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Sierra Pacific Industries

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February 14, 2005

State Water Resources Control Board
Division of Water Rights
P.O. Box 2000
Sacramento, California 95812-2000

Attn: Katherine Mrowka

Subject: Permits 19164 & 19165

Dear Ms. Mrowka,

This letter is in response to your December 28, 2004 letter regarding our petition for the extension of time for Permits 19164 and 19165. Your letter identified inadequacies in our response to your letter in November and the following is to satisfy your requests in both letters, supplying you with sufficient information to continue processing our application. We have some questions, which we will raise later, about whether that should be the next step but we certainly hope we can move on in a positive direction after your review of the following.

In the first part of this letter we will supply the water use and availability analysis requested as well as respond to the issue of paying for CEQA compliance, i.e. the SWRCB concerns specific to processing our petition.

In the second part of this letter we will address the concerns raised by the DFG in their 2001 protest, namely potential impacts to fish habitat, a perceived lack of due diligence on our part, and possible lack of sufficient monitoring for compliance with permit conditions during an extension.

Proceeding then to the question regarding the availability of the water to serve these permits:

As requested, and to set the context for the following analysis, Figures 1 through 3 categorize the recent past by hydrologic condition, or water year classes, in the Shasta River watershed. The longest, most continuous hydrologic data set is from the flow gage in the Shasta River near Yreka, which records flows dating back to just before January, 1934. Average annual flow in the river for the entire sixty-seven-year period of record (years 1941-1944 are not available) from that gage is shown in Figure 1 in chronological order.

There is no single way to classify years hydrologically, for example as very dry, dry, normal, wet, or very wet. Water managers in different basins use different methods. No entity routinely makes a formal ruling for the Shasta River basin. For the purposes of this discussion, average annual flows for each year of the seventy years of data from the gage near Yreka were ranked as a percentage of the entire data set. For this analysis, a "Normal" year was defined as being in the middle 40% of the flows in the years of record. "Very Wet" and "Very Dry" years were when 90% or more of the years

Emmerson Exhibit 38

had less water or more water, respectively, flowing past the gage. "Dry" years were years when 70%, or more, of the years of record had more water in the river. Conversely, "Wet" years were years when only 30% or less of years had more water flowing in the river. Figure 2 shows the seventy-year period of record ranked into these classifications. An alternative method of categorizing the years uses the "average annual" condition as the center of the distribution, so for reference, Figure 2 includes a line that illustrates the "Average Annual Flow" calculated from the same set of data.

In 1999, the USGS took over maintenance of the gage in the river near Montague (which is an instrument used by the watermaster to make a determination of "excess" or "surplus" water for supplying the permits in question) and real-time as well as historic flow data is available on the Internet at the USGS Surface Water Supply Web site (http://nwis.waterdata.usgs.gov/nwis). Before this time, records for that gage were kept only for the purposes of aiding the watermaster in his seasonal duties. Most of the historic data for this gage is located in the paper copies of the annual watermaster reports, copies of which were found dating back to 1959. There are also records for the 1911-1933 time period, but the source and reliability of those data are unknown, and since a more recent, relatively complete data set exists, that period of record was not included in the analysis.

The most complete set of data from the gage in the Shasta River near Montague is from approximately 1977 to present. To ascertain whether these twenty-seven years are representative of the range of hydrologic conditions, Figure 3 illustrates the water-year classification (using the method described above) of just these same twenty-seven years of data from the gage near Yreka. As can be seen in this chart, this period could be considered a representative sample of the whole period, including at least two of each "type" of year.

Specific to the availability of the water to serve the permits in question, simply put, we use the water only when the watermaster determines that there is excess water and communicates that to the resident ranch manager. We understand that you are asking for a more comprehensive explanation of how that determination is made.

According to the historic practices explained to us by the watermaster, surplus water for these permits would generally be available at times when the gage in the river near Montague shows a discharge of more than 25-35cfs. This amount in the river provides sufficient water for the 18cfs of adjudicated water downstream of that point, plus 2cfs for loss between there and the downstream users, plus a 5-15cfs margin of error that is an estimate based on experience of the watermaster of the potential unexpected withdrawals and system loss that might occur between our diversions and the gage near Montague.

Another consideration is the level of the reservoir behind Dwinell dam. Anecdotally, when Dwinell Reservoir is above three-quarters full, surface water conditions downstream are wet - - springs are charged, tributary streamflows are high, etc. - - an "excess" water is more likely to be available.

Also considered are the forecasted conditions for additional spring flows based on anticipated snowmelt. This is less of a consideration since there is so much annual variability in how that translates into actual streamflow and the timing of the snowmelt.

In addition, the watermaster considers the real-time river conditions, which fluctuate daily based on which diverters are using their water, and how much and when.

After numerous conversations with the watermaster, who has been serving in the Shasta Valley for some twenty years, and an examination of the available hydrologic data, there is no single measurement that correlates with the availability of "excess" water. And

because of the variable of real-time river conditions, there is no way to precisely reconstruct when this water was available historically. As described, a number of variables are taken into consideration. Figures 4 through 12 present by month all the data available that is considered by the watermaster and based on experience, used to decide whether there is surplus water available to divert, and reference to them allows some general statements.

A note on the graphs showing average monthly streamflow - - data from the gage near Montague is not complete, so data from the gage near Yreka was graphed to show how closely the two correlated and whether information from the gage near Yreka could be used as a surrogate for the missing pieces of information from near Montague. The graphs show that the two discharge measures in fact track very close to each other and data from the gage near Yreka are a reliable estimate of flows near Montague.

Referring to the monthly figures, there are many years when water might be available in March and April, but even so some years will be too dry. In some years, excess water continues to be available through May and even into June, although the latter is less frequent. In most years, it is in this time period when stored water begins to be added to the streamflow, either to supplement surplus water or to constitute entire allotments of diverted water because there is no more "surplus". Stored water is metered by the watermaster at the gate at the outflow of Dwinell Reservoir. In rare years, there may be excess water into July, but generally by this time and for the rest of the irrigation season, adjudicated water is all that is available to divert and in some years that is depleted to where users may not receive full allotments, based on priority.

Comparing the monthly data to the years classified by hydrologic conditions, some more general statements can be made, with the caveat that real-time conditions might allow periods of "excess" water availability in years when averaged data does not indicate its availability. "Excess" water may be available even in "Dry" years in March, probably not at all in "Very Dry" years. In years that might classify on the dry side, but still "Normal", excess water may be available into April or May. Only in "Wet" or "Very Wet" years is there likely to be excess water through May and possibly into June and July. "Excess" may irregularly be available in August, September, or October, regardless of water-year, but real-time conditions dominate the decision making by the watermaster since irrigation needs are varied later in the season and adult anadromous fish are in the river by September and October.

Ideally at this point, we would bring to bear in this analysis, the dates when we in fact diverted the "excess" water permitted. Unfortunately, due to the fact that there have been at least three owners of this property since the original application to divert this water was submitted, the records are in disarray and there appear to be missing records that would help in this discussion, e.g. monthly or daily records of amounts of diverted water, but are not in our possession. We can speculate, using the graphs as shown, that "excess" water would likely have been available roughly 18 of the last twenty-seven years, or in "Normal" or wetter hydrologic conditions.

Now onto "the issue of paying for preparation of a CEQA document for the time extension petitions." We are prepared to pay for this. We believe we may have enough "in-house" expertise to accomplish the necessary documentation, but we should discuss the details with you further. For instance, using the CEQA checklist for an initial study, which we downloaded from the State's Website (http://ceres.ca.gov/topic/env_law/ceqa/guidelines/Appendix_G.html), we believe that at most we may have to prepare a "Mitigated Negative Declaration." However, in reviewing

the patchy records we received from previous owners and have been able to reassemble on this issue, we're now wondering whether an extension of time is a moot issue.

It appears that there may be a sufficient record of beneficial use, and certainly if we include the watermaster reports from 2003 (which you've seen previously but is also attached) and 2004 (attached), even though these were recorded in the time lag since the request for extension of time. Please also refer to the attached letter dated July 25, 1990 from Gary Gragnani, a previous owner, to Dave McAnlis, of your agency. In addition to confirming use of water under these permits with no protests or complaints since the original application, note the third paragraph which quantifies water diverted under these permits in 1986.

CEQA documentation may be necessary regardless of the need for an extension of time, as will be made clearer in the following discussion where we address the protest by DFG.

At this point, we will respond to the protest filed by DFG regarding our request for an extension of time to establish a record of beneficial use.

First, regarding the issue of what DFG perceives as "a lack of due diligence." The fact that there are two water allotments taken at the two diversions named in Permits 19164 and 19165, appropriated and adjudicated water, sometimes with overlapping seasons of use is a factor. As a matter of practice this water is only diverted at the discretion of the watermaster and we do not have written records like what has been supplied recently. We can only speculate about the past, but this has likely complicated communication on this issue.

Compounding this are the facts that: 1) Emmerson Investments, Inc. acquired the ranches and these corresponding permits in 1994 and 1995. As stated above, there have been at least three other managers in the time between the original application and our acquisition and the files passed on are not well organized.

2) Excess water for diversion on these permits has only been available for some months of maybe two-thirds of these years

3) There may have been confusion about the need for a recording device versus a measuring device. There have been measuring devices at each diversion since approximately 1977 (see attached letter dated September 1, 1977, from Thomas C. Mackey, Supervising Watermaster and Nelson W. Richardson of Mountain Home Properties) and these have been used by the watermaster to apportion the water being diverted. As indicated in this same letter, provision for a recording device was incorporated in the Parshall flume installation, but we do not know if recorders were ever used. Be that as it may be, new F-type recorders were installed in 2003. The data from these is provided in the reports by the watermasters (currently, two watermasters are serving this basin) and attached to this correspondence.

The DFG protest application also raises the issue of the quality of fish habitat in the river in light of our request for an extension of time. We know that the Shasta River below Dwinell is accessible to anadromous fish as well as having resident fish. Our qualitative evaluation of the habitat in the reach of river on our property indicates that good spawning habitat exists downstream from these diversions. Inclusive of that reach, the river provides potential rearing habitat. A non-permanent barrier currently exists approximately a half-mile downstream of the lower diversion in the form of a beaver dam (and probably more than one) which may impede or block passage of all coho life stages,

and perhaps juveniles of other species, as long as it is in good repair. It is currently being well maintained by a pair of beavers.

Anecdotal observations from a variety of sources show that there have been salmon in the reach of the river through the ranch in many of the years when excess water from these permits was likely diverted in the last twenty plus years.

Water temperature data exists for one year, 2001, when Hobo®-Temp temperature loggers (Onset Corporation) were placed in the river from late June into October. River flow data shows that 2001 was a "dry" year when one would expect flows in the river to be higher 85% of years. A temperature logger was placed in the river immediately downstream of where it flowed onto the ranch and another approximately where it left the property. Water flowing off the ranch was generally colder than the water coming onto the ranch, presumably from spring water input (Figures 13A & 13B).

As explained in the water availability analysis above, water for these permits is generally only available for a portion of the spring of "Normal" to "Very Wet" years and sometimes in the fall, although there is no year in memory that it was used at that time of year. As a rule of thumb, the years when it is needed in that season, excess water is not available and we would be willing to discuss the possibility of shortening the season of applicability of these permits to completely avoid the issue of interfering with the salmon spawning season.

Without going into a detailed description of how the availability of excess water corresponds with annual cycles of salmonids, the water supplying these permits is diverted at a season and hydrologic condition when there is an abundance or overabundance of water and therefore neither volume nor temperature of water are at levels when a withdrawal as permitted would likely have adverse impacts on fisheries. Use of this water may in fact benefit the fisheries, as it would allow stored water in Dwinell Reservoir to be released later in the season. Based on anecdotal evidence from the watermaster and local landowners, the higher the water level is in the reservoir the higher the water levels are at all visible points downstream, which includes in the river channel. Keeping water stored in the reservoir as long as possible thus has the effect of extending the season of higher volumes of water for fish habitat.

The above discussion should explain why we do not believe that the extension of time to comply with the permit terms, nor the diversion of the permitted water, harms the habitat for the fisheries.

We are aware, as has been pointed out by DFG, that the downstream diversion (which supplies water to a pump), during the irrigation season may under some flows impede the movement of fish and that the screens at both diversions are not adequate to prevent fish from potentially getting into the irrigation delivery system.

We are currently exploring three options to remedy this situation, all of which include upgrading the screens:

1) ...moving the point of diversion so that all water currently taken at the downstream diversion will be diverted at the gravity-fed diversion, upstream. We realize that this will require new permits for a changed point of diversion, and we would continue to work closely with the SWRCB and the DFG if this option proves the most feasible.

2) ...keeping the point of diversion the same but modifying the facility to eliminate the need to impound water with a check dam which may block fish movements. There may be a couple of different

ways to do this, either of which will likely need permits from DFG, so again we would work closely with both agencies.

3) ...keeping the point of diversion and the existing facility but incorporating a means for fish to surmount the obstacle, i.e. some sort of fishway or ladder.

In considering these alternatives, we are not at the point where we can make time commitments for completing one of them, as you had indicated was important to the further processing of our application. We will commit to filing quarterly reports with you, starting in, for instance May, 2005, to keep you informed of our progress in pursuing these options toward resolving the problem of potentially impeding fish movements.

