5	0.28	0.00	0.000
OCT	1.12	4.40	0.00	0.00	0.00	2.49	0.20	0.00	1.74	0.46	-0.12	0.58	0.00	56.0	0.47	0.00	0.000
NOV	0.50	3.45	0.00	0.00	0.00	2.06	0.00	0.00	1.61	0.25	-0.04	0.28	0.00	54.9	0.18	0.00	0.000
DEC	1.06	2.85	0.00	0.00	0.00	1.59	0.11	0.00	1.29	0.44	0.10	0.40	0.00	49.3	0.33	0.00	0.000

FOLLOWING ARE YEAR END TOTALS FOR MODELED REGION FOR YEAR 1986

PRECIP	POTET	CHGINT	RUNOFF	RECHRG	SOLPEV	ACTSEV	SNWEVP	PPLTR	APLTR	CHGSM	EVINT	CHGSNW	AVTMP	EHRM-RO	DEFCIT
17.74	55.03	0.00	0.55	3.80	33.51	3.69	0.00	23.49	7.26	-1.02	3.47	0.00	54.42	10.20	-0.01

FOLLOWING ARE MONTHLY TOTALS FOR MODELED REGION FOR YEAR 1987

MON	PRECIP	POTET	CHGINT	RUNOFF	RECHRG	SOLPEV	ACTSEV	SNWEVP	PPLTR	APLTR	CHGSM	EVINT	CHGSNW	AVTMP	EHRM-RO	DEFCIT
JAN	2.81	2.73	0.00	0.00	0.00	1.39	1.06	0.00	0.62	0.45	0.71	0.58	0.00	47.1	0.95	0.00
FEB	3.03	2.91	0.00	0.01	0.00	1.64	1.21	0.00	1.24	1.16	0.26	0.39	0.00	50.5	1.60	0.00
MAR	2.60	4.22	0.00	0.00	0.00	2.44	1.16	0.00	1.99	1.59	-0.62	0.46	0.00	52.1	0.93	0.00
APR	0.66	5.40	0.00	0.00	0.00	3.35	0.02	0.00	2.89	0.65	-0.25	0.24	0.00	56.4	0.20	0.00
MAY	0.45	5.83	0.00	0.00	0.00	3.64	0.00	0.00	2.55	0.42	-0.20	0.23	0.00	54.4	0.16	0.00
JUN	0.00	6.45	0.00	0.00	0.00	4.19	0.00	0.00	2.73	0.11	-0.11	0.00	0.00	54.6	0.00	0.00
JUL	0.00	6.11	0.00	0.00	0.00	3.97	0.00	0.00	2.52	0.00	0.00	0.00	0.00	55.5	0.00	0.00
AUG	0.00	5.80	0.00	0.00	0.00	3.77	0.00	0.00	2.44	0.00	0.00	0.00	0.00	57.9	0.00	0.00

SEP	0.00	4.89	0.00	0.00	0.00	3.18	0.00	0.00	2.19	0.00	0.00	0.00	0.00	57.8	0.00	0.00	0.000
OCT	0.96	4.40	0.00	0.00	0.00	2.67	0.11	0.00	1.91	0.11	0.45	0.30	0.00	58.0	0.00	0.00	0.000
NOV	2.23	3.45	0.00	0.00	0.00	1.82	0.89	0.00	1.06	0.59	0.11	0.65	0.00	53.6	0.13	0.00	0.000
DEC	3.59	2.85	0.00	0.00	0.00	1.35	1.21	0.00	0.60	0.51	1.09	0.78	0.00	47.3	1.01	0.00	0.000

FOLLOWING ARE YEAR END TOTALS FOR MODELED REGION FOR YEAR 1987

PRECIP	POTET	CHGINT	RUNOFF	RECHRG	SOLPEV	ACTSEV	SNWEVP	PPLTR	APLTR	CHGSM	EVINT	CHGSNW	AVTMP	EHRM-RO	DEFCIT
16.34	55.03	0.00	0.02	0.00	33.41	5.67	0.00	22.73	5.58	1.45	3.63	0.00	53.78	5.00	0.00

FOLLOWING ARE MONTHLY TOTALS FOR MODELED REGION FOR YEAR 1988

MON	PRECIP	POTET	CHGINT	RUNOFF	RECHRG	SOLPEV	ACTSEV	SNWEVP	PPLTR	APLTR	CHGSM	EVINT	CHGSNW	AVTMP	EHRM-RO	DEFCIT
JAN	1.65	2.73	0.00	0.00	0.00	1.54	1.36	0.00	0.62	0.55	-0.63	0.36	0.00	49.2	0.52	0.000
FEB	0.21	3.02	0.00	0.00	0.00	1.88	0.12	0.00	2.25	0.88	-0.91	0.12	0.00	52.9	0.03	0.000
MAR	0.98	4.22	0.00	0.00	0.00	2.58	0.29	0.00	2.56	0.54	-0.09	0.24	0.00	54.5	0.13	0.000
APR	1.44	5.40	0.00	0.00	0.00	3.28	0.47	0.00	2.61	0.49	0.11	0.36	0.00	56.0	0.26	0.000
MAY	0.57	5.83	0.00	0.00	0.00	3.63	0.00	0.00	2.52	0.32	0.01	0.24	0.00	53.2	0.03	0.000
JUN	0.10	6.45	0.00	0.00	0.00	4.15	0.00	0.00	2.70	0.16	-0.12	0.06	0.00	56.0	0.00	0.000
JUL	0.00	6.11	0.00	0.00	0.00	3.97	0.00	0.00	2.51	0.01	-0.01	0.00	0.00	59.3	0.00	0.000
AUG	0.00	5.80	0.00	0.00	0.00	3.77	0.00	0.00	2.45	0.00	0.00	0.00	0.00	58.3	0.00	0.000
SEP	0.00	4.89	0.00	0.00	0.00	3.18	0.00	0.00	2.20	0.00	0.00	0.00	0.00	57.4	0.00	0.000
OCT	0.00	4.40	0.00	0.00	0.00	2.86	0.00	0.00	2.10	0.00	0.00	0.00	0.00	55.3	0.00	0.000
NOV	1.59	3.45	0.00	0.00	0.00	2.01	0.47	0.00	1.38	0.37	0.39	0.36	0.00	52.9	0.00	0.000
DEC	2.47	2.85	0.00	0.00	0.00	1.59	0.32	0.00	1.21	0.38	1.36	0.40	0.00	47.3	1.22	0.000

FOLLOWING ARE YEAR END TOTALS FOR MODELED REGION FOR YEAR 1988

PRECIP	POTET	CHGINT	RUNOFF	RECHRG	SOLPEV	ACTSEV	SNWEVP	PPLTR	APLTR	CHGSM	EVINT	CHGSNW	AVTMP	EHRM-RO	DEFCIT
9.01	55.14	0.00	0.01	0.00	34.44	3.04	0.00	25.11	3.71	0.10	2.14	0.00	54.36	2.19	0.00

FOLLOWING ARE MONTHLY TOTALS FOR MODELED REGION FOR YEAR 1989

MON	PRECIP	POTET	CHGINT	RUNOFF	RECHRG	SOLPEV	ACTSEV	SNWEVP	PPLTR	APLTR	CHGSM	EVINT	CHGSNW	AVTMP	EHRM-RO	DEFCIT
JAN	1.28	2.73	0.00	0.00	0.00	1.54	0.90	0.00	0.84	0.81	-0.79	0.36	0.00	45.9	0.30	0.00
FEB	1.49	2.91	0.00	0.00	0.00	1.64	0.53	0.00	1.69	1.23	-0.66	0.39	0.00	46.0	0.63	0.00
MAR	2.24	4.22	0.00	0.00	0.00	2.43	0.74	0.00	2.17	1.12	-0.10	0.47	0.00	53.7	0.85	0.00
APR	1.07	5.40	0.00	0.00	0.00	3.34	0.34	0.00	2.75	0.44	0.02	0.27	0.00	57.4	0.41	0.00
MAY	0.22	5.83	0.00	0.00	0.00	3.71	0.00	0.00	2.59	0.31	-0.20	0.11	0.00	53.3	0.00	0.00
JUN	0.04	6.45	0.00	0.00	0.00	4.17	0.00	0.00	2.71	0.01	-0.01	0.04	0.00	56.6	0.00	0.00
JUL	0.00	6.11	0.00	0.00	0.00	3.97	0.00	0.00	2.52	0.00	0.00	0.00	0.00	55.8	0.00	0.00
AUG	0.00	5.80	0.00	0.00	0.00	3.77	0.00	0.00	2.44	0.00	0.00	0.00	0.00	56.6	0.00	0.00
SEP	1.44	4.89	0.00	0.00	0.00	2.99	0.38	0.00	1.92	0.36	0.40	0.30	0.00	56.7	0.00	0.00
OCT	1.31	4.40	0.00	0.00	0.00	2.68	0.63	0.00	1.72	0.53	-0.12	0.27	0.00	55.3	0.00	0.00
NOV	1.18	3.45	0.00	0.00	0.00	2.15	0.40	0.00	1.52	0.39	0.26	0.14	0.00	55.6	0.00	0.00
DEC	0.13	2.85	0.00	0.00	0.00	1.81	0.16	0.00	1.46	0.35	-0.44	0.06	0.00	51.1	0.00	0.00

FOLLOWING ARE YEAR END TOTALS FOR MODELED REGION FOR YEAR 1989

PRECIP	POTET	CHGINT	RUNOFF	RECHRG	SOLPEV	ACTSEV	SNWEVP	PPLTR	APLTR	CHGSM	EVINT	CHGSNW	AVTMP	EHRM-RO	DEFCIT
10.40	55.03	0.00	0.01	0.00	34.21	4.07	0.00	24.33	5.55	-1.64	2.40	0.00	53.69	2.19	0.00

FOLLOWING ARE MONTHLY TOTALS FOR MODELED REGION FOR YEAR 1990

MON	PRECIP	POTET	CHGINT	RUNOFF	RECHRG	SOLPEV	ACTSEV	SNWEVP	PPLTR	APLTR	CHGSM	EVINT	CHGSNW	AVTMP	EHRM-RO	DEFCIT
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JAN	2.61	2.73	0.00	0.00	0.00	1.50	0.82	0.00	0.79	0.51	0.87	0.41	0.00	48.2	0.01	0.00	0.000
FEB	2.52	2.91	0.00	0.01	0.00	1.67	1.34	0.00	1.20	1.09	-0.26	0.35	0.00	47.4	1.16	0.00	0.000
MAR	1.96	4.22	0.00	0.00	0.00	2.43	0.91	0.00	2.05	1.14	-0.58	0.48	0.00	51.7	0.50	0.00	0.000
APR	1.10	5.40	0.00	0.00	0.00	3.34	0.30	0.00	2.76	0.52	0.02	0.26	0.00	57.0	0.29	0.00	0.000
MAY	1.67	5.83	0.00	0.00	0.00	3.64	0.54	0.00	2.37	0.43	0.47	0.22	0.00	53.5	0.65	0.00	0.000
JUN	0.00	6.45	0.00	0.00	0.00	4.19	0.25	0.00	2.64	0.37	-0.62	0.00	0.00	56.3	0.00	0.00	0.000
JUL	0.00	6.11	0.00	0.00	0.00	3.97	0.00	0.00	2.52	0.01	-0.01	0.00	0.00	58.2	0.00	0.00	0.000
AUG	0.12	5.80	0.00	0.00	0.00	3.73	0.00	0.00	2.42	0.05	0.01	0.06	0.00	59.2	0.00	0.00	0.000
SEP	0.12	4.89	0.00	0.00	0.00	3.14	0.00	0.00	2.17	0.04	0.01	0.06	0.00	58.9	0.00	0.00	0.000
OCT	0.12	4.40	0.00	0.00	0.00	2.82	0.00	0.00	2.07	0.02	0.03	0.06	0.00	55.8	0.00	0.00	0.000
NOV	0.24	3.45	0.00	0.00	0.00	2.17	0.00	0.00	1.71	0.09	0.04	0.11	0.00	53.0	0.00	0.00	0.000
DEC	1.59	2.85	0.00	0.00	0.00	1.06	0.30	0.00	0.93	0.35	0.43	0.44	0.07	44.2	0.00	0.00	0.000

FOLLOWING ARE YEAR END TOTALS FOR MODELED REGION FOR YEAR 1990

PRECIP	POTET	CHGINT	RUNOFF	RECHRG	SOLPEV	ACTSEV	SNWEVP	PPLTR	APLTR	CHGSM	EVINT	CHGSNW	AVTMP	EHRM-RO	DEFCIT
12.03	55.03	0.00	0.01	0.00	33.67	4.46	0.00	23.62	4.63	0.42	2.45	0.07	53.64	2.61	0.00

FOLLOWING ARE MONTHLY TOTALS FOR MODELED REGION FOR YEAR 1991

MON	PRECIP	POTET	CHGINT	RUNOFF	RECHRG	SOLPEV	ACTSEV	SNWEVP	PPLTR	APLTR	CHGSM	EVINT	CHGSNW	AVTMP	EHRM-RO	DEFCIT
JAN	0.23	2.73	0.00	0.00	0.00	1.61	0.26	0.00	1.15	0.37	-0.44	0.11	-0.07	48.5	0.00	0.00
FEB	1.86	2.91	0.00	0.00	0.00	1.67	0.23	0.00	1.92	0.49	0.80	0.35	0.00	53.8	0.00	0.00
MAR	7.49	4.22	0.00	0.16	1.50	2.08	2.04	0.00	1.09	1.08	1.70	1.02	0.00	49.0	4.82	0.00
APR	0.47	5.40	0.00	0.00	0.00	3.39	0.14	0.00	2.87	2.37	-2.21	0.18	0.00	51.9	0.16	0.00
MAY	0.50	5.83	0.00	0.00	0.00	3.65	0.02	0.00	2.55	0.46	-0.19	0.21	0.00	50.7	0.02	0.00
JUN	0.00	6.45	0.00	0.00	0.00	4.19	0.00	0.00	2.73	0.18	-0.18	0.00	0.00	52.6	0.00	0.00
JUL	0.00	6.11	0.00	0.00	0.00	3.97	0.00	0.00	2.52	0.00	0.00	0.00	0.00	56.1	0.00	0.00
AUG	0.06	5.80	0.00	0.00	0.00	3.74	0.00	0.00	2.42	0.01	0.00	0.05	0.00	58.6	0.00	0.00

SEP	0.00	4.89	0.00	0.00	0.00	3.18	0.00	0.00	2.19	0.00	0.00	0.00	0.00	57.9	0.00	0.00	0.000
OCT	1.28	4.40	0.00	0.00	0.00	2.75	0.47	0.00	1.83	0.16	0.48	0.18	0.00	56.0	0.00	0.00	0.000
NOV	0.07	3.45	0.00	0.00	0.00	2.21	0.11	0.00	1.69	0.35	-0.44	0.05	0.00	54.5	0.00	0.00	0.000
DEC	3.63	2.85	0.00	0.00	0.00	1.60	0.15	0.00	1.29	0.31	2.77	0.39	0.00	49.2	1.44	0.00	0.000

FOLLOWING ARE YEAR END TOTALS FOR MODELED REGION FOR YEAR 1991

PRECIP	POTET	CHGINT	RUNOFF	RECHRG	SOLPEV	ACTSEV	SNWEVP	PPLTR	APLTR	CHGSM	EVINT	CHGSNW	AVTMP	EHRM-RO	DEFCIT
15.61	55.03	0.00	0.16	1.50	34.04	3.42	0.00	24.25	5.79	2.29	2.52	-0.07	53.21	6.45	0.00

FOLLOWING ARE MONTHLY TOTALS FOR MODELED REGION FOR YEAR 1992

MON	PRECIP	POTET	CHGINT	RUNOFF	RECHRG	SOLPEV	ACTSEV	SNWEVP	PPLTR	APLTR	CHGSM	EVINT	CHGSNW	AVTMP	EHRM-RO	DEFCIT
JAN	1.81	2.73	0.00	0.02	0.30	1.58	0.99	0.00	0.82	0.82	-0.62	0.30	0.00	49.2	1.20	0.00
FEB	5.47	3.02	0.00	0.50	1.90	1.48	0.83	0.00	1.24	1.24	0.25	0.74	0.00	54.3	3.96	0.00
MAR	3.20	4.22	0.00	0.12	0.04	2.28	1.22	0.00	1.73	1.71	-0.61	0.71	0.00	54.1	1.43	0.00
APR	0.00	5.40	0.00	0.00	0.00	3.51	0.00	0.00	3.01	1.76	-1.76	0.00	0.00	58.7	0.00	0.00
MAY	0.00	5.83	0.00	0.00	0.00	3.79	0.00	0.00	2.63	0.07	-0.07	0.00	0.00	56.8	0.00	0.00
JUN	0.12	6.45	0.00	0.00	0.00	4.16	0.00	0.00	2.70	0.05	0.01	0.05	0.00	57.2	0.00	0.00
JUL	0.02	6.11	0.00	0.00	0.00	3.96	0.00	0.00	2.51	0.02	-0.02	0.02	0.00	60.1	0.01	0.00
AUG	0.00	5.80	0.00	0.00	0.00	3.77	0.00	0.00	2.45	0.00	0.00	0.00	0.00	58.3	0.00	0.00
SEP	0.06	4.89	0.00	0.00	0.00	3.15	0.00	0.00	2.18	0.01	0.00	0.05	0.00	58.2	0.00	0.00
OCT	0.39	4.40	0.00	0.00	0.00	2.76	0.00	0.00	2.03	0.15	0.09	0.15	0.00	58.7	0.00	0.00
NOV	0.09	3.45	0.00	0.00	0.00	2.19	0.00	0.00	1.73	0.09	-0.08	0.08	0.00	54.2	0.00	0.00
DEC	4.46	2.85	0.00	0.01	0.00	1.43	1.22	0.00	0.67	0.57	2.01	0.65	0.00	47.0	1.51	0.00

FOLLOWING ARE YEAR END TOTALS FOR MODELED REGION FOR YEAR 1992

PRECIP	POTET	CHGINT	RUNOFF	RECHRG	SOLPEV	ACTSEV	SNWEVP	PPLTR	APLTR	CHGSM	EVINT	CHGSNW	AVTMP	EHRM-RO	DEFCIT
15.61	55.14	0.00	0.66	2.24	34.05	4.27	0.00	23.69	6.49	-0.79	2.75	0.00	55.56	8.11	-0.01

FOLLOWING ARE MONTHLY AVERAGES FOR MODELED REGION FOR SIMULATION

	PRECIP	POTET	CHGINT	RUNOFF	RECHRG	SOLPEV	ACTSEV	SNWEVP	PPLTR	APLTR	CHGSM	EVINT	CHGSNW	AVTMP	EHRM-RO	DEFCIT
JAN	2.77	2.73	0.00	0.11	0.65	1.47	0.84	0.00	0.78	0.59	0.13	0.45	0.00	48.25	1.64	0.00
FEB	2.95	2.94	0.00	0.16	0.62	1.58	0.76	0.00	1.45	1.15	-0.25	0.50	0.00	50.54	1.63	0.00
MAR	3.63	4.22	0.00	0.24	0.44	2.33	1.20	0.00	1.82	1.28	-0.15	0.63	0.00	51.44	1.85	0.00
APR	1.38	5.40	0.00	0.08	0.03	3.28	0.47	0.00	2.62	1.40	-0.93	0.35	0.00	53.88	0.48	-0.01
MAY	0.44	5.83	0.00	0.01	0.00	3.69	0.10	0.00	2.53	0.55	-0.38	0.16	0.00	52.99	0.10	-0.01
JUN	0.11	6.45	0.00	0.00	0.00	4.16	0.01	0.00	2.70	0.13	-0.09	0.05	0.00	55.70	0.02	0.00
JUL	0.07	6.11	0.00	0.00	0.00	3.95	0.02	0.00	2.50	0.04	-0.01	0.02	0.00	57.24	0.03	0.00
AUG	0.08	5.80	0.00	0.00	0.00	3.75	0.01	0.00	2.42	0.03	0.00	0.03	0.00	57.97	0.01	0.00
SEP	0.27	4.89	0.00	0.00	0.00	3.12	0.06	0.00	2.14	0.06	0.07	0.08	0.00	58.58	0.05	0.00
OCT	1.05	4.40	0.00	0.00	0.00	2.72	0.34	0.00	1.86	0.29	0.19	0.22	0.00	55.66	0.33	0.00
NOV	2.18	3.45	0.00	0.01	0.07	1.99	0.64	0.00	1.30	0.43	0.63	0.39	0.00	52.83	0.90	0.00
DEC	2.56	2.85	0.00	0.02	0.10	1.51	0.69	0.00	0.98	0.53	0.73	0.47	0.00	48.17	1.10	0.00

FOLLOWING ARE ANNUAL AVERAGES FOR MODELED REGION FOR SIMULATION

PRECIP	POTET	CHGINT	RUNOFF	RECHRG	SOLPEV	ACTSEV	SNWEVP	PPLTR	APLTR	CHGSM	EVINT	CHGSNW	AVTMP	EHRM-RO	DEFCIT
17.48	55.06	0.00	0.63	1.93	33.55	5.14	0.00	23.10	6.50	-0.06	3.37	0.00	53.61	8.14	-0.02

AVG ANNUAL RECHARGE DISTRIBUTION, HUNDRETHS OF INCHES

1 2 3 4 5

1 262 280 201 71 112

2 235 260 153 67 110

3 -1 105 122 122 56

4 -1 -1 127 -1 -1

AVG ANNUAL AET DISTRIBUTION, TENTHS OF INCHES

1 2 3 4 5

1 161 165 147 139 126

2 161 158 143 140 126

3 -1 146 134 134 127

4 -1 -1 132 -1 -1

Message: 43

To: WLocke@aol.com, mfeeney@ix.netcom.com

From: essert@nps.navy.mil (Chris Essert)

Subject: Run # 21

Date: Mon, 7 Aug 95 22:03:05 PDT

First, the following lines show the difference in the output listings between this run and the first initial so-called "Base Case Run":

4c4

< EL TORO BASIN WATER BALANCE STUDY - BASE RUN

> EL TORO BASIN STUDY - SENSITIVITY ANALYSIS - Gonzales ET - Alfalfa on Grassland

5.19

54c54

< ASUN (INTERCEPT)= -20.0 BSUN (SLOPE)=3.6360

> ASUN (INTERCEPT)= -20.0 BSUN (SLOPE)= 3.636

119,120c118,119

< OCT NOV DEC JAN FEB MAR

< 0.01 0.01 0.01 0.01 0.01 0.01

> JAN FEB MAR APR MAY JUN JUL AUG SEP OCT NOV DEC

> 0.05 0.07 0.13 0.17 0.17 0.26 0.25 0.24 0.18 0.14 0.09 0.06

159,160c158,159

< NUMBER OF GRASSLAND = 0

< NUMBER OF SAGEBRUSH = 15

> NUMBER OF GRASSLAND = 15

> NUMBER OF SAGEBRUSH = 0

(Please note that the only difference between this run and Run # 18 is that the land use has been changed from Sagebrush to Grassland).

