

Appendix A
Historical Surface Water Diversion Data and IDC
Applied Water Demand Comparisons

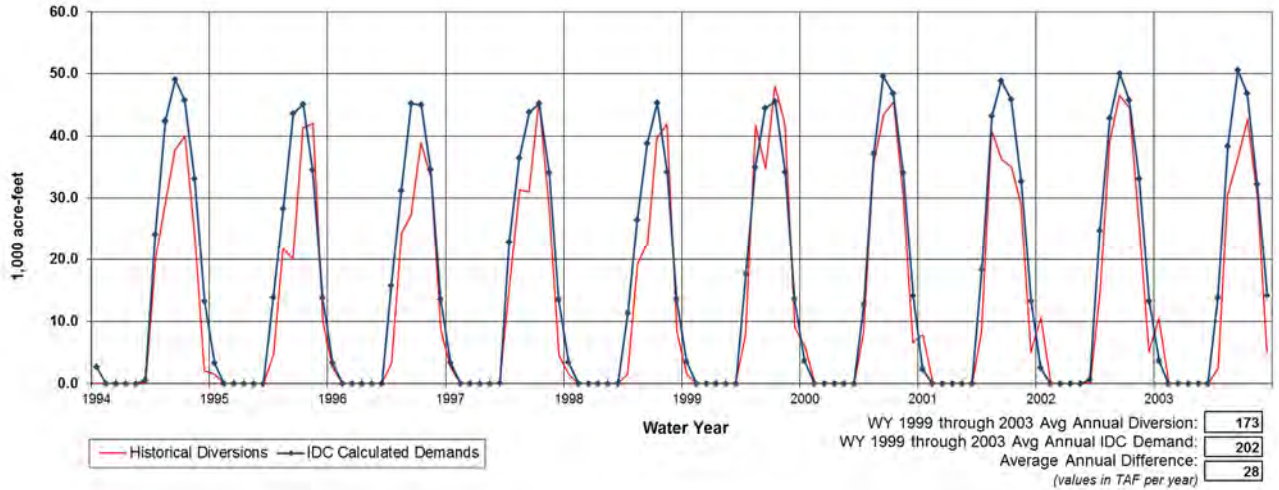


Figure A-1 Annual Historical Diversions and IDC Calculated Demands for RD 108 and River Garden Farms

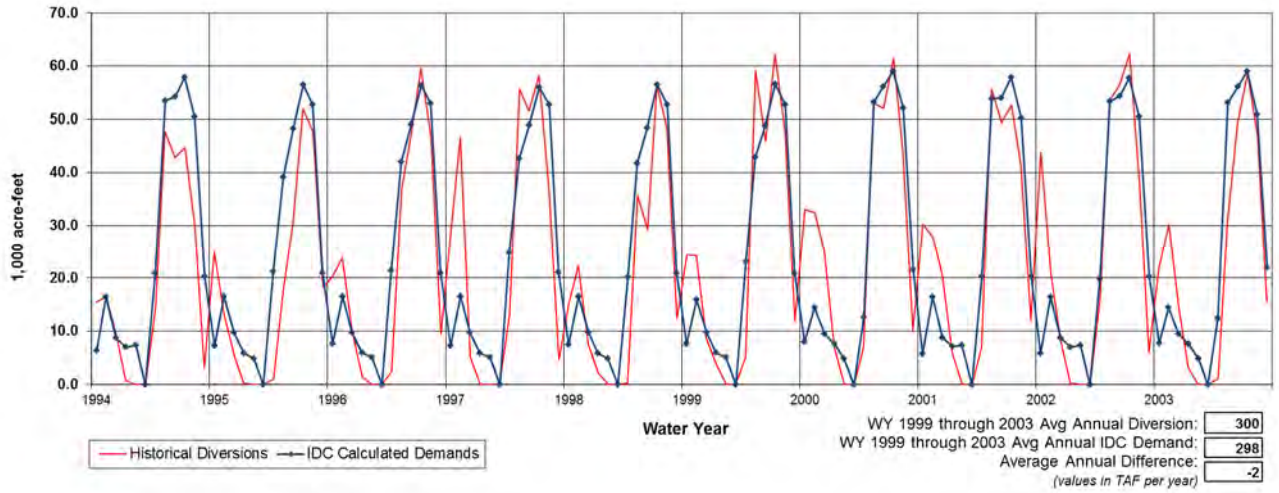


Figure A-2 Annual Historical Diversions and IDC Calculated Demands for Western Canal

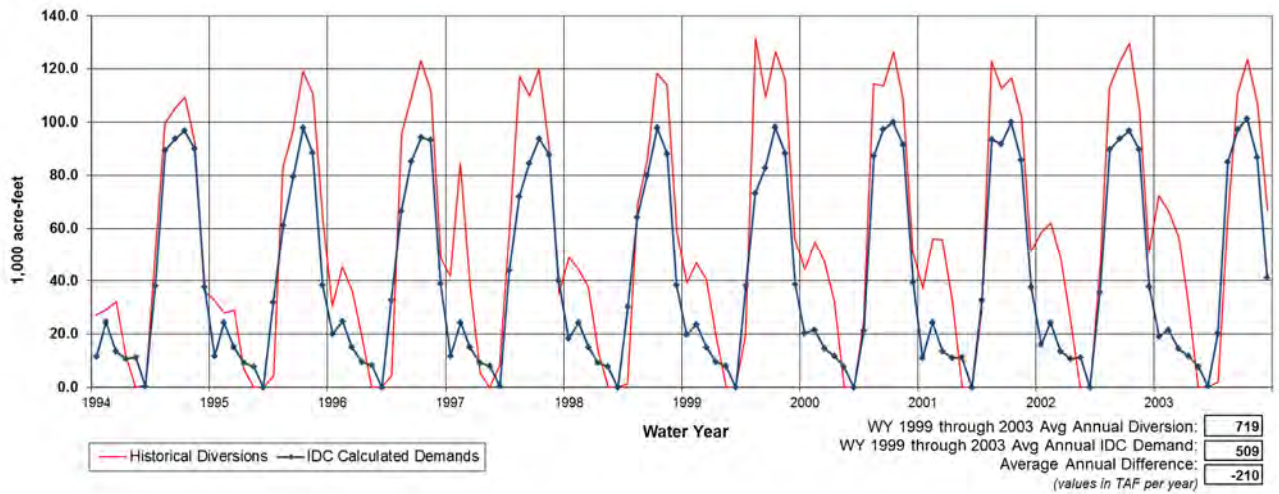


Figure A-3 Annual Historical Diversions and IDC Calculated Demands for Joint Water District

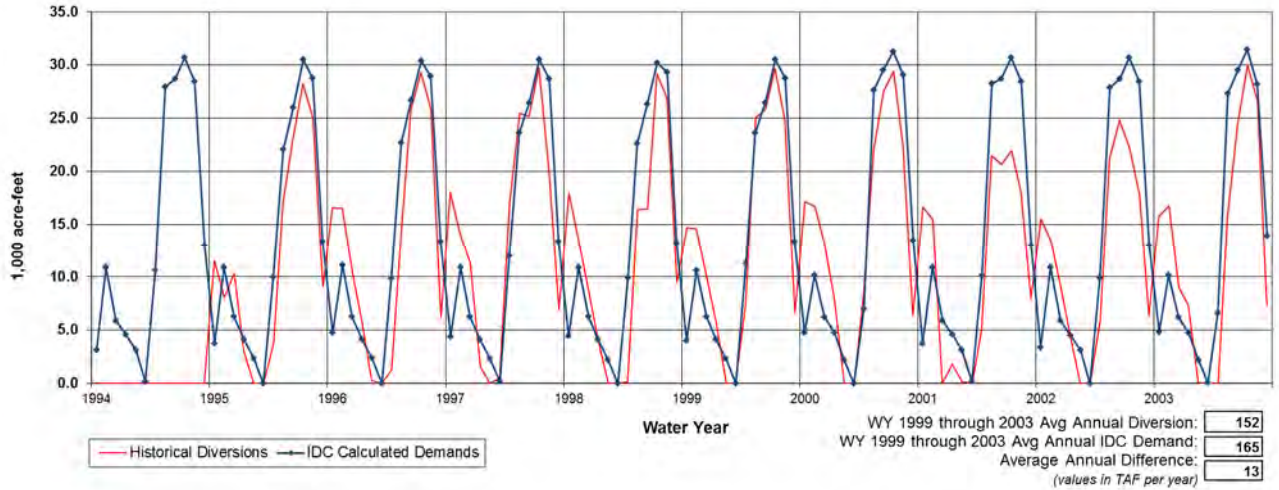


Figure A-4 Annual Historical Diversions and IDC Calculated Demands for YCWA

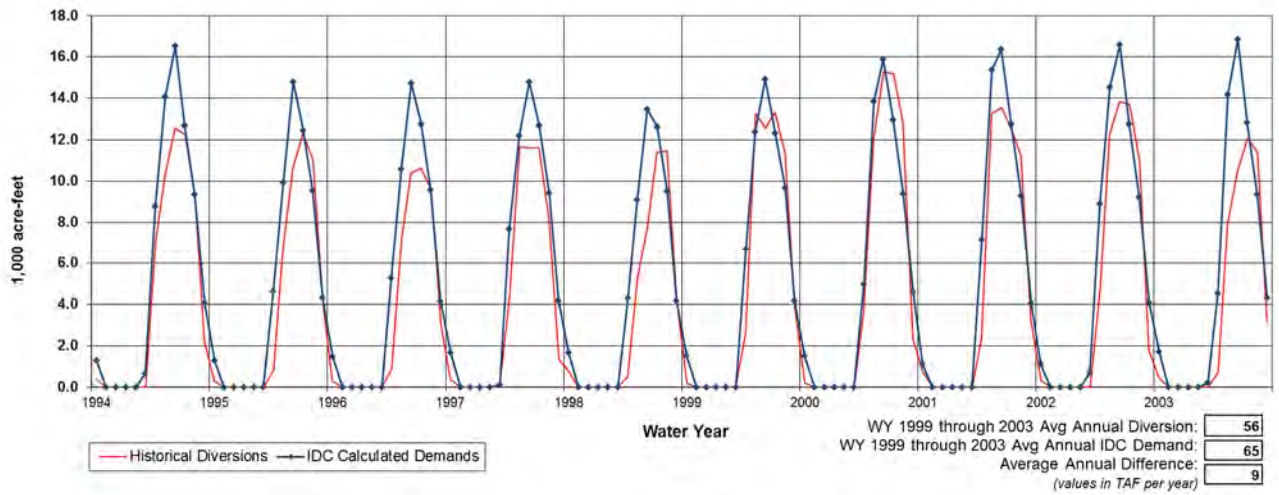


Figure A-5 Annual Historical Diversions and IDC Calculated Demands for Meridian, Newhall, Tisdale, and Short Form Contractors in WBA 18

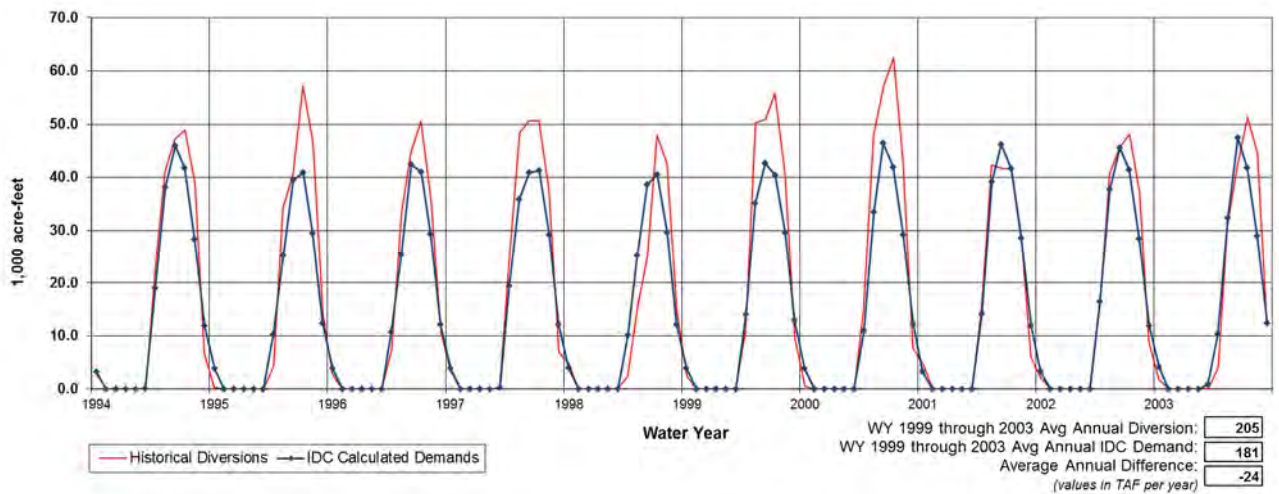


Figure A-6 Annual Historical Diversions and IDC Calculated Demands for Sutter Mutual

Appendix B
Summary of Quantitative Calibration Targets

APPENDIX B

Summary of Quantitative Calibration Targets by Well

SACFEM2013: Sacramento Valley Finite Element Groundwater Model; User's Manual

State Well Number	SACFEM 2013 Model Layer	Earliest Year with Measured Data	Latest Year with Measured Data	Minimum Measured Groundwater Elevation (feet NAVD88)	Maximum Measured Groundwater Elevation (feet NAVD88)	Range in Measured Groundwater Elevation (feet)	Number of Measurements	Mean Error (feet)	Root Mean Squared Error (feet)
05N02E05C001M	1	1972.22	1999.76	2.2	14.3	12.1	318.0	-0.3	4.9
05N05E04C001M	2	1969.9	2002.35	-55.5	-22.5	33.0	335.0	30.2	30.7
05N05E10C003M	2	1969.87	2010.57	-42.5	-10.6	31.9	94.0	19.7	21.1
06N01E24L003M	2	1970.24	2010.25	14.4	33.0	18.6	75.0	-1.4	4.9
06N02E02M003M	2	1970.24	2010.24	-8.3	24.3	32.6	72.0	-8.6	14.6
06N05E01C001M	1	1969.9	2006.7	-80.1	-42.8	37.3	425.0	43.9	44.3
07N01E08N002M	2	1972.64	1994.63	64.6	87.5	22.9	235.0	-24.5	25.0
07N01E11K001M	4	1994.09	1998.42	-17.5	51.9	69.4	51.0	-26.4	33.0
07N01E25J001M	3	1991.6	1999.25	-69.3	33.4	102.7	77.0	-10.4	19.8
07N05E26C001M	4	1970.21	2008.9	-63.9	-31.0	32.9	75.0	31.5	32.0
07N05E32D001M	5	1978.79	1991.2	-51.3	-27.1	24.2	26.0	26.1	26.4
07N06E23P001M	2	1969.9	1998.94	-38.1	1.4	39.5	317.0	-0.8	4.8
08N03E04R001M	2	1970.28	2010.67	-35.8	17.9	53.7	414.0	8.2	10.0
08N04E24M001M	1	1969.9	2001.41	-12.6	3.0	15.6	142.0	13.9	14.1
08N05E07P001M	2	1970.21	2010.7	-5.5	5.7	11.2	349.0	3.3	3.6
08N06E21N002M	2	1969.81	2004.17	-28.4	1.6	30.0	122.0	3.7	6.9
08N06E25J002M	2	1970.21	2010.57	-14.7	85.5	100.2	79.0	-13.8	19.2
08N07E18E002M	3	1984.2	2010.58	-28.9	28.7	57.6	51.0	-8.7	15.8
09N02E16N001M	2	1969.9	2010.67	-27.0	48.1	75.1	461.0	-2.5	11.0
09N04E01R001M	1	1970.82	2010.31	-18.5	13.1	31.6	70.0	0.4	4.6
09N04E22E001M	2	1969.9	2007.83	2.9	15.1	12.2	162.0	1.9	2.8
09N05E14B001M	3	1980.77	2010.57	-49.6	-20.8	28.8	61.0	24.0	24.7
09N05E25J001M	2	1977.5	2010.7	-45.7	-7.4	38.3	346.0	18.3	19.4
09N05E28K001M	2	1970.21	2010.57	-37.4	-4.8	32.6	81.0	20.4	21.4
10N01E26E003M	2	1970.26	2010.32	-20.2	55.5	75.7	86.0	15.7	19.5
10N01E33L002M	2	1972.55	2010.3	2.0	74.6	72.6	88.0	-0.3	13.6
10N02E08E001M	2	1970.84	2010.32	-20.2	51.5	71.7	82.0	5.9	12.2
10N04E27R002M	5	1996.77	2010.67	-32.5	-16.0	16.5	110.0	26.1	26.3
10N04E27R003M	4	1996.77	2010.67	-6.1	7.1	13.2	111.0	-0.6	2.2
10N04E27R004M	2	1996.77	2010.67	6.7	18.2	11.5	111.0	-10.9	11.3