One more concern raised by the DFG in their protest is that if the determination of the availability of excess water is so heavily reliant upon decision-making and direction from the watermaster, how is this water use monitored outside of the traditional April through September annual term of service? With the advent of technology allowing real-time water monitoring, watermaster support is essentially now a yearlong service (personal communication, J. Scott, DWR Watermaster). In addition, since we have owned this property, we have allowed reasonable access by DFG for examination of these diversions.

We trust we have responded adequately to your letter(s). If we can provide further assistance interpreting the information we have presented, a meeting would probably be the best venue for doing that and we will make ourselves available.

We look forward to discussing the next steps towards licensing these permits, and as suggested above, there may, after all, be sufficient data to proceed with that and we will contact you after you have had some time to consider the information in this correspondence.

If you have any questions about the water availability analysis or water temperature data you may contact Julie Kelley (in this same office, (530) 378-8134).

If you need anything further from me, please call me at (530) 378-8119.

Regards,

SIERRA PACIFIC INDUSTRIES

Jack G. Frost
Lands Forester

ATTACHMENTS

(Copy sent to Department of Fish and Game: Ms J. Vorpagel & Mr. J. Whelan)

FIGURE 1 – AVERAGE ANNUAL FLOW OF THE SHASTA RIVER NEAR YREKA

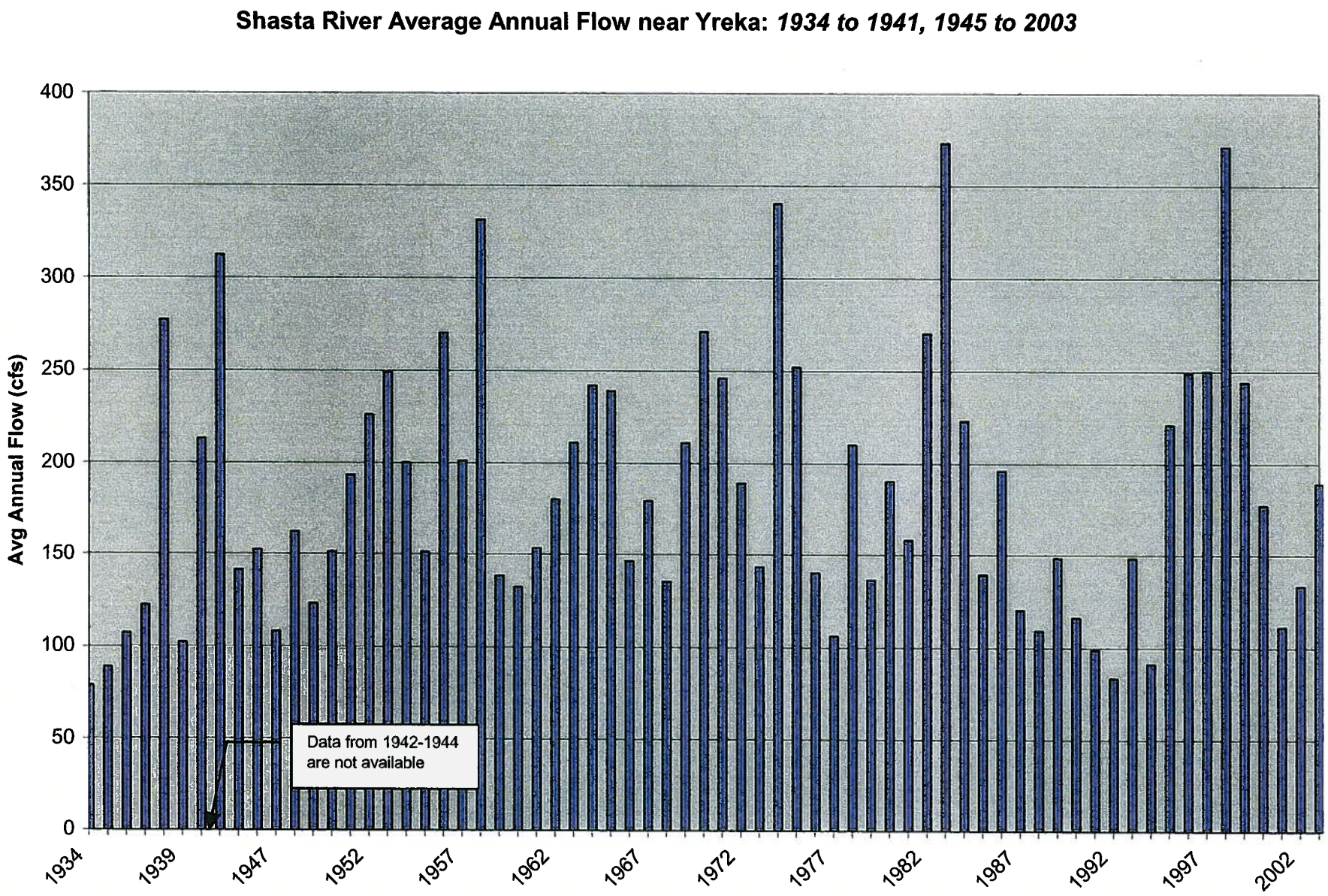


FIGURE 2 – WATER YEAR CLASSIFICATION BASED ON FLOWS IN THE SHASTA RIVER NEAR YREKA, 1934 TO 2003

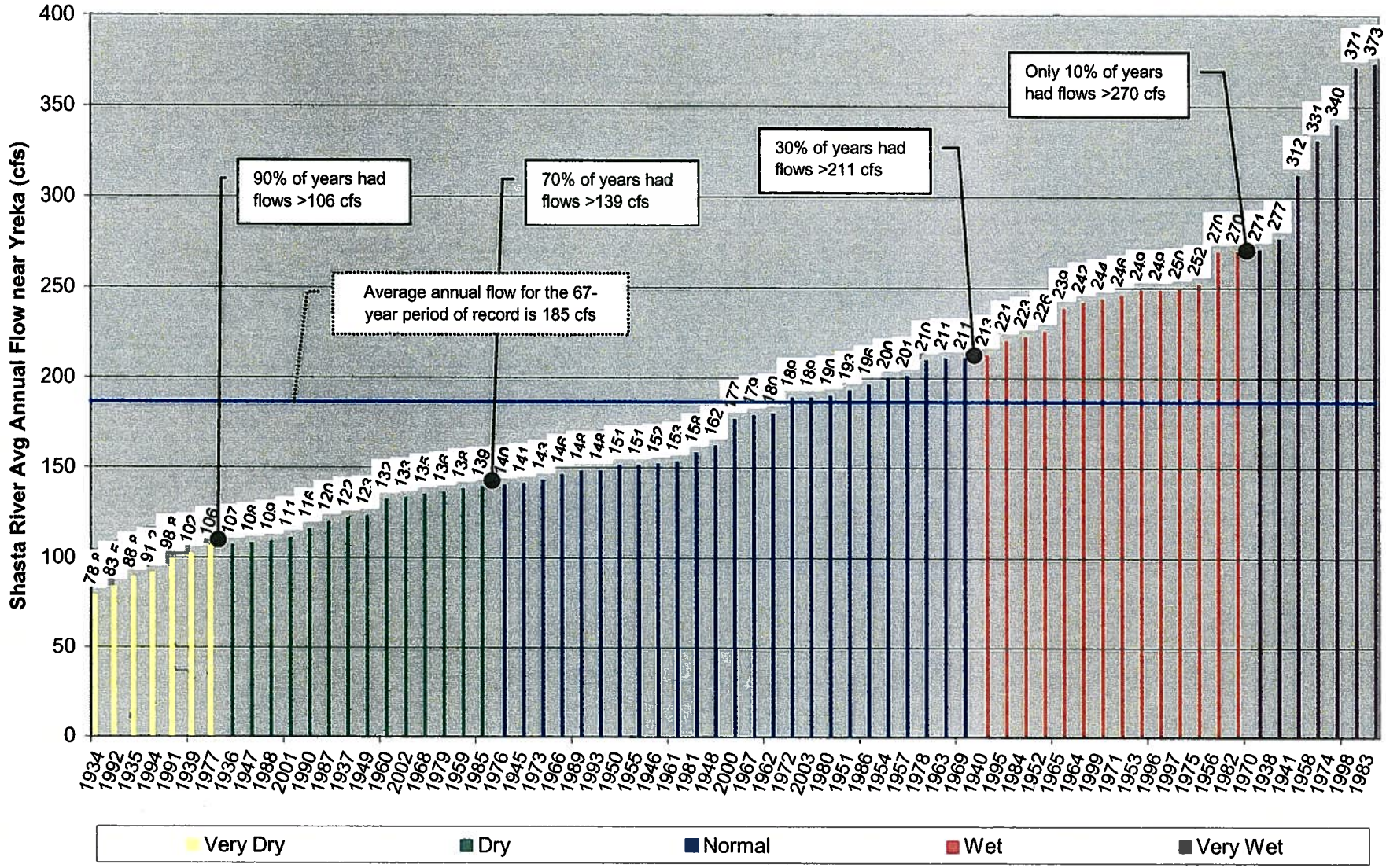


FIGURE 3 – WATER YEAR CLASSIFICATION OF YEARS AVAILABLE FOR GAGE NEAR MONTAGUE, 1977 TO 2004

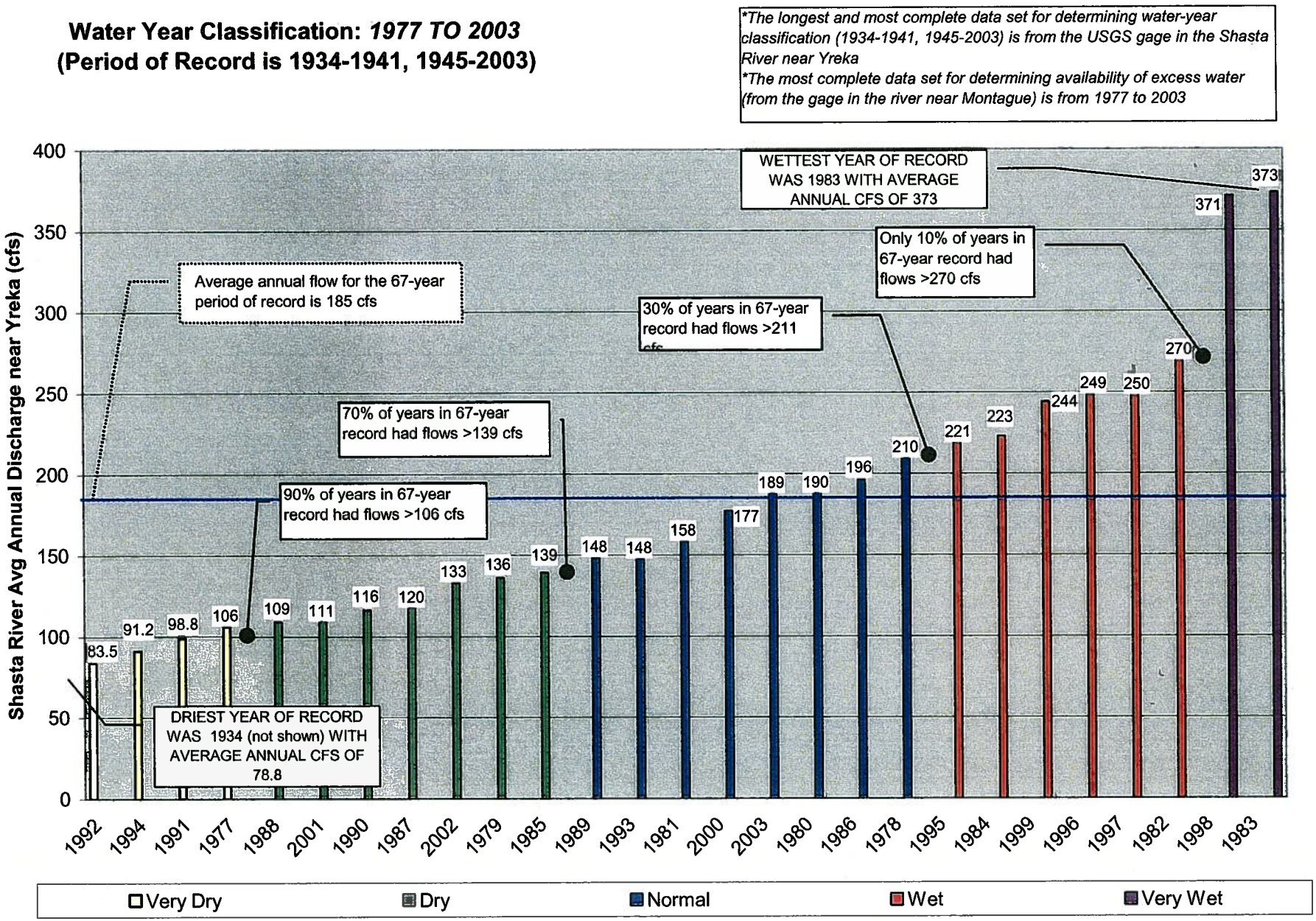
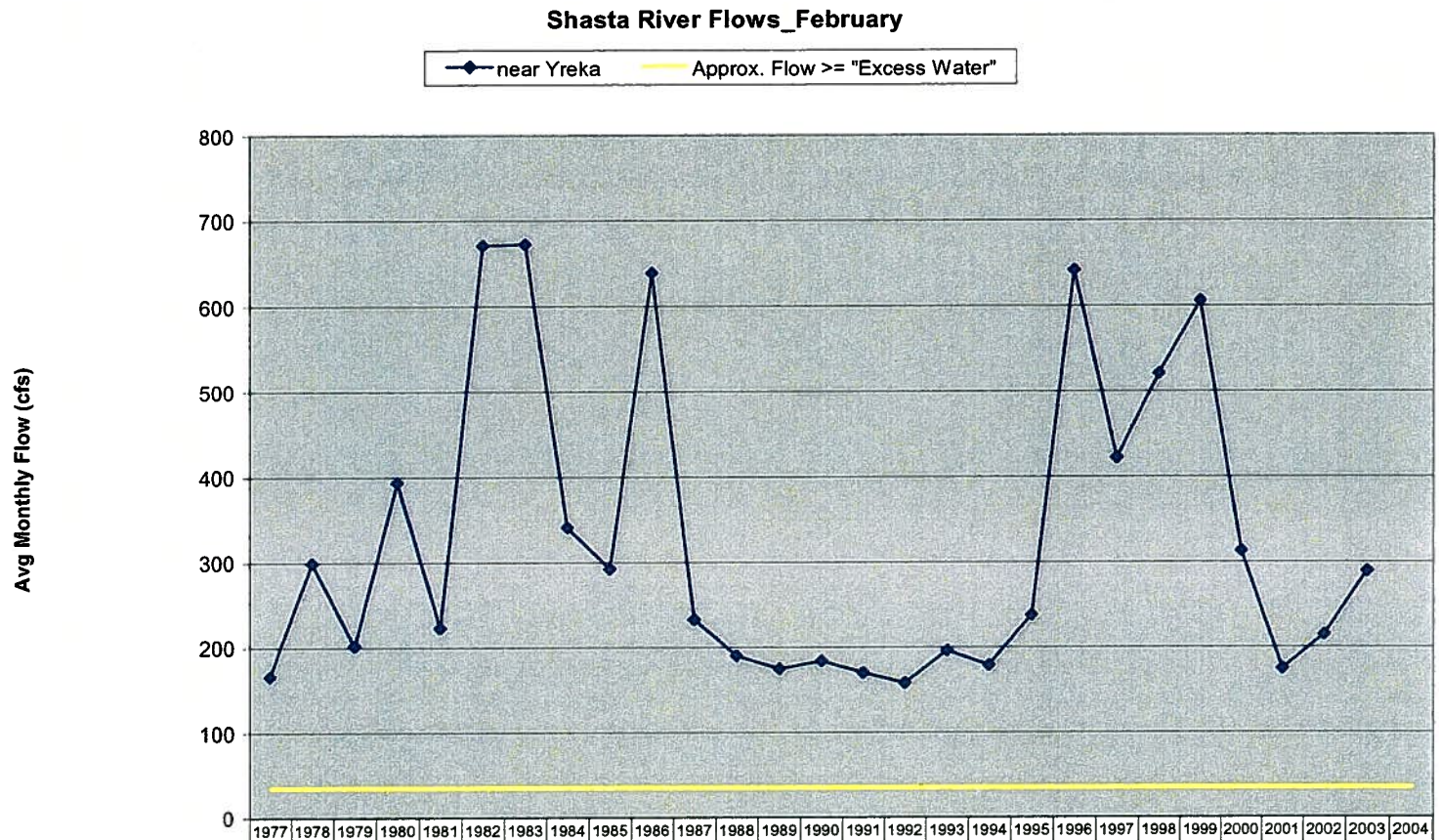


