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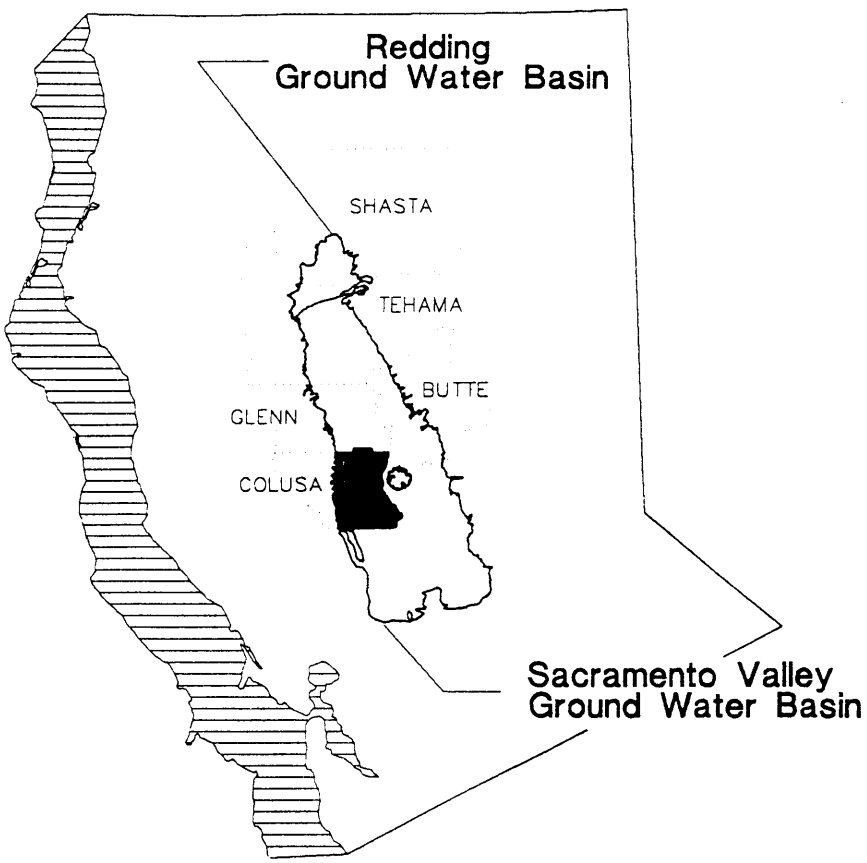
DEPARTMENT OF WATER RESOURCES
Northern District

GROUND WATER LEVELS IN THE SACRAMENTO VALLEY GROUND WATER BASIN COLUSA COUNTY



January 1994

Douglas P. Wheeler Secretary for Resources The Resources Agency	Pete Wilson Governor State of California	David N. Kennedy Director Department of Water Resources

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Data used to produce the tables, graphs, and maps are available at $25.00/set in electronic form (IBM-compatible personal computer).

For electronic copies of the data in this report and those listed above, contact the DWR district associated with the report:

Department of Water Resources
Northern District
Ground Water Section
2440 Main Street
Red Bluff, CA 96080-2398

~

Department of Water Resources
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Douglas P. Wheeler
Secretary for Resources
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Governor
State of California

David N. Kennedy
Director
Department of Water Resources

Foreword

Ground water is an important source of water for Colusa County. The Northern District of the Department of Water Resources and the U.S. Bureau of Reclamation have collected data on ground water levels from 114 wells in the county.

This report summarizes ground water level data collected by these agencies since the late 1920s through July 1993. The report presents locations of wells, information related to the monitoring program, and hydrographs depicting ground water levels over time. This information will provide the basis for a better understanding of ground water level trends in Colusa County. Understanding these trends will aid in management of this important resource.

Linton Brown

Linton Brown, Chief
Northern District

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Organization

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Introduction

Since the late 1920s, DWR and USBR have measured ground water levels for a total of 114 wells in Colusa County. This report is a compilation of information related to this monitoring program in Colusa County and includes ground water hydrographs for the monitored wells.

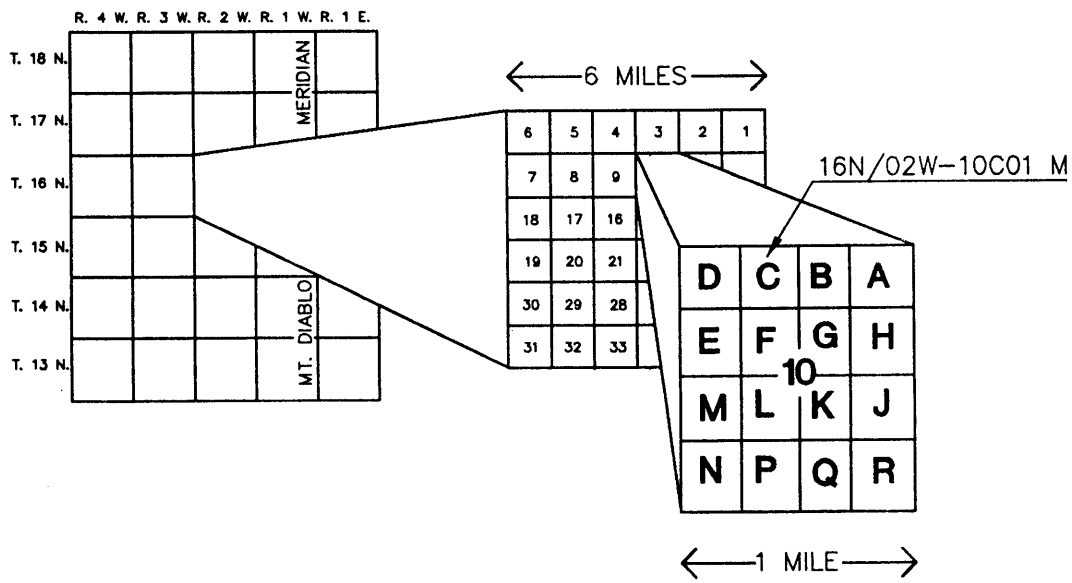
State Well Numbering System

Each well in the monitoring program is assigned an official State Well Number. DWR has sole responsibility for assigning State Well Numbers to water wells in California, and each number uniquely identifies a well based on its location.

Each State Well Number includes township, range and section number, and each section is further subdivided into sixteen 40-acre tracts, which are assigned a letter designation as shown below. Within each 40-acre tract, wells are numbered sequentially in the order they are inventoried. The final letter of the identification signifies the base line and meridian to which the well location refers. In Colusa County, all wells are referenced to the Mount Diablo base line and meridian. The example below is for State Well Number 16N/02W-10C01M.

Figure 1

State Well Numbering System



The lettering system does not contain the letters "I" and "O".

Measurement Frequency and Period of Record

Table I shows the period of record and frequency of measurement for Colusa County wells monitored historically by the Ground Water Section of the Northern District and the USBR. The wells currently measured are labeled as ACTIVE.

Most wells are measured semiannually: once in spring, usually during March, and once in fall, during October. Dates of the measurements are timed to obtain the approximate highest static water level in the spring and approximate lowest static water level in the fall. Currently, seven wells are measured monthly to provide a record of how levels change throughout the year. Over time, the measurement frequency for many wells in the monitoring program has alternated between semiannually and monthly. The "Measurement Frequency" column in Table 1 reflects only the most recent measurement frequency for the wells.

Table 1
Measurement Frequency and Period of Record for Ground Water Monitoring Wells in Colusa County

State Well Number	Measurement Frequency	No. of Meas.	Record Begins	Record Ends
13N/01E-11A01M	SEMI-ANNUAL	121	07/01/53	ACTIVE
13N/01E-15R01M	SEMI-ANNUAL	120	10/28/41	05/14/64
13N/01E-32Q01M	SEMI-ANNUAL	143	03/28/67	10/23/79
13N/01W-05M02M	SEMI-ANNUAL	31	03/14/78	ACTIVE
13N/01W-05R01M	SEMI-ANNUAL	69	08/03/42	03/22/91
13N/01W-07G01M	SEMI-ANNUAL	44	02/26/75	ACTIVE
13N/01W-08M01M	SEMI-ANNUAL	56	10/19/65	ACTIVE
13N/01W-08Q01M	SEMI-ANNUAL	9	10/19/65	10/09/69
13N/01W-08Q02M	SEMI-ANNUAL	53	10/02/67	ACTIVE
13N/01W-15N03M	SEMI-ANNUAL	57	10/18/65	ACTIVE
13N/01W-16N01M	SEMI-ANNUAL	68	12/18/29	03/08/66
13N/01W-16N03M	SEMI-ANNUAL	54	10/18/66	ACTIVE
13N/01W-22P02M	SEMI-ANNUAL	56	10/18/65	ACTIVE
13N/01W-23F02M	SEMI-ANNUAL	56	10/18/65	ACTIVE
13N/01W-28E02M	SEMI-ANNUAL	56	10/18/65	ACTIVE
13N/01W-31Q01M	SEMI-ANNUAL	66	01/02/30	10/03/62
13N/01W-32F01M	SEMI-ANNUAL	12	04/22/75	10/16/80
13N/01W-34P01M	SEMI-ANNUAL	140	11/15/41	10/04/71
13N/01W-35L02M	SEMI-ANNUAL	44	01/22/75	ACTIVE
13N/01W-35L06M	SEMI-ANNUAL	12	12/18/29	01/05/49
13N/01W-36N01M	SEMI-ANNUAL	56	10/18/65	ACTIVE
13N/01W-36Q01M	SEMI-ANNUAL	115	09/27/41	03/25/57
13N/02W-04G01M	MONTHLY	622	06/22/53	ACTIVE
13N/02W-04G02M	SEMI-ANNUAL	374	06/11/53	03/20/92
13N/02W-04G03M	MONTHLY	634	06/11/53	ACTIVE
13N/02W-04G04M	MONTHLY	377	06/23/53	ACTIVE
13N/02W-05E01M	SEMI-ANNUAL	13	03/12/76	03/22/82
13N/02W-05H02M	SEMI-ANNUAL	18	03/16/59	10/04/67
13N/02W-05H03M	SEMI-ANNUAL	18	10/04/67	03/12/76
13N/02W-11M01M	SEMI-ANNUAL	90	02/18/53	ACTIVE
13N/02W-12L01M	SEMI-ANNUAL	61	03/13/63	ACTIVE
13N/02W-13C01M	SEMI-ANNUAL	45	09/27/65	ACTIVE
13N/02W-13R01M	SEMI-ANNUAL	60	10/11/63	ACTIVE
13N/02W-15D01M	SEMI-ANNUAL	32	10/25/77	ACTIVE
13N/02W-15J01M	MONTHLY	153	01/28/75	ACTIVE
13N/02W-20H01M	SEMI-ANNUAL	41	01/28/75	ACTIVE
13N/02W-21N01M	SEMI-ANNUAL	29	10/10/63	10/25/77
13N/02W-22H01M	SEMI-ANNUAL	156	06/25/48	ACTIVE
13N/02W-22H02M	SEMI-ANNUAL	32	10/25/77	ACTIVE
13N/02W-25F01M	SEMI-ANNUAL	44	01/28/75	ACTIVE
13N/02W-23L01M	SEMI-ANNUAL	77	07/17/52	ACTIVE
14N/01E-21L01M	SEMI-ANNUAL	44	02/26/75	ACTIVE
14N/01W-03L01M	SEMI-ANNUAL	197	12/19/29	11/30/65
14N/01W-03L02M	SEMI-ANNUAL	96	05/06/63	03/08/84
14N/01W-04K03M	SEMI-ANNUAL	55	03/28/67	ACTIVE
14N/01W-12A01M	SEMI-ANNUAL	61	10/11/57	ACTIVE
14N/01W-32R01M	SEMI-ANNUAL	30	03/16/59	10/12/73
14N/02W-04B01M	SEMI-ANNUAL	32	10/11/57	10/11/72
14N/02W-04B02M	SEMI-ANNUAL	41	03/20/73	ACTIVE
14N/02W-09B01M	SEMI-ANNUAL	33	03/01/77	ACTIVE
14N/02W-09F01M	SEMI-ANNUAL	9	03/01/77	03/12/81
14N/02W-13N01M	SEMI-ANNUAL	73	10/10/57	ACTIVE
14N/02W-16N02M	SEMI-ANNUAL	302	10/11/57	10/21/88
14N/02W-18P01M	SEMI-ANNUAL	12	03/11/66	10/04/71
14N/02W-19R01M	SEMI-ANNUAL	20	03/16/59	10/09/68
14N/02W-23P01M	SEMI-ANNUAL	56	10/19/65	ACTIVE
14N/02W-29J01M	MONTHLY	166	02/28/67	ACTIVE
14N/02W-31N02M	SEMI-ANNUAL	41	10/03/62	10/07/82
14N/02W-34N01M	SEMI-ANNUAL	91	09/29/49	ACTIVE
14N/02W-36D01M	SEMI-ANNUAL	56	10/19/65	ACTIVE
14N/02W-36N01M	SEMI-ANNUAL	75	12/05/41	10/19/55
14N/02W-36N02M	SEMI-ANNUAL	76	10/19/55	ACTIVE
14N/03W-01D01M	SEMI-ANNUAL	40	04/22/48	04/01/69
14N/03W-01K01M	SEMI-ANNUAL	59	04/28/67	ACTIVE
14N/03W-02D01M	SEMI-ANNUAL	9	10/02/79	10/13/83
14N/03W-11A01M	SEMI-ANNUAL	62	03/29/67	ACTIVE
14N/03W-11H01M	SEMI-ANNUAL	59	03/29/67	ACTIVE
14N/03W-12F01M	SEMI-ANNUAL	31	09/28/49	03/12/64
14N/03W-12F02M	SEMI-ANNUAL	60	10/08/63	ACTIVE
14N/03W-14Q02M	SEMI-ANNUAL	43	04/28/67	11/12/87
14N/03W-14Q03M	SEMI-ANNUAL	46	04/28/67	ACTIVE
14N/03W-24C01M	SEMI-ANNUAL	61	09/27/49	ACTIVE
14N/03W-25A01M	SEMI-ANNUAL	26	03/14/79	10/23/91
14N/03W-36B01M	SEMI-ANNUAL	81	09/27/49	10/06/88
15N/01W-05G01M	SEMI-ANNUAL	42	10/21/75	ACTIVE
15N/01W-23P02M	SEMI-ANNUAL	11	02/26/75	10/24/79
15N/02W-13H01M	SEMI-ANNUAL	47	10/10/57	10/05/84
15N/02W-19E01M	SEMI-ANNUAL	44	02/26/75	ACTIVE
15N/02W-31Q02M	SEMI-ANNUAL	44	02/27/75	ACTIVE
15N/03W-01N01M	SEMI-ANNUAL	44	02/27/75	ACTIVE
15N/03W-18J01M	SEMI-ANNUAL	81	02/17/53	ACTIVE
15N/03W-24E01M	SEMI-ANNUAL	25	12/24/29	04/13/54
15N/03W-27G01M	SEMI-ANNUAL	32	03/16/59	10/18/74
15N/03W-28A01M	SEMI-ANNUAL	46	02/19/75	ACTIVE
15N/03W-29J01M	SEMI-ANNUAL	5	12/10/91	ACTIVE
15N/03W-32B01M	SEMI-ANNUAL	114	09/27/49	ACTIVE
15N/03W-33N01M	SEMI-ANNUAL	42	12/24/29	03/12/57
15N/03W-33N02M	SEMI-ANNUAL	209	04/21/48	10/24/78
15N/03W-33Q01M	SEMI-ANNUAL	58	06/28/77	ACTIVE
15N/03W-35G01M	SEMI-ANNUAL	32	10/21/77	ACTIVE

Table 1 (continued)
Measurement Frequency and Period of Record for Ground Water Monitoring Wells in Colusa County

State Well Number	Measurement Frequency	No. of Meas.	Record Begins	Record Ends
15N/04W-11G01M	SEMI-ANNUAL	44	02/27/75	ACTIVE
15N/04W-14J01M	SEMI-ANNUAL	48	04/22/48	03/20/73
16N/01W-20F01M	SEMI-ANNUAL	153	12/17/29	ACTIVE
16N/02W-10C01M	SEMI-ANNUAL	17	02/11/75	10/14/82
16N/02W-12J01M	SEMI-ANNUAL	61	08/21/41	04/07/53
16N/02W-12J02M	SEMI-ANNUAL	44	02/11/75	ACTIVE
16N/02W-25B02M	MONTHLY	307	02/21/66	ACTIVE
16N/03W-07Q01M	SEMI-ANNUAL	44	02/19/75	ACTIVE
16N/03W-14H02M	SEMI-ANNUAL	43	03/31/75	ACTIVE
16N/03W-35N02M	SEMI-ANNUAL	71	09/27/57	ACTIVE
16N/04W-02P01M	SEMI-ANNUAL	44	02/11/75	ACTIVE
16N/04W-12C01M	SEMI-ANNUAL	31	12/07/29	03/12/57
17N/01W-06R01M	SEMI-ANNUAL	71	09/28/57	10/05/92
17N/02W-25G02M	SEMI-ANNUAL	45	02/11/75	ACTIVE
17N/02W-30J02M	SEMI-ANNUAL	45	03/06/74	ACTIVE
17N/03W-03Q01M	SEMI-ANNUAL	32	12/07/29	03/12/57
17N/03W-08R01M	SEMI-ANNUAL	93	02/10/75	ACTIVE
17N/03W-10C01M	MONTHLY	179	03/06/54	ACTIVE
17N/03W-32H01M	SEMI-ANNUAL	44	02/10/75	ACTIVE
18N/01W-32L02M	SEMI-ANNUAL	53	02/20/75	ACTIVE
18N/01W-35K01M	SEMI-ANNUAL	81	09/28/57	ACTIVE
18N/02W-15N01M	SEMI-ANNUAL	170	08/22/41	03/17/81
18N/02W-18K01M	SEMI-ANNUAL	44	02/10/75	ACTIVE
18N/02W-36B01M	SEMI-ANNUAL	127	09/11/41	ACTIVE

Well Locations

Plate 1 shows the locations of ground water level monitoring wells in Colusa County. Approximate latitude, longitude, and Zone 10 UTM *(Universal Transverse Mercator)* coordinates, in meters, for each well are given in Table 2.

We determined the coordinates by plotting the location of each well on USGS 7.5-minute quadrangles, using information on file with DWR. The UTM coordinates of the plotted locations were digitized from these quadrangles. Latitude and longitude coordinates for each well were calculated from the digitized UTM coordinate data using software developed by the U.S. Geological Survey.

Locations shown in Table 2 and on Plate 1 are approximate, but are estimated to be within 500 feet. If you detect an error in location, please notify the Department of Water Resources, Northern District, Ground Water Section, 2440 Main Street, Red Bluff, California 96080-2398, telephone number (916) 529-7314.

Table 2
Locations for Ground Water Level Monitoring Wells in Colusa County

State Well Number	UTM Coordinates East	UTM Coordinates North	Latitude (Decimal Degrees)	Longitude (Decimal Degrees)	Latitude (Degrees Minutes Seconds)			Longitude (Degrees Minutes Seconds)		
13N/01E-11A01M	601920	4316880	38.9968	121.8231	38	59	49	121	49	23
13N/01E-15R01M	600635	4313927	38.9704	121.8384	38	58	13	121	50	18
13N/01E-32Q01M	597087	4308967	38.9261	121.8800	38	55	34	121	52	48
13N/01W-05M02M	586337	4317489	39.0040	122.0029	39	0	14	122	0	11
13N/01W-05R01M	587689	4317340	39.0025	121.9873	39	0	9	121	59	14
13N/01W-07G01M	585483	4316102	38.9916	122.0130	38	59	30	122	0	47
13N/01W-08M01M	586127	4315763	38.9885	122.0056	38	59	19	122	0	20
13N/01W-08Q01M	587042	4315396	38.9851	121.9950	38	59	6	121	59	42
13N/01W-08Q02M	587070	4315385	38.9850	121.9947	38	59	6	121	59	41
13N/01W-15N03M	589388	4313760	38.9701	121.9682	38	58	12	121	58	5
13N/01W-16N01M	588089	4313896	38.9715	121.9832	38	58	17	121	58	59
13N/01W-16N03M	588142	4313918	38.9717	121.9825	38	58	18	121	58	57
13N/01W-22P02M	589937	4312135	38.9554	121.9621	38	57	19	121	57	43
13N/01W-23F02M	591508	4313308	38.9658	121.9438	38	57	57	121	56	38
13N/01W-28E02M	587787	4311288	38.9480	121.9870	38	56	53	121	59	13
13N/01W-31Q01M	585494	4308899	38.9267	122.0137	38	55	36	122	0	49
13N/01W-32F01M	586531	4309934	38.9359	122.0016	38	56	9	122	0	6
13N/01W-34P01M	590190	4308918	38.9264	121.9596	38	55	35	121	57	34
13N/01W-35L02M	591505	4309618	38.9326	121.9443	38	55	57	121	56	39
13N/01W-35L06M	591604	4309519	38.9317	121.9432	38	55	54	121	56	35
13N/01W-36N01M	592668	4308920	38.9262	121.9310	38	55	34	121	55	52
13N/01W-36Q01M	593604	4308925	38.9261	121.9202	38	55	34	121	55	13
13N/02W-04G01M	579072	4318031	39.0096	122.0867	39	0	34	122	5	12
13N/02W-04G02M	579149	4318047	39.0097	122.0859	39	0	35	122	5	9
13N/02W-04G03M	579072	4318031	39.0096	122.0867	39	0	34	122	5	12
13N/02W-04G04M	579071	4318058	39.0098	122.0868	39	0	35	122	5	12
13N/02W-05E01M	576611	4317638	39.0063	122.1152	39	0	23	122	6	55
13N/02W-05H02M	577874	4317990	39.0093	122.1006	39	0	34	122	6	2
13N/02W-05H03M	577874	4317990	39.0093	122.1006	39	0	34	122	6	2
13N/02W-11M01M	581466	4315764	38.9889	122.0594	38	59	20	122	3	34
13N/02W-12L01M	583452	4315894	38.9899	122.0364	38	59	24	122	2	11
13N/02W-13C01M	583632	4315103	38.9828	122.0344	38	58	58	122	2	4
13N/02W-13R01M	584411	4313986	38.9726	122.0256	38	58	21	122	1	32
13N/02W-15[illegible]M	579903	4314945	38.9817	122.0775	38	58	54	122	4	39
13N/02W-15[illegible]M	581420	4313956	38.9726	122.0601	38	58	22	122	3	36
13N/02W-20H01M	578076	4312969	38.9641	122.0988	38	57	51	122	5	56
13N/02W-21N01M	578337	4311997	38.9553	122.0959	38	57	19	122	5	45
13N/02W-22H01M	581363	4313010	38.9641	122.0609	38	57	51	122	3	39
13N/02W-22H02M	581313	4312961	38.9637	122.0615	38	57	49	122	3	41
13N/02W-23L01M	582053	4312437	38.9589	122.0530	38	57	32	122	3	11
13N/02W-25F01M	583818	4311490	38.9502	122.0327	38	57	1	122	1	58
14N/01E-21L01M	598239	4322650	39.0492	121.8647	39	2	57	121	51	53
14N/01W-03L01M	589963	4327457	39.0935	121.9597	39	5	36	121	57	35
14N/01W-03L02M	590050	4327451	39.0934	121.9587	39	5	36	121	57	31
14N/01W-04K03M	588670	4327432	39.0934	121.9747	39	5	36	121	58	29

Table 2 (continued)
Locations for Ground Water Level Monitoring Wells in Colusa County

State Well Number	UTM Coordinates East	UTM Coordinates North	Latitude (Decimal Degrees)	Longitude (Decimal Degrees)	Latitude (Degrees Minutes Seconds)			Longitude (Degrees Minutes Seconds)		
14N/01W-12A01M	593881	4326295	39.0826	121.9146	39	4	57	121	54	53
14N/01W-32R01M	587673	4318581	39.0137	121.9874	39	0	49	121	59	14
14N/02W-04B01M	579064	4328214	39.1013	122.0857	39	6	5	122	5	8
14N/02W-04B02M	578779	4328178	39.1010	122.0890	39	6	4	122	5	20
14N/02W-09B01M	578964	4326524	39.0861	122.0870	39	5	10	122	5	13
14N/02W-09F01M	578825	4325823	39.0798	122.0887	39	4	47	122	5	19
14N/02W-13N01M	583057	4323694	39.0602	122.0400	39	3	37	122	2	24
14N/02W-16N02M	578328	4323378	39.0578	122.0947	39	3	28	122	5	41
14N/02W-18P01M	575963	4323422	39.0584	122.1221	39	3	30	122	7	19
14N/02W-19R01M	576280	4321980	39.0454	122.1186	39	2	43	122	7	7
14N/02W-23P01M	581989	4321764	39.0429	122.0526	39	2	35	122	3	9
14N/02W-29J01M	578142	4320594	39.0328	122.0972	39	1	58	122	5	50
14N/02W-31N02M	575194	4318380	39.0131	122.1315	39	0	47	122	7	53
14N/02W-34N01M	579813	4318472	39.0135	122.0781	39	0	49	122	4	41
14N/02W-36D01M	583041	4320070	39.0276	122.0407	39	1	39	122	2	26
14N/02W-36N01M	583247	4318512	39.0135	122.0385	39	0	49	122	2	19
14N/02W-36N02M	583247	4318512	39.0135	122.0385	39	0	49	122	2	19
14N/03W-01D01M	573637	4328162	39.1013	122.1484	39	6	5	122	8	54
14N/03W-01K01M	574373	4327267	39.0932	122.1400	39	5	36	122	8	24
14N/03W-02D01M	571913	4328170	39.1016	122.1684	39	6	6	122	10	6
14N/03W-11A01M	573377	4326524	39.0866	122.1516	39	5	12	122	9	6
14N/03W-11H01M	573437	4325888	39.0809	122.1510	39	4	51	122	9	4
14N/03W-12F01M	574018	4325929	39.0812	122.1443	39	4	52	122	8	39
14N/03W-12F02M	574019	4325928	39.0812	122.1442	39	4	52	122	8	39
14N/03W-14Q02M	572986	4323296	39.0575	122.1565	39	3	27	122	9	23
14N/03W-14Q03M	572764	4323363	39.0582	122.1590	39	3	29	122	9	33
14N/03W-24C01M	574204	4323240	39.0569	122.1424	39	3	25	122	8	33
14N/03W-25A01M	575112	4321592	39.0420	122.1321	39	2	31	122	7	56
14N/03W-36B01M	574402	4319833	39.0262	122.1405	39	1	34	122	8	26
15N/01W-05G01M	587083	4337340	39.1828	121.9918	39	10	58	121	59	30
15N/01W-23P02M	591617	4331908	39.1334	121.9400	39	8	0	121	56	24
15N/02W-13H01M	584557	4334067	39.1535	122.0214	39	9	13	122	1	17
15N/02W-19E01M	575129	4332622	39.1414	122.1307	39	8	29	122	7	50
15N/02W-31Q02M	576077	4328302	39.1024	122.1202	39	6	9	122	7	13
15N/03W-01N01M	573598	4336353	39.1751	122.1480	39	10	31	122	8	53
15N/03W-18J01M	566955	4333838	39.1530	122.2251	39	9	11	122	13	30
15N/03W-24E01M	573520	4332321	39.1388	122.1493	39	8	20	122	8	58
15N/03W-27G01M	571271	4330750	39.1249	122.1755	39	7	29	122	10	32
15N/03W-28A01M	569462	4331579	39.1325	122.1963	39	7	57	122	11	47
15N/03W-29J01M	568555	4330438	39.1223	122.2070	39	7	20	122	12	25
15N/03W-32B01M	567849	4329686	39.1155	122.2152	39	6	56	122	12	55
15N/03W-33N01M	569015	4328234	39.1024	122.2019	39	6	9	122	12	7
15N/03W-33N02M	568654	4328230	39.1024	122.2060	39	6	8	122	12	22
15N/03W-33Q01M	569658	4328313	39.1030	122.1944	39	6	11	122	11	40
15N/03W-35G01M	572849	4329119	39.1100	122.1574	39	6	36	122	9	27

Table 2 (continued)
Locations for Ground Water Level Monitoring Wells in Colusa County

State Well Number	UTM Coordinates East	UTM Coordinates North	Latitude (Decimal Degrees)	Longitude (Decimal Degrees)	Latitude (Degrees Minutes Seconds)			Longitude (Degrees Minutes Seconds)		
15N/04W-11G01M	563157	4335462	39.1679	122.2689	39	10	5	122	16	8
15N/04W-14J01M	563537	4333401	39.1493	122.2647	39	8	58	122	15	53
16N/01W-20F01M	586628	4342178	39.2264	121.9964	39	13	35	121	59	47
16N/02W-10C01M	580318	4345900	39.2606	122.0691	39	15	38	122	4	9
16N/02W-12J01M	584206	4345055	39.2526	122.0241	39	15	9	122	1	27
16N/02W-12J02M	584109	4345029	39.2524	122.0252	39	15	8	122	1	31
16N/02W-25B02M	583815	4341162	39.2175	122.0291	39	13	3	122	1	45
16N/03W-07Q01M	566360	4344623	39.2502	122.2310	39	15	1	122	13	51
16N/03W-14H02M	573182	4344018	39.2442	122.1520	39	14	39	122	9	7
16N/03W-35N02M	571716	4338060	39.1907	122.1696	39	11	26	122	10	11
16N/04W-02P01M	562693	4345973	39.2627	122.2733	39	15	46	122	16	24
16N/04W-12C01M	564238	4345761	39.2607	122.2554	39	15	38	122	15	20
17N/01W-06R01M	585480	4355865	39.3499	122.0080	39	20	59	122	0	29
17N/02W-25G02M	583630	4350072	39.2978	122.0302	39	17	52	122	1	49
17N/02W-30J02M	575922	4349736	39.2955	122.1196	39	17	44	122	7	10
17N/03W-03Q01M	570888	4355762	39.3502	122.1773	39	21	1	122	10	38
17N/03W-08R01M	568028	4354115	39.3356	122.2107	39	20	8	122	12	38
17N/03W-10C01M	570514	4355529	39.3482	122.1817	39	20	53	122	10	54
17N/03W-32H01M	568266	4348726	39.2871	122.2085	39	17	13	122	12	30
18N/01W-32L02M	586435	4357988	39.3689	121.9966	39	22	8	121	59	48
18N/01W-35K01M	591764	4357737	39.3661	121.9348	39	21	58	121	56	5
18N/02W-15N01M	579650	4362203	39.4075	122.0749	39	24	27	122	4	30
18N/02W-18K01M	575684	4362664	39.4120	122.1209	39	24	43	122	7	15
18N/02W-36B01M	583841	4358942	39.3777	122.0266	39	22	40	122	1	36

Ground Water Level Data Management

The data presented in this report are maintained on IBM-compatible personal computer systems using a collection of data processing applications developed by the Ground Water Sections of DWR's Central and Northern districts. The data management application, known as "EX-terra," consists of five main data tables that contain:

- Ground water level data
- Generalized geographic data
- Well construction data
- Well qualification data
- Coordinate data.

EX-terra is configured to produce both printed reports and ASCII *(American Standard Code for Information Interchange)* files for use in other computer programs. Among the printed reports are:

- Ground water levels for single wells or groups of wells, based on State Well Number, ground water basin, or county
- Well construction and monitoring history
- Well coordinate and geographic data.

The ASCII output files are formatted for direct input to several widely available graphics programs to create ground water level contour maps or hydrographs, such as those presented in Appendix A.

The ground water level and coordinate data presented in this report can be purchased in electronic form (see inside front cover for details). The files are provided in ASCII delimited format. An ASCII documentation file explaining the contents of the data files is included with each response to a data request. Information about the IBM-compatible applications that comprise the EX-terra ground water level data management system and their implementation is also available.

Ground Water Level Measurements

Water levels in all wells are measured using a steel tape or electric probe. All measurements of water levels should be accurate to the nearest tenth of a foot. The water surface elevations presented in this report are calculated using the water level measurements and ground surface elevations at each well. Most of the ground surface elevations were estimated from USGS 7.5 quadrangles. Accuracy of these elevations is dependent on the contour intervals of the maps, which range from 5 to 40 feet.

Ground water level data for each well are depicted on the hydrographs in Appendix A. The hydrographs represent water level data through July 1993 and are organized by township from south to north and by range from east to west.

On the hydrographs, solid circles (dots) depict actual measured ground water elevations. When an individual measurement is identified by a larger circle, the measurement is questionable. Solid lines connecting individual measurements are interpolations of the change in ground water elevation between measurements. Discontinuities on the graphs indicate an expected measurement is missing. Ground surface elevations at the wells are represented as long, solid horizontal lines.

Hydrographs representing monthly monitoring wells have a higher concentration of data points compared to hydrographs representing semi-annual measurement wells.

Data points that appear "unusual" were checked against field records and retained to preserve the objectivity of the ground water level records.

Ground Water Level Trends

Colusa County can be divided into two general ground water resource areas: the Sacramento Valley, which is the major ground water basin, and the foothills and mountains to the west of the valley. The latter has limited ground water resources. The Department's monitoring program focused on wells located only in the Sacramento Valley ground water basin.

Ground water levels fluctuate annually in response to ground water extractions, subsurface inflow and outflow, recharge from precipitation, stream percolation, and infiltration of applied irrigation water. Levels are usually highest in the spring and lowest in the fall. Longer term fluctuations occur when discharge exceeds or is less than recharge over several seasons. Changes in ground water levels are determined from well measurements. Hydrographs are graphical plots of the measurements and illustrate annual spring to fall changes, long-term changes linked to increased or decreased ground water extraction, or variations associated with wet or dry climatic conditions.

Sacramento Valley ground water in Colusa County is recharged by local creeks, the Glenn-Colusa Canal, and the Sacramento River when the surface water level is higher than the adjacent ground water level. The ground water is also recharged by precipitation, applied water, and subsurface inflow from the north and east. Ground water discharges at the Sacramento River and the Colusa Basin Drain and outflows in the subsurface toward the south.

In general, the hydrographs in Appendix A show:

- Ground water level declines in some of the wells are associated with the 1976-77 and 1987-92 drought periods.

- All ground water levels recovered from the 1976-77 to pre-drought levels during the wet period in the early 1980s. Most of the ground water levels recovered from the 1987-92 drought during the wet 1992-93 winter and spring.

Ground Water Level Trends (continued)

- Wells in the southern portion of the county near the Tehama-Colusa Canal area show a general decline in ground water levels before 1965 due to increasing ground water extraction for agricultural use. After 1965, the introduction of applied surface water by the Colusa County Water District started a general upward trend in ground water levels which peaked before the 1987-92 drought.

  Originally all of the District's surface water was pumped from the Colusa Basin Drain. Starting in October 1979, Colusa Basin Drain water was gradually replaced by deliveries from the Tehama-Colusa Canal. By 1984, the Tehama-Colusa Canal delivered all of the District's water supply and the Colusa Basin Drain pumping plants were decommissioned.

- Wells east of and adjacent to the Tehama-Colusa Canal had spring-to-fall ground water level fluctuations from 15 to 20 feet prior to importation of Tehama-Colusa Canal water in the early 1980s. Since deliveries began, ground water level fluctuations were reduced to less than 10 feet due to reduced ground water pumpage.

- Wells producing from the unconfined aquifer east of the GCID Canal (i.e. 17N/03W-10C01M) show almost no seasonal fluctuation. The ground water table is near the surface because ground water is not used much in the area. Deep percolation from surface water irrigation keeps the ground water basin full.

Well Qualification

Well qualification is a standardized process to identify the aquifer(s) associated with individual monitoring wells (Table 3).

A ground water basin is often stratified with several layers of pervious, impervious and semi-impervious material. These layers form an upper unconfined and one or more lower confined to semi-confined zones (described as ground water bodies or aquifers). Water wells may draw from two or more different aquifers.

In order to compare and understand the water level data from various monitoring wells, one must identify which aquifer(s) each well is drawing from by qualifying the wells.

There are four components in well qualification. They are:

I. The ground water body classification of the well's ground water aquifer(s).

1. Unconfined ground water body.
2. Semi-confined ground water body.
3. Confined ground water body.
4. Previously named zone either confined or unconfined, i.e., "A" zone confined, "Silverado."
5. Composite, consisting of both free and confined ground water bodies.

II. The degree of certainty associated with the ground water body classification.

1. Definite: Evidence is conclusive.
2. Probable: Evidence is not conclusive, but includes fairly convincing evidence in support.
3. Possible: Evidence is not conclusive and not as firm as probable, but evidence indicates that it could be or that it is possible.

III. The hydrogeologic unit as the water bearing material associated with the ground water body. (i.e. Qal - Alluvium, Qfl - Floodplain deposits, Ttu - Tuscan Formation etc.)

IV. The date of qualification and the licensed professional who qualified the well.

Information used to qualify a well may be found from the following sources.

- Well Completion Reports (Drillers' Well Logs) may contain the log of geologic formation by depth of the bore hole, well construction information, and well test information such as drawdown and yield. When no well completion report is available, a report of a nearby well is substituted and the degree of certainty is reduced to probable or possible in qualifying the well.
- Geologic maps.
- Water level records are analyzed for patterns of water level fluctuation.
- Electric logs - chart the resistivity vs. depth of a well. They are used to locate the vertical boundaries of water-bearing materials.
- Pump test records.
- Water quality and temperature records.

The amount of information available for a well affects the degree of certainty of the ground water body classification.

Table 3
Well Qualification for Colusa County Monitoring Wells

Well Number	Log *	Use	Ground Water Body	Hydrogeologic Units	Confidence
13N/01E-11A01M	DWR	DOM	Semi-confined	Qfl+Qob	Probable
13N/01E-15R01M		ABAN	Semi-confined	Qfl+Qob	Possible
13N/01E-32Q01M		ABAN	Unconfined	Qfl	Possible
13N/01W-05M02M	96539	IRR	Confined	Qaf+Tte	Probable
13N/01W-05R01M		STK	Unconfined	Qaf	Possible
13N/01W-07G01M	DWR	IRR	Composite	Qaf	Definite
13N/01W-08M01M	USGS	IRR	Confined	Qaf	Possible
13N/01W-08Q01M	OWNER	DOM	Composite	Qaf	Possible
13N/01W-08Q02M		DOM	Composite	Qaf	Possible
13N/01W-15N03M	USBR	IRR	Confined	Qaf	Possible
13N/01W-16N01M	OWNER	DOM	Unconfined	Qaf	Possible
13N/01W-16N03M	8475	DOM	Composite	Qaf	Probable
13N/01W-22P02M	40376	IRR	Confined	Qaf	Probable
13N/01W-23F02M		IRR	Confined	Qaf+Tte	Possible
13N/01W-28E02M		IRR	Confined	Qaf+Tte	Possible
13N/01W-31Q01M		DOM	Unconfined	Qaf	Possible
13N/01W-32F01M	35409	IRR	Composite	Qaf+Tte	Probable
13N/01W-34P01M		ABAN	Unconfined	Qaf	Possible
13N/01W-35L02M	52421	DOM	Semi-confined	Qaf	Probable
13N/01W-35L06M		ABAN	Composite	Qaf	Possible
13N/01W-36N01M		IRR	Confined	Qaf+Tte	Possible
13N/01W-36Q01M	DWR	OBS	Unconfined	Qob	Definite
13N/02W-04G01M	DWR	OBS	Confined	Qaf+Tte	Definite
13N/02W-04G02M	DWR	OBS	Unconfined	Qaf	Probable
13N/02W-04G03M	DWR	OBS	Confined	Qaf	Definite
13N/02W-04G04M	DWR	OBS	Semi-confined	Qaf	Probable
13N/02W-05E01M			Confined	Qaf	Possible
13N/02W-05H02M		IRR	Confined	Qaf	Possible
13N/02W-05H03M		IRR	Confined	Qaf	Possible
13N/02W-11M01M		ABAN	Confined	Qaf	Probable
13N/02W-12L01M			Confined	Qaf+Tte?	Possible
13N/02W-13C01M	DWR	DOM	Confined	Qaf	Definite
13N/02W-13R01M		IRR	Confined	Qaf	Possible
13N/02W-15D01M	32866	IRR	Confined	Qaf+Tte	Possible
13N/02W-15J01M	77457	DOM	Composite	Qaf	Probable
13N/02W-20H01M	95744	DOM	Confined	Qaf	Probable
13N/02W-21N01M	USGS	IRR	Confined	Qaf+Tte	Probable
13N/02W-22H01M		ABAN	Semi-confined	Qaf	Possible
13N/02W-22H02M	USGS	ABAN	Confined	Qaf+Tte	Possible
13N/02W-23L01M	43888	DOM	Composite	Qaf+Tte	Probable
13N/02W-25F01M		IRR	Confined	Qaf+Tte	Possible
14N/01E-21L01M	15314	DOM	Composite	Qfl+Qob	Probable
14N/01W-03L01M		STK	Composite	Qfl+Qob	Possible
14N/01W-03L02M	66692	STK	Confined	Qfl	Probable
14N/01W-04K03M	USBR	IRR	Unconfined	Qfl	Probable

Table 3
Well Qualification for Colusa County Monitoring Wells

Well Number	Log *	Use	Ground Water Body	Hydrogeologic Units	Confidence
14N/01W-12A01M	USBR	IRR	Confined	Qfl	Probable
14N/01W-32R01M	DWR	OBS	Unconfined	Qaf	Probable
14N/02W-04B01M		IRR	Unconfined	Qaf	Possible
14N/02W-04B02M		IRR	Unconfined	Qaf	Possible
14N/02W-09B01M		IRR	Composite	Qaf	Possible
14N/02W-09F01M	55790	IRR	Composite	Qaf	Probable
14N/02W-13N01M	USBR	IRR	Confined	Qaf+Tte	Probable
14N/02W-16N02M			Confined	Qaf	Possible
14N/02W-18P01M		IRR	Confined	Qaf	Possible
14N/02W-19R01M		ABAN	Semi-confined	Qaf	Possible
14N/02W-23P01M	USGS	IRR	Confined	Qaf+Tte	Probable
14N/02W-29J01M	44455	IRR	Confined	Qaf+Tte	Probable
14N/02W-31N02M	68708	IRR	Confined	Qaf+Tte	Probable
14N/02W-34N01M		DOM	Semi-confined	Qaf	Probable
14N/02W-36D01M		IRR	Confined	Qaf+Tte	Possible
14N/02W-36N01M		OBS	Unconfined	Qaf	Probable
14N/02W-36N02M		IRR	Confined	Qaf+Tte	Possible
14N/03W-01D01M		ABAN	Unconfined	Qaf	Possible
14N/03W-01K01M	2659	IRR	Confined	Qaf+Tte	Definite
14N/03W-02D01M		IRR	Confined	Qaf	Possible
14N/03W-11A01M	74980	IRR	Confined	Tte	Probable
14N/03W-11H01M	OWNER	IRR	Confined	Tte	Probable
14N/03W-12F01M		ABAN	Unconfined	Qaf	Possible
14N/03W-12F02M	40423	DOM	Semi-confined	Qaf	Probable
14N/03W-14Q02M	74990	IRR	Confined	Qaf+Tte	Probable
14N/03W-14Q03M	20032	IRR	Confined	Qaf+Tte	Probable
14N/03W-24C01M	OWNER	DOM	Semi-confined	Qaf	Possible
14N/03W-25A01M	43855	IRR	Confined	Qaf+Tte	Probable
14N/03W-36B01M		STK	Confined	Qaf	Possible
15N/01W-05G01M	12982	IND	Semi-confined	Qfl+Qob	Definite
15N/01W-23P02M	60845	DOM	Composite	Qfl	Definite
15N/02W-13H01M	USGS	DOM	Confined	Qfl+Qob	Probable
15N/02W-19E01M	71038	IRR	Confined	Qaf	Definite
15N/02W-31Q02M	8543	IND	Semi-confined	Qaf	Definite
15N/03W-01N01M	96520	IND	Confined	Qfl	Definite
15N/03W-18J01M		DOM	Unconfined	Qaf	Possible
15N/03W-24E01M		ABAN	Unconfined	Qob	Possible
15N/03W-27G01M		DOM	Unconfined	Qaf	Possible
15N/03W-28A01M	15367	IND	Unconfined	Qaf	Probable
15N/03W-29J01M	98567	DOM	Semi-confined	Qaf	Probable
15N/03W-32B01M		STK	Unconfined	Qaf	Possible
15N/03W-33N01M		IRR	Confined	Qaf+Tte	Possible
15N/03W-33N02M		IRR	Confined	Qaf	Possible
15N/03W-33Q01M	123144	IRR	Composite	Qaf+Tte	Probable
15N/03W-35G01M	37220	IRR	Confined	Qaf+Tte	Possible

Table 3
Well Qualification for Colusa County Monitoring Wells

Well Number	Log *	Use	Ground Water Body	Hydrogeologic Units	Confidence
15N/04W-11G01M	2698	IRR	Unconfined	Qaf+Tte	Definite
15N/04W-14J01M		ABAN	Unconfined	Qaf	Probable
16N/01W-20F01M		DOM	Unconfined	Qfl	Definite
16N/02W-10C01M	2697	DOM	Semi-confined	Qfl	Probable
16N/02W-12J01M		DOM	Unconfined	Qfl	Probable
16N/02W-12J02M	19711	DOM	Semi-confined	Qfl	Probable
16N/02W-25B02M	OWNER	DOM	Confined	Qfl+Qob	Probable
16N/03W-07Q01M	41959	DOM	Unconfined	Qaf	Probable
16N/03W-14H02M	OWNER	DOM	Semi-confined	Qfl+Qaf	Possible
16N/03W-35N02M	DWR	DOM	Confined	Qaf+Tte	Probable
16N/04W-02P01M	77484	STK	Composite	Tte	Probable
16N/04W-12C01M		DOM	Unconfined	Qaf	Possible
17N/01W-06R01M	USGS	IRR	Composite	Qfl+Qob	Probable
17N/02W-25G02M	96526	IND	Unconfined	Qfl	Definite
17N/02W-30J02M	57983	DOM	Semi-confined	Qfl+Qob	Possible
17N/03W-03Q01M		STK	Unconfined	Qaf	Possible
17N/03W-08R01M	49451	DOM	Semi-confined	Qaf	Probable
17N/03W-10C01M		DOM	Unconfined	Qaf	Probable
17N/03W-32H01M	93568	DOM	Semi-confined	Qaf	Probable
18N/01W-32L02M	78144	IRR	Unconfined	Qfl	Definite
18N/01W-35K01M	DWR	DOM	Unconfined	Qfl	Probable
18N/02W-15N01M		ABAN	Unconfined	Qob	Probable
18N/02W-18K01M	115460	IRR	Confined	Qob	Probable
18N/02W-36B01M		ABAN	Semi-confined	Qfl+Qob	Possible

HYDROGEOLOGIC UNITS

Qfl - Floodplain deposits
Qaf - Alluvial Fan Deposits
Qob - Older Basin Deposits
Tte - Tehama Formation

GROUND WATER BODY

Unconfined - Represents the free ground water level in the uppermost zone of saturation.
Semi-confined - Represents a water level that locally appears confined but regionally is unconfined.
Confined - Represents the piezometric surface of an aquifer under pressure.
Composite - Represents a water level that includes one or more confined levels and the free ground water level.