The results of this run are:

EL TORO BASIN STUDY - SENSITIVITY ANALYSIS - Gonzales ET - Alfalfa on Grassland

FOLLOWING ARE MONTHLY TOTALS FOR MODELED REGION FOR YEAR 1970

	MON	PRECP	POTET	CHGINT	RUNOFF	RECHRG	SOLPEV	ACTSEV	SNWEVP	PPLTR	APLTR	CHGSM	EVINT	CHGSNW	AVTMP	EHRM-RO	DEFCIT
JAN		5.10	1.67	0.00	0.04	3.97	0.58	0.58	0.00	0.30	0.30	-0.21	0.42	0.00	50.8	4.44	0.00
FEB		3.25	2.02	0.00	0.01	1.56	0.63	0.59	0.00	0.55	0.55	0.19	0.34	0.00	51.3	2.18	0.00
MAR		2.38	4.06	0.00	0.26	1.57	0.78	0.47	0.00	2.21	1.92	-2.07	0.24	0.00	51.5	1.84	0.00

APR	0.89	5.04	0.00	0.01	0.00	0.38	0.00	0.00	3.55	0.81	-0.25	0.32	0.00	49.9	0.30	-0.01	0.000
MAY	0.10	5.42	0.00	0.01	0.00	0.15	0.00	0.00	4.25	0.11	-0.09	0.08	0.00	52.9	0.04	-0.01	0.000
JUN	0.00	7.92	0.00	0.01	0.00	0.03	0.00	0.00	6.46	0.00	0.00	0.00	0.00	53.4	0.00	-0.01	0.000
JUL	0.00	7.63	0.00	0.00	0.00	0.01	0.00	0.00	6.23	0.00	0.00	0.00	0.00	55.5	0.00	0.00	0.000
AUG	0.00	7.50	0.00	0.00	0.00	0.15	0.00	0.00	6.01	0.00	0.00	0.00	0.00	54.7	0.00	0.00	0.000
SEP	0.00	5.37	0.00	0.00	0.00	0.32	0.00	0.00	4.14	0.00	0.00	0.00	0.00	58.8	0.00	0.00	0.000
OCT	0.19	4.25	0.00	0.00	0.00	0.61	0.00	0.00	2.85	0.03	0.01	0.15	0.00	52.9	0.07	0.00	0.000
NOV	4.36	2.58	0.00	0.02	0.81	0.60	0.16	0.00	1.15	0.50	2.40	0.47	0.00	54.0	2.77	0.00	0.000
DEC	5.83	1.74	0.00	0.07	4.42	0.43	0.43	0.00	0.30	0.30	-0.07	0.69	0.00	46.6	5.06	0.00	0.000

FOLLOWING ARE YEAR END TOTALS FOR MODELED REGION FOR YEAR 1970

PRECIP	POTET	CHGINT	RUNOFF	RECHRG	SOLPEV	ACTSEV	SNWEVP	PPLTR	APLTR	CHGSM	EVINT	CHGSNW	AVTMP	EHRM-RO	DEFCIT
22.10	55.20	0.00	0.45	12.33	4.68	2.23	0.00	38.00	4.54	-0.11	2.71	0.00	52.69	16.68	-0.04

FOLLOWING ARE MONTHLY TOTALS FOR MODELED REGION FOR YEAR 1971

MON	PRECIP	POTET	CHGINT	RUNOFF	RECHRG	SOLPEV	ACTSEV	SNWEVP	PPLTR	APLTR	CHGSM	EVINT	CHGSNW	AVTMP	EHRM-RO	DEFCIT	
JAN	1.43	1.67	0.00	0.03	0.74	0.69	0.68	0.00	0.36	0.36	-0.56	0.18	0.00	46.7	1.03	0.00	0.000
FEB	0.91	2.02	0.00	0.01	0.00	0.69	0.42	0.00	0.72	0.71	-0.42	0.19	0.00	47.3	0.32	0.00	0.000
MAR	1.53	4.06	0.00	0.01	0.00	0.81	0.35	0.00	2.29	1.83	-0.85	0.18	0.00	49.1	0.66	0.00	0.000
APR	1.52	5.04	0.00	0.02	0.00	0.38	0.09	0.00	3.54	1.62	-0.45	0.25	0.00	49.7	0.54	-0.01	0.000
MAY	0.28	5.42	0.00	0.01	0.00	0.15	0.00	0.00	4.12	0.09	-0.05	0.24	0.00	49.2	0.10	-0.01	0.000
JUN	0.00	7.92	0.00	0.00	0.00	0.03	0.00	0.00	6.46	0.02	-0.02	0.00	0.00	53.8	0.00	0.00	0.000
JUL	0.04	7.63	0.00	0.00	0.00	0.01	0.00	0.00	6.20	0.00	0.00	0.04	0.00	54.4	0.01	0.00	0.000
AUG	0.03	7.50	0.00	0.00	0.00	0.15	0.00	0.00	5.99	0.00	0.00	0.03	0.00	58.2	0.01	0.00	0.000
SEP	0.22	5.37	0.00	0.00	0.00	0.31	0.00	0.00	4.06	0.03	0.10	0.10	0.00	58.5	0.00	0.00	0.000
OCT	0.23	4.25	0.00	0.00	0.00	0.62	0.00	0.00	2.85	0.16	-0.08	0.15	0.00	49.8	0.08	0.00	0.000
NOV	2.06	2.58	0.00	0.00	0.00	0.66	0.20	0.00	1.26	0.43	1.19	0.24	0.00	48.8	0.85	0.00	0.000
DEC	4.02	1.74	0.00	0.00	1.60	0.52	0.52	0.00	0.36	0.36	1.06	0.47	0.00	43.5	2.04	0.00	0.000

FOLLOWING ARE YEAR END TOTALS FOR MODELED REGION FOR YEAR 1971

PRECIP	POTET	CHGINT	RUNOFF	RECHRG	SOLPEV	ACTSEV	SNWEVP	PPLTR	APLTR	CHGSM	EVINT	CHGSNW	AVTMP	EHRM-RO	DEFCIT
12.28	55.20	0.00	0.09	2.34	5.01	2.26	0.00	38.21	5.61	-0.07	2.07	0.00	50.76	5.64	-0.03

FOLLOWING ARE MONTHLY TOTALS FOR MODELED REGION FOR YEAR 1972

MON	PRECIP	POTET	CHGINT	RUNOFF	RECHRG	SOLPEV	ACTSEV	SNWEVP	PPLTR	APLTR	CHGSM	EVINT	CHGSNW	AVTMP	EHRM-RO	DEFCIT
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JAN	1.00	1.67	0.00	0.00	0.00	0.70	0.64	0.00	0.38	0.38	-0.19	0.16	0.00	46.7	0.41	0.00	0.000
FEB	0.74	2.09	0.00	0.00	0.07	0.73	0.60	0.00	0.72	0.71	-0.75	0.11	0.00	51.3	0.28	0.00	0.000
MAR	0.62	4.06	0.00	0.00	0.00	0.79	0.09	0.00	2.50	1.55	-1.18	0.16	0.00	53.1	0.00	0.00	0.000
APR	0.71	5.04	0.00	0.00	0.00	0.37	0.00	0.00	3.63	0.59	-0.12	0.24	0.00	52.9	0.00	0.00	0.000
MAY	0.18	5.42	0.00	0.00	0.00	0.15	0.00	0.00	4.21	0.08	-0.03	0.13	0.00	53.0	0.00	0.00	0.000
JUN	0.00	7.92	0.00	0.00	0.00	0.03	0.00	0.00	6.46	0.00	0.00	0.00	0.00	54.2	0.00	0.00	0.000
JUL	0.00	7.63	0.00	0.00	0.00	0.01	0.00	0.00	6.23	0.00	0.00	0.00	0.00	58.8	0.00	0.00	0.000
AUG	0.00	7.50	0.00	0.00	0.00	0.16	0.00	0.00	6.01	0.00	0.00	0.00	0.00	58.8	0.00	0.00	0.000
SEP	0.00	5.37	0.00	0.00	0.00	0.33	0.00	0.00	4.13	0.00	0.00	0.00	0.00	59.7	0.00	0.00	0.000
OCT	2.10	4.25	0.00	0.00	0.00	0.62	0.27	0.00	2.55	1.22	0.31	0.30	0.00	56.8	0.92	0.00	0.000
NOV	6.04	2.58	0.00	0.04	2.92	0.63	0.55	0.00	0.93	0.85	1.25	0.43	0.00	51.1	4.60	0.00	0.000
DEC	2.63	1.74	0.00	0.00	0.73	0.40	0.38	0.00	0.37	0.37	0.74	0.40	0.00	44.2	1.51	0.00	0.000

FOLLOWING ARE YEAR END TOTALS FOR MODELED REGION FOR YEAR 1972

PRECIP	POTET	CHGINT	RUNOFF	RECHRG	SOLPEV	ACTSEV	SNWEVP	PPLTR	APLTR	CHGSM	EVINT	CHGSNW	AVTMP	EHRM-RO	DEFCIT
14.01	55.27	0.00	0.05	3.73	4.92	2.52	0.00	38.10	5.75	0.04	1.93	0.00	53.37	7.71	0.00

FOLLOWING ARE MONTHLY TOTALS FOR MODELED REGION FOR YEAR 1973

MON	PRECIP	POTET	CHGINT	RUNOFF	RECHRG	SOLPEV	ACTSEV	SNWEVP	PPLTR	APLTR	CHGSM	EVINT	CHGSNW	AVTMP	EHRM-RO	DEFCIT
JAN	5.27	1.67	0.00	0.24	3.60	0.56	0.56	0.00	0.29	0.29	0.12	0.46	0.00	46.9	4.29	0.00
FEB	6.82	2.02	0.00	0.98	4.32	0.54	0.54	0.00	0.46	0.46	-0.06	0.58	0.00	52.2	5.78	0.00
MAR	5.30	4.06	0.00	0.89	2.27	0.70	0.68	0.00	1.75	1.75	-0.99	0.69	0.00	48.8	3.50	0.00
APR	0.36	5.04	0.00	0.06	0.00	0.38	0.02	0.00	3.64	1.48	-1.36	0.19	0.00	54.8	0.12	-0.03
MAY	0.06	5.42	0.00	0.01	0.00	0.16	0.00	0.00	4.28	0.03	-0.01	0.04	0.00	54.7	0.02	-0.01
JUN	0.05	7.92	0.00	0.01	0.00	0.03	0.00	0.00	6.42	0.01	0.00	0.04	0.00	57.7	0.02	-0.01
JUL	0.00	7.63	0.00	0.01	0.00	0.01	0.00	0.00	6.23	0.00	0.00	0.00	0.00	55.9	0.00	-0.01
AUG	0.00	7.50	0.00	0.01	0.00	0.15	0.00	0.00	6.01	0.00	0.00	0.00	0.00	56.3	0.00	-0.01
SEP	0.12	5.37	0.00	0.01	0.00	0.31	0.00	0.00	4.07	0.03	0.00	0.09	0.00	58.1	0.03	0.00
OCT	2.08	4.25	0.00	0.01	0.00	0.61	0.29	0.00	2.57	1.33	0.20	0.25	0.00	55.7	0.84	0.00
NOV	4.36	2.58	0.00	0.01	0.46	0.58	0.47	0.00	0.93	0.71	2.17	0.53	0.00	51.4	2.47	0.00
DEC	4.66	1.74	0.00	0.02	3.29	0.58	0.57	0.00	0.42	0.42	0.05	0.31	0.00	50.4	3.77	0.00

FOLLOWING ARE YEAR END TOTALS FOR MODELED REGION FOR YEAR 1973

PRECIP	POTET	CHGINT	RUNOFF	RECHRG	SOLPEV	ACTSEV	SNWEVP	PPLTR	APLTR	CHGSM	EVINT	CHGSNW	AVTMP	EHRM-RO	DEFCIT
29.06	55.20	0.00	2.24	13.94	4.61	3.15	0.00	37.08	6.50	0.12	3.19	0.00	53.55	20.84	-0.07

FOLLOWING ARE MONTHLY TOTALS FOR MODELED REGION FOR YEAR 1974

MON	PRECIP	POTET	CHGINT	RUNOFF	RECHRG	SOLPEV	ACTSEV	SNWEVP	PPLTR	APLTR	CHGSM	EVINT	CHGSNW	AVTMP	EHRM-RO	DEFCIT
JAN	3.74	1.67	0.00	0.56	2.53	0.62	0.62	0.00	0.32	0.32	-0.62	0.33	0.00	48.0	3.20	0.00
FEB	0.91	2.02	0.00	0.00	0.00	0.66	0.42	0.00	0.68	0.67	-0.45	0.27	0.00	49.9	0.13	0.00
MAR	4.12	4.06	0.00	0.03	0.51	0.75	0.55	0.00	2.00	1.88	0.70	0.45	0.00	53.1	1.35	0.00
APR	2.82	5.04	0.00	0.32	1.31	0.37	0.16	0.00	3.39	2.52	-1.84	0.38	0.00	54.0	1.80	-0.02
MAY	0.00	5.42	0.00	0.00	0.00	0.16	0.00	0.00	4.31	0.21	-0.21	0.00	0.00	52.8	0.00	0.00
JUN	0.33	7.92	0.00	0.01	0.00	0.03	0.00	0.00	6.41	0.27	0.00	0.06	0.00	56.8	0.14	-0.01
JUL	0.19	7.63	0.00	0.00	0.00	0.01	0.00	0.00	6.16	0.10	0.00	0.09	0.00	58.8	0.08	0.00
AUG	0.06	7.50	0.00	0.00	0.00	0.15	0.00	0.00	5.98	0.01	0.01	0.04	0.00	58.9	0.00	0.00
SEP	0.00	5.37	0.00	0.00	0.00	0.32	0.00	0.00	4.14	0.01	-0.01	0.00	0.00	58.7	0.00	0.00
OCT	1.91	4.25	0.00	0.00	0.00	0.59	0.09	0.00	2.64	0.61	0.84	0.37	0.00	57.7	0.79	0.00
NOV	0.77	2.58	0.00	0.00	0.00	0.66	0.38	0.00	1.14	0.71	-0.58	0.26	0.00	54.3	0.27	0.00
DEC	2.81	1.74	0.00	0.00	0.01	0.55	0.52	0.00	0.41	0.36	1.53	0.39	0.00	46.5	1.42	0.00

FOLLOWING ARE YEAR END TOTALS FOR MODELED REGION FOR YEAR 1974

PRECIP	POTET	CHGINT	RUNOFF	RECHRG	SOLPEV	ACTSEV	SNWEVP	PPLTR	APLTR	CHGSM	EVINT	CHGSNW	AVTMP	EHRM-RO	DEFCIT
17.65	55.20	0.00	0.94	4.36	4.86	2.74	0.00	37.57	7.64	-0.63	2.63	0.00	54.14	9.18	-0.04

FOLLOWING ARE MONTHLY TOTALS FOR MODELED REGION FOR YEAR 1975

MON	PRECIP	POTET	CHGINT	RUNOFF	RECHRG	SOLPEV	ACTSEV	SNWEVP	PPLTR	APLTR	CHGSM	EVINT	CHGSNW	AVTMP	EHRM-RO	DEFCIT
JAN	1.34	1.67	0.00	0.00	0.18	0.70	0.68	0.00	0.37	0.36	-0.04	0.16	0.00	47.8	0.00	0.00
FEB	3.19	2.02	0.00	0.00	1.55	0.61	0.61	0.00	0.54	0.54	0.12	0.36	0.00	49.4	1.77	0.00
MAR	5.21	4.06	0.00	0.28	1.98	0.72	0.69	0.00	1.83	1.83	-0.13	0.56	0.00	50.0	3.23	0.00
APR	1.71	5.04	0.00	0.02	0.00	0.34	0.12	0.00	3.14	2.32	-1.51	0.76	0.00	49.0	0.34	0.00
MAY	0.00	5.42	0.00	0.00	0.00	0.16	0.00	0.00	4.31	0.23	-0.23	0.00	0.00	52.6	0.00	0.00
JUN	0.23	7.92	0.00	0.00	0.00	0.03	0.00	0.00	6.31	0.05	0.00	0.18	0.00	54.1	0.00	0.00
JUL	0.10	7.63	0.00	0.00	0.00	0.01	0.00	0.00	6.18	0.04	0.00	0.06	0.00	56.1	0.03	0.00
AUG	0.27	7.50	0.00	0.00	0.00	0.15	0.00	0.00	5.90	0.12	0.00	0.14	0.00	56.9	0.09	0.00
SEP	0.00	5.37	0.00	0.00	0.00	0.32	0.00	0.00	4.14	0.00	0.00	0.00	0.00	56.8	0.00	0.00
OCT	1.75	4.25	0.00	0.00	0.00	0.60	0.13	0.00	2.68	0.48	0.87	0.27	0.00	52.3	0.64	0.00
NOV	0.87	2.58	0.00	0.00	0.00	0.67	0.42	0.00	1.15	0.72	-0.46	0.19	0.00	49.9	0.27	0.00
DEC	0.46	1.74	0.00	0.00	0.00	0.67	0.18	0.00	0.70	0.35	-0.17	0.10	0.00	47.7	0.16	0.00

FOLLOWING ARE YEAR END TOTALS FOR MODELED REGION FOR YEAR 1975

PRECIP	POTET	CHGINT	RUNOFF	RECHRG	SOLPEV	ACTSEV	SNWEVP	PPLTR	APLTR	CHGSM	EVINT	CHGSNW	AVTMP	EHRM-RO	DEFCIT
15.13	55.20	0.00	0.31	3.71	4.98	2.84	0.00	37.25	7.06	-1.56	2.79	0.00	51.90	6.53	-0.01