FIGURE 4A –AVERAGE MONTHLY DATA USED IN DETERMINATION OF "EXCESS" WATER_FEBRUARY



	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
near Yreka	166	299	202	394	223	671	672	341	292	639	233	190	175	184	170	158	196	179	238	642	422	521	606	313	175	215	289	
Approx. Flow >= "Excess Water"	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35

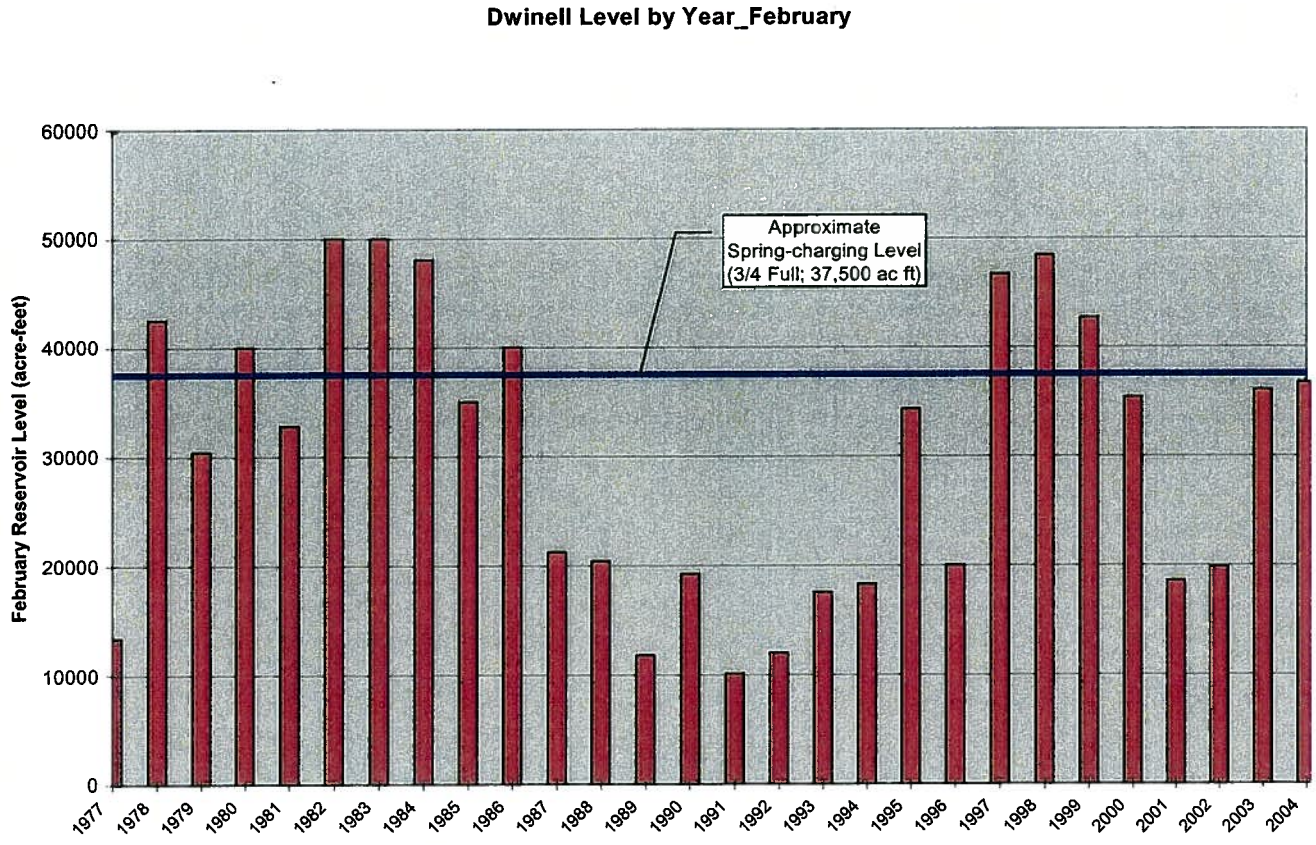


FIGURE 4B – SNOW DATA AVAILABLE FOR DETERMINATION OF "EXCESS" WATER_FEBRUARY

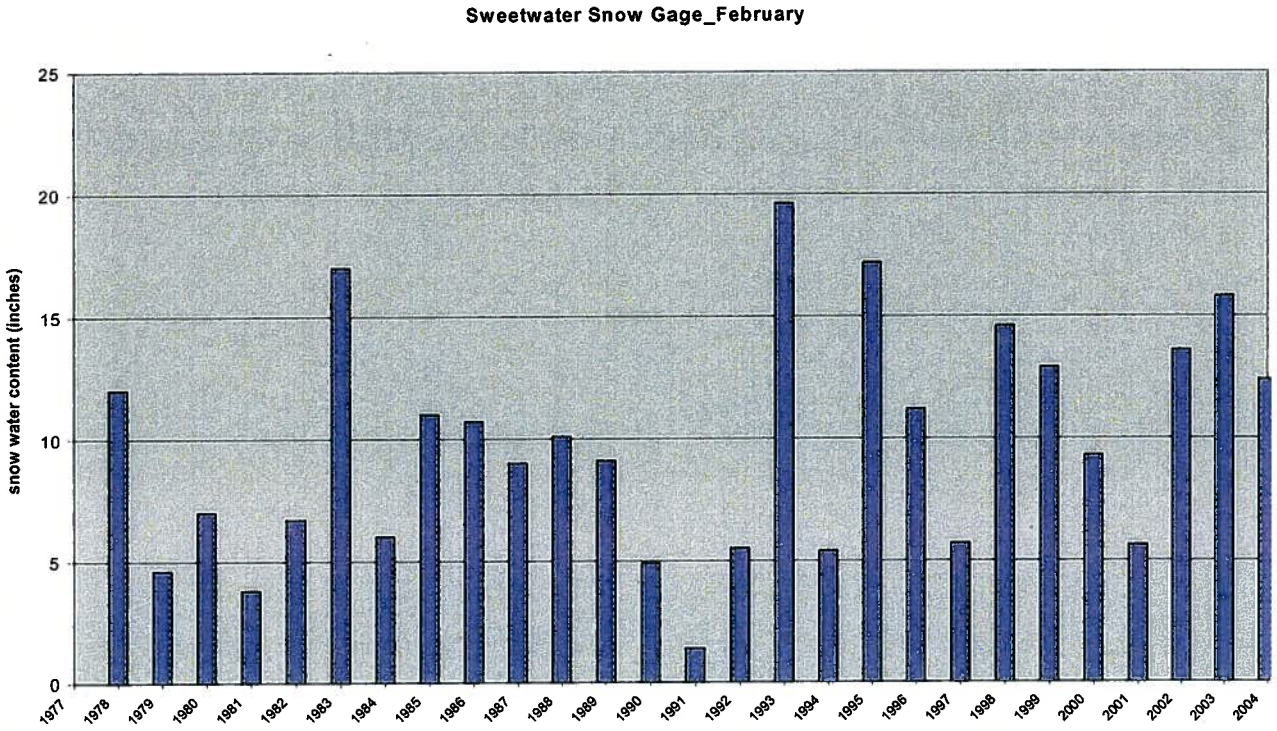
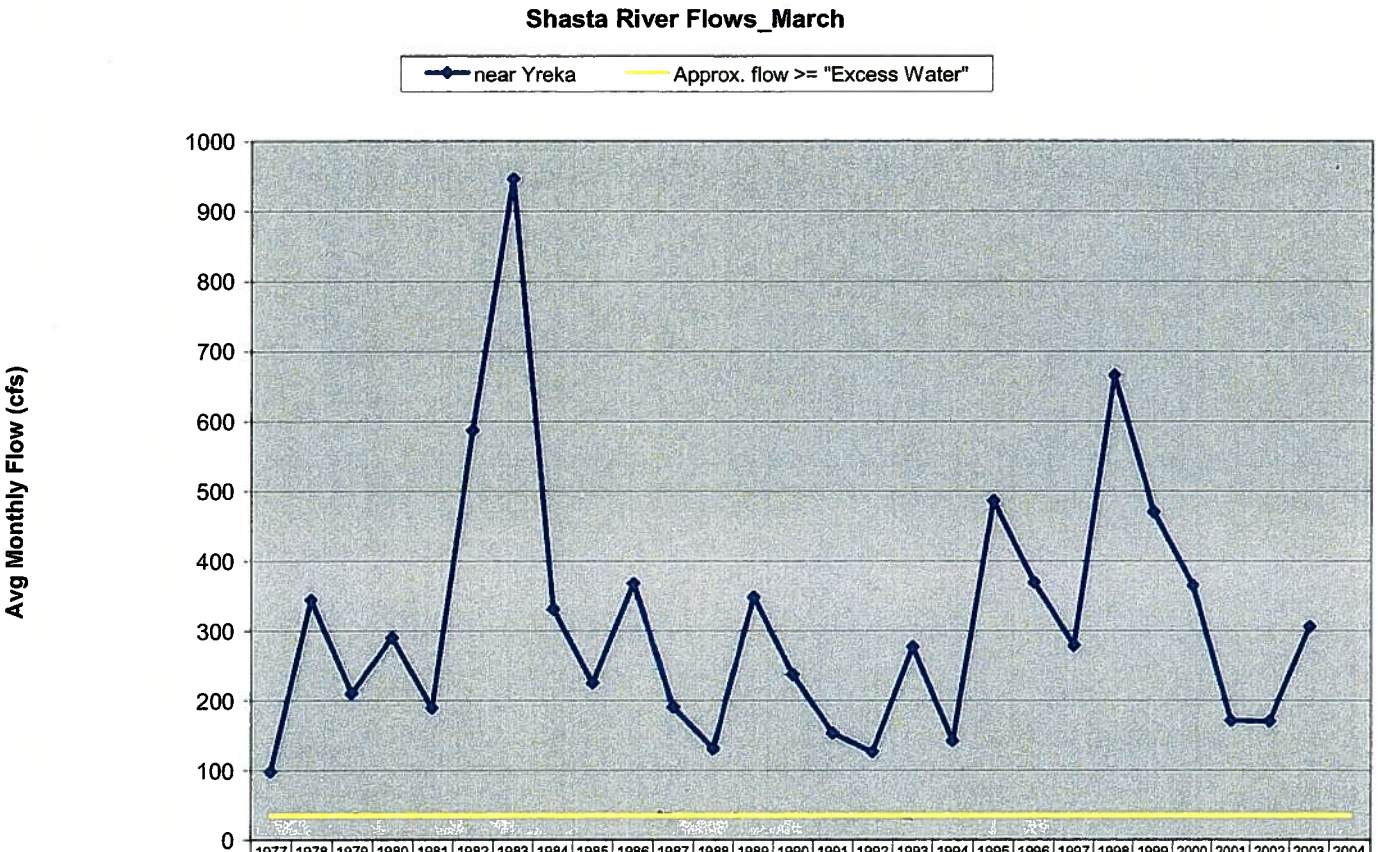