APPENDIX B

Summary of Quantitative Calibration Targets by Well

SACFEM2013: Sacramento Valley Finite Element Groundwater Model; User's Manual

State Well Number	SACFEM 2013 Model Layer	Earliest Year with Measured Data	Latest Year with Measured Data	Minimum Measured Groundwater Elevation (feet NAVD88)	Maximum Measured Groundwater Elevation (feet NAVD88)	Range in Measured Groundwater Elevation (feet)	Number of Measurements	Mean Error (feet)	Root Mean Squared Error (feet)
10N04E31M001M	5	1997.19	2010.67	-18.5	-9.9	8.6	109.0	22.8	23.0
10N04E31M002M	4	1997.52	2010.67	-8.4	4.9	13.3	106.0	9.5	9.7
10N04E31M003M	3	1997.52	2010.67	2.4	15.1	12.7	106.0	1.9	2.9
10N04E31M004M	2	1997.52	2010.67	5.2	13.7	8.5	106.0	2.0	2.7
10N05E05E001M	2	1970.21	2010.57	-39.2	-13.2	26.0	80.0	18.6	19.4
10N05E22G001M	3	1969.87	1995.36	-43.1	4.4	47.5	283.0	9.9	12.8
10N06E05H001M	2	1969.9	2010.7	-17.7	28.2	45.9	450.0	-3.2	8.2
11N01E03E001M	2	1970.21	2010.25	-21.7	37.1	58.8	118.0	-1.6	10.8
11N02E20K004M	2	1970.23	2010.67	-20.1	37.3	57.4	405.0	-5.4	8.6
11N03E15C001M	1	1970.22	2010.67	7.5	32.2	24.7	123.0	3.7	5.5
11N03E20H003M	2	1970.23	2010.55	14.0	29.3	15.3	83.0	2.5	4.7
11N04E04N001M	7	1994.02	2010.71	-8.6	15.1	23.7	209.0	-2.2	4.2
11N04E04N002M	3	1994.1	2010.71	4.4	27.2	22.8	208.0	-13.2	13.6
11N04E04N003M	2	1994.1	2010.71	11.6	28.7	17.1	208.0	-11.2	11.5
11N06E15C004M	1	1970.23	2008.77	33.3	62.7	29.4	147.0	-40.6	42.2
12N01E06D002M	5	1997.77	2010.73	-7.0	28.7	35.8	95.0	10.4	12.2
12N01E06D003M	4	1997.77	2010.73	-29.3	29.2	58.5	94.0	15.7	20.6
12N01E06D004M	3	1997.77	2010.73	-11.6	29.6	41.2	95.0	8.5	11.4
12N01E16A001M	5	1997.77	2010.73	-14.9	28.4	43.3	85.0	11.0	13.6
12N01E16A002M	3	1997.77	2010.73	-15.1	29.9	45.1	86.0	16.0	20.5
12N01E26A001M	4	1996.85	2010.73	-18.6	21.1	39.7	103.0	19.6	21.7
12N01E26A002M	3	1996.85	2010.73	-21.5	23.0	44.5	104.0	21.0	24.0
12N01E26A003M	2	1996.85	2010.73	-0.3	22.6	22.9	104.0	14.1	15.3
12N02E23K001M	6	1969.78	2009.95	15.5	20.9	5.4	93.0	4.1	4.7
12N04E03N002M	7	1996.77	2010.67	-6.5	44.7	51.2	113.0	-13.8	16.1
12N04E03N003M	6	1996.77	2010.67	-1.5	41.3	42.8	112.0	-11.1	13.7
12N04E03N004M	2	1996.77	2010.67	10.1	45.0	34.9	113.0	-18.7	19.7
12N04E05R004M	1	1970.22	2010.71	-0.3	37.7	38.0	398.0	-9.0	10.5
12N04E26J002M	7	1996.77	2010.67	-17.8	24.4	42.2	114.0	-5.3	9.1
12N04E26J003M	5	1996.77	2010.67	-17.5	24.6	42.1	113.0	-7.2	9.9

APPENDIX B

Summary of Quantitative Calibration Targets by Well

SACFEM2013: Sacramento Valley Finite Element Groundwater Model; User's Manual

State Well Number	SACFEM 2013 Model Layer	Earliest Year with Measured Data	Latest Year with Measured Data	Minimum Measured Groundwater Elevation (feet NAVD88)	Maximum Measured Groundwater Elevation (feet NAVD88)	Range in Measured Groundwater Elevation (feet)	Number of Measurements	Mean Error (feet)	Root Mean Squared Error (feet)
12N04E26J004M	2	1996.77	2010.67	2.6	38.3	35.8	114.0	-21.4	22.6
12N05E01D002M	2	1970.21	2010.57	49.6	77.3	27.7	91.0	-32.6	35.2
12N05E06R001M	1	1970.21	2010.57	-7.5	52.5	60.0	86.0	-22.4	24.8
12N05E12Q001M	1	1969.83	2007.68	22.8	73.0	50.2	446.0	-24.7	31.4
12N05E17A002M	1	1970.21	2010.7	-1.9	41.4	43.3	402.0	-13.9	16.9
12N06E27D002M	3	1969.9	2003.83	39.4	95.0	55.6	160.0	-6.6	22.3
13N01E11A001M	2	1970.19	2010.59	18.7	31.8	13.1	98.0	5.2	6.0
13N01E12J002M	2	1970.22	2010.67	23.8	32.8	9.0	135.0	6.3	6.9
13N01E32K001M	4	1997.77	2010.73	-24.7	23.3	48.0	94.0	23.7	27.0
13N01E32K002M	3	1997.77	2010.73	-13.1	20.4	33.5	94.0	20.4	21.9
13N02W04G001M	3	1969.81	2010.59	38.1	120.0	81.9	449.0	-17.5	32.4
13N02W04G004M	1	1978.45	2010.59	97.3	148.0	50.7	239.0	-51.3	53.7
13N02W15J001M	2	1975.25	2010.59	31.0	111.9	80.9	215.0	-27.8	34.8
13N02W22H001M	1	1970.21	2010.27	106.8	176.0	69.2	77.0	-61.3	63.3
13N04E07L001M	3	1996.3	2010.72	26.1	39.7	13.6	115.0	-2.3	3.1
13N04E23A002M	1	1970.22	2010.57	15.0	57.9	42.9	99.0	-8.6	12.5
13N04E36E001M	1	1969.79	1995.47	-25.9	43.4	69.3	199.0	-10.0	16.0
13N05E06R004M	4	1996.3	2010.72	27.5	61.9	34.4	116.0	3.2	6.3
14N01W03L002M	3	1970.19	1983.76	-21.1	40.8	61.9	84.0	-10.8	16.6
14N01W04K003M	1	1970.19	2010.59	25.8	36.2	10.4	96.0	-26.0	28.2
14N02W16N002M	1	1969.81	1988.19	46.5	87.8	41.3	142.0	13.3	16.1
14N02W29J001M	5	1970.82	2010.59	57.5	107.2	49.7	225.0	-33.2	38.2
14N03E05C001M	1	1970.21	2004.8	3.1	42.5	39.4	66.0	-5.0	7.6
14N03E17A003M	2	1970.23	2010.58	2.0	38.1	36.1	345.0	-0.8	4.2
14N03W11A001M	4	1970.21	2010.59	48.5	107.6	59.1	95.0	-5.1	16.3
14N04E30N003M	2	1995.74	2010.72	4.7	33.4	28.7	152.0	4.0	6.6
15N01E16R001M	3	1969.78	2003.22	29.7	40.3	10.6	72.0	-2.7	6.4
15N01W05G001M	1	1976.19	2010.59	26.2	47.6	21.4	88.0	-6.7	9.0
15N02E35D001M	3	1970.24	2010.57	31.5	44.7	13.2	87.0	-11.8	13.5
15N03E05D002M	2	1970.22	2004.21	30.7	58.7	28.0	63.0	-14.8	15.6

APPENDIX B

Summary of Quantitative Calibration Targets by Well

SACFEM2013: Sacramento Valley Finite Element Groundwater Model; User's Manual

State Well Number	SACFEM 2013 Model Layer	Earliest Year with Measured Data	Latest Year with Measured Data	Minimum Measured Groundwater Elevation (feet NAVD88)	Maximum Measured Groundwater Elevation (feet NAVD88)	Range in Measured Groundwater Elevation (feet)	Number of Measurements	Mean Error (feet)	Root Mean Squared Error (feet)
15N03E15H004M	2	1970.22	2010.67	32.0	46.7	14.7	137.0	0.7	2.4
15N04E13A001M	2	1970.8	2010.59	13.4	88.1	74.6	90.0	21.4	28.2
15N04E16G002M	3	1996.29	2010.72	31.1	59.1	28.0	114.0	4.8	5.9
15N04E27A001M	4	1970.23	2006.28	-13.5	61.4	74.9	82.0	28.4	34.2
16N01W20F001M	1	1970.19	2010.59	24.7	55.7	31.0	114.0	16.1	17.1
16N02E26Q001M	1	1970.22	2010.58	39.3	60.9	21.6	91.0	-17.4	18.5
16N02W25B002M	2	1969.88	2010.59	28.1	51.4	23.3	335.0	-3.8	5.6
16N03E21D002M	1	1970.22	2010.58	44.6	69.1	24.5	115.0	-16.4	17.0
16N03W07Q001M	1	1975.25	2010.59	105.7	111.3	5.6	90.0	-11.4	11.7
16N03W35N002M	4	1970.19	2010.22	60.6	70.5	9.9	97.0	0.8	5.0
16N04E17R002M	2	1988.84	2010.69	37.1	79.4	42.3	122.0	-2.2	8.0
16N04E22B001M	3	1995.74	2010.72	41.9	85.1	43.2	154.0	10.0	13.2
17N01E10A001M	2	1970.22	2010.59	28.1	60.7	32.6	124.0	4.9	7.1
17N01E17F001M	2	1992.89	2010.59	51.9	59.8	7.9	69.0	5.8	8.2
17N01E17F002M	3	1992.89	2010.59	51.9	62.6	10.7	69.0	3.5	5.8
17N01E17F003M	5	1992.89	2010.59	51.6	62.3	10.7	69.0	3.1	5.0
17N02E14A001M	1	1970.22	2010.69	56.2	84.2	28.0	140.0	-16.6	18.3
17N02W09H002M	5	2004.06	2010.59	24.4	68.7	44.4	64.0	10.9	16.5
17N02W09H003M	4	2004.06	2010.59	11.1	68.0	56.9	63.0	11.8	21.0
17N02W09H004M	2	2004.06	2010.59	53.4	67.3	13.9	64.0	2.2	4.2
17N03E03D001M	1	1970.22	2010.59	61.9	89.8	27.9	139.0	3.4	5.2
17N03E05C001M	1	1970.22	2002.79	75.6	95.6	20.0	105.0	-13.0	13.7
17N03E16N001M	2	1970.22	2010.69	66.4	82.6	16.2	141.0	-15.8	16.7
17N03W08R001M	2	1975.25	2010.59	86.6	98.1	11.5	139.0	4.1	5.0
17N03W10C001M	1	1970.19	2010.59	85.9	93.3	7.4	226.0	-4.8	5.5
17N04E30R001M	4	1970.21	2010.69	-26.4	82.4	108.8	129.0	4.2	10.6
18N01E13M001M	2	1970.23	2002.79	61.1	75.5	14.4	90.0	1.9	4.7
18N01E17D001M	1	1970.21	2001.56	63.8	71.6	7.8	80.0	5.5	11.6
18N01W17G001M	1	1970.21	2010.22	50.4	79.4	29.0	137.0	13.3	14.7
18N01W22L001M	2	1970.21	2009.81	32.0	70.2	38.2	136.0	5.5	11.5

APPENDIX B

Summary of Quantitative Calibration Targets by Well

SACFEM2013: Sacramento Valley Finite Element Groundwater Model; User's Manual

State Well Number	SACFEM 2013 Model Layer	Earliest Year with Measured Data	Latest Year with Measured Data	Minimum Measured Groundwater Elevation (feet NAVD88)	Maximum Measured Groundwater Elevation (feet NAVD88)	Range in Measured Groundwater Elevation (feet)	Number of Measurements	Mean Error (feet)	Root Mean Squared Error (feet)
18N01W35K001M	1	1970.19	2001.78	58.4	62.2	3.8	86.0	7.2	11.9
18N02E16F001M	1	1970.76	2010.59	74.2	79.1	4.9	138.0	4.3	7.1
18N02E32Q002M	1	1970.23	2002.79	69.3	74.8	5.5	267.0	-2.3	6.2
18N02W18D001M	6	2007.33	2010.59	77.1	81.7	4.6	17.0	4.8	5.1
18N02W18D002M	5	2007.33	2010.59	73.7	78.5	4.8	17.0	7.9	7.9
18N02W18D003M	4	2007.33	2010.59	74.3	78.6	4.3	18.0	6.7	6.8
18N02W18D004M	2	2007.33	2010.59	40.5	77.4	36.9	17.0	24.2	27.8
18N02W18K001M	2	1975.25	2010.59	-27.8	78.2	106.0	63.0	13.1	32.0
18N02W36B001M	1	1970.19	2010.59	60.5	73.2	12.7	100.0	0.8	3.3
18N03E05K001M	1	1970.22	2002.79	89.3	106.3	17.0	104.0	9.9	10.3
18N03E18F001M	5	1970.22	2010.59	86.2	98.6	12.4	139.0	-4.8	6.3
18N03E21G001M	1	1970.22	2010.59	80.5	96.9	16.4	140.0	-0.2	3.5
18N03W10L001M	1	1969.88	2010.59	89.5	95.6	6.1	222.0	1.1	3.1
18N04E16C001M	3	1970.22	2010.59	93.3	136.3	43.0	135.0	-11.3	16.5
18N04W12A001M	1	1970.21	2010.22	98.9	129.0	30.1	124.0	-7.1	12.4
18N04W23F001M	7	1970.21	2010.59	128.0	149.0	21.0	130.0	7.8	11.9
19N01E09Q001M	2	1991.66	2010.59	48.1	92.6	44.5	93.0	5.1	10.0
19N01E27Q001M	4	1978.39	2010.59	60.1	86.8	26.7	172.0	-1.3	5.0
19N01W15D001M	1	1970.21	2010.59	66.8	89.7	22.9	142.0	9.7	12.8
19N02W13J001M	1	1969.88	2010.59	73.6	88.3	14.7	223.0	6.2	7.3
19N02W29Q001M	2	1970.21	2010.59	77.5	92.4	14.9	130.0	-2.5	4.3
19N02W36H001M	1	1970.21	2010.59	70.6	83.9	13.3	130.0	-1.1	3.9
19N03W26P001M	3	1974.19	2010.59	91.6	102.3	10.7	122.0	-3.1	4.7
19N04W12E001M	4	1969.88	2010.59	63.5	170.0	106.5	355.0	-5.6	25.6
20N01E10C002M	2	1973.26	2010.59	70.3	126.8	56.5	130.0	0.0	9.2
20N01E18L001M	6	2000.12	2010.59	99.8	113.8	13.9	102.0	-3.8	4.3
20N01E18L002M	5	2001.89	2010.59	100.8	108.0	7.1	75.0	-2.1	2.9
20N01E18L003M	2	2001.89	2010.59	103.5	108.1	4.5	74.0	-3.1	3.7
20N01E35C001M	1	1970.23	2010.59	93.8	101.0	7.2	137.0	4.2	4.6
20N02E06Q001M	4	1970.23	2010.59	97.6	134.3	36.7	141.0	6.7	8.9

APPENDIX B

Summary of Quantitative Calibration Targets by Well

SACFEM2013: Sacramento Valley Finite Element Groundwater Model; User's Manual

State Well Number	SACFEM 2013 Model Layer	Earliest Year with Measured Data	Latest Year with Measured Data	Minimum Measured Groundwater Elevation (feet NAVD88)	Maximum Measured Groundwater Elevation (feet NAVD88)	Range in Measured Groundwater Elevation (feet)	Number of Measurements	Mean Error (feet)	Root Mean Squared Error (feet)
20N02E07H001M	3	1990.84	1997.84	91.1	128.7	37.6	99.0	4.6	6.2
20N02E24C001M	2	2000.01	2010.59	105.8	130.6	24.8	81.0	15.5	16.0
20N02E24C002M	5	2000.01	2010.59	105.9	130.6	24.7	84.0	16.2	16.6
20N02E24C003M	7	2000.01	2010.59	105.6	130.7	25.1	85.0	18.1	18.5
20N02E28N001M	1	1969.89	2010.59	112.8	121.6	8.8	400.0	-5.4	7.0
20N02W02J001M	1	1970.21	2010.59	114.8	125.6	10.8	131.0	1.5	3.9
20N02W11A001M	1	1976.88	2010.59	110.4	124.6	14.2	633.0	-1.7	4.5
20N02W11A002M	2	1978.24	2010.59	91.2	121.4	30.2	313.0	0.2	4.2
20N02W11A003M	4	1978.24	2010.59	75.1	123.1	48.0	320.0	3.7	6.5
20N02W29G001M	1	1969.88	2010.59	110.4	116.7	6.3	161.0	-2.3	4.5
21N01E05G001M	2	1969.98	1997.56	113.5	144.9	31.4	116.0	-3.3	4.3
21N01E12K001M	4	1970.23	2010.52	81.1	165.2	84.1	108.0	15.7	21.7
21N01E27D001M	1	1970.23	2010.59	87.0	132.1	45.2	169.0	0.1	9.1
21N01W04N001M	1	1970.21	2010.59	106.6	129.2	22.6	152.0	9.1	9.6
21N01W23J001M	1	1970.23	2010.59	104.2	120.2	16.0	168.0	0.5	3.1
21N01W24B001M	6	1995.29	2010.59	96.0	127.4	31.4	122.0	1.0	4.9
21N02E26F001M	7	1970.23	2008.19	102.0	146.7	44.7	119.0	27.0	29.9
21N02W05M001M	4	2002.41	2010.59	117.3	167.8	50.5	95.0	-3.6	6.4
21N02W05M002M	2	2002.41	2010.59	133.5	181.1	47.6	96.0	-11.8	13.3
21N02W05M004M	1	2002.41	2006.89	159.1	178.4	19.3	63.0	-12.1	12.6
21N02W09M002M	2	1970.21	2010.23	118.3	172.0	53.7	128.0	-8.7	12.8
21N02W23G001M	2	1970.21	2010.59	107.4	147.9	40.5	149.0	-5.5	7.9
21N02W31M001M	2	1970.21	2010.23	94.7	155.5	60.8	126.0	-8.4	13.4
21N03W31R002M	3	1969.81	2008.19	68.2	166.1	97.9	488.0	30.0	40.2
21N03W31R004M	2	1969.81	2008.19	76.3	166.9	90.6	480.0	32.3	42.6
21N03W31R005M	1	1969.81	2008.19	92.4	166.0	73.6	482.0	30.3	39.4
21N03W33A004M	5	1970.21	2010.27	99.3	169.0	69.7	75.0	9.3	22.0
22N01E09J002M	1	1970.23	2002.79	133.8	165.4	31.6	91.0	-1.8	13.8
22N01E20K001M	1	1969.89	2010.59	112.5	154.9	42.4	229.0	-3.2	9.4
22N01E28J001M	6	1972.24	2010.59	115.0	162.2	47.2	326.0	-1.5	10.5