FOLLOWING ARE MONTHLY TOTALS FOR MODELED REGION FOR YEAR 1976

MON	PREC	POTET	CHGINT	RUNOFF	RECHRG	SOLPEV	ACTSEV	SNWEVP	PPLTR	APLTR	CHGSM	EVINT	CHGSNW	AVTMP	EHRM-RO	DEFCIT
JAN	0.20	1.67	0.00	0.00	0.00	0.74	0.01	0.00	0.67	0.21	-0.09	0.08	0.00	48.2	0.05	0.00
FEB	2.30	2.09	0.00	0.00	0.00	0.65	0.45	0.00	0.67	0.45	1.07	0.33	0.00	47.3	0.69	0.00
MAR	1.61	4.06	0.00	0.00	0.09	0.76	0.39	0.00	2.28	1.85	-0.95	0.23	0.00	47.4	1.05	0.00
APR	1.44	5.04	0.00	0.00	0.00	0.36	0.05	0.00	3.50	1.26	-0.24	0.37	0.00	51.5	0.17	0.00
MAY	0.32	5.42	0.00	0.00	0.00	0.14	0.00	0.00	4.17	0.17	-0.03	0.18	0.00	52.8	0.09	0.00
JUN	0.06	7.92	0.00	0.00	0.00	0.03	0.00	0.00	6.42	0.01	0.00	0.05	0.00	57.3	0.02	0.00
JUL	0.00	7.63	0.00	0.00	0.00	0.01	0.00	0.00	6.23	0.00	0.00	0.00	0.00	56.7	0.00	0.00
AUG	0.98	7.50	0.00	0.00	0.00	0.15	0.01	0.00	5.76	0.66	0.01	0.30	0.00	59.7	0.00	0.00
SEP	0.66	5.37	0.00	0.00	0.00	0.31	0.01	0.00	4.00	0.19	0.29	0.16	0.00	57.9	0.13	0.00
OCT	0.96	4.25	0.00	0.00	0.00	0.65	0.13	0.00	2.80	1.06	-0.28	0.05	0.00	55.9	0.48	0.00
NOV	1.02	2.58	0.00	0.00	0.00	0.72	0.27	0.00	1.30	0.48	0.19	0.09	0.00	56.2	0.30	0.00
DEC	2.17	1.74	0.00	0.00	0.03	0.66	0.02	0.00	0.76	0.16	1.82	0.13	0.00	48.4	1.15	0.00

FOLLOWING ARE YEAR END TOTALS FOR MODELED REGION FOR YEAR 1976

PREC	POTET	CHGINT	RUNOFF	RECHRG	SOLPEV	ACTSEV	SNWEVP	PPLTR	APLTR	CHGSM	EVINT	CHGSNW	AVTMP	EHRM-RO	DEFCIT
11.73	55.27	0.00	0.01	0.12	5.19	1.34	0.00	38.55	6.50	1.80	1.96	0.00	53.28	4.13	0.00

FOLLOWING ARE MONTHLY TOTALS FOR MODELED REGION FOR YEAR 1977

MON	PREC	POTET	CHGINT	RUNOFF	RECHRG	SOLPEV	ACTSEV	SNWEVP	PPLTR	APLTR	CHGSM	EVINT	CHGSNW	AVTMP	EHRM-RO	DEFCIT
JAN	2.32	1.67	0.00	0.01	1.67	0.72	0.65	0.00	0.40	0.40	-0.53	0.12	0.00	46.9	2.11	0.00
FEB	0.72	2.02	0.00	0.00	0.00	0.69	0.17	0.00	0.85	0.81	-0.43	0.18	0.00	50.8	0.00	0.00
MAR	1.95	4.06	0.00	0.00	0.00	0.75	0.30	0.00	2.16	1.76	-0.54	0.43	0.00	46.9	0.67	0.00
APR	0.09	5.04	0.00	0.00	0.00	0.39	0.00	0.00	3.74	0.54	-0.52	0.08	0.00	51.9	0.00	0.00
MAY	1.07	5.42	0.00	0.00	0.00	0.14	0.01	0.00	3.99	0.67	0.00	0.39	0.00	48.5	0.42	0.00
JUN	0.21	7.92	0.00	0.00	0.00	0.03	0.00	0.00	6.32	0.04	-0.01	0.17	0.00	52.4	0.07	0.00
JUL	0.00	7.63	0.00	0.00	0.00	0.01	0.00	0.00	6.23	0.00	0.00	0.00	0.00	54.6	0.00	0.00
AUG	0.00	7.50	0.00	0.00	0.00	0.15	0.00	0.00	6.01	0.00	0.00	0.00	0.00	57.4	0.00	0.00
SEP	0.35	5.37	0.00	0.00	0.00	0.30	0.00	0.00	3.98	0.11	0.03	0.21	0.00	58.2	0.00	0.00
OCT	0.06	4.25	0.00	0.00	0.00	0.63	0.00	0.00	2.93	0.04	-0.02	0.04	0.00	55.0	0.00	0.00
NOV	0.56	2.58	0.00	0.00	0.00	0.71	0.04	0.00	1.44	0.39	0.05	0.08	0.00	54.5	0.00	0.00
DEC	4.89	1.74	0.00	0.01	1.71	0.52	0.25	0.00	0.53	0.19	2.30	0.43	0.00	52.2	3.49	0.00

FOLLOWING ARE YEAR END TOTALS FOR MODELED REGION FOR YEAR 1977

PREC	POTET	CHGINT	RUNOFF	RECHRG	SOLPEV	ACTSEV	SNWEVP	PPLTR	APLTR	CHGSM	EVINT	CHGSNW	AVTMP	EHRM-RO	DEFCIT
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12.22 55.20 0.00 0.03 3.38 5.06 1.42 0.00 38.57 4.93 0.34 2.12 0.00 52.44 6.75 0.00

FOLLOWING ARE MONTHLY TOTALS FOR MODELED REGION FOR YEAR 1978

MON	PRECP	POTET	CHGINT	RUNOFF	RECHRG	SOLPEV	ACTSEV	SNWEVP	PPLTR	APLTR	CHGSM	EVINT	CHGSNW	AVTMP	EHRM-RO	DEFCIT
JAN	6.18	1.67	0.00	0.16	5.10	0.56	0.56	0.00	0.29	0.29	-0.39	0.45	0.00	51.6	5.55	0.00 0.000
FEB	4.73	2.02	0.00	0.44	3.11	0.62	0.61	0.00	0.55	0.55	-0.32	0.35	0.00	52.0	3.90	0.00 0.000
MAR	5.18	4.06	0.00	0.32	1.42	0.72	0.68	0.00	1.81	1.81	0.35	0.60	0.00	56.2	3.09	0.00 0.000
APR	4.99	5.04	0.00	0.32	1.13	0.35	0.33	0.00	3.10	3.10	-0.48	0.60	0.00	53.1	2.70	0.00 0.000
MAY	0.16	5.42	0.00	0.01	0.00	0.15	0.01	0.00	4.26	1.60	-1.52	0.06	0.00	55.4	0.05	0.00 0.000
JUN	0.00	7.92	0.00	0.00	0.00	0.03	0.00	0.00	6.46	0.01	-0.01	0.00	0.00	56.1	0.00	0.00 0.000
JUL	0.00	7.63	0.00	0.00	0.00	0.01	0.00	0.00	6.23	0.00	0.00	0.00	0.00	57.3	0.00	0.00 0.000
AUG	0.00	7.50	0.00	0.00	0.00	0.15	0.00	0.00	6.01	0.00	0.00	0.00	0.00	58.5	0.00	0.00 0.000
SEP	0.31	5.37	0.00	0.00	0.00	0.31	0.00	0.00	4.05	0.20	0.00	0.11	0.00	60.2	0.10	0.00 0.000
OCT	0.00	4.25	0.00	0.00	0.00	0.64	0.00	0.00	2.95	0.00	0.00	0.00	0.00	55.4	0.00	0.00 0.000
NOV	2.61	2.58	0.00	0.01	0.01	0.66	0.27	0.00	1.23	0.39	1.70	0.24	0.00	50.9	1.54	0.00 0.000
DEC	1.57	1.74	0.00	0.01	0.15	0.64	0.60	0.00	0.47	0.46	0.17	0.17	0.00	45.5	0.82	0.00 0.000

FOLLOWING ARE YEAR END TOTALS FOR MODELED REGION FOR YEAR 1978

PRECP	POTET	CHGINT	RUNOFF	RECHRG	SOLPEV	ACTSEV	SNWEVP	PPLTR	APLTR	CHGSM	EVINT	CHGSNW	AVTMP	EHRM-RO	DEFCIT
25.74	55.20	0.00	1.29	10.92	4.85	3.06	0.00	37.40	8.40	-0.50	2.59	0.00	54.37	17.76	-0.02

FOLLOWING ARE MONTHLY TOTALS FOR MODELED REGION FOR YEAR 1979

MON	PRECP	POTET	CHGINT	RUNOFF	RECHRG	SOLPEV	ACTSEV	SNWEVP	PPLTR	APLTR	CHGSM	EVINT	CHGSNW	AVTMP	EHRM-RO	DEFCIT
JAN	5.17	1.67	0.00	0.02	3.30	0.58	0.58	0.00	0.30	0.30	0.56	0.41	0.00	46.3	3.92	0.00 0.000
FEB	3.83	2.02	0.00	0.15	2.19	0.56	0.55	0.00	0.47	0.47	-0.08	0.55	0.00	47.7	2.86	0.00 0.000
MAR	4.13	4.06	0.00	0.20	1.14	0.72	0.66	0.00	1.80	1.80	-0.30	0.63	0.00	52.2	2.50	0.00 0.000
APR	0.62	5.04	0.00	0.02	0.00	0.38	0.09	0.00	3.58	2.20	-1.89	0.20	0.00	54.2	0.00	0.00 0.000
MAY	0.41	5.42	0.00	0.00	0.00	0.15	0.00	0.00	4.20	0.42	-0.16	0.14	0.00	55.1	0.15	0.00 0.000
JUN	0.00	7.92	0.00	0.00	0.00	0.03	0.00	0.00	6.46	0.00	0.00	0.00	0.00	55.8	0.00	0.00 0.000
JUL	0.05	7.63	0.00	0.00	0.00	0.01	0.00	0.00	6.20	0.01	0.00	0.04	0.00	58.3	0.02	0.00 0.000
AUG	0.05	7.50	0.00	0.00	0.00	0.15	0.00	0.00	5.98	0.01	0.00	0.04	0.00	58.6	0.00	0.00 0.000
SEP	0.05	5.37	0.00	0.00	0.00	0.32	0.00	0.00	4.11	0.01	0.00	0.04	0.00	62.4	0.00	0.00 0.000
OCT	1.62	4.25	0.00	0.05	0.00	0.59	0.22	0.00	2.59	0.67	0.41	0.32	0.00	56.5	0.62	-0.05 0.000
NOV	2.18	2.58	0.00	0.00	0.00	0.63	0.57	0.00	0.97	0.82	0.43	0.36	0.00	52.8	0.93	0.00 0.000
DEC	2.87	1.74	0.00	0.01	0.35	0.60	0.41	0.00	0.54	0.36	1.50	0.24	0.00	50.2	1.82	0.00 0.000

FOLLOWING ARE YEAR END TOTALS FOR MODELED REGION FOR YEAR 1979

PRECIP	POTET	CHGINT	RUNOFF	RECHRG	SOLPEV	ACTSEV	SNWEVP	PPLTR	APLTR	CHGSM	EVINT	CHGSNW	AVTMP	EHRM-RO	DEFCIT
20.97	55.20	0.00	0.46	6.98	4.73	3.08	0.00	37.19	7.05	0.47	2.98	0.00	54.21	12.82	-0.06

FOLLOWING ARE MONTHLY TOTALS FOR MODELED REGION FOR YEAR 1980

MON	PRECIP	POTET	CHGINT	RUNOFF	RECHRG	SOLPEV	ACTSEV	SNWEVP	PPLTR	APLTR	CHGSM	EVINT	CHGSNW	AVTMP	EHRM-RO	DEFCIT	
JAN	4.44	1.67	0.00	0.10	3.47	0.60	0.60	0.00	0.31	0.31	-0.41	0.37	0.00	50.2	3.98	0.00	0.000
FEB	6.02	2.09	0.00	0.42	3.73	0.64	0.51	0.00	0.61	0.61	0.36	0.38	0.00	51.9	4.98	0.00	0.000
MAR	2.73	4.06	0.00	0.24	1.12	0.72	0.52	0.00	2.04	1.95	-1.56	0.45	0.00	49.9	1.65	0.00	0.000
APR	2.27	5.04	0.00	0.00	0.00	0.35	0.09	0.00	3.35	1.96	-0.30	0.51	0.00	53.7	0.77	0.00	0.000
MAY	0.67	5.42	0.00	0.00	0.00	0.14	0.01	0.00	4.11	0.84	-0.44	0.26	0.00	50.3	0.23	0.00	0.000
JUN	0.09	7.92	0.00	0.00	0.00	0.03	0.00	0.00	6.42	0.05	0.00	0.05	0.00	55.0	0.04	0.00	0.000
JUL	0.88	7.63	0.00	0.00	0.00	0.01	0.00	0.00	6.14	0.78	0.00	0.11	0.00	58.4	0.34	0.00	0.000
AUG	0.00	7.50	0.00	0.00	0.00	0.16	0.00	0.00	6.01	0.00	0.00	0.00	0.00	57.0	0.00	0.00	0.000
SEP	0.06	5.37	0.00	0.00	0.00	0.33	0.00	0.00	4.09	0.01	0.00	0.04	0.00	58.1	0.02	0.00	0.000
OCT	0.00	4.25	0.00	0.00	0.00	0.66	0.00	0.00	2.94	0.00	0.00	0.00	0.00	56.2	0.00	0.00	0.000
NOV	0.15	2.58	0.00	0.00	0.00	0.71	0.00	0.00	1.44	0.04	0.01	0.10	0.00	54.5	0.00	0.00	0.000
DEC	1.41	1.74	0.00	0.00	0.00	0.63	0.52	0.00	0.48	0.35	0.34	0.20	0.00	52.3	0.36	0.00	0.000

FOLLOWING ARE YEAR END TOTALS FOR MODELED REGION FOR YEAR 1980

PRECIP	POTET	CHGINT	RUNOFF	RECHRG	SOLPEV	ACTSEV	SNWEVP	PPLTR	APLTR	CHGSM	EVINT	CHGSNW	AVTMP	EHRM-RO	DEFCIT
18.71	55.27	0.00	0.78	8.32	4.99	2.26	0.00	37.95	6.90	-1.99	2.47	0.00	53.95	12.37	-0.01

FOLLOWING ARE MONTHLY TOTALS FOR MODELED REGION FOR YEAR 1981

MON	PRECIP	POTET	CHGINT	RUNOFF	RECHRG	SOLPEV	ACTSEV	SNWEVP	PPLTR	APLTR	CHGSM	EVINT	CHGSNW	AVTMP	EHRM-RO	DEFCIT	
JAN	5.01	1.67	0.00	0.01	2.33	0.66	0.13	0.00	0.52	0.23	2.04	0.27	0.00	53.4	3.80	0.00	0.000
FEB	1.79	2.02	0.00	0.00	0.39	0.66	0.66	0.00	0.56	0.56	-0.08	0.26	0.00	52.4	0.65	0.00	0.000
MAR	4.58	4.06	0.00	0.10	1.67	0.69	0.68	0.00	1.71	1.71	-0.34	0.76	0.00	49.4	2.73	0.00	0.000
APR	1.03	5.04	0.00	0.01	0.00	0.39	0.13	0.00	3.56	2.52	-1.81	0.19	0.00	52.4	0.37	0.00	0.000
MAY	0.05	5.42	0.00	0.00	0.00	0.16	0.00	0.00	4.28	0.16	-0.16	0.04	0.00	52.4	0.00	0.00	0.000
JUN	0.00	7.92	0.00	0.00	0.00	0.03	0.00	0.00	6.46	0.00	0.00	0.00	0.00	58.6	0.00	0.00	0.000
JUL	0.00	7.63	0.00	0.00	0.00	0.01	0.00	0.00	6.23	0.00	0.00	0.00	0.00	55.9	0.00	0.00	0.000
AUG	0.00	7.50	0.00	0.00	0.00	0.15	0.00	0.00	6.01	0.00	0.00	0.00	0.00	56.1	0.00	0.00	0.000
SEP	0.00	5.37	0.00	0.00	0.00	0.32	0.00	0.00	4.14	0.00	0.00	0.00	0.00	55.9	0.00	0.00	0.000
OCT	1.03	4.25	0.00	0.00	0.00	0.62	0.11	0.00	2.78	0.31	0.47	0.15	0.00	52.7	0.35	0.00	0.000
NOV	4.02	2.58	0.00	0.01	0.72	0.62	0.43	0.00	1.05	0.72	1.75	0.38	0.00	53.8	2.62	0.00	0.000
DEC	1.81	1.74	0.00	0.00	0.37	0.63	0.60	0.00	0.47	0.47	0.20	0.17	0.00	48.5	0.94	0.00	0.000

FOLLOWING ARE YEAR END TOTALS FOR MODELED REGION FOR YEAR 1981

PRECIP	POTET	CHGINT	RUNOFF	RECHRG	SOLPEV	ACTSEV	SNWEVP	PPLTR	APLTR	CHGSM	EVINT	CHGSNW	AVTMP	EHRM-RO	DEFCIT
19.32	55.20	0.00	0.14	5.47	4.93	2.75	0.00	37.77	6.68	2.07	2.21	0.00	53.45	11.47	0.00

FOLLOWING ARE MONTHLY TOTALS FOR MODELED REGION FOR YEAR 1982

MON	PRECIP	POTET	CHGINT	RUNOFF	RECHRG	SOLPEV	ACTSEV	SNWEVP	PPLTR	APLTR	CHGSM	EVINT	CHGSNW	AVTMP	EHRM-RO	DEFCIT
JAN	3.90	1.67	0.00	0.31	2.46	0.58	0.58	0.00	0.29	0.29	-0.18	0.43	0.00	42.9	3.06	0.00
FEB	2.43	2.02	0.00	0.10	0.98	0.63	0.62	0.00	0.53	0.53	-0.16	0.35	0.00	49.8	1.59	0.00
MAR	6.64	4.06	0.00	0.19	2.98	0.67	0.67	0.00	1.65	1.65	0.30	0.86	0.00	48.4	4.49	0.00
APR	1.78	5.04	0.00	0.51	0.16	0.35	0.22	0.00	3.26	2.60	-2.20	0.51	0.00	52.2	0.85	-0.02
MAY	0.05	5.42	0.00	0.00	0.00	0.16	0.00	0.00	4.28	0.18	-0.18	0.04	0.00	50.5	0.02	0.00
JUN	0.17	7.92	0.00	0.00	0.00	0.03	0.00	0.00	6.41	0.06	0.05	0.06	0.00	52.0	0.05	0.00
JUL	0.17	7.63	0.00	0.00	0.00	0.01	0.00	0.00	6.15	0.08	-0.01	0.10	0.00	52.3	0.05	0.00
AUG	0.00	7.50	0.00	0.00	0.00	0.15	0.00	0.00	6.01	0.05	-0.05	0.00	0.00	52.9	0.00	0.00
SEP	1.38	5.37	0.00	0.00	0.00	0.31	0.10	0.00	3.94	0.75	0.37	0.17	0.00	56.6	0.55	0.00
OCT	2.11	4.25	0.00	0.01	0.00	0.58	0.15	0.00	2.63	0.72	0.91	0.33	0.00	56.0	0.93	0.00
NOV	5.54	2.58	0.00	0.08	2.39	0.59	0.59	0.00	0.90	0.89	1.13	0.46	0.00	50.9	3.98	0.00
DEC	3.17	1.74	0.00	0.25	1.97	0.59	0.59	0.00	0.42	0.42	-0.35	0.29	0.00	48.6	2.50	0.00

FOLLOWING ARE YEAR END TOTALS FOR MODELED REGION FOR YEAR 1982

PRECIP	POTET	CHGINT	RUNOFF	RECHRG	SOLPEV	ACTSEV	SNWEVP	PPLTR	APLTR	CHGSM	EVINT	CHGSNW	AVTMP	EHRM-RO	DEFCIT
27.35	55.20	0.00	1.47	10.95	4.65	3.52	0.00	36.48	8.23	-0.36	3.58	0.00	51.08	18.07	-0.04