FIGURE 5A – AVERAGE MONTH'Y DATA USED IN DETERMINATION "EXCESS" WATER_MARCH



	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
near Yreka	97.7	344	210	290	189	587	946	331	225	368	190	131	348	237	153	126	277	142	486	369	279	666	470	365	171	170	306	
Approx. flow >= "Excess Water"	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35

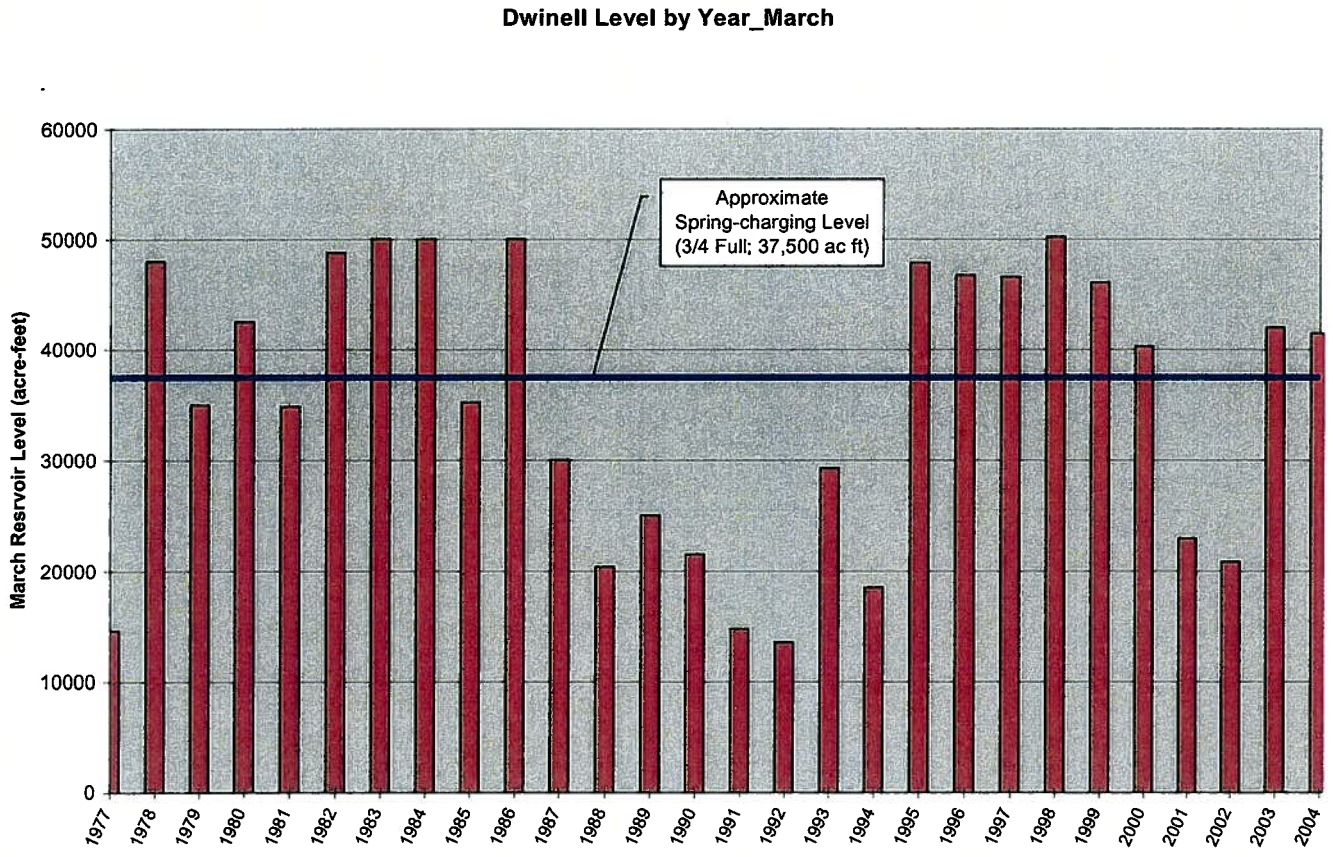


FIGURE 5B – SNOW DATA AVAILABLE FOR DETERMINATION OF "EXCESS" WATER_MARCH

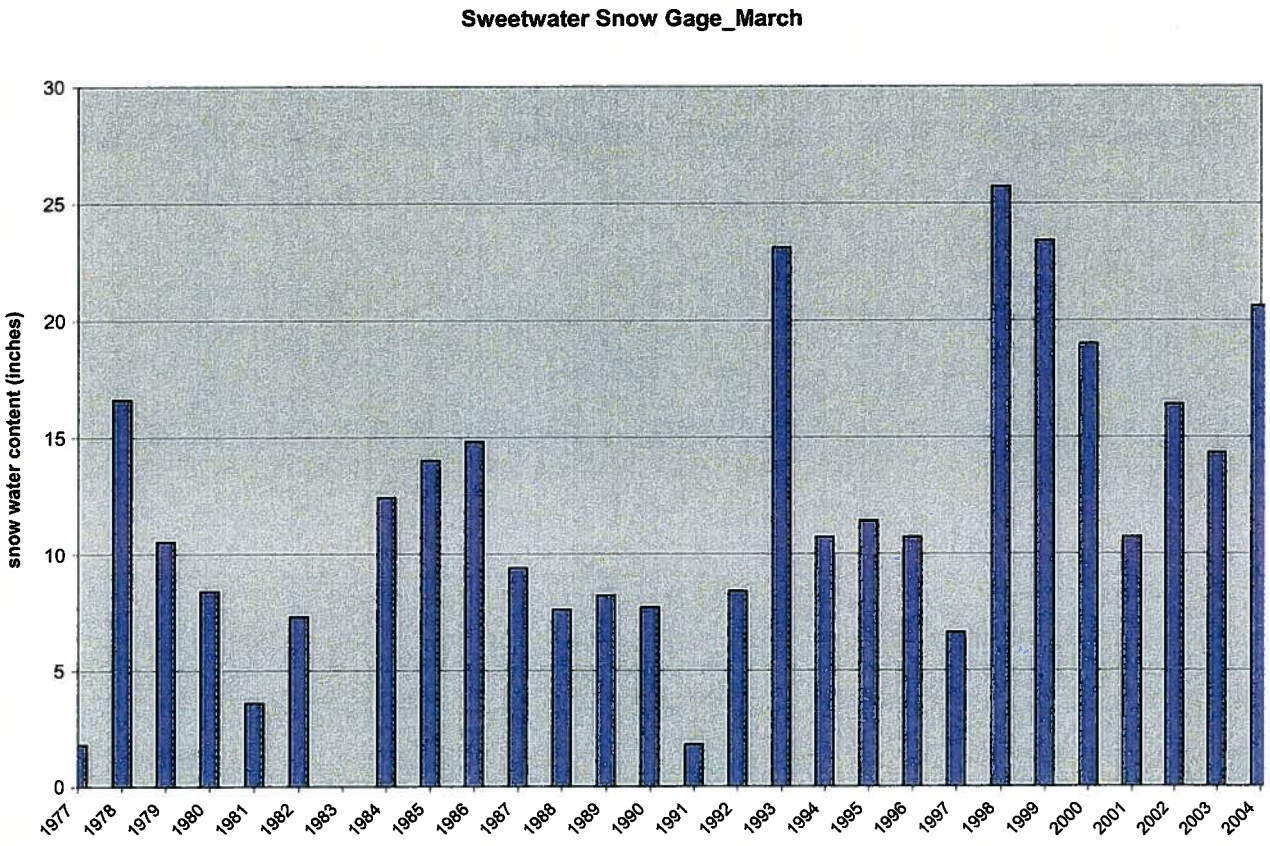
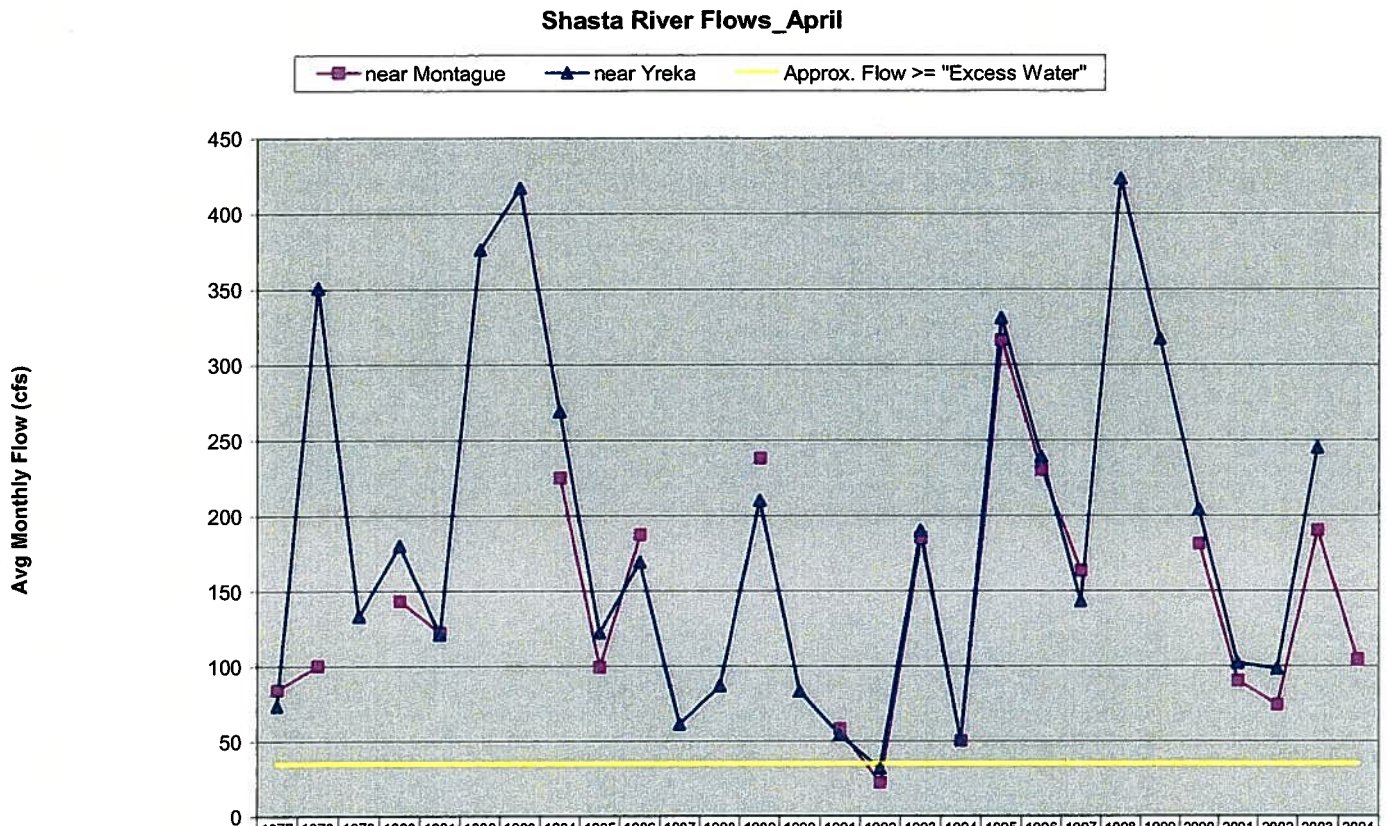


FIGURE 6A – AVERAGE MONTH[illegible] DATA USED IN DETERMINATION [illegible] "EXCESS" WATER_APRIL



	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
near Montague	84	100		143	122			225	99	187			238		58	22	185	50	316	230	163			181	90	74	190	104
near Yreka	73.5	351	133	180	121	376	417	269	122	169	61.4	86.9	210	83.2	54.3	31.8	190	51.2	331	239	143	423	317	204	102	98	245	
Approx. Flow >= "Excess Water"	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35