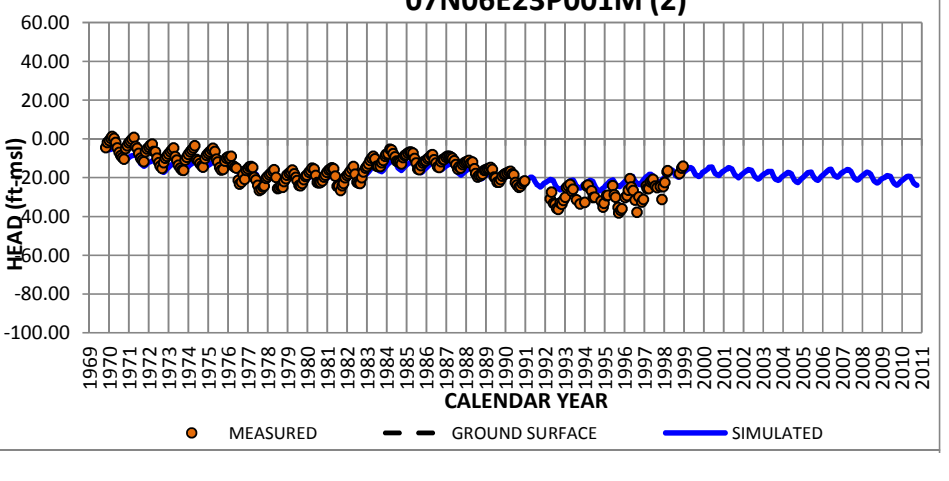
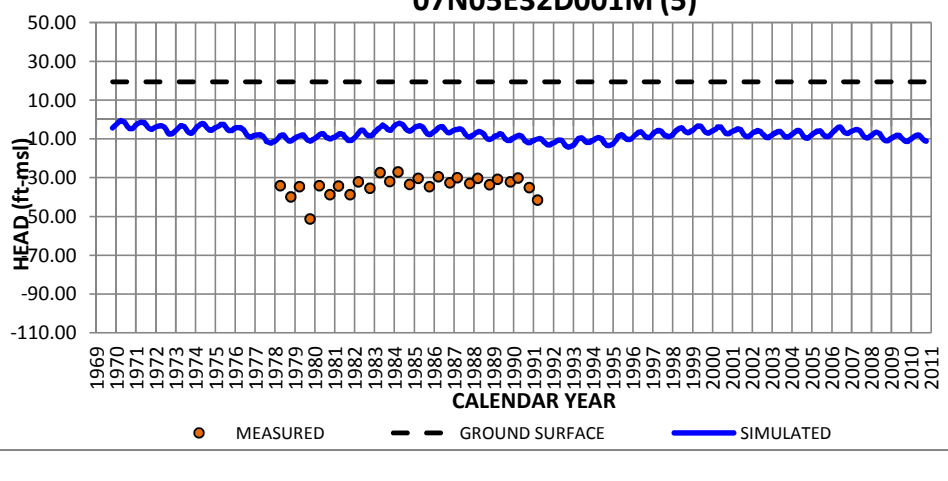
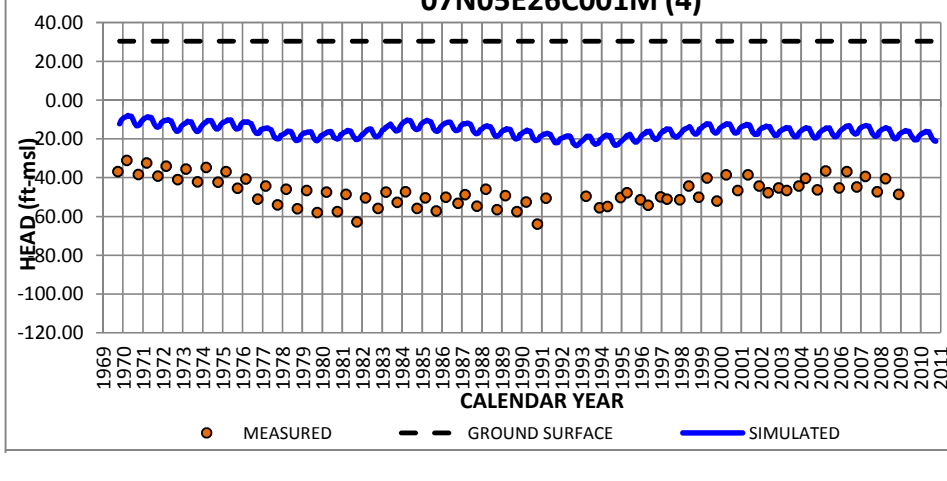
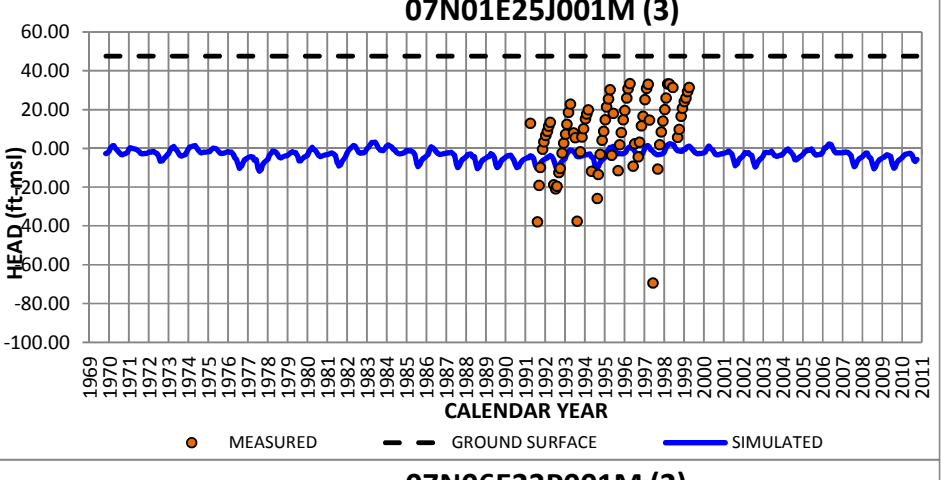
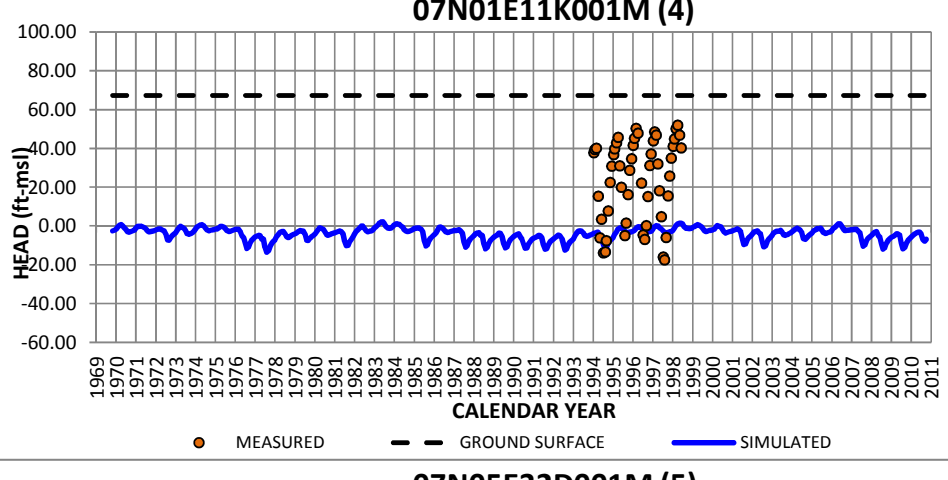
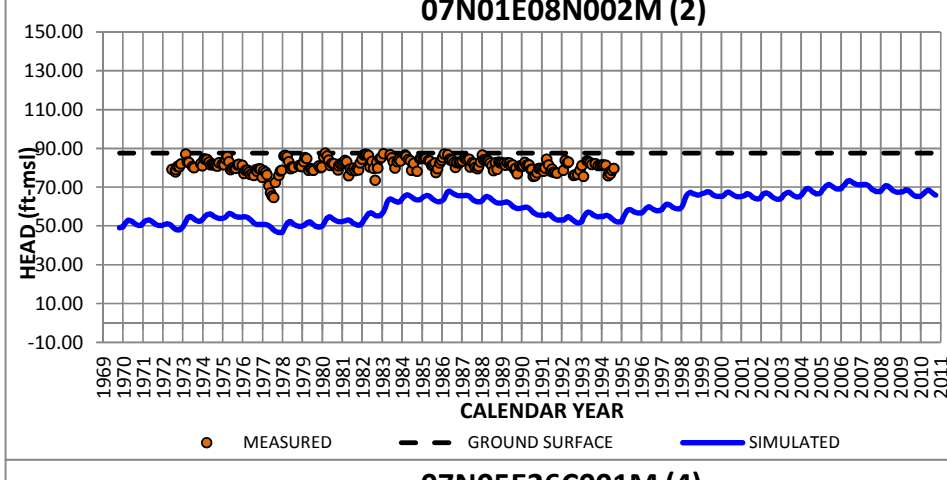
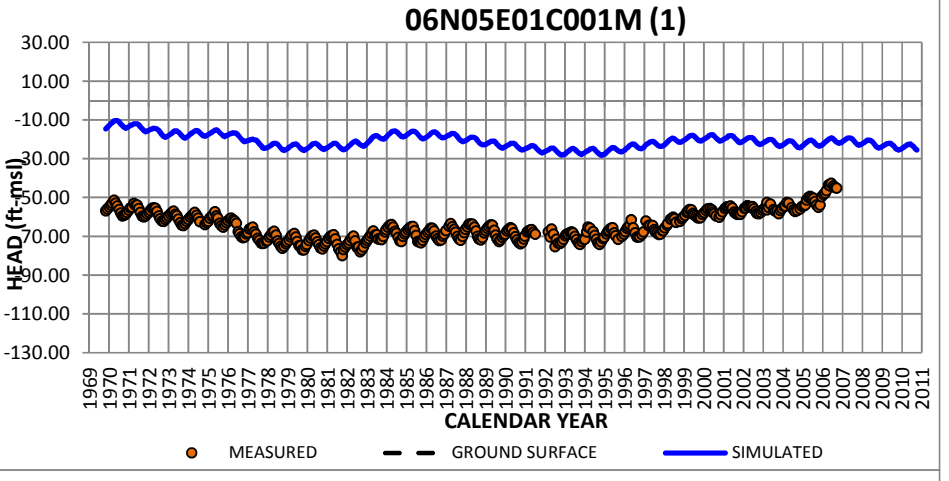
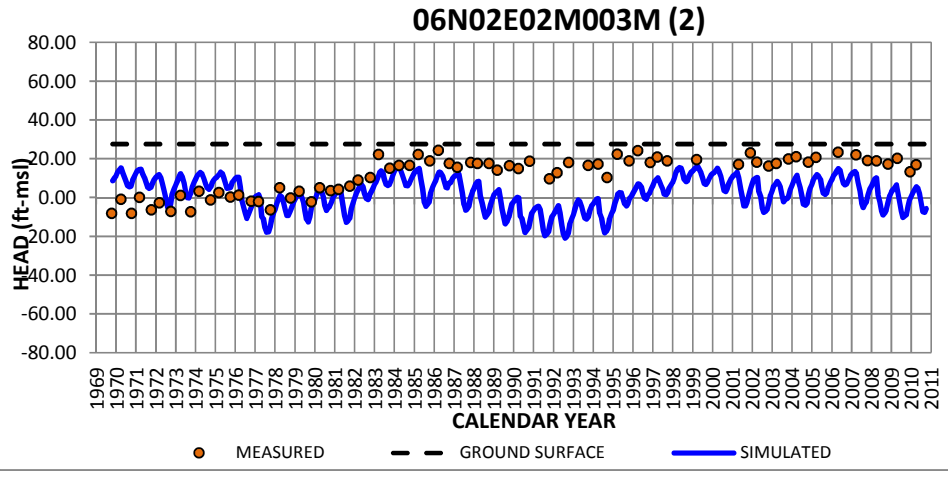
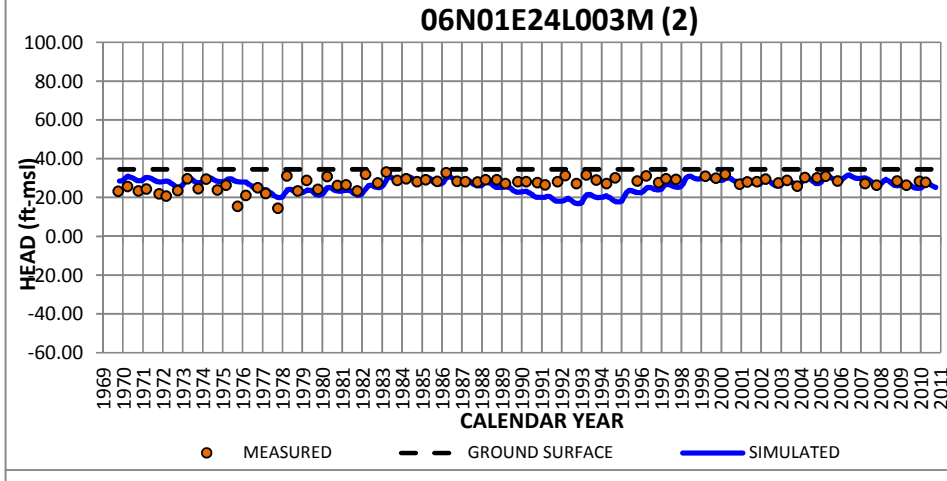
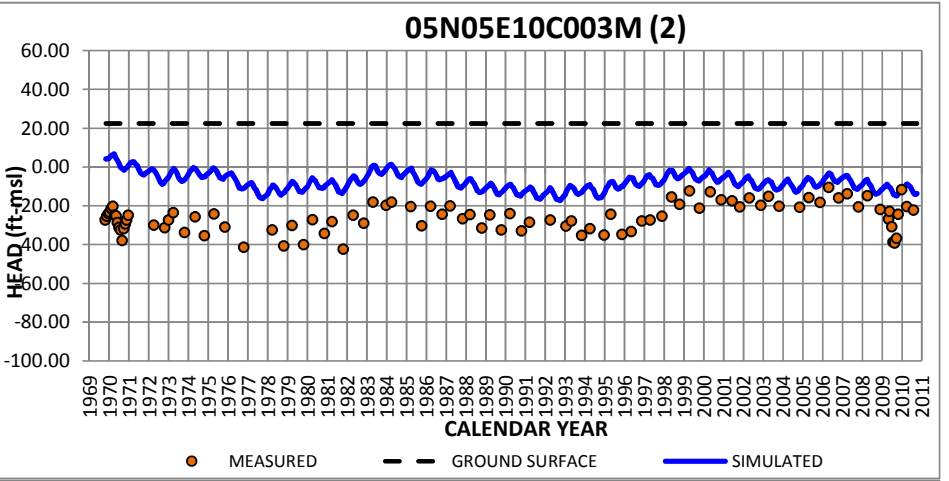
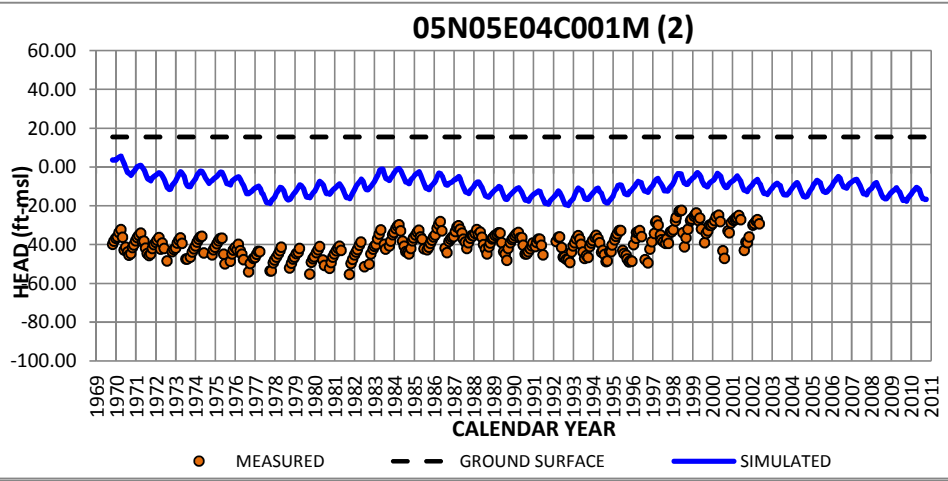
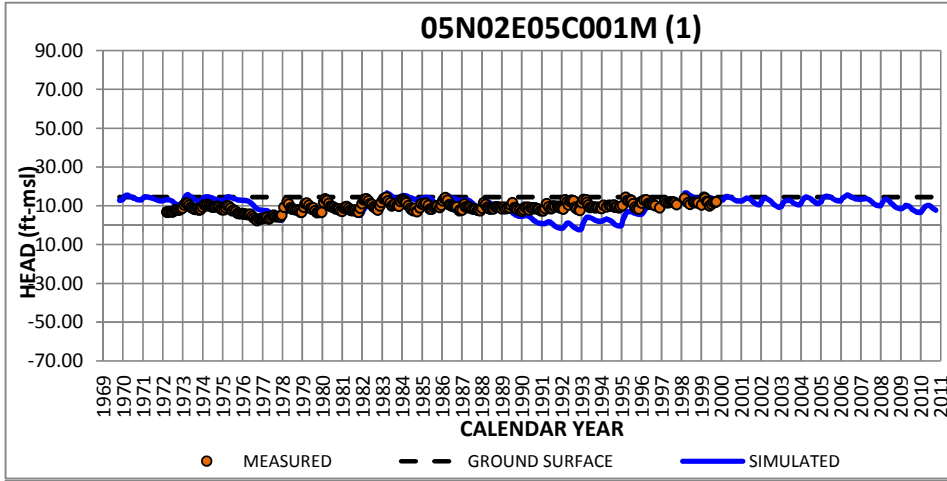
APPENDIX B