FOLLOWING ARE MONTHLY TOTALS FOR MODELED REGION FOR YEAR 1983

MON	PRECIP	POTET	CHGINT	RUNOFF	RECHRG	SOLPEV	ACTSEV	SNWEVP	PPLTR	APLTR	CHGSM	EVINT	CHGSNW	AVTMP	EHRM-RO	DEFCIT
JAN	6.59	1.67	0.00	0.72	4.44	0.60	0.58	0.00	0.31	0.31	0.16	0.39	0.00	51.2	5.66	0.00
FEB	5.52	2.02	0.00	0.83	2.92	0.55	0.55	0.00	0.46	0.46	0.20	0.56	0.00	52.7	4.32	0.00
MAR	7.99	4.06	0.00	2.23	3.22	0.65	0.65	0.00	1.61	1.61	-0.66	0.95	0.00	53.7	5.92	0.00
APR	3.76	5.04	0.00	0.42	0.00	0.33	0.13	0.00	2.95	2.41	-0.07	0.98	0.00	53.9	1.65	-0.11
MAY	0.44	5.42	0.00	0.18	0.00	0.15	0.05	0.00	4.12	1.77	-1.68	0.19	0.00	55.3	0.18	-0.07
JUN	0.56	7.92	0.00	0.02	0.00	0.03	0.00	0.00	6.29	0.36	-0.01	0.20	0.00	58.4	0.20	-0.02
JUL	0.00	7.63	0.00	0.01	0.00	0.01	0.00	0.00	6.23	0.01	-0.01	0.00	0.00	60.9	0.00	-0.01
AUG	0.15	7.50	0.00	0.01	0.00	0.15	0.00	0.00	5.94	0.06	0.00	0.09	0.00	62.9	0.05	-0.01
SEP	0.15	5.37	0.00	0.01	0.00	0.31	0.00	0.00	4.07	0.02	0.04	0.09	0.00	64.5	0.05	0.00

OCT	1.02	4.25	0.00	0.01	0.00	0.60	0.05	0.00	2.71	0.66	0.01	0.30	0.00	60.6	0.43	0.00	0.000
NOV	4.38	2.58	0.00	0.02	0.86	0.56	0.38	0.00	0.97	0.51	2.05	0.57	0.00	53.6	2.75	0.00	0.000
DEC	4.00	1.74	0.00	0.12	2.19	0.50	0.50	0.00	0.36	0.36	0.32	0.51	0.00	50.0	2.96	0.00	0.000

FOLLOWING ARE YEAR END TOTALS FOR MODELED REGION FOR YEAR 1983

PRECIP	POTET	CHGINT	RUNOFF	RECHRG	SOLPEV	ACTSEV	SNWEVP	PPLTR	APLTR	CHGSM	EVINT	CHGSNW	AVTMP	EHRM-RO	DEFCIT
34.56	55.20	0.00	4.57	13.63	4.45	2.88	0.00	36.03	8.53	0.36	4.81	0.00	56.47	24.17	-0.23

FOLLOWING ARE MONTHLY TOTALS FOR MODELED REGION FOR YEAR 1984

MON	PRECIP	POTET	CHGINT	RUNOFF	RECHRG	SOLPEV	ACTSEV	SNWEVP	PPLTR	APLTR	CHGSM	EVINT	CHGSNW	AVTMP	EHRM-RO	DEFCIT
JAN	0.38	1.67	0.00	0.13	0.00	0.73	0.67	0.00	0.40	0.40	-0.91	0.09	0.00	48.1	0.16	0.00
FEB	2.31	2.09	0.00	0.01	0.31	0.66	0.53	0.00	0.64	0.64	-0.52	0.31	0.00	50.7	0.60	0.00
MAR	1.62	4.06	0.00	0.00	0.00	0.75	0.41	0.00	2.15	1.93	-1.08	0.36	0.00	55.5	0.00	0.00
APR	0.81	5.04	0.00	0.00	0.00	0.37	0.03	0.00	3.59	1.42	-0.90	0.26	0.00	54.2	0.00	0.00
MAY	2.06	5.42	0.00	0.00	0.05	0.14	0.03	0.00	4.00	1.57	0.04	0.37	0.00	56.6	0.00	0.00
JUN	0.27	7.92	0.00	0.00	0.00	0.03	0.00	0.00	6.34	0.20	-0.09	0.15	0.00	55.8	0.00	0.00
JUL	0.00	7.63	0.00	0.00	0.00	0.01	0.00	0.00	6.23	0.00	0.00	0.00	0.00	60.1	0.00	0.00
AUG	0.00	7.50	0.00	0.00	0.00	0.16	0.00	0.00	6.01	0.00	0.00	0.00	0.00	59.4	0.00	0.00
SEP	0.00	5.37	0.00	0.00	0.00	0.33	0.00	0.00	4.13	0.00	0.00	0.00	0.00	63.3	0.00	0.00
OCT	1.77	4.25	0.00	0.00	0.00	0.62	0.19	0.00	2.63	1.22	0.11	0.25	0.00	55.1	0.43	0.00
NOV	3.94	2.58	0.00	0.00	0.06	0.54	0.43	0.00	0.86	0.61	2.14	0.69	0.00	51.3	0.65	0.00
DEC	1.14	1.74	0.00	0.00	0.25	0.63	0.63	0.00	0.43	0.42	-0.39	0.23	0.00	46.3	0.29	0.00

FOLLOWING ARE YEAR END TOTALS FOR MODELED REGION FOR YEAR 1984

PRECIP	POTET	CHGINT	RUNOFF	RECHRG	SOLPEV	ACTSEV	SNWEVP	PPLTR	APLTR	CHGSM	EVINT	CHGSNW	AVTMP	EHRM-RO	DEFCIT
14.29	55.27	0.00	0.15	0.68	4.97	2.91	0.00	37.41	8.42	-0.57	2.70	0.00	54.71	2.14	0.00

FOLLOWING ARE MONTHLY TOTALS FOR MODELED REGION FOR YEAR 1985

MON	PRECIP	POTET	CHGINT	RUNOFF	RECHRG	SOLPEV	ACTSEV	SNWEVP	PPLTR	APLTR	CHGSM	EVINT	CHGSNW	AVTMP	EHRM-RO	DEFCIT
JAN	1.39	1.67	0.00	0.00	0.05	0.66	0.65	0.00	0.35	0.35	0.11	0.23	0.00	45.7	0.00	0.00
FEB	1.70	2.02	0.00	0.00	0.24	0.61	0.59	0.00	0.53	0.53	-0.06	0.39	0.00	48.7	0.00	0.00
MAR	3.46	4.06	0.00	0.00	0.58	0.71	0.68	0.00	1.81	1.80	-0.21	0.60	0.00	48.0	1.42	0.00
APR	0.94	5.04	0.00	0.00	0.00	0.38	0.10	0.00	3.53	2.16	-1.58	0.26	0.00	56.5	0.00	0.00
MAY	0.31	5.42	0.00	0.00	0.00	0.15	0.00	0.00	4.15	0.20	-0.08	0.20	0.00	52.6	0.00	0.00
JUN	0.20	7.92	0.00	0.00	0.00	0.03	0.00	0.00	6.37	0.12	-0.03	0.11	0.00	58.0	0.00	0.00

JUL	0.00	7.63	0.00	0.00	0.00	0.01	0.00	0.00	6.23	0.00	0.00	0.00	0.00	59.0	0.00	0.00	0.000
AUG	0.00	7.50	0.00	0.00	0.00	0.15	0.00	0.00	6.01	0.00	0.00	0.00	0.00	57.6	0.00	0.00	0.000
SEP	0.29	5.37	0.00	0.00	0.00	0.31	0.00	0.00	4.00	0.12	0.00	0.17	0.00	57.6	0.00	0.00	0.000
OCT	1.18	4.25	0.00	0.00	0.00	0.63	0.22	0.00	2.77	0.62	0.29	0.05	0.00	53.7	0.54	0.00	0.000
NOV	3.59	2.58	0.00	0.01	0.32	0.61	0.44	0.00	1.03	0.69	1.73	0.40	0.00	49.5	1.87	0.00	0.000
DEC	1.72	1.74	0.00	0.00	0.55	0.56	0.55	0.00	0.40	0.40	-0.14	0.36	0.00	49.9	0.06	0.00	0.000

FOLLOWING ARE YEAR END TOTALS FOR MODELED REGION FOR YEAR 1985

PRECIP	POTET	CHGINT	RUNOFF	RECHRG	SOLPEV	ACTSEV	SNWEVP	PPLTR	APLTR	CHGSM	EVINT	CHGSNW	AVTMP	EHRM-RO	DEFCIT
14.79	55.20	0.00	0.01	1.75	4.83	3.22	0.00	37.20	6.99	0.03	2.78	0.00	53.07	3.88	0.00

FOLLOWING ARE MONTHLY TOTALS FOR MODELED REGION FOR YEAR 1986

MON	PRECIP	POTET	CHGINT	RUNOFF	RECHRG	SOLPEV	ACTSEV	SNWEVP	PPLTR	APLTR	CHGSM	EVINT	CHGSNW	AVTMP	EHRM-RO	DEFCIT
JAN	2.08	1.67	0.00	0.00	0.33	0.66	0.63	0.00	0.35	0.35	0.52	0.25	0.00	52.9	0.67	0.00
FEB	6.39	2.02	0.00	0.10	5.14	0.58	0.58	0.00	0.51	0.51	-0.39	0.44	0.00	52.8	5.52	0.00
MAR	4.76	4.06	0.00	0.42	2.52	0.75	0.60	0.00	2.00	1.97	-1.15	0.40	0.00	55.1	3.40	0.00
APR	0.77	5.04	0.00	0.01	0.00	0.38	0.04	0.00	3.63	1.36	-0.83	0.19	0.00	53.8	0.32	0.00
MAY	0.26	5.42	0.00	0.00	0.00	0.15	0.00	0.00	4.23	0.18	-0.02	0.10	0.00	52.5	0.09	0.00
JUN	0.00	7.92	0.00	0.00	0.00	0.03	0.00	0.00	6.46	0.00	0.00	0.00	0.00	56.2	0.00	0.00
JUL	0.05	7.63	0.00	0.00	0.00	0.01	0.00	0.00	6.20	0.01	0.00	0.04	0.00	56.5	0.02	0.00
AUG	0.00	7.50	0.00	0.00	0.00	0.15	0.00	0.00	6.01	0.00	0.00	0.00	0.00	57.4	0.00	0.00
SEP	0.77	5.37	0.00	0.00	0.00	0.31	0.02	0.00	4.00	0.39	0.19	0.16	0.00	55.5	0.28	0.00
OCT	1.12	4.25	0.00	0.00	0.00	0.56	0.06	0.00	2.56	0.62	-0.08	0.51	0.00	56.0	0.47	0.00
NOV	0.50	2.58	0.00	0.00	0.00	0.67	0.00	0.00	1.39	0.25	0.03	0.22	0.00	54.9	0.18	0.00
DEC	1.06	1.74	0.00	0.00	0.00	0.60	0.25	0.00	0.60	0.34	0.21	0.26	0.00	49.3	0.34	0.00

FOLLOWING ARE YEAR END TOTALS FOR MODELED REGION FOR YEAR 1986

PRECIP	POTET	CHGINT	RUNOFF	RECHRG	SOLPEV	ACTSEV	SNWEVP	PPLTR	APLTR	CHGSM	EVINT	CHGSNW	AVTMP	EHRM-RO	DEFCIT
17.74	55.20	0.00	0.55	8.00	4.86	2.19	0.00	37.93	5.97	-1.52	2.57	0.00	54.42	11.27	-0.02

FOLLOWING ARE MONTHLY TOTALS FOR MODELED REGION FOR YEAR 1987

MON	PRECIP	POTET	CHGINT	RUNOFF	RECHRG	SOLPEV	ACTSEV	SNWEVP	PPLTR	APLTR	CHGSM	EVINT	CHGSNW	AVTMP	EHRM-RO	DEFCIT
JAN	2.81	1.67	0.00	0.00	0.00	0.62	0.59	0.00	0.33	0.31	1.56	0.33	0.00	47.1	1.27	0.00
FEB	3.03	2.02	0.00	0.01	1.68	0.66	0.65	0.00	0.58	0.58	-0.13	0.24	0.00	50.5	2.30	0.00
MAR	2.60	4.06	0.00	0.00	0.02	0.76	0.65	0.00	1.97	1.93	-0.39	0.38	0.00	52.1	1.06	0.00

APR	0.66	5.04	0.00	0.00	0.00	0.38	0.03	0.00	3.61	1.50	-1.10	0.22	0.00	56.4	0.20	0.00	0.000
MAY	0.45	5.42	0.00	0.00	0.00	0.15	0.00	0.00	4.13	0.47	-0.25	0.22	0.00	54.4	0.16	0.00	0.000
JUN	0.00	7.92	0.00	0.00	0.00	0.03	0.00	0.00	6.46	0.06	-0.06	0.00	0.00	54.6	0.00	0.00	0.000
JUL	0.00	7.63	0.00	0.00	0.00	0.01	0.00	0.00	6.23	0.00	0.00	0.00	0.00	55.5	0.00	0.00	0.000
AUG	0.00	7.50	0.00	0.00	0.00	0.15	0.00	0.00	6.01	0.00	0.00	0.00	0.00	57.9	0.00	0.00	0.000
SEP	0.00	5.37	0.00	0.00	0.00	0.32	0.00	0.00	4.14	0.00	0.00	0.00	0.00	57.8	0.00	0.00	0.000
OCT	0.96	4.25	0.00	0.00	0.00	0.59	0.05	0.00	2.76	0.19	0.48	0.25	0.00	58.0	0.00	0.00	0.000
NOV	2.23	2.58	0.00	0.00	0.00	0.59	0.42	0.00	0.98	0.72	0.59	0.50	0.00	53.6	0.15	0.00	0.000
DEC	3.59	1.74	0.00	0.00	0.88	0.52	0.51	0.00	0.35	0.35	1.35	0.49	0.00	47.3	1.69	0.00	0.000

FOLLOWING ARE YEAR END TOTALS FOR MODELED REGION FOR YEAR 1987

PRECIP	POTET	CHGINT	RUNOFF	RECHRG	SOLPEV	ACTSEV	SNWEVP	PPLTR	APLTR	CHGSM	EVINT	CHGSNW	AVTMP	EHRM-RO	DEFCIT
16.34	55.20	0.00	0.02	2.59	4.80	2.91	0.00	37.54	6.12	2.06	2.64	0.00	53.78	6.84	0.00

FOLLOWING ARE MONTHLY TOTALS FOR MODELED REGION FOR YEAR 1988

MON	PRECIP	POTET	CHGINT	RUNOFF	RECHRG	SOLPEV	ACTSEV	SNWEVP	PPLTR	APLTR	CHGSM	EVINT	CHGSNW	AVTMP	EHRM-RO	DEFCIT
JAN	1.65	1.67	0.00	0.00	0.73	0.69	0.68	0.00	0.35	0.35	-0.32	0.19	0.00	49.2	0.77	0.00
FEB	0.21	2.09	0.00	0.00	0.00	0.75	0.58	0.00	0.85	0.83	-1.07	0.08	0.00	52.9	0.03	0.00
MAR	0.98	4.06	0.00	0.00	0.00	0.77	0.28	0.00	2.38	1.44	-0.91	0.17	0.00	54.5	0.13	0.00
APR	1.44	5.04	0.00	0.00	0.00	0.37	0.05	0.00	3.51	1.06	-0.01	0.34	0.00	56.0	0.26	0.00
MAY	0.57	5.42	0.00	0.00	0.00	0.14	0.00	0.00	4.13	0.36	-0.03	0.23	0.00	53.2	0.03	0.00
JUN	0.10	7.92	0.00	0.00	0.00	0.03	0.00	0.00	6.41	0.13	-0.08	0.06	0.00	56.0	0.00	0.00
JUL	0.00	7.63	0.00	0.00	0.00	0.01	0.00	0.00	6.23	0.00	0.00	0.00	0.00	59.3	0.00	0.00
AUG	0.00	7.50	0.00	0.00	0.00	0.16	0.00	0.00	6.01	0.00	0.00	0.00	0.00	58.3	0.00	0.00
SEP	0.00	5.37	0.00	0.00	0.00	0.33	0.00	0.00	4.13	0.00	0.00	0.00	0.00	57.4	0.00	0.00
OCT	0.00	4.25	0.00	0.00	0.00	0.66	0.00	0.00	2.94	0.00	0.00	0.00	0.00	55.3	0.00	0.00
NOV	1.59	2.58	0.00	0.00	0.00	0.66	0.24	0.00	1.23	0.41	0.69	0.25	0.00	52.9	0.00	0.00
DEC	2.47	1.74	0.00	0.00	0.17	0.60	0.33	0.00	0.56	0.31	1.39	0.25	0.00	47.3	1.50	0.00

FOLLOWING ARE YEAR END TOTALS FOR MODELED REGION FOR YEAR 1988

PRECIP	POTET	CHGINT	RUNOFF	RECHRG	SOLPEV	ACTSEV	SNWEVP	PPLTR	APLTR	CHGSM	EVINT	CHGSNW	AVTMP	EHRM-RO	DEFCIT
9.01	55.27	0.00	0.01	0.90	5.17	1.97	0.00	38.73	4.89	-0.34	1.57	0.00	54.36	2.73	0.00

FOLLOWING ARE MONTHLY TOTALS FOR MODELED REGION FOR YEAR 1989

MON	PRECIP	POTET	CHGINT	RUNOFF	RECHRG	SOLPEV	ACTSEV	SNWEVP	PPLTR	APLTR	CHGSM	EVINT	CHGSNW	AVTMP	EHRM-RO	DEFCIT
-----	--------	-------	--------	--------	--------	--------	--------	--------	-------	-------	-------	-------	--------	-------	---------	--------

JAN	1.28	1.67	0.00	0.00	0.48	0.67	0.65	0.00	0.36	0.36	-0.42	0.22	0.00	45.9	0.40	0.00	0.000
FEB	1.49	2.02	0.00	0.00	0.23	0.65	0.56	0.00	0.62	0.61	-0.18	0.26	0.00	46.0	0.72	0.00	0.000
MAR	2.24	4.06	0.00	0.00	0.13	0.76	0.54	0.00	2.05	1.90	-0.73	0.38	0.00	53.7	0.98	0.00	0.000
APR	1.07	5.04	0.00	0.00	0.00	0.39	0.03	0.00	3.58	1.29	-0.50	0.25	0.00	57.4	0.41	0.00	0.000
MAY	0.22	5.42	0.00	0.00	0.00	0.15	0.00	0.00	4.22	0.35	-0.24	0.11	0.00	53.3	0.00	0.00	0.000
JUN	0.04	7.92	0.00	0.00	0.00	0.03	0.00	0.00	6.43	0.00	0.00	0.04	0.00	56.6	0.00	0.00	0.000
JUL	0.00	7.63	0.00	0.00	0.00	0.01	0.00	0.00	6.23	0.00	0.00	0.00	0.00	55.8	0.00	0.00	0.000
AUG	0.00	7.50	0.00	0.00	0.00	0.15	0.00	0.00	6.01	0.00	0.00	0.00	0.00	56.6	0.00	0.00	0.000
SEP	1.44	5.37	0.00	0.00	0.00	0.30	0.04	0.00	3.89	0.79	0.33	0.28	0.00	56.7	0.00	0.00	0.000
OCT	1.31	4.25	0.00	0.00	0.00	0.60	0.21	0.00	2.66	0.84	0.04	0.23	0.00	55.3	0.00	0.00	0.000
NOV	1.18	2.58	0.00	0.00	0.00	0.70	0.17	0.00	1.37	0.46	0.46	0.10	0.00	55.6	0.00	0.00	0.000
DEC	0.13	1.74	0.00	0.00	0.00	0.69	0.28	0.00	0.67	0.36	-0.54	0.03	0.00	51.1	0.00	0.00	0.000

FOLLOWING ARE YEAR END TOTALS FOR MODELED REGION FOR YEAR 1989

PRECIP	POTET	CHGINT	RUNOFF	RECHRG	SOLPEV	ACTSEV	SNWEVP	PPLTR	APLTR	CHGSM	EVINT	CHGSNW	AVTMP	EHRM-RO	DEFCIT
10.40	55.20	0.00	0.01	0.84	5.11	2.49	0.00	38.09	6.95	-1.79	1.90	0.00	53.69	2.51	0.00