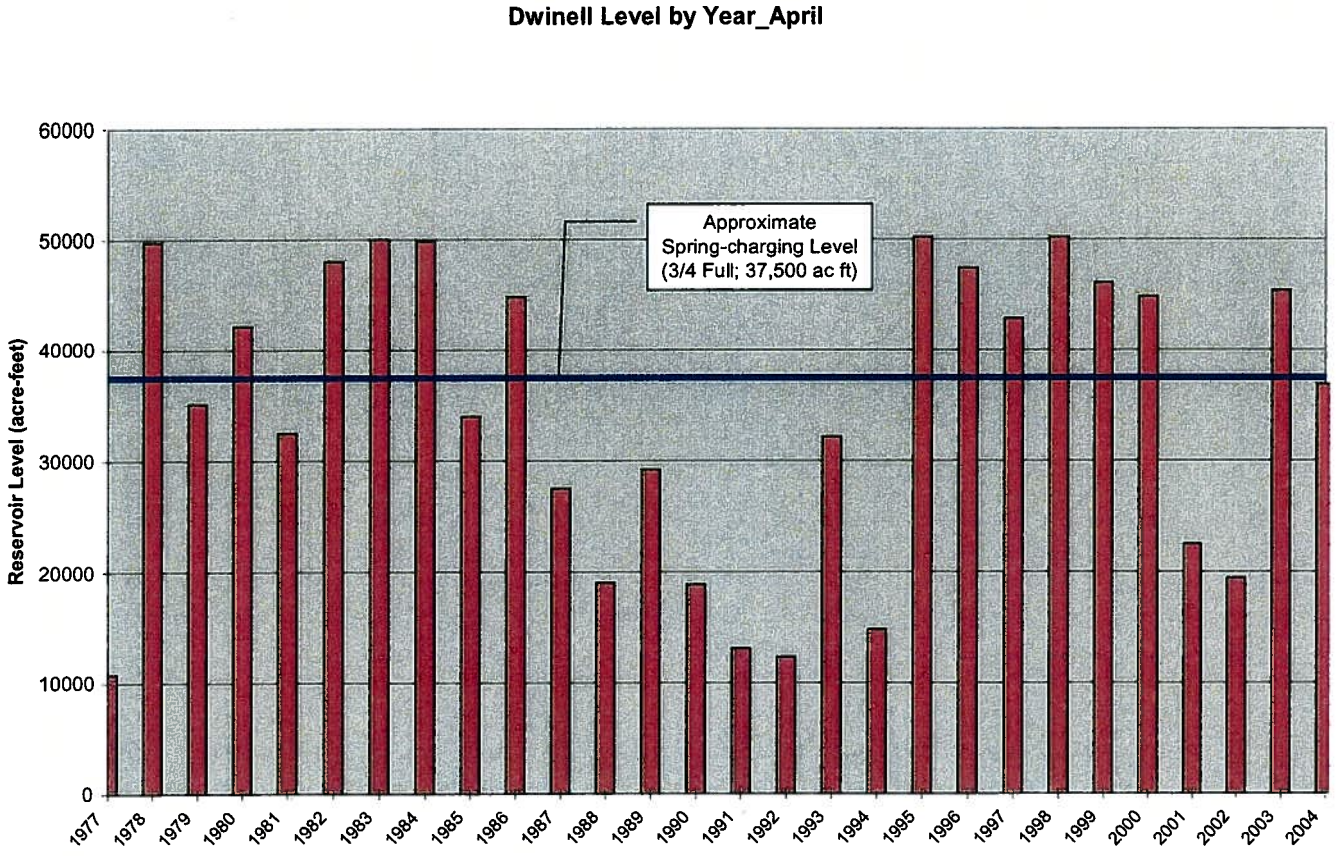


FIGURE 6B – SNOW DATA AVAILABLE FOR DETERMINATION OF "EXCESS" WATER_APRIL

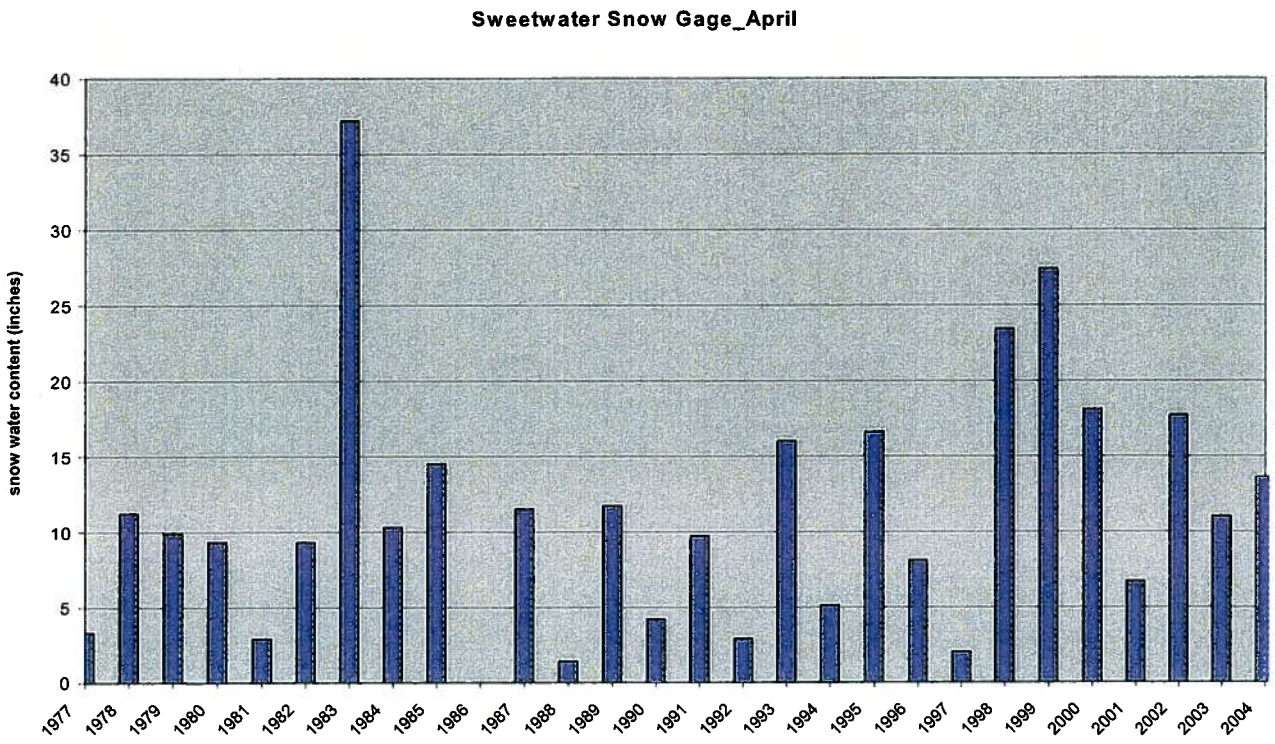
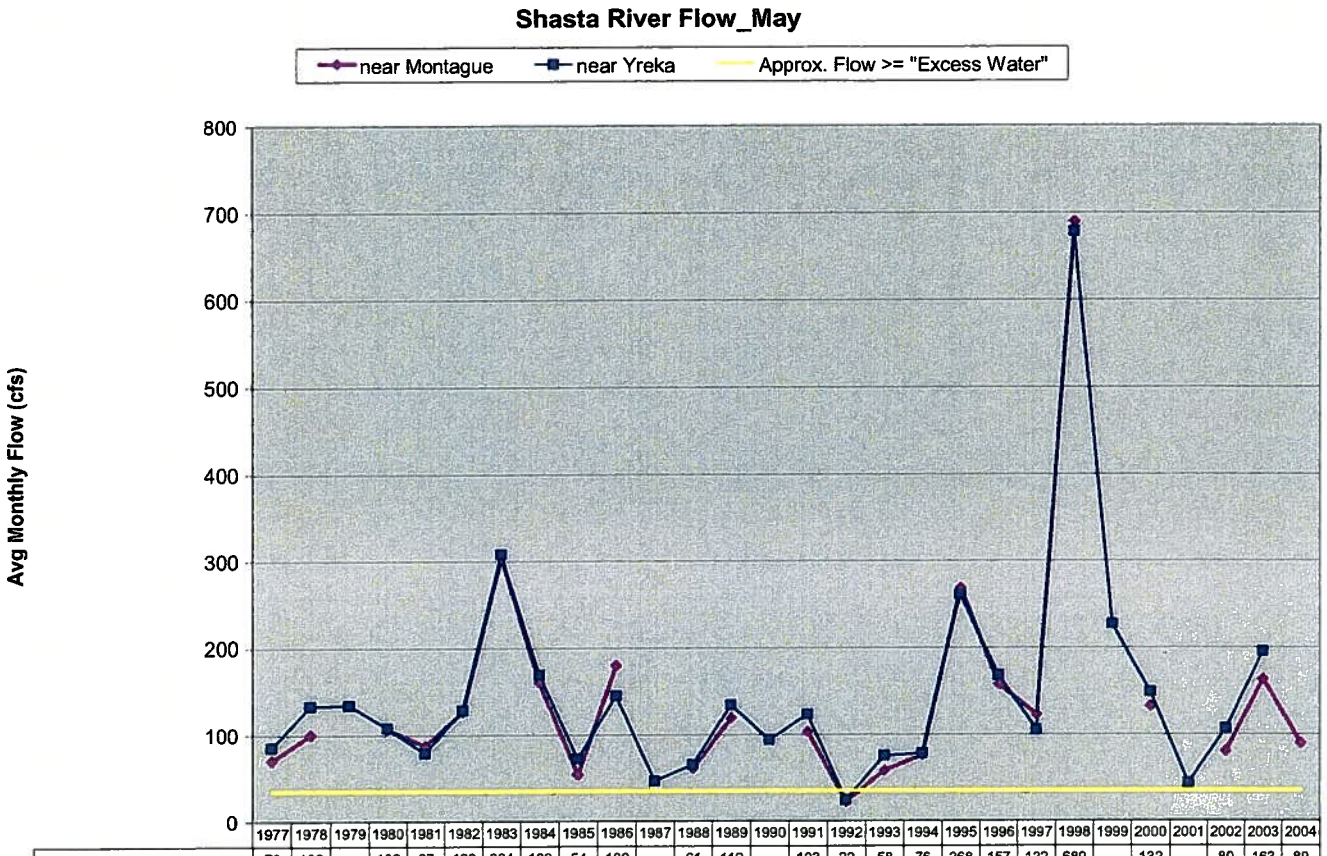


FIGURE 7 – AVERAGE MONTHLY DATA USED IN DETERMINATION OF "EXCESS" WATER_MAY



	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
near Montague	70	100		106	87	126	304	160	54	180		61	119		103	22	58	76	268	157	122	689		132		80	163	89
near Yreka	85.5	133	134	108	79	128	308	169	72.5	145	46.5	65.4	134	93.9	123	24.5	75.4	78.2	261	168	105	678	227	149	43.8	106	195	
Approx. Flow >= "Excess Water"	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35

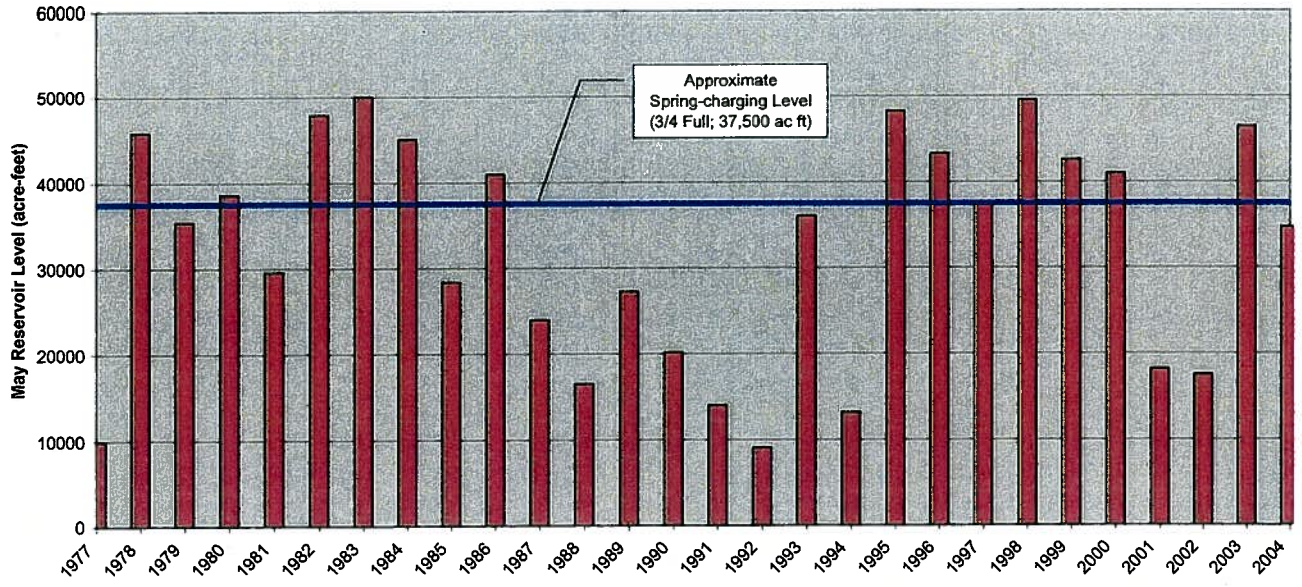
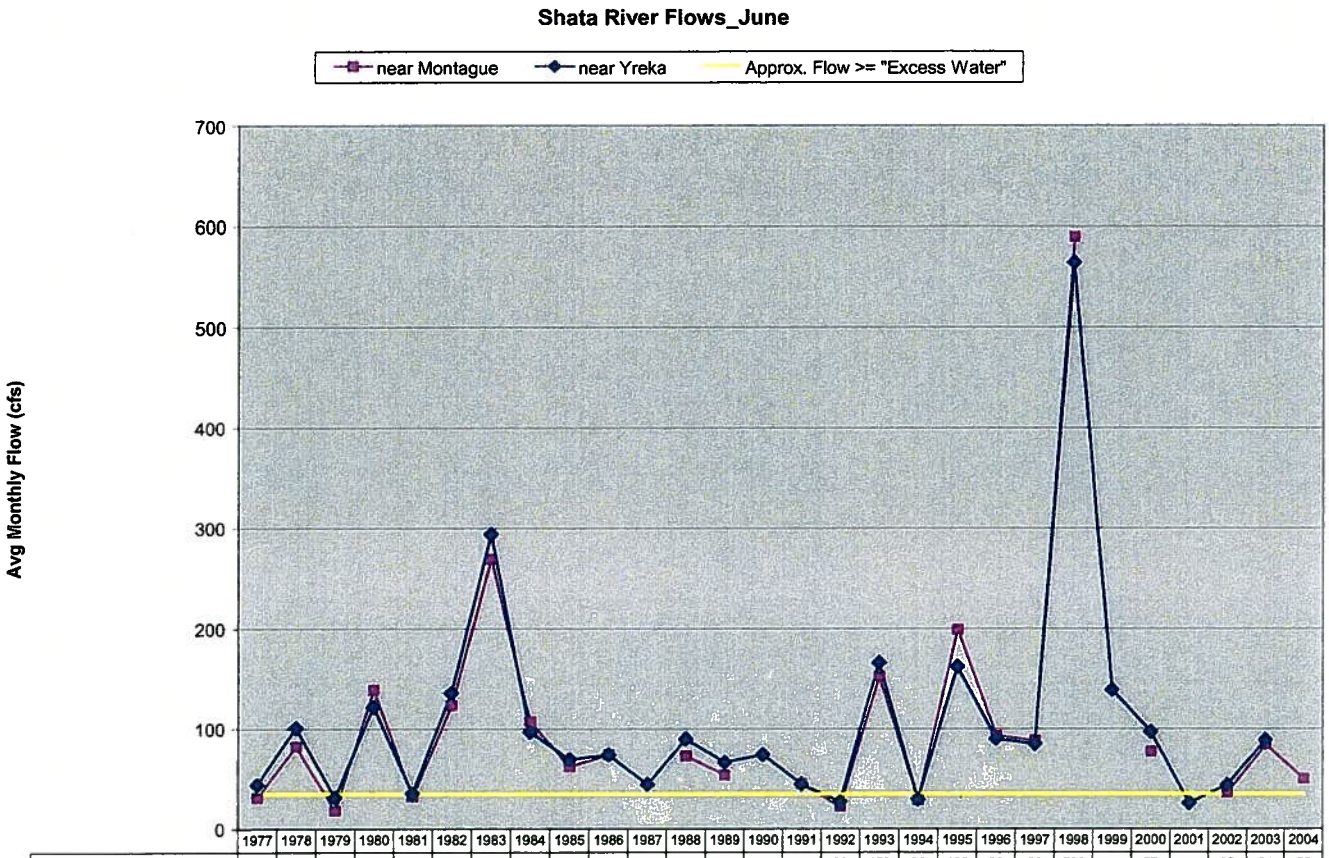