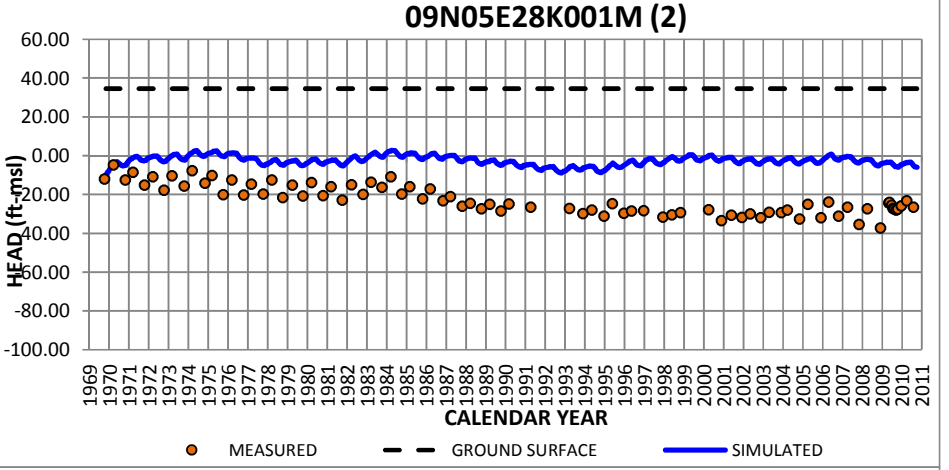
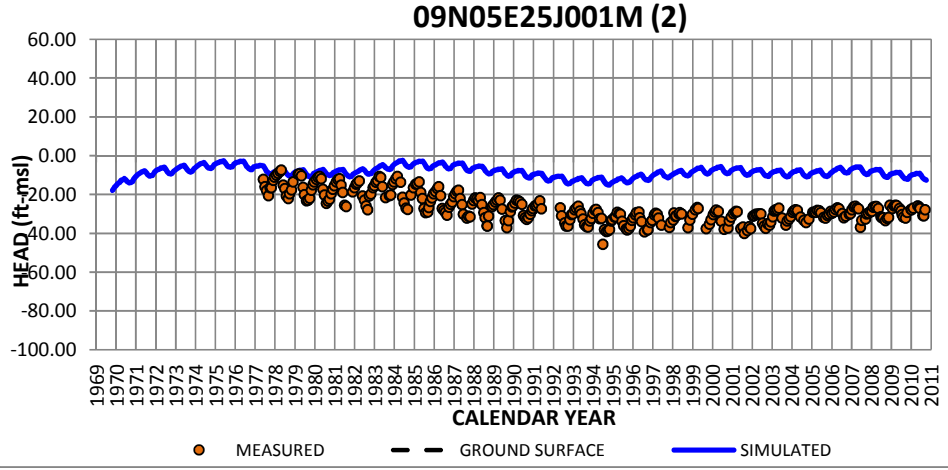
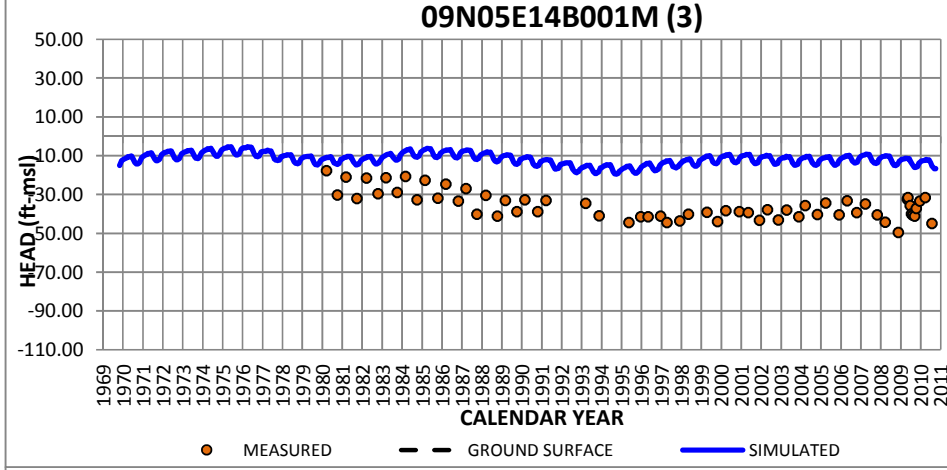
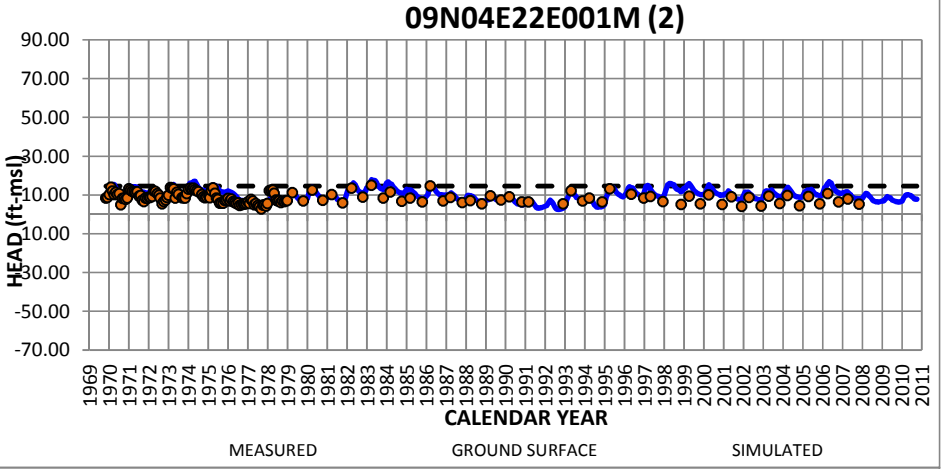
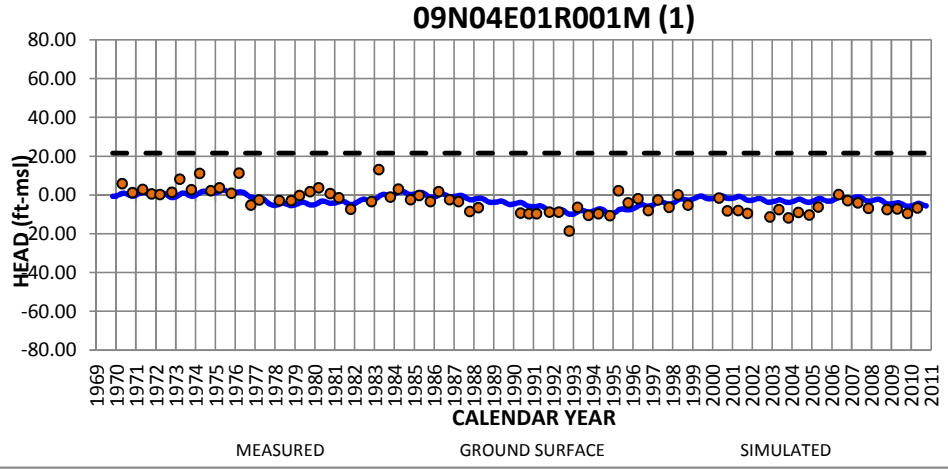
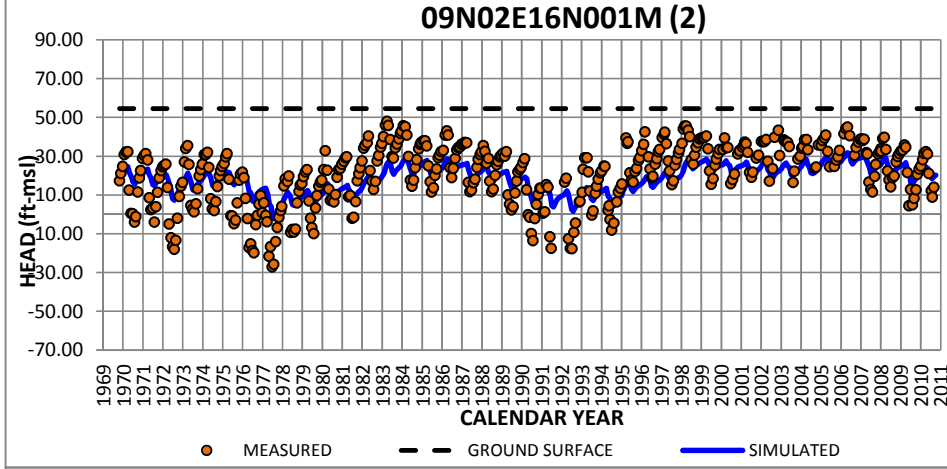
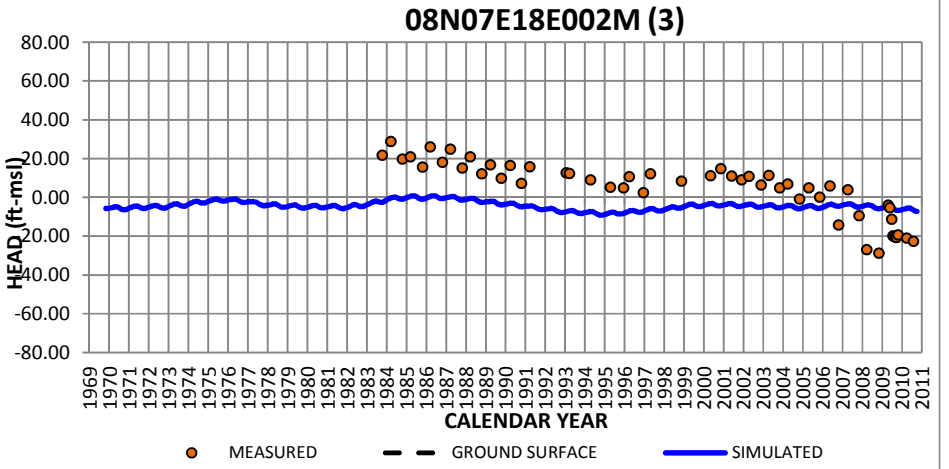
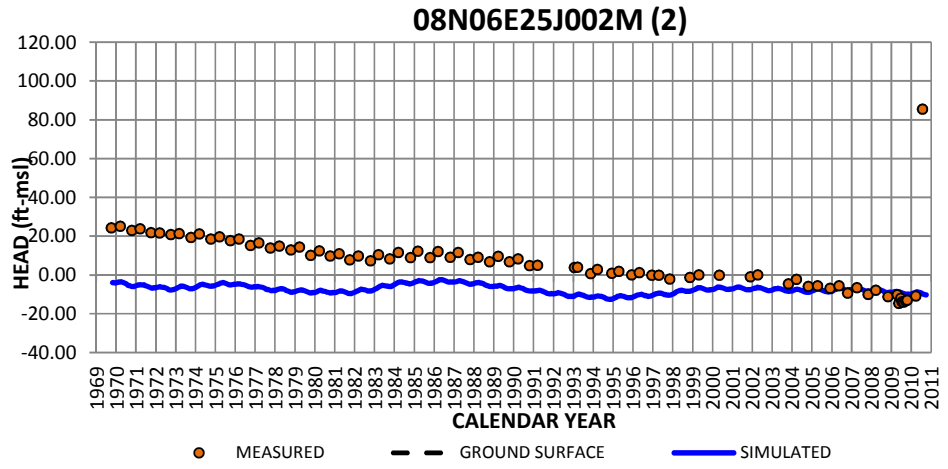
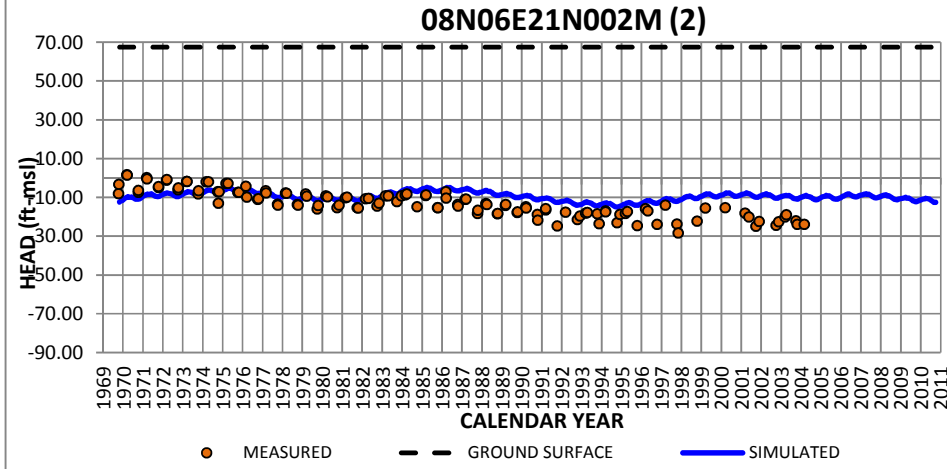
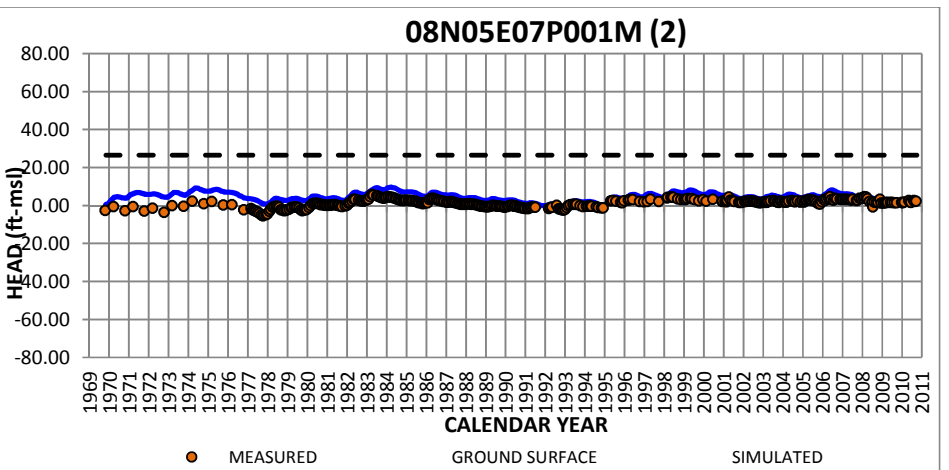
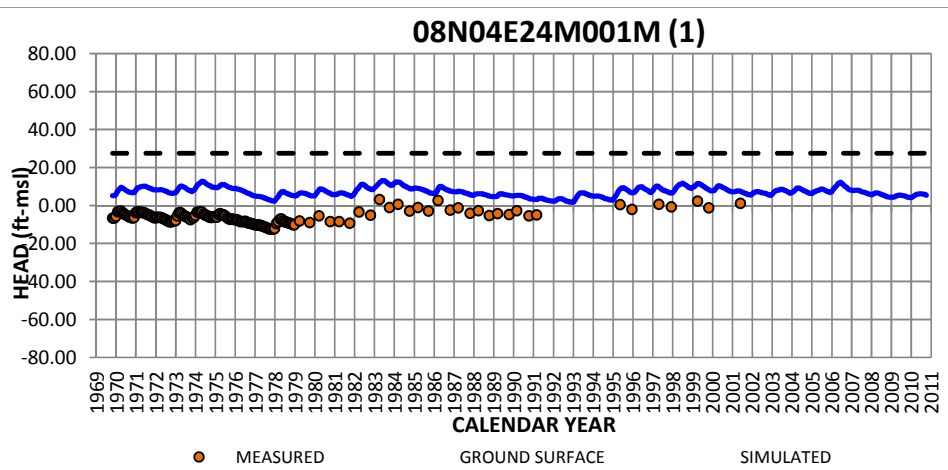
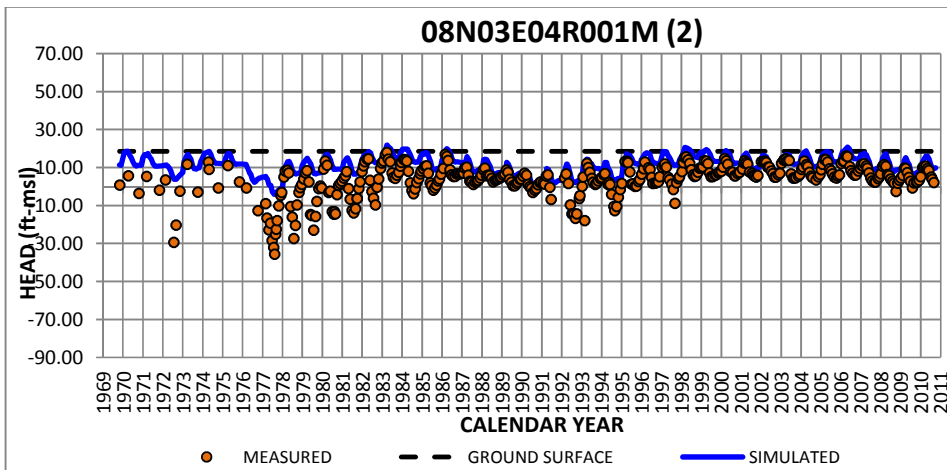
Summary of Quantitative Calibration Targets by Well