FOLLOWING ARE MONTHLY TOTALS FOR MODELED REGION FOR YEAR 1990

MON	PRECIP	POTET	CHGINT	RUNOFF	RECHRG	SOLPEV	ACTSEV	SNWEVP	PPLTR	APLTR	CHGSM	EVINT	CHGSNW	AVTMP	EHRM-RO	DEFCIT
JAN	2.61	1.67	0.00	0.00	0.00	0.67	0.55	0.00	0.38	0.32	1.51	0.24	0.00	48.2	0.01	0.00
FEB	2.52	2.02	0.00	0.01	0.94	0.67	0.67	0.00	0.58	0.58	0.10	0.21	0.00	47.4	1.70	0.00
MAR	1.96	4.06	0.00	0.00	0.26	0.75	0.56	0.00	2.06	1.97	-1.21	0.37	0.00	51.7	0.73	0.00
APR	1.10	5.04	0.00	0.00	0.00	0.38	0.03	0.00	3.59	1.36	-0.53	0.24	0.00	57.0	0.29	0.00
MAY	1.67	5.42	0.00	0.00	0.00	0.15	0.01	0.00	4.13	0.93	0.51	0.22	0.00	53.5	0.68	0.00
JUN	0.00	7.92	0.00	0.00	0.00	0.03	0.01	0.00	6.45	0.66	-0.66	0.00	0.00	56.3	0.00	0.00
JUL	0.00	7.63	0.00	0.00	0.00	0.01	0.00	0.00	6.23	0.00	0.00	0.00	0.00	58.2	0.00	0.00
AUG	0.12	7.50	0.00	0.00	0.00	0.15	0.00	0.00	5.97	0.06	0.00	0.06	0.00	59.2	0.00	0.00
SEP	0.12	5.37	0.00	0.00	0.00	0.31	0.00	0.00	4.09	0.05	0.01	0.06	0.00	58.9	0.00	0.00
OCT	0.12	4.25	0.00	0.00	0.00	0.63	0.00	0.00	2.92	0.02	0.06	0.05	0.00	55.8	0.00	0.00
NOV	0.24	2.58	0.00	0.00	0.00	0.70	0.00	0.00	1.47	0.10	0.06	0.08	0.00	53.0	0.00	0.00
DEC	1.59	1.74	0.00	0.00	0.00	0.38	0.14	0.00	0.52	0.25	0.84	0.29	0.07	44.2	0.00	0.00

FOLLOWING ARE YEAR END TOTALS FOR MODELED REGION FOR YEAR 1990

PRECIP	POTET	CHGINT	RUNOFF	RECHRG	SOLPEV	ACTSEV	SNWEVP	PPLTR	APLTR	CHGSM	EVINT	CHGSNW	AVTMP	EHRM-RO	DEFCIT
12.03	55.20	0.00	0.01	1.20	4.85	1.97	0.00	38.40	6.30	0.68	1.80	0.07	53.64	3.41	0.00

FOLLOWING ARE MONTHLY TOTALS FOR MODELED REGION FOR YEAR 1991

MON	PREC	POTET	CHGINT	RUNOFF	RECHRG	SOLPEV	ACTSEV	SNWEVP	PPLTR	APLTR	CHGSM	EVINT	CHGSNW	AVTMP	EHRM-RO	DEFCIT
JAN	0.23	1.67	0.00	0.00	0.00	0.70	0.52	0.00	0.46	0.33	-0.60	0.06	-0.07	48.5	0.00	0.00
FEB	1.86	2.02	0.00	0.00	0.00	0.67	0.38	0.00	0.73	0.44	0.82	0.22	0.00	53.8	0.00	0.00
MAR	7.49	4.06	0.00	0.16	3.54	0.68	0.67	0.00	1.67	1.67	0.63	0.82	0.00	49.0	5.33	0.00
APR	0.47	5.04	0.00	0.00	0.00	0.39	0.05	0.00	3.63	1.94	-1.69	0.17	0.00	51.9	0.16	0.00
MAY	0.50	5.42	0.00	0.00	0.00	0.15	0.00	0.00	4.15	0.29	0.01	0.20	0.00	50.7	0.02	0.00
JUN	0.00	7.92	0.00	0.00	0.00	0.03	0.00	0.00	6.46	0.14	-0.14	0.00	0.00	52.6	0.00	0.00
JUL	0.00	7.63	0.00	0.00	0.00	0.01	0.00	0.00	6.23	0.00	0.00	0.00	0.00	56.1	0.00	0.00
AUG	0.06	7.50	0.00	0.00	0.00	0.15	0.00	0.00	5.98	0.01	0.00	0.05	0.00	58.6	0.00	0.00
SEP	0.00	5.37	0.00	0.00	0.00	0.32	0.00	0.00	4.14	0.00	0.00	0.00	0.00	57.9	0.00	0.00
OCT	1.28	4.25	0.00	0.00	0.00	0.61	0.15	0.00	2.76	0.37	0.62	0.14	0.00	56.0	0.00	0.00
NOV	0.07	2.58	0.00	0.00	0.00	0.72	0.10	0.00	1.43	0.47	-0.53	0.03	0.00	54.5	0.00	0.00
DEC	3.63	1.74	0.00	0.00	0.76	0.61	0.10	0.00	0.69	0.25	2.29	0.23	0.00	49.2	1.70	0.00

FOLLOWING ARE YEAR END TOTALS FOR MODELED REGION FOR YEAR 1991

PREC	POTET	CHGINT	RUNOFF	RECHRG	SOLPEV	ACTSEV	SNWEVP	PPLTR	APLTR	CHGSM	EVINT	CHGSNW	AVTMP	EHRM-RO	DEFCIT
15.61	55.20	0.00	0.16	4.30	5.05	1.98	0.00	38.32	5.91	1.40	1.93	-0.07	53.21	7.20	0.00

FOLLOWING ARE MONTHLY TOTALS FOR MODELED REGION FOR YEAR 1992

MON	PREC	POTET	CHGINT	RUNOFF	RECHRG	SOLPEV	ACTSEV	SNWEVP	PPLTR	APLTR	CHGSM	EVINT	CHGSNW	AVTMP	EHRM-RO	DEFCIT
JAN	1.81	1.67	0.00	0.02	1.15	0.70	0.68	0.00	0.37	0.37	-0.56	0.16	0.00	49.2	1.43	0.00
FEB	5.47	2.09	0.00	0.50	3.32	0.59	0.57	0.00	0.54	0.54	0.05	0.48	0.00	54.3	4.47	0.00
MAR	3.20	4.06	0.00	0.12	0.71	0.70	0.65	0.00	1.87	1.85	-0.71	0.57	0.00	54.1	1.61	0.00
APR	0.00	5.04	0.00	0.00	0.00	0.39	0.00	0.00	3.80	1.15	-1.15	0.00	0.00	58.7	0.00	0.00
MAY	0.00	5.42	0.00	0.00	0.00	0.15	0.00	0.00	4.32	0.01	-0.01	0.00	0.00	56.8	0.00	0.00
JUN	0.12	7.92	0.00	0.00	0.00	0.03	0.00	0.00	6.41	0.06	0.00	0.05	0.00	57.2	0.00	0.00
JUL	0.02	7.63	0.00	0.00	0.00	0.01	0.00	0.00	6.22	0.00	0.00	0.02	0.00	60.1	0.01	0.00
AUG	0.00	7.50	0.00	0.00	0.00	0.16	0.00	0.00	6.01	0.00	0.00	0.00	0.00	58.3	0.00	0.00
SEP	0.06	5.37	0.00	0.00	0.00	0.33	0.00	0.00	4.09	0.01	0.00	0.04	0.00	58.2	0.00	0.00
OCT	0.39	4.25	0.00	0.00	0.00	0.63	0.00	0.00	2.86	0.19	0.08	0.12	0.00	58.7	0.00	0.00
NOV	0.09	2.58	0.00	0.00	0.00	0.72	0.00	0.00	1.47	0.09	-0.06	0.06	0.00	54.2	0.00	0.00
DEC	4.46	1.74	0.00	0.01	0.83	0.55	0.51	0.00	0.39	0.36	2.35	0.40	0.00	47.0	2.10	0.00

FOLLOWING ARE YEAR END TOTALS FOR MODELED REGION FOR YEAR 1992

PREC	POTET	CHGINT	RUNOFF	RECHRG	SOLPEV	ACTSEV	SNWEVP	PPLTR	APLTR	CHGSM	EVINT	CHGSNW	AVTMP	EHRM-RO	DEFCIT
15.61	55.27	0.00	0.66	6.01	4.97	2.42	0.00	38.35	4.62	0.00	1.91	0.00	55.56	9.62	-0.01

FOLLOWING ARE MONTHLY AVERAGES FOR MODELED REGION FOR SIMULATION

	PRECP	POTET	CHGINT	RUNOFF	RECHRG	SOLPEV	ACTSEV	SNWEVP	PPLTR	APLTR	CHGSM	EVINT	CHGSNW	AVTMP	EHRM-RO	DEFCIT
JAN	2.77	1.67	0.00	0.11	1.48	0.65	0.57	0.00	0.37	0.33	0.03	0.25	0.00	48.25	1.90	0.00
FEB	2.95	2.04	0.00	0.16	1.41	0.64	0.53	0.00	0.61	0.58	-0.06	0.32	0.00	50.54	1.94	0.00
MAR	3.63	4.06	0.00	0.24	1.10	0.73	0.54	0.00	1.97	1.79	-0.54	0.50	0.00	51.44	2.07	0.00
APR	1.38	5.04	0.00	0.08	0.12	0.37	0.08	0.00	3.49	1.74	-0.96	0.33	0.00	53.88	0.50	-0.01
MAY	0.44	5.43	0.00	0.01	0.00	0.15	0.01	0.00	4.19	0.49	-0.22	0.15	0.00	52.99	0.10	-0.01
JUN	0.11	7.92	0.00	0.00	0.00	0.03	0.00	0.00	6.41	0.10	-0.05	0.05	0.00	55.70	0.02	0.00
JUL	0.07	7.63	0.00	0.00	0.00	0.01	0.00	0.00	6.21	0.05	0.00	0.02	0.00	57.24	0.03	0.00
AUG	0.08	7.50	0.00	0.00	0.00	0.16	0.00	0.00	5.99	0.04	0.00	0.03	0.00	57.97	0.01	0.00
SEP	0.27	5.37	0.00	0.00	0.00	0.32	0.01	0.00	4.07	0.12	0.06	0.08	0.00	58.58	0.05	0.00
OCT	1.05	4.25	0.00	0.00	0.00	0.62	0.11	0.00	2.75	0.51	0.24	0.19	0.00	55.66	0.34	0.00
NOV	2.18	2.58	0.00	0.01	0.35	0.65	0.29	0.00	1.18	0.52	0.73	0.28	0.00	52.83	1.07	0.00
DEC	2.56	1.74	0.00	0.02	0.72	0.57	0.41	0.00	0.49	0.35	0.77	0.29	0.00	48.17	1.39	0.00

FOLLOWING ARE ANNUAL AVERAGES FOR MODELED REGION FOR SIMULATION

PRECP	POTET	CHGINT	RUNOFF	RECHRG	SOLPEV	ACTSEV	SNWEVP	PPLTR	APLTR	CHGSM	EVINT	CHGSNW	AVTMP	EHRM-RO	DEFCIT
17.48	55.22	0.00	0.63	5.19	4.90	2.54	0.00	37.73	6.63	0.00	2.51	0.00	53.61	9.41	-0.02

AVG ANNUAL RECHARGE DISTRIBUTION, HUNDRETHS OF INCHES

	1	2	3	4	5
1	600	663	505	407	424
2	595	620	430	397	419
3	-1	437	412	415	318
4	-1	-1	309	-1	-1

AVG ANNUAL AET DISTRIBUTION, TENTHS OF INCHES

	1	2	3	4	5
1	128	126	117	104	94
2	124	121	115	105	94

3 -1 111 104 104 99

4 -1 -1 113 -1 -1

Message: 44

To: WWLocke@aol.com, mfeeney@ix.netcom.com

From: essert@nps.navy.mil (Chris Essert)

Subject: Run # 22

Date: Mon, 7 Aug 95 22:06:41 PDT

The following lines illustrate the differences between the output listing for the Base Case Run and the output listing for this run:

4c4

<

EL TORO BASIN WATER BALANCE STUDY - BASE RUN

>

EL TORO BASIN STUDY - SENSITIVITY ANALYSIS - Carmel Valley ET - Alfalfa on Grass

54c54

< ASUN (INTERCEPT)= -20.0 BSUN (SLOPE)=3.6360

> ASUN (INTERCEPT)= -20.0 BSUN (SLOPE)= 3.636

119,120c118,119

< OCT NOV DEC JAN FEB MAR

< 0.01 0.01 0.01 0.01 0.01 0.01

> JAN FEB MAR APR MAY JUN JUL AUG SEP OCT NOV DEC

> 0.09 0.10 0.14 0.18 0.19 0.22 0.20 0.19 0.16 0.14 0.12 0.09

159,160c158,159

< NUMBER OF GRASSLAND = 0

< NUMBER OF SAGEBRUSH = 15

> NUMBER OF GRASSLAND = 15

> NUMBER OF SAGEBRUSH = 0

(Please note that the only difference between this run and run # 19 is that the Land Use was changed to Grassland for this run).

Here are the results:

EL TORO BASIN STUDY - SENSITIVITY ANALYSIS - Carmel Valley ET - Alfalfa on Grass

FOLLOWING ARE MONTHLY TOTALS FOR MODELED REGION FOR YEAR 1970

MON	PRECP	POTET	CHGINT	RUNOFF	RECHRG	SOLPEV	ACTSEV	SNWEVP	PPLTR	APLTR	CHGSM	EVINT	CHGSMW	AVTMP	EHRM-RO	DEFCIT
JAN	5.10	2.73	0.00	0.04	3.46	1.06	1.05	0.00	0.55	0.55	-0.43	0.42	0.00	50.8	4.00	0.00
FEB	3.25	2.91	0.00	0.01	0.83	0.97	0.77	0.00	0.92	0.91	0.38	0.34	0.00	51.3	1.82	0.00
MAR	2.38	4.22	0.00	0.26	1.53	0.82	0.47	0.00	2.30	1.97	-2.09	0.24	0.00	51.5	1.79	0.00
APR	0.89	5.40	0.00	0.01	0.00	0.41	0.00	0.00	3.82	0.79	-0.22	0.32	0.00	49.9	0.30	-0.01
MAY	0.10	5.83	0.00	0.01	0.00	0.16	0.00	0.00	4.57	0.10	-0.08	0.08	0.00	52.9	0.04	-0.01
JUN	0.00	6.45	0.00	0.01	0.00	0.03	0.00	0.00	5.26	0.00	0.00	0.00	0.00	53.4	0.00	-0.01
JUL	0.00	6.11	0.00	0.00	0.00	0.01	0.00	0.00	4.99	0.00	0.00	0.00	0.00	55.5	0.00	0.00

AUG	0.00	5.80	0.00	0.00	0.00	0.12	0.00	0.00	4.65	0.00	0.00	0.00	0.00	54.7	0.00	0.00	0.000
SEP	0.00	4.89	0.00	0.00	0.00	0.29	0.00	0.00	3.77	0.00	0.00	0.00	0.00	58.8	0.00	0.00	0.000
OCT	0.19	4.40	0.00	0.00	0.00	0.64	0.00	0.00	2.96	0.03	0.01	0.15	0.00	52.9	0.07	0.00	0.000
NOV	4.36	3.45	0.00	0.02	0.67	0.84	0.21	0.00	1.63	0.62	2.37	0.47	0.00	54.0	2.67	0.00	0.000
DEC	5.83	2.85	0.00	0.07	3.72	0.88	0.88	0.00	0.62	0.62	-0.15	0.69	0.00	46.6	4.51	0.00	0.000

FOLLOWING ARE YEAR END TOTALS FOR MODELED REGION FOR YEAR 1970

PRECIP	POTET	CHGINT	RUNOFF	RECHRG	SOLPEV	ACTSEV	SNWEVP	PPLTR	APLTR	CHGSM	EVINT	CHGSNW	AVTMP	EHRM-RO	DEFCIT
22.10	55.03	0.00	0.45	10.21	6.23	3.39	0.00	36.04	5.59	-0.21	2.71	0.00	52.69	15.20	-0.04

FOLLOWING ARE MONTHLY TOTALS FOR MODELED REGION FOR YEAR 1971

MON	PRECIP	POTET	CHGINT	RUNOFF	RECHRG	SOLPEV	ACTSEV	SNWEVP	PPLTR	APLTR	CHGSM	EVINT	CHGSNW	AVTMP	EHRM-RO	DEFCIT
JAN	1.43	2.73	0.00	0.03	0.34	1.17	1.05	0.00	0.66	0.66	-0.83	0.18	0.00	46.7	0.80	0.00
FEB	0.91	2.91	0.00	0.01	0.00	1.02	0.26	0.00	1.26	1.14	-0.68	0.19	0.00	47.3	0.31	0.00
MAR	1.53	4.22	0.00	0.01	0.00	0.84	0.28	0.00	2.43	1.47	-0.41	0.18	0.00	49.1	0.64	0.00
APR	1.52	5.40	0.00	0.02	0.00	0.41	0.08	0.00	3.82	1.46	-0.27	0.25	0.00	49.7	0.54	-0.01
MAY	0.28	5.83	0.00	0.01	0.00	0.16	0.00	0.00	4.44	0.06	-0.02	0.24	0.00	49.2	0.10	-0.01
JUN	0.00	6.45	0.00	0.00	0.00	0.03	0.00	0.00	5.26	0.01	-0.01	0.00	0.00	53.8	0.00	0.00
JUL	0.04	6.11	0.00	0.00	0.00	0.01	0.00	0.00	4.96	0.00	0.00	0.04	0.00	54.4	0.01	0.00
AUG	0.03	5.80	0.00	0.00	0.00	0.12	0.00	0.00	4.62	0.00	0.00	0.03	0.00	58.2	0.01	0.00
SEP	0.22	4.89	0.00	0.00	0.00	0.28	0.00	0.00	3.69	0.02	0.10	0.10	0.00	58.5	0.00	0.00
OCT	0.23	4.40	0.00	0.00	0.00	0.64	0.00	0.00	2.96	0.17	-0.09	0.15	0.00	49.8	0.08	0.00
NOV	2.06	3.45	0.00	0.00	0.00	0.90	0.23	0.00	1.76	0.53	1.06	0.24	0.00	48.8	0.83	0.00
DEC	4.02	2.85	0.00	0.00	0.87	0.97	0.94	0.00	0.70	0.66	1.07	0.47	0.00	43.5	1.76	0.00

FOLLOWING ARE YEAR END TOTALS FOR MODELED REGION FOR YEAR 1971

PRECIP	POTET	CHGINT	RUNOFF	RECHRG	SOLPEV	ACTSEV	SNWEVP	PPLTR	APLTR	CHGSM	EVINT	CHGSNW	AVTMP	EHRM-RO	DEFCIT
12.28	55.03	0.00	0.09	1.22	6.56	2.84	0.00	36.55	6.18	-0.09	2.07	0.00	50.76	5.09	-0.03

FOLLOWING ARE MONTHLY TOTALS FOR MODELED REGION FOR YEAR 1972

MON	PRECIP	POTET	CHGINT	RUNOFF	RECHRG	SOLPEV	ACTSEV	SNWEVP	PPLTR	APLTR	CHGSM	EVINT	CHGSNW	AVTMP	EHRM-RO	DEFCIT
JAN	1.00	2.73	0.00	0.00	0.00	1.19	0.67	0.00	0.81	0.80	-0.64	0.16	0.00	46.7	0.36	0.00
FEB	0.74	3.02	0.00	0.00	0.00	1.08	0.52	0.00	1.24	1.05	-0.94	0.11	0.00	51.3	0.21	0.00
MAR	0.62	4.22	0.00	0.00	0.00	0.82	0.06	0.00	2.61	0.90	-0.50	0.16	0.00	53.1	0.00	0.00
APR	0.71	5.40	0.00	0.00	0.00	0.40	0.00	0.00	3.90	0.50	-0.03	0.24	0.00	52.9	0.00	0.00

MAY	0.18	5.83	0.00	0.00	0.00	0.16	0.00	0.00	4.53	0.07	-0.02	0.13	0.00	53.0	0.00	0.00	0.000
JUN	0.00	6.45	0.00	0.00	0.00	0.03	0.00	0.00	5.26	0.00	0.00	0.00	0.00	54.2	0.00	0.00	0.000
JUL	0.00	6.11	0.00	0.00	0.00	0.01	0.00	0.00	4.99	0.00	0.00	0.00	0.00	58.8	0.00	0.00	0.000
AUG	0.00	5.80	0.00	0.00	0.00	0.12	0.00	0.00	4.64	0.00	0.00	0.00	0.00	58.8	0.00	0.00	0.000
SEP	0.00	4.89	0.00	0.00	0.00	0.30	0.00	0.00	3.76	0.00	0.00	0.00	0.00	59.7	0.00	0.00	0.000
OCT	2.10	4.40	0.00	0.00	0.00	0.64	0.27	0.00	2.65	1.25	0.28	0.30	0.00	56.8	0.91	0.00	0.000
NOV	6.04	3.45	0.00	0.04	2.65	0.88	0.67	0.00	1.37	1.24	1.01	0.43	0.00	51.1	4.34	0.00	0.000
DEC	2.63	2.85	0.00	0.00	0.22	0.76	0.67	0.00	0.70	0.70	0.63	0.40	0.00	44.2	1.23	0.00	0.000