CONFIDENCE RATING

Definite - Know well depth & perforated interval, have complete drillers report and good local geology.
Probable - Know well depth, have partial well drillers report & good local geology.
Possible - Know well depth, have poor local geology and/or uncertain well data.

* A well log on file is identified by its DWR log number or by the agency that prepared the log. Likewise, a blank entry indicates that a log is not on file.

Appendix A
Hydrographs

State Well Number	Page
13N/01E-11A01M	21
13N/01E-15R01M	21
13N/01E-32Q01M	22
13N/01W-05M02M	22
13N/01W-05R01M	23
13N/01W-07G01M	23
13N/01W-08M01M	24
13N/01W-08Q01M	24
13N/01W-08Q02M	25
13N/01W-15N03M	25
13N/01W-16N01M	26
13N/01W-16N03M	26
13N/01W-22P02M	27
13N/01W-23F02M	27
13N/01W-28E02M	28
13N/01W-31Q01M	28
13N/01W-32F01M	29
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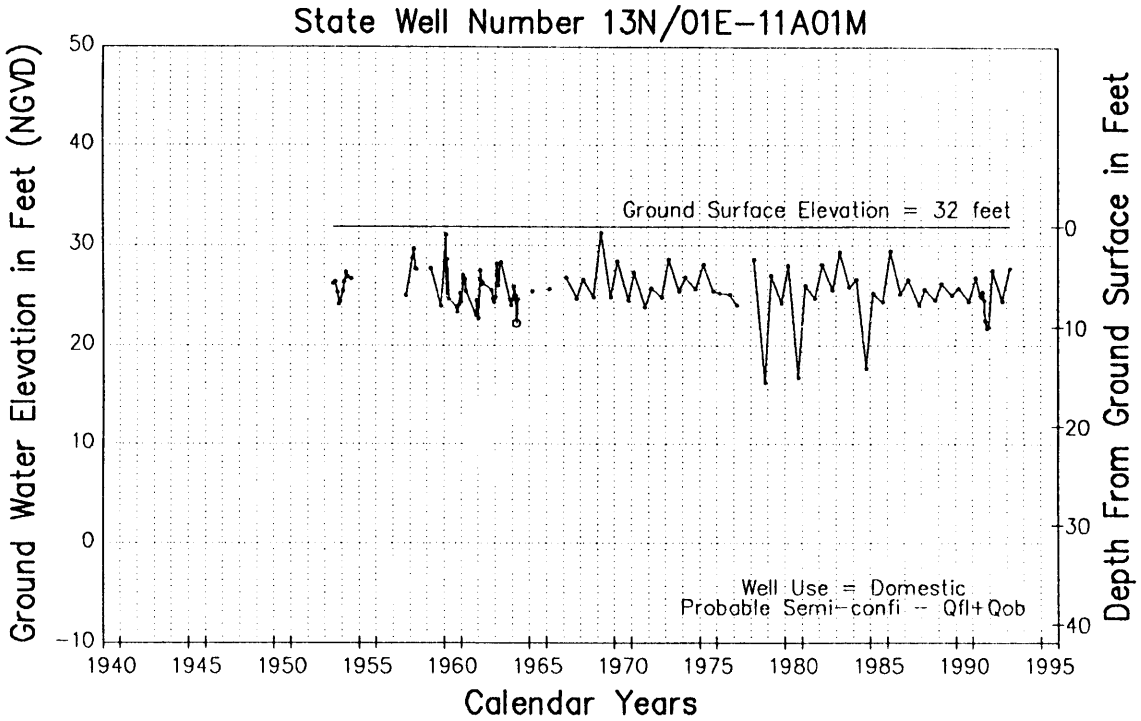
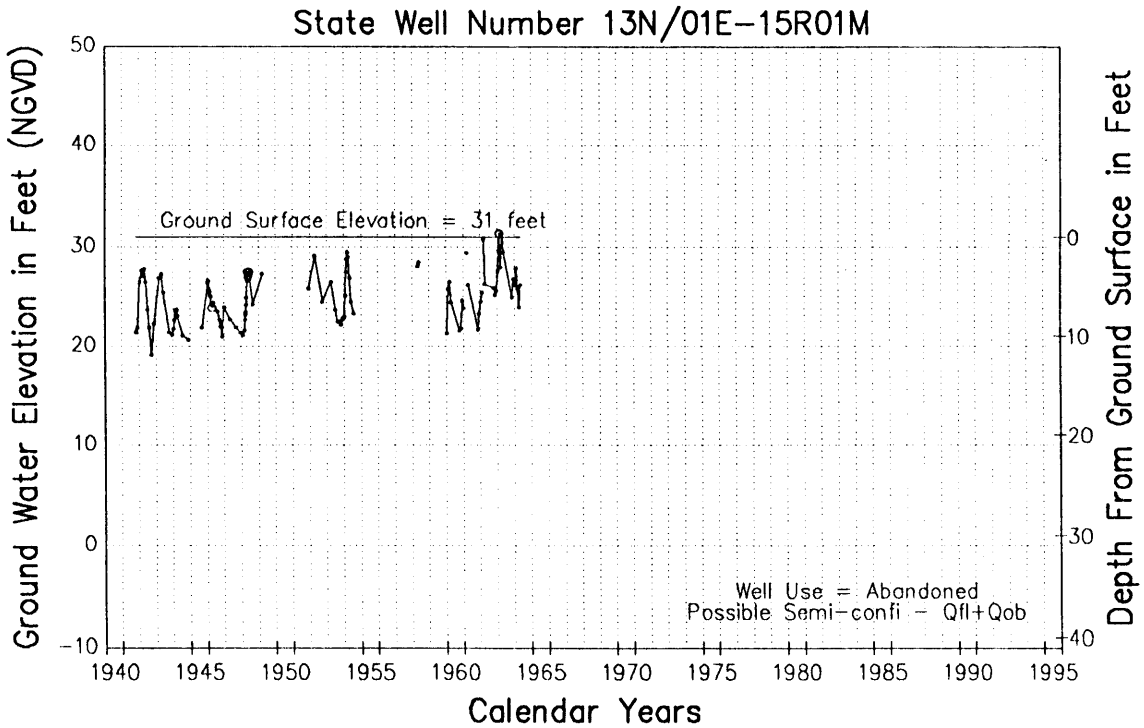
Sacramento Valley Ground Water Basin
Colusa County