FIGURE 8 – AVERAGE MONTHLY DATA USED IN DETERMINATION OF "EXCESS" WATER_JUNE



	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
near Montague	31	82	18	139	32	123	269	107	62	74		73	54		45	22	152	29	199	93	88	589		77		36	84	50
near Yreka	44.3	101	31.5	122	35.7	136	294	97	69.6	74.4	44.7	89.9	66.9	74.6	44.8	27.3	166	29.6	162	90.2	85.1	564	139	96.9	25.7	44.3	89	
Approx. Flow >= "Excess Water"	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35

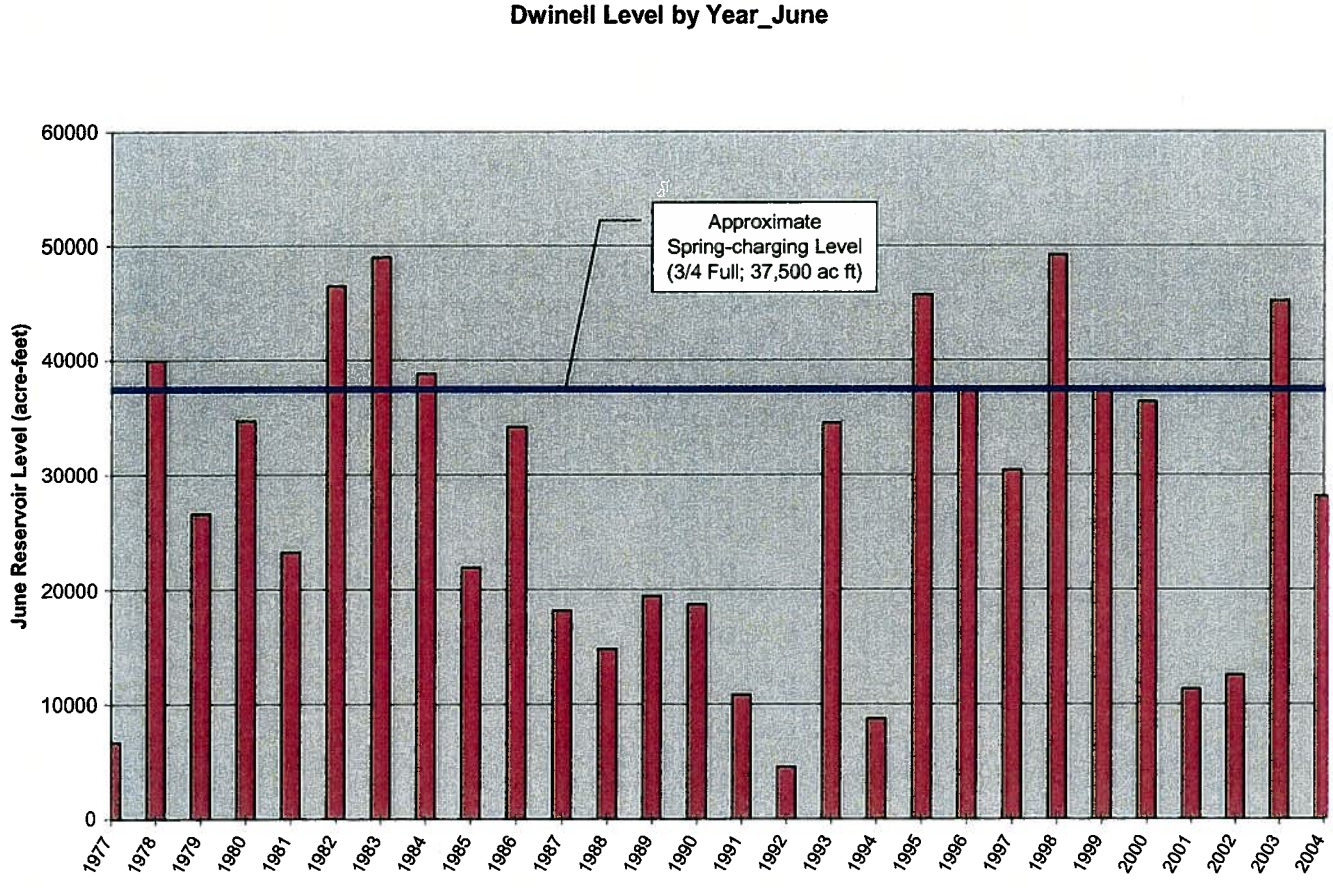
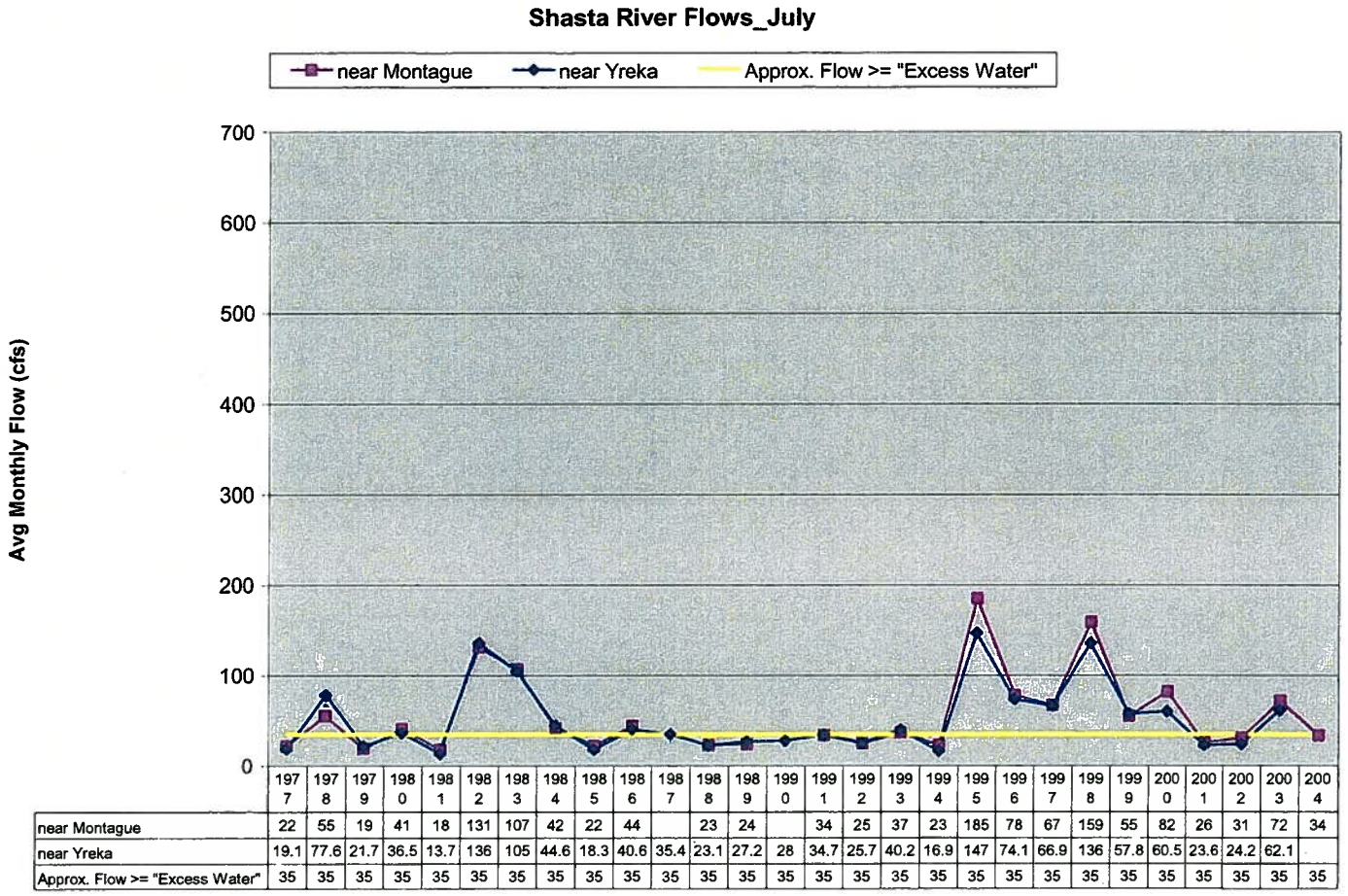


FIGURE 9 – AVERAGE MONTHLY DATA USED IN DETERMINATION OF "EXCESS" WATER_JULY



	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
near Montague	22	55	19	41	18	131	107	42	22	44		23	24		34	25	37	23	185	78	67	159	55	82	26	31	72	34
near Yreka	19.1	77.6	21.7	36.5	13.7	136	105	44.6	18.3	40.6	35.4	23.1	27.2	28	34.7	25.7	40.2	16.9	147	74.1	66.9	136	57.8	60.5	23.6	24.2	62.1	
Approx. Flow >= "Excess Water"	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35