FOLLOWING ARE YEAR END TOTALS FOR MODELED REGION FOR YEAR 1972

PRECIP	POTET	CHGINT	RUNOFF	RECHRG	SOLPEV	ACTSEV	SNWEVP	PPLTR	APLTR	CHGSM	EVINT	CHGSNW	AVTMP	EHRM-RO	DEFCIT
14.01	55.14	0.00	0.05	2.87	6.39	2.87	0.00	36.46	6.52	-0.21	1.93	0.00	53.37	7.06	0.00

FOLLOWING ARE MONTHLY TOTALS FOR MODELED REGION FOR YEAR 1973

MON	PRECIP	POTET	CHGINT	RUNOFF	RECHRG	SOLPEV	ACTSEV	SNWEVP	PPLTR	APLTR	CHGSM	EVINT	CHGSNW	AVTMP	EHRM-RO	DEFCIT	
JAN	5.27	2.73	0.00	0.24	2.53	1.05	1.02	0.00	0.54	0.54	0.47	0.46	0.00	46.9	3.62	0.00	0.000
FEB	6.82	2.91	0.00	0.98	3.72	0.88	0.87	0.00	0.75	0.75	-0.08	0.58	0.00	52.2	5.30	0.00	0.000
MAR	5.30	4.22	0.00	0.89	2.16	0.73	0.71	0.00	1.83	1.83	-0.99	0.69	0.00	48.8	3.44	0.00	0.000
APR	0.36	5.40	0.00	0.06	0.00	0.41	0.01	0.00	3.92	1.45	-1.32	0.19	0.00	54.8	0.12	-0.03	0.000
MAY	0.06	5.83	0.00	0.01	0.00	0.17	0.00	0.00	4.60	0.02	-0.01	0.04	0.00	54.7	0.02	-0.01	0.000
JUN	0.05	6.45	0.00	0.01	0.00	0.03	0.00	0.00	5.23	0.01	0.00	0.04	0.00	57.7	0.02	-0.01	0.000
JUL	0.00	6.11	0.00	0.01	0.00	0.01	0.00	0.00	4.99	0.00	0.00	0.00	0.00	55.9	0.00	-0.01	0.000
AUG	0.00	5.80	0.00	0.01	0.00	0.12	0.00	0.00	4.65	0.00	0.00	0.00	0.00	56.3	0.00	-0.01	0.000
SEP	0.12	4.89	0.00	0.01	0.00	0.28	0.00	0.00	3.70	0.03	0.00	0.09	0.00	58.1	0.03	0.00	0.000
OCT	2.08	4.40	0.00	0.01	0.00	0.63	0.29	0.00	2.68	1.35	0.19	0.25	0.00	55.7	0.84	0.00	0.000
NOV	4.36	3.45	0.00	0.01	0.08	0.82	0.67	0.00	1.33	1.01	2.05	0.53	0.00	51.4	2.21	0.00	0.000
DEC	4.66	2.85	0.00	0.02	2.44	1.03	0.96	0.00	0.77	0.77	0.16	0.31	0.00	50.4	3.32	0.00	0.000

FOLLOWING ARE YEAR END TOTALS FOR MODELED REGION FOR YEAR 1973

PRECIP	POTET	CHGINT	RUNOFF	RECHRG	SOLPEV	ACTSEV	SNWEVP	PPLTR	APLTR	CHGSM	EVINT	CHGSNW	AVTMP	EHRM-RO	DEFCIT
29.06	55.03	0.00	2.24	10.93	6.15	4.54	0.00	34.99	7.76	0.47	3.19	0.00	53.55	18.92	-0.07

FOLLOWING ARE MONTHLY TOTALS FOR MODELED REGION FOR YEAR 1974

MON	PRECIP	POTET	CHGINT	RUNOFF	RECHRG	SOLPEV	ACTSEV	SNWEVP	PPLTR	APLTR	CHGSM	EVINT	CHGSNW	AVTMP	EHRM-RO	DEFCIT	
JAN	3.74	2.73	0.00	0.56	2.36	1.11	0.98	0.00	0.63	0.63	-1.11	0.33	0.00	48.0	2.94	0.00	0.000

FEB	0.91	2.91	0.00	0.00	0.00	0.99	0.14	0.00	1.27	1.08	-0.58	0.27	0.00	49.9	0.13	0.00	0.000
MAR	4.12	4.22	0.00	0.03	0.07	0.78	0.57	0.00	2.09	1.77	1.24	0.45	0.00	53.1	1.29	0.00	0.000
APR	2.82	5.40	0.00	0.32	1.19	0.40	0.16	0.00	3.67	2.57	-1.77	0.38	0.00	54.0	1.78	-0.02	0.000
MAY	0.00	5.83	0.00	0.00	0.00	0.17	0.00	0.00	4.63	0.16	-0.16	0.00	0.00	52.8	0.00	0.00	0.000
JUN	0.33	6.45	0.00	0.01	0.00	0.03	0.00	0.00	5.21	0.26	0.01	0.06	0.00	56.8	0.14	-0.01	0.000
JUL	0.19	6.11	0.00	0.00	0.00	0.01	0.00	0.00	4.92	0.10	-0.01	0.09	0.00	58.8	0.08	0.00	0.000
AUG	0.06	5.80	0.00	0.00	0.00	0.12	0.00	0.00	4.61	0.01	0.01	0.04	0.00	58.9	0.00	0.00	0.000
SEP	0.00	4.89	0.00	0.00	0.00	0.29	0.00	0.00	3.77	0.01	-0.01	0.00	0.00	58.7	0.00	0.00	0.000
OCT	1.91	4.40	0.00	0.00	0.00	0.61	0.09	0.00	2.74	0.62	0.83	0.37	0.00	57.7	0.79	0.00	0.000
NOV	0.77	3.45	0.00	0.00	0.00	0.90	0.31	0.00	1.68	0.84	-0.65	0.26	0.00	54.3	0.27	0.00	0.000
DEC	2.81	2.85	0.00	0.00	0.00	1.00	0.81	0.00	0.80	0.60	1.01	0.39	0.00	46.5	1.22	0.00	0.000

FOLLOWING ARE YEAR END TOTALS FOR MODELED REGION FOR YEAR 1974

PRECIP	POTET	CHGINT	RUNOFF	RECHRG	SOLPEV	ACTSEV	SNWEVP	PPLTR	APLTR	CHGSM	EVINT	CHGSNW	AVTMP	EHRM-RO	DEFCIT
17.65	55.03	0.00	0.94	3.62	6.41	3.06	0.00	36.02	8.65	-1.21	2.63	0.00	54.14	8.63	-0.04

FOLLOWING ARE MONTHLY TOTALS FOR MODELED REGION FOR YEAR 1975

MON	PRECIP	POTET	CHGINT	RUNOFF	RECHRG	SOLPEV	ACTSEV	SNWEVP	PPLTR	APLTR	CHGSM	EVINT	CHGSNW	AVTMP	EHRM-RO	DEFCIT	
JAN	1.34	2.73	0.00	0.00	0.00	1.19	0.90	0.00	0.73	0.59	-0.31	0.16	0.00	47.8	0.00	0.00	0.000
FEB	3.19	2.91	0.00	0.00	0.47	0.95	0.91	0.00	0.85	0.84	0.60	0.36	0.00	49.4	1.44	0.00	0.000
MAR	5.21	4.22	0.00	0.28	1.56	0.75	0.63	0.00	1.97	1.96	0.23	0.56	0.00	50.0	3.13	0.00	0.000
APR	1.71	5.40	0.00	0.02	0.00	0.37	0.11	0.00	3.41	2.34	-1.53	0.76	0.00	49.0	0.34	0.00	0.000
MAY	0.00	5.83	0.00	0.00	0.00	0.17	0.00	0.00	4.63	0.18	-0.18	0.00	0.00	52.6	0.00	0.00	0.000
JUN	0.23	6.45	0.00	0.00	0.00	0.03	0.00	0.00	5.11	0.05	0.00	0.18	0.00	54.1	0.00	0.00	0.000
JUL	0.10	6.11	0.00	0.00	0.00	0.01	0.00	0.00	4.94	0.04	0.00	0.06	0.00	56.1	0.03	0.00	0.000
AUG	0.27	5.80	0.00	0.00	0.00	0.12	0.00	0.00	4.53	0.12	0.01	0.14	0.00	56.9	0.09	0.00	0.000
SEP	0.00	4.89	0.00	0.00	0.00	0.29	0.00	0.00	3.77	0.01	-0.01	0.00	0.00	56.8	0.00	0.00	0.000
OCT	1.75	4.40	0.00	0.00	0.00	0.62	0.14	0.00	2.79	0.50	0.85	0.27	0.00	52.3	0.64	0.00	0.000
NOV	0.87	3.45	0.00	0.00	0.00	0.92	0.38	0.00	1.69	0.85	-0.55	0.19	0.00	49.9	0.27	0.00	0.000
DEC	0.46	2.85	0.00	0.00	0.00	1.12	0.08	0.00	1.28	0.46	-0.17	0.10	0.00	47.7	0.16	0.00	0.000

FOLLOWING ARE YEAR END TOTALS FOR MODELED REGION FOR YEAR 1975

PRECIP	POTET	CHGINT	RUNOFF	RECHRG	SOLPEV	ACTSEV	SNWEVP	PPLTR	APLTR	CHGSM	EVINT	CHGSNW	AVTMP	EHRM-RO	DEFCIT
15.13	55.03	0.00	0.31	2.02	6.53	3.15	0.00	35.69	7.93	-1.06	2.79	0.00	51.90	6.10	-0.01

FOLLOWING ARE MONTHLY TOTALS FOR MODELED REGION FOR YEAR 1976

MON	PRECIP	POTET	CHGINT	RUNOFF	RECHRG	SOLPEV	ACTSEV	SNWEVP	PPLTR	APLTR	CHGSM	EVINT	CHGSNW	AVTMP	EHRM-RO	DEFCIT	
JAN	0.20	2.73	0.00	0.00	0.00	1.22	0.00	0.00	1.11	0.19	-0.07	0.08	0.00	48.2	0.05	0.00	0.000
FEB	2.30	3.02	0.00	0.00	0.00	1.00	0.58	0.00	1.08	0.58	0.80	0.33	0.00	47.3	0.64	0.00	0.000
MAR	1.61	4.22	0.00	0.00	0.01	0.79	0.39	0.00	2.38	1.68	-0.70	0.23	0.00	47.4	0.93	0.00	0.000
APR	1.44	5.40	0.00	0.00	0.00	0.38	0.05	0.00	3.77	1.17	-0.14	0.37	0.00	51.5	0.17	0.00	0.000
MAY	0.32	5.83	0.00	0.00	0.00	0.15	0.00	0.00	4.49	0.16	-0.02	0.18	0.00	52.8	0.09	0.00	0.000
JUN	0.06	6.45	0.00	0.00	0.00	0.03	0.00	0.00	5.22	0.01	0.00	0.05	0.00	57.3	0.02	0.00	0.000
JUL	0.00	6.11	0.00	0.00	0.00	0.01	0.00	0.00	4.99	0.00	0.00	0.00	0.00	56.7	0.00	0.00	0.000
AUG	0.98	5.80	0.00	0.00	0.00	0.12	0.01	0.00	4.40	0.64	0.03	0.30	0.00	59.7	0.00	0.00	0.000
SEP	0.66	4.89	0.00	0.00	0.00	0.28	0.01	0.00	3.63	0.19	0.30	0.16	0.00	57.9	0.13	0.00	0.000
OCT	0.96	4.40	0.00	0.00	0.00	0.68	0.13	0.00	2.91	1.09	-0.31	0.05	0.00	55.9	0.49	0.00	0.000
NOV	1.02	3.45	0.00	0.00	0.00	0.97	0.26	0.00	1.81	0.57	0.11	0.09	0.00	56.2	0.30	0.00	0.000
DEC	2.17	2.85	0.00	0.00	0.02	1.12	0.06	0.00	1.28	0.16	1.81	0.13	0.00	48.4	1.12	0.00	0.000

FOLLOWING ARE YEAR END TOTALS FOR MODELED REGION FOR YEAR 1976

PRECIP	POTET	CHGINT	RUNOFF	RECHRG	SOLPEV	ACTSEV	SNWEVP	PPLTR	APLTR	CHGSM	EVINT	CHGSNW	AVTMP	EHRM-RO	DEFCIT
11.73	55.14	0.00	0.01	0.03	6.75	1.49	0.00	37.06	6.44	1.80	1.96	0.00	53.28	3.93	0.00

FOLLOWING ARE MONTHLY TOTALS FOR MODELED REGION FOR YEAR 1977

MON	PRECIP	POTET	CHGINT	RUNOFF	RECHRG	SOLPEV	ACTSEV	SNWEVP	PPLTR	APLTR	CHGSM	EVINT	CHGSNW	AVTMP	EHRM-RO	DEFCIT	
JAN	2.32	2.73	0.00	0.01	1.47	1.21	0.77	0.00	0.81	0.80	-0.84	0.12	0.00	46.9	1.95	0.00	0.000
FEB	0.72	2.91	0.00	0.00	0.00	1.03	0.06	0.00	1.37	1.05	-0.56	0.18	0.00	50.8	0.00	0.00	0.000
MAR	1.95	4.22	0.00	0.00	0.00	0.78	0.27	0.00	2.27	1.45	-0.21	0.43	0.00	46.9	0.65	0.00	0.000
APR	0.09	5.40	0.00	0.00	0.00	0.42	0.00	0.00	4.01	0.33	-0.31	0.08	0.00	51.9	0.00	0.00	0.000
MAY	1.07	5.83	0.00	0.00	0.00	0.15	0.01	0.00	4.31	0.67	0.00	0.39	0.00	48.5	0.42	0.00	0.000
JUN	0.21	6.45	0.00	0.00	0.00	0.03	0.00	0.00	5.12	0.04	0.00	0.17	0.00	52.4	0.07	0.00	0.000
JUL	0.00	6.11	0.00	0.00	0.00	0.01	0.00	0.00	4.99	0.00	0.00	0.00	0.00	54.6	0.00	0.00	0.000
AUG	0.00	5.80	0.00	0.00	0.00	0.12	0.00	0.00	4.65	0.00	0.00	0.00	0.00	57.4	0.00	0.00	0.000
SEP	0.35	4.89	0.00	0.00	0.00	0.27	0.00	0.00	3.61	0.10	0.03	0.21	0.00	58.2	0.00	0.00	0.000
OCT	0.06	4.40	0.00	0.00	0.00	0.66	0.00	0.00	3.03	0.04	-0.02	0.04	0.00	55.0	0.00	0.00	0.000
NOV	0.56	3.45	0.00	0.00	0.00	0.96	0.04	0.00	1.95	0.41	0.02	0.08	0.00	54.5	0.00	0.00	0.000
DEC	4.89	2.85	0.00	0.01	1.37	0.98	0.50	0.00	0.95	0.35	2.23	0.43	0.00	52.2	3.23	0.00	0.000

FOLLOWING ARE YEAR END TOTALS FOR MODELED REGION FOR YEAR 1977

PRECIP	POTET	CHGINT	RUNOFF	RECHRG	SOLPEV	ACTSEV	SNWEVP	PPLTR	APLTR	CHGSM	EVINT	CHGSNW	AVTMP	EHRM-RO	DEFCIT
12.22	55.03	0.00	0.03	2.84	6.61	1.66	0.00	37.07	5.25	0.33	2.12	0.00	52.44	6.32	0.00

FOLLOWING ARE MONTHLY TOTALS FOR MODELED REGION FOR YEAR 1978

MON	PRECIP	POTET	CHGINT	RUNOFF	RECHRG	SOLPEV	ACTSEV	SNWEVP	PPLTR	APLTR	CHGSM	EVINT	CHGSNW	AVTMP	EHRM-RO	DEFCIT
JAN	6.18	2.73	0.00	0.16	4.56	1.05	1.04	0.00	0.55	0.55	-0.58	0.45	0.00	51.6	5.07	0.00
FEB	4.73	2.91	0.00	0.44	2.58	0.95	0.80	0.00	0.91	0.90	-0.35	0.35	0.00	52.0	3.57	0.00
MAR	5.18	4.22	0.00	0.32	1.06	0.75	0.68	0.00	1.91	1.91	0.61	0.60	0.00	56.2	2.94	0.00
APR	4.99	5.40	0.00	0.32	0.94	0.38	0.35	0.00	3.36	3.35	-0.56	0.60	0.00	53.1	2.64	0.00
MAY	0.16	5.83	0.00	0.01	0.00	0.17	0.01	0.00	4.58	1.47	-1.38	0.06	0.00	55.4	0.05	0.00
JUN	0.00	6.45	0.00	0.00	0.00	0.03	0.00	0.00	5.26	0.00	0.00	0.00	0.00	56.1	0.00	0.00
JUL	0.00	6.11	0.00	0.00	0.00	0.01	0.00	0.00	4.99	0.00	0.00	0.00	0.00	57.3	0.00	0.00
AUG	0.00	5.80	0.00	0.00	0.00	0.12	0.00	0.00	4.65	0.00	0.00	0.00	0.00	58.5	0.00	0.00
SEP	0.31	4.89	0.00	0.00	0.00	0.28	0.00	0.00	3.68	0.20	0.00	0.11	0.00	60.2	0.10	0.00
OCT	0.00	4.40	0.00	0.00	0.00	0.67	0.00	0.00	3.06	0.00	0.00	0.00	0.00	55.4	0.00	0.00
NOV	2.61	3.45	0.00	0.01	0.01	0.90	0.37	0.00	1.68	0.53	1.46	0.24	0.00	50.9	1.50	0.00
DEC	1.57	2.85	0.00	0.01	0.00	1.09	0.78	0.00	0.92	0.89	-0.28	0.17	0.00	45.5	0.70	0.00

FOLLOWING ARE YEAR END TOTALS FOR MODELED REGION FOR YEAR 1978

PRECIP	POTET	CHGINT	RUNOFF	RECHRG	SOLPEV	ACTSEV	SNWEVP	PPLTR	APLTR	CHGSM	EVINT	CHGSNW	AVTMP	EHRM-RO	DEFCIT
25.74	55.03	0.00	1.29	9.14	6.40	4.02	0.00	35.54	9.79	-1.08	2.59	0.00	54.37	16.57	-0.02

FOLLOWING ARE MONTHLY TOTALS FOR MODELED REGION FOR YEAR 1979

MON	PRECIP	POTET	CHGINT	RUNOFF	RECHRG	SOLPEV	ACTSEV	SNWEVP	PPLTR	APLTR	CHGSM	EVINT	CHGSNW	AVTMP	EHRM-RO	DEFCIT
JAN	5.17	2.73	0.00	0.02	1.97	1.07	0.98	0.00	0.58	0.57	1.22	0.41	0.00	46.3	3.42	0.00
FEB	3.83	2.91	0.00	0.15	1.62	0.89	0.88	0.00	0.76	0.76	-0.12	0.55	0.00	47.7	2.50	0.00
MAR	4.13	4.22	0.00	0.20	0.99	0.75	0.66	0.00	1.90	1.89	-0.24	0.63	0.00	52.2	2.42	0.00
APR	0.62	5.40	0.00	0.02	0.00	0.41	0.09	0.00	3.85	2.21	-1.90	0.20	0.00	54.2	0.00	0.00
MAY	0.41	5.83	0.00	0.00	0.00	0.16	0.00	0.00	4.52	0.40	-0.13	0.14	0.00	55.1	0.15	0.00
JUN	0.00	6.45	0.00	0.00	0.00	0.03	0.00	0.00	5.26	0.00	0.00	0.00	0.00	55.8	0.00	0.00
JUL	0.05	6.11	0.00	0.00	0.00	0.01	0.00	0.00	4.96	0.01	0.00	0.04	0.00	58.3	0.02	0.00
AUG	0.05	5.80	0.00	0.00	0.00	0.12	0.00	0.00	4.62	0.01	0.00	0.04	0.00	58.6	0.00	0.00
SEP	0.05	4.89	0.00	0.00	0.00	0.29	0.00	0.00	3.74	0.01	0.00	0.04	0.00	62.4	0.00	0.00
OCT	1.62	4.40	0.00	0.05	0.00	0.61	0.23	0.00	2.69	0.68	0.39	0.32	0.00	56.5	0.62	-0.05
NOV	2.18	3.45	0.00	0.00	0.00	0.88	0.69	0.00	1.41	1.04	0.09	0.36	0.00	52.8	0.89	0.00
DEC	2.87	2.85	0.00	0.01	0.01	1.06	0.49	0.00	1.05	0.50	1.64	0.24	0.00	50.2	1.56	0.00