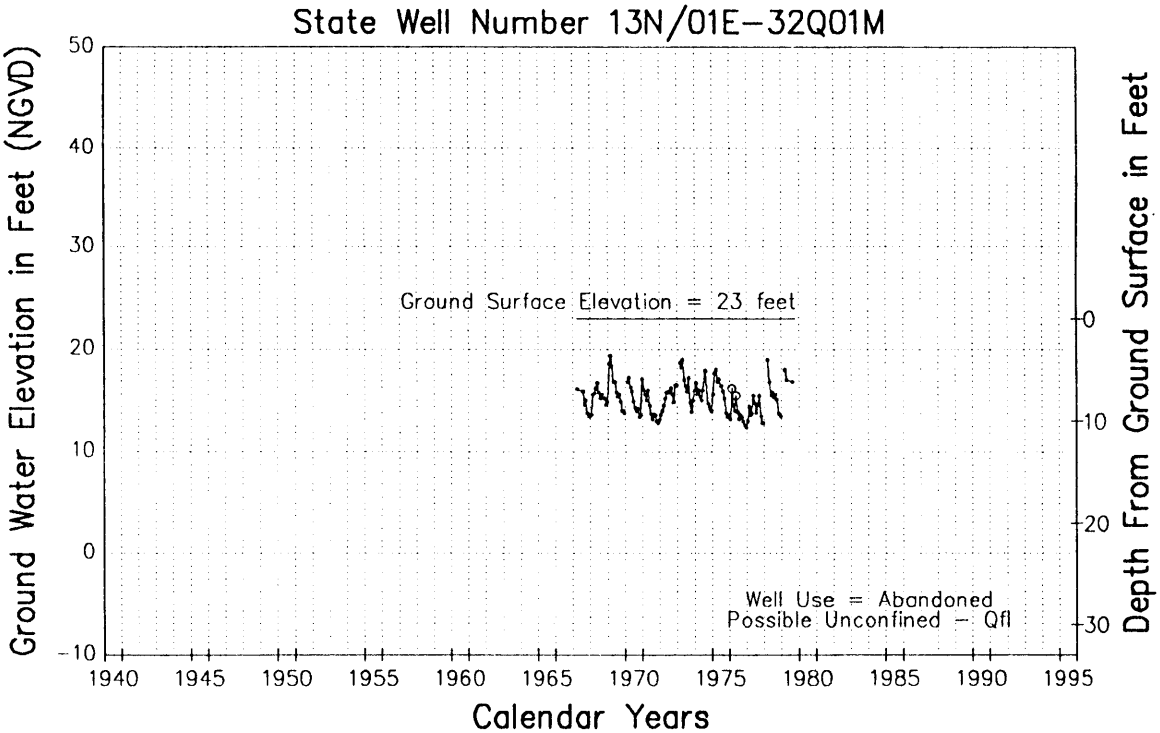


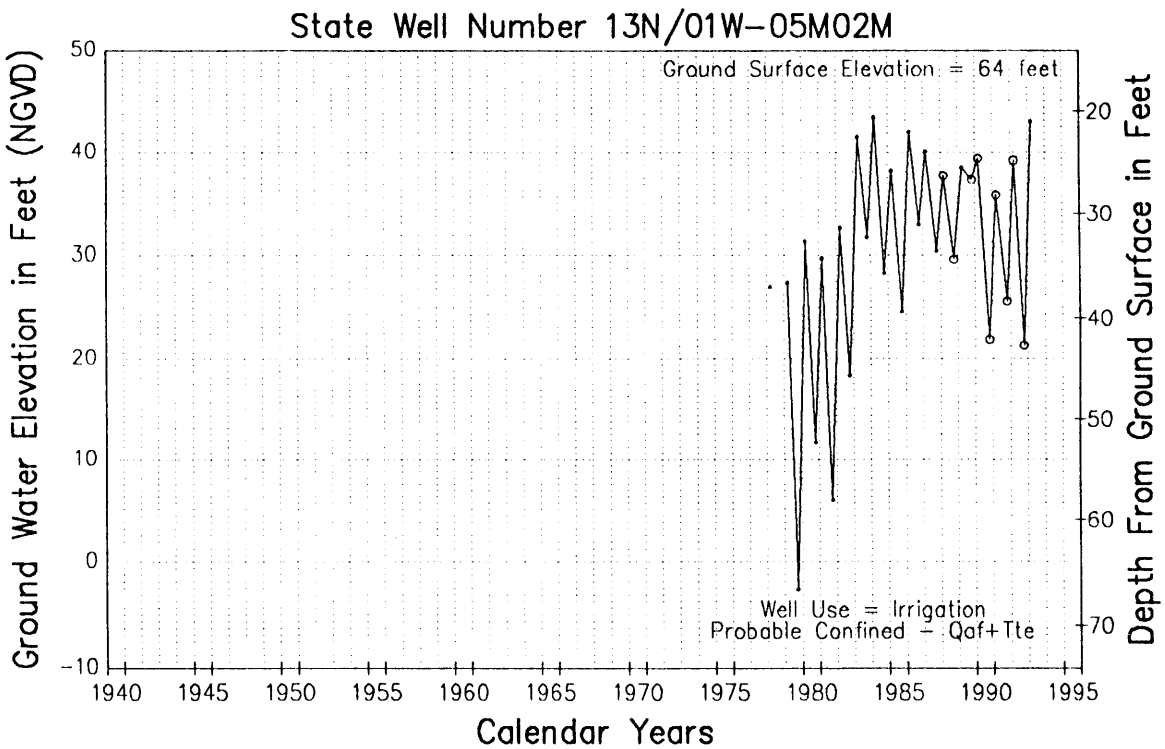


· Water surface elevation in well ∘ Questionable measurement

Department of Water Resources, Northern District

Sacramento Valley Ground Water Basin
Colusa County

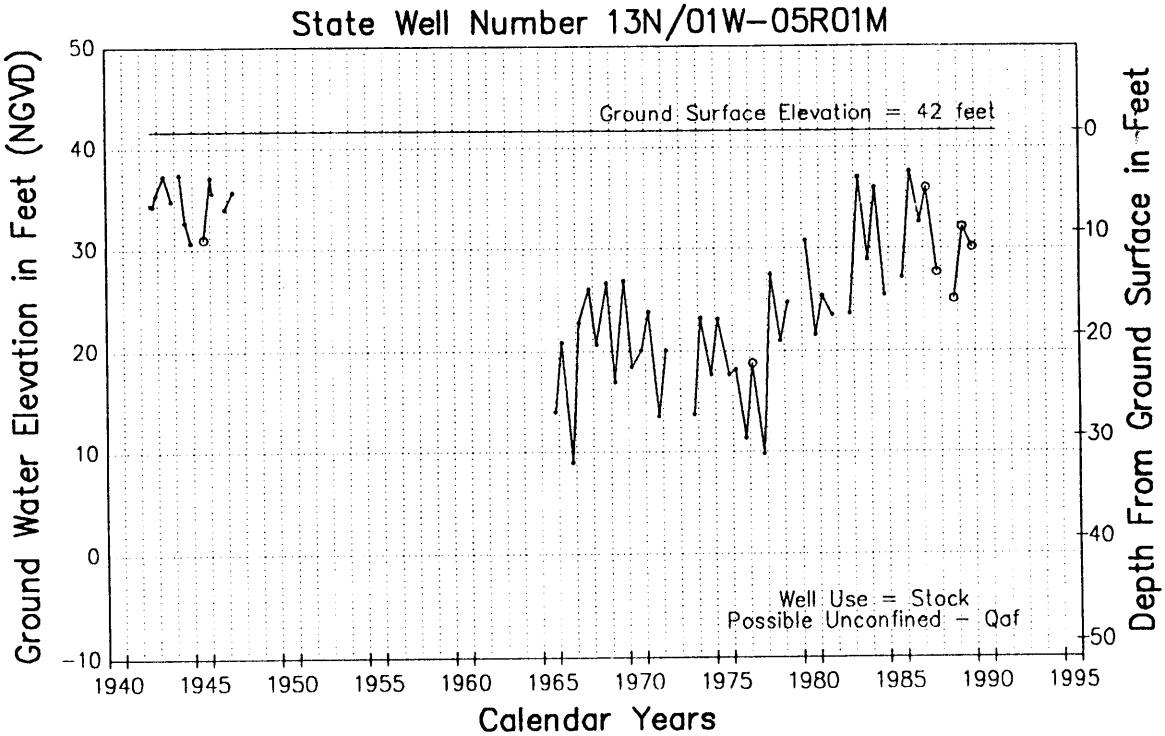


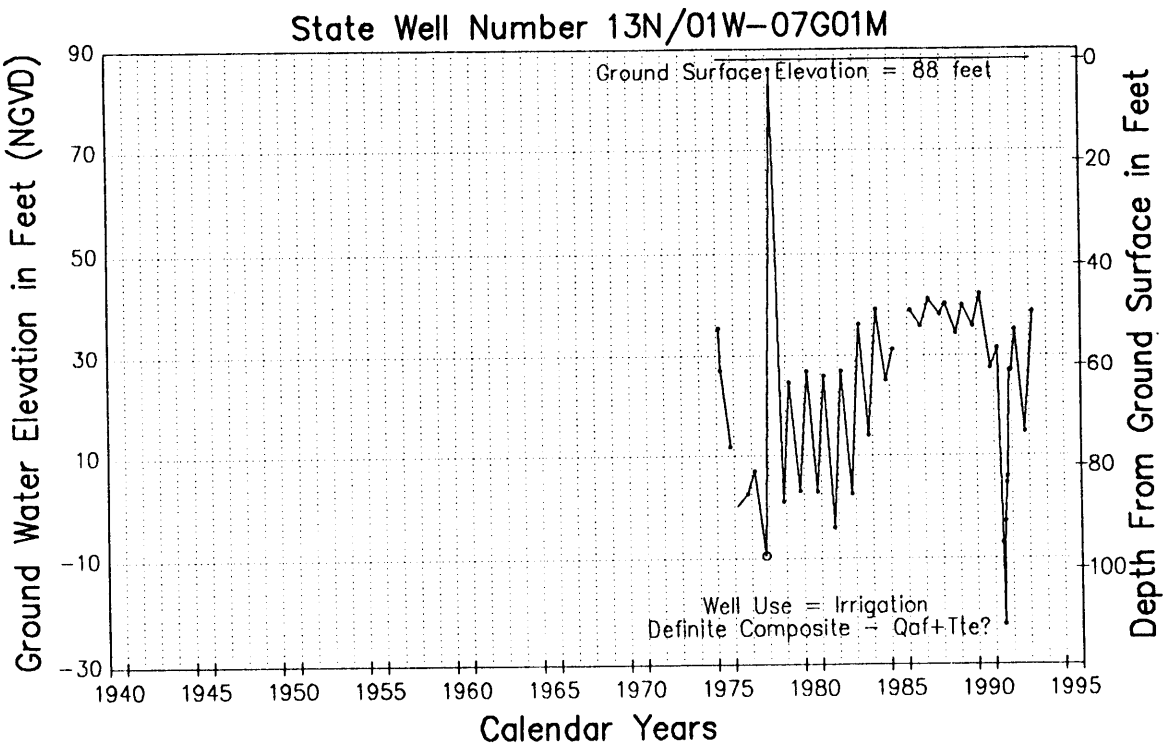


· Water surface elevation in well ∘ Questionable measurement

Department of Water Resources, Northern District

Sacramento Valley Ground Water Basin
Colusa County

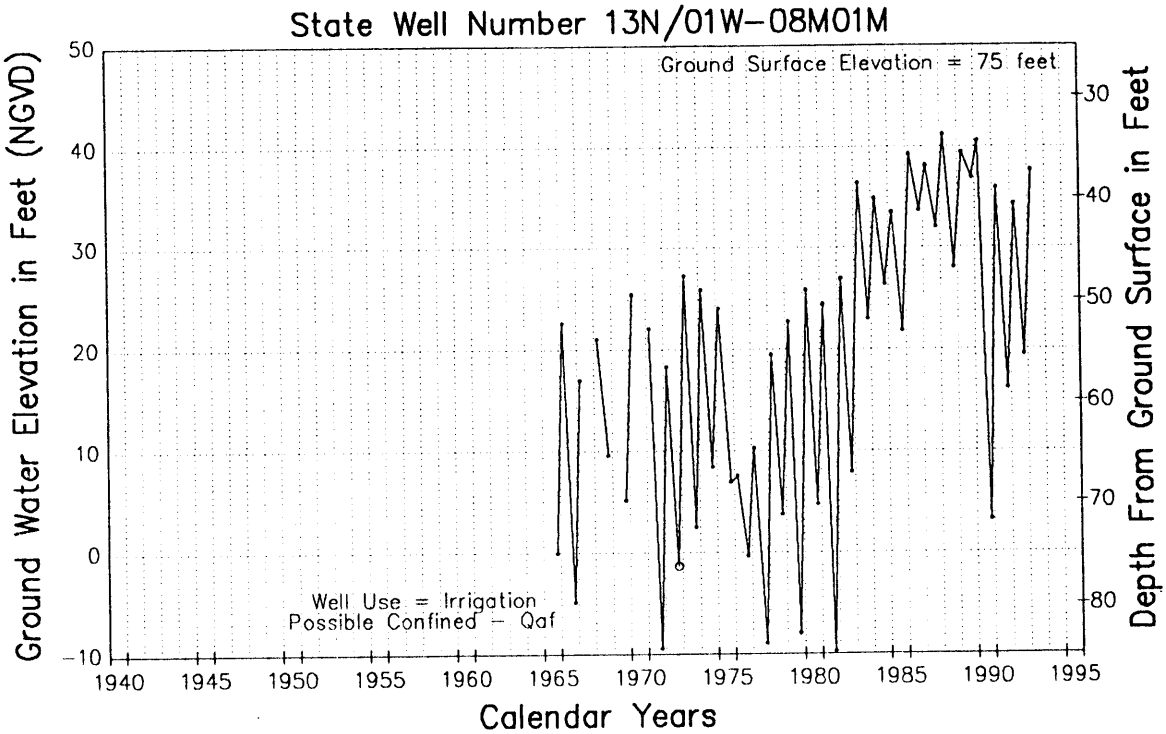


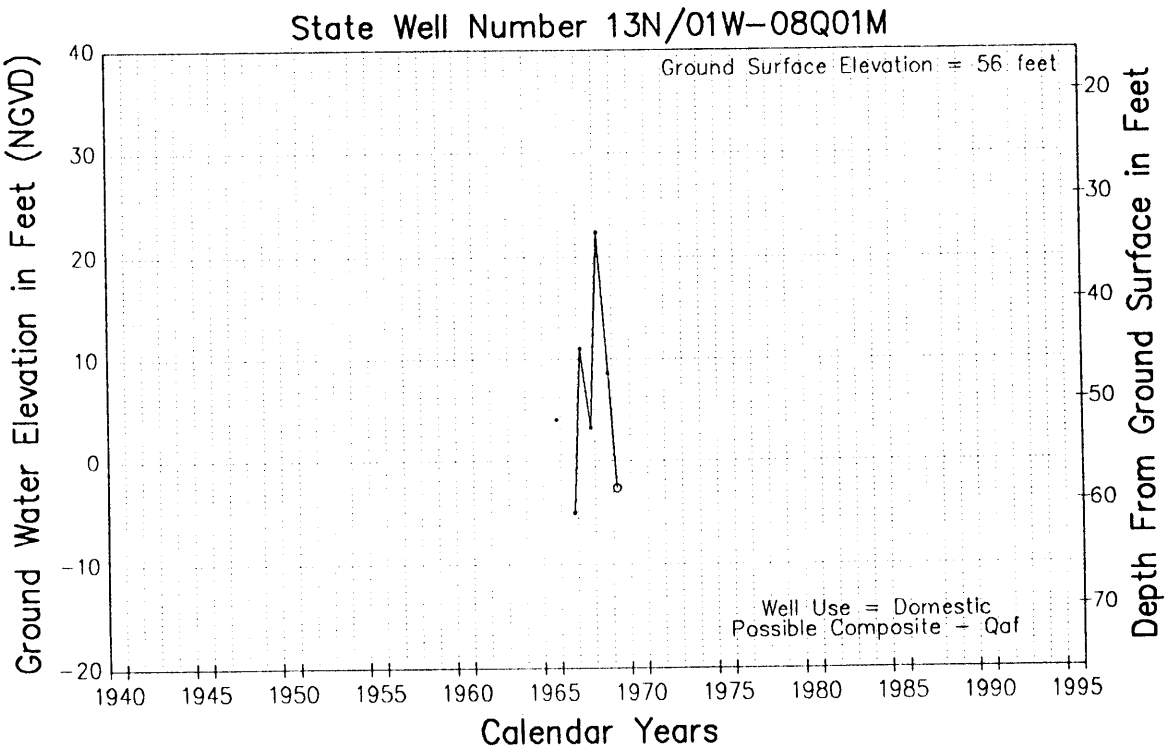


· Water surface elevation in well ∘ Questionable measurement

Department of Water Resources, Northern District

Sacramento Valley Ground Water Basin
Colusa County

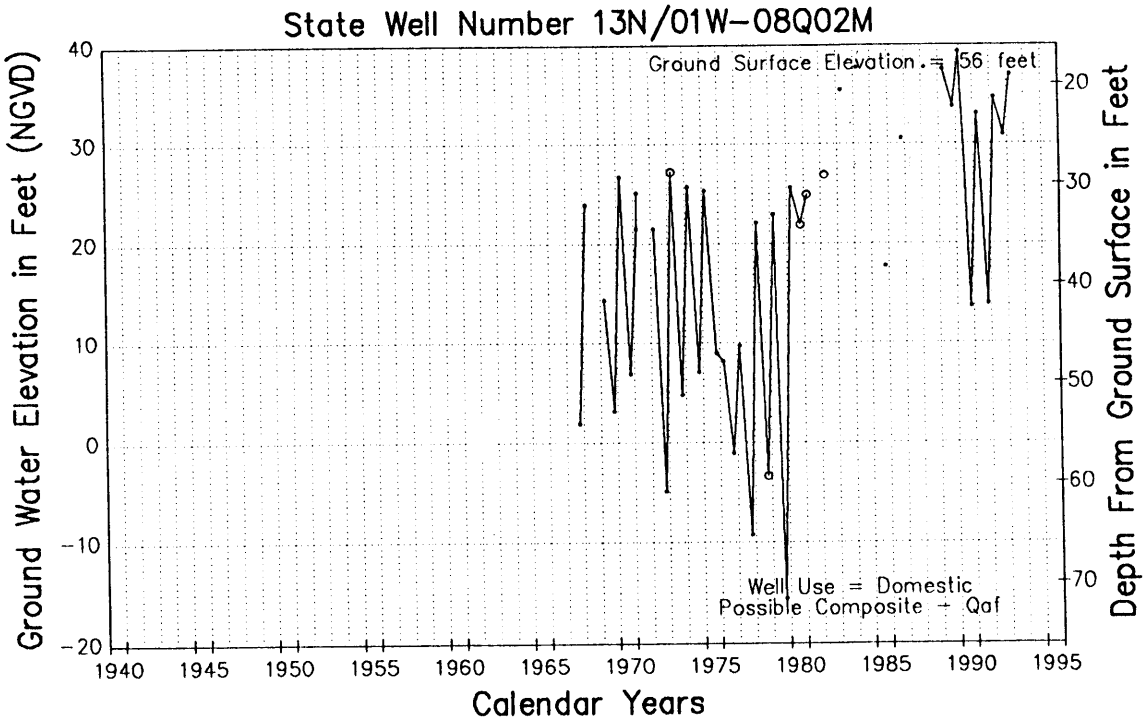


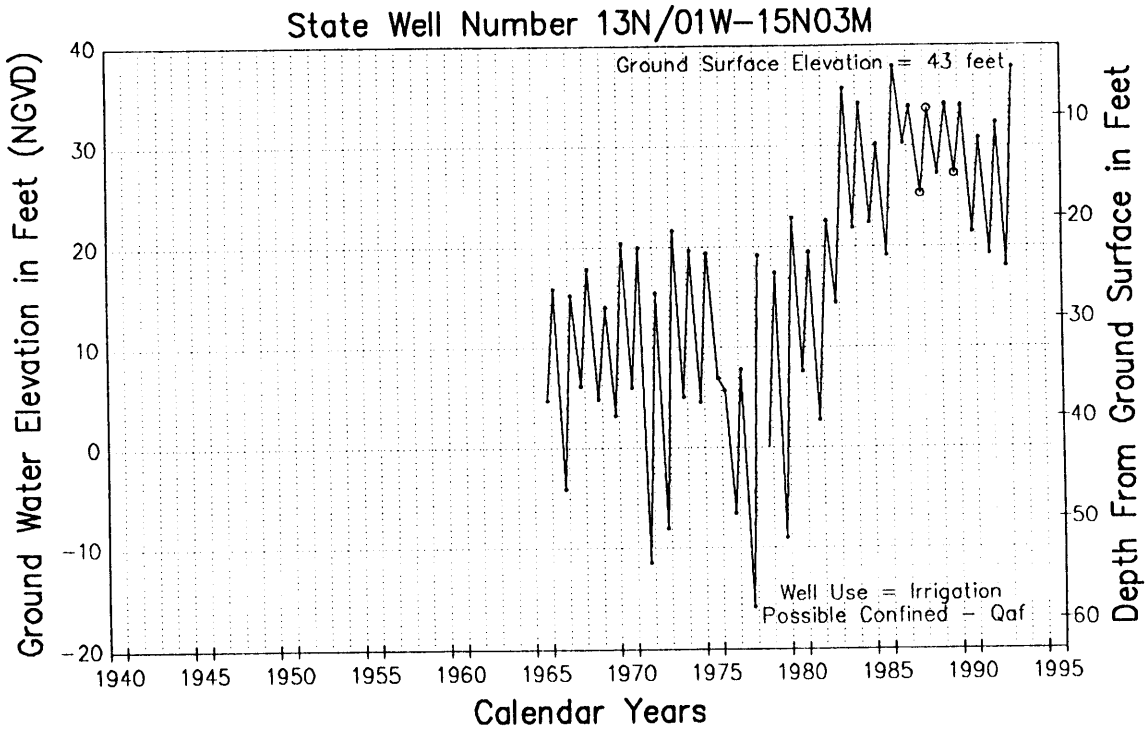


· Water surface elevation in well ∘ Questionable measurement

Department of Water Resources, Northern District

Sacramento Valley Ground Water Basin
Colusa County

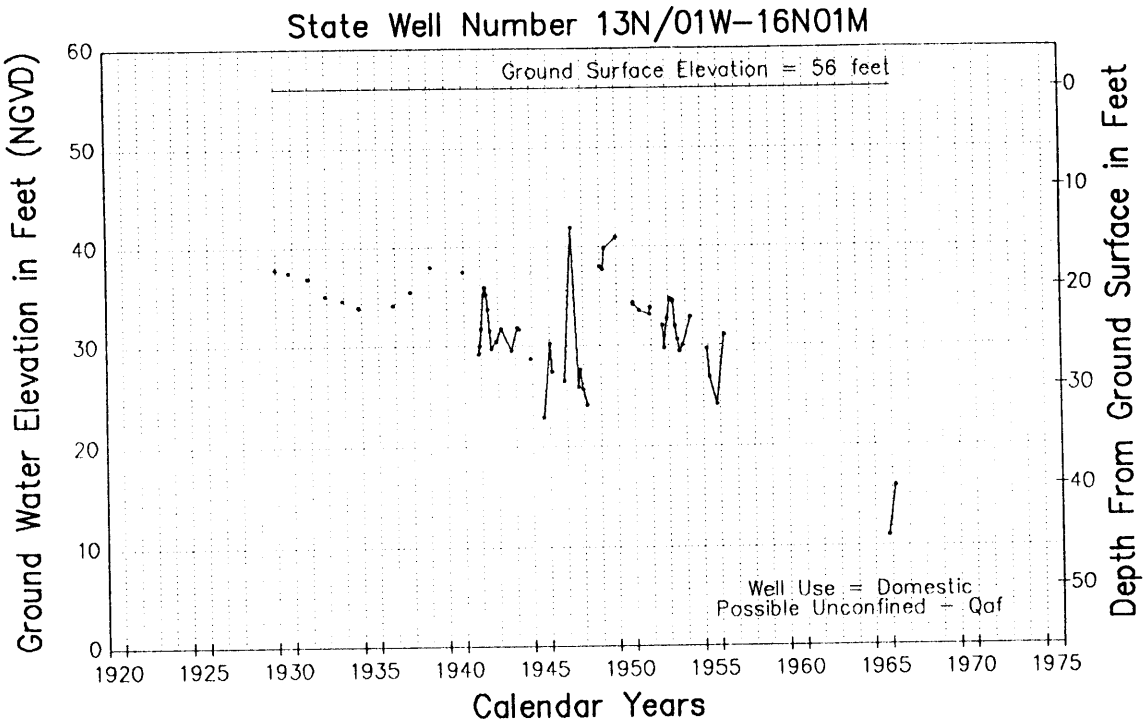


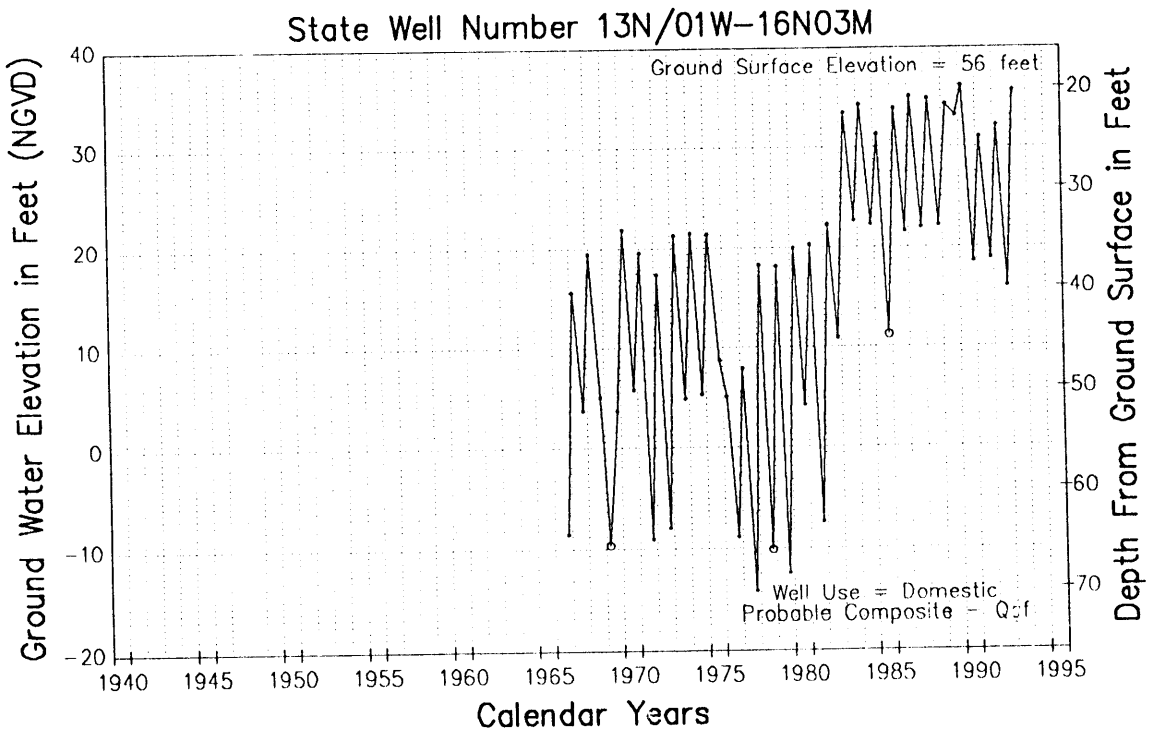


· Water surface elevation in well ∘ Questionable measurement

Department of Water Resources, Northern District

Sacramento Valley Ground Water Basin
Colusa County

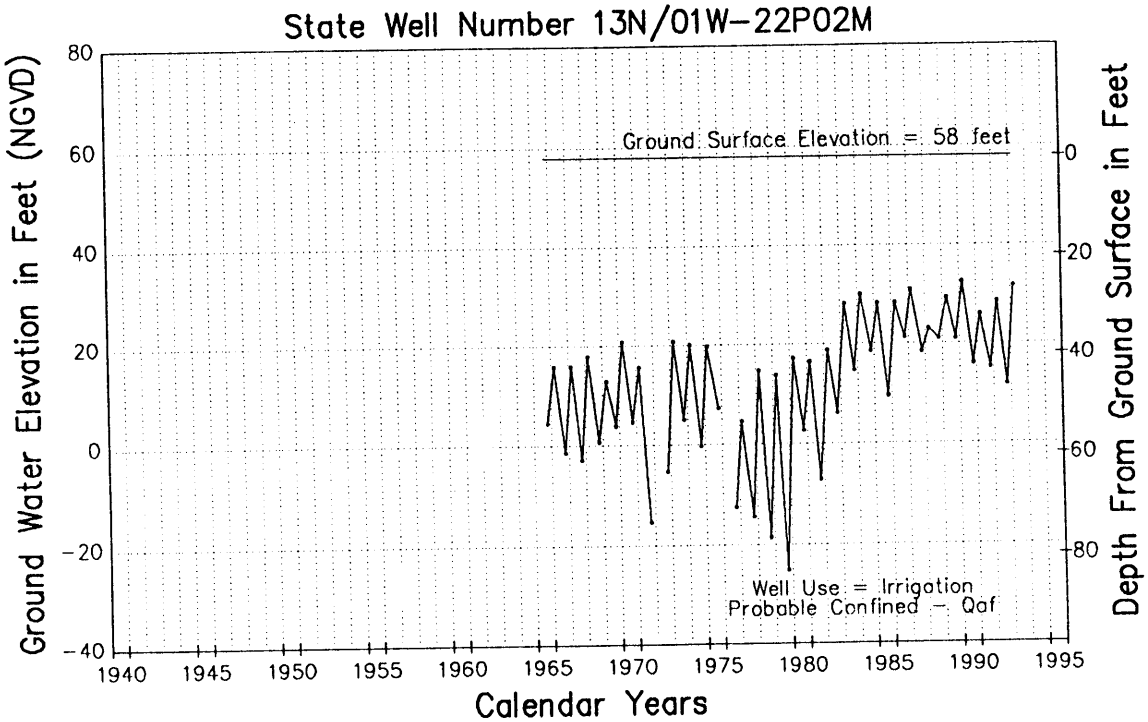


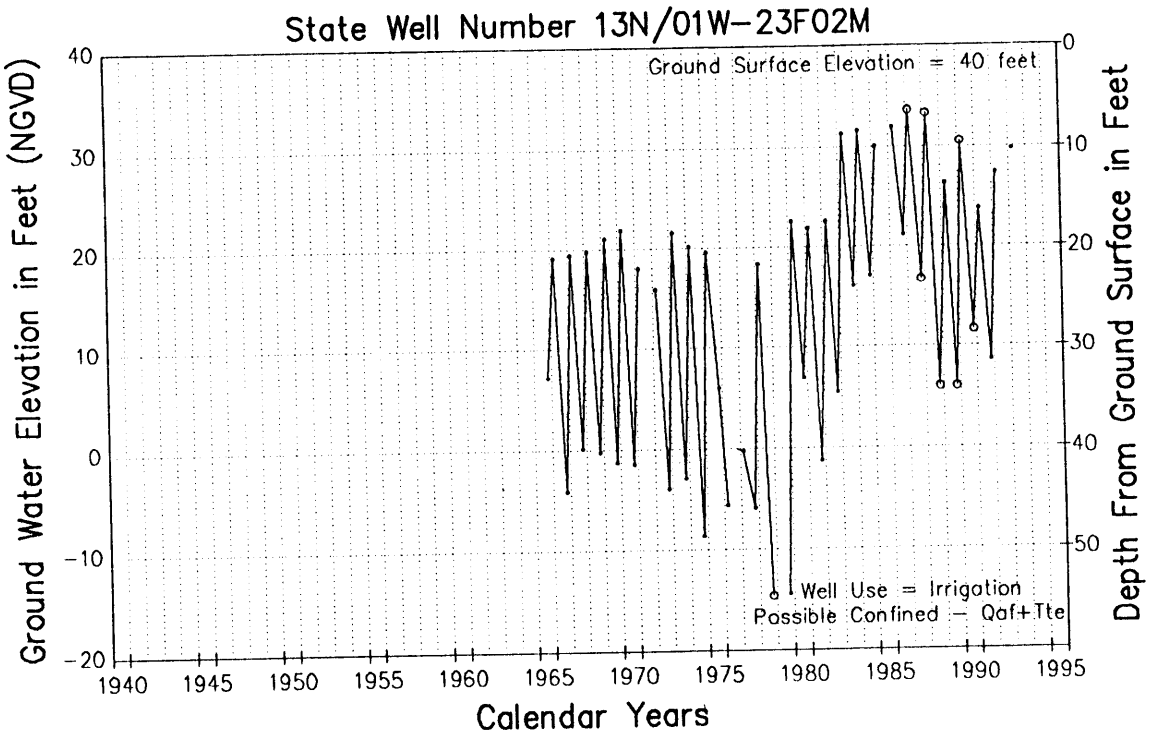


· Water surface elevation in well ∘ Questionable measurement

Department of Water Resources, Northern District

Sacramento Valley Ground Water Basin
Colusa County

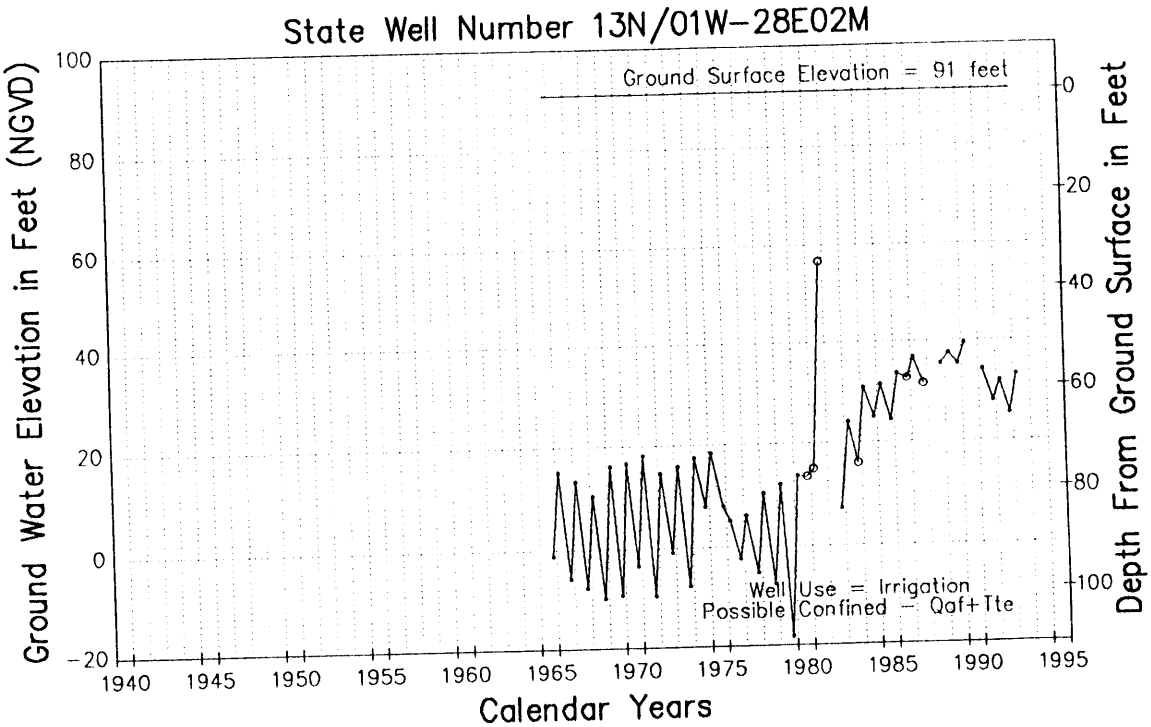


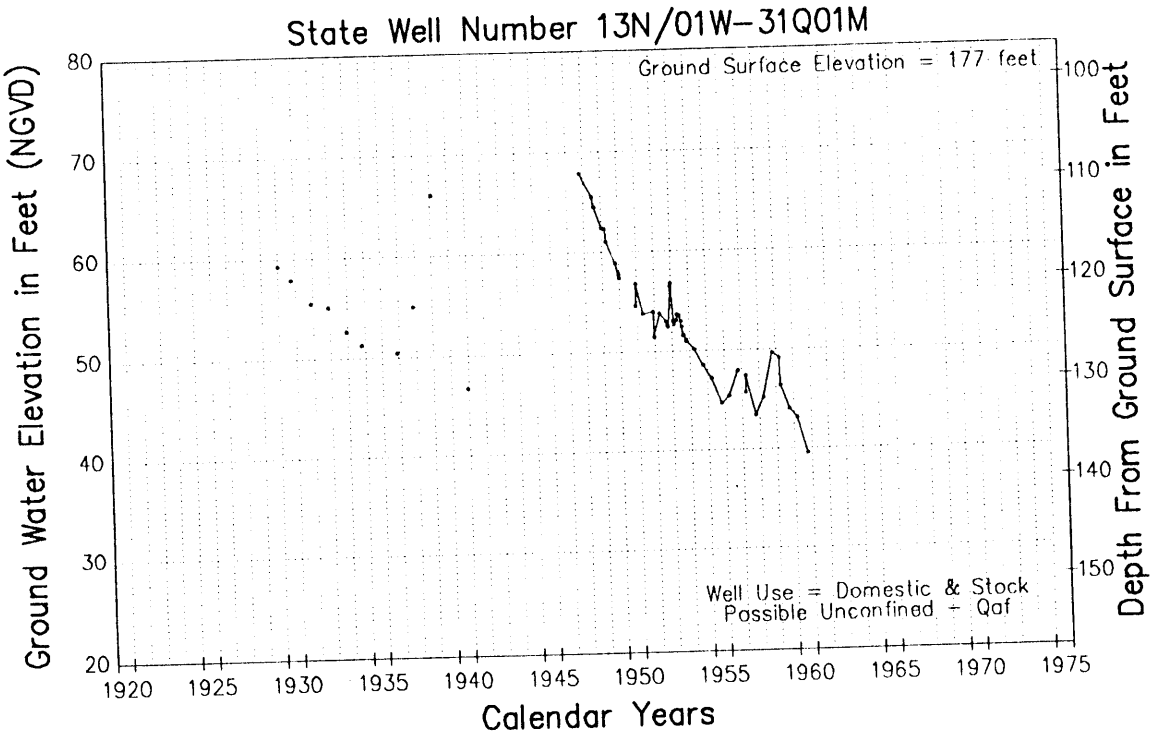


• Water surface elevation in well ∘ Questionable measurement

Department of Water Resources, Northern District

Sacramento Valley Ground Water Basin
Colusa County

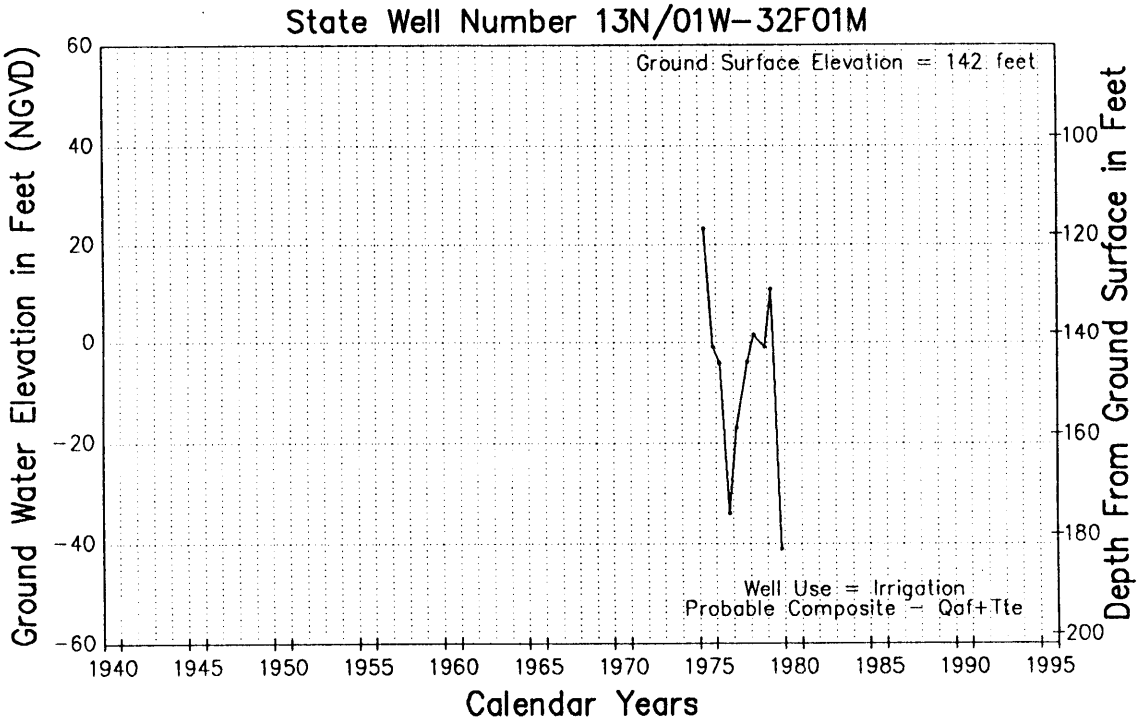


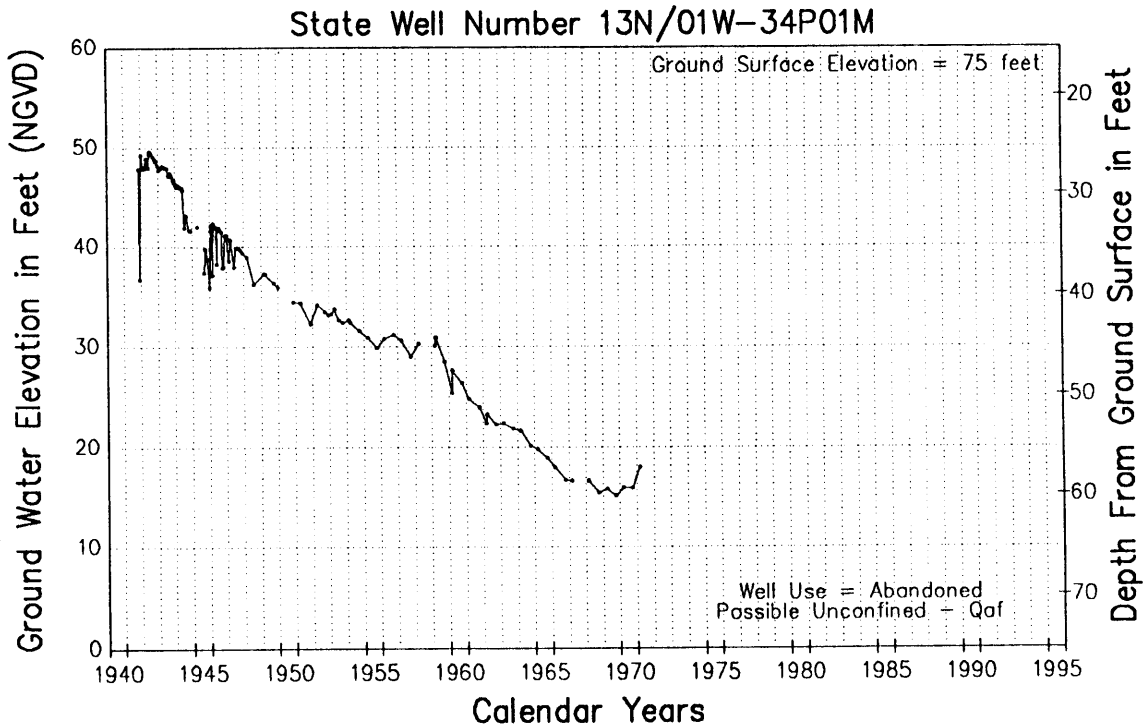


· Water surface elevation in well ∘ Questionable measurement

Department of Water Resources, Northern District

Sacramento Valley Ground Water Basin
Colusa County

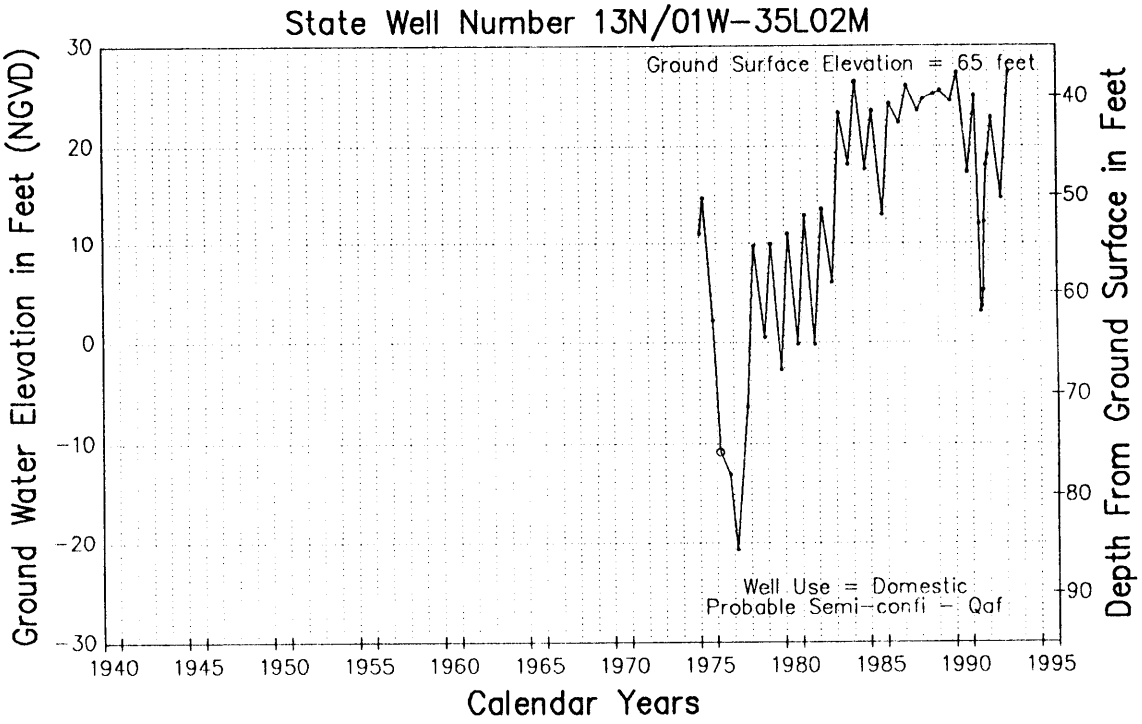


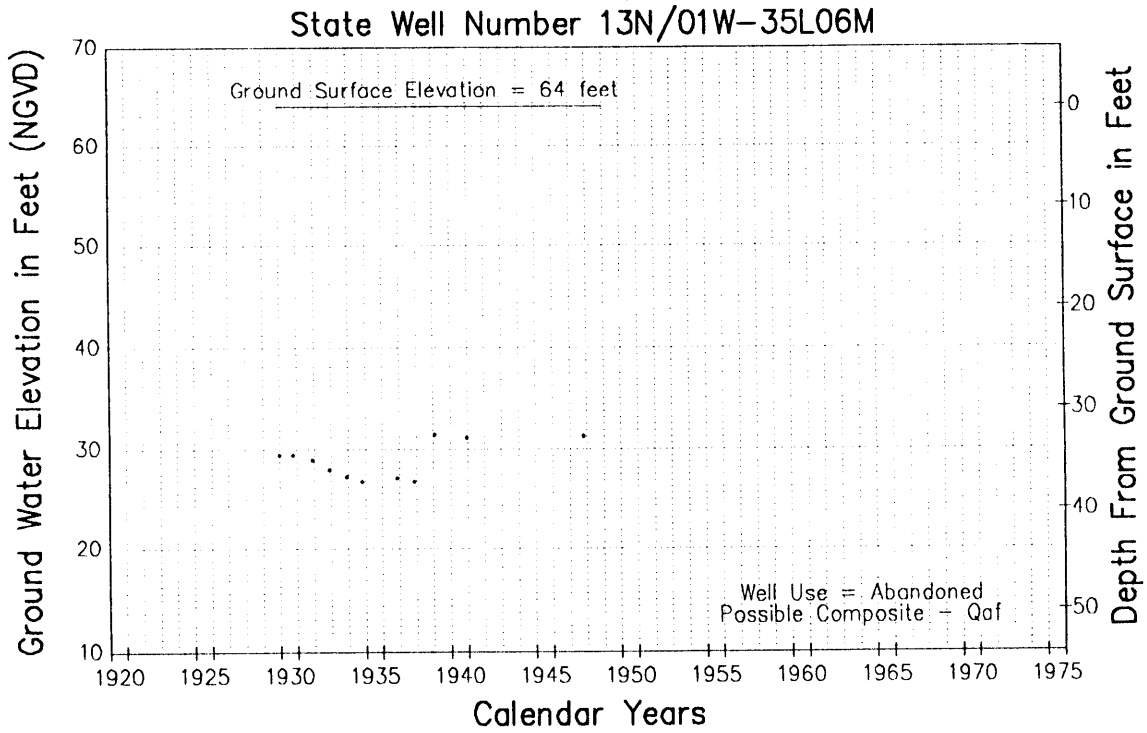


• Water surface elevation in well ∘ Questionable measurement

Department of Water Resources, Northern District

Sacramento Valley Ground Water Basin
Colusa County

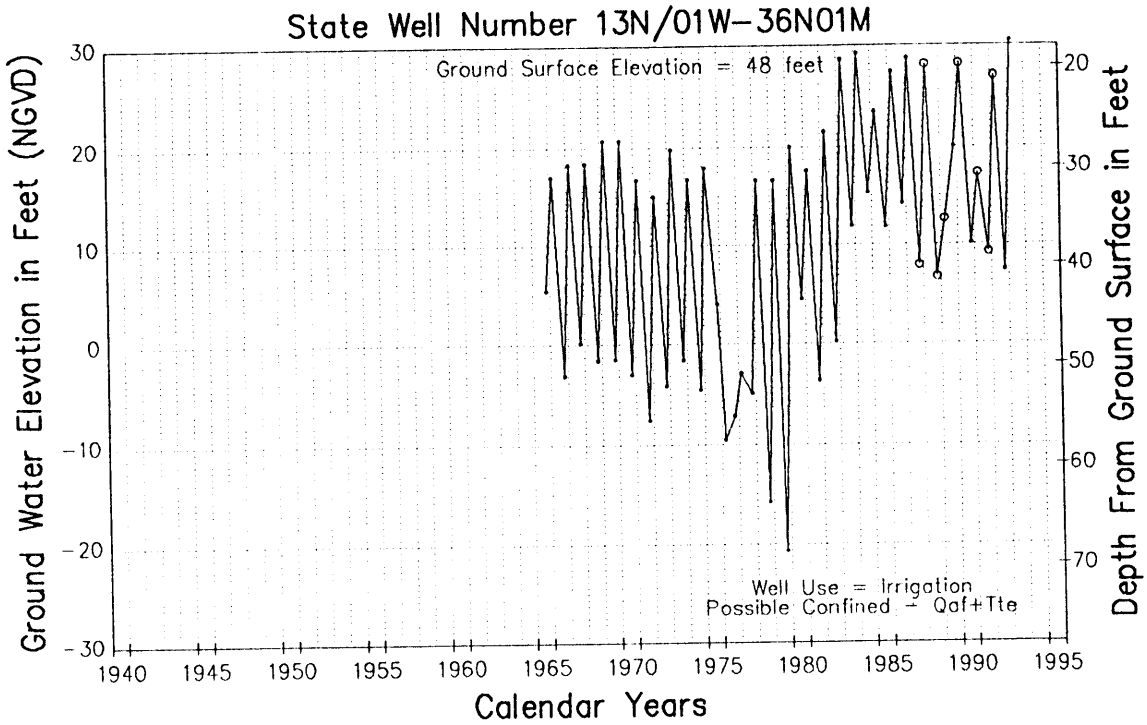


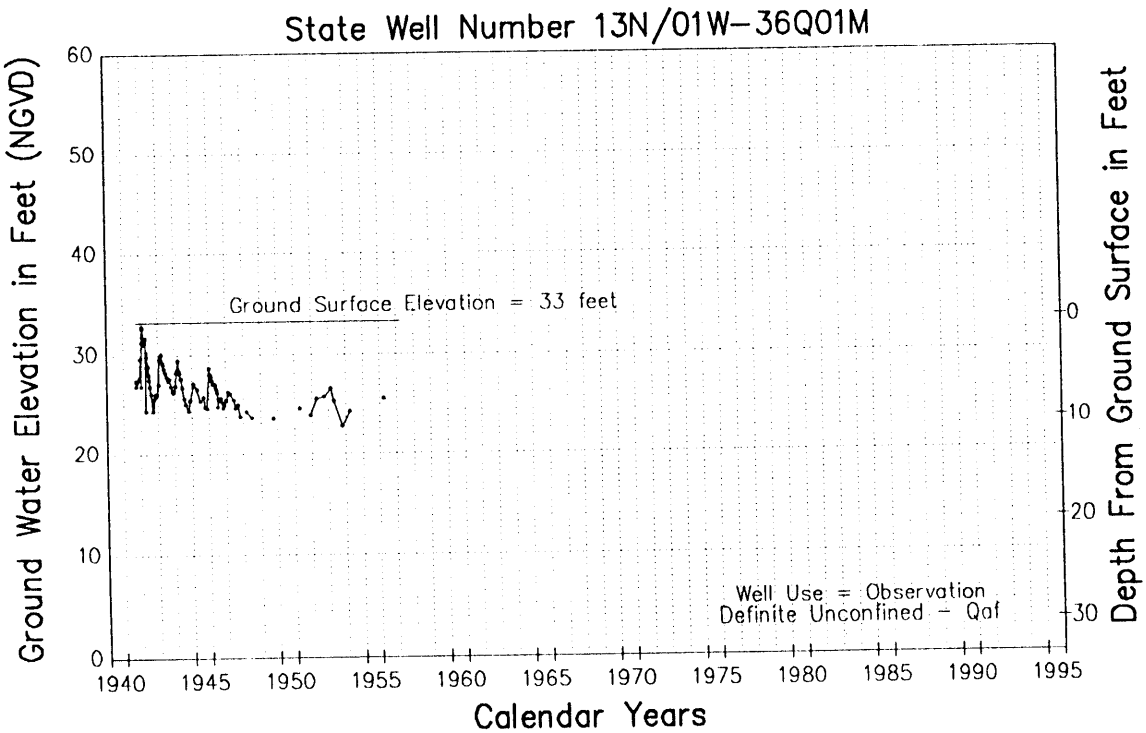


· Water surface elevation in well ∘ Questionable measurement

Department of Water Resources, Northern District

Sacramento Valley Ground Water Basin
Colusa County

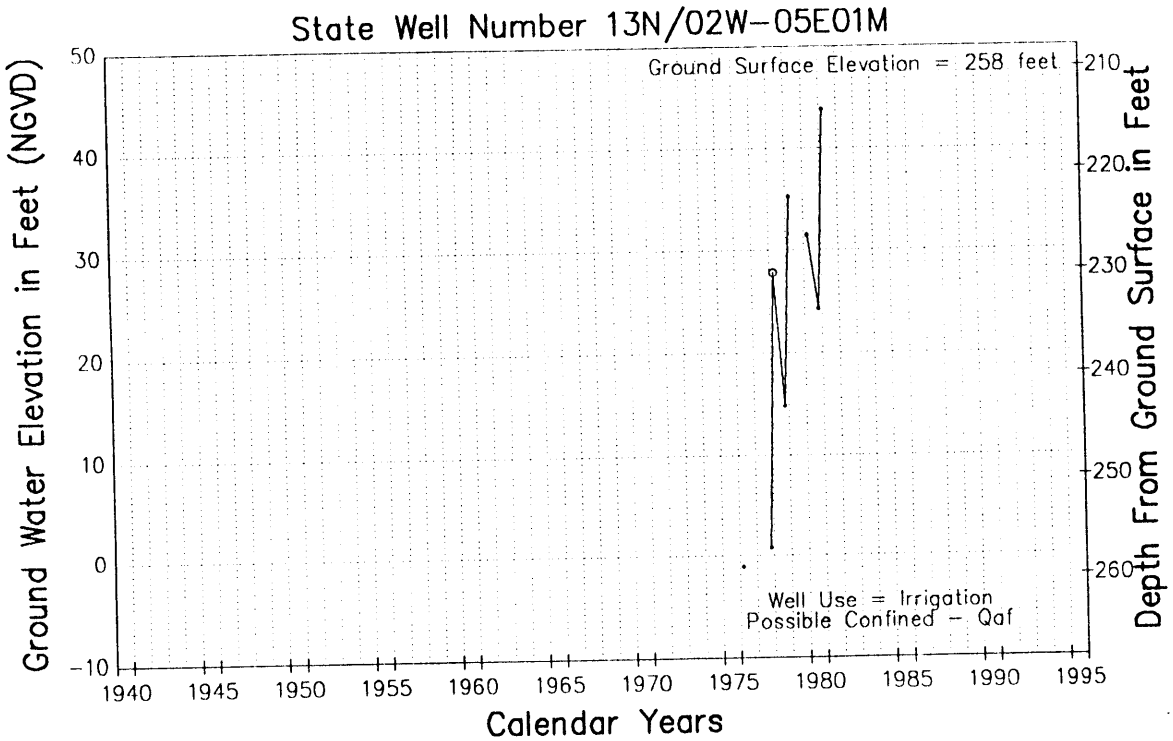


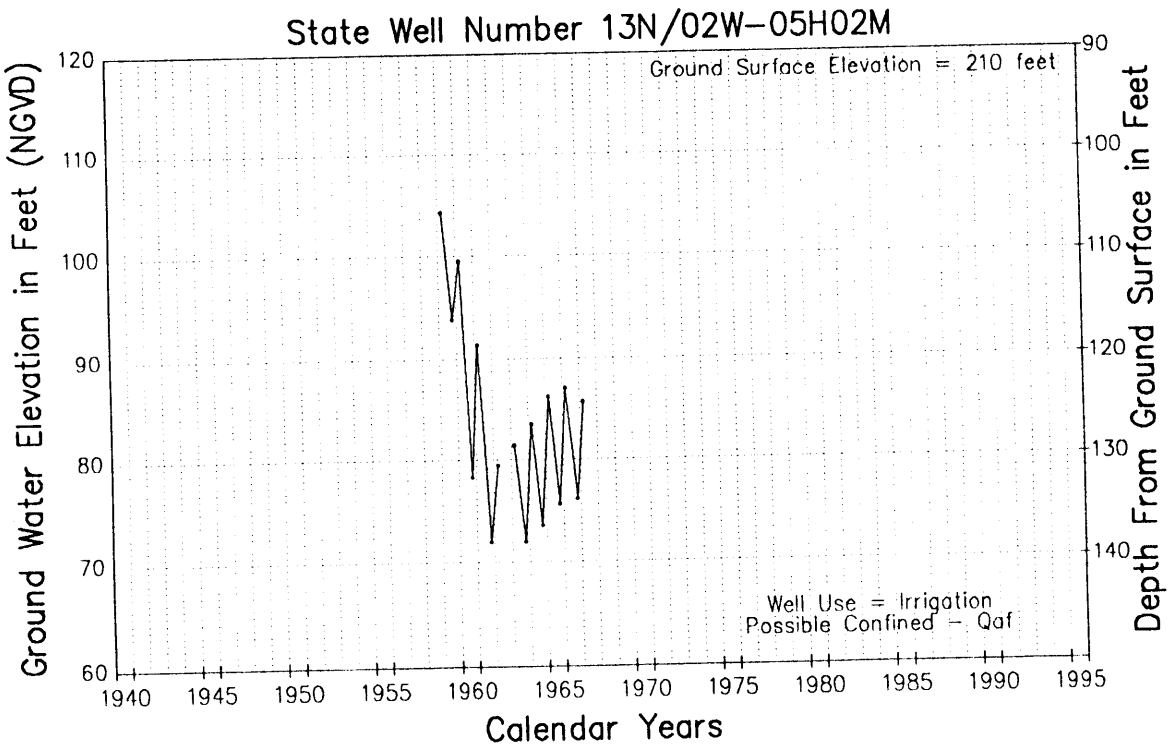


· Water surface elevation in well ∘ Questionable measurement

Department of Water Resources, Northern District

Sacramento Valley Ground Water Basin
Colusa County

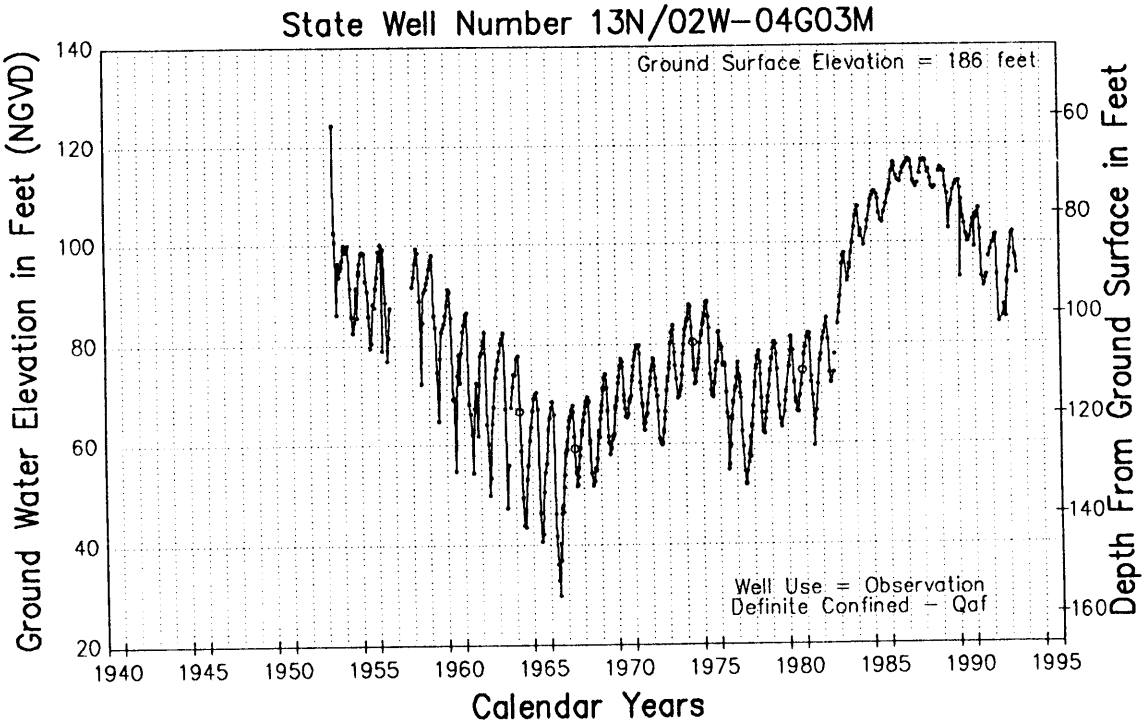


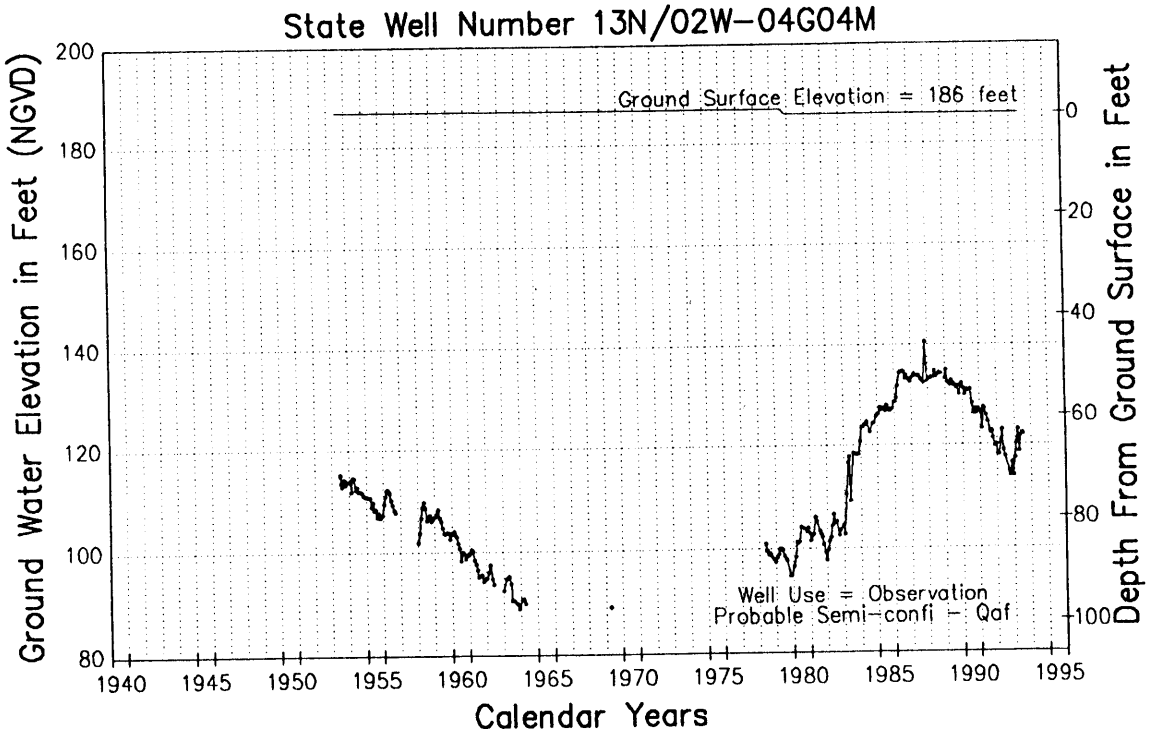


· Water surface elevation in well ∘ Questionable measurement

Department of Water Resources, Northern District