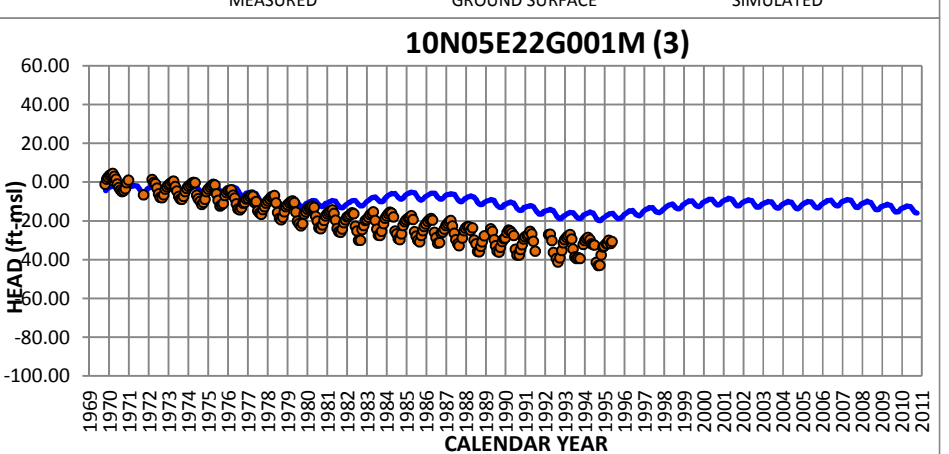
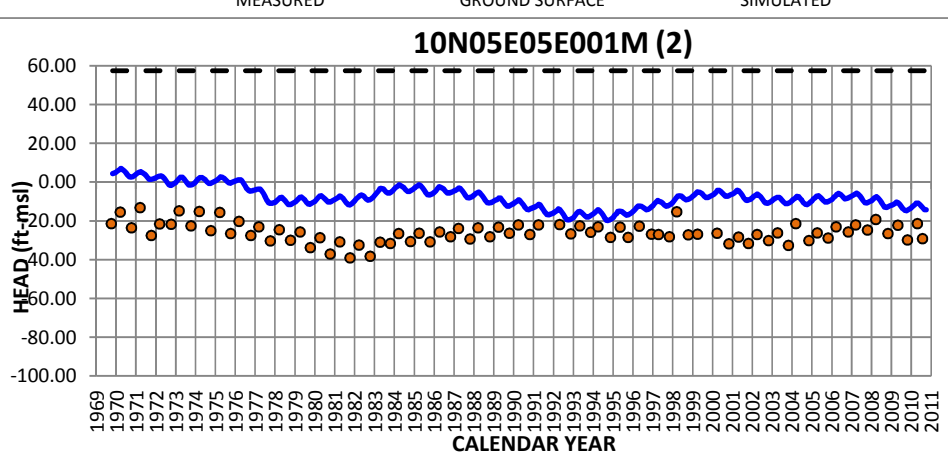
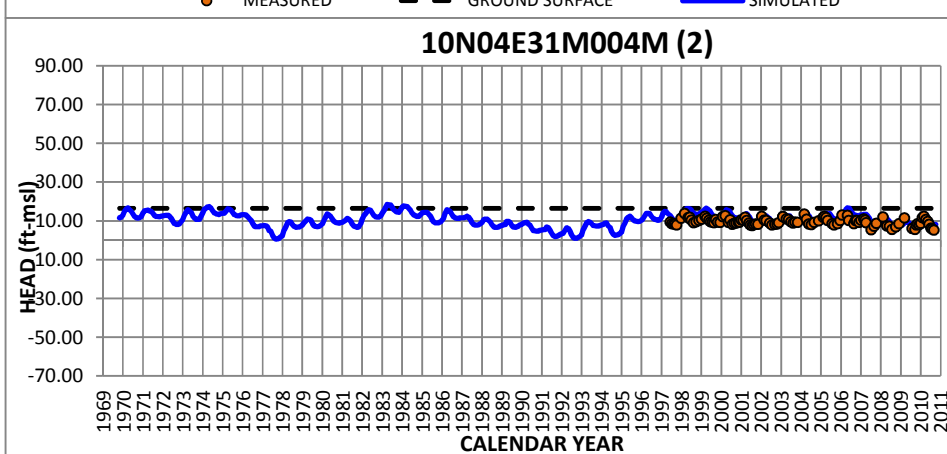
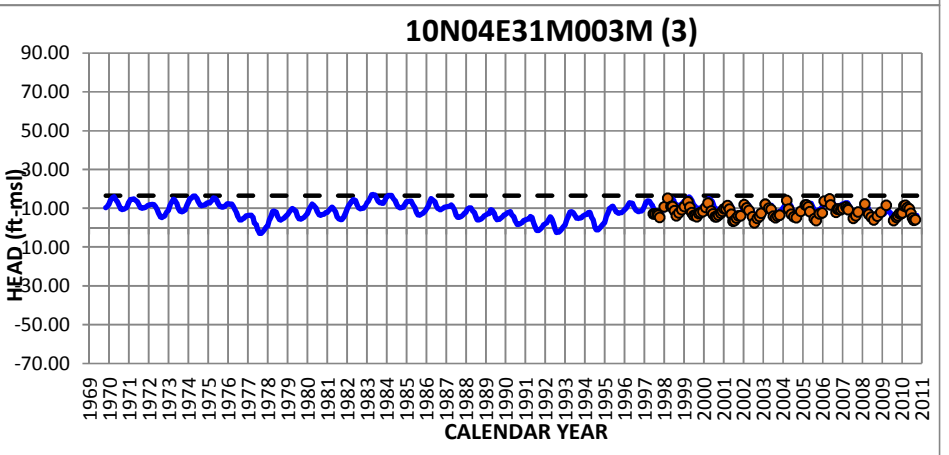
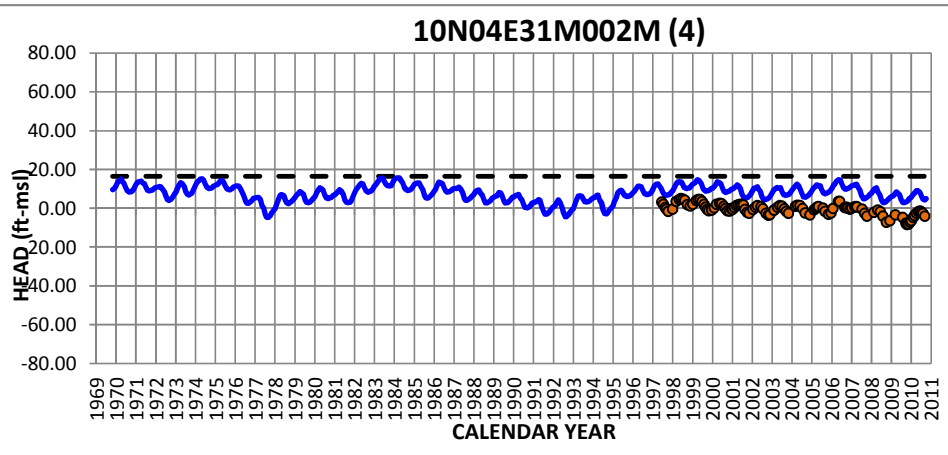
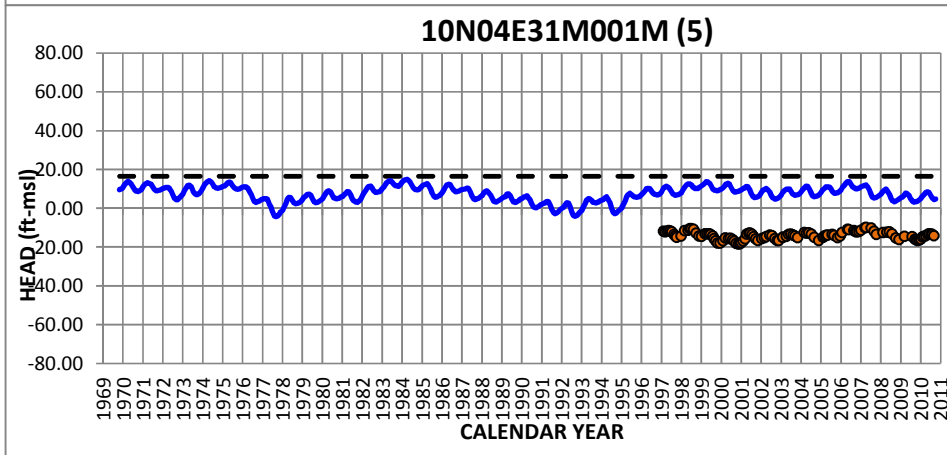
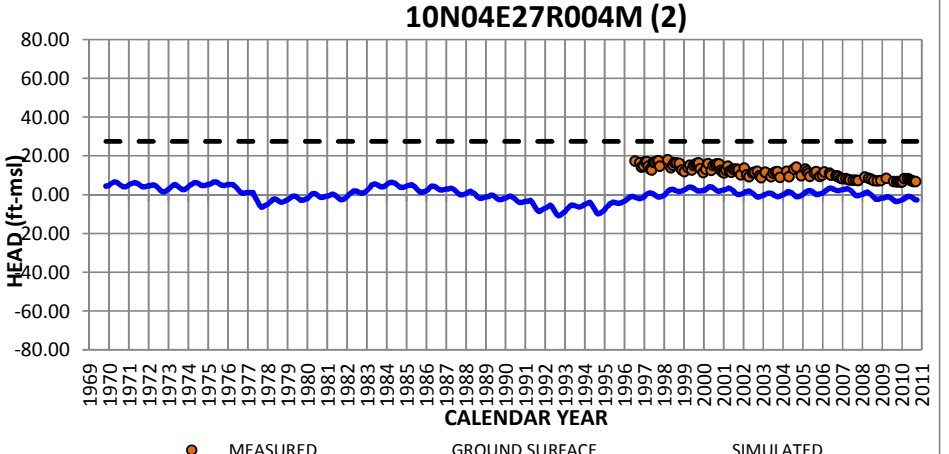
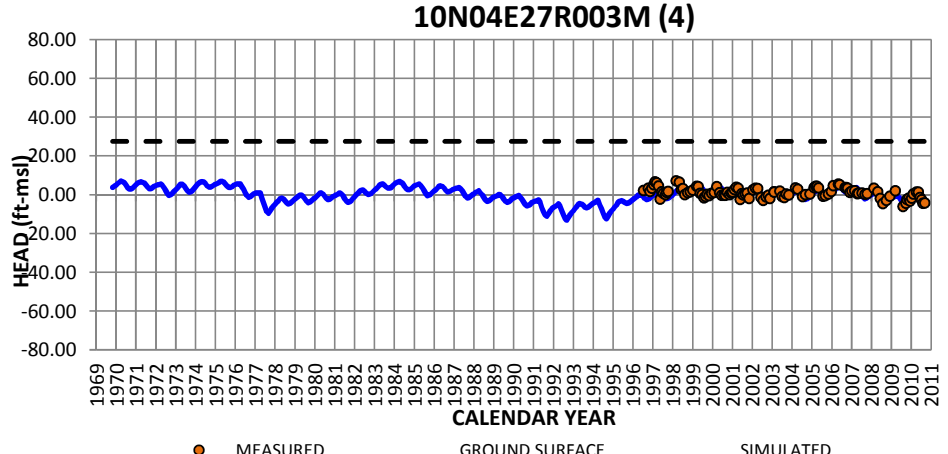
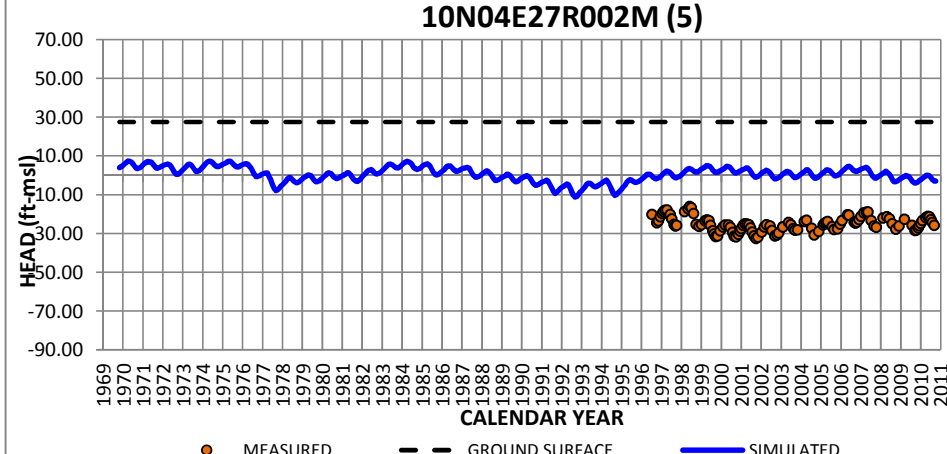
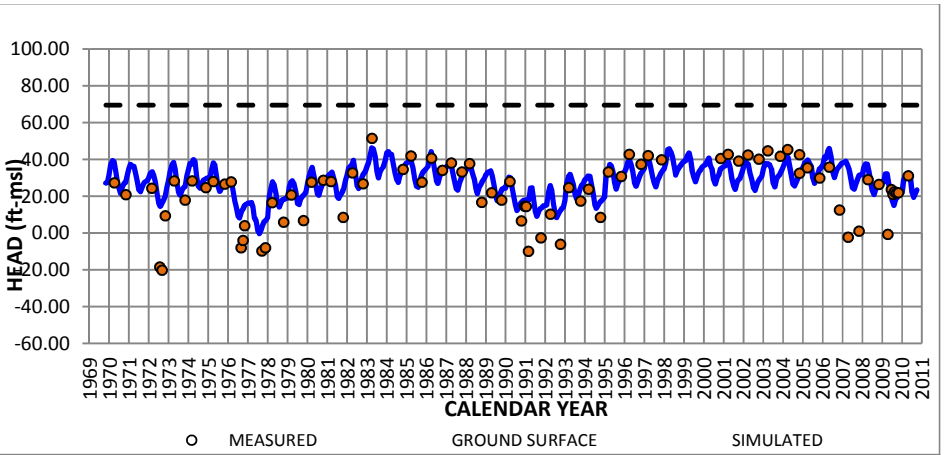
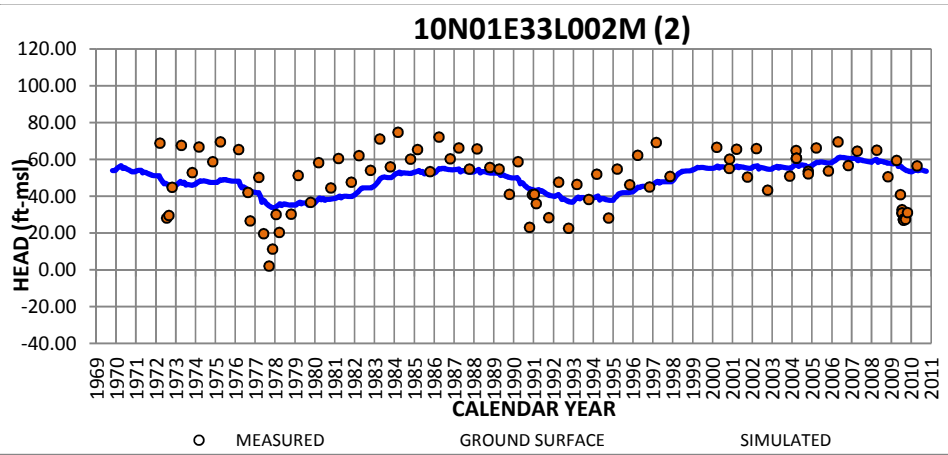
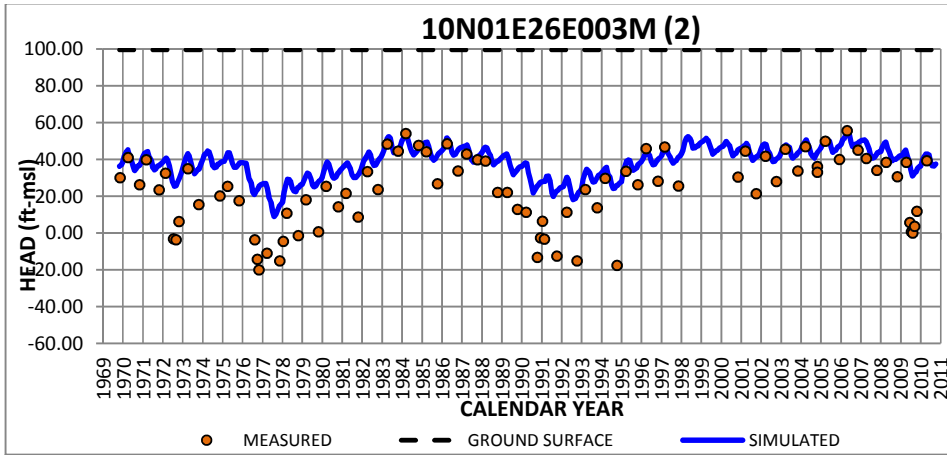
SACFEM2013: Sacramento Valley Finite Element Groundwater Model; User's Manual

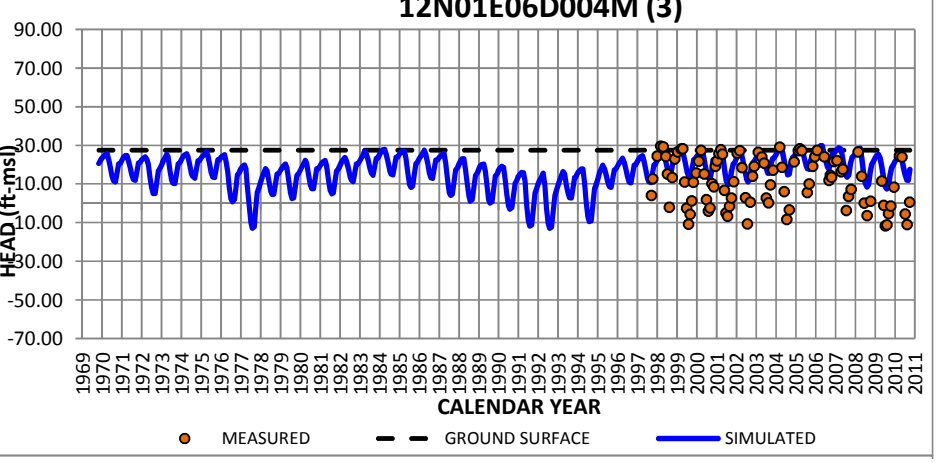
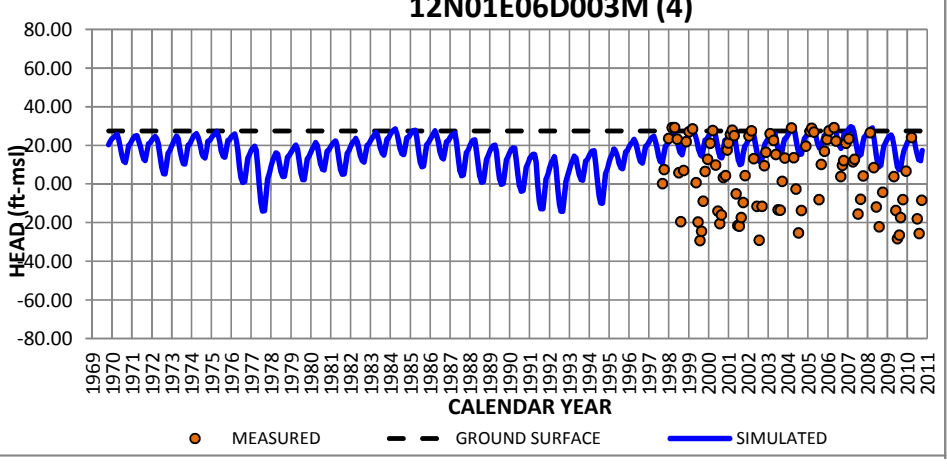
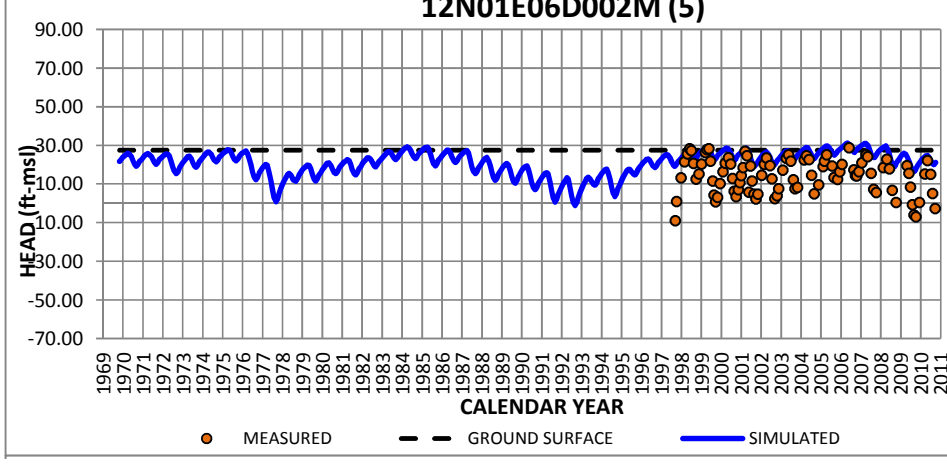
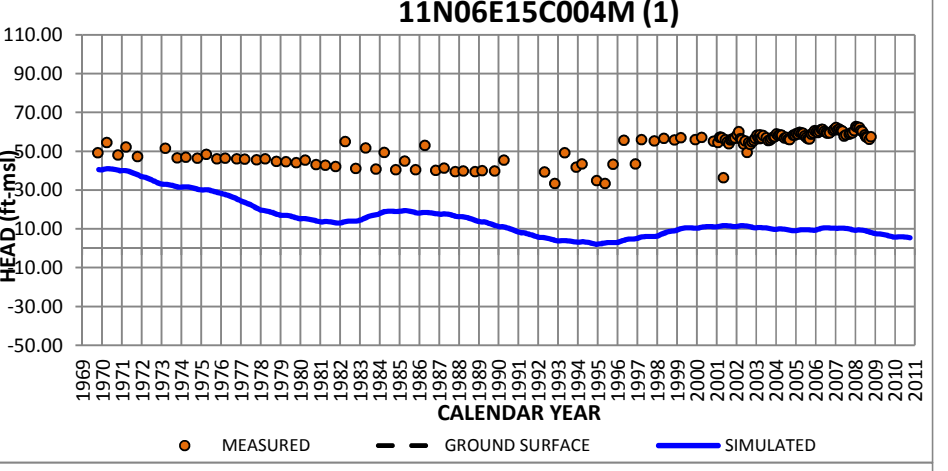
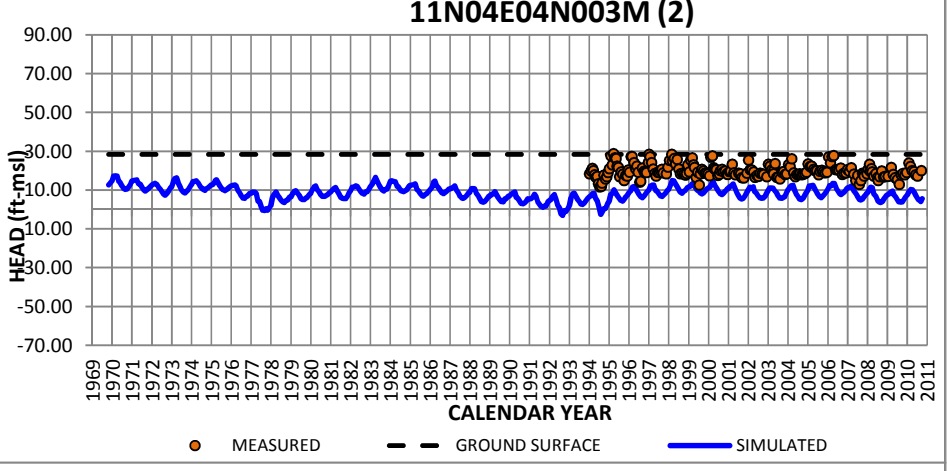
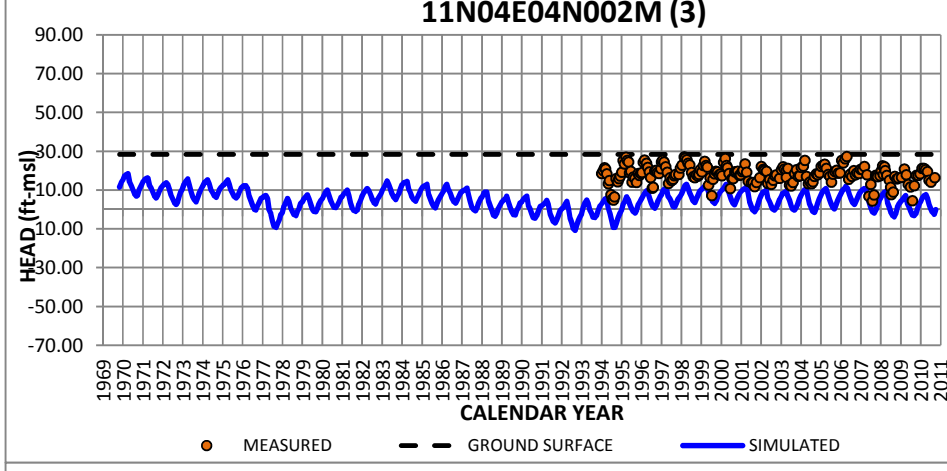
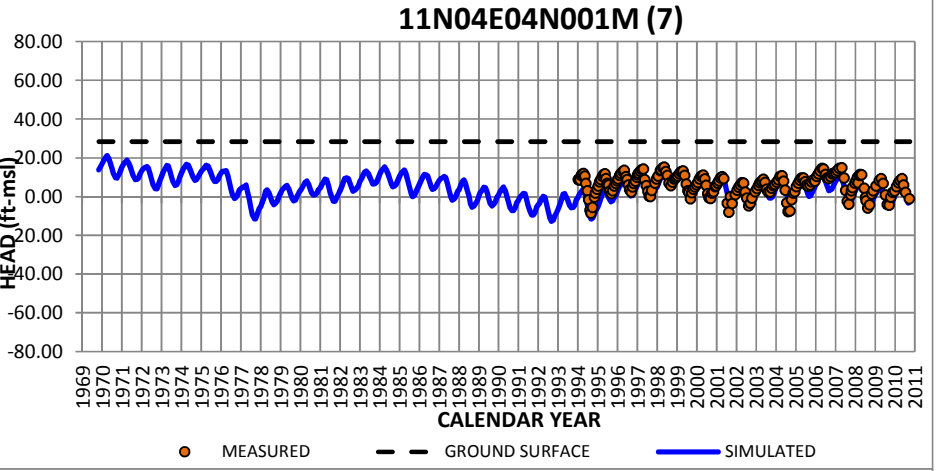
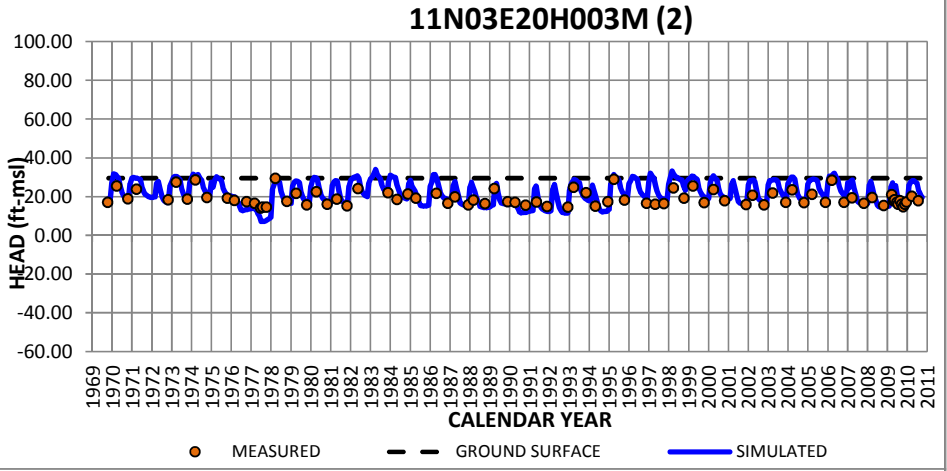
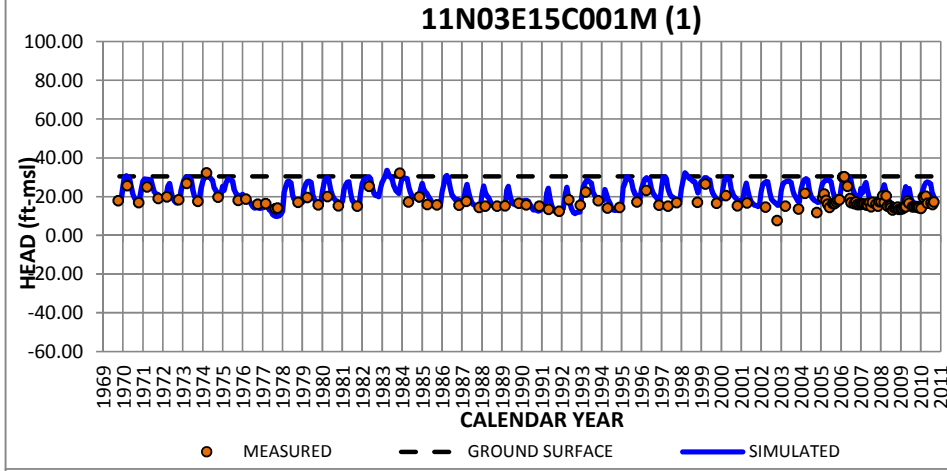
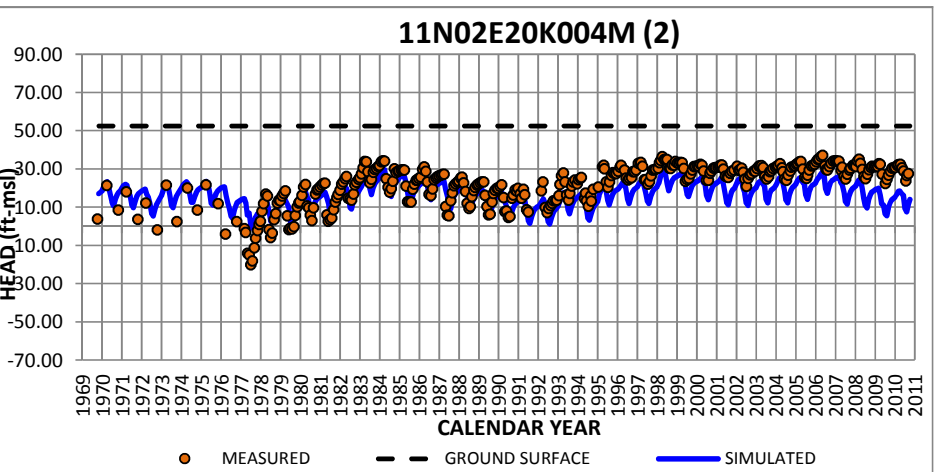
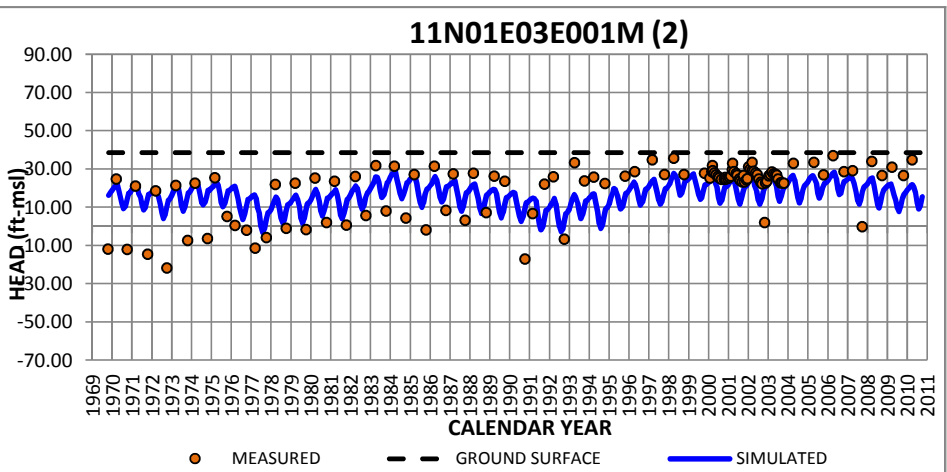
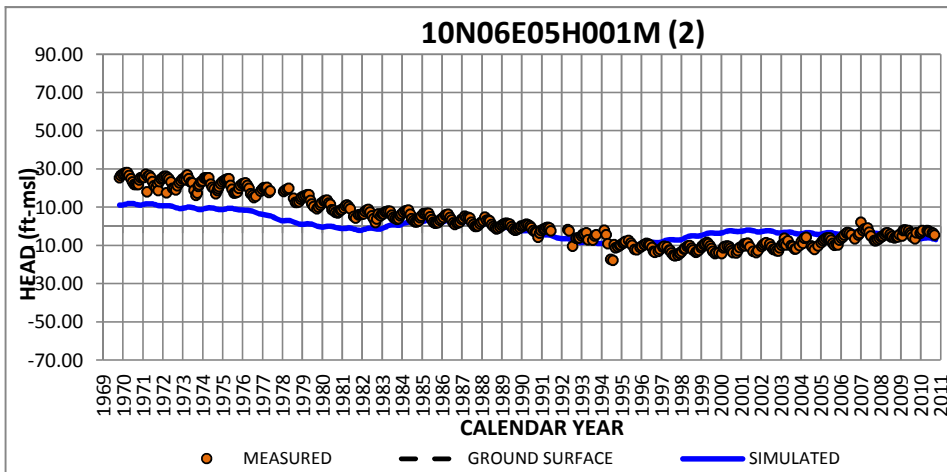
State Well Number	SACFEM 2013 Model Layer	Earliest Year with Measured Data	Latest Year with Measured Data	Minimum Measured Groundwater Elevation (feet NAVD88)	Maximum Measured Groundwater Elevation (feet NAVD88)	Range in Measured Groundwater Elevation (feet)	Number of Measurements	Mean Error (feet)	Root Mean Squared Error (feet)
22N01E28J003M	3	1971.99	2010.59	122.1	164.4	42.3	329.0	-2.8	7.5
22N01E28J005M	7	1971.99	2010.59	116.1	160.2	44.1	330.0	3.7	12.0
22N01E29R001M	6	1970.23	2010.59	106.5	156.4	49.9	137.0	-5.4	10.3
22N01E33N001M	1	1994.28	1997.54	121.4	150.5	29.1	19.0	-0.5	10.1
22N01E33N002M	3	1994.28	1997.54	105.8	143.4	37.6	19.0	2.6	4.8
22N01W05M001M	2	1970.23	2010.59	115.4	148.3	32.9	117.0	3.4	6.4
22N02E17E001M	6	1971.19	2003.57	138.5	256.0	117.5	140.0	57.1	60.4
22N02W08B002M	2	1969.88	2010.59	117.1	201.6	84.5	211.0	9.4	17.5
22N02W20Q001M	1	1973.8	2010.59	165.4	198.2	32.8	146.0	-8.0	9.4
22N02W21D001M	1	1970.21	2010.59	145.8	191.2	45.4	122.0	3.3	8.7
22N02W30H002M	6	2004.39	2010.59	86.3	140.8	54.5	48.0	46.7	48.3
22N02W30H003M	2	2004.39	2010.59	144.5	193.1	48.6	47.0	0.3	8.9
22N02W30H004M	1	2004.39	2010.59	183.5	195.5	12.0	46.0	-11.2	11.4
22N02W36D001M	2	1970.21	2010.59	128.3	162.0	33.7	150.0	-2.8	6.2
22N03W21F002M	2	1977.49	2010.59	223.1	253.9	30.8	321.0	-19.2	20.2
23N01E29P001M	1	1969.89	1990.18	141.3	192.0	50.7	129.0	-12.7	19.7
23N01E29P002M	2	1991.18	2010.59	129.8	164.9	35.1	97.0	33.9	35.2
23N01W09E001M	1	1970.23	2010.59	131.9	170.1	38.2	293.0	20.0	21.7
23N01W14R002M	2	1986.17	2010.59	137.9	171.1	33.2	116.0	26.6	27.3
23N02W16B001M	2	1970.22	2010.22	114.5	170.8	56.3	93.0	31.9	33.5
24N02W12P001M	3	1999.99	2010.59	194.4	202.9	8.6	62.0	13.1	13.6
24N02W12P002M	6	1999.99	2010.59	194.6	202.9	8.3	62.0	21.5	21.6
24N02W30P002M	3	1993.21	2010.22	111.9	196.0	84.1	56.0	33.9	38.1
24N03W17M001M	1	1973.18	2010.59	236.0	286.4	50.4	144.0	5.4	11.3
25N02W09G001M	1	1973.19	2010.59	219.0	234.4	15.4	176.0	6.9	7.7
25N03W10L003M	4	1969.89	2010.59	179.7	248.5	68.8	344.0	19.6	23.1
25N03W10L004M	2	1969.89	2010.59	236.6	269.1	32.5	321.0	-10.8	12.0
27N03W10B001M	1	1970.55	2010.59	243.1	269.3	26.2	331.0	6.5	7.1
27N03W20K001M	2	1969.84	1975.25	249.6	257.4	7.8	34.0	7.0	7.5
27N04W35E001M	2	1970.23	2010.59	297.3	337.7	40.4	133.0	-21.9	23.9

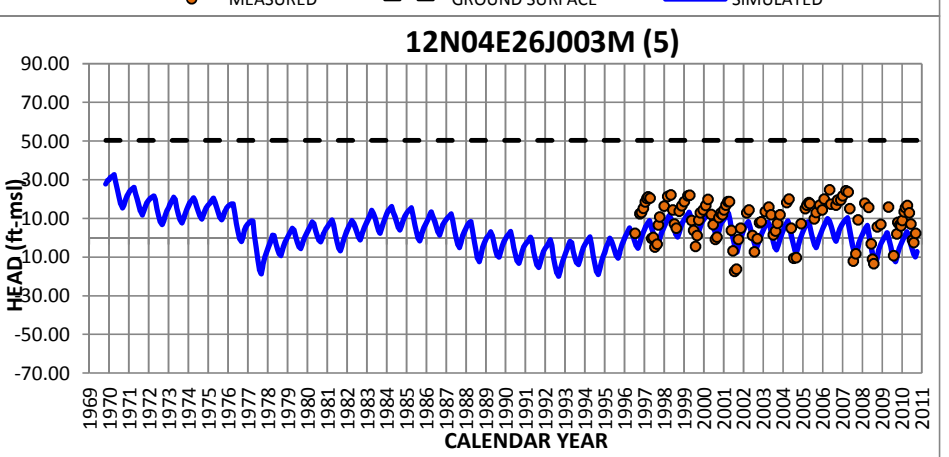
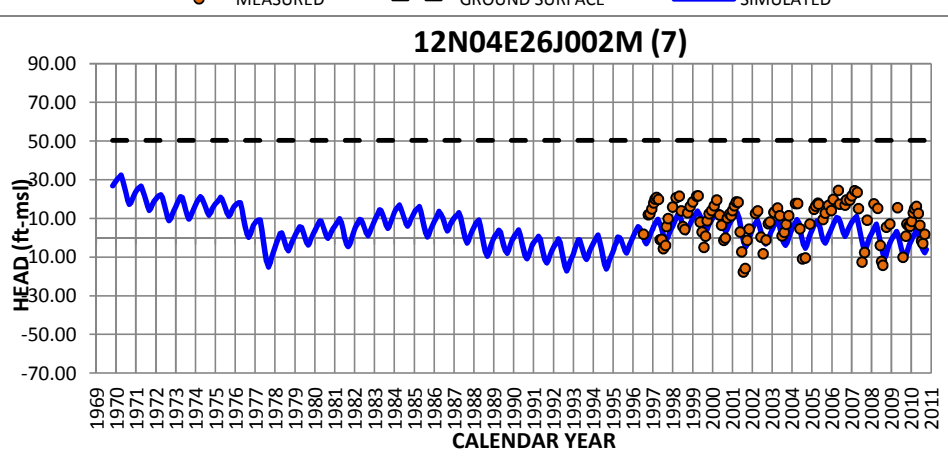
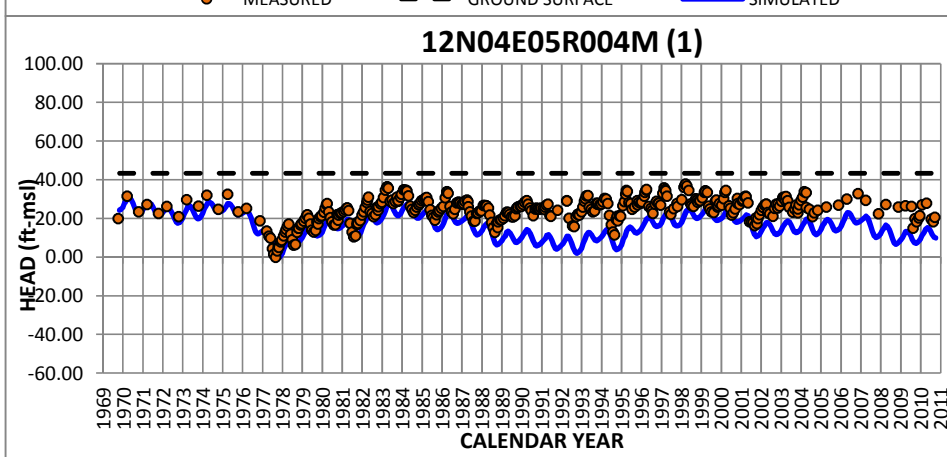
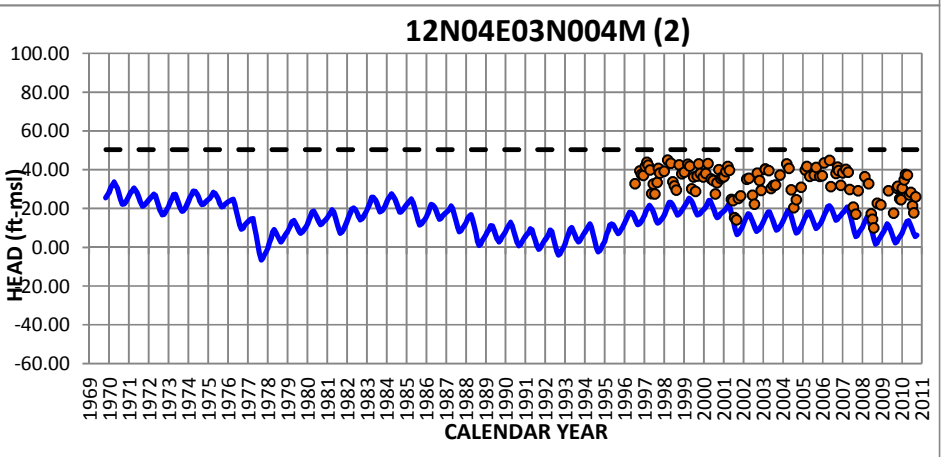
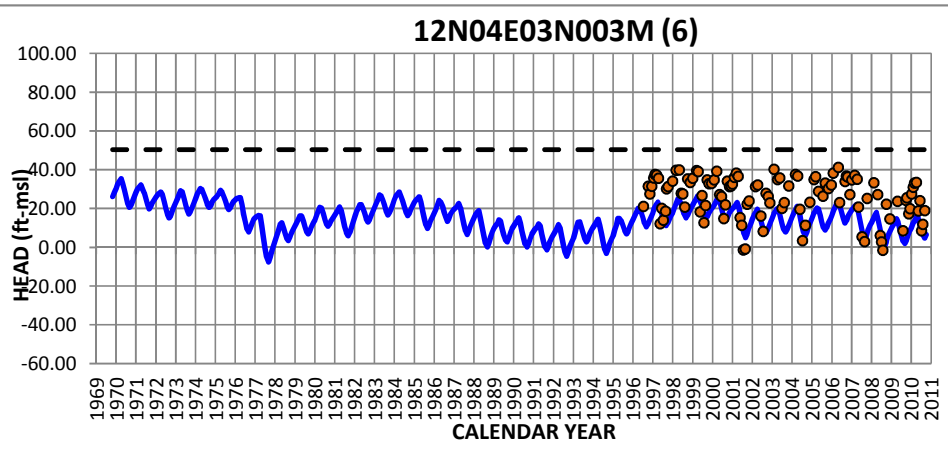
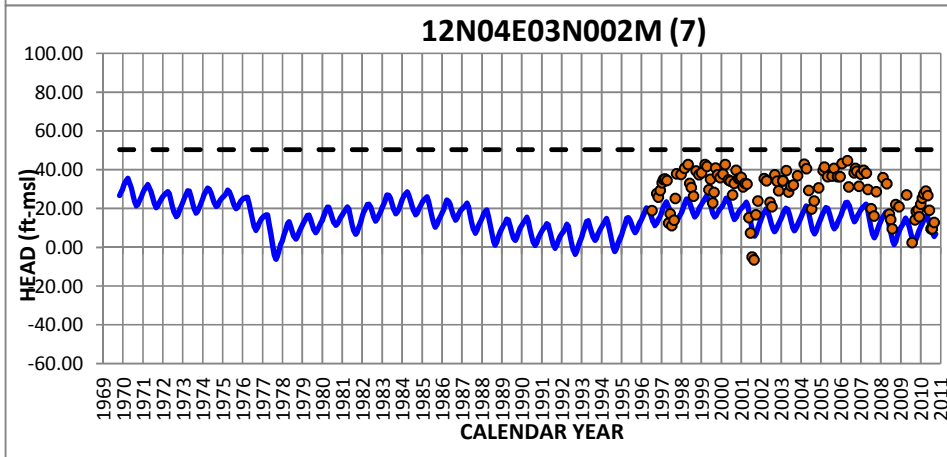
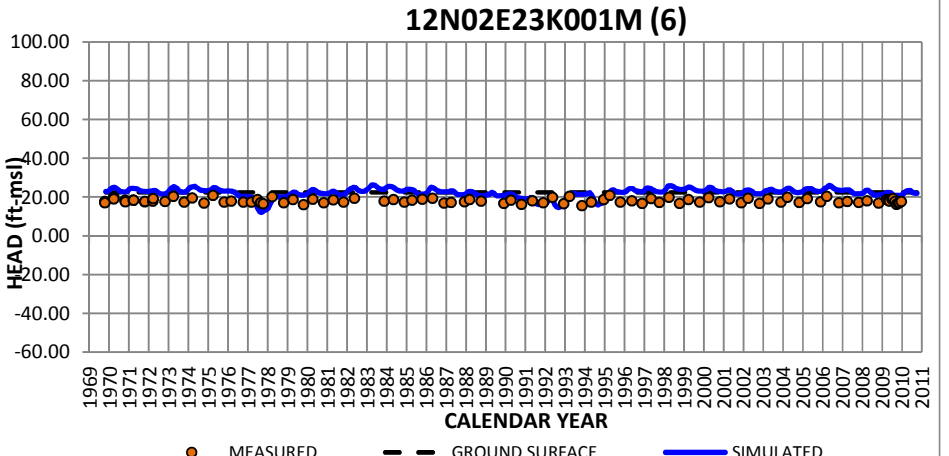
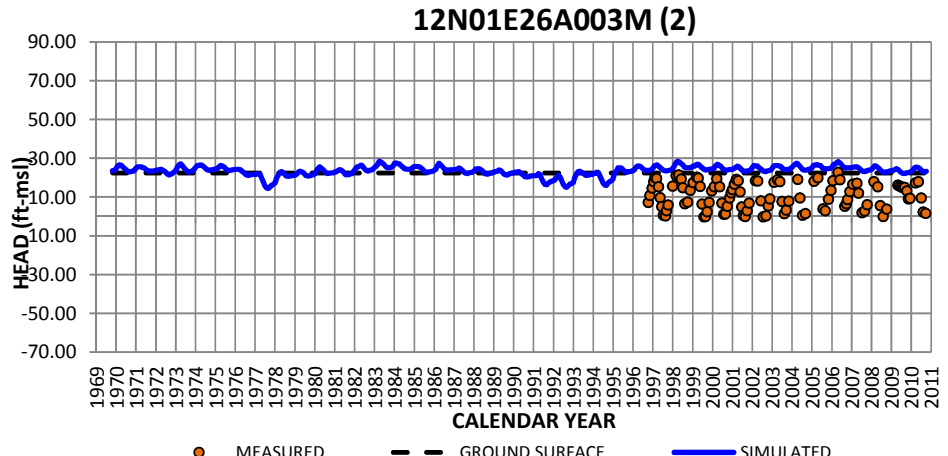
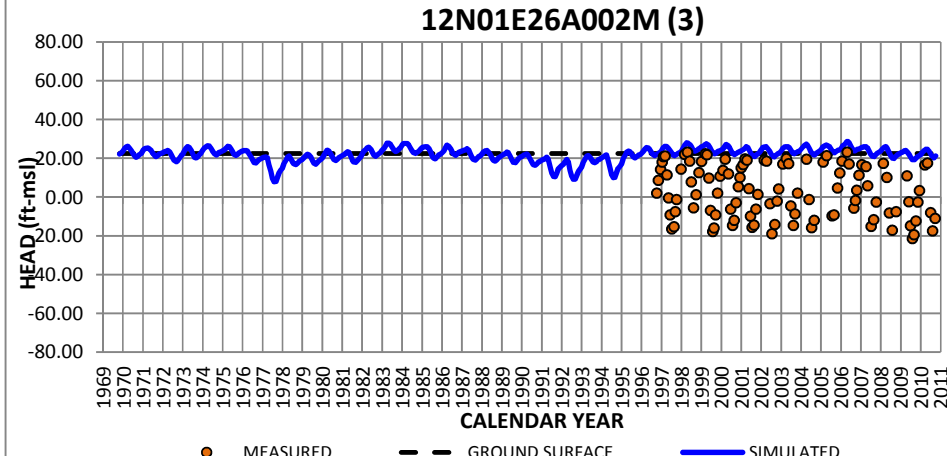
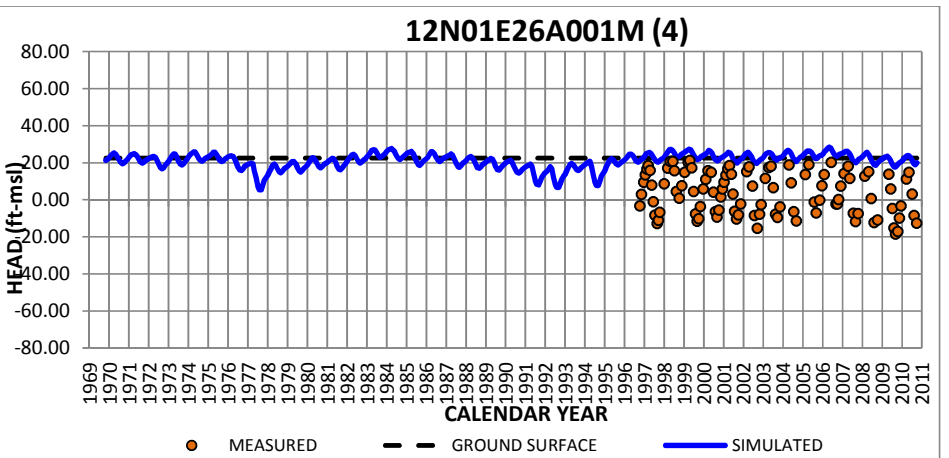
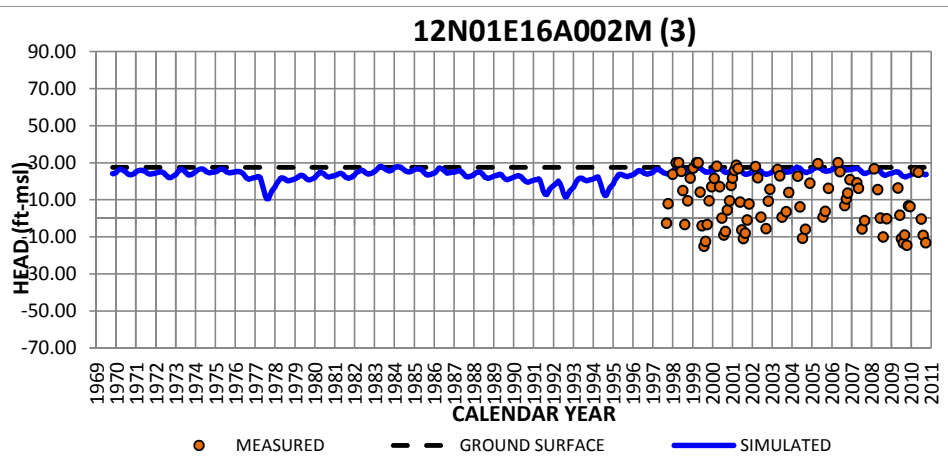
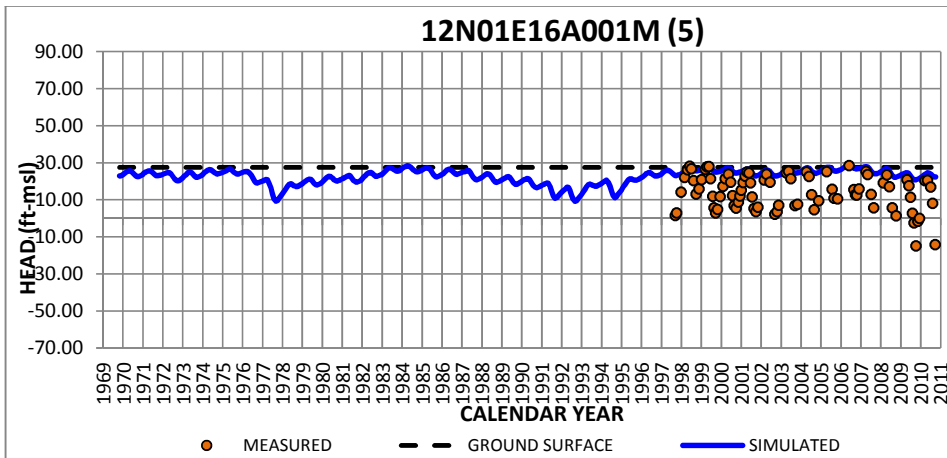
Appendix C
Simulated and Measured Groundwater
Hydrographs

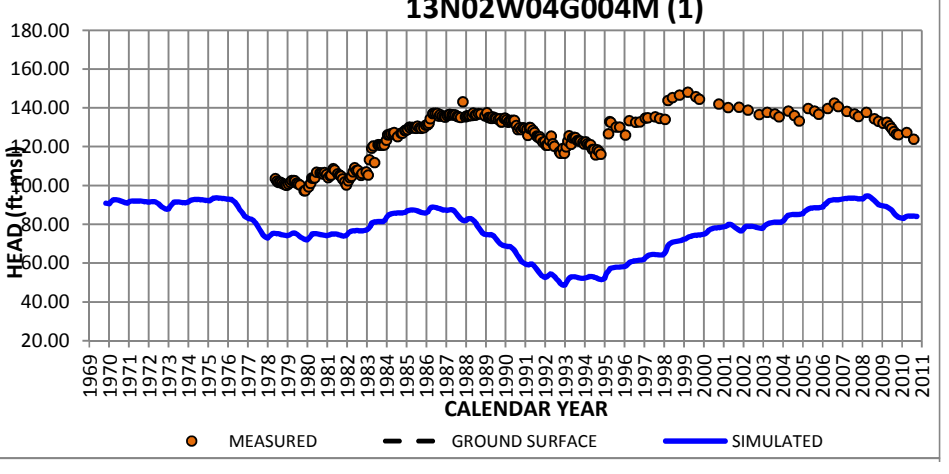
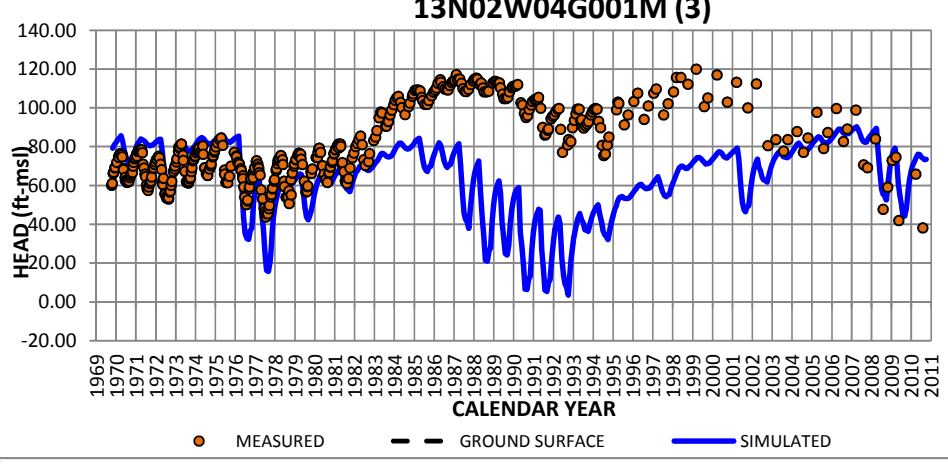
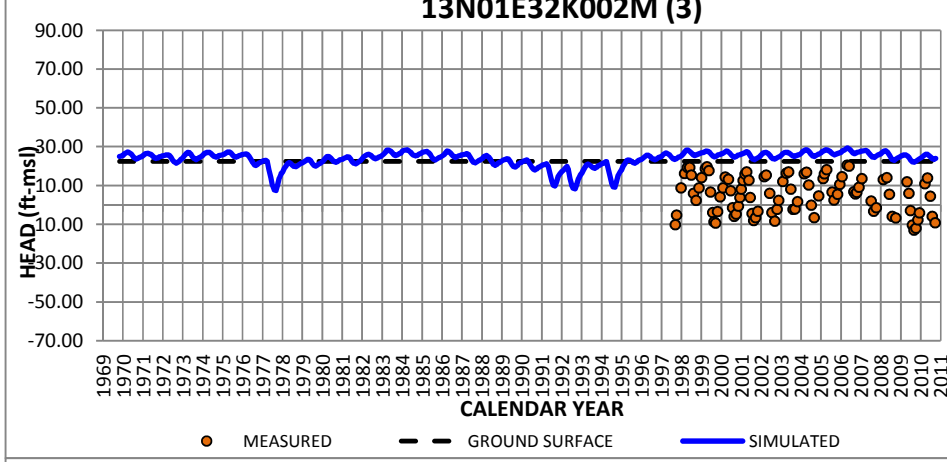
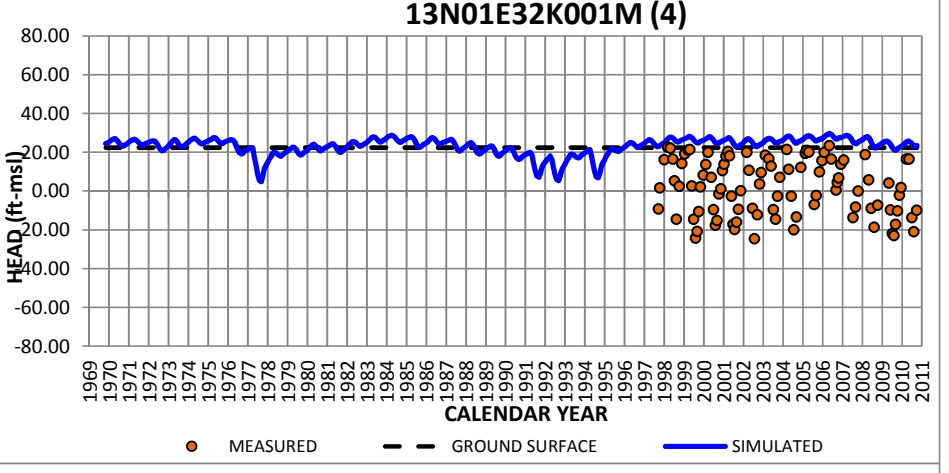
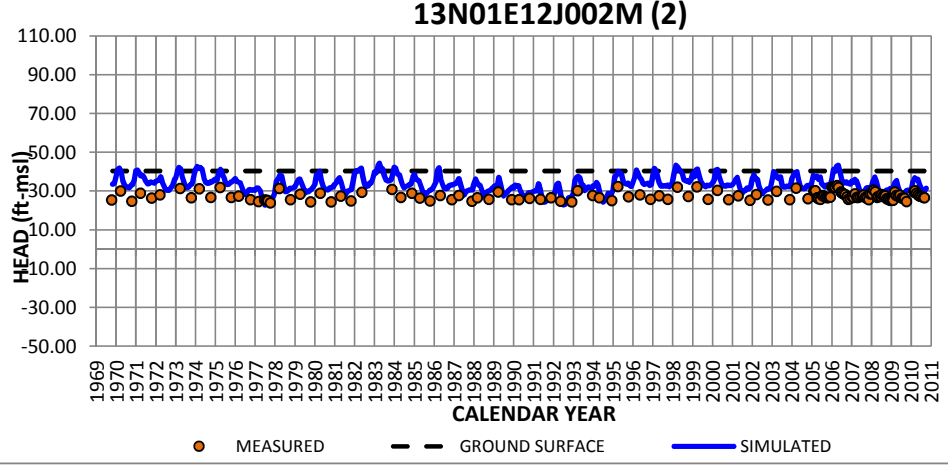
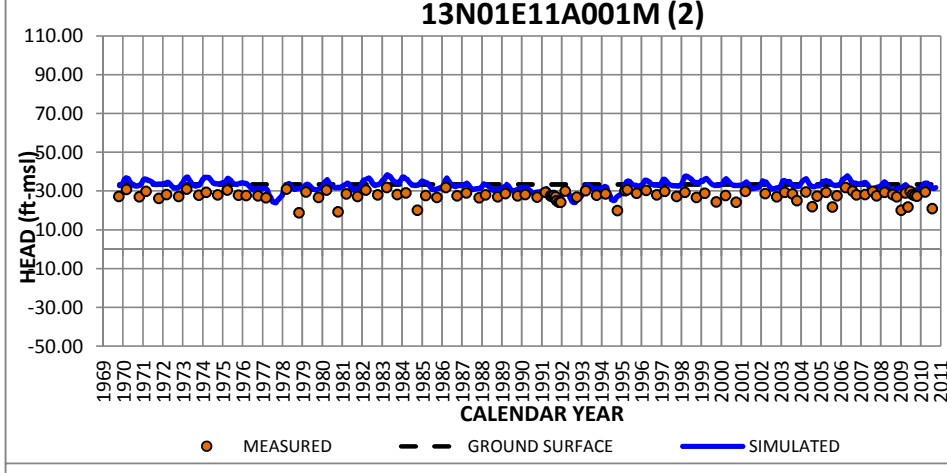
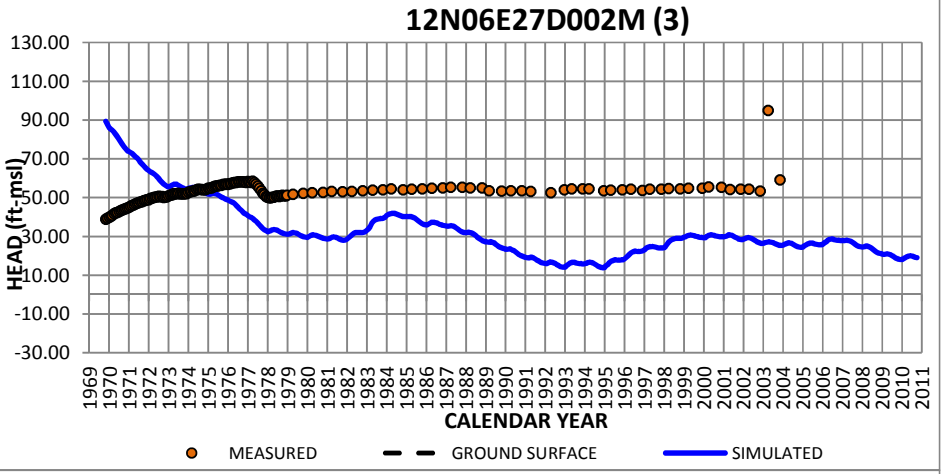
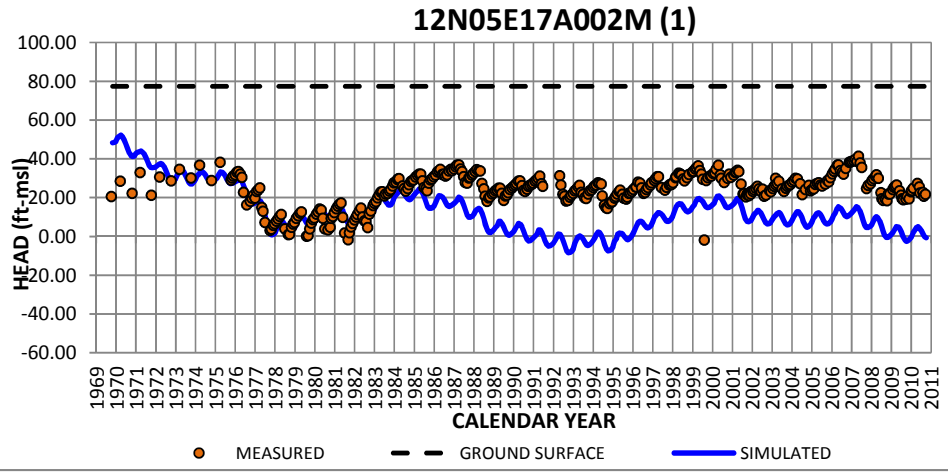
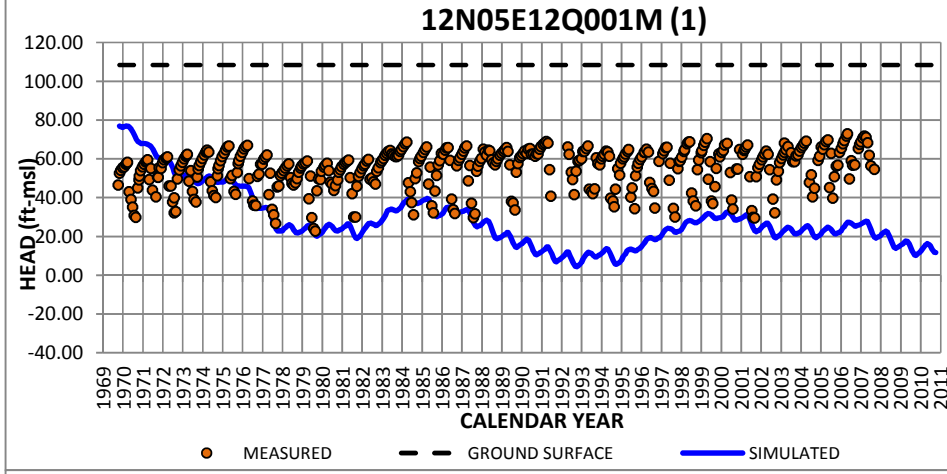
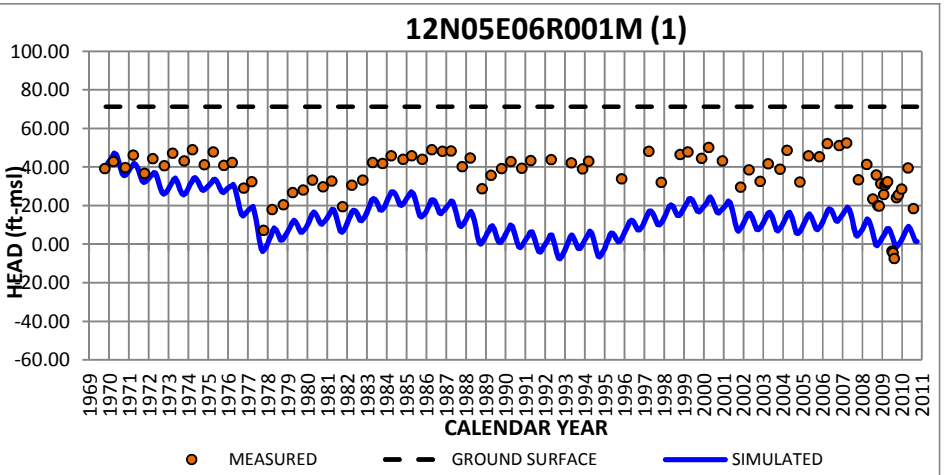
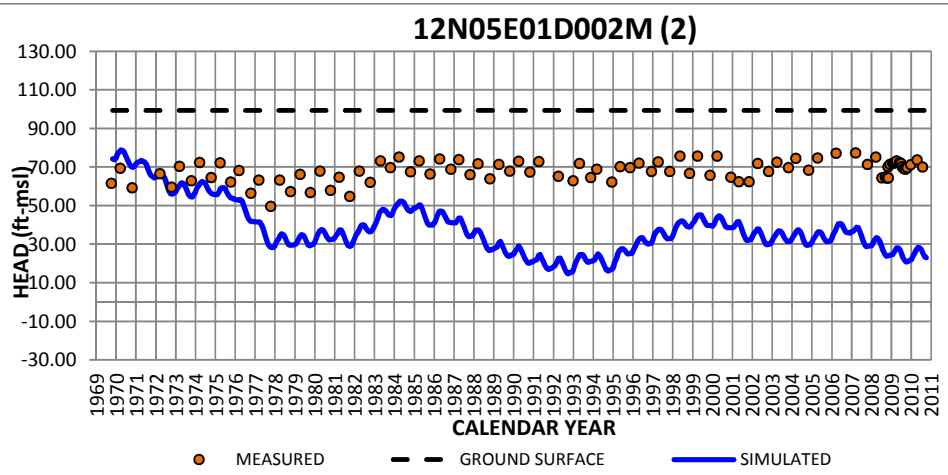
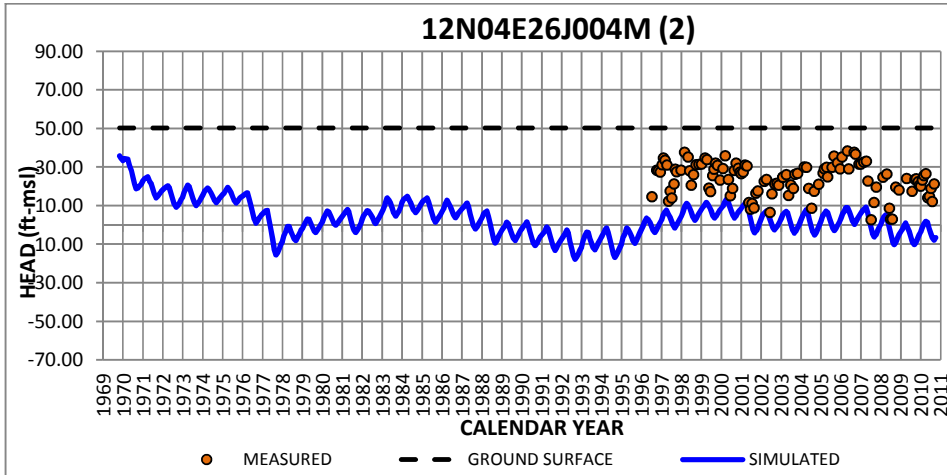


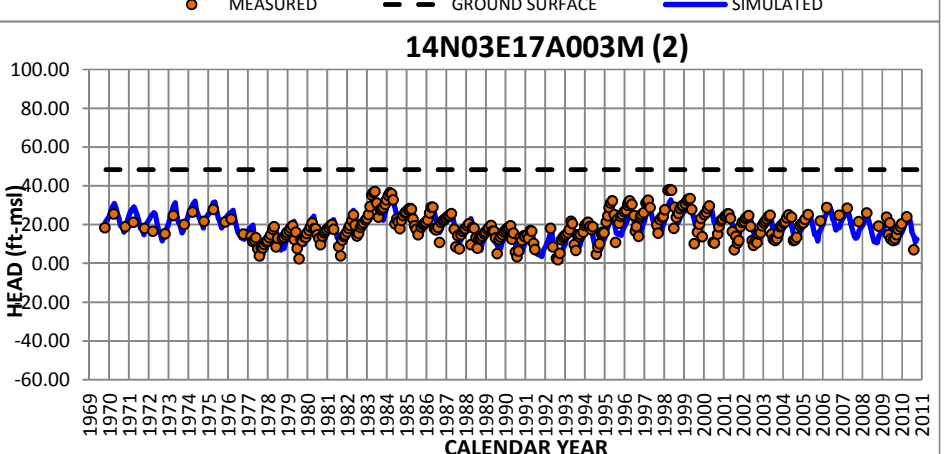
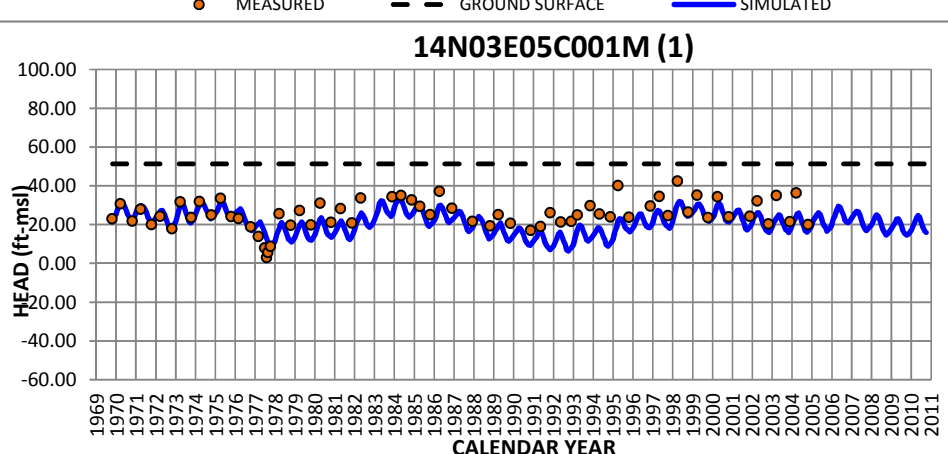