FOLLOWING ARE YEAR END TOTALS FOR MODELED REGION FOR YEAR 1979

PRECIP	POTET	CHGINT	RUNOFF	RECHRG	SOLPEV	ACTSEV	SNWEVP	PPLTR	APLTR	CHGSM	EVINT	CHGSNW	AVTMP	EHRM-RO	DEFCIT
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20.97 55.03 0.00 0.46 4.59 6.27 4.00 0.00 35.33 8.07 0.93 2.98 0.00 54.21 11.58 -0.06

FOLLOWING ARE MONTHLY TOTALS FOR MODELED REGION FOR YEAR 1980

MON	PRECP	POTET	CHGINT	RUNOFF	RECHRG	SOLPEV	ACTSEV	SNWEVP	PPLTR	APLTR	CHGSM	EVINT	CHGSNW	AVTMP	EHRM-RO	DEFCIT	
JAN	4.44	2.73	0.00	0.10	2.86	1.09	1.06	0.00	0.58	0.58	-0.52	0.37	0.00	50.2	3.62	0.00	0.000
FEB	6.02	3.02	0.00	0.42	3.08	0.98	0.52	0.00	1.08	1.05	0.56	0.38	0.00	51.9	4.62	0.00	0.000
MAR	2.73	4.22	0.00	0.24	0.96	0.75	0.52	0.00	2.14	2.02	-1.48	0.45	0.00	49.9	1.56	0.00	0.000
APR	2.27	5.40	0.00	0.00	0.00	0.38	0.10	0.00	3.62	1.95	-0.29	0.51	0.00	53.7	0.76	0.00	0.000
MAY	0.67	5.83	0.00	0.00	0.00	0.15	0.01	0.00	4.43	0.79	-0.38	0.26	0.00	50.3	0.23	0.00	0.000
JUN	0.09	6.45	0.00	0.00	0.00	0.03	0.00	0.00	5.22	0.05	0.00	0.05	0.00	55.0	0.04	0.00	0.000
JUL	0.88	6.11	0.00	0.00	0.00	0.01	0.00	0.00	4.90	0.78	0.00	0.11	0.00	58.4	0.34	0.00	0.000
AUG	0.00	5.80	0.00	0.00	0.00	0.12	0.00	0.00	4.64	0.00	0.00	0.00	0.00	57.0	0.00	0.00	0.000
SEP	0.06	4.89	0.00	0.00	0.00	0.30	0.00	0.00	3.72	0.01	0.00	0.04	0.00	58.1	0.02	0.00	0.000
OCT	0.00	4.40	0.00	0.00	0.00	0.68	0.00	0.00	3.04	0.00	0.00	0.00	0.00	56.2	0.00	0.00	0.000
NOV	0.15	3.45	0.00	0.00	0.00	0.96	0.00	0.00	1.95	0.04	0.01	0.10	0.00	54.5	0.00	0.00	0.000
DEC	1.41	2.85	0.00	0.00	0.00	1.09	0.46	0.00	1.02	0.54	0.20	0.20	0.00	52.3	0.35	0.00	0.000

FOLLOWING ARE YEAR END TOTALS FOR MODELED REGION FOR YEAR 1980

PRECP	POTET	CHGINT	RUNOFF	RECHRG	SOLPEV	ACTSEV	SNWEVP	PPLTR	APLTR	CHGSM	EVINT	CHGSNW	AVTMP	EHRM-RO	DEFCIT
18.71	55.14	0.00	0.78	6.91	6.55	2.67	0.00	36.35	7.81	-1.91	2.47	0.00	53.95	11.55	-0.01

FOLLOWING ARE MONTHLY TOTALS FOR MODELED REGION FOR YEAR 1981

MON	PRECP	POTET	CHGINT	RUNOFF	RECHRG	SOLPEV	ACTSEV	SNWEVP	PPLTR	APLTR	CHGSM	EVINT	CHGSNW	AVTMP	EHRM-RO	DEFCIT	
JAN	5.01	2.73	0.00	0.01	2.03	1.14	0.27	0.00	0.91	0.30	2.13	0.27	0.00	53.4	3.60	0.00	0.000
FEB	1.79	2.91	0.00	0.00	0.04	1.00	0.96	0.00	0.87	0.87	-0.34	0.26	0.00	52.4	0.50	0.00	0.000
MAR	4.58	4.22	0.00	0.10	1.28	0.72	0.71	0.00	1.79	1.79	-0.06	0.76	0.00	49.4	2.59	0.00	0.000
APR	1.03	5.40	0.00	0.01	0.00	0.41	0.12	0.00	3.83	2.54	-1.83	0.19	0.00	52.4	0.37	0.00	0.000
MAY	0.05	5.83	0.00	0.00	0.00	0.17	0.00	0.00	4.60	0.12	-0.11	0.04	0.00	52.4	0.00	0.00	0.000
JUN	0.00	6.45	0.00	0.00	0.00	0.03	0.00	0.00	5.26	0.00	0.00	0.00	0.00	58.6	0.00	0.00	0.000
JUL	0.00	6.11	0.00	0.00	0.00	0.01	0.00	0.00	4.99	0.00	0.00	0.00	0.00	55.9	0.00	0.00	0.000
AUG	0.00	5.80	0.00	0.00	0.00	0.12	0.00	0.00	4.65	0.00	0.00	0.00	0.00	56.1	0.00	0.00	0.000
SEP	0.00	4.89	0.00	0.00	0.00	0.29	0.00	0.00	3.77	0.00	0.00	0.00	0.00	55.9	0.00	0.00	0.000
OCT	1.03	4.40	0.00	0.00	0.00	0.64	0.11	0.00	2.89	0.32	0.45	0.15	0.00	52.7	0.35	0.00	0.000
NOV	4.02	3.45	0.00	0.01	0.39	0.86	0.60	0.00	1.47	0.98	1.66	0.38	0.00	53.8	2.39	0.00	0.000
DEC	1.81	2.85	0.00	0.00	0.00	1.09	0.72	0.00	0.95	0.93	-0.01	0.17	0.00	48.5	0.79	0.00	0.000

FOLLOWING ARE YEAR END TOTALS FOR MODELED REGION FOR YEAR 1981

PRECIP	POTET	CHGINT	RUNOFF	RECHRG	SOLPEV	ACTSEV	SNWEVP	PPLTR	APLTR	CHGSM	EVINT	CHGSNW	AVTMP	EHRM-RO	DEFCIT
19.32	55.03	0.00	0.14	3.74	6.48	3.49	0.00	35.96	7.85	1.89	2.21	0.00	53.45	10.60	0.00

FOLLOWING ARE MONTHLY TOTALS FOR MODELED REGION FOR YEAR 1982

MON	PRECIP	POTET	CHGINT	RUNOFF	RECHRG	SOLPEV	ACTSEV	SNWEVP	PPLTR	APLTR	CHGSM	EVINT	CHGSNW	AVTMP	EHRM-RO	DEFCIT
JAN	3.90	2.73	0.00	0.31	1.66	1.07	1.04	0.00	0.55	0.55	-0.09	0.43	0.00	42.9	2.65	0.00
FEB	2.43	2.91	0.00	0.10	0.48	0.96	0.82	0.00	0.89	0.89	-0.21	0.35	0.00	49.8	1.37	0.00
MAR	6.64	4.22	0.00	0.19	2.59	0.71	0.70	0.00	1.73	1.73	0.59	0.86	0.00	48.4	4.29	0.00
APR	1.78	5.40	0.00	0.51	0.15	0.38	0.22	0.00	3.53	2.66	-2.25	0.51	0.00	52.2	0.83	-0.03
MAY	0.05	5.83	0.00	0.00	0.00	0.17	0.00	0.00	4.60	0.13	-0.12	0.04	0.00	50.5	0.02	0.00
JUN	0.17	6.45	0.00	0.00	0.00	0.03	0.00	0.00	5.21	0.05	0.06	0.06	0.00	52.0	0.05	0.00
JUL	0.17	6.11	0.00	0.00	0.00	0.01	0.00	0.00	4.91	0.09	-0.01	0.10	0.00	52.3	0.05	0.00
AUG	0.00	5.80	0.00	0.00	0.00	0.12	0.00	0.00	4.65	0.05	-0.05	0.00	0.00	52.9	0.00	0.00
SEP	1.38	4.89	0.00	0.00	0.00	0.28	0.09	0.00	3.57	0.70	0.42	0.17	0.00	56.6	0.56	0.00
OCT	2.11	4.40	0.00	0.01	0.00	0.60	0.16	0.00	2.73	0.78	0.84	0.33	0.00	56.0	0.92	0.00
NOV	5.54	3.45	0.00	0.08	1.80	0.84	0.84	0.00	1.27	1.25	1.13	0.46	0.00	50.9	3.68	0.00
DEC	3.17	2.85	0.00	0.25	1.44	1.04	0.97	0.00	0.77	0.77	-0.55	0.29	0.00	48.6	2.25	0.00

FOLLOWING ARE YEAR END TOTALS FOR MODELED REGION FOR YEAR 1982

PRECIP	POTET	CHGINT	RUNOFF	RECHRG	SOLPEV	ACTSEV	SNWEVP	PPLTR	APLTR	CHGSM	EVINT	CHGSNW	AVTMP	EHRM-RO	DEFCIT
27.35	55.03	0.00	1.47	8.11	6.20	4.84	0.00	34.42	9.66	-0.26	3.58	0.00	51.08	16.66	-0.05

FOLLOWING ARE MONTHLY TOTALS FOR MODELED REGION FOR YEAR 1983

MON	PRECIP	POTET	CHGINT	RUNOFF	RECHRG	SOLPEV	ACTSEV	SNWEVP	PPLTR	APLTR	CHGSM	EVINT	CHGSNW	AVTMP	EHRM-RO	DEFCIT
JAN	6.59	2.73	0.00	0.72	3.77	1.09	0.71	0.00	0.69	0.68	0.31	0.39	0.00	51.2	5.21	0.00
FEB	5.52	2.91	0.00	0.83	2.25	0.89	0.89	0.00	0.75	0.75	0.25	0.56	0.00	52.7	3.89	0.00
MAR	7.99	4.22	0.00	2.23	3.10	0.68	0.68	0.00	1.69	1.69	-0.66	0.95	0.00	53.7	5.82	0.00
APR	3.76	5.40	0.00	0.42	0.00	0.36	0.13	0.00	3.22	2.53	-0.18	0.98	0.00	53.9	1.60	-0.12
MAY	0.44	5.83	0.00	0.18	0.00	0.16	0.05	0.00	4.44	1.64	-1.55	0.19	0.00	55.3	0.18	-0.08
JUN	0.56	6.45	0.00	0.02	0.00	0.03	0.00	0.00	5.10	0.36	0.00	0.20	0.00	58.4	0.20	-0.02
JUL	0.00	6.11	0.00	0.01	0.00	0.01	0.00	0.00	4.99	0.01	-0.01	0.00	0.00	60.9	0.00	-0.01
AUG	0.15	5.80	0.00	0.01	0.00	0.12	0.00	0.00	4.57	0.06	0.00	0.09	0.00	62.9	0.05	-0.01
SEP	0.15	4.89	0.00	0.01	0.00	0.28	0.00	0.00	3.70	0.02	0.04	0.09	0.00	64.5	0.05	0.00
OCT	1.02	4.40	0.00	0.01	0.00	0.62	0.05	0.00	2.81	0.66	0.01	0.30	0.00	60.6	0.43	0.00
NOV	4.38	3.45	0.00	0.02	0.57	0.81	0.56	0.00	1.38	0.75	1.91	0.57	0.00	53.6	2.51	0.00
DEC	4.00	2.85	0.00	0.12	1.39	0.95	0.95	0.00	0.68	0.68	0.35	0.51	0.00	50.0	2.45	0.00

FOLLOWING ARE YEAR END TOTALS FOR MODELED REGION FOR YEAR 1983

PRECIP	POTET	CHGINT	RUNOFF	RECHRG	SOLPEV	ACTSEV	SNWEVP	PPLTR	APLTR	CHGSM	EVINT	CHGSNW	AVTMP	EHRM-RO	DEFCIT
34.56	55.03	0.00	4.57	11.08	5.99	4.02	0.00	34.03	9.84	0.48	4.81	0.00	56.47	22.40	-0.24

FOLLOWING ARE MONTHLY TOTALS FOR MODELED REGION FOR YEAR 1984

MON	PRECIP	POTET	CHGINT	RUNOFF	RECHRG	SOLPEV	ACTSEV	SNWEVP	PPLTR	APLTR	CHGSM	EVINT	CHGSNW	AVTMP	EHRM-RO	DEFCIT
JAN	0.38	2.73	0.00	0.13	0.00	1.22	0.68	0.00	0.85	0.83	-1.35	0.09	0.00	48.1	0.15	0.00
FEB	2.31	3.02	0.00	0.01	0.00	1.00	0.65	0.00	1.05	0.98	0.38	0.31	0.00	50.7	0.46	0.00
MAR	1.62	4.22	0.00	0.00	0.00	0.78	0.31	0.00	2.32	1.62	-0.68	0.36	0.00	55.5	0.00	0.00
APR	0.81	5.40	0.00	0.00	0.00	0.40	0.02	0.00	3.87	1.16	-0.63	0.26	0.00	54.2	0.00	0.00
MAY	2.06	5.83	0.00	0.00	0.04	0.15	0.03	0.00	4.33	1.59	0.03	0.37	0.00	56.6	0.00	0.00
JUN	0.27	6.45	0.00	0.00	0.00	0.02	0.00	0.00	5.14	0.18	-0.06	0.15	0.00	55.8	0.00	0.00
JUL	0.00	6.11	0.00	0.00	0.00	0.01	0.00	0.00	4.99	0.00	0.00	0.00	0.00	60.1	0.00	0.00
AUG	0.00	5.80	0.00	0.00	0.00	0.12	0.00	0.00	4.64	0.00	0.00	0.00	0.00	59.4	0.00	0.00
SEP	0.00	4.89	0.00	0.00	0.00	0.30	0.00	0.00	3.76	0.00	0.00	0.00	0.00	63.3	0.00	0.00
OCT	1.77	4.40	0.00	0.00	0.00	0.65	0.19	0.00	2.74	1.23	0.10	0.25	0.00	55.1	0.43	0.00
NOV	3.94	3.45	0.00	0.00	0.00	0.79	0.63	0.00	1.25	0.88	1.73	0.69	0.00	51.3	0.57	0.00
DEC	1.14	2.85	0.00	0.00	0.00	1.08	0.97	0.00	0.79	0.76	-0.82	0.23	0.00	46.3	0.21	0.00

FOLLOWING ARE YEAR END TOTALS FOR MODELED REGION FOR YEAR 1984

PRECIP	POTET	CHGINT	RUNOFF	RECHRG	SOLPEV	ACTSEV	SNWEVP	PPLTR	APLTR	CHGSM	EVINT	CHGSNW	AVTMP	EHRM-RO	DEFCIT
14.29	55.14	0.00	0.15	0.04	6.53	3.48	0.00	35.72	9.23	-1.31	2.70	0.00	54.71	1.82	0.00

FOLLOWING ARE MONTHLY TOTALS FOR MODELED REGION FOR YEAR 1985

MON	PRECIP	POTET	CHGINT	RUNOFF	RECHRG	SOLPEV	ACTSEV	SNWEVP	PPLTR	APLTR	CHGSM	EVINT	CHGSNW	AVTMP	EHRM-RO	DEFCIT
JAN	1.39	2.73	0.00	0.00	0.00	1.15	0.71	0.00	0.77	0.66	-0.21	0.23	0.00	45.7	0.00	0.00
FEB	1.70	2.91	0.00	0.00	0.00	0.94	0.55	0.00	1.01	0.78	-0.02	0.39	0.00	48.7	0.00	0.00
MAR	3.46	4.22	0.00	0.00	0.00	0.74	0.68	0.00	1.91	1.75	0.42	0.60	0.00	48.0	1.21	0.00
APR	0.94	5.40	0.00	0.00	0.00	0.41	0.09	0.00	3.81	1.73	-1.13	0.26	0.00	56.5	0.00	0.00
MAY	0.31	5.83	0.00	0.00	0.00	0.16	0.00	0.00	4.47	0.15	-0.04	0.20	0.00	52.6	0.00	0.00
JUN	0.20	6.45	0.00	0.00	0.00	0.03	0.00	0.00	5.17	0.11	-0.02	0.11	0.00	58.0	0.00	0.00
JUL	0.00	6.11	0.00	0.00	0.00	0.01	0.00	0.00	4.99	0.00	0.00	0.00	0.00	59.0	0.00	0.00
AUG	0.00	5.80	0.00	0.00	0.00	0.12	0.00	0.00	4.65	0.00	0.00	0.00	0.00	57.6	0.00	0.00
SEP	0.29	4.89	0.00	0.00	0.00	0.28	0.00	0.00	3.63	0.12	0.00	0.17	0.00	57.6	0.00	0.00
OCT	1.18	4.40	0.00	0.00	0.00	0.66	0.22	0.00	2.88	0.64	0.27	0.05	0.00	53.7	0.54	0.00

NOV	3.59	3.45	0.00	0.01	0.14	0.85	0.57	0.00	1.47	0.88	1.59	0.40	0.00	49.5	1.69	0.00	0.000
DEC	1.72	2.85	0.00	0.00	0.27	1.02	0.80	0.00	0.81	0.80	-0.51	0.36	0.00	49.9	0.04	0.00	0.000

FOLLOWING ARE YEAR END TOTALS FOR MODELED REGION FOR YEAR 1985

PRECIP	POTET	CHGINT	RUNOFF	RECHRG	SOLPEV	ACTSEV	SNWEVP	PPLTR	APLTR	CHGSM	EVINT	CHGSNW	AVTMP	EHRM-RO	DEFCIT
14.79	55.03	0.00	0.01	0.41	6.38	3.61	0.00	35.57	7.62	0.35	2.78	0.00	53.07	3.48	0.00

FOLLOWING ARE MONTHLY TOTALS FOR MODELED REGION FOR YEAR 1986

MON	PRECIP	POTET	CHGINT	RUNOFF	RECHRG	SOLPEV	ACTSEV	SNWEVP	PPLTR	APLTR	CHGSM	EVINT	CHGSNW	AVTMP	EHRM-RO	DEFCIT
JAN	2.08	2.73	0.00	0.00	0.00	1.15	0.66	0.00	0.78	0.72	0.44	0.25	0.00	52.9	0.48	0.00
FEB	6.39	2.91	0.00	0.10	4.12	0.92	0.92	0.00	0.80	0.80	0.01	0.44	0.00	52.8	5.06	0.00
MAR	4.76	4.22	0.00	0.42	2.30	0.78	0.56	0.00	2.13	2.09	-1.00	0.40	0.00	55.1	3.33	0.00
APR	0.77	5.40	0.00	0.01	0.00	0.41	0.04	0.00	3.90	1.32	-0.79	0.19	0.00	53.8	0.32	0.00
MAY	0.26	5.83	0.00	0.00	0.00	0.16	0.00	0.00	4.55	0.17	-0.01	0.10	0.00	52.5	0.09	0.00
JUN	0.00	6.45	0.00	0.00	0.00	0.03	0.00	0.00	5.26	0.00	0.00	0.00	0.00	56.2	0.00	0.00
JUL	0.05	6.11	0.00	0.00	0.00	0.01	0.00	0.00	4.96	0.01	0.00	0.04	0.00	56.5	0.02	0.00
AUG	0.00	5.80	0.00	0.00	0.00	0.12	0.00	0.00	4.65	0.00	0.00	0.00	0.00	57.4	0.00	0.00
SEP	0.77	4.89	0.00	0.00	0.00	0.28	0.02	0.00	3.63	0.36	0.22	0.16	0.00	55.5	0.28	0.00
OCT	1.12	4.40	0.00	0.00	0.00	0.59	0.06	0.00	2.67	0.65	-0.11	0.51	0.00	56.0	0.47	0.00
NOV	0.50	3.45	0.00	0.00	0.00	0.91	0.00	0.00	1.90	0.29	-0.01	0.22	0.00	54.9	0.18	0.00
DEC	1.06	2.85	0.00	0.00	0.00	1.06	0.18	0.00	1.16	0.49	0.13	0.26	0.00	49.3	0.33	0.00

FOLLOWING ARE YEAR END TOTALS FOR MODELED REGION FOR YEAR 1986

PRECIP	POTET	CHGINT	RUNOFF	RECHRG	SOLPEV	ACTSEV	SNWEVP	PPLTR	APLTR	CHGSM	EVINT	CHGSNW	AVTMP	EHRM-RO	DEFCIT
17.74	55.03	0.00	0.55	6.42	6.41	2.44	0.00	36.38	6.89	-1.11	2.57	0.00	54.42	10.57	-0.02