Sacramento Valley Ground Water Basin
Colusa County

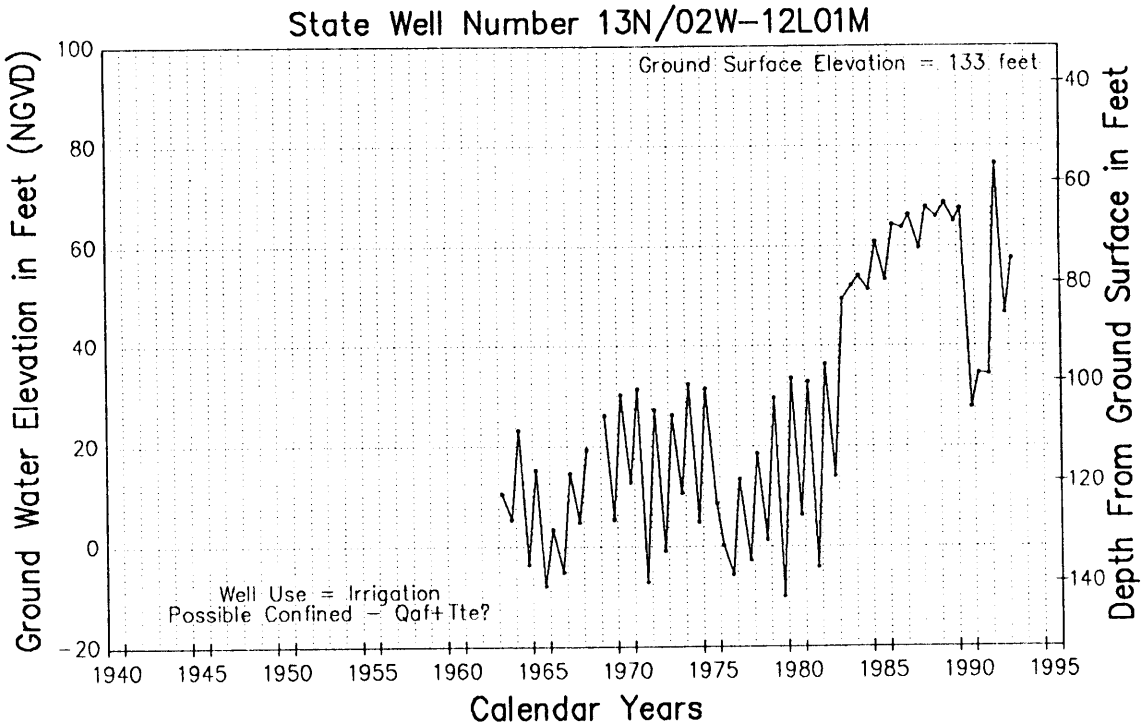


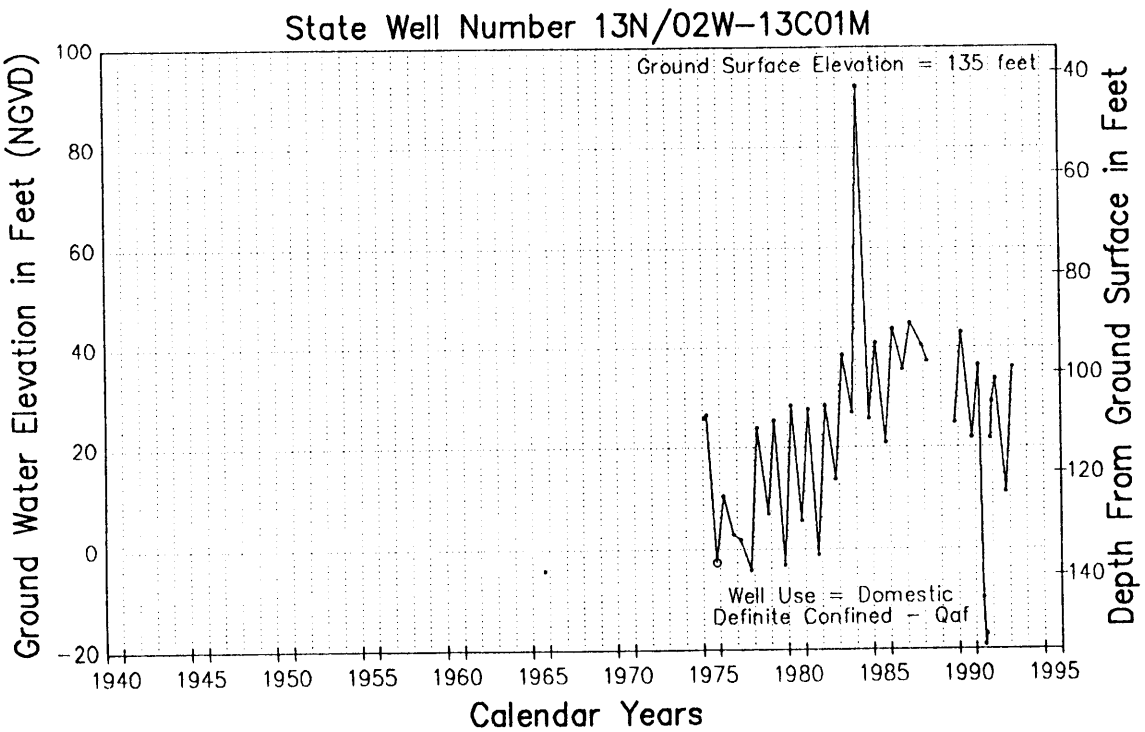


· Water surface elevation in well ∘ Questionable measurement

Department of Water Resources, Northern District

Sacramento Valley Ground Water Basin
Colusa County

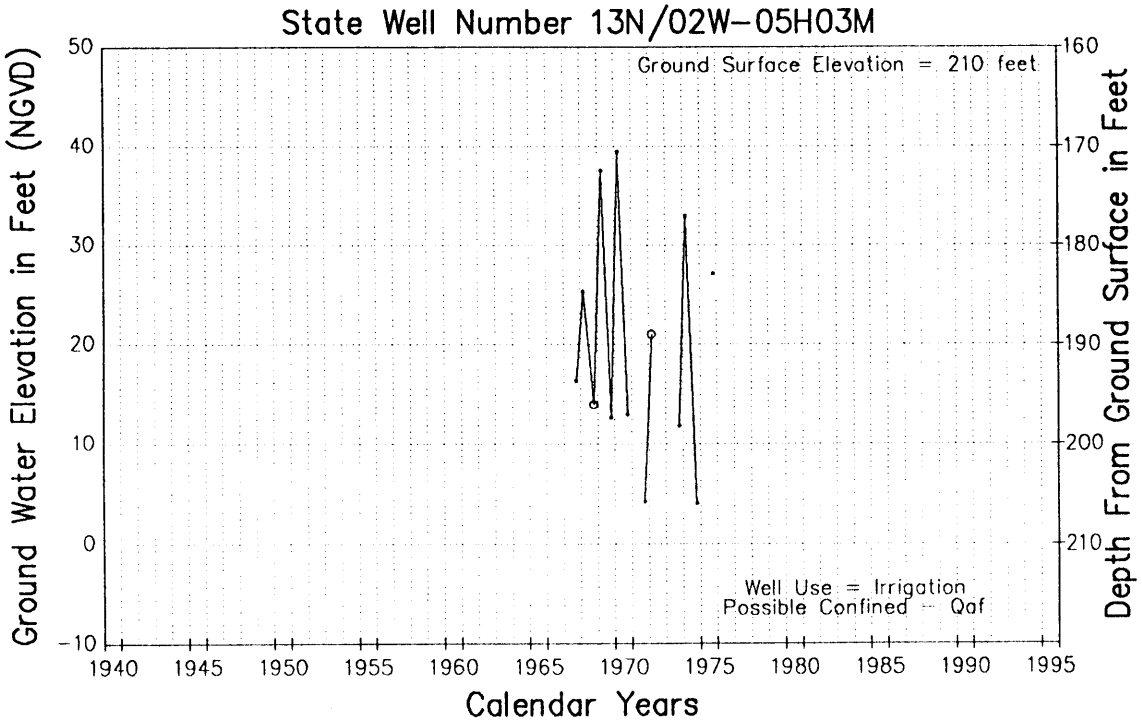


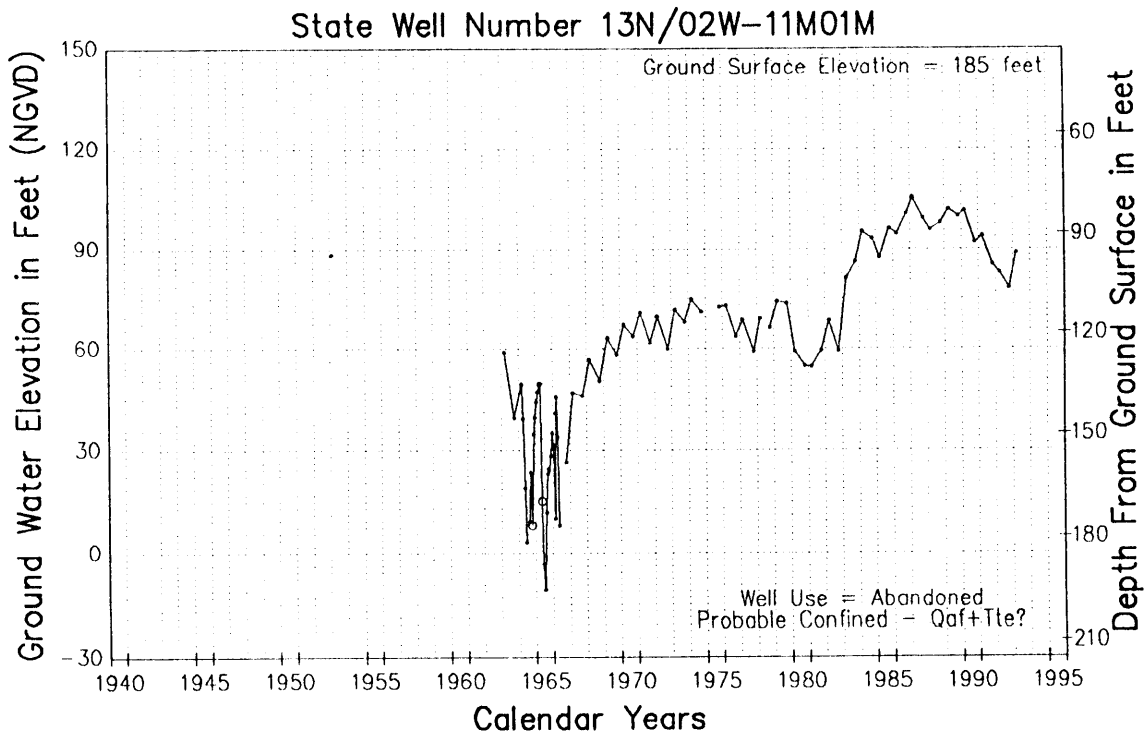


· Water surface elevation in well ∘ Questionable measurement

Department of Water Resources, Northern District

Sacramento Valley Ground Water Basin
Colusa County

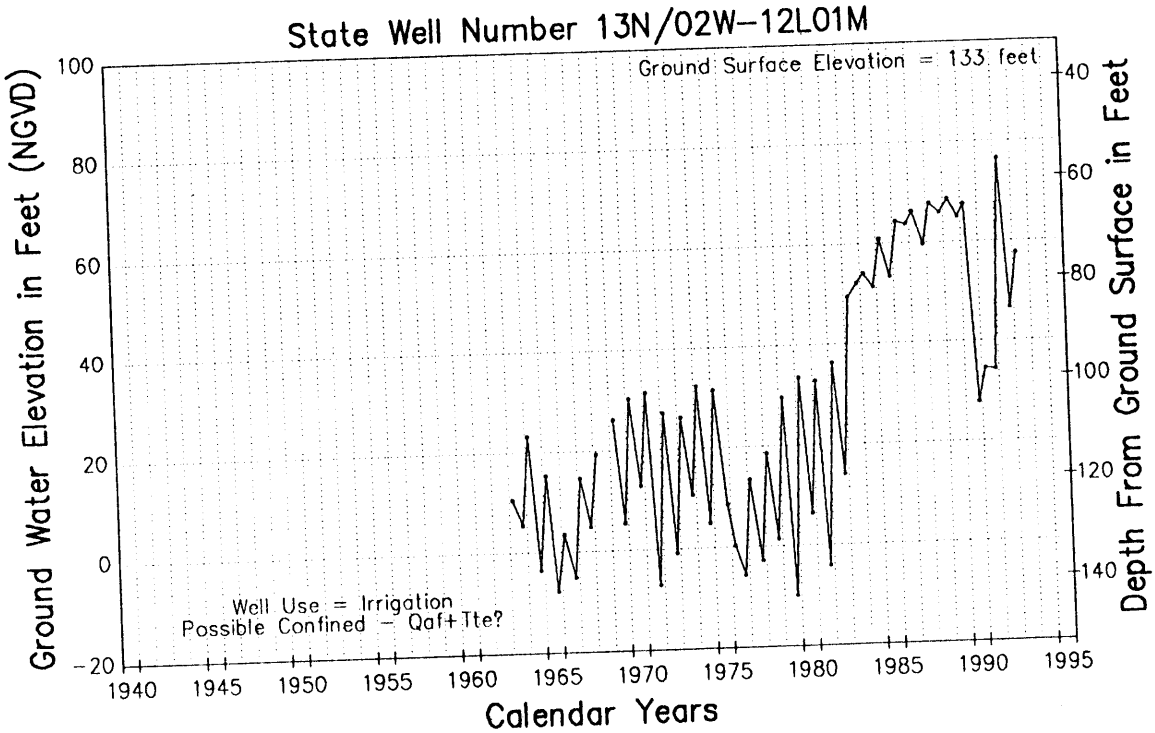


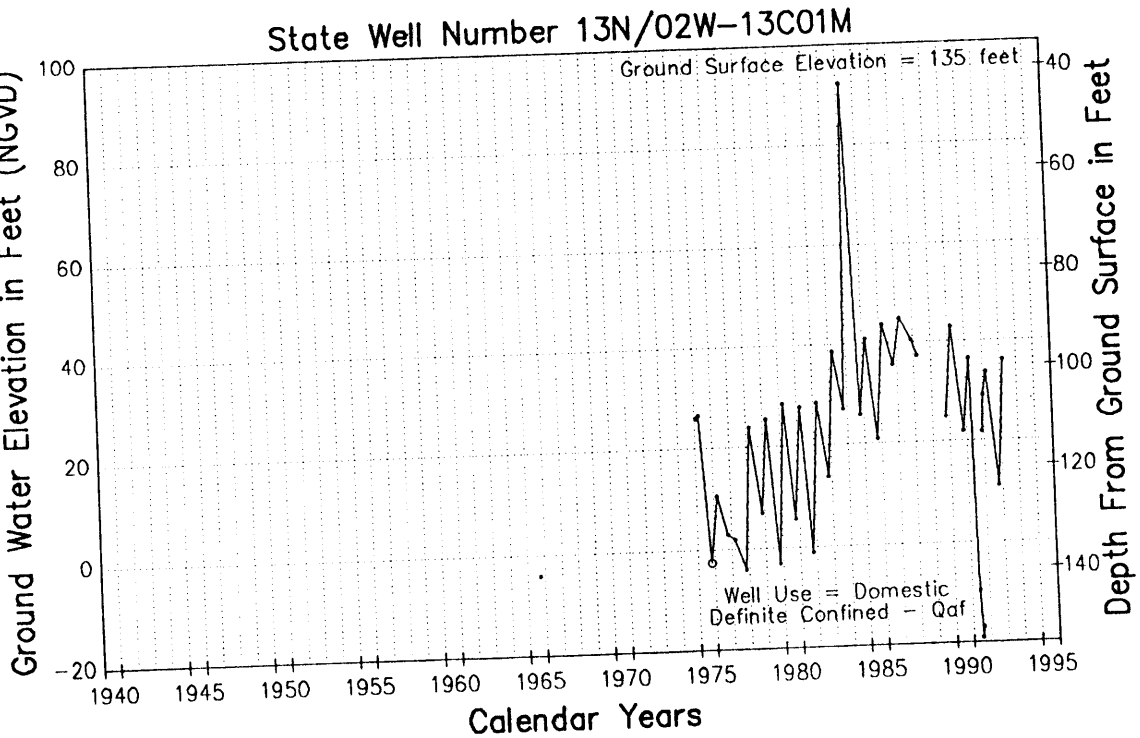


Water surface elevation in well ○ Questionable measurement

Department of Water Resources, Northern District

Sacramento Valley Ground Water Basin
Colusa County



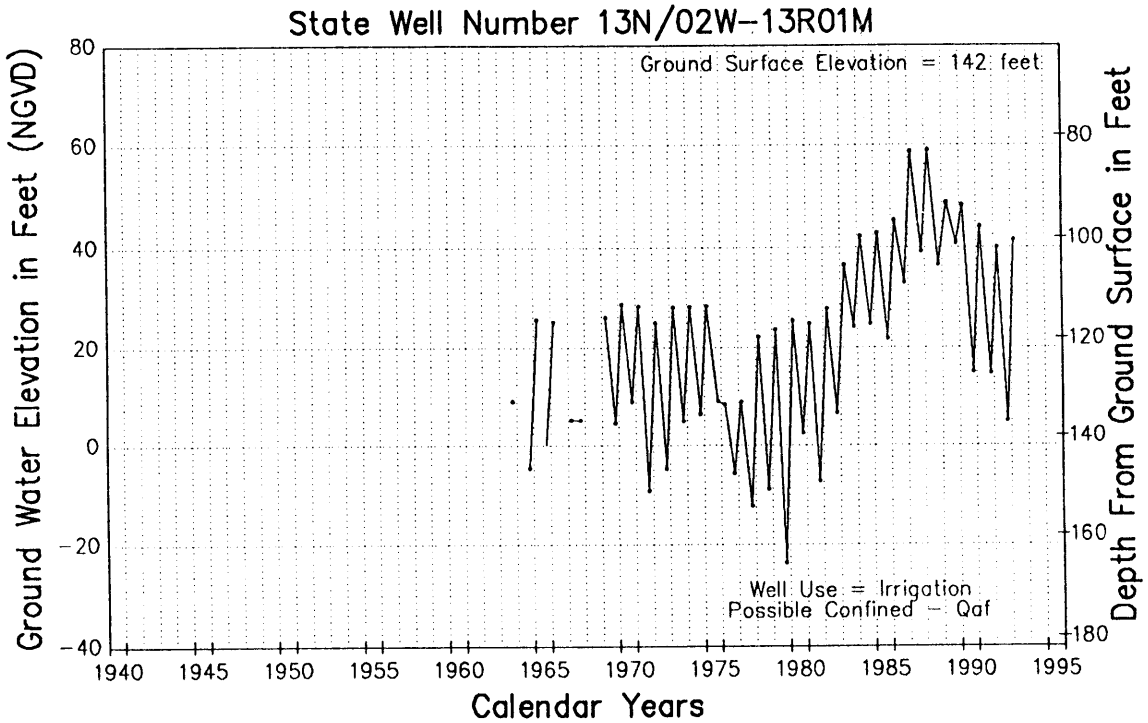


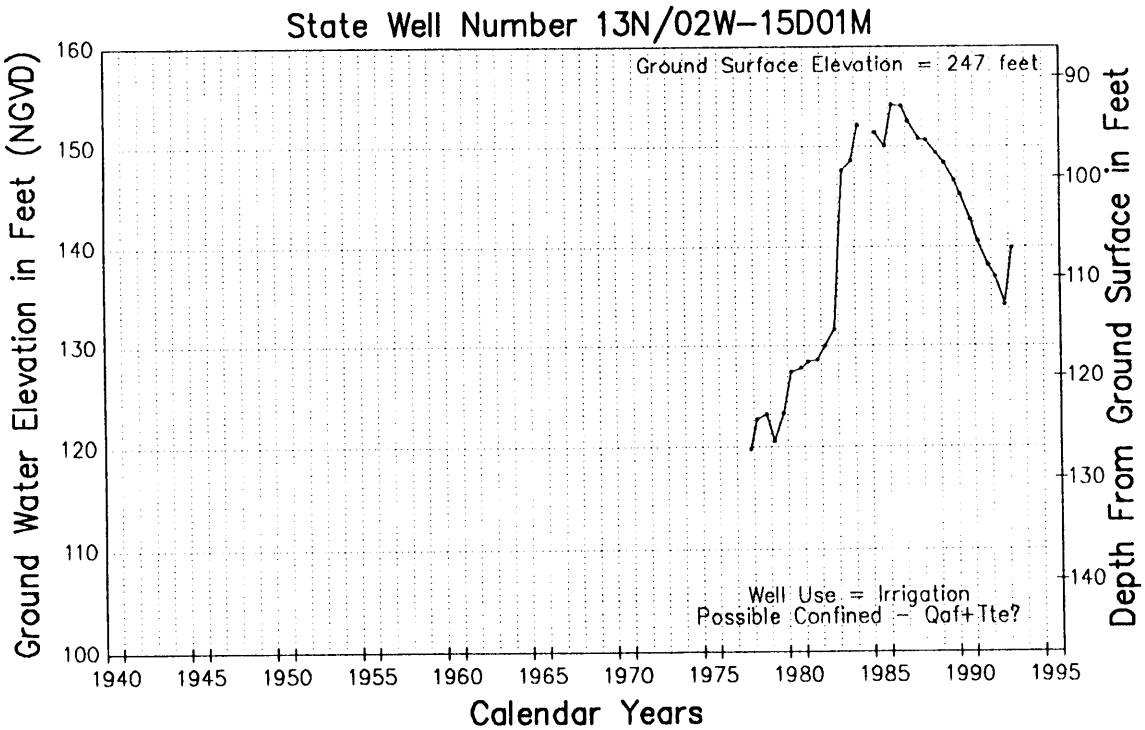
Water surface elevation in well

∘ Questionable measurement

Department of Water Resources, Northern District

Sacramento Valley Ground Water Basin
Colusa County

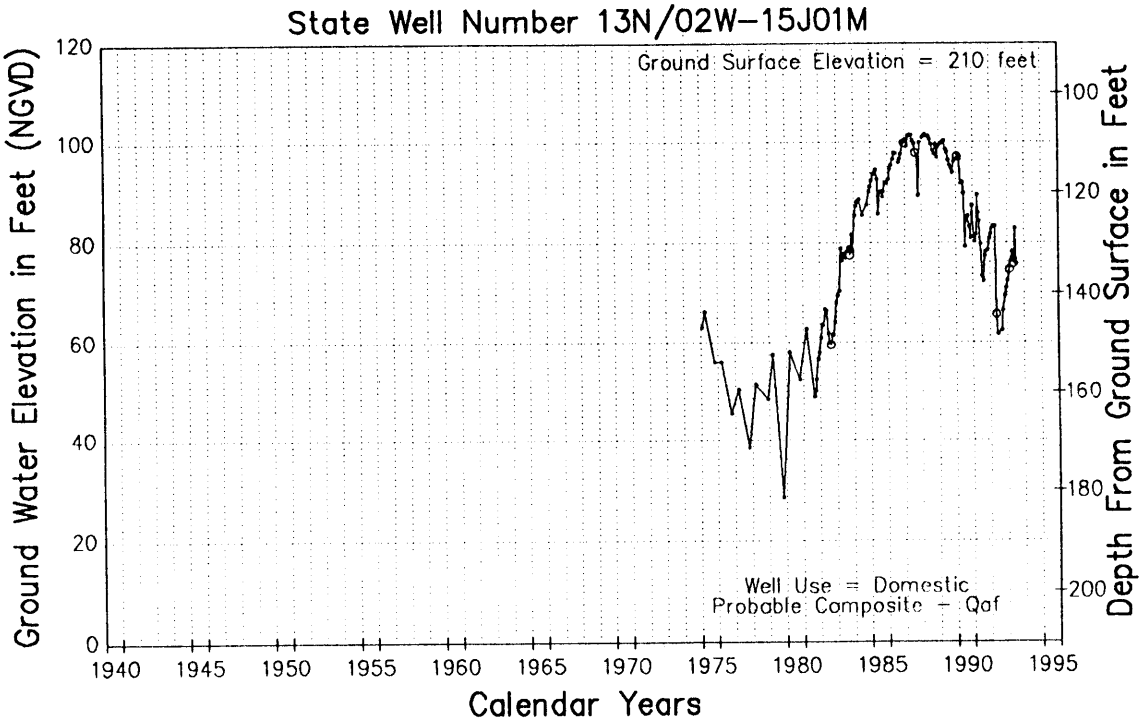


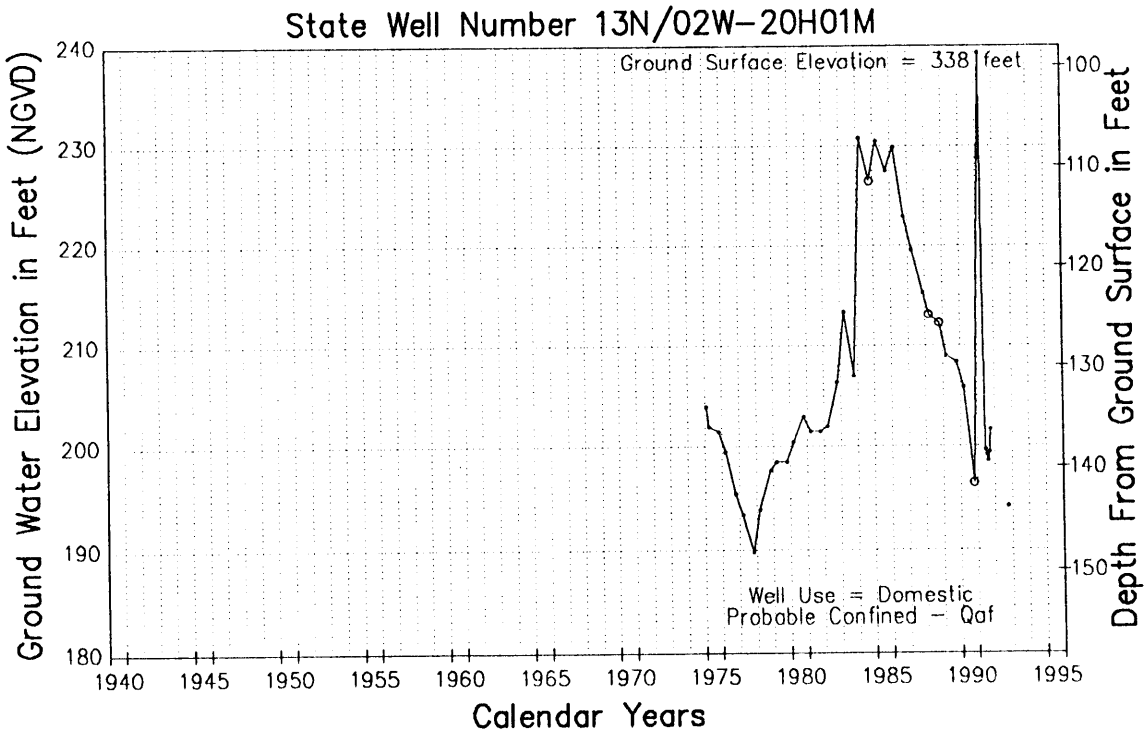


· Water surface elevation in well ∘ Questionable measurement

Department of Water Resources, Northern District

Sacramento Valley Ground Water Basin
Colusa County

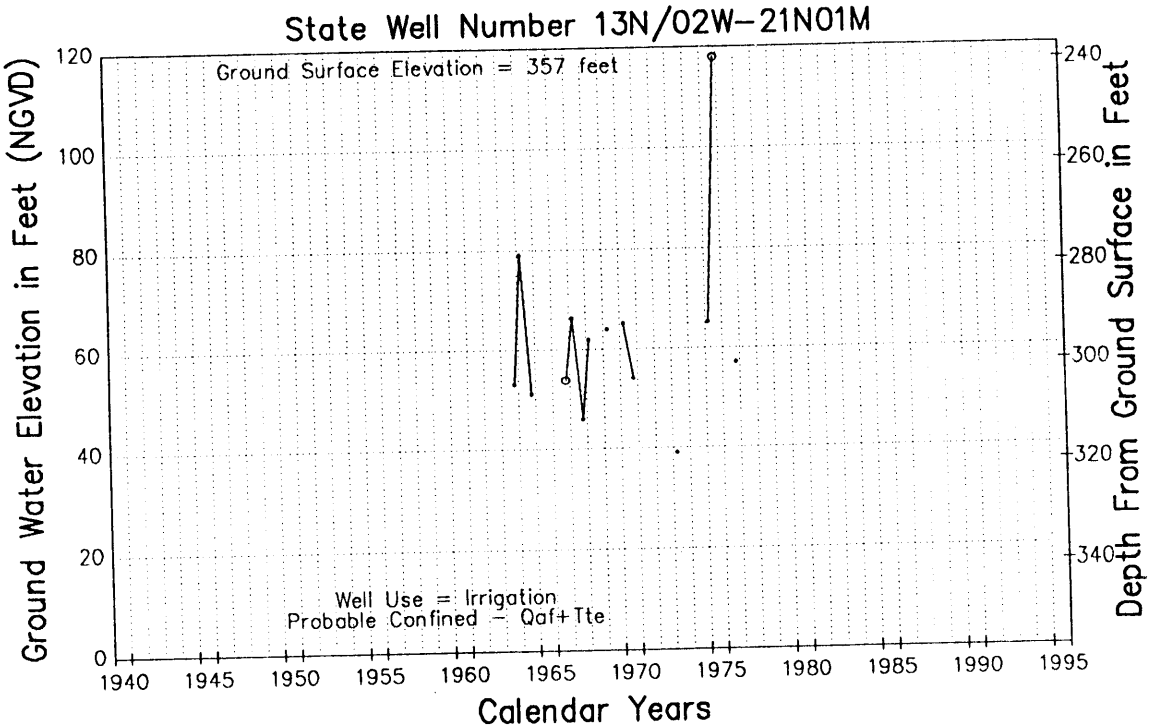


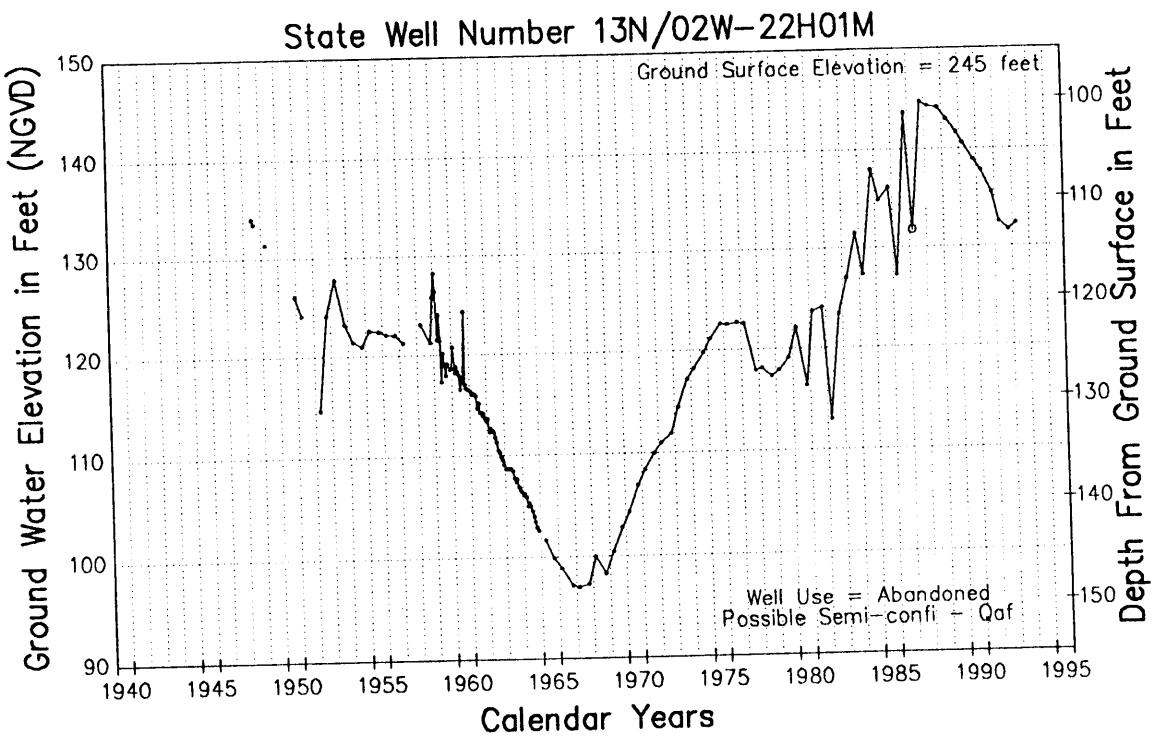


· Water surface elevation in well ∘ Questionable measurement

Department of Water Resources, Northern District

Sacramento Valley Ground Water Basin
Colusa County





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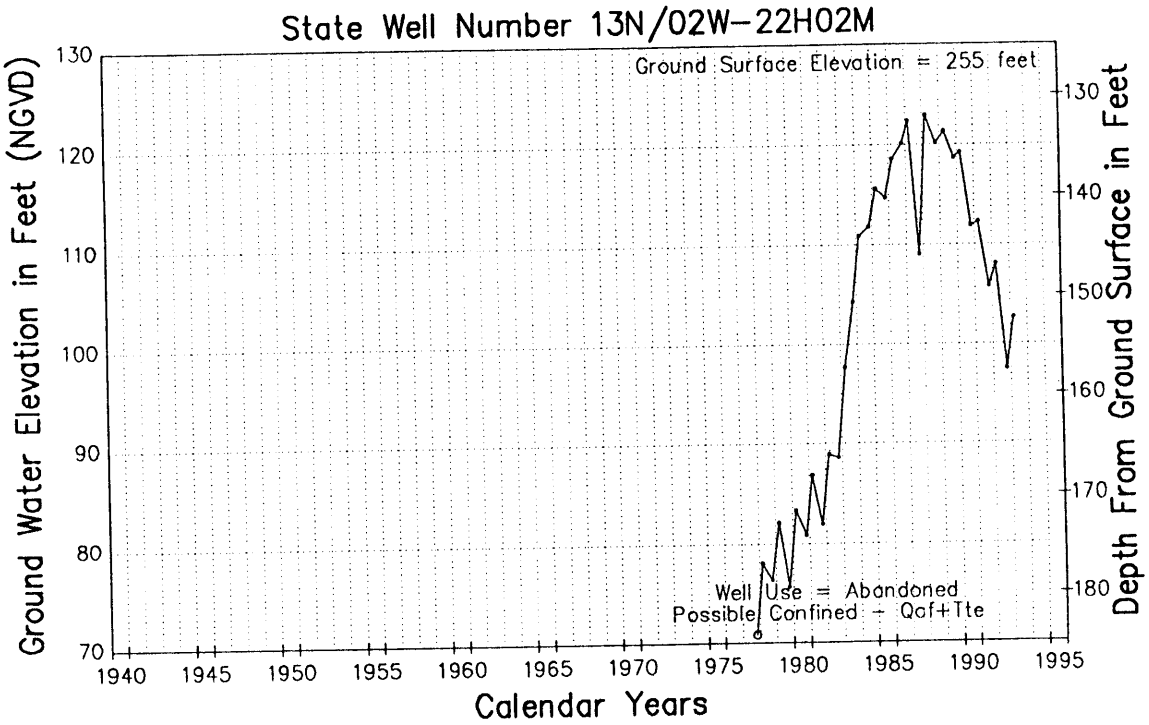
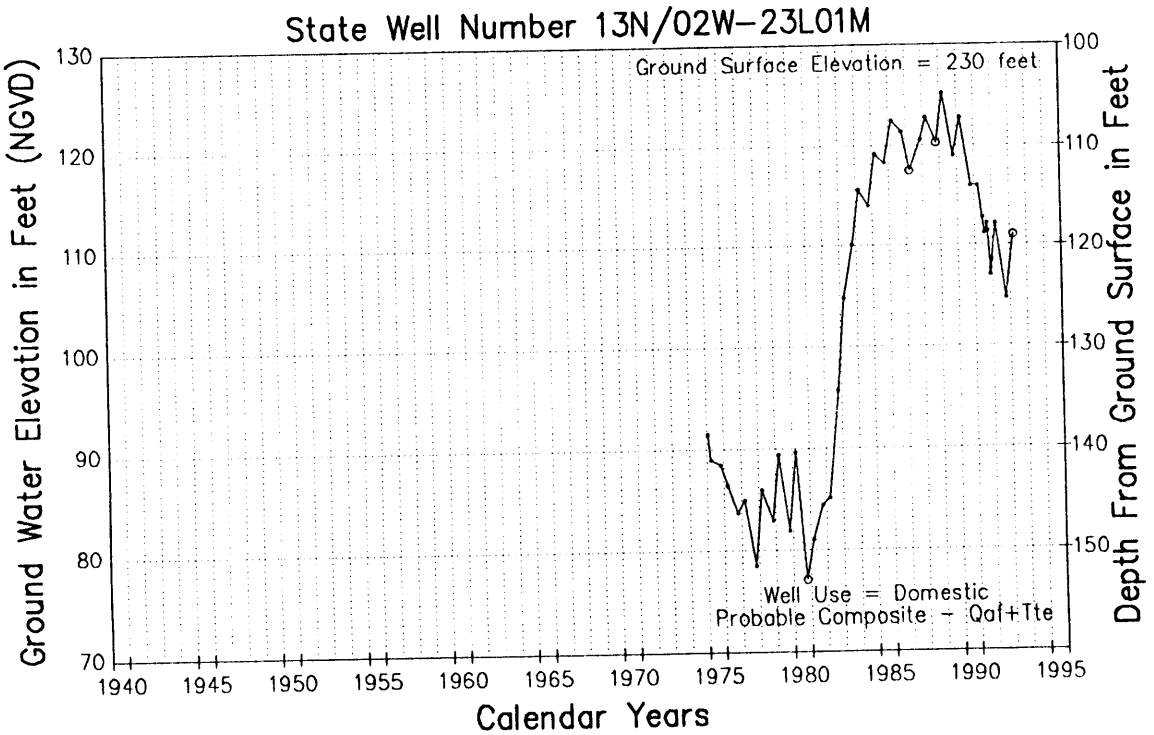
Department of Water Resources, Northern District

Sacramento Valley Ground Water Basin
Colusa County

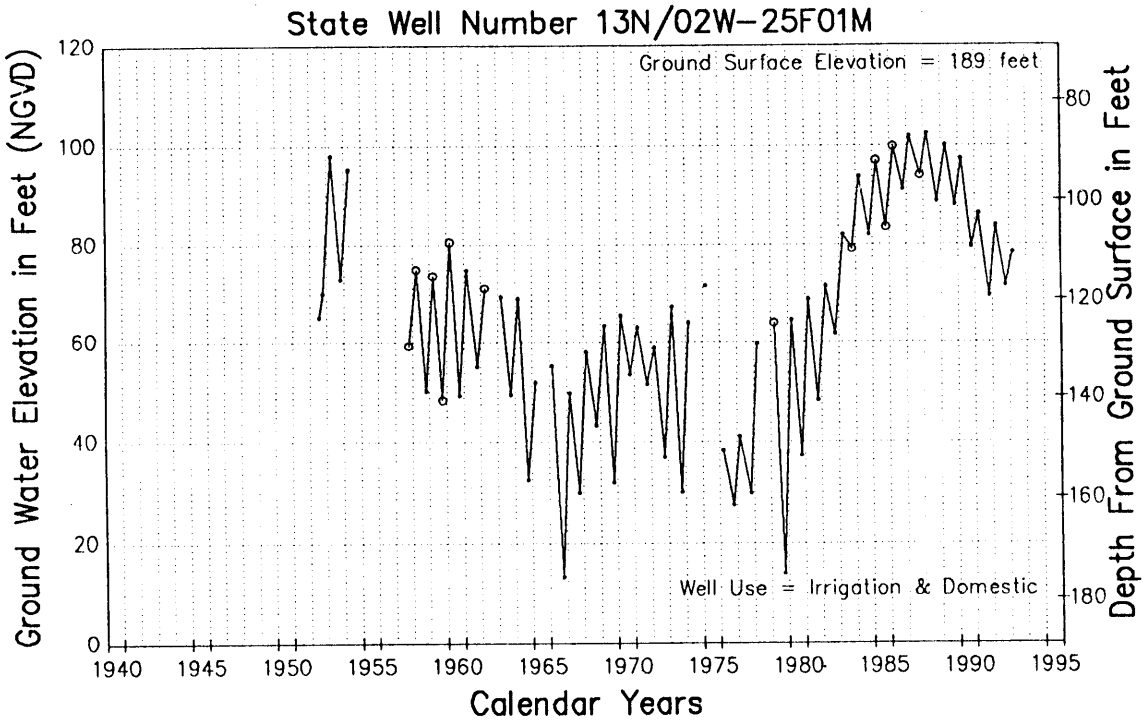


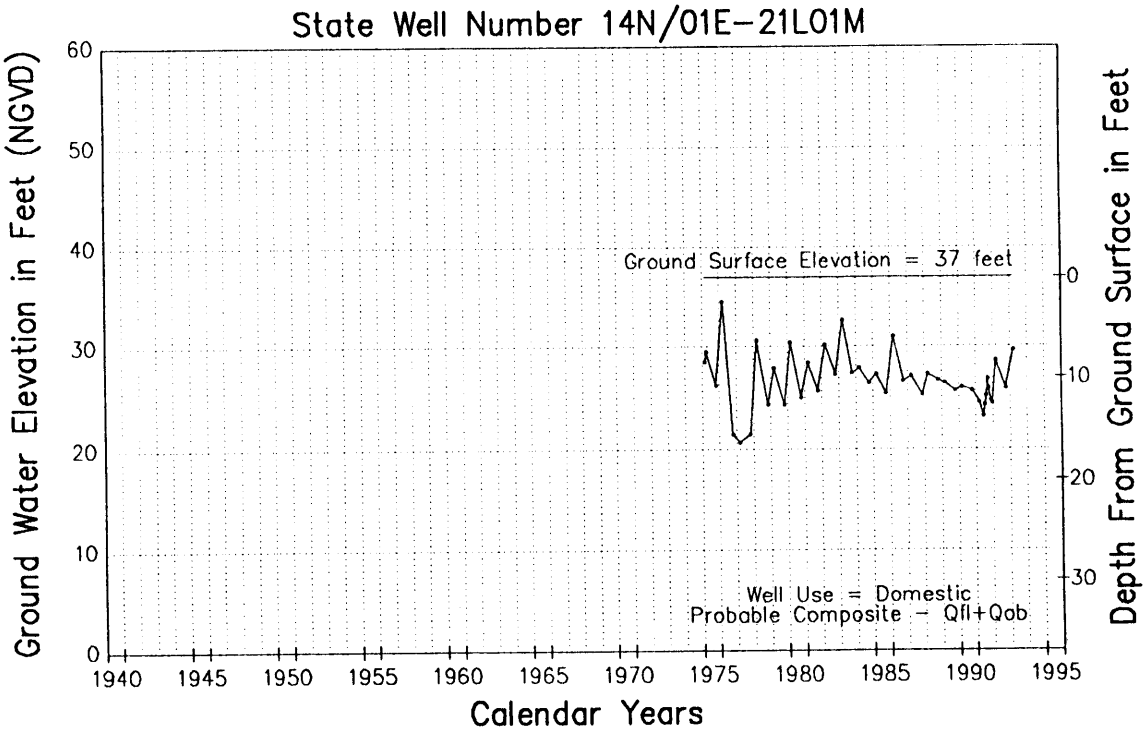


• Water surface elevation in well ∘ Questionable measurement

Department of Water Resources, Northern District

Sacramento Valley Ground Water Basin
Colusa County

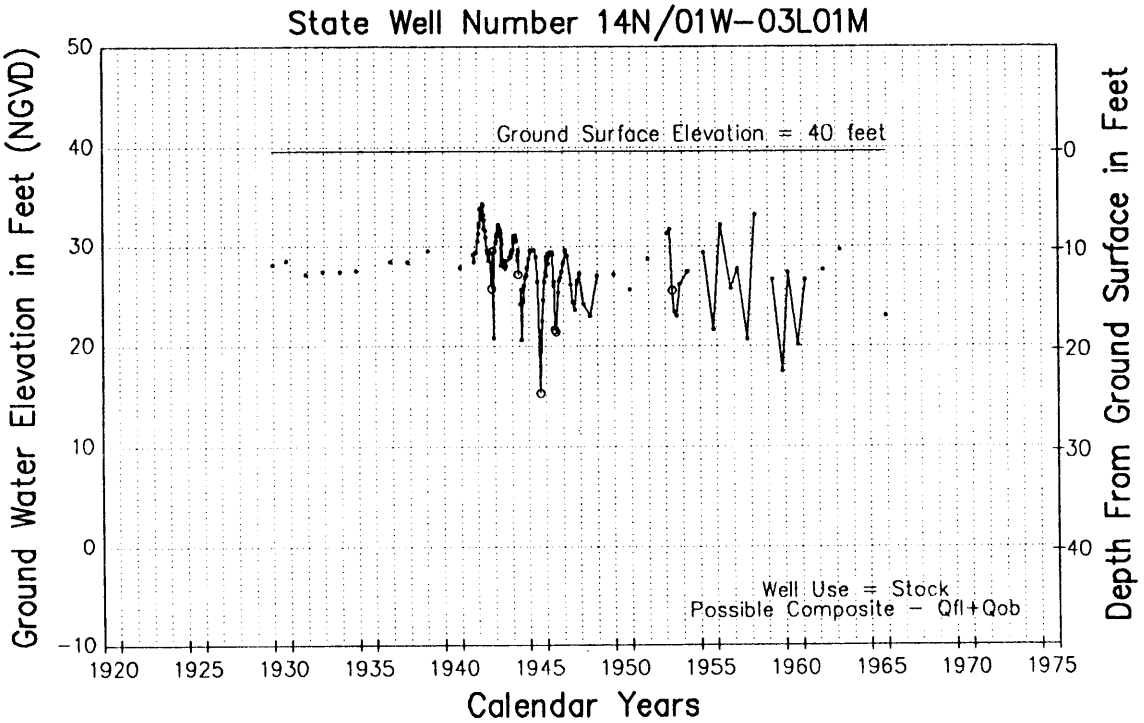


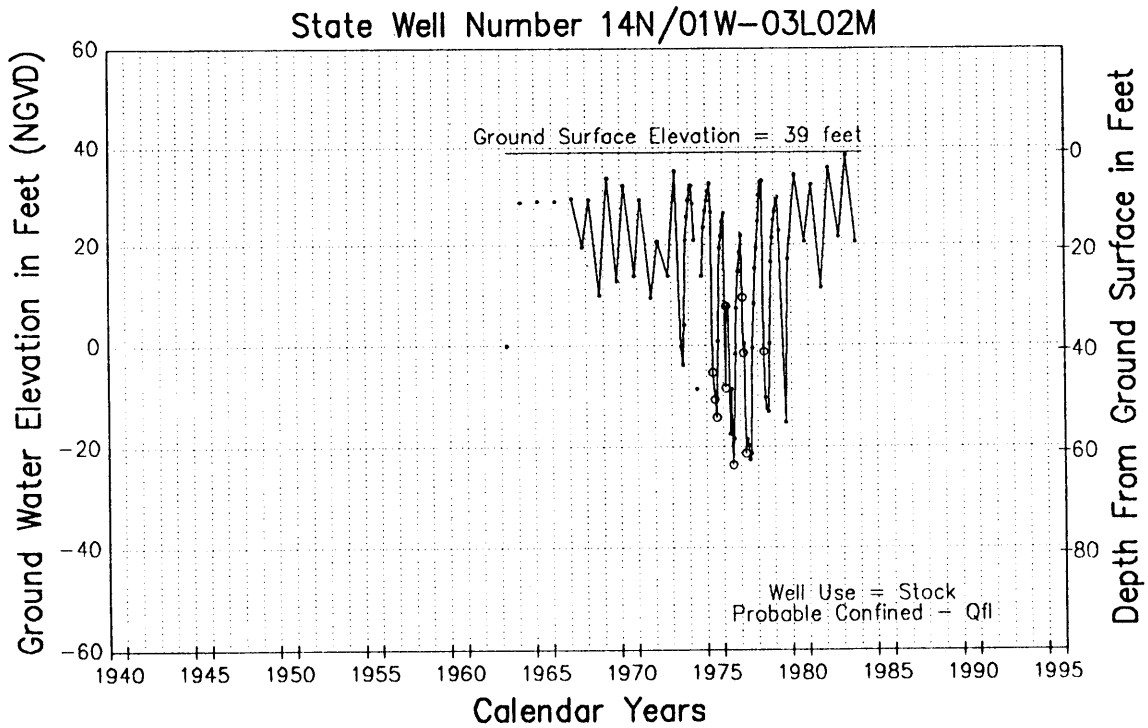


· Water surface elevation in well ∘ Questionable measurement

Department of Water Resources, Northern District

Sacramento Valley Ground Water Basin
Colusa County

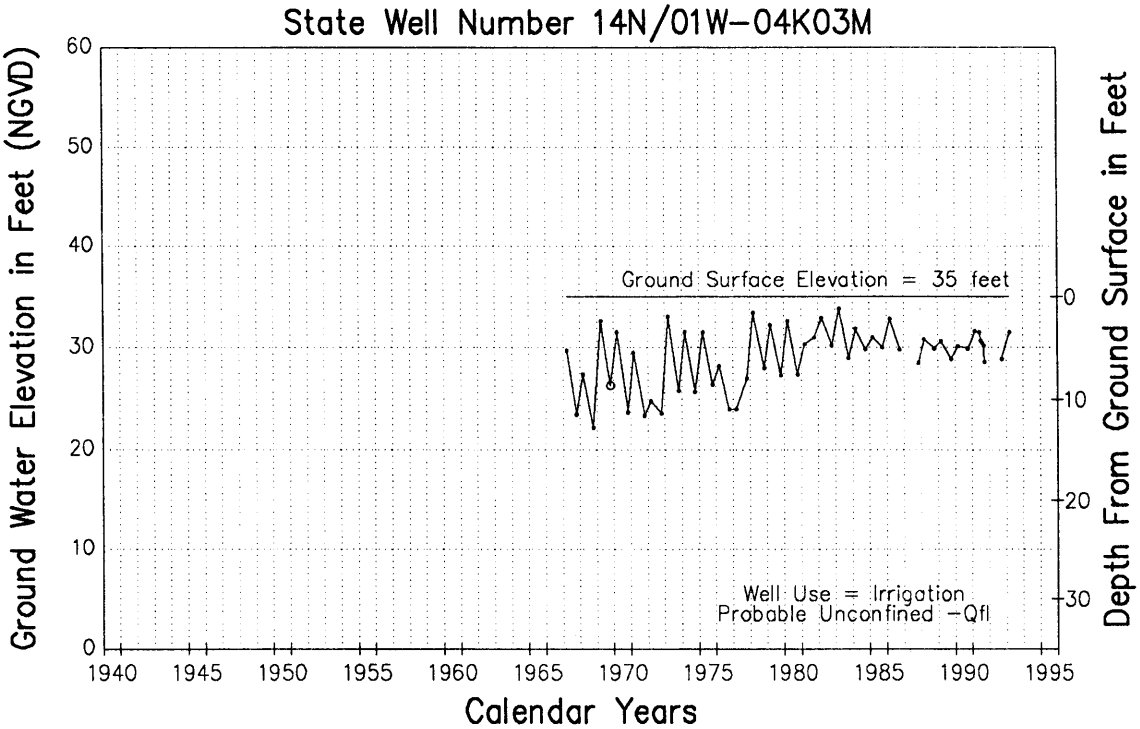


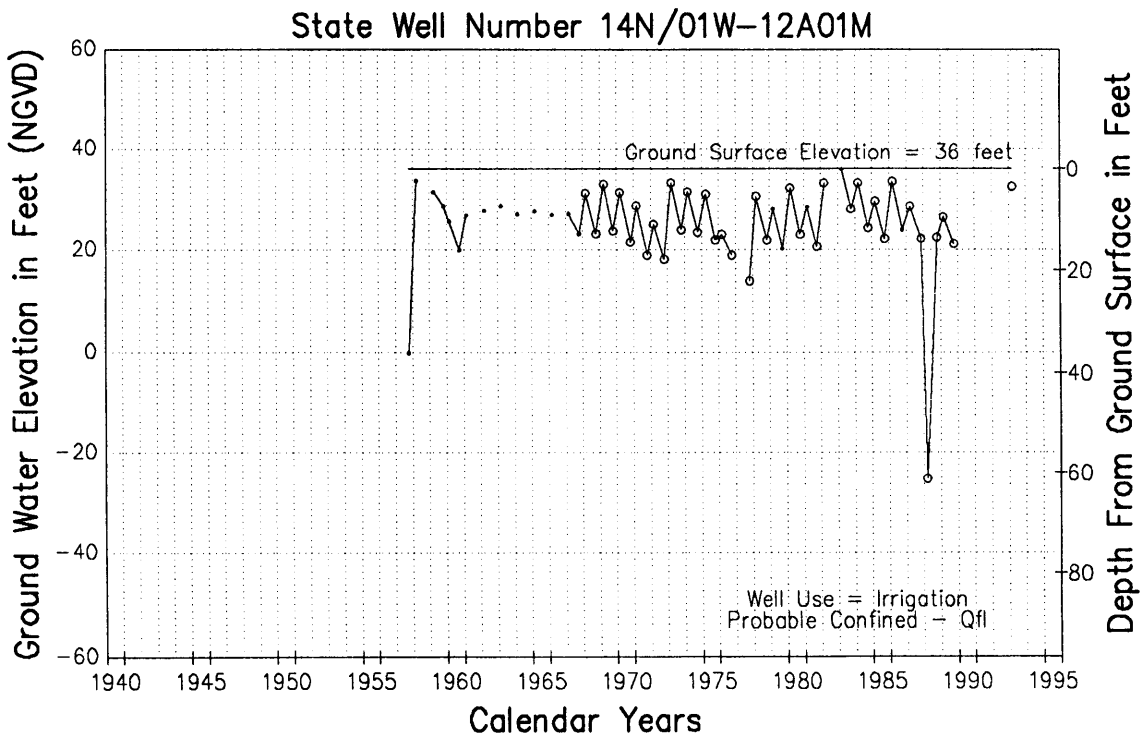


· Water surface elevation in well ∘ Questionable measurement

Department of Water Resources, Northern District

Sacramento Valley Ground Water Basin
Colusa County



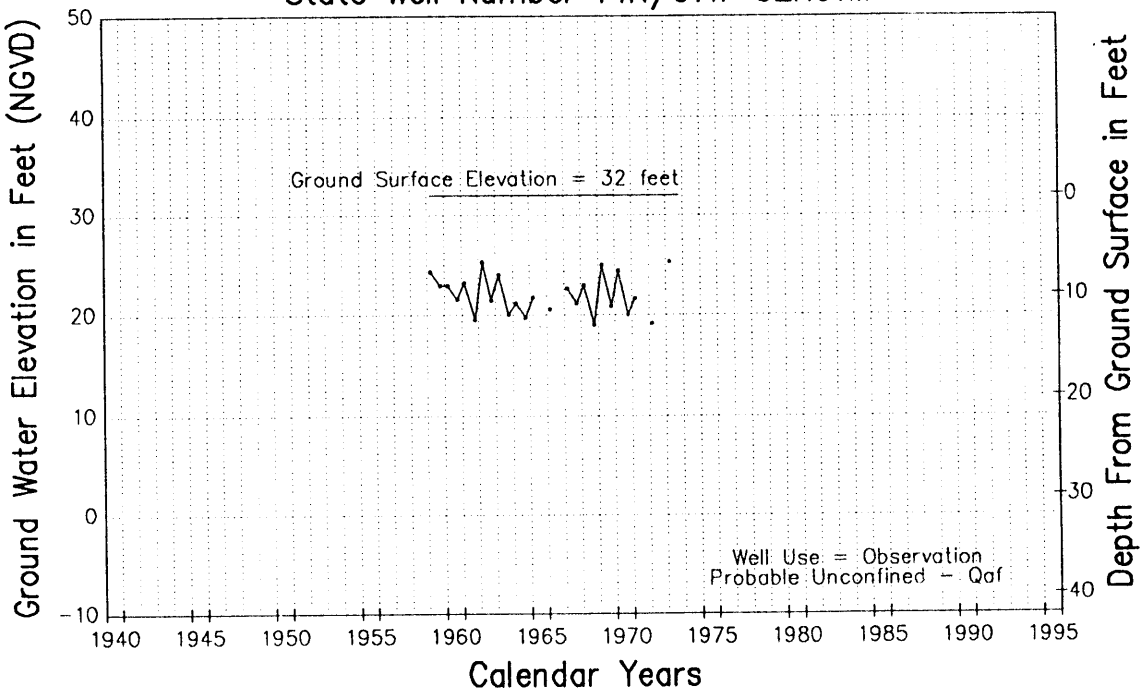


· Water surface elevation in well ∘ Questionable measurement

Department of Water Resources, Northern District

Sacramento Valley Ground Water Basin
Colusa County

State Well Number 14N/01W-32R01M



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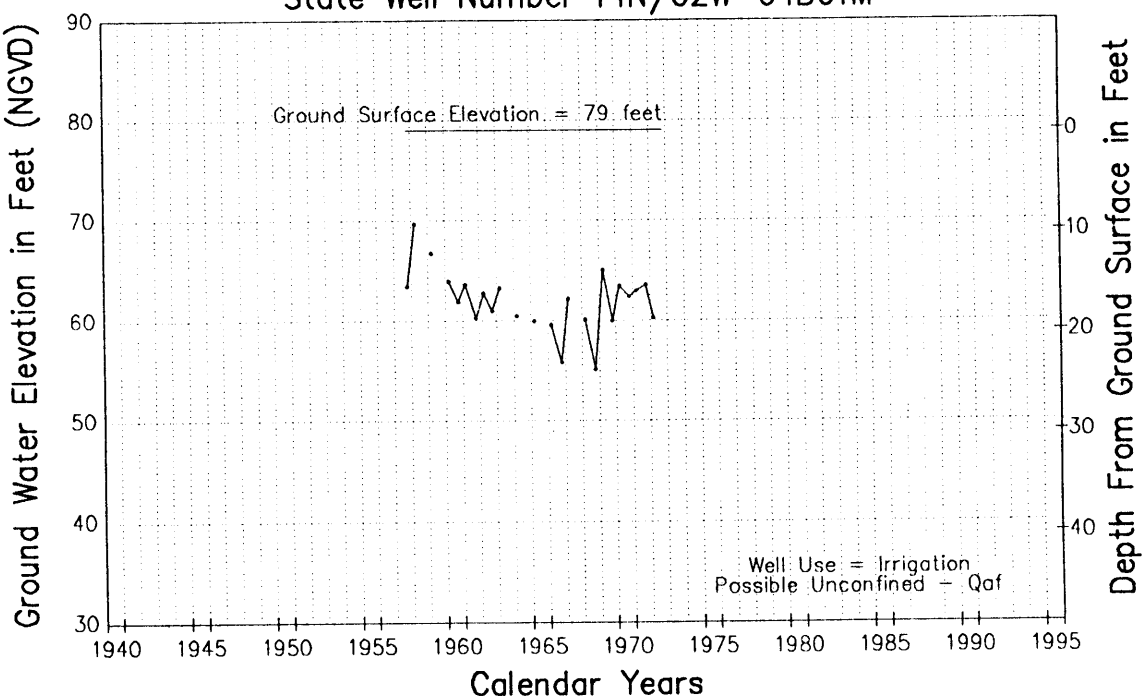
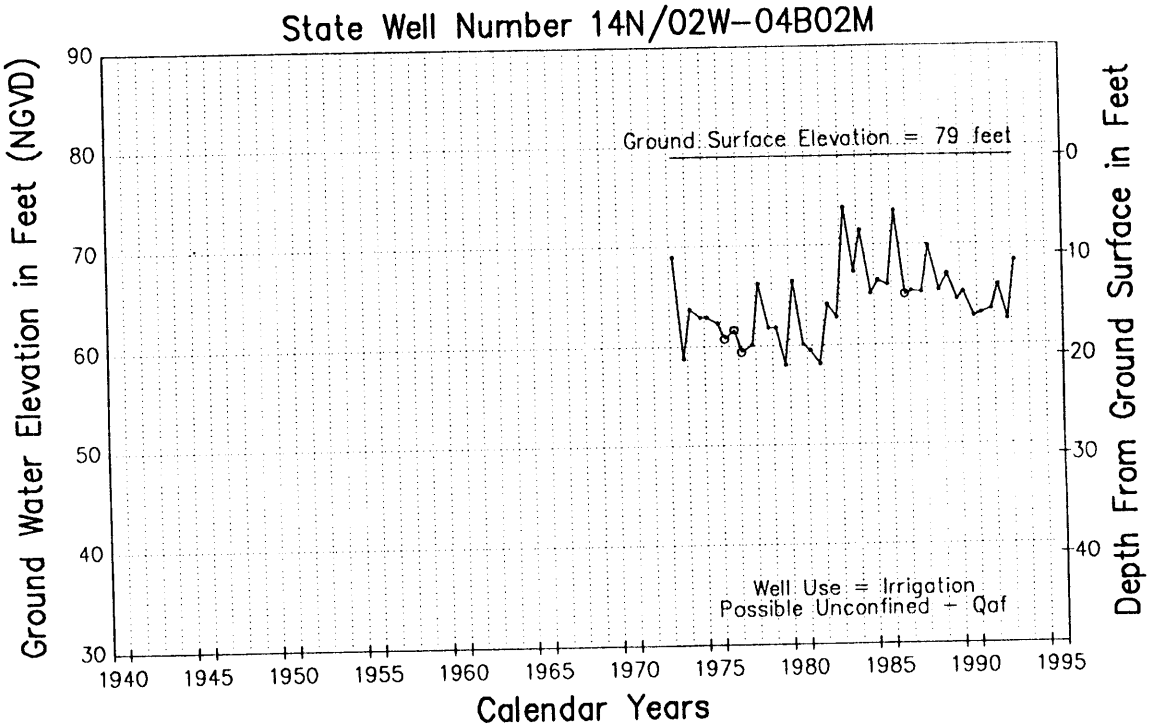
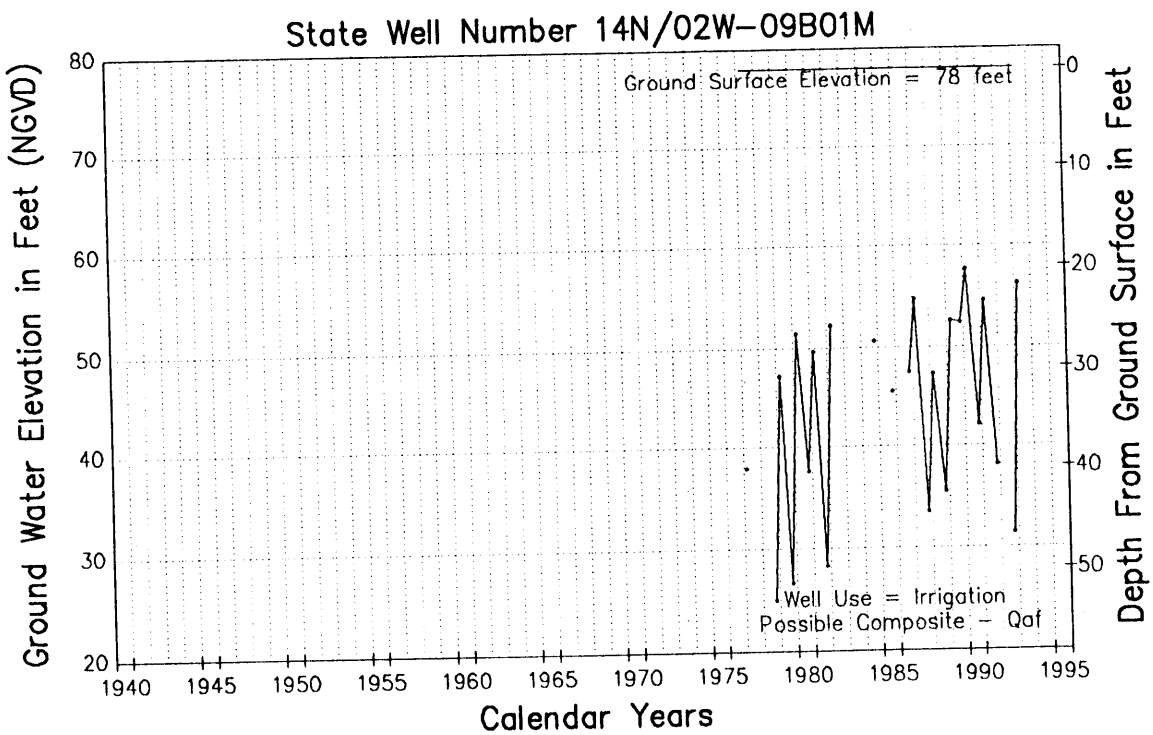


· Water surface elevation in well ∘ Questionable measurement

Department of Water Resources, Northern District

Sacramento Valley Ground Water Basin
Colusa County





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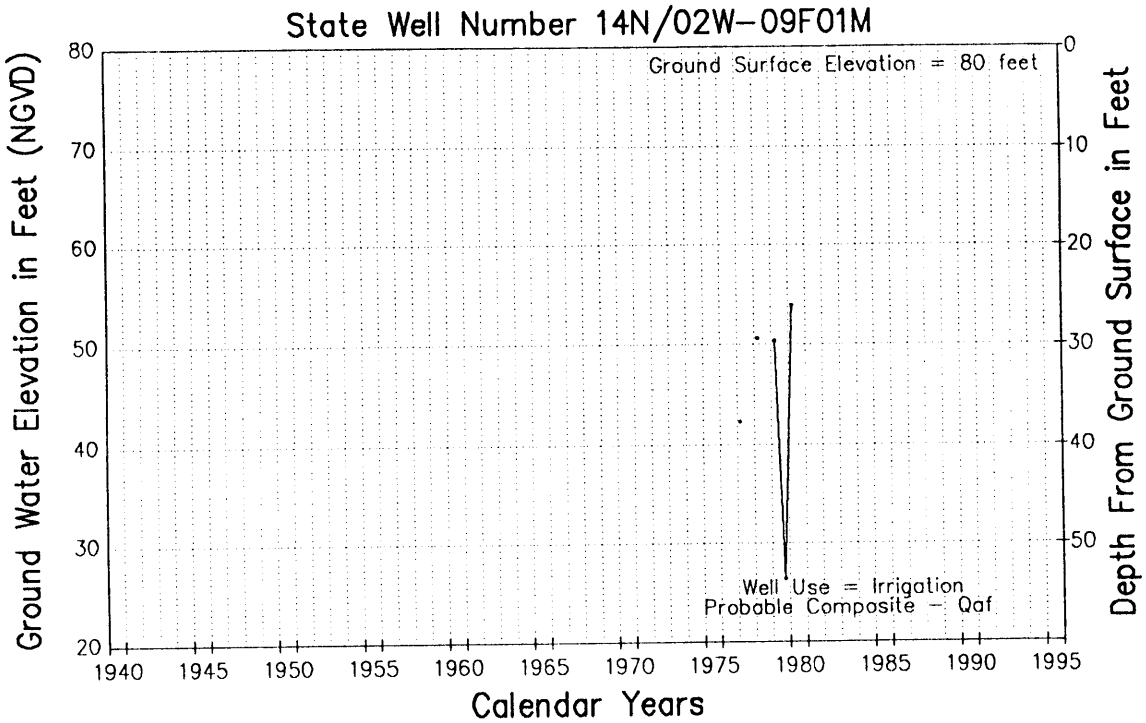
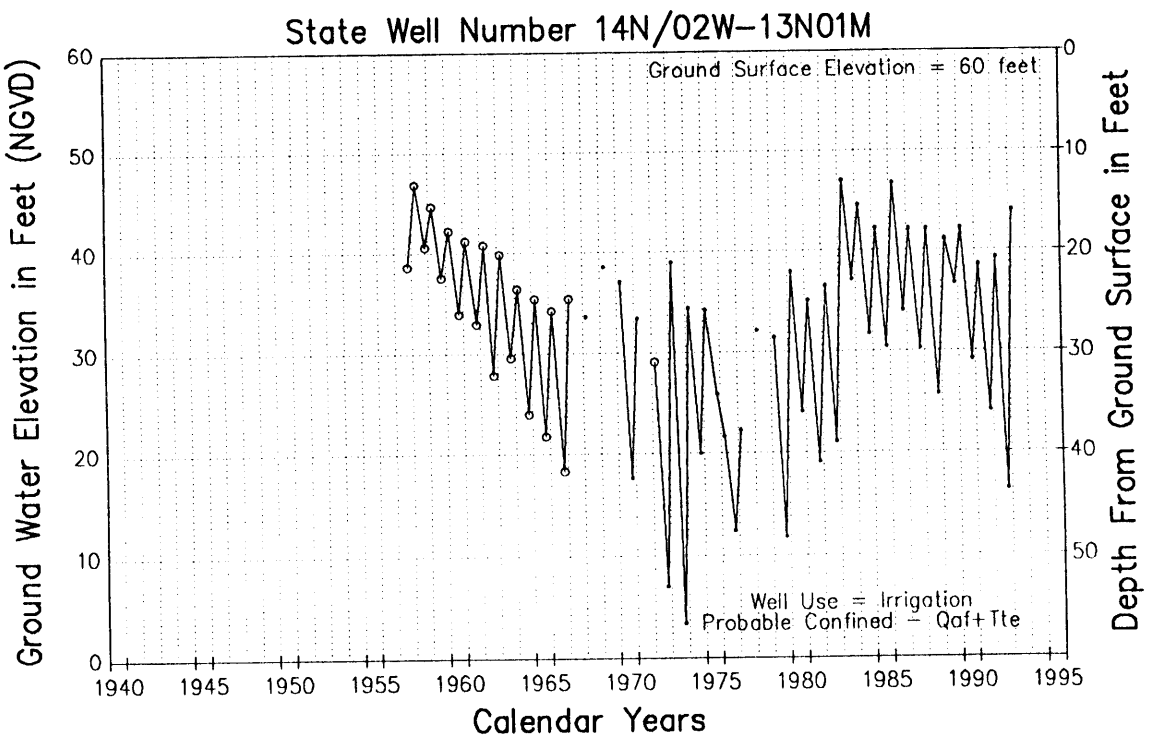
Department of Water Resources, Northern District

Sacramento Valley Ground Water Basin
Colusa County





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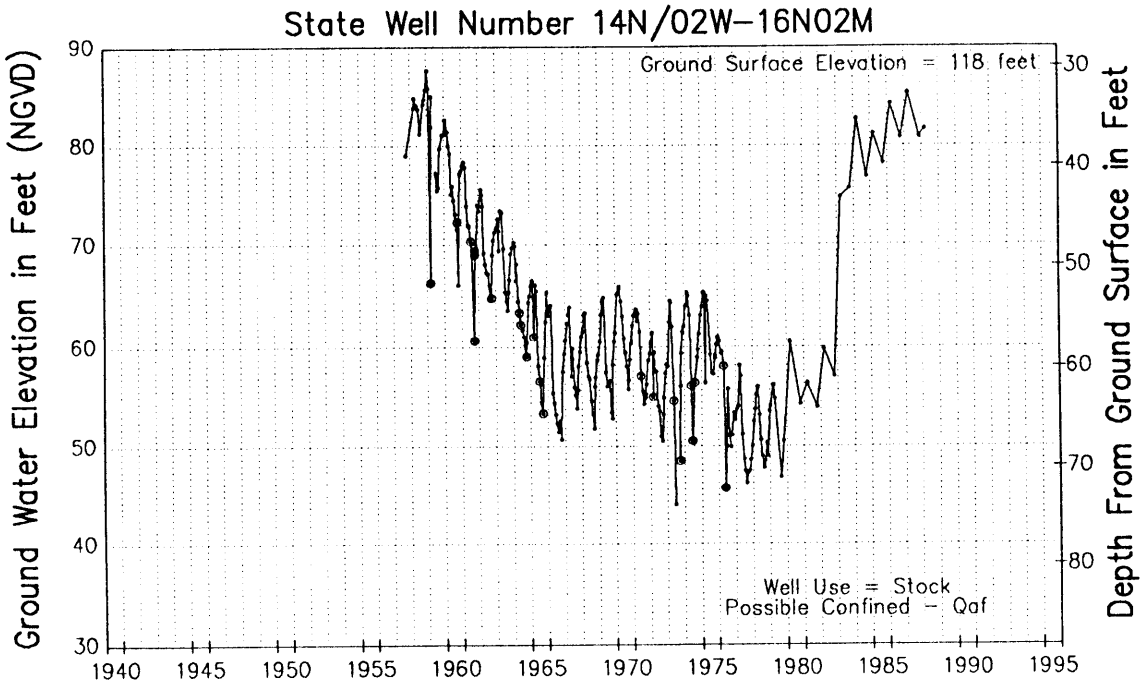
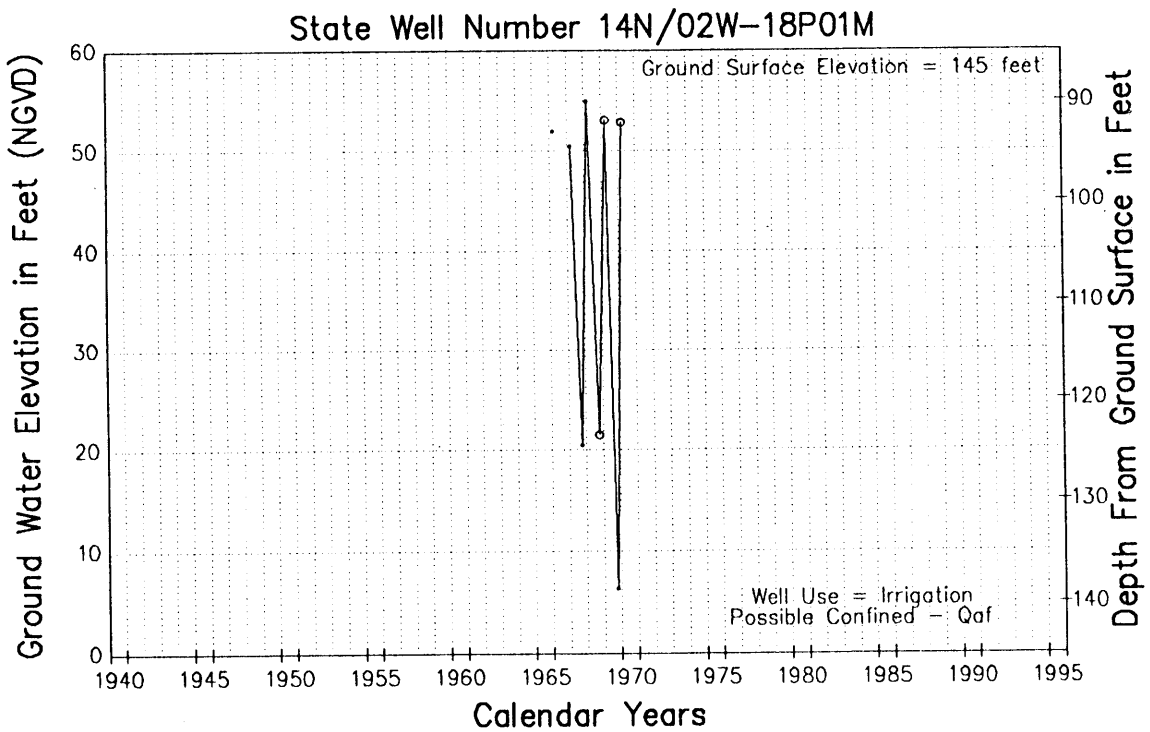
Department of Water Resources, Northern District

Sacramento Valley Ground Water Basin
Colusa County





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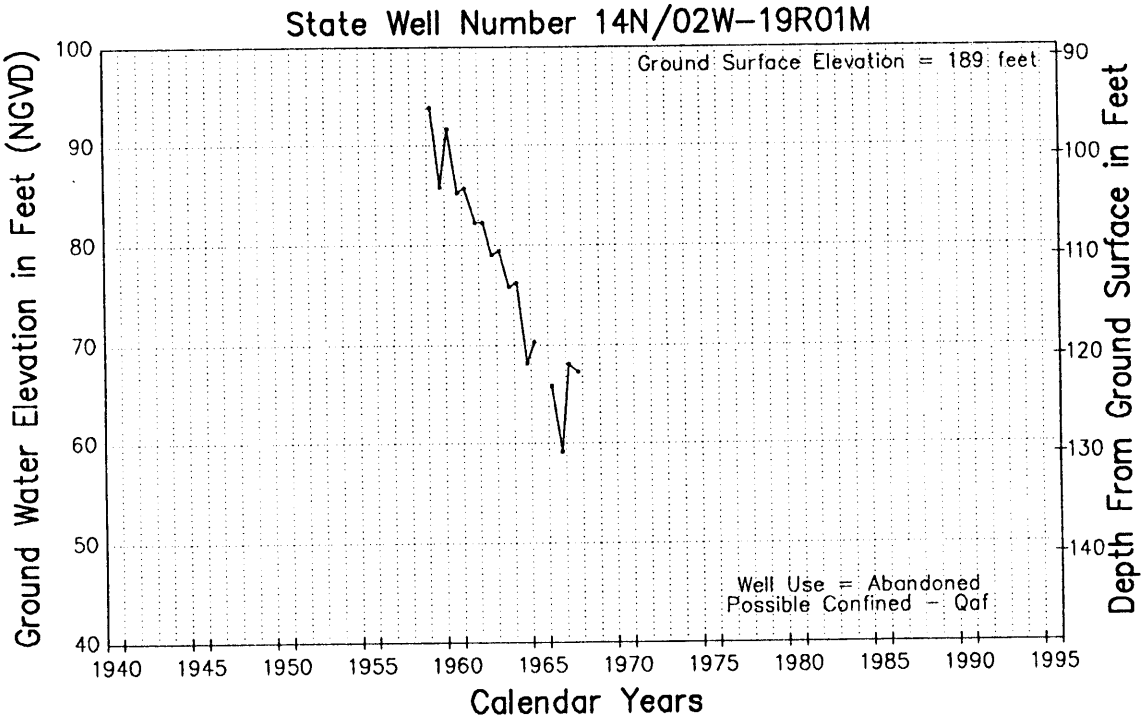
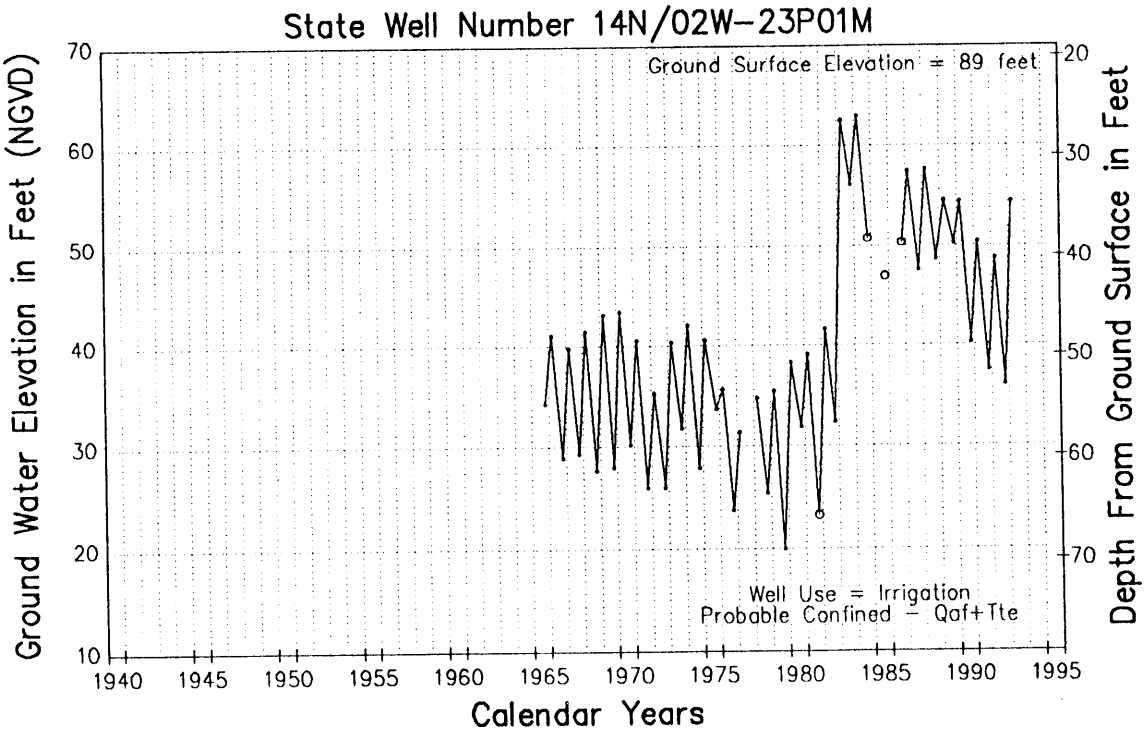
Department of Water Resources, Northern District

Sacramento Valley Ground Water Basin
Colusa County





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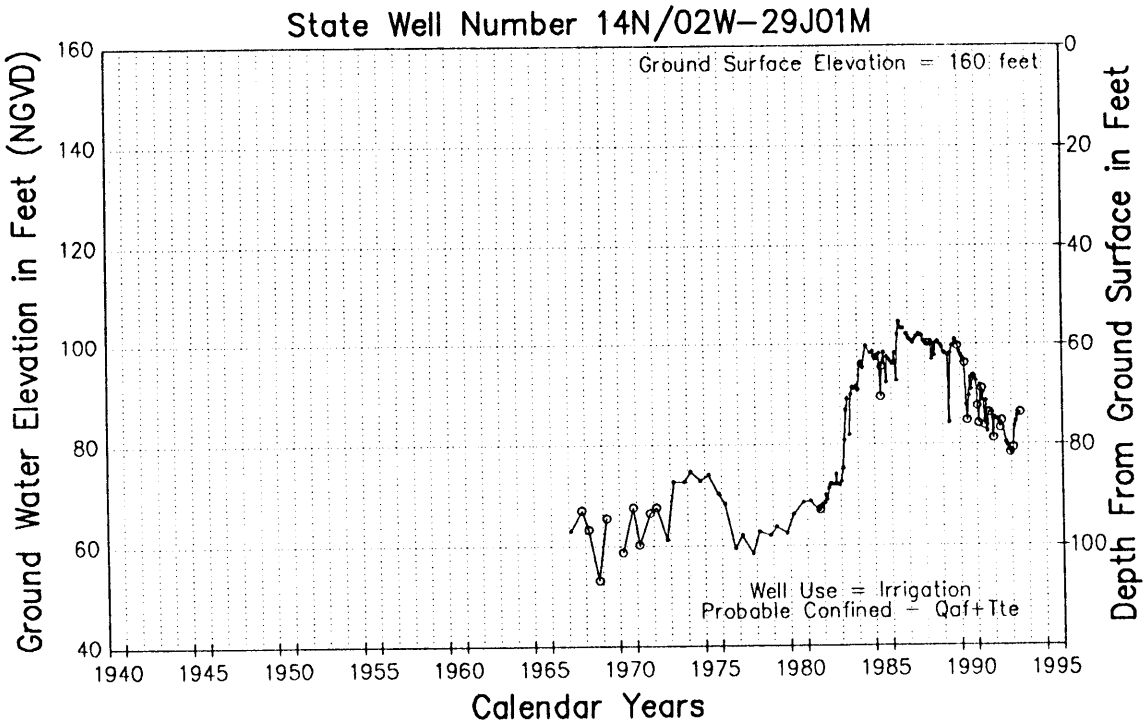
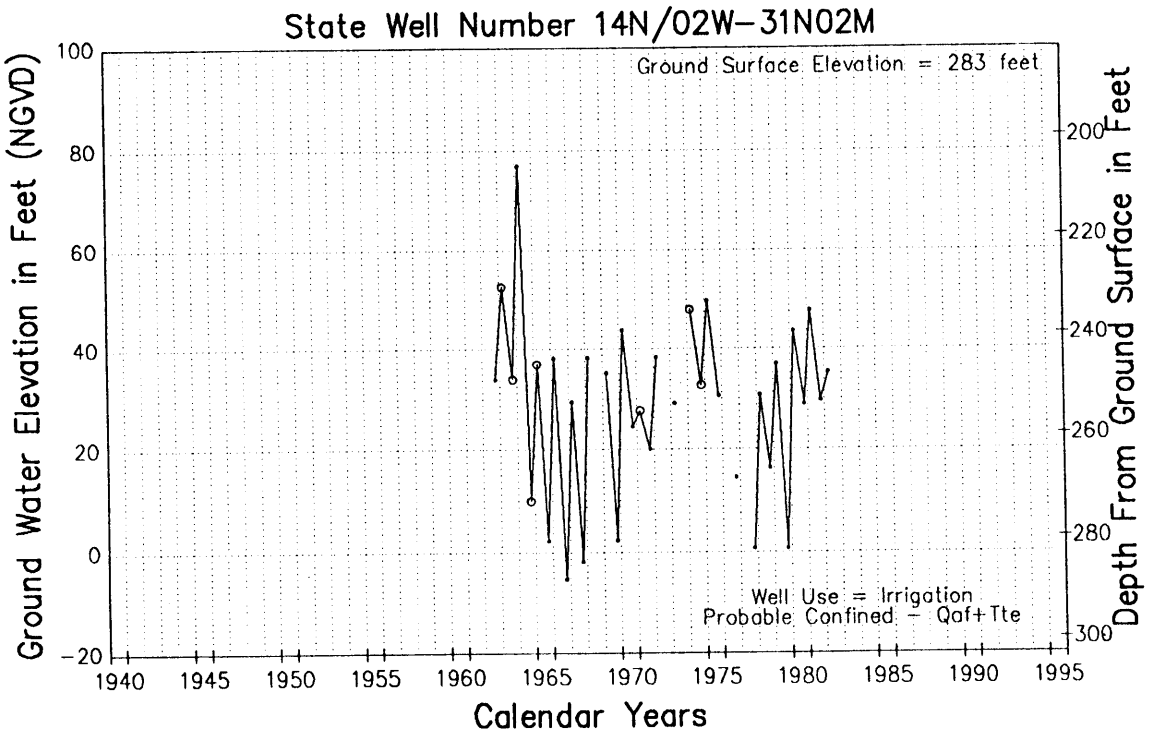
Sacramento Valley Ground Water Basin
Colusa County





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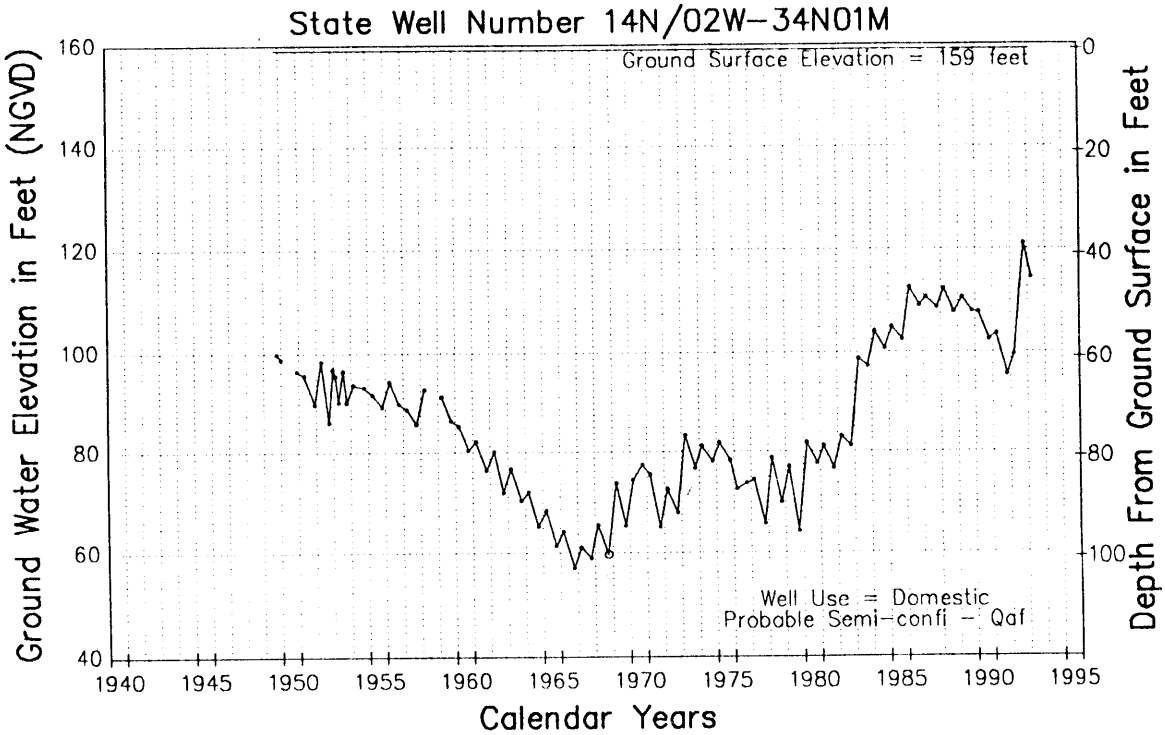
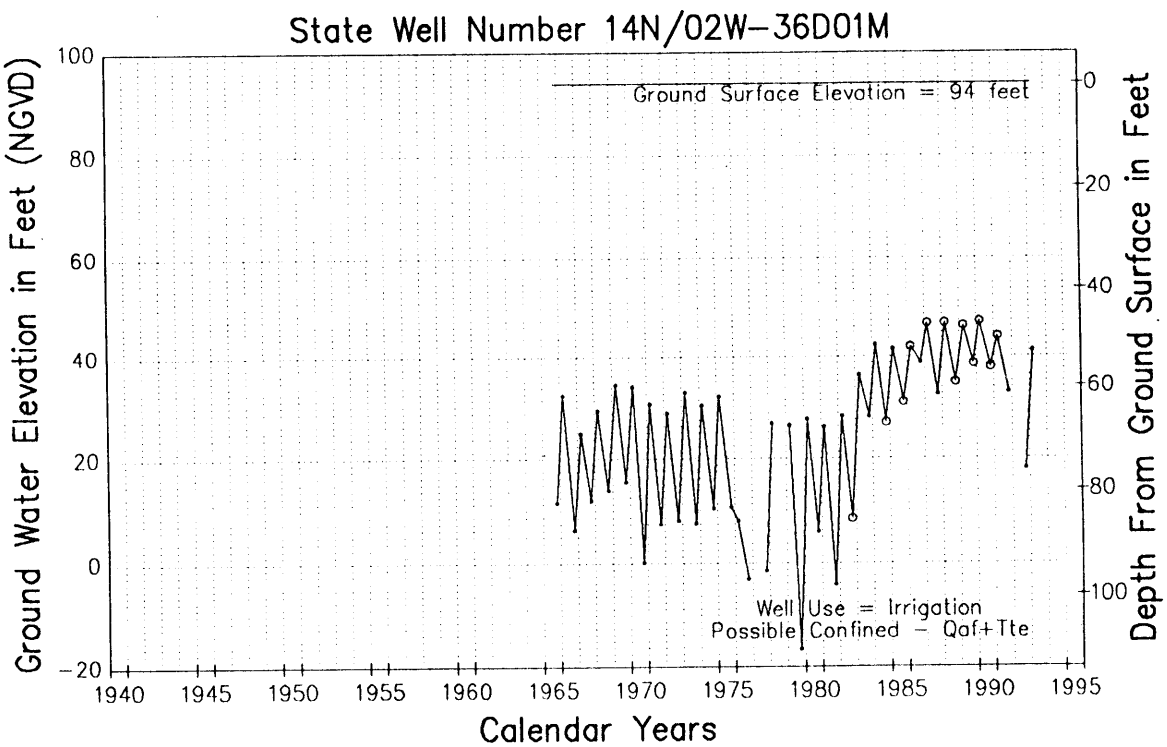
Department of Water Resources, Northern District

Sacramento Valley Ground Water Basin
Colusa County





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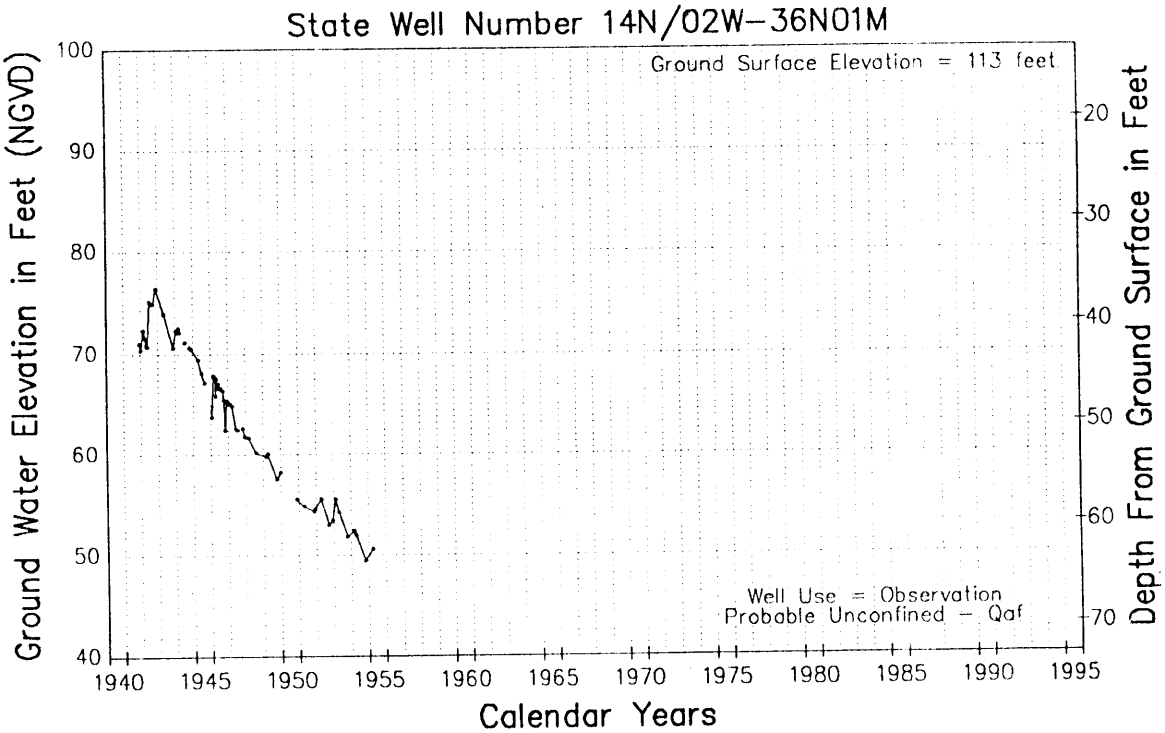
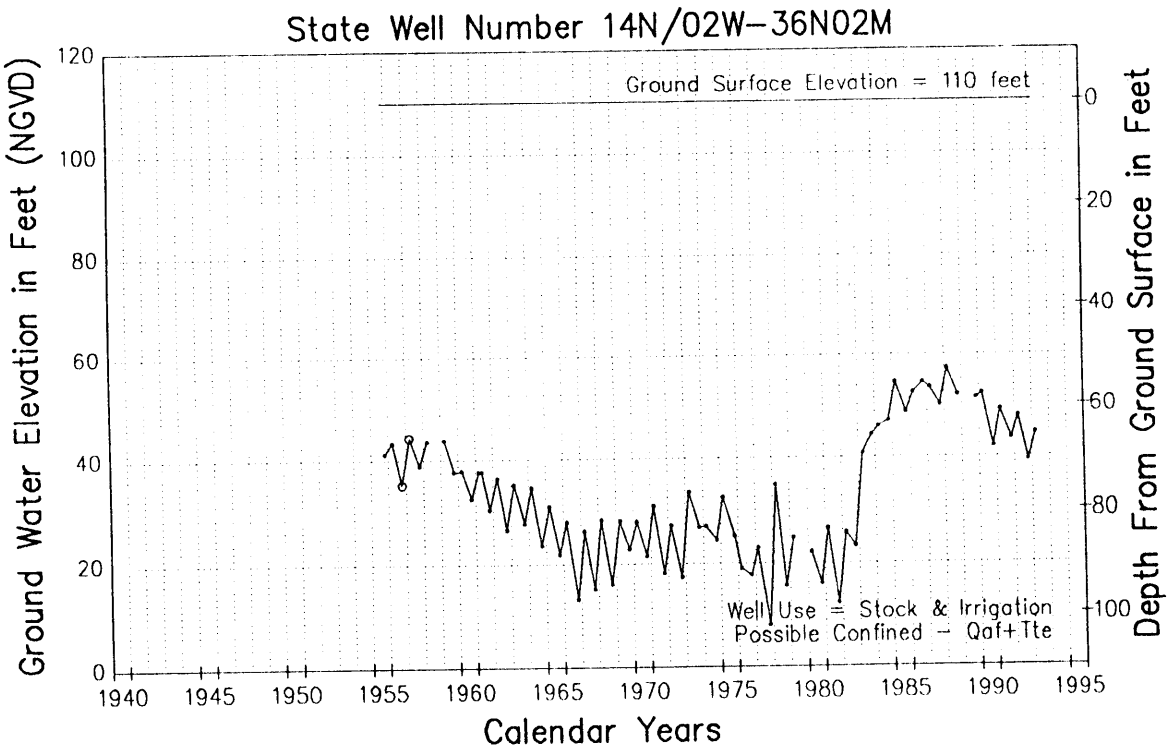
Department of Water Resources, Northern District

Sacramento Valley Ground Water Basin
Colusa County





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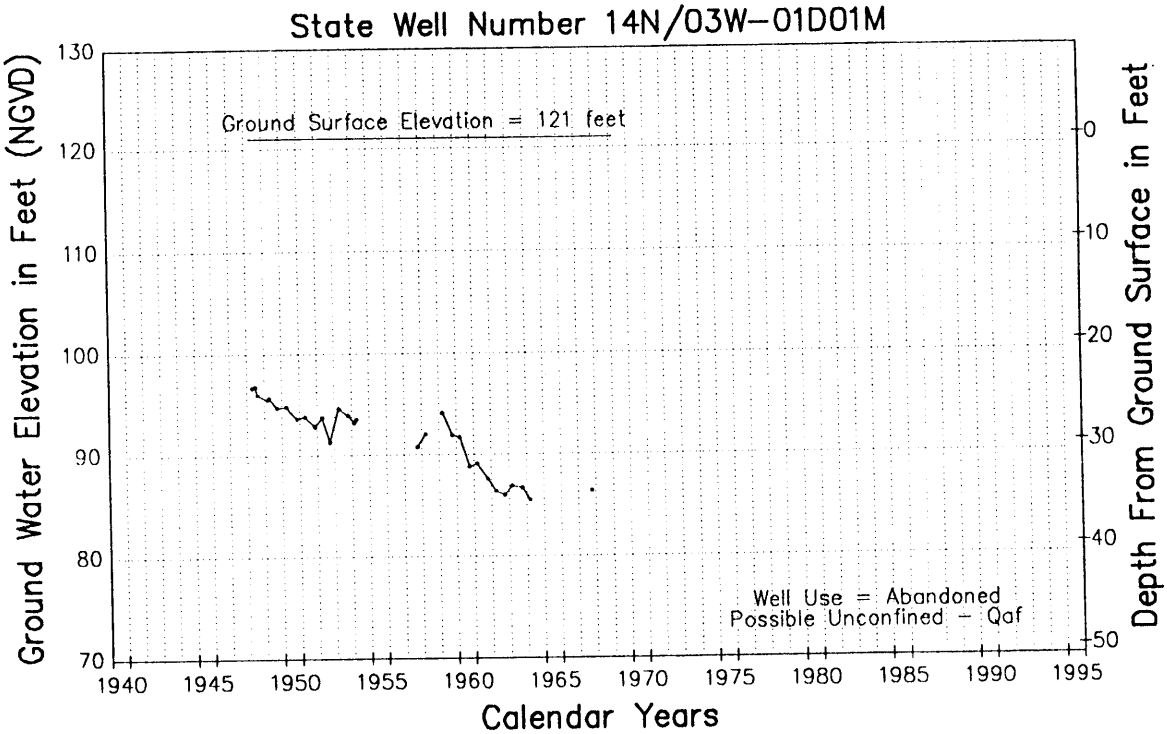
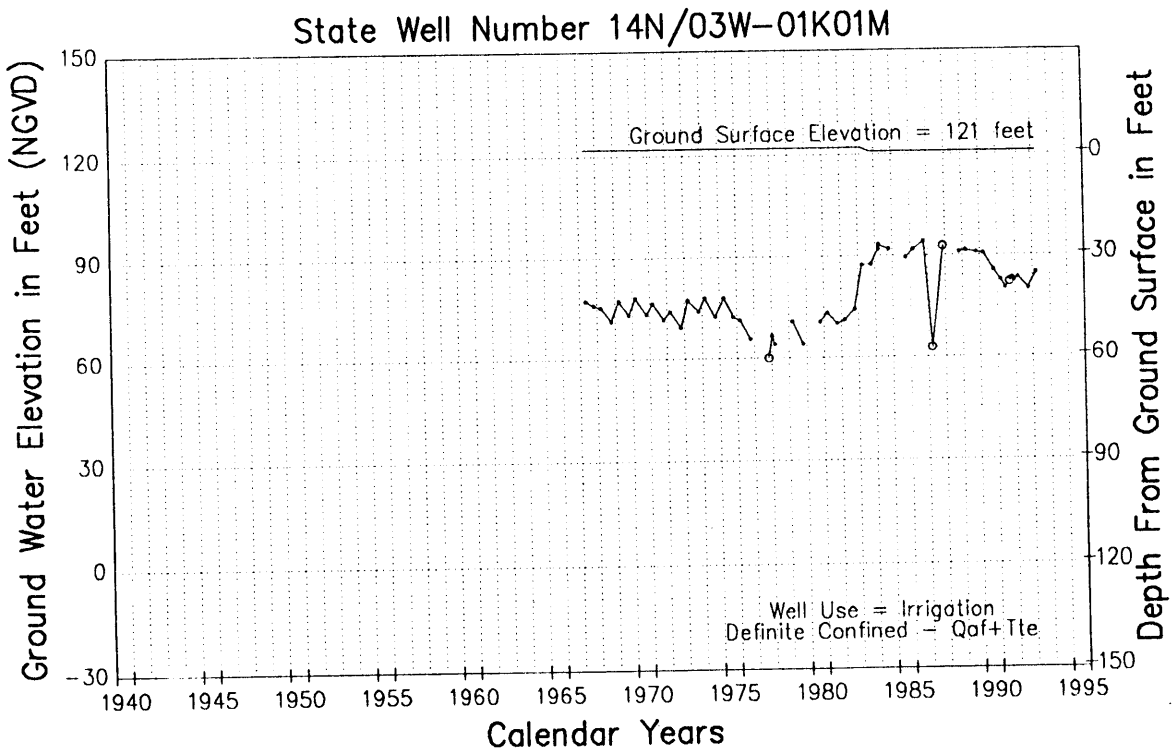
Department of Water Resources, Northern District

Sacramento Valley Ground Water Basin
Colusa County





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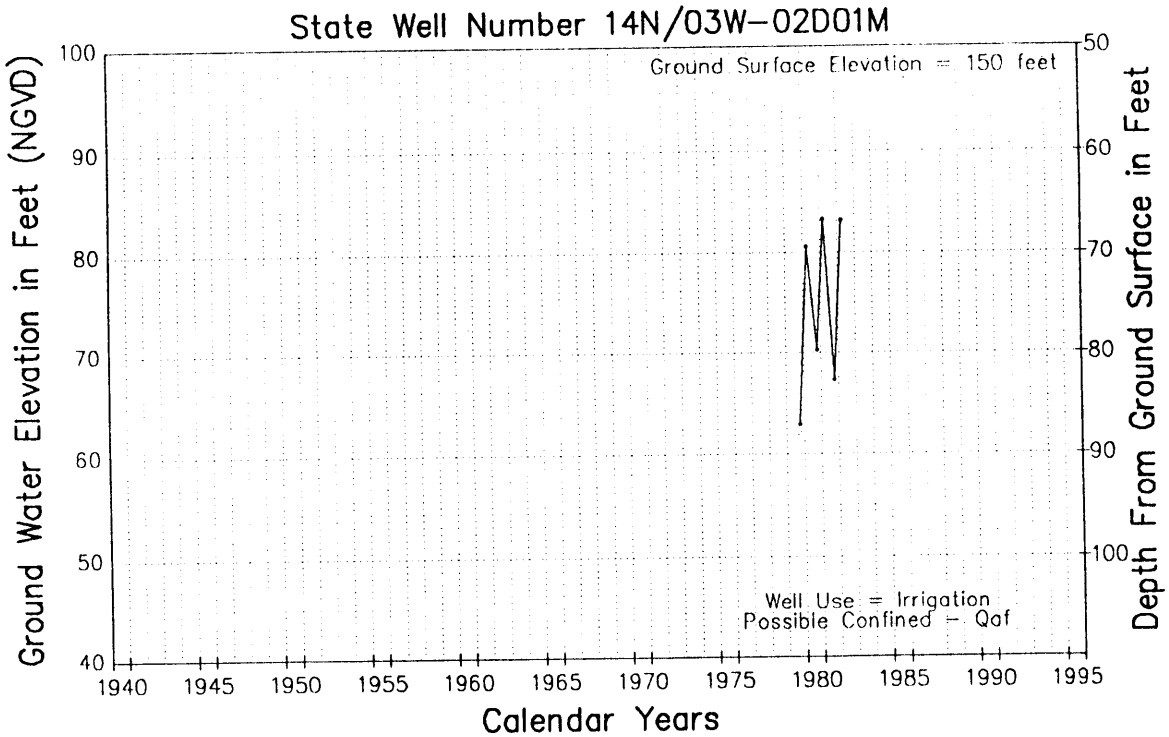
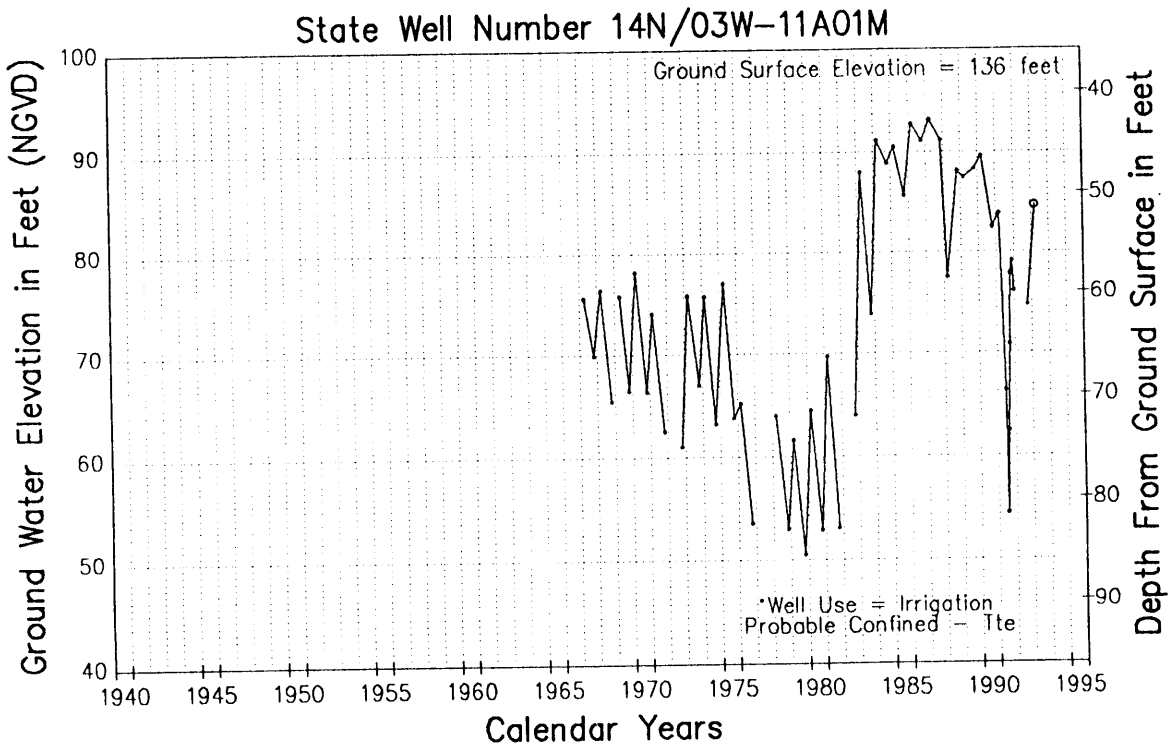
Department of Water Resources, Northern District

Sacramento Valley Ground Water Basin
Colusa County





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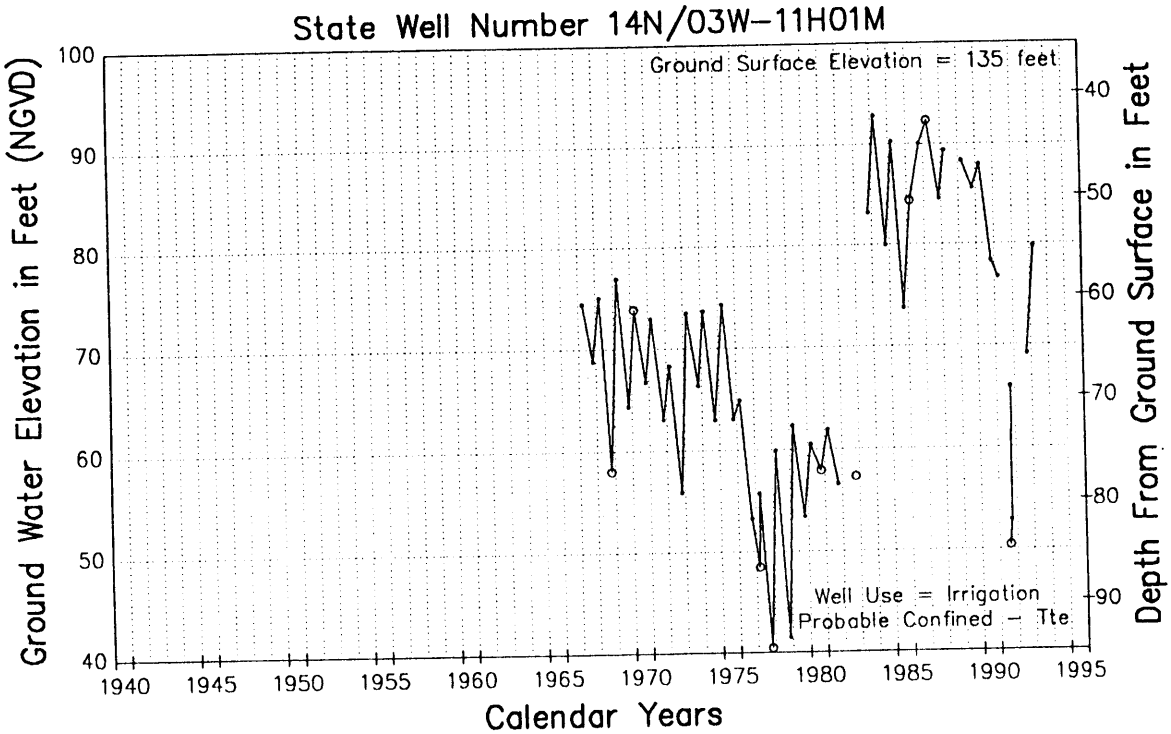
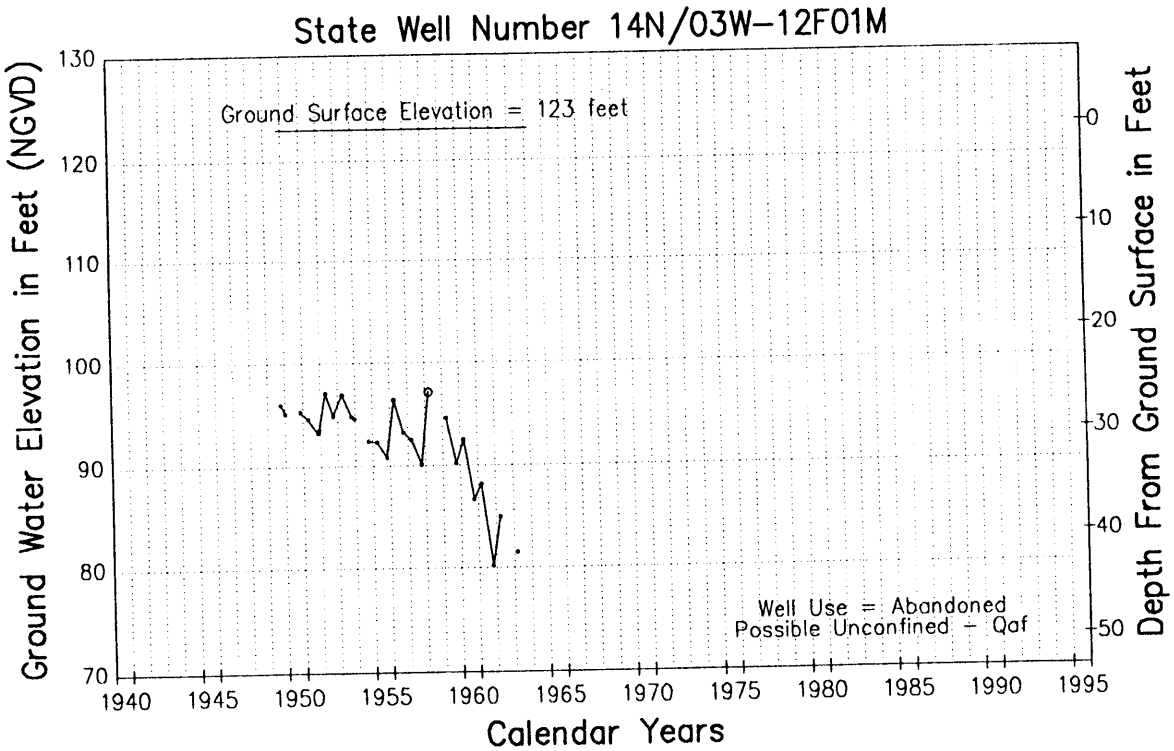
Department of Water Resources, Northern District

Sacramento Valley Ground Water Basin
Colusa County





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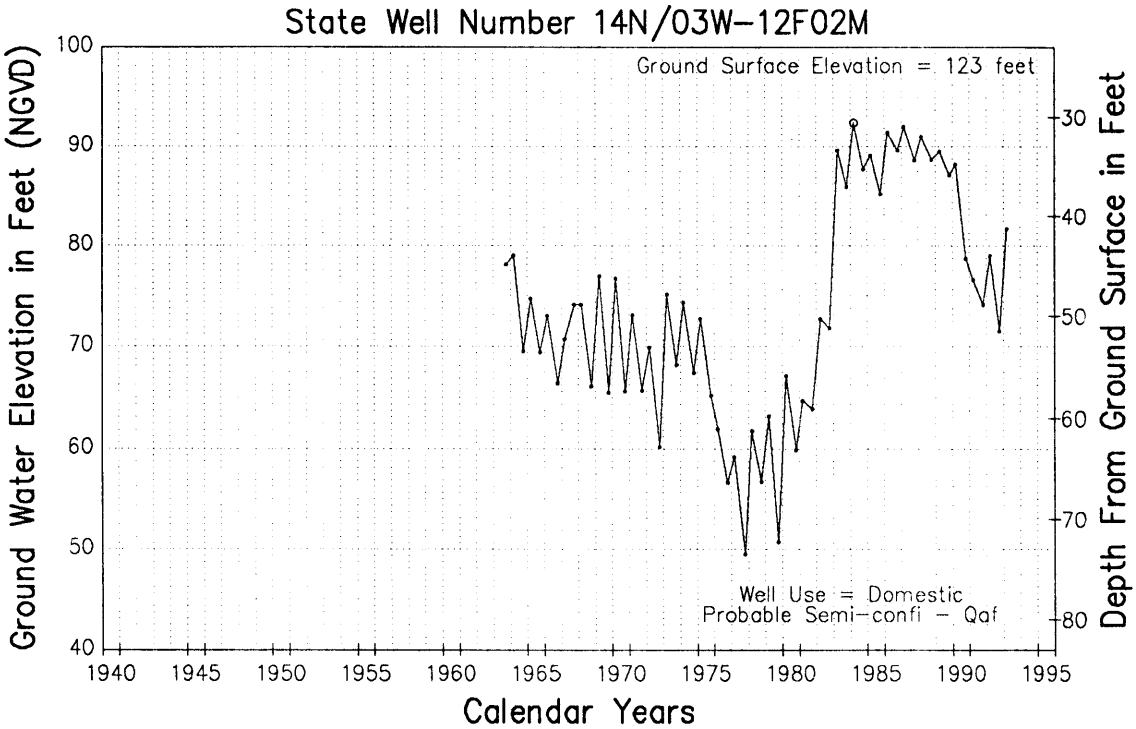
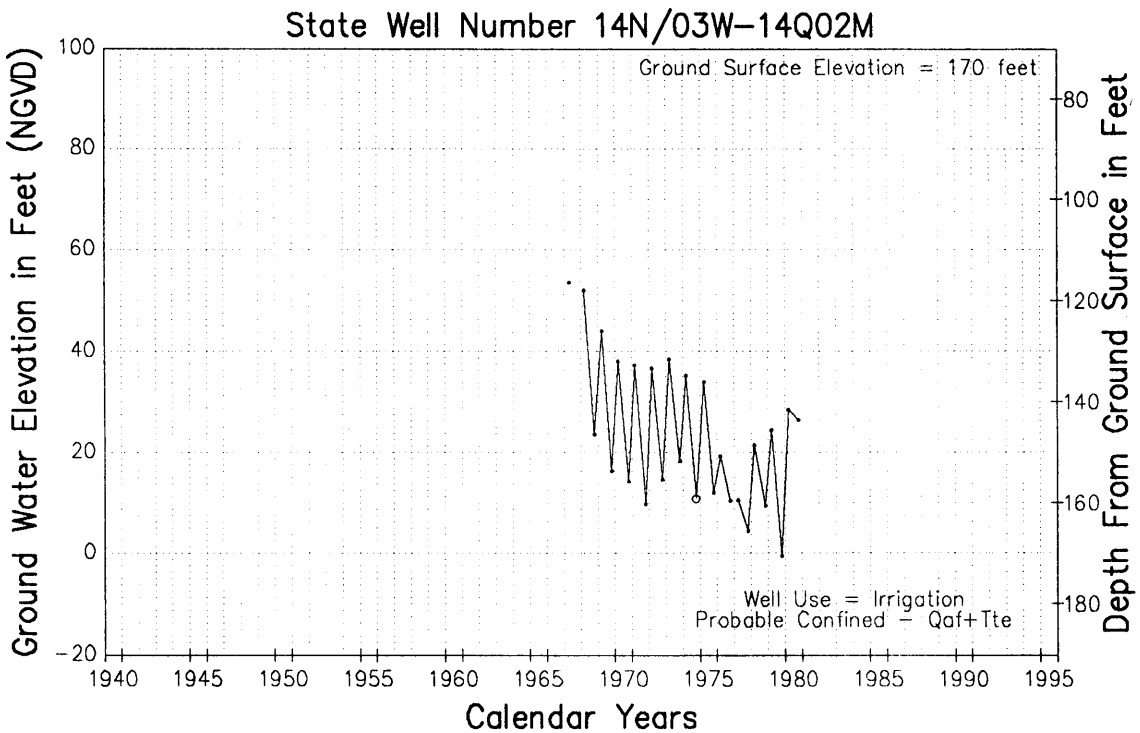
Department of Water Resources, Northern District

Sacramento Valley Ground Water Basin
Colusa County





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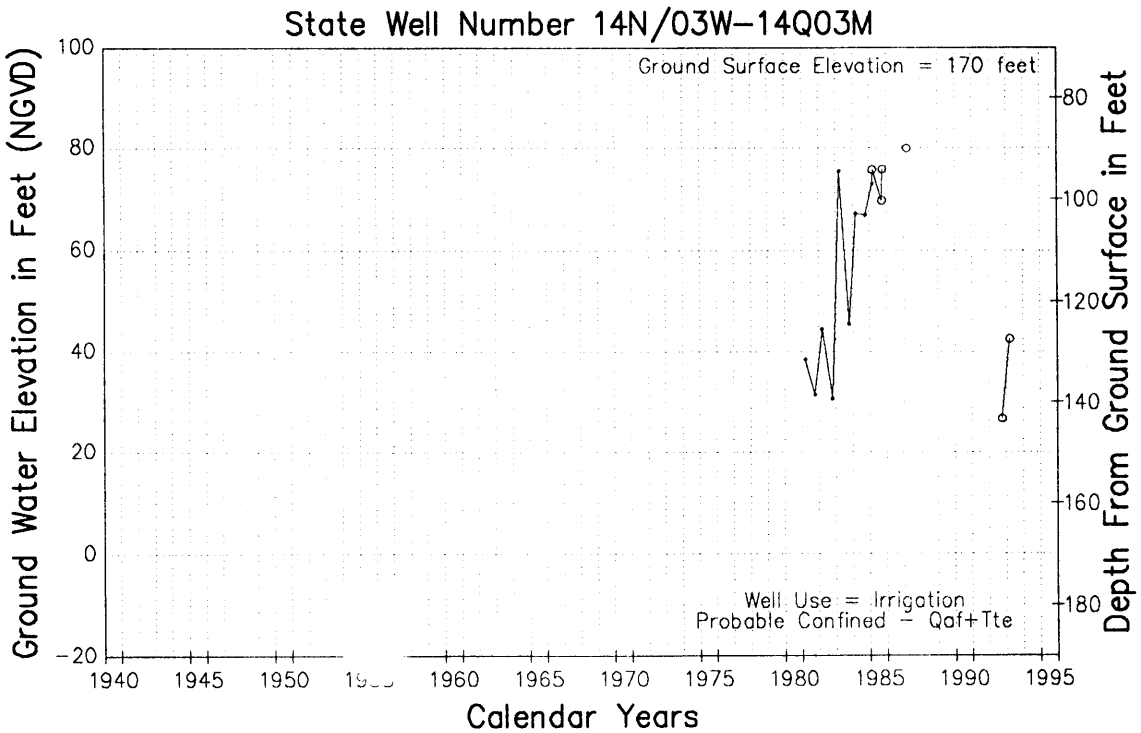
Department of Water Resources, Northern District

Sacramento Valley Ground Water Basin
Colusa County



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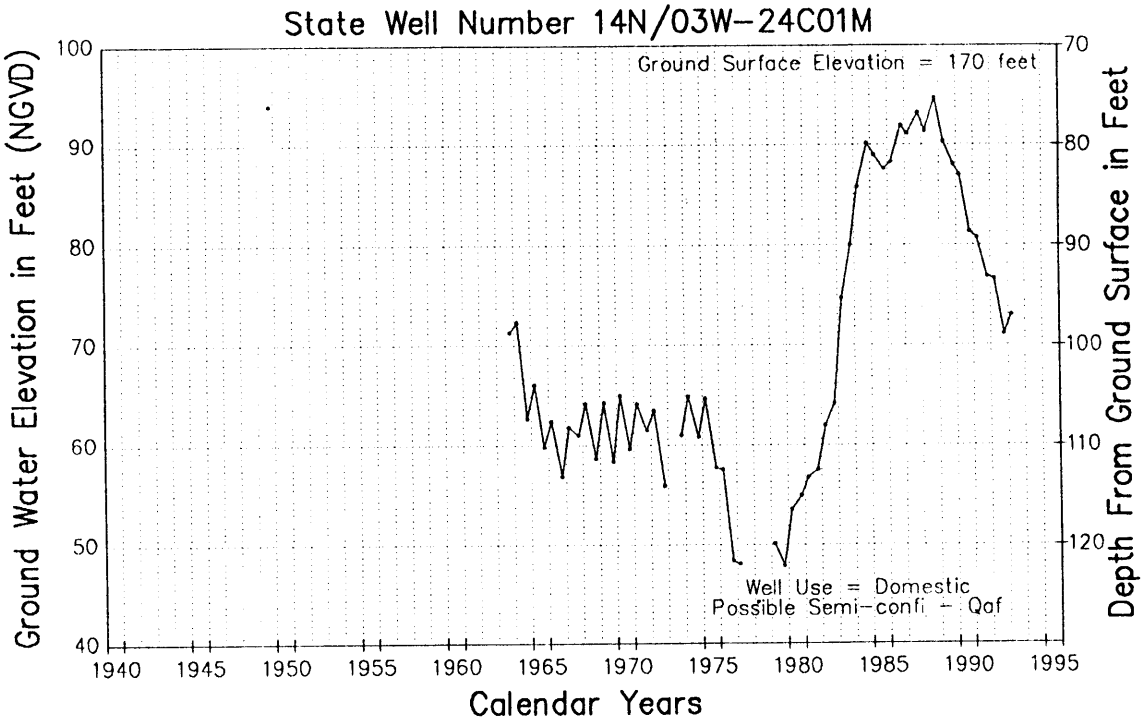
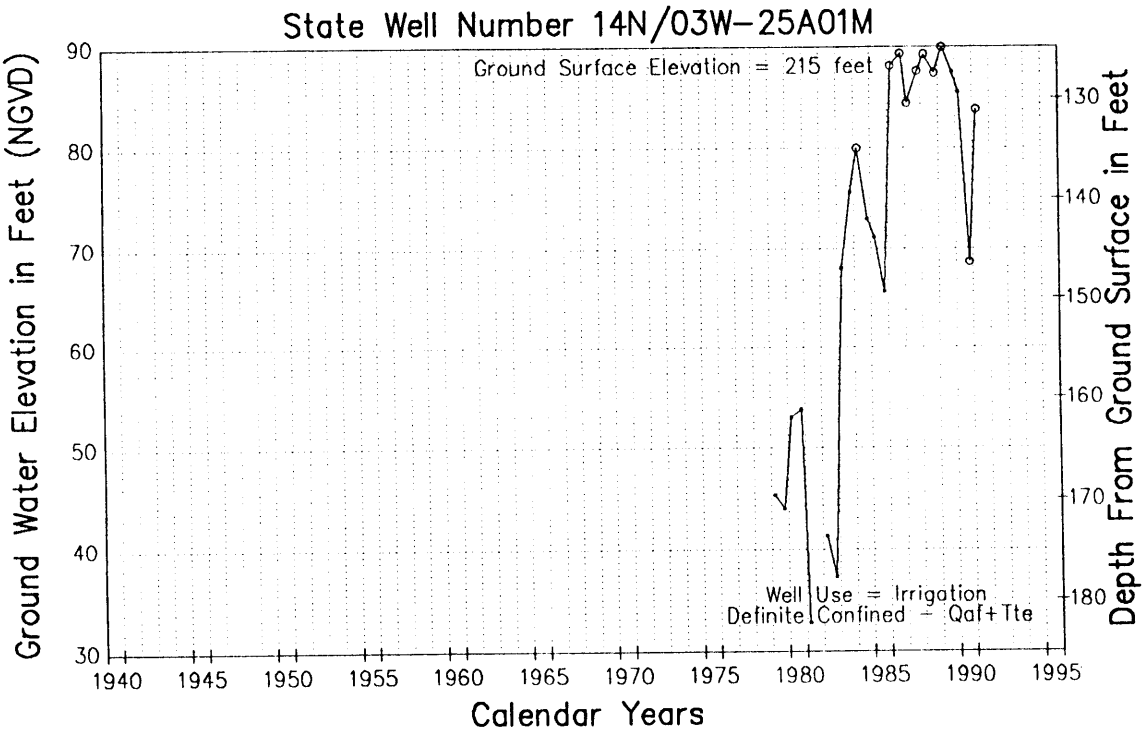
Department of Water Resources, Northern District

Sacramento Valley Ground Water Basin
Colusa County





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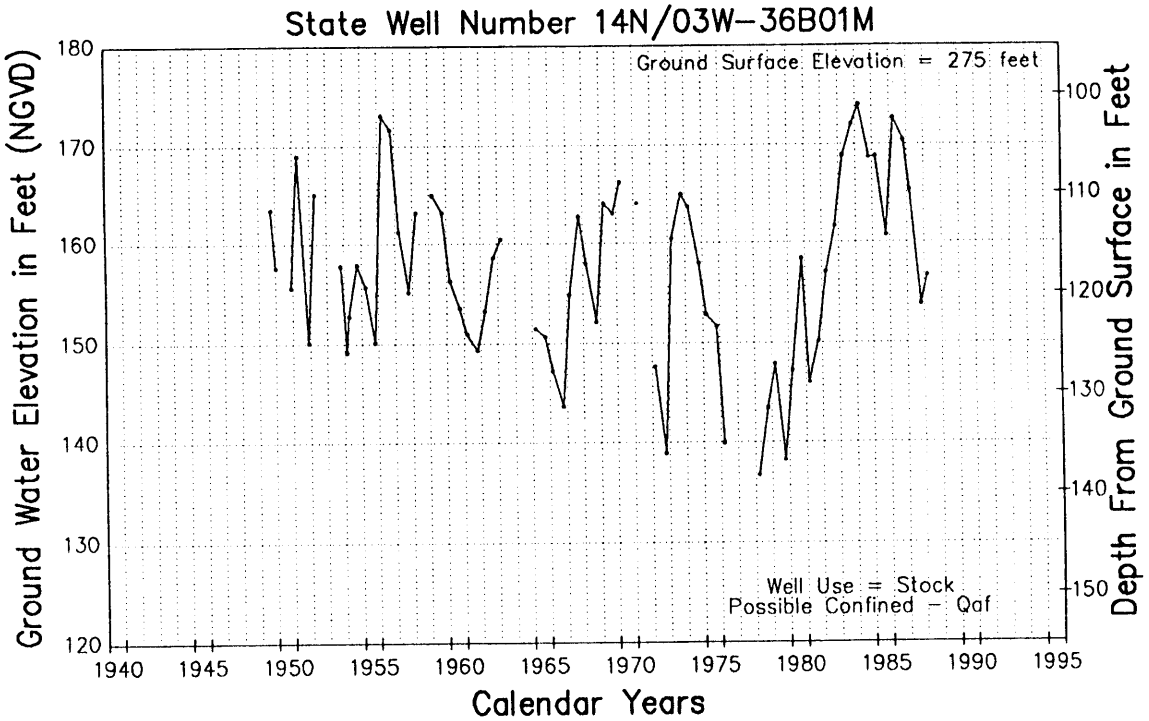
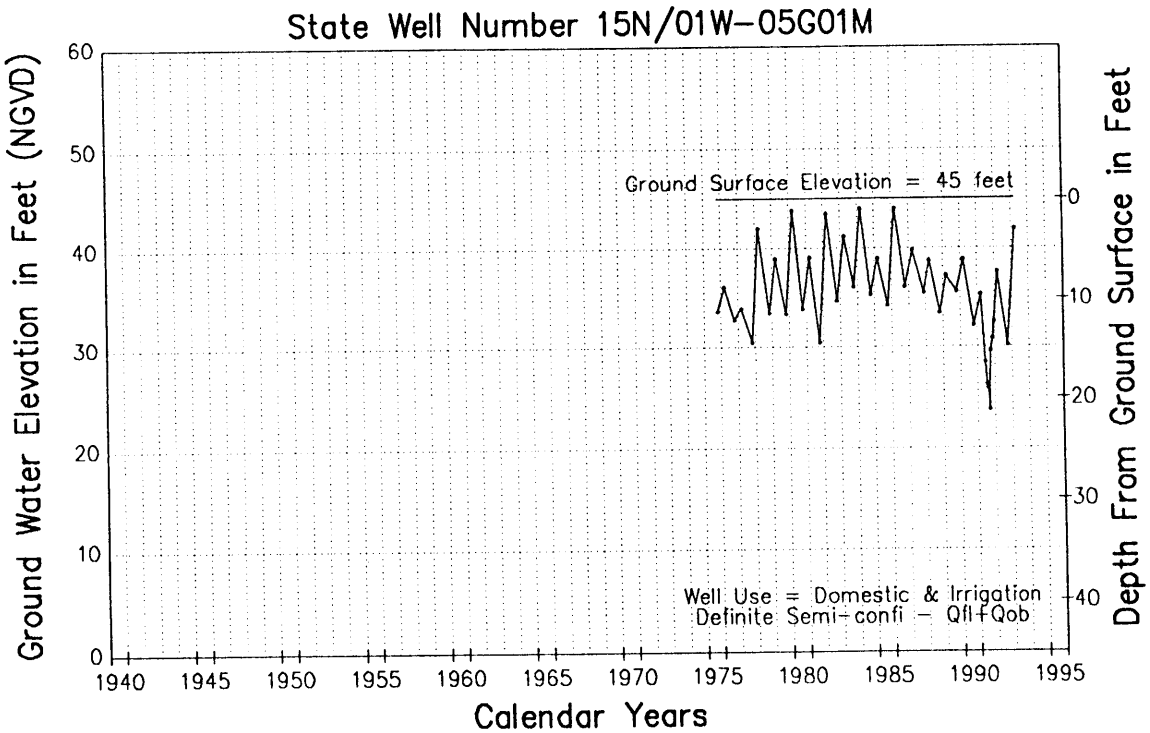
Department of Water Resources, Northern District

Sacramento Valley Ground Water Basin
Colusa County





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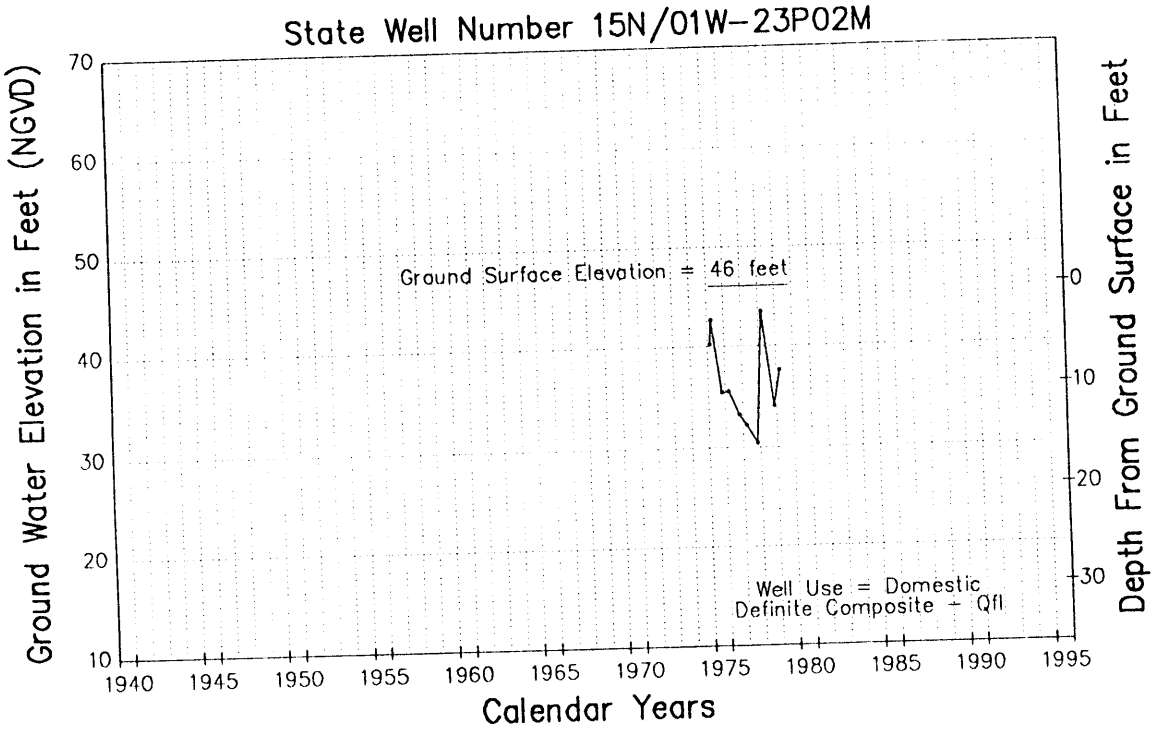
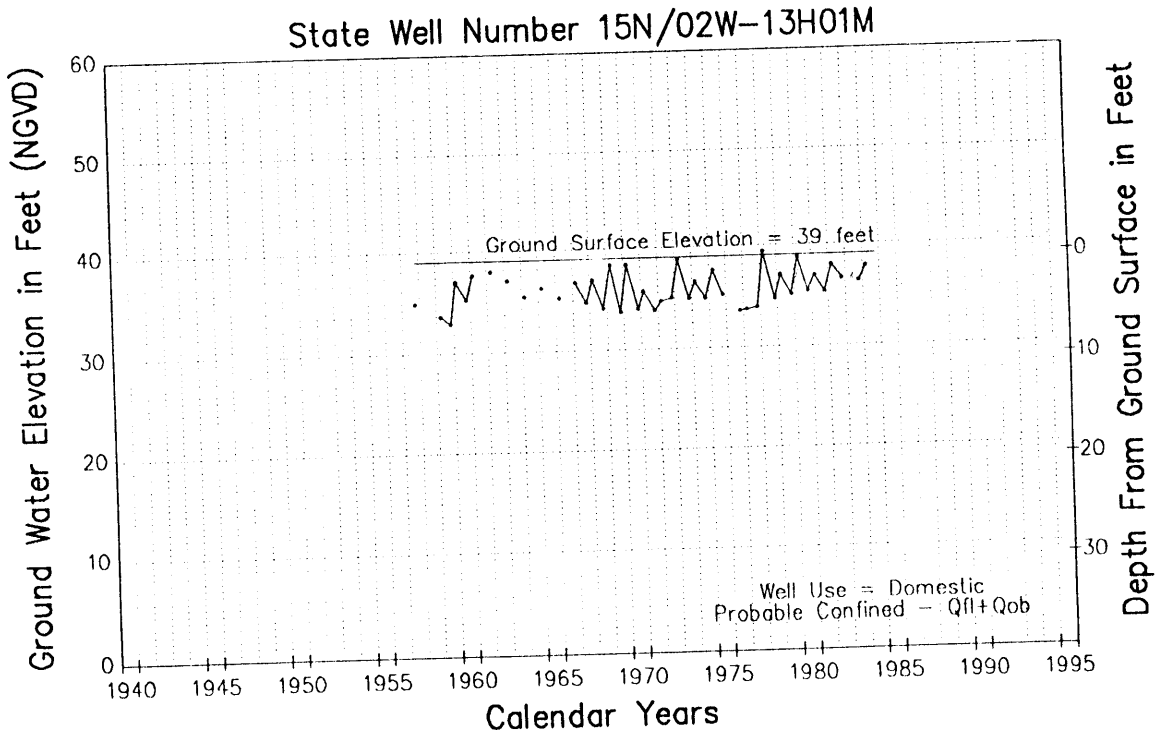
Department of Water Resources, Northern District

Sacramento Valley Ground Water Basin
Colusa County





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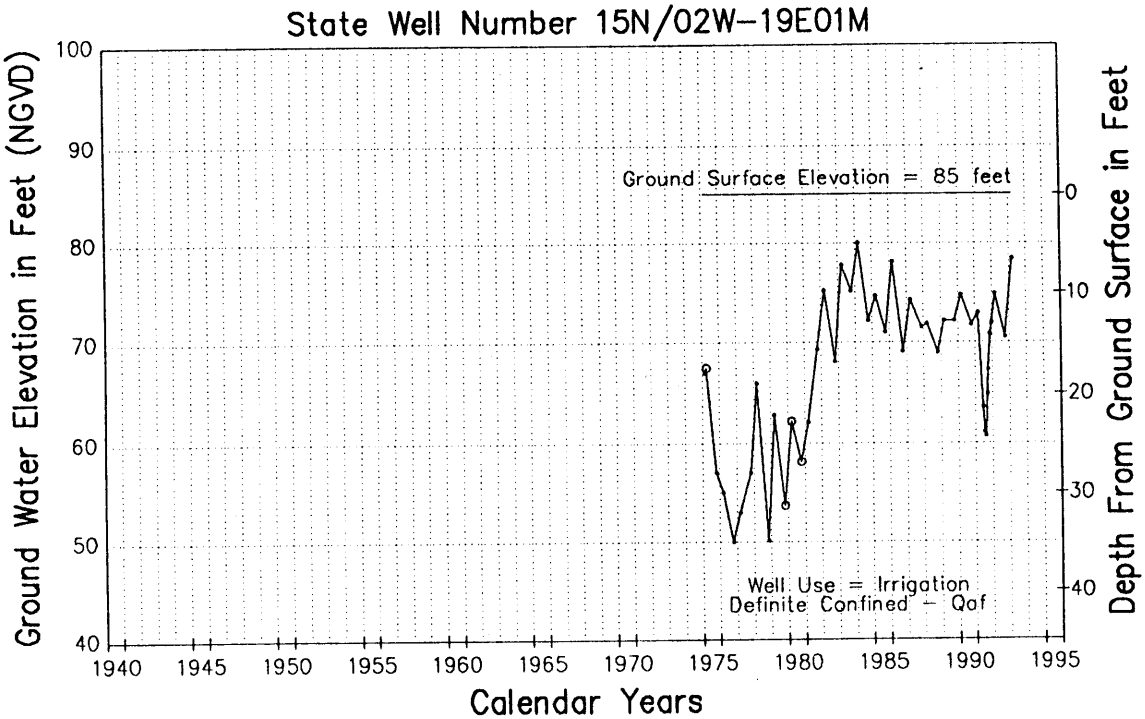
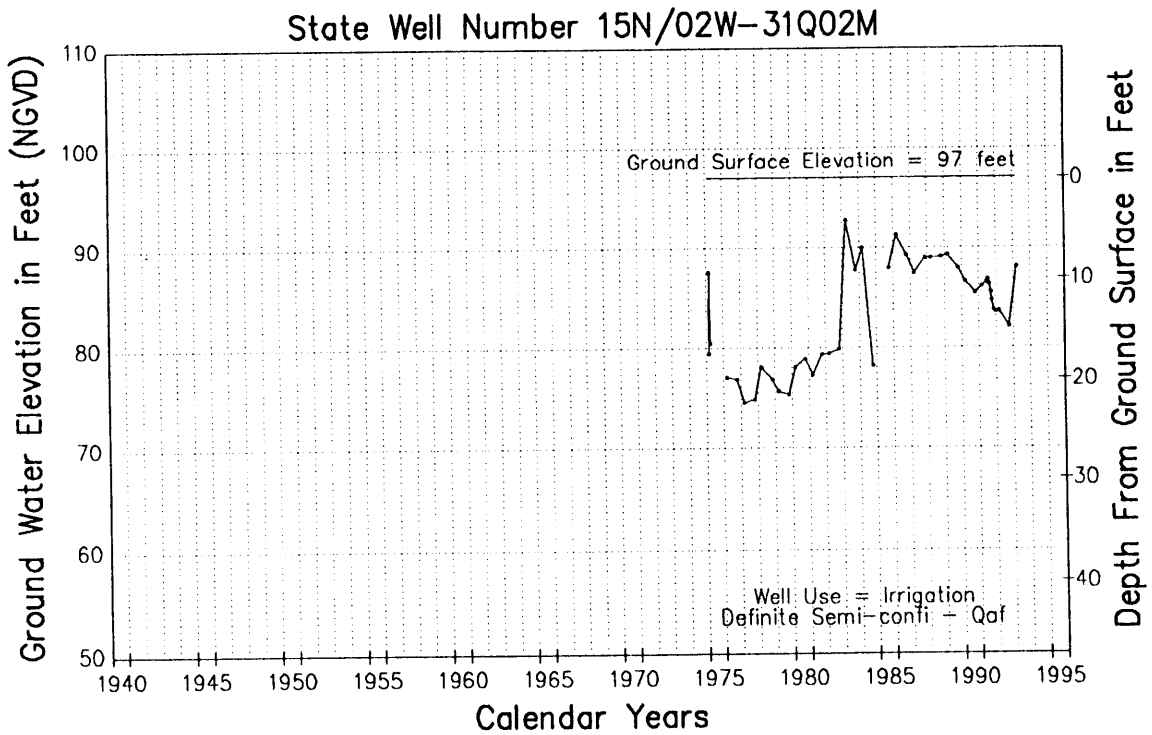
Department of Water Resources, Northern District

Sacramento Valley Ground Water Basin
Colusa County





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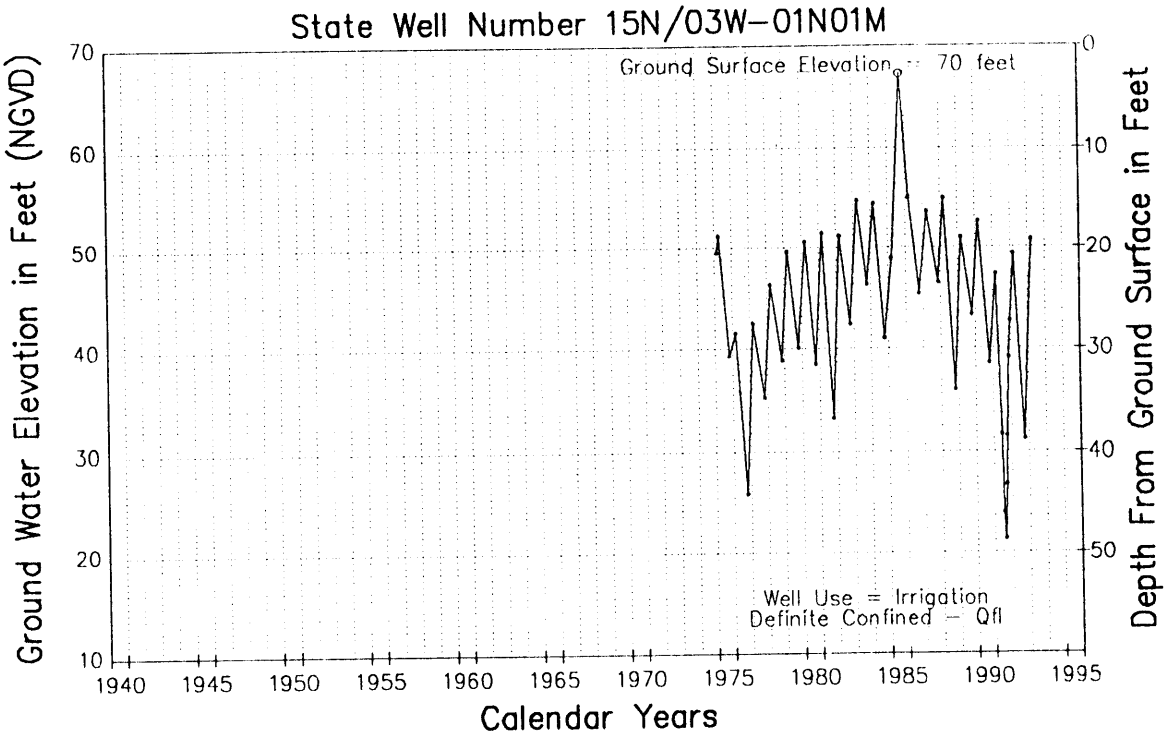
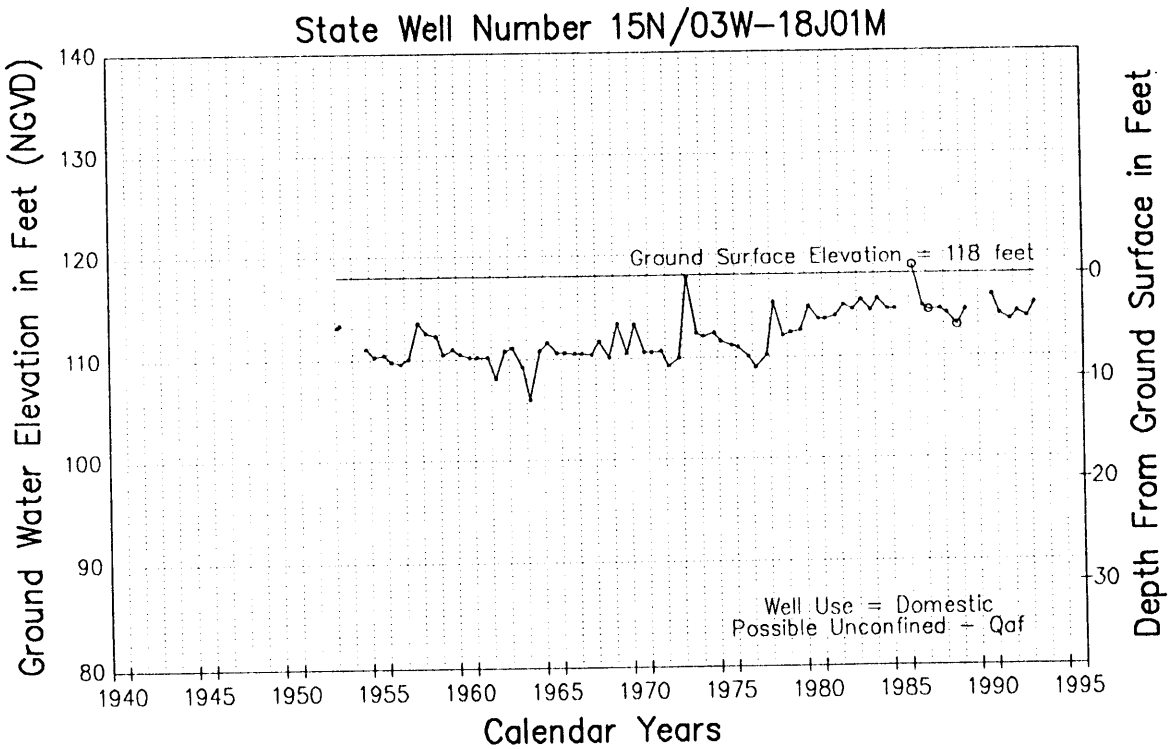
Department of Water Resources, Northern District

Sacramento Valley Ground Water Basin
Colusa County





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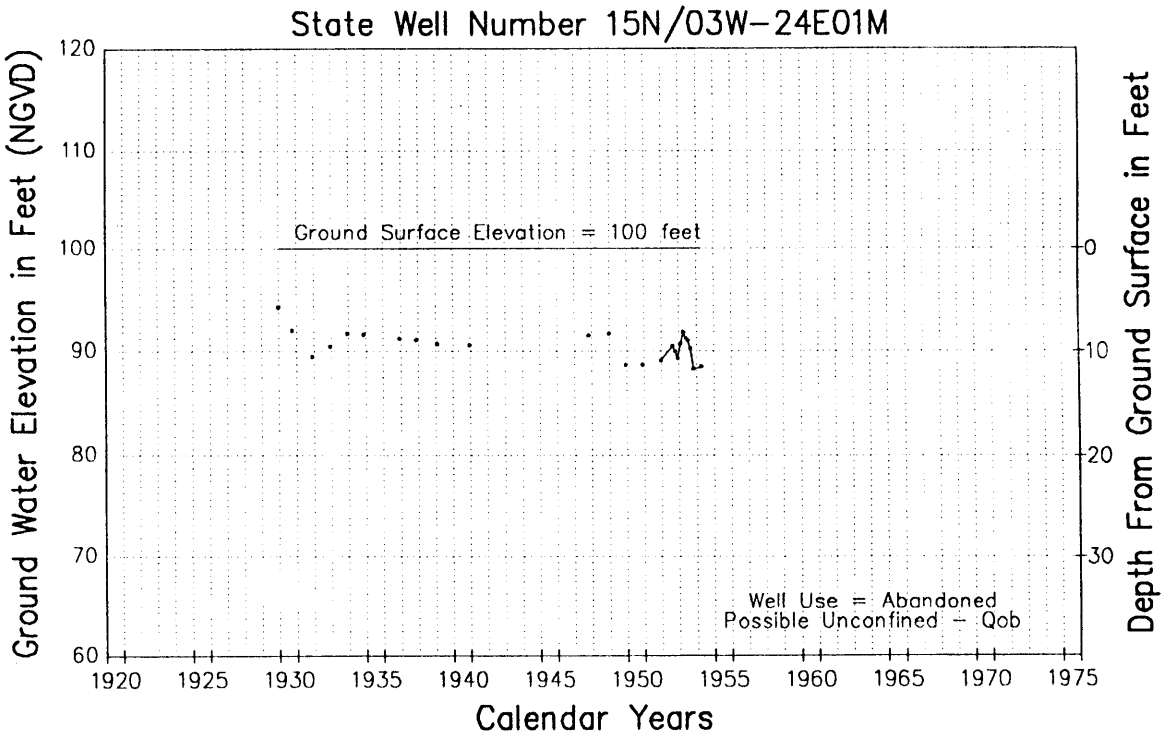
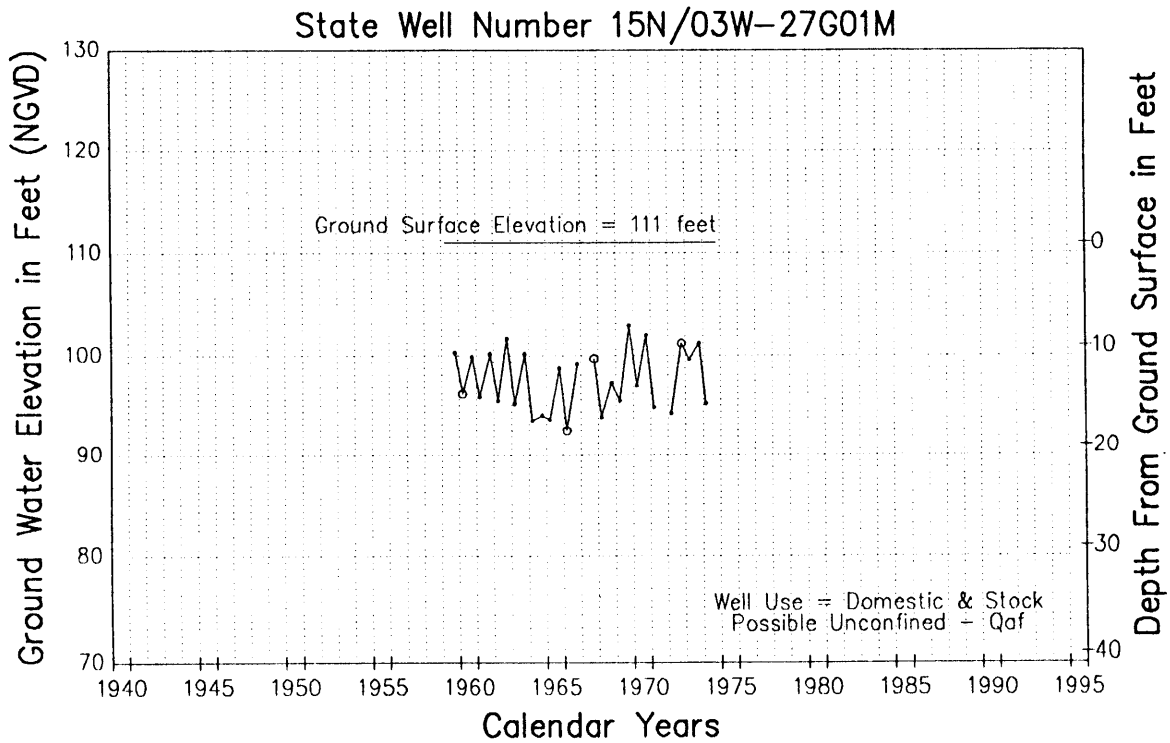
Department of Water Resources, Northern District

Sacramento Valley Ground Water Basin
Colusa County





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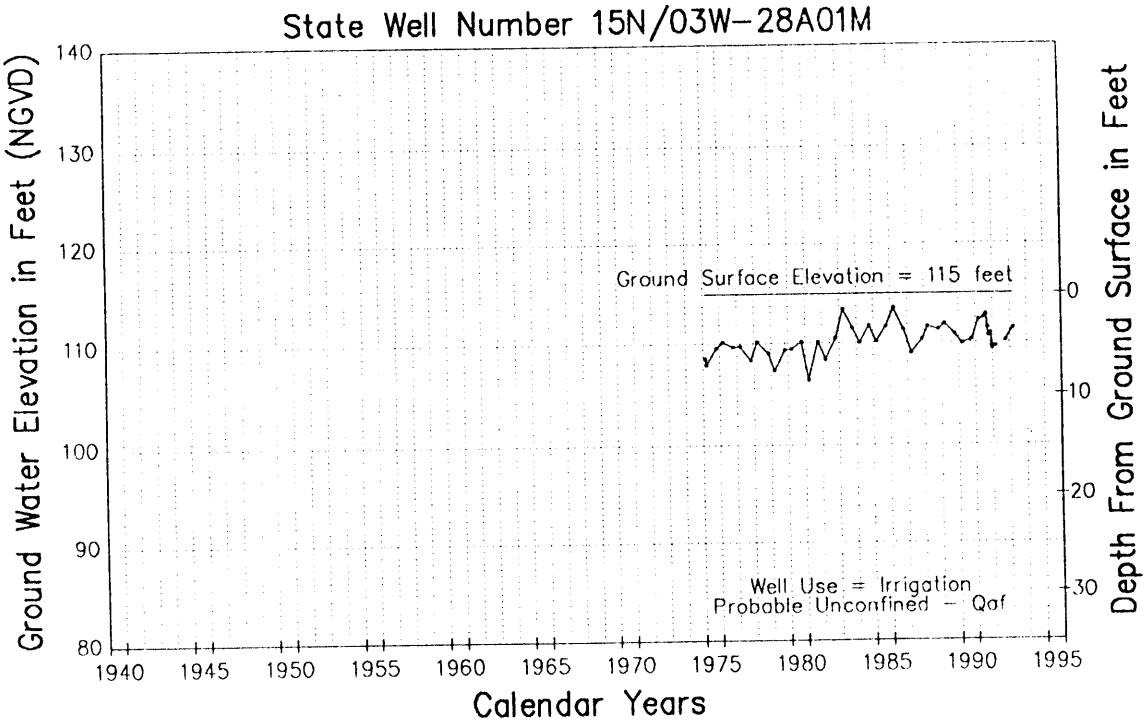
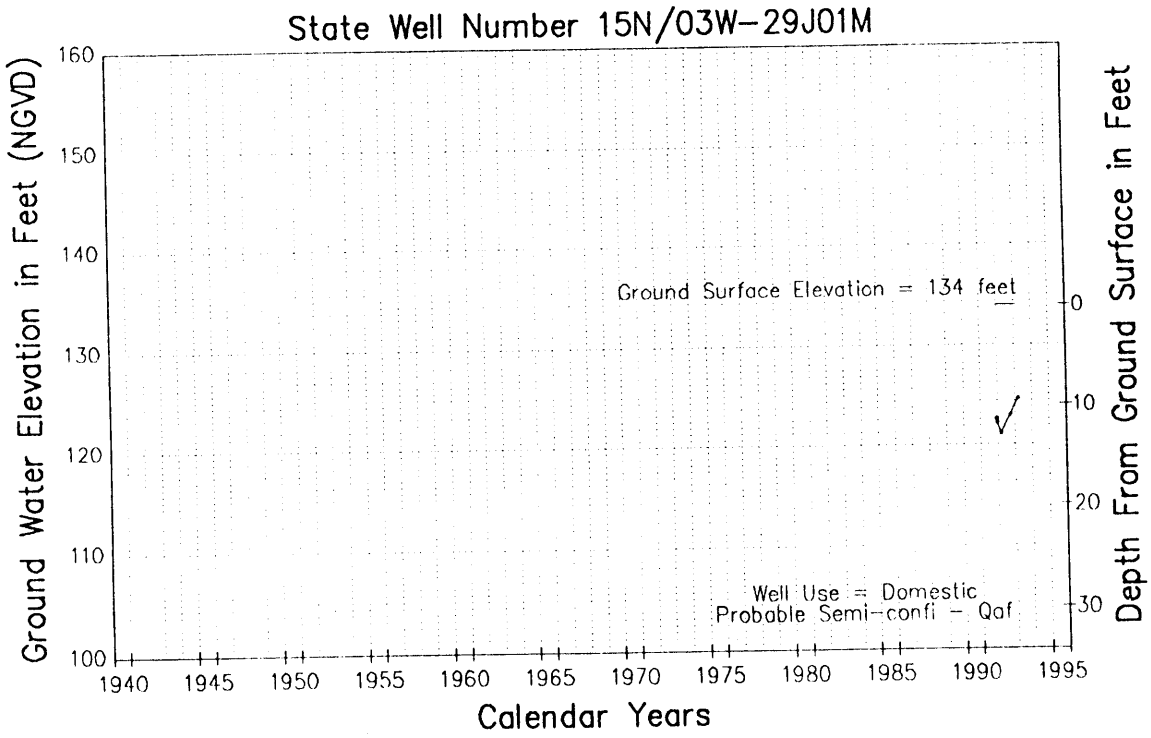
Sacramento Valley Ground Water Basin
Colusa County





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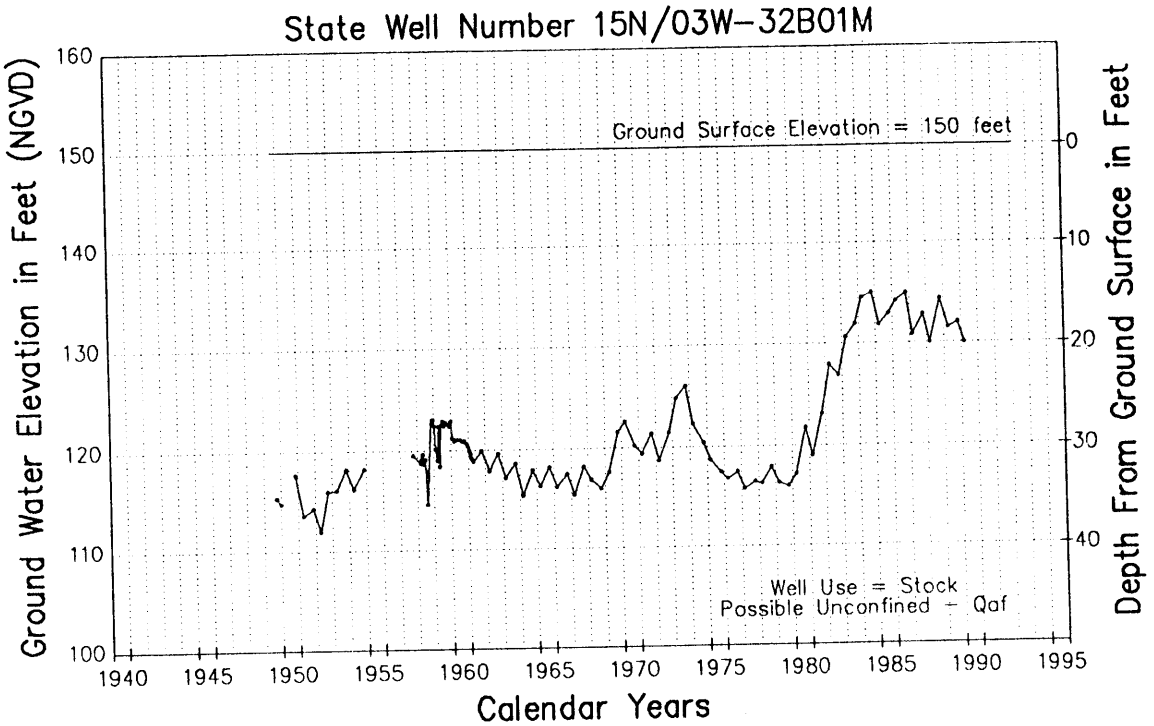
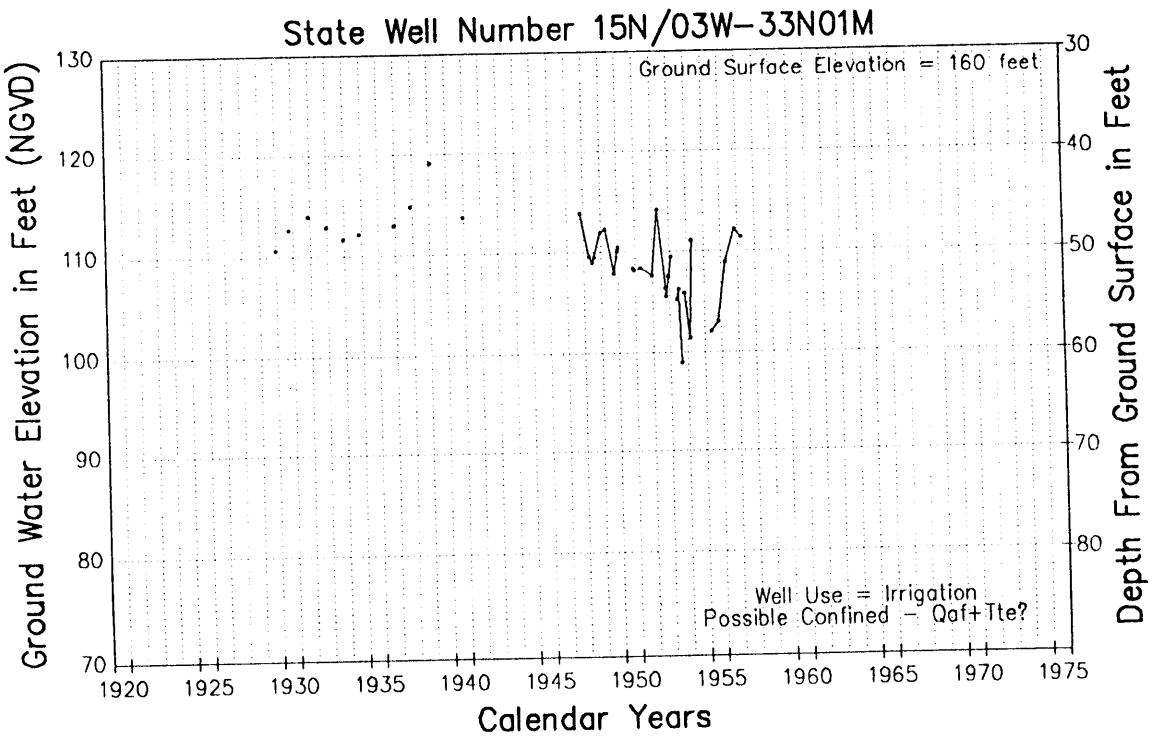
Department of Water Resources, Northern District

Sacramento Valley Ground Water Basin
Colusa County





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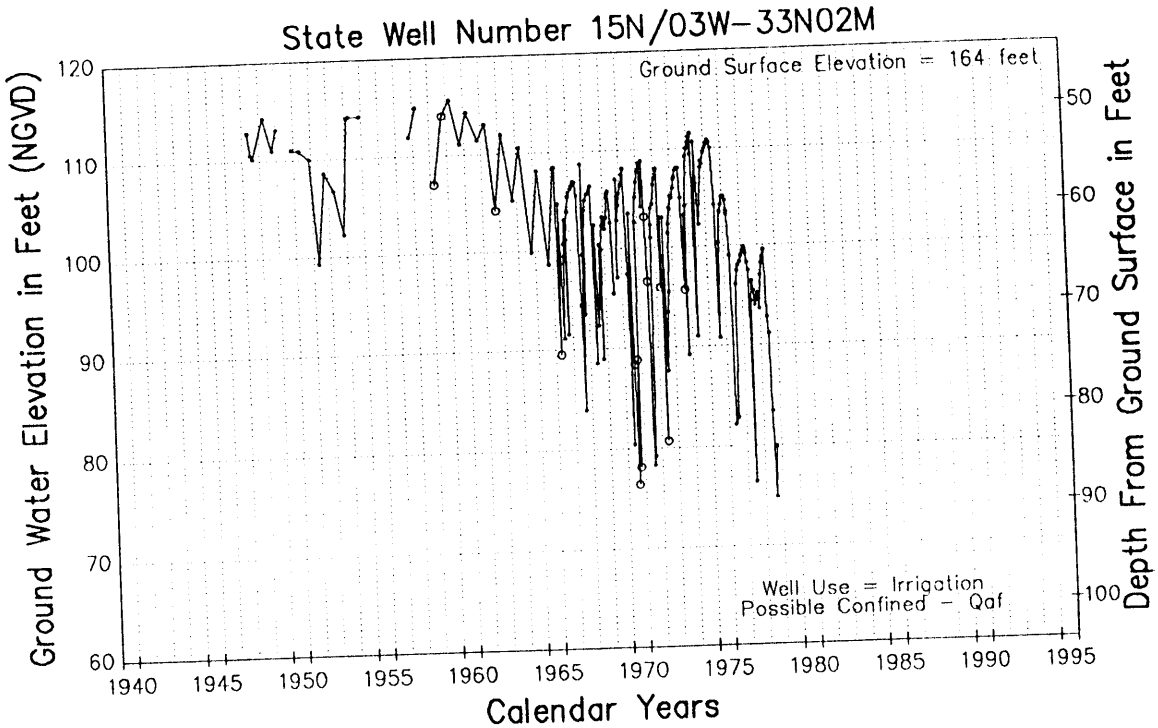
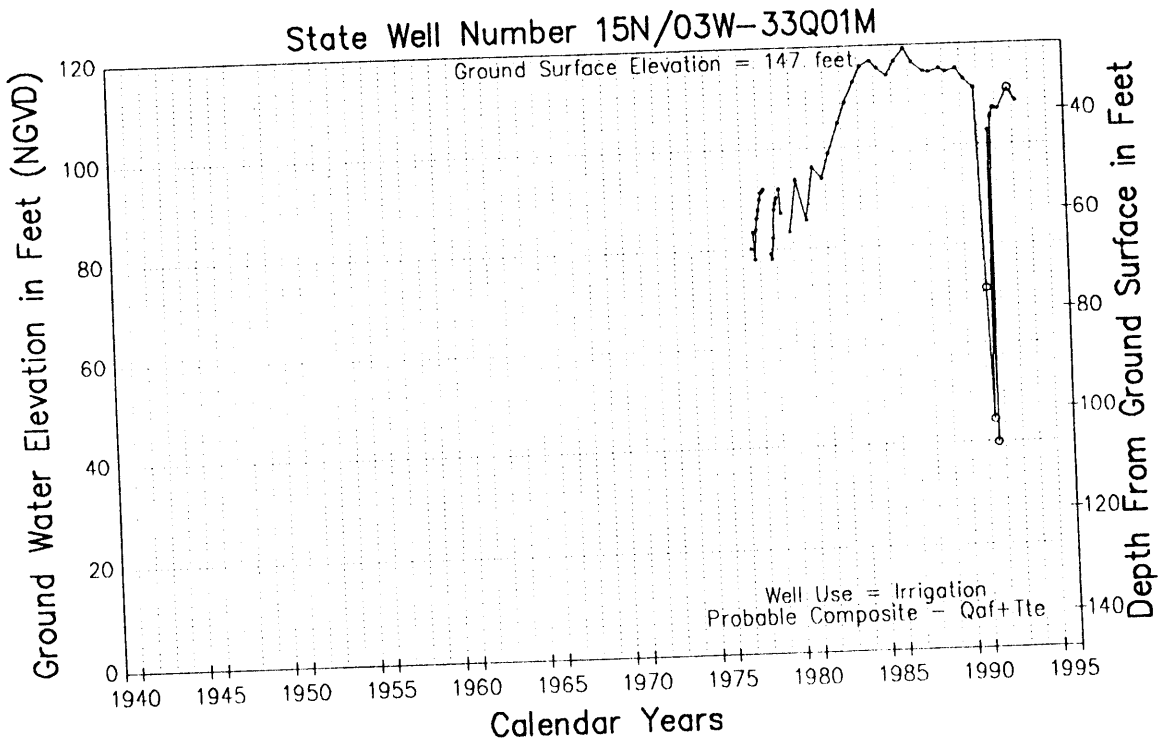
Sacramento Valley Ground Water Basin
Colusa County





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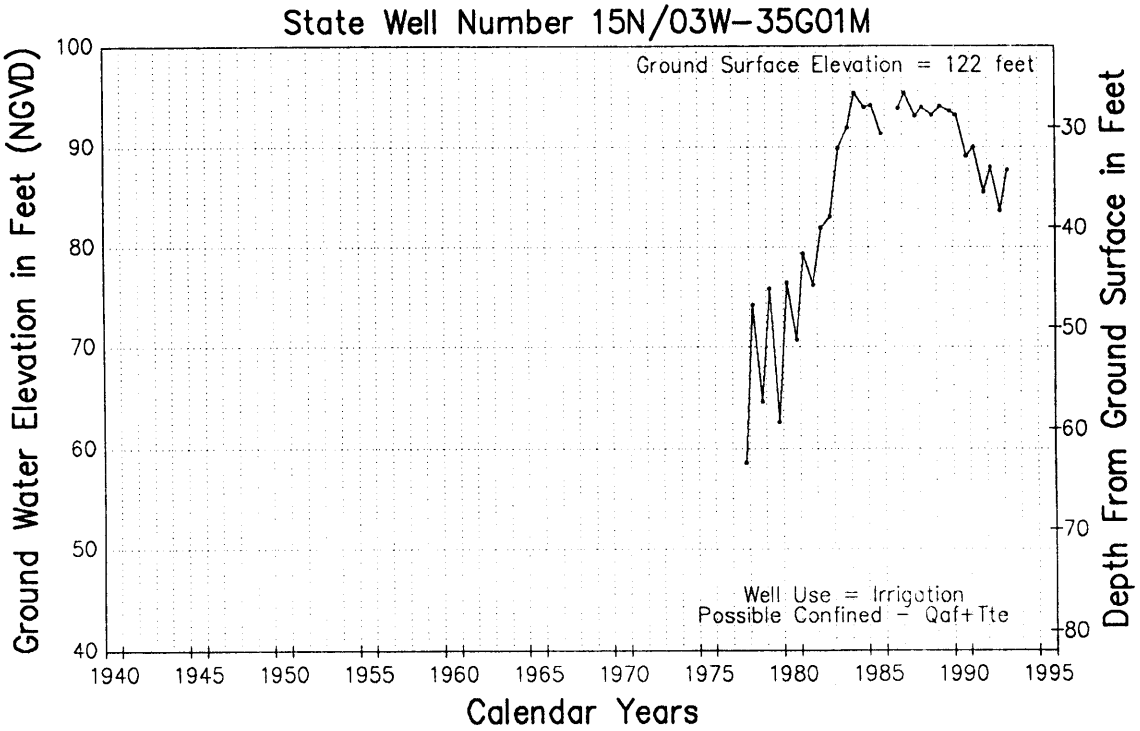
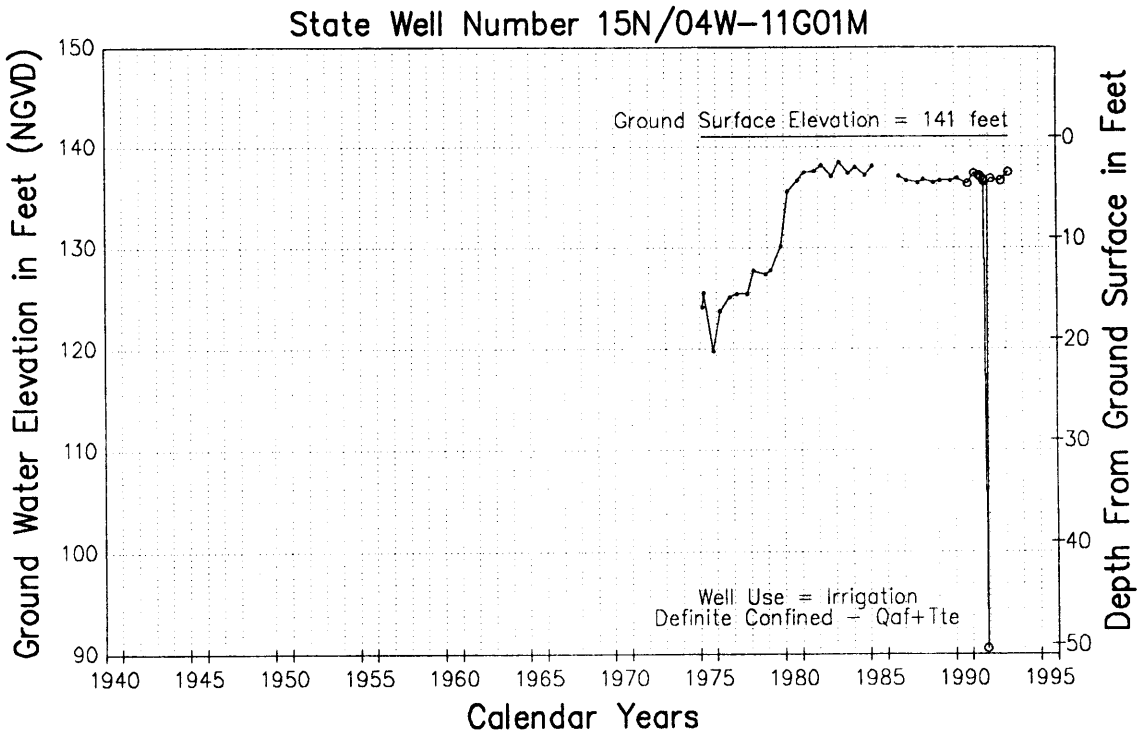
Sacramento Valley Ground Water Basin
Colusa County





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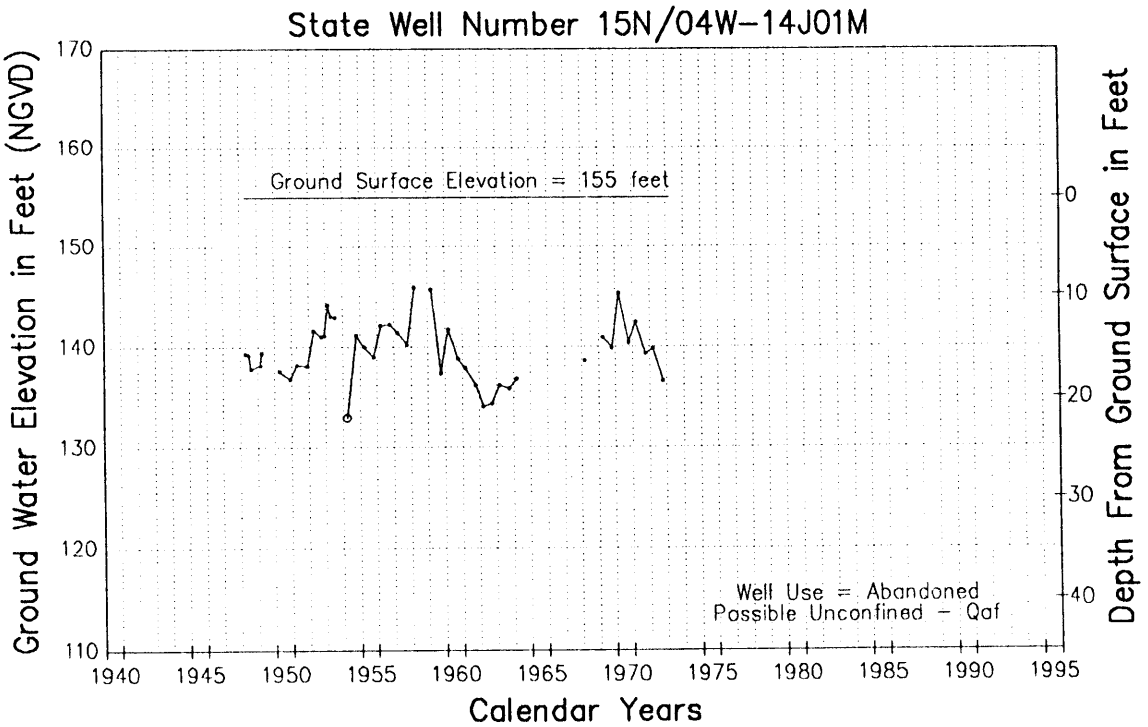
Department of Water Resources, Northern District

Sacramento Valley Ground Water Basin
Colusa County



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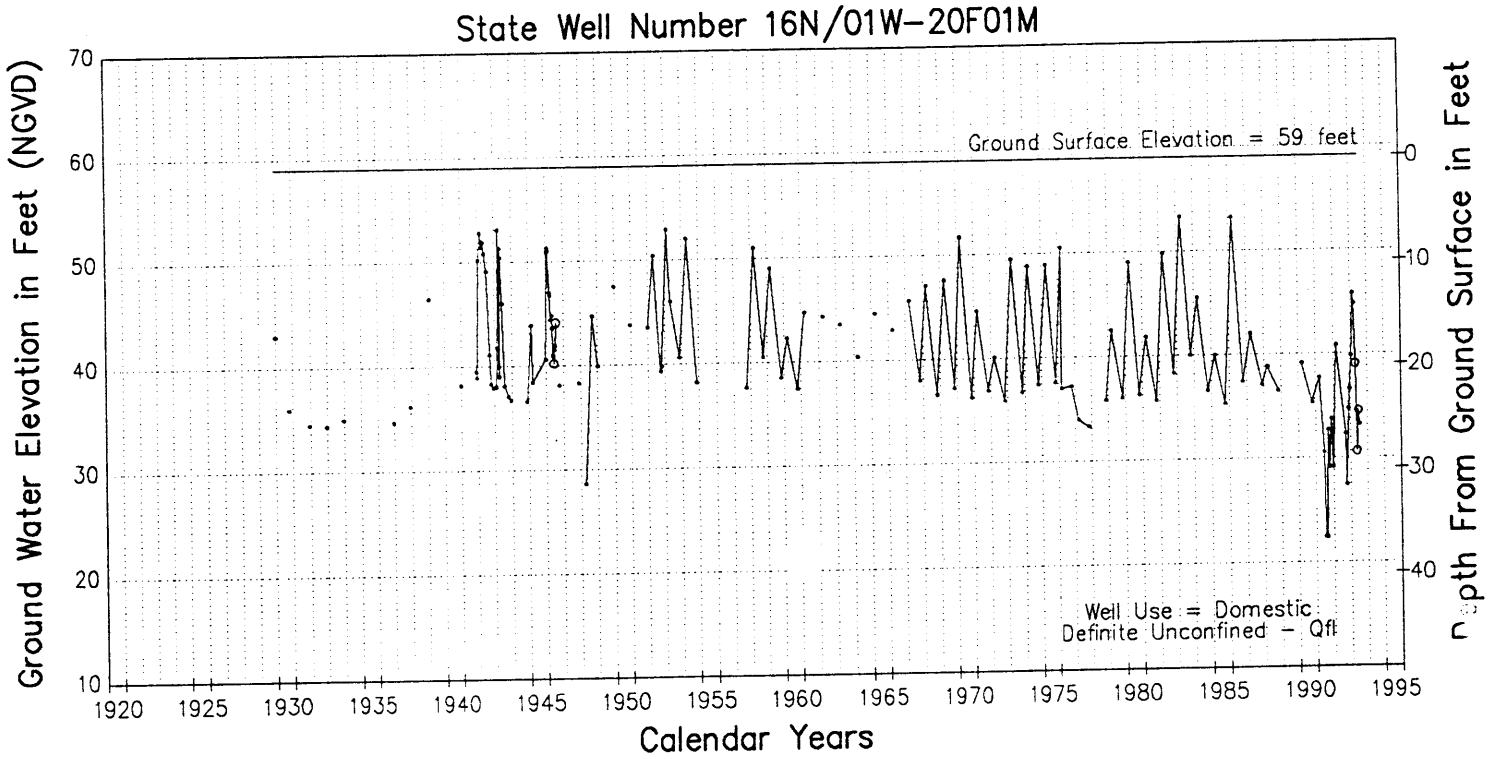
Department of Water Resources, Northern District

Sacramento Valley Ground Water Basin
Colusa County



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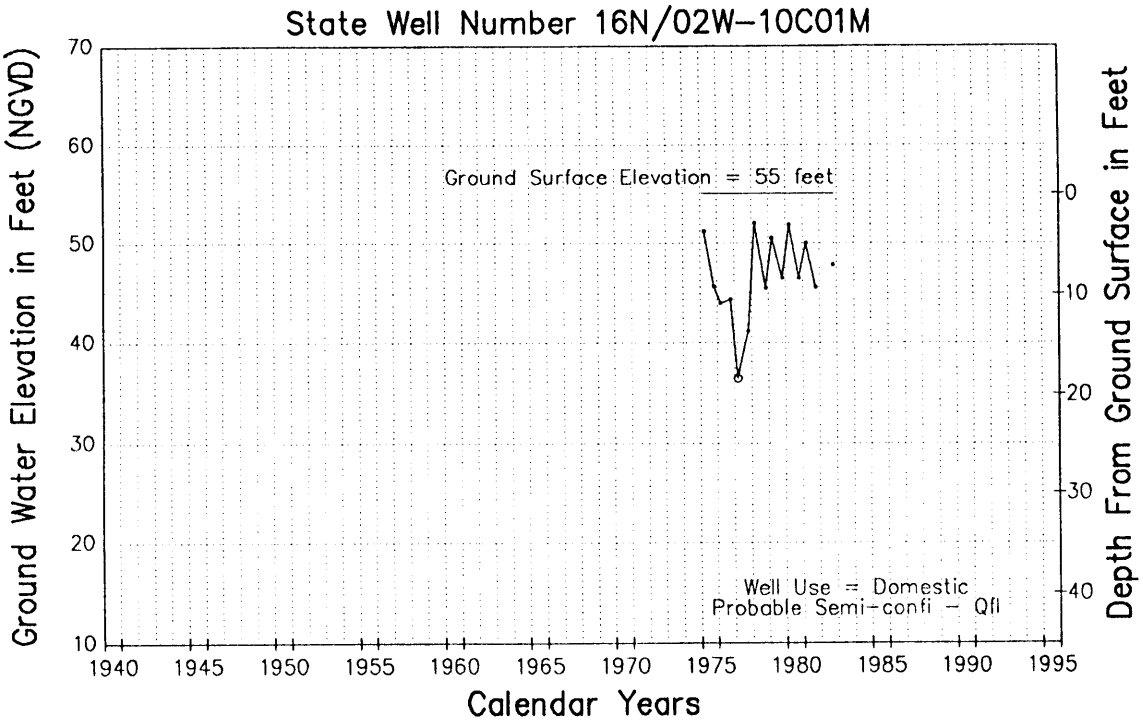
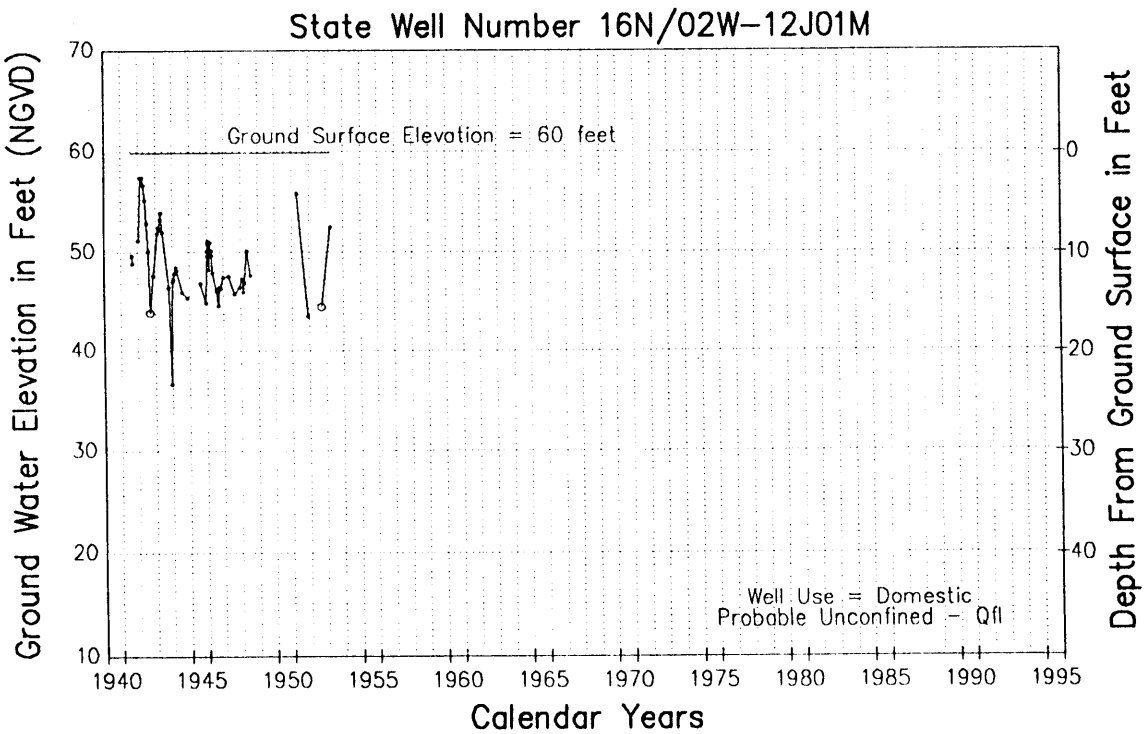
Department of Water Resources, Northern District

Sacramento Valley Ground Water Basin
Colusa County





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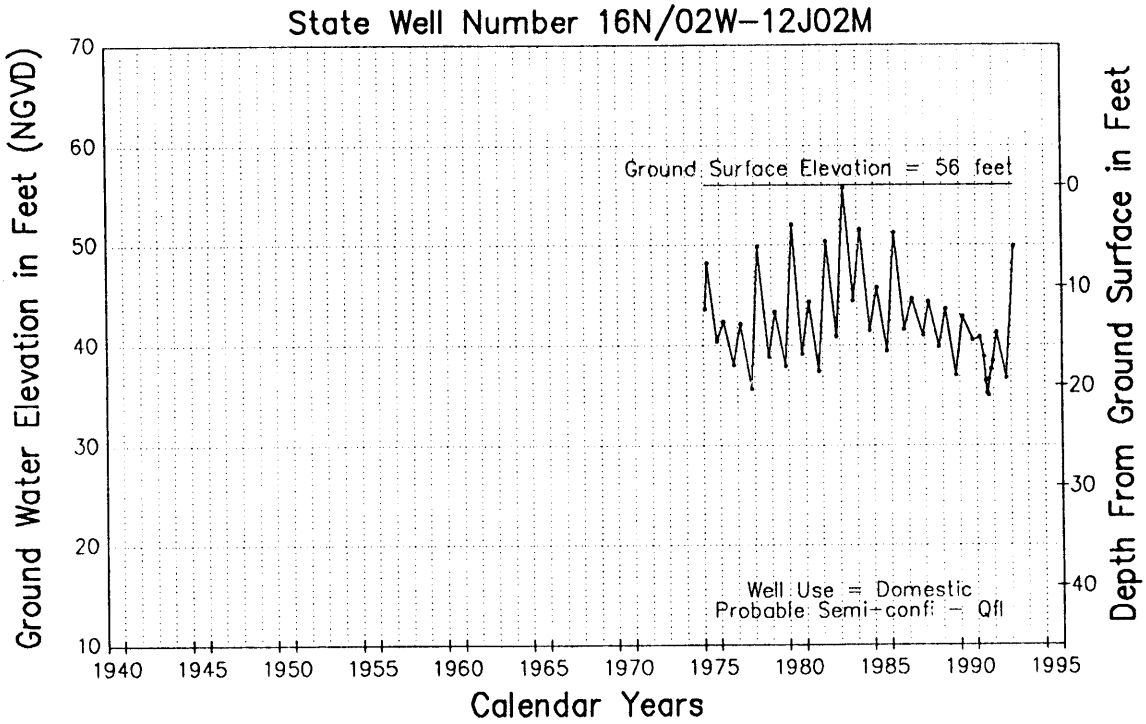
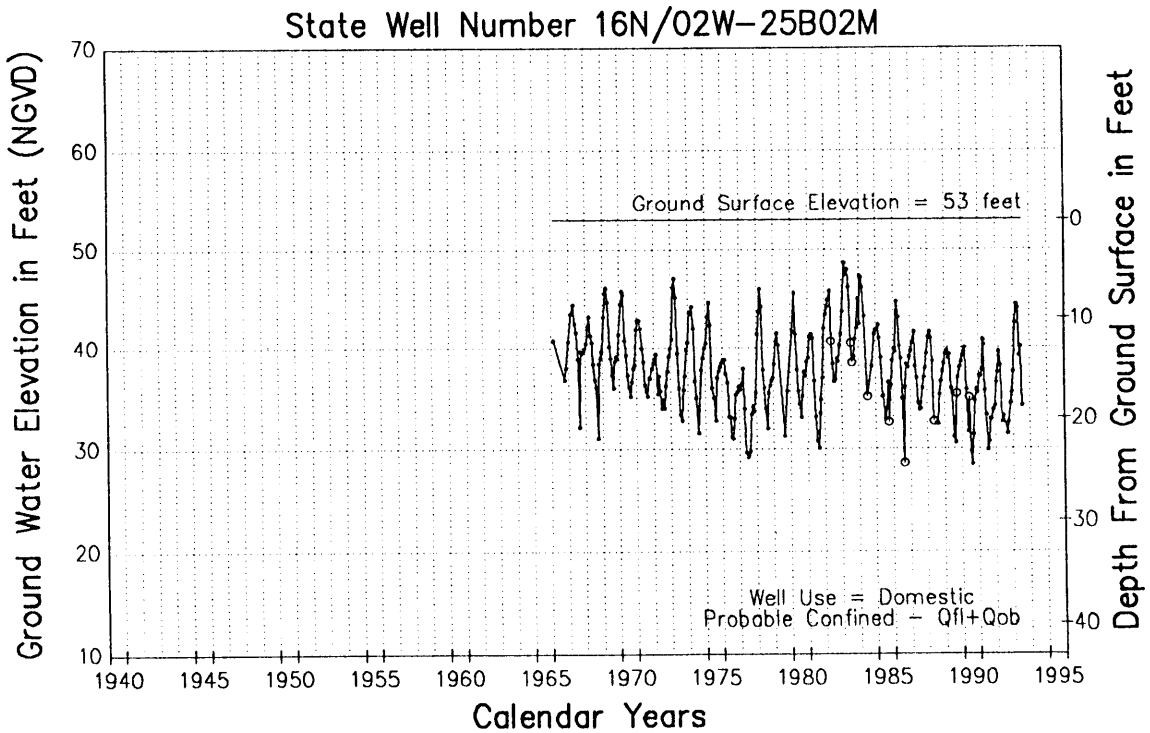
Department of Water Resources, Northern District

Sacramento Valley Ground Water Basin
Colusa County





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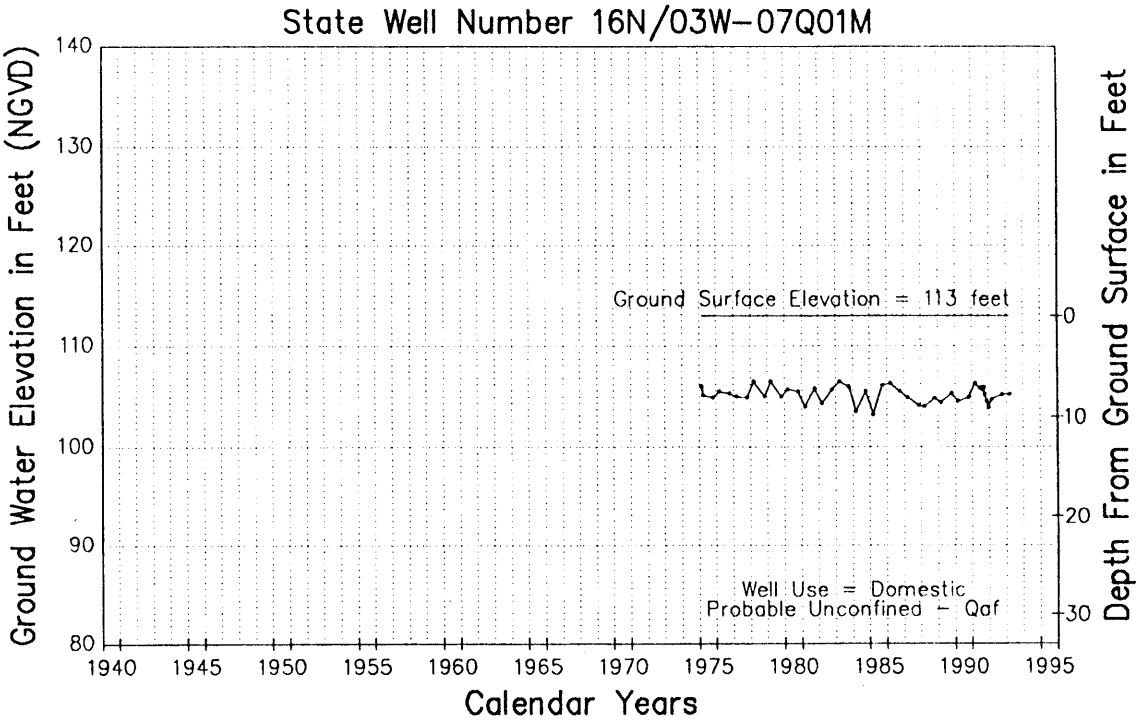
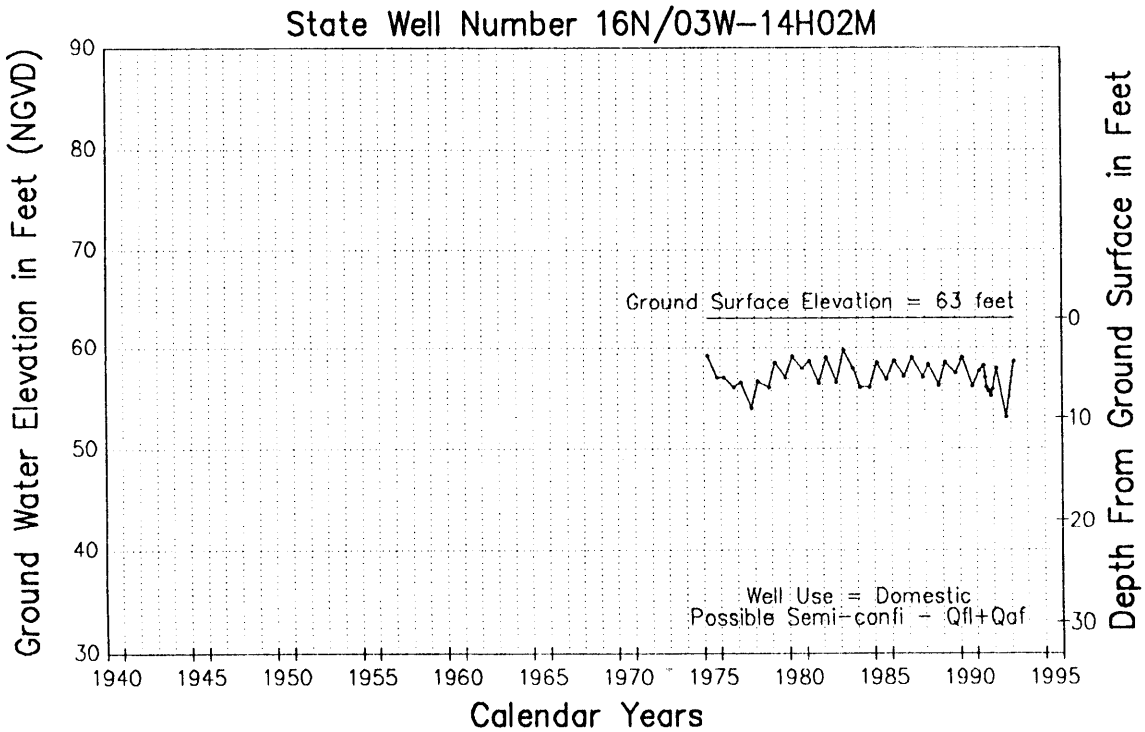
Department of Water Resources, Northern District

Sacramento Valley Ground Water Basin
Colusa County





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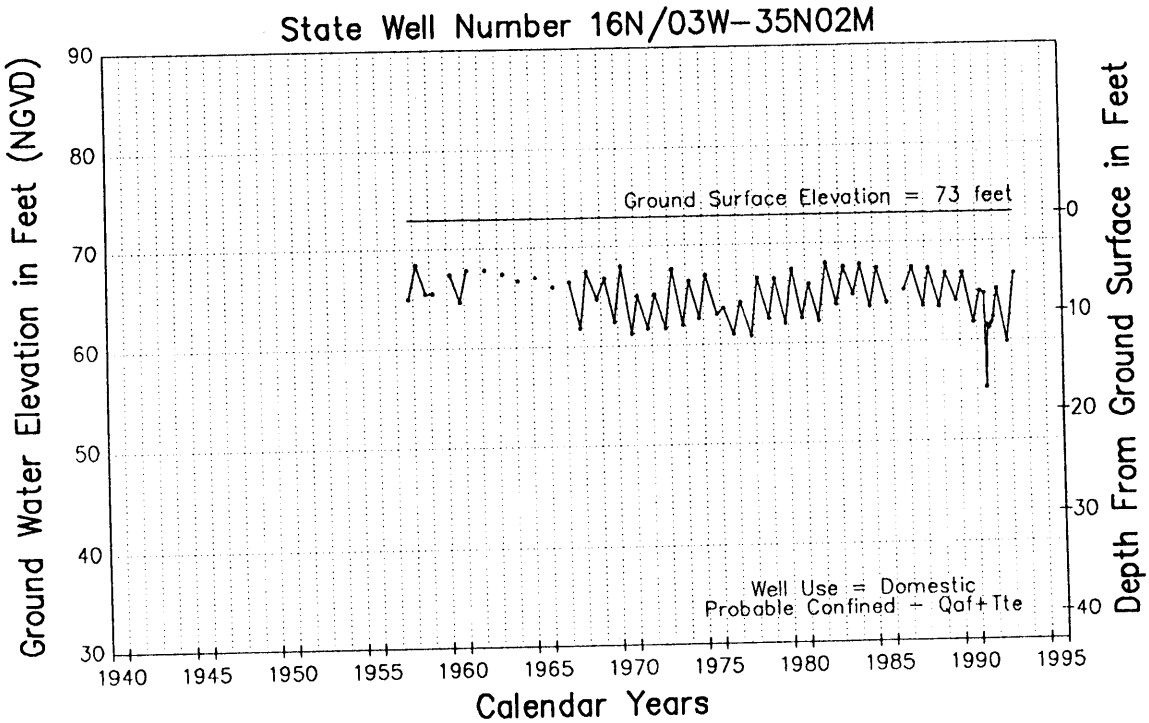
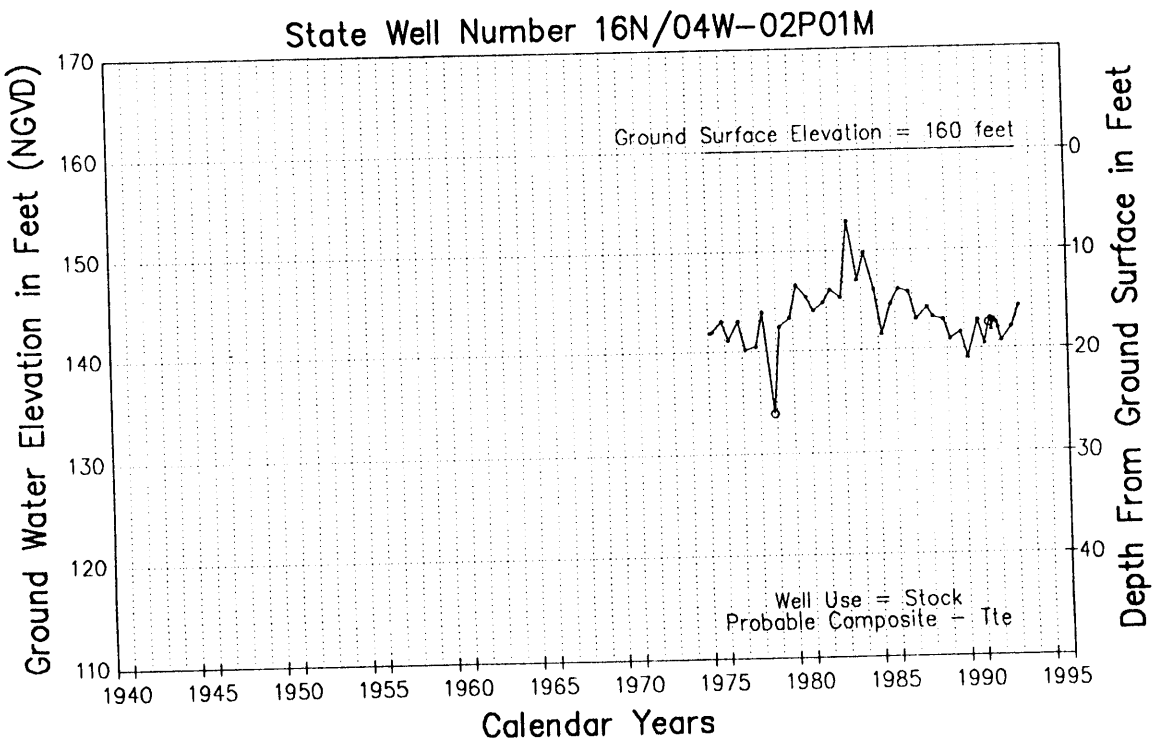
Department of Water Resources, Northern District

Sacramento Valley Ground Water Basin
Colusa County





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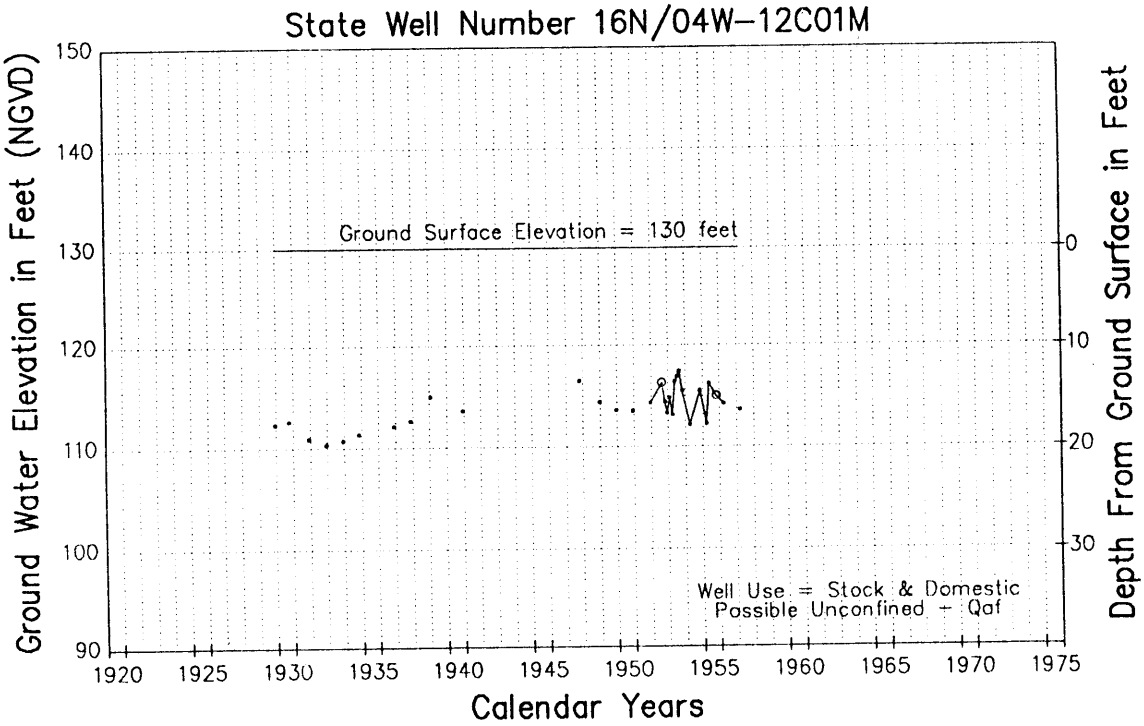
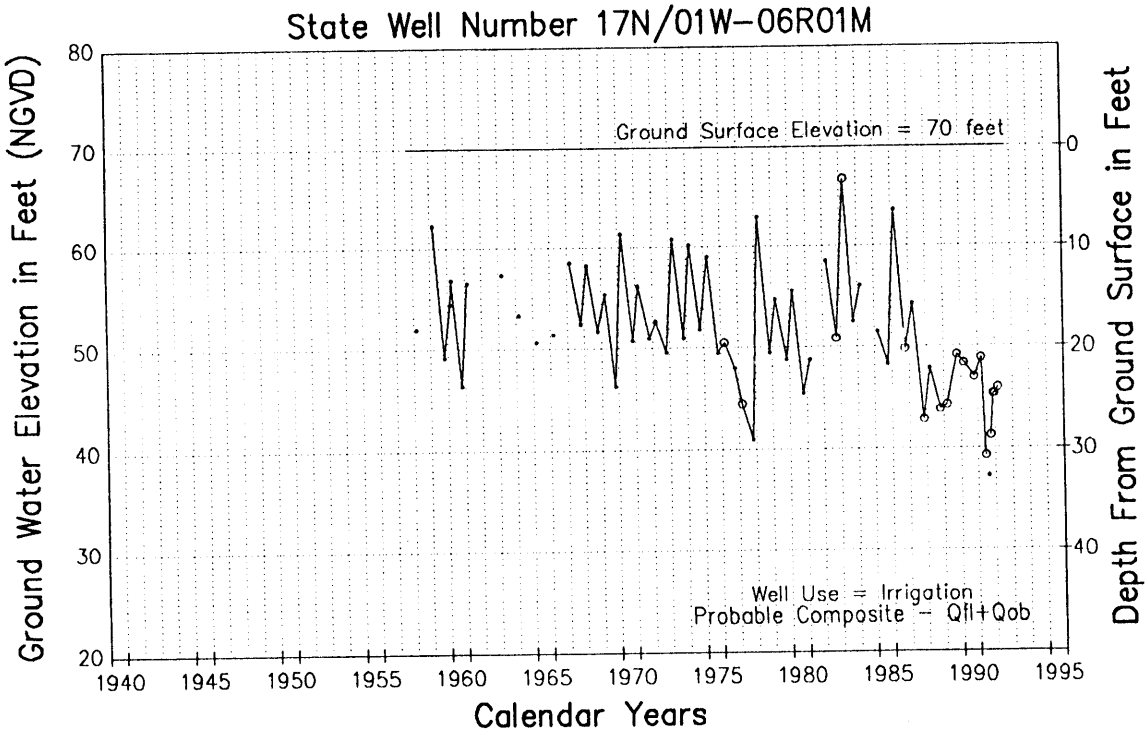
Department of Water Resources, Northern District

Sacramento Valley Ground Water Basin
Colusa County

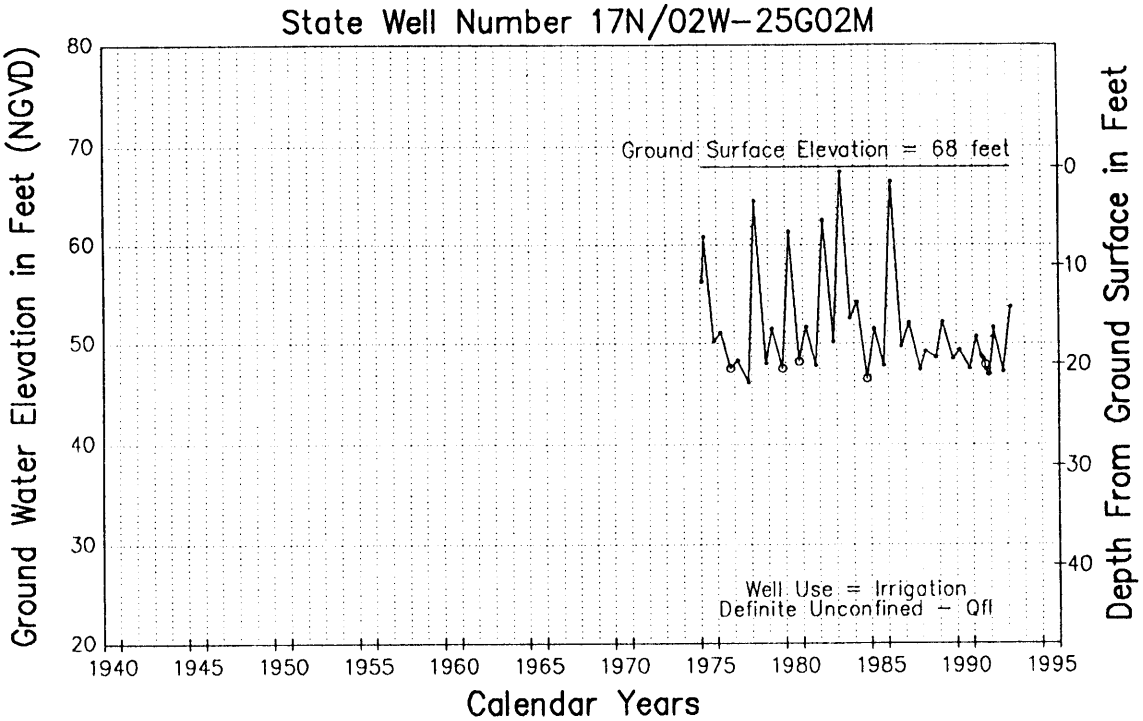


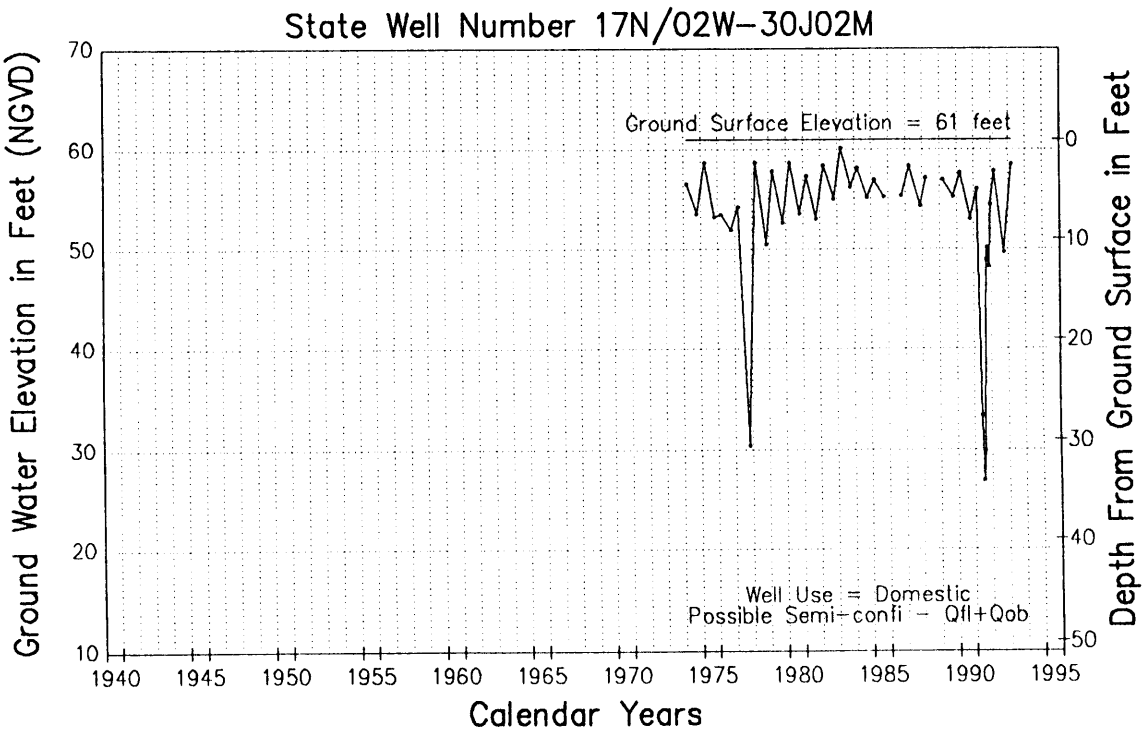


· Water surface elevation in well ∘ Questionable measurement

Department of Water Resources, Northern District

Sacramento Valley Ground Water Basin
Colusa County





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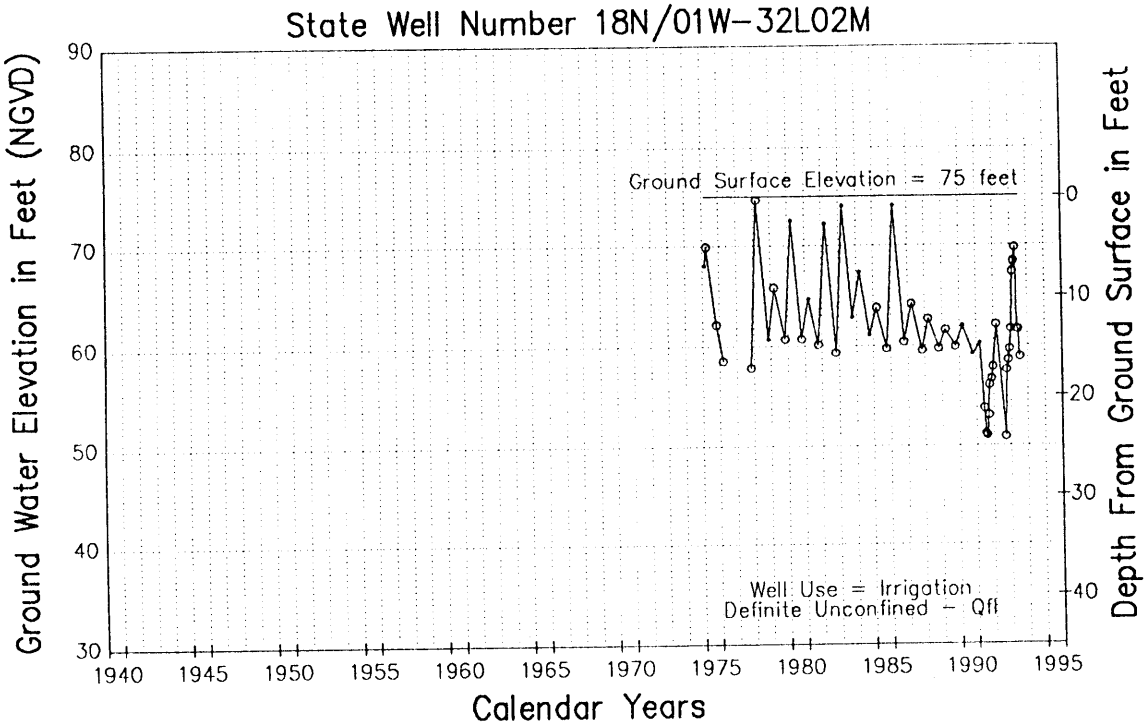
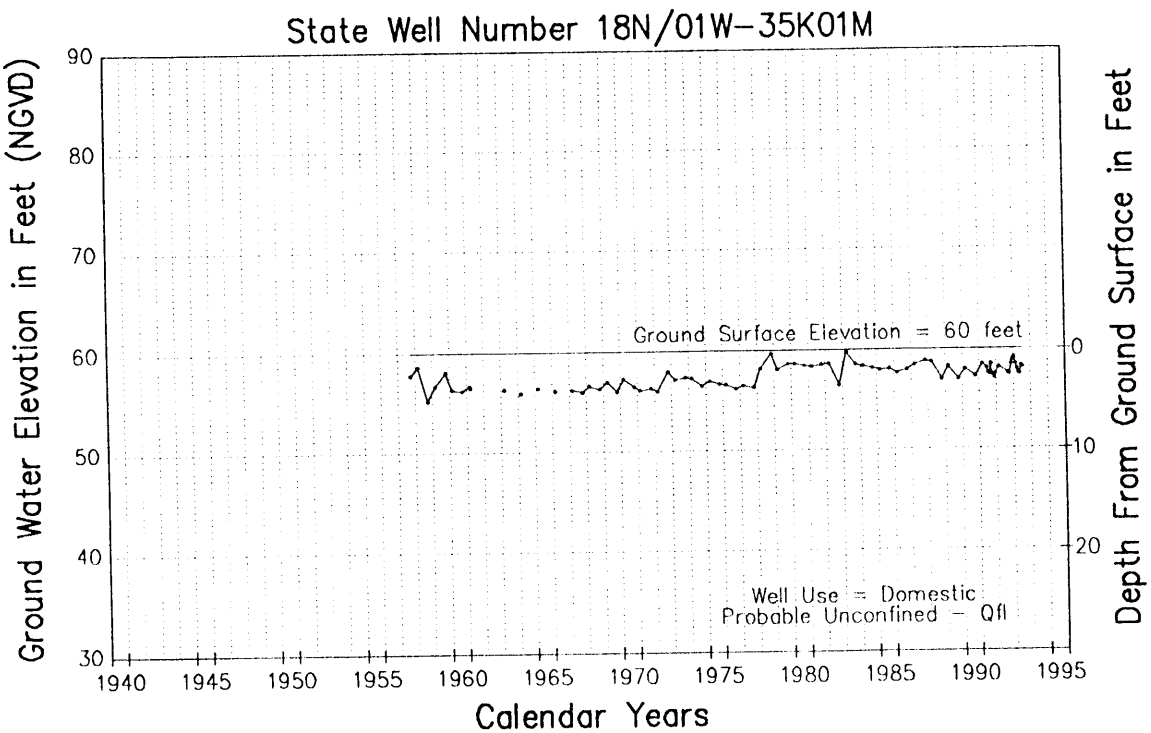
Department of Water Resources, Northern District

Sacramento Valley Ground Water Basin
Colusa County





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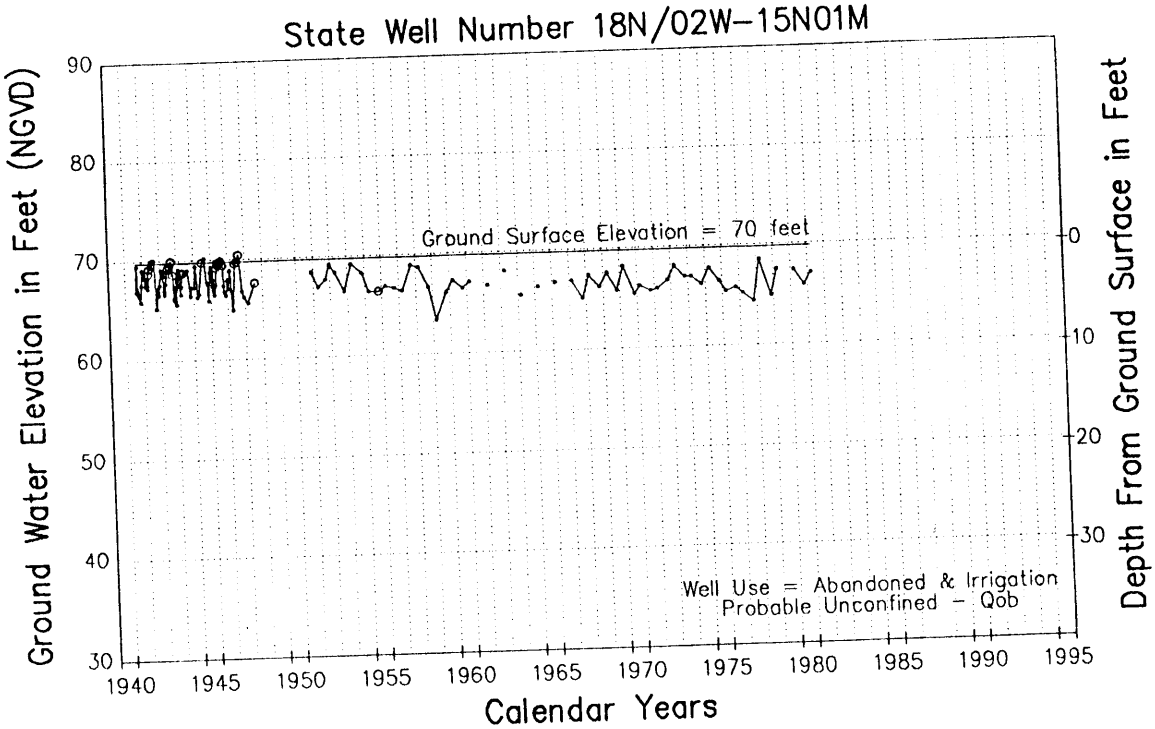
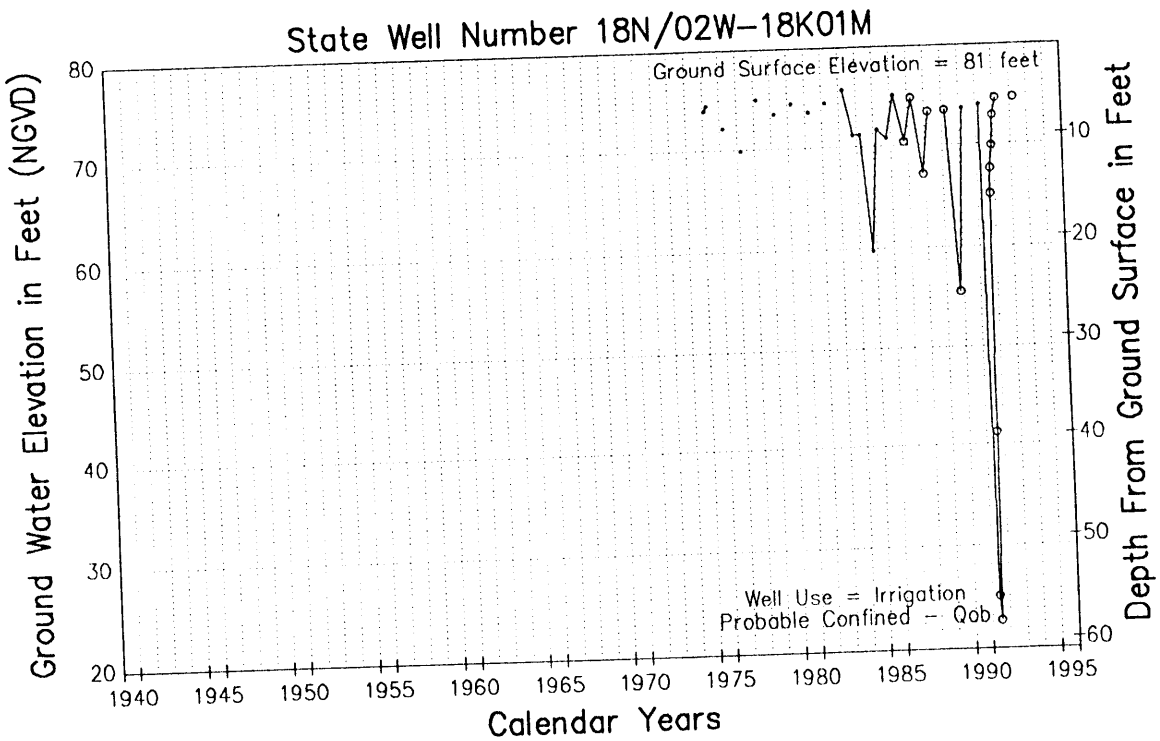
Department of Water Resources, Northern District

Sacramento Valley Ground Water Basin
Colusa County

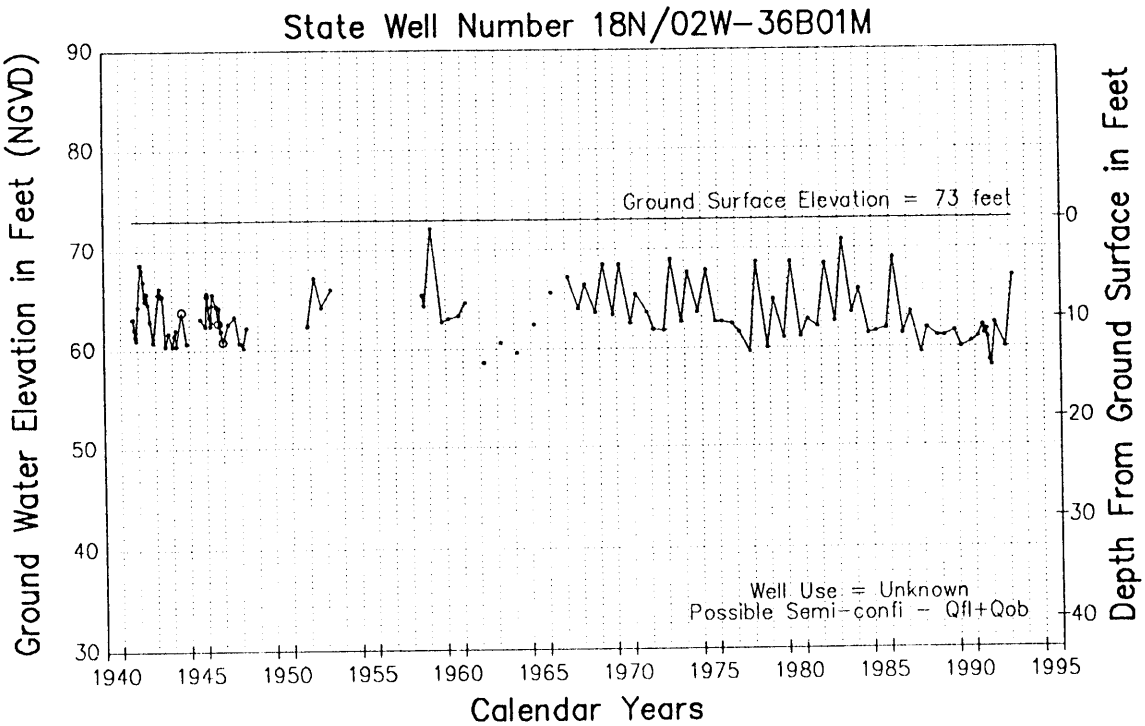




· Water surface elevation in well ∘ Questionable measurement

Department of Water Resources, Northern District

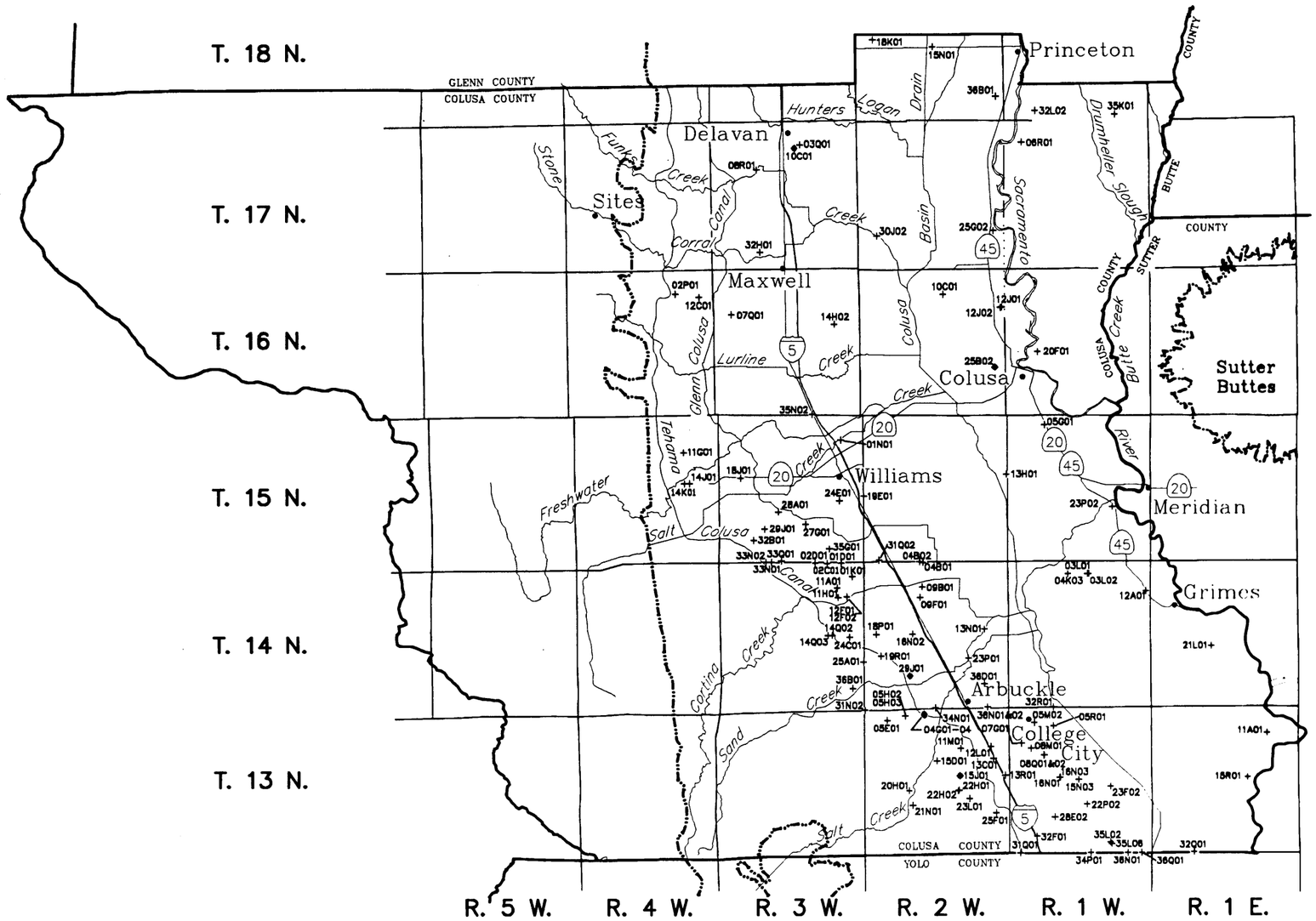
Sacramento Valley Ground Water Basin
Colusa County

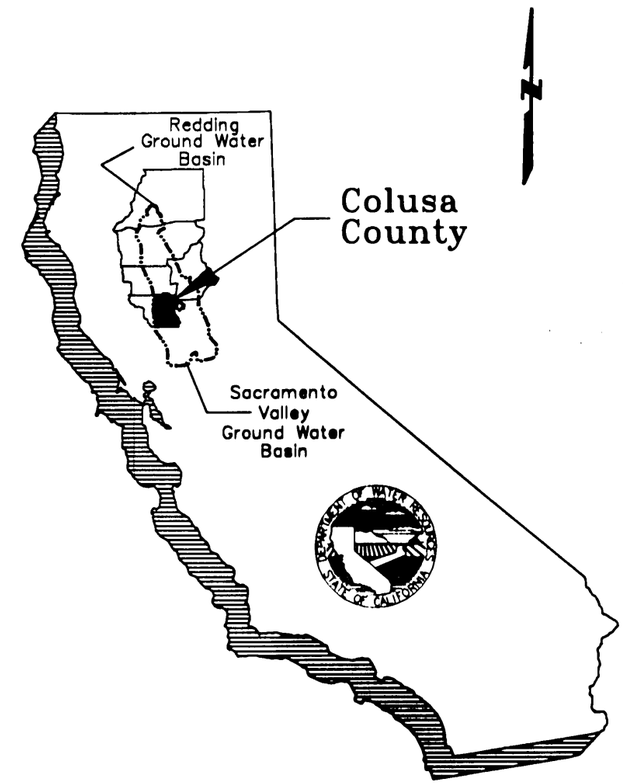


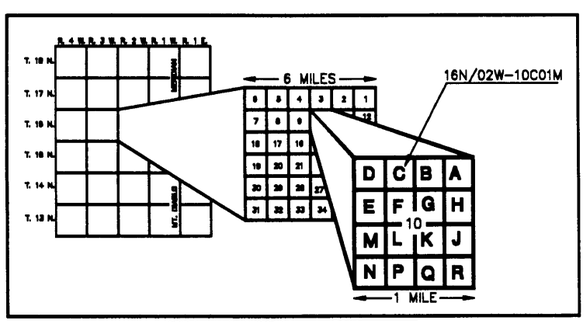
· Water surface elevation in well ∘ Questionable measurement

Department of Water Resources, Northern District

Plate 1
Location of Ground Water Level Monitoring Wells in Colusa County







State Well Numbering System

EXPLANATION

+ Semi-Annually Monitored Well

• Monthly Monitored Well

09A01 Section Number, Tract, and Sequence Number of State Well Number. Combined with the Township and Range to Determine the Entire State Well Number.

—— Colusa County Line

····· Township and Range Lines projected

—·—·— Sacramento Valley Ground Water Basin Boundary

STATE OF CALIFORNIA
THE RESOURCES AGENCY
DEPARTMENT OF WATER RESOURCES
NORTHERN DISTRICT

Ground Water Levels in the Sacramento Valley Ground Water Basin, Colusa County

LOCATION OF GROUND WATER LEVEL MONITORING WELLS
January 1994

0 2 4 6 8 10
Miles