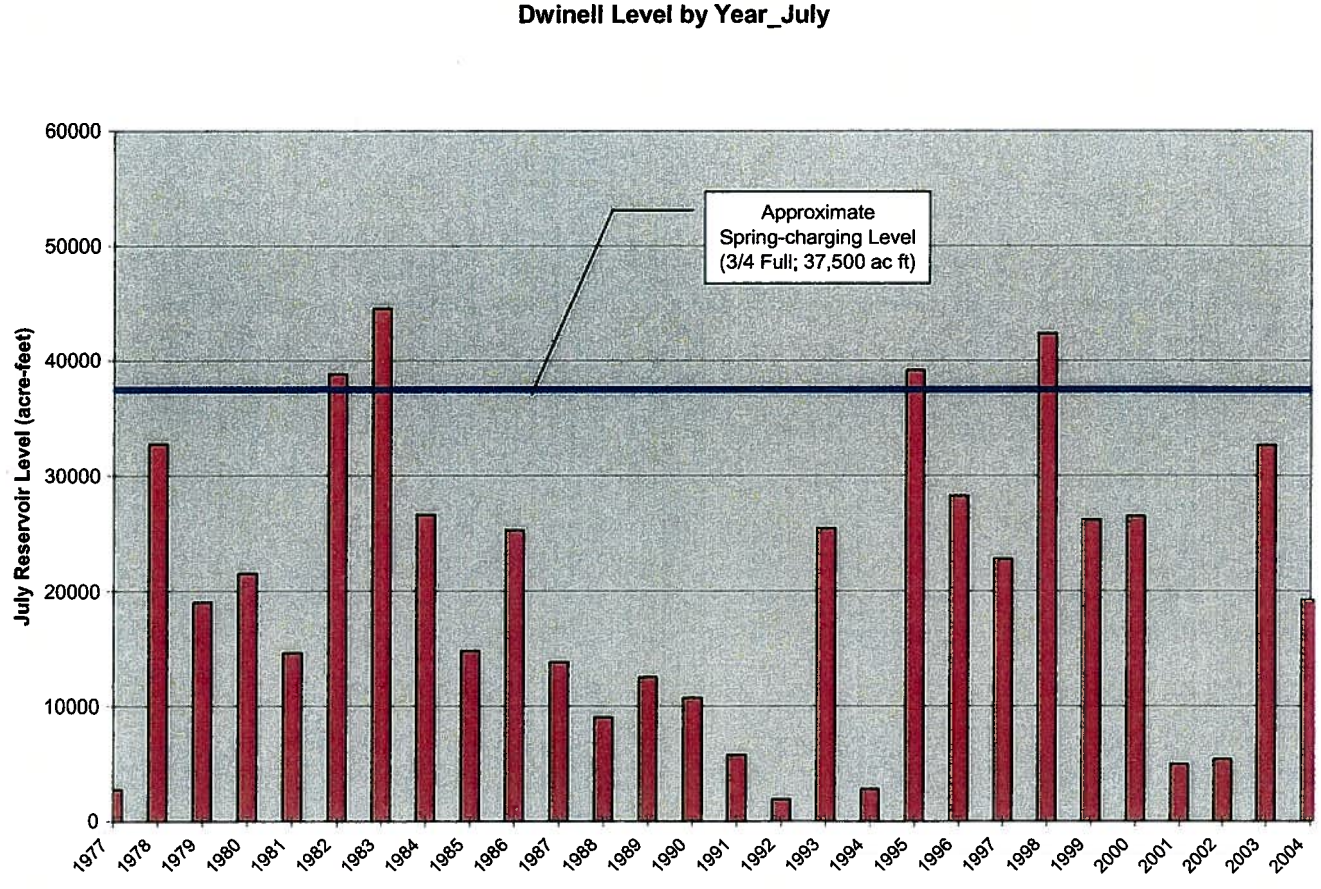
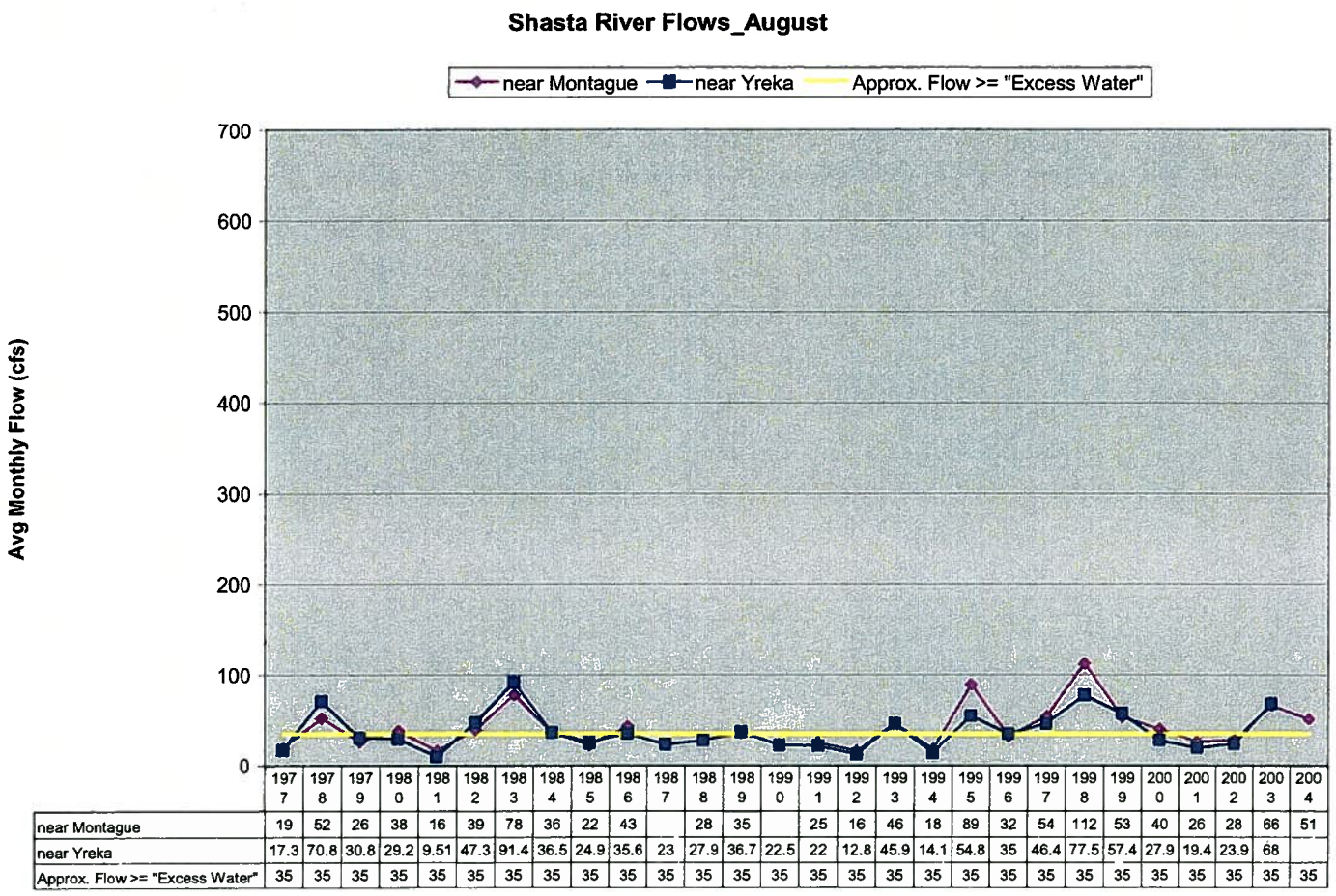


FIGURE 10 – AVERAGE MONTH[illegible] DATA USED IN DETERMINATION [illegible] "EXCESS" WATER_AUGUST



	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
near Montague	19	52	26	38	16	39	78	36	22	43		28	35		25	16	46	18	89	32	54	112	53	40	26	28	66	51
near Yreka	17.3	70.8	30.8	29.2	9.51	47.3	91.4	36.5	24.9	35.6	23	27.9	36.7	22.5	22	12.8	45.9	14.1	54.8	35	46.4	77.5	57.4	27.9	19.4	23.9	68	
Approx. Flow >= "Excess Water"	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35

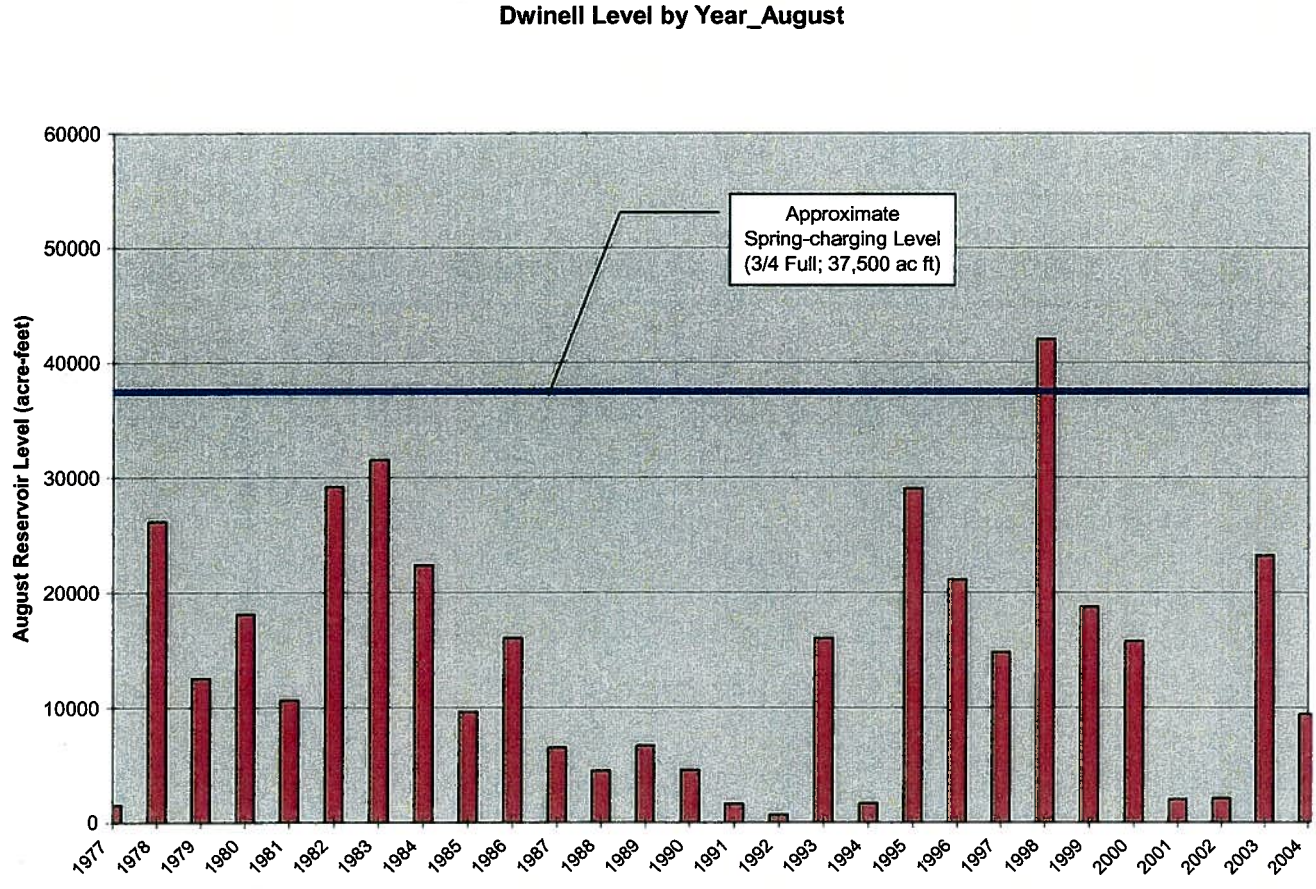
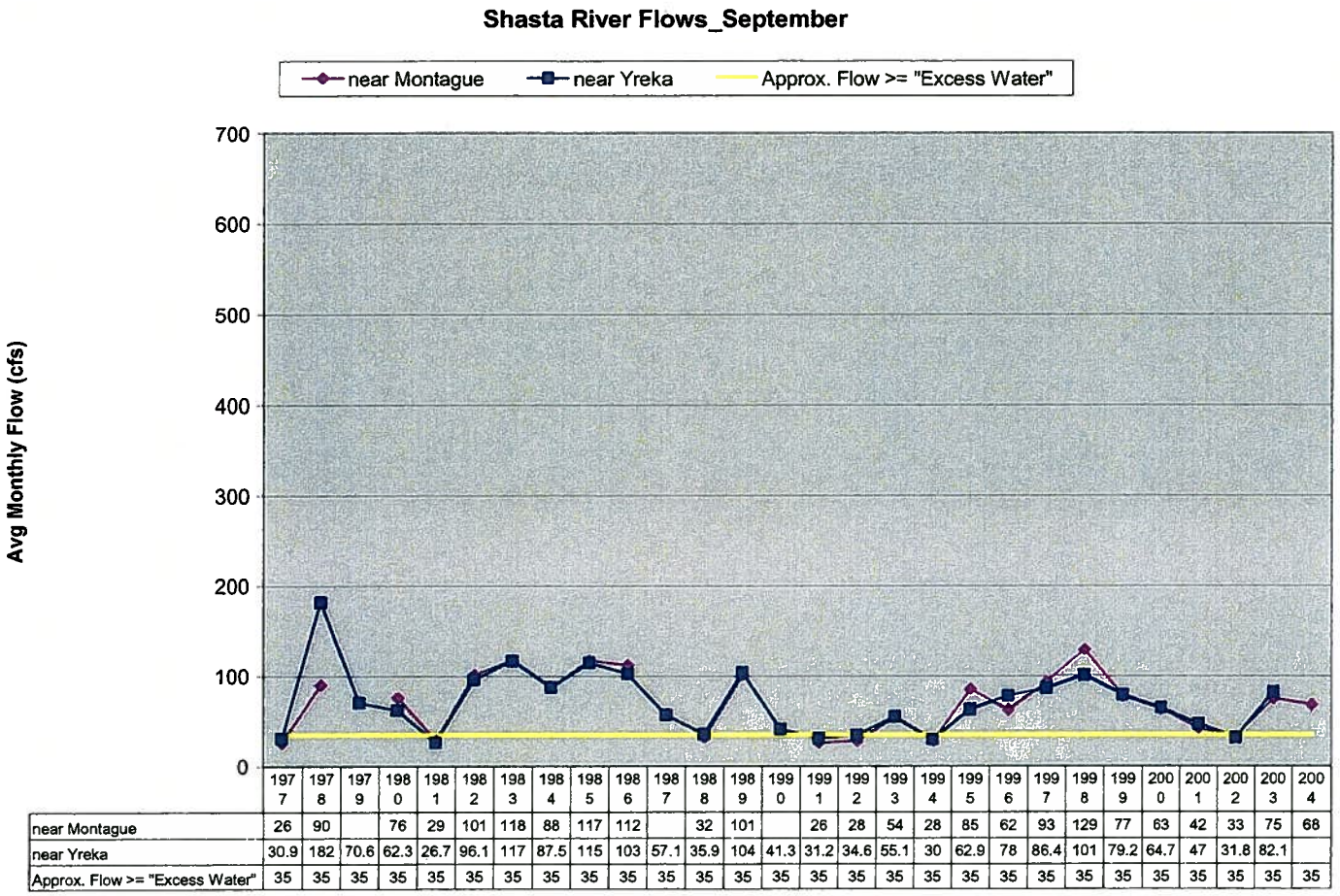


FIGURE 11 – AVERAGE MONTH[illegible] DATA USED IN DETERMINATION [illegible] "EXCESS" WATER_SEPTEMBER



	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
near Montague	26	90		76	29	101	118	88	117	112		32	101		26	28	54	28	85	62	93	129	77	63	42	33	75	68
near Yreka	30.9	182	70.6	62.3	26.7	96.1	117	87.5	115	103	57.1	35.9	104	41.3	31.2	34.6	55.1	30	62.9	78	86.4	101	79.2	64.7	47	31.8	82.1	
Approx. Flow >= "Excess Water"	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35

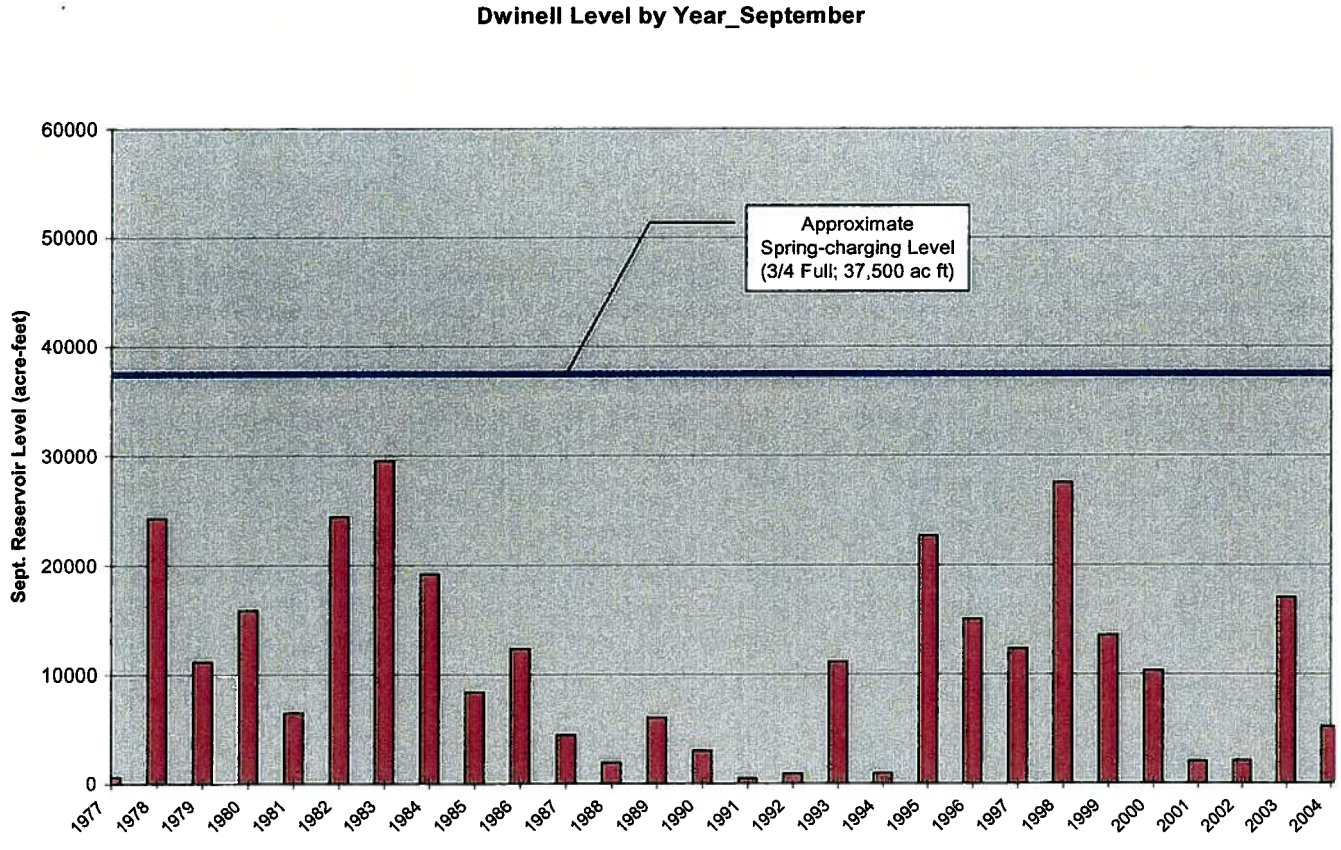
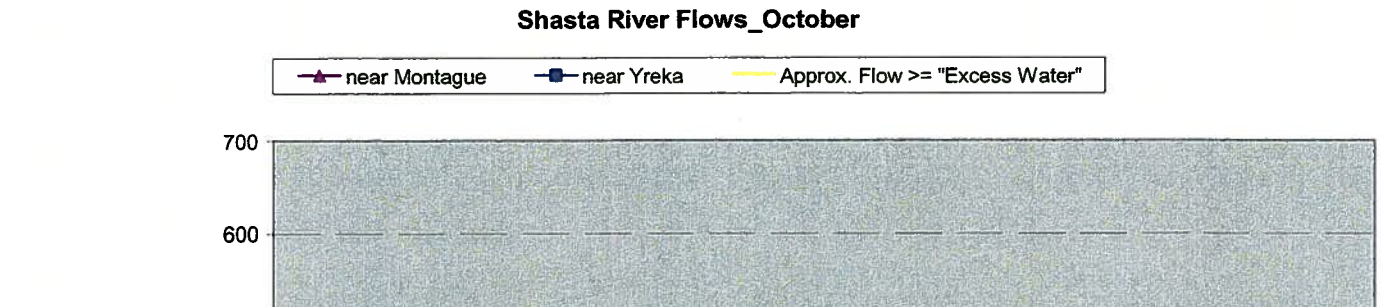


FIGURE 12 – AVERAGE MONTH[illegible] DATA USED IN DETERMINATION [illegible] "EXCESS" WATER_OCTOBER



	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
near Montague																							170	167	117	119	150	149
near Yreka	117	149	142	146	135	178	195	189	151	166	131	90.7	155	108	93.9	103	145	104	141	146	159	186	152	157	129	132		
Approx. Flow >= "Excess Water"	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35

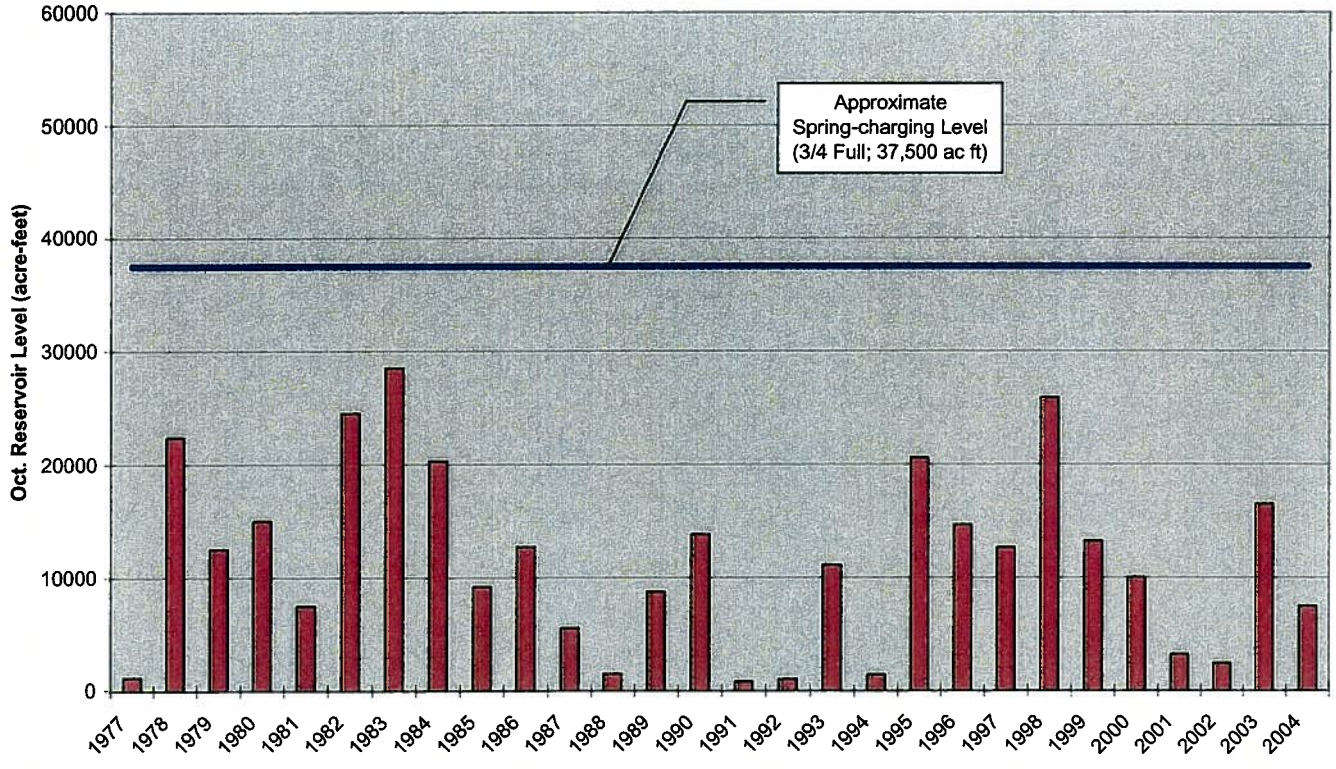


FIGURE 13A – WATER TEMPERATURE_SHASTA RIVER, 2001: UPSTREAM

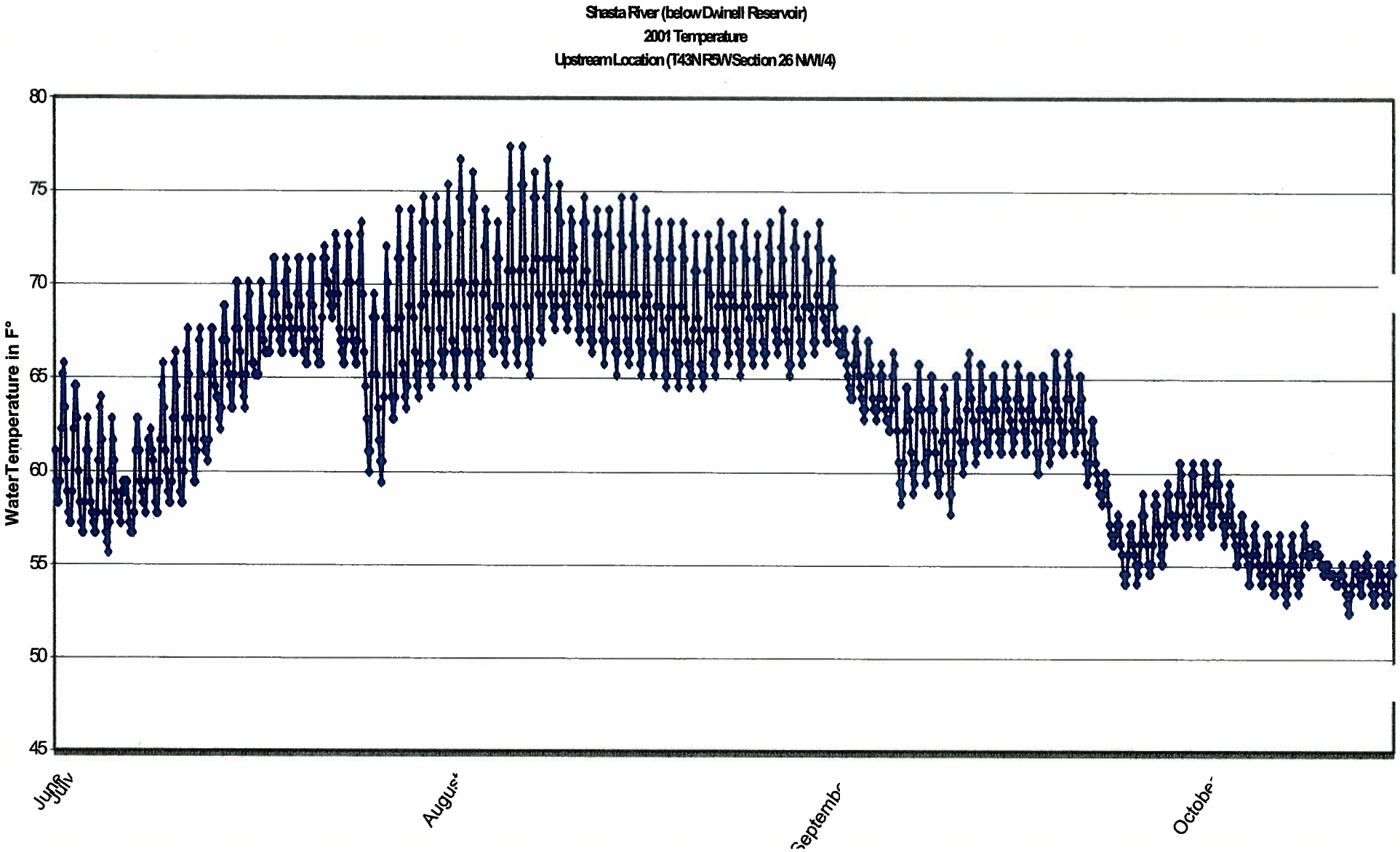


FIGURE 13B – WATER TEMPERATURE_SHASTA RIVER, 2001: DOWNSTREAM