FOLLOWING ARE MONTHLY TOTALS FOR MODELED REGION FOR YEAR 1987

MON	PRECIP	POTET	CHGINT	RUNOFF	RECHRG	SOLPEV	ACTSEV	SNWEVP	PPLTR	APLTR	CHGSM	EVINT	CHGSNW	AVTMP	EHRM-RO	DEFCIT
JAN	2.81	2.73	0.00	0.00	0.00	1.11	0.97	0.00	0.62	0.54	0.97	0.33	0.00	47.1	1.07	0.00
FEB	3.03	2.91	0.00	0.01	0.74	1.00	0.93	0.00	0.90	0.89	0.22	0.24	0.00	50.5	1.99	0.00
MAR	2.60	4.22	0.00	0.00	0.00	0.80	0.55	0.00	2.13	2.02	-0.35	0.38	0.00	52.1	1.01	0.00
APR	0.66	5.40	0.00	0.00	0.00	0.41	0.03	0.00	3.88	1.22	-0.80	0.22	0.00	56.4	0.20	0.00
MAY	0.45	5.83	0.00	0.00	0.00	0.16	0.00	0.00	4.45	0.46	-0.23	0.22	0.00	54.4	0.16	0.00
JUN	0.00	6.45	0.00	0.00	0.00	0.03	0.00	0.00	5.26	0.05	-0.05	0.00	0.00	54.6	0.00	0.00
JUL	0.00	6.11	0.00	0.00	0.00	0.01	0.00	0.00	4.99	0.00	0.00	0.00	0.00	55.5	0.00	0.00

AUG	0.00	5.80	0.00	0.00	0.00	0.12	0.00	0.00	4.65	0.00	0.00	0.00	0.00	57.9	0.00	0.00	0.000
SEP	0.00	4.89	0.00	0.00	0.00	0.29	0.00	0.00	3.77	0.00	0.00	0.00	0.00	57.8	0.00	0.00	0.000
OCT	0.96	4.40	0.00	0.00	0.00	0.62	0.05	0.00	2.87	0.20	0.47	0.25	0.00	58.0	0.00	0.00	0.000
NOV	2.23	3.45	0.00	0.00	0.00	0.84	0.50	0.00	1.45	0.95	0.29	0.50	0.00	53.6	0.14	0.00	0.000
DEC	3.59	2.85	0.00	0.00	0.14	0.97	0.95	0.00	0.68	0.65	1.35	0.49	0.00	47.3	1.31	0.00	0.000

FOLLOWING ARE YEAR END TOTALS FOR MODELED REGION FOR YEAR 1987

PRECIP	POTET	CHGINT	RUNOFF	RECHRG	SOLPEV	ACTSEV	SNWEVP	PPLTR	APLTR	CHGSM	EVINT	CHGSNW	AVTMP	EHRM-RO	DEFCIT
16.34	55.03	0.00	0.02	0.88	6.35	3.97	0.00	35.64	6.97	1.87	2.64	0.00	53.78	5.88	0.00

FOLLOWING ARE MONTHLY TOTALS FOR MODELED REGION FOR YEAR 1988

MON	PRECIP	POTET	CHGINT	RUNOFF	RECHRG	SOLPEV	ACTSEV	SNWEVP	PPLTR	APLTR	CHGSM	EVINT	CHGSNW	AVTMP	EHRM-RO	DEFCIT
JAN	1.65	2.73	0.00	0.00	0.22	1.17	1.13	0.00	0.62	0.61	-0.51	0.19	0.00	49.2	0.59	0.00
FEB	0.21	3.02	0.00	0.00	0.00	1.09	0.23	0.00	1.40	1.07	-1.17	0.08	0.00	52.9	0.03	0.00
MAR	0.98	4.22	0.00	0.00	0.00	0.80	0.23	0.00	2.51	0.96	-0.39	0.17	0.00	54.5	0.13	0.00
APR	1.44	5.40	0.00	0.00	0.00	0.39	0.05	0.00	3.79	1.01	0.05	0.34	0.00	56.0	0.26	0.00
MAY	0.57	5.83	0.00	0.00	0.00	0.15	0.00	0.00	4.45	0.35	-0.01	0.23	0.00	53.2	0.03	0.00
JUN	0.10	6.45	0.00	0.00	0.00	0.03	0.00	0.00	5.21	0.12	-0.07	0.06	0.00	56.0	0.00	0.00
JUL	0.00	6.11	0.00	0.00	0.00	0.01	0.00	0.00	4.99	0.00	0.00	0.00	0.00	59.3	0.00	0.00
AUG	0.00	5.80	0.00	0.00	0.00	0.12	0.00	0.00	4.64	0.00	0.00	0.00	0.00	58.3	0.00	0.00
SEP	0.00	4.89	0.00	0.00	0.00	0.30	0.00	0.00	3.76	0.00	0.00	0.00	0.00	57.4	0.00	0.00
OCT	0.00	4.40	0.00	0.00	0.00	0.68	0.00	0.00	3.04	0.00	0.00	0.00	0.00	55.3	0.00	0.00
NOV	1.59	3.45	0.00	0.00	0.00	0.91	0.30	0.00	1.71	0.53	0.51	0.25	0.00	52.9	0.00	0.00
DEC	2.47	2.85	0.00	0.00	0.10	1.06	0.35	0.00	1.09	0.44	1.32	0.25	0.00	47.3	1.38	0.00

FOLLOWING ARE YEAR END TOTALS FOR MODELED REGION FOR YEAR 1988

PRECIP	POTET	CHGINT	RUNOFF	RECHRG	SOLPEV	ACTSEV	SNWEVP	PPLTR	APLTR	CHGSM	EVINT	CHGSNW	AVTMP	EHRM-RO	DEFCIT
9.01	55.14	0.00	0.01	0.32	6.73	2.29	0.00	37.21	5.08	-0.27	1.57	0.00	54.36	2.42	0.00

FOLLOWING ARE MONTHLY TOTALS FOR MODELED REGION FOR YEAR 1989

MON	PRECIP	POTET	CHGINT	RUNOFF	RECHRG	SOLPEV	ACTSEV	SNWEVP	PPLTR	APLTR	CHGSM	EVINT	CHGSNW	AVTMP	EHRM-RO	DEFCIT
JAN	1.28	2.73	0.00	0.00	0.20	1.16	0.85	0.00	0.73	0.72	-0.71	0.22	0.00	45.9	0.34	0.00
FEB	1.49	2.91	0.00	0.00	0.01	0.98	0.56	0.00	1.08	1.00	-0.35	0.26	0.00	46.0	0.64	0.00
MAR	2.24	4.22	0.00	0.00	0.00	0.79	0.51	0.00	2.18	1.72	-0.37	0.38	0.00	53.7	0.90	0.00
APR	1.07	5.40	0.00	0.00	0.00	0.41	0.03	0.00	3.85	0.98	-0.19	0.25	0.00	57.4	0.41	0.00

MAY	0.22	5.83	0.00	0.00	0.00	0.16	0.00	0.00	4.55	0.32	-0.21	0.11	0.00	53.3	0.00	0.00	0.000
JUN	0.04	6.45	0.00	0.00	0.00	0.03	0.00	0.00	5.23	0.00	0.00	0.04	0.00	56.6	0.00	0.00	0.000
JUL	0.00	6.11	0.00	0.00	0.00	0.01	0.00	0.00	4.99	0.00	0.00	0.00	0.00	55.8	0.00	0.00	0.000
AUG	0.00	5.80	0.00	0.00	0.00	0.12	0.00	0.00	4.65	0.00	0.00	0.00	0.00	56.6	0.00	0.00	0.000
SEP	1.44	4.89	0.00	0.00	0.00	0.27	0.04	0.00	3.52	0.76	0.36	0.28	0.00	56.7	0.00	0.00	0.000
OCT	1.31	4.40	0.00	0.00	0.00	0.63	0.21	0.00	2.76	0.88	-0.01	0.23	0.00	55.3	0.00	0.00	0.000
NOV	1.18	3.45	0.00	0.00	0.00	0.94	0.22	0.00	1.85	0.53	0.33	0.10	0.00	55.6	0.00	0.00	0.000
DEC	0.13	2.85	0.00	0.00	0.00	1.15	0.19	0.00	1.25	0.42	-0.52	0.03	0.00	51.1	0.00	0.00	0.000

FOLLOWING ARE YEAR END TOTALS FOR MODELED REGION FOR YEAR 1989

PRECIP	POTET	CHGINT	RUNOFF	RECHRG	SOLPEV	ACTSEV	SNWEVP	PPLTR	APLTR	CHGSM	EVINT	CHGSNW	AVTMP	EHRM-RO	DEFCIT
10.40	55.03	0.00	0.01	0.21	6.66	2.62	0.00	36.63	7.33	-1.67	1.90	0.00	53.69	2.30	0.00

FOLLOWING ARE MONTHLY TOTALS FOR MODELED REGION FOR YEAR 1990

MON	PRECIP	POTET	CHGINT	RUNOFF	RECHRG	SOLPEV	ACTSEV	SNWEVP	PPLTR	APLTR	CHGSM	EVINT	CHGSNW	AVTMP	EHRM-RO	DEFCIT
JAN	2.61	2.73	0.00	0.00	0.00	1.15	0.73	0.00	0.75	0.54	1.10	0.24	0.00	48.2	0.01	0.00
FEB	2.52	2.91	0.00	0.01	0.18	1.01	0.98	0.00	0.89	0.88	0.25	0.21	0.00	47.4	1.41	0.00
MAR	1.96	4.22	0.00	0.00	0.05	0.78	0.57	0.00	2.16	1.94	-0.96	0.37	0.00	51.7	0.63	0.00
APR	1.10	5.40	0.00	0.00	0.00	0.41	0.03	0.00	3.87	1.25	-0.42	0.24	0.00	57.0	0.29	0.00
MAY	1.67	5.83	0.00	0.00	0.00	0.16	0.01	0.00	4.45	0.96	0.47	0.22	0.00	53.5	0.67	0.00
JUN	0.00	6.45	0.00	0.00	0.00	0.03	0.00	0.00	5.25	0.60	-0.60	0.00	0.00	56.3	0.00	0.00
JUL	0.00	6.11	0.00	0.00	0.00	0.01	0.00	0.00	4.99	0.00	0.00	0.00	0.00	58.2	0.00	0.00
AUG	0.12	5.80	0.00	0.00	0.00	0.12	0.00	0.00	4.60	0.06	0.00	0.06	0.00	59.2	0.00	0.00
SEP	0.12	4.89	0.00	0.00	0.00	0.29	0.00	0.00	3.72	0.05	0.01	0.06	0.00	58.9	0.00	0.00
OCT	0.12	4.40	0.00	0.00	0.00	0.66	0.00	0.00	3.03	0.02	0.05	0.05	0.00	55.8	0.00	0.00
NOV	0.24	3.45	0.00	0.00	0.00	0.95	0.00	0.00	1.98	0.12	0.05	0.08	0.00	53.0	0.00	0.00
DEC	1.59	2.85	0.00	0.00	0.00	0.69	0.25	0.00	0.93	0.42	0.56	0.29	0.07	44.2	0.00	0.00

FOLLOWING ARE YEAR END TOTALS FOR MODELED REGION FOR YEAR 1990

PRECIP	POTET	CHGINT	RUNOFF	RECHRG	SOLPEV	ACTSEV	SNWEVP	PPLTR	APLTR	CHGSM	EVINT	CHGSNW	AVTMP	EHRM-RO	DEFCIT
12.03	55.03	0.00	0.01	0.23	6.26	2.57	0.00	36.61	6.84	0.51	1.80	0.07	53.64	3.01	0.00

FOLLOWING ARE MONTHLY TOTALS FOR MODELED REGION FOR YEAR 1991

MON	PRECIP	POTET	CHGINT	RUNOFF	RECHRG	SOLPEV	ACTSEV	SNWEVP	PPLTR	APLTR	CHGSM	EVINT	CHGSNW	AVTMP	EHRM-RO	DEFCIT
JAN	0.23	2.73	0.00	0.00	0.00	1.17	0.38	0.00	0.95	0.40	-0.54	0.06	-0.07	48.5	0.00	0.00

FEB	1.86	2.91	0.00	0.00	0.00	1.01	0.28	0.00	1.24	0.51	0.85	0.22	0.00	53.8	0.00	0.00	0.000
MAR	7.49	4.22	0.00	0.16	3.25	0.71	0.71	0.00	1.75	1.75	0.81	0.82	0.00	49.0	5.22	0.00	0.000
APR	0.47	5.40	0.00	0.00	0.00	0.42	0.05	0.00	3.90	1.93	-1.68	0.17	0.00	51.9	0.16	0.00	0.000
MAY	0.50	5.83	0.00	0.00	0.00	0.16	0.00	0.00	4.47	0.29	0.02	0.20	0.00	50.7	0.02	0.00	0.000
JUN	0.00	6.45	0.00	0.00	0.00	0.03	0.00	0.00	5.26	0.13	-0.13	0.00	0.00	52.6	0.00	0.00	0.000
JUL	0.00	6.11	0.00	0.00	0.00	0.01	0.00	0.00	4.99	0.00	0.00	0.00	0.00	56.1	0.00	0.00	0.000
AUG	0.06	5.80	0.00	0.00	0.00	0.12	0.00	0.00	4.61	0.01	0.00	0.05	0.00	58.6	0.00	0.00	0.000
SEP	0.00	4.89	0.00	0.00	0.00	0.29	0.00	0.00	3.77	0.00	0.00	0.00	0.00	57.9	0.00	0.00	0.000
OCT	1.28	4.40	0.00	0.00	0.00	0.64	0.16	0.00	2.86	0.39	0.60	0.14	0.00	56.0	0.00	0.00	0.000
NOV	0.07	3.45	0.00	0.00	0.00	0.97	0.10	0.00	1.94	0.50	-0.56	0.03	0.00	54.5	0.00	0.00	0.000
DEC	3.63	2.85	0.00	0.00	0.62	1.06	0.16	0.00	1.20	0.35	2.27	0.23	0.00	49.2	1.63	0.00	0.000

FOLLOWING ARE YEAR END TOTALS FOR MODELED REGION FOR YEAR 1991

PRECIP	POTET	CHGINT	RUNOFF	RECHRG	SOLPEV	ACTSEV	SNWEVP	PPLTR	APLTR	CHGSM	EVINT	CHGSNW	AVTMP	EHRM-RO	DEFCIT
15.61	55.03	0.00	0.16	3.87	6.57	1.82	0.00	36.95	6.26	1.63	1.93	-0.07	53.21	7.03	0.00

FOLLOWING ARE MONTHLY TOTALS FOR MODELED REGION FOR YEAR 1992

MON	PRECIP	POTET	CHGINT	RUNOFF	RECHRG	SOLPEV	ACTSEV	SNWEVP	PPLTR	APLTR	CHGSM	EVINT	CHGSNW	AVTMP	EHRM-RO	DEFCIT
JAN	1.81	2.73	0.00	0.02	0.94	1.19	0.92	0.00	0.72	0.72	-0.94	0.16	0.00	49.2	1.25	0.00
FEB	5.47	3.02	0.00	0.50	2.66	0.94	0.70	0.00	0.94	0.93	0.19	0.48	0.00	54.3	4.09	0.00
MAR	3.20	4.22	0.00	0.12	0.39	0.73	0.66	0.00	1.97	1.94	-0.49	0.57	0.00	54.1	1.51	0.00
APR	0.00	5.40	0.00	0.00	0.00	0.42	0.00	0.00	4.08	1.07	-1.07	0.00	0.00	58.7	0.00	0.00
MAY	0.00	5.83	0.00	0.00	0.00	0.16	0.00	0.00	4.64	0.00	0.00	0.00	0.00	56.8	0.00	0.00
JUN	0.12	6.45	0.00	0.00	0.00	0.03	0.00	0.00	5.21	0.06	0.00	0.05	0.00	57.2	0.00	0.00
JUL	0.02	6.11	0.00	0.00	0.00	0.01	0.00	0.00	4.97	0.00	0.00	0.02	0.00	60.1	0.01	0.00
AUG	0.00	5.80	0.00	0.00	0.00	0.12	0.00	0.00	4.64	0.00	0.00	0.00	0.00	58.3	0.00	0.00
SEP	0.06	4.89	0.00	0.00	0.00	0.30	0.00	0.00	3.73	0.01	0.00	0.04	0.00	58.2	0.00	0.00
OCT	0.39	4.40	0.00	0.00	0.00	0.66	0.00	0.00	2.96	0.19	0.08	0.12	0.00	58.7	0.00	0.00
NOV	0.09	3.45	0.00	0.00	0.00	0.97	0.00	0.00	1.98	0.09	-0.06	0.06	0.00	54.2	0.00	0.00
DEC	4.46	2.85	0.00	0.01	0.26	1.01	0.92	0.00	0.74	0.65	2.21	0.40	0.00	47.0	1.80	0.00

FOLLOWING ARE YEAR END TOTALS FOR MODELED REGION FOR YEAR 1992

PRECIP	POTET	CHGINT	RUNOFF	RECHRG	SOLPEV	ACTSEV	SNWEVP	PPLTR	APLTR	CHGSM	EVINT	CHGSNW	AVTMP	EHRM-RO	DEFCIT
15.61	55.14	0.00	0.66	4.25	6.53	3.20	0.00	36.59	5.68	-0.08	1.91	0.00	55.56	8.67	-0.01

FOLLOWING ARE MONTHLY AVERAGES FOR MODELED REGION FOR SIMULATION

PRECIP	POTET	CHGINT	RUNOFF	RECHRG	SOLPEV	ACTSEV	SNWEVP	PPLTR	APLTR	CHGSM	EVINT	CHGSNW	AVTMP	EHRM-RO	DEFCIT
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JAN	2.77	2.73	0.00	0.11	1.13	1.14	0.80	0.00	0.72	0.60	-0.12	0.25	0.00	48.25	1.69	0.00
FEB	2.95	2.94	0.00	0.16	1.00	0.98	0.64	0.00	1.02	0.89	-0.06	0.32	0.00	50.54	1.74	0.00
MAR	3.63	4.22	0.00	0.24	0.90	0.76	0.53	0.00	2.08	1.72	-0.25	0.50	0.00	51.44	1.98	0.00
APR	1.38	5.40	0.00	0.08	0.10	0.40	0.08	0.00	3.77	1.67	-0.87	0.33	0.00	53.88	0.49	-0.01
MAY	0.44	5.83	0.00	0.01	0.00	0.16	0.01	0.00	4.51	0.46	-0.19	0.15	0.00	52.99	0.10	-0.01
JUN	0.11	6.45	0.00	0.00	0.00	0.03	0.00	0.00	5.21	0.10	-0.04	0.05	0.00	55.70	0.02	0.00
JUL	0.07	6.11	0.00	0.00	0.00	0.01	0.00	0.00	4.97	0.05	0.00	0.02	0.00	57.24	0.03	0.00
AUG	0.08	5.80	0.00	0.00	0.00	0.12	0.00	0.00	4.62	0.04	0.00	0.03	0.00	57.97	0.01	0.00
SEP	0.27	4.89	0.00	0.00	0.00	0.29	0.01	0.00	3.70	0.12	0.07	0.08	0.00	58.58	0.05	0.00
OCT	1.05	4.40	0.00	0.00	0.00	0.64	0.11	0.00	2.85	0.53	0.22	0.19	0.00	55.66	0.34	0.00
NOV	2.18	3.45	0.00	0.01	0.26	0.90	0.36	0.00	1.65	0.67	0.60	0.28	0.00	52.83	0.99	0.00
DEC	2.56	2.85	0.00	0.02	0.42	1.02	0.60	0.00	0.93	0.59	0.64	0.29	0.00	48.17	1.22	0.00

FOLLOWING ARE ANNUAL AVERAGES FOR MODELED REGION FOR SIMULATION

PRECIP	POTET	CHGINT	RUNOFF	RECHRG	SOLPEV	ACTSEV	SNWEVP	PPLTR	APLTR	CHGSM	EVINT	CHGSNW	AVTMP	EHRM-RO	DEFCIT
17.48	55.06	0.00	0.63	3.81	6.44	3.12	0.00	36.04	7.44	0.00	2.51	0.00	53.61	8.66	-0.03

AVG ANNUAL RECHARGE DISTRIBUTION, HUNDRETHS OF INCHES

	1	2	3	4	5
1	440	504	360	291	320
2	447	470	297	283	315
3	-1	314	298	300	217
4	-1	-1	199	-1	-1

AVG ANNUAL AET DISTRIBUTION, TENTHS OF INCHES

	1	2	3	4	5
1	143	142	131	116	105
2	139	136	128	117	105
3	-1	124	116	115	109
4	-1	-1	124	-1	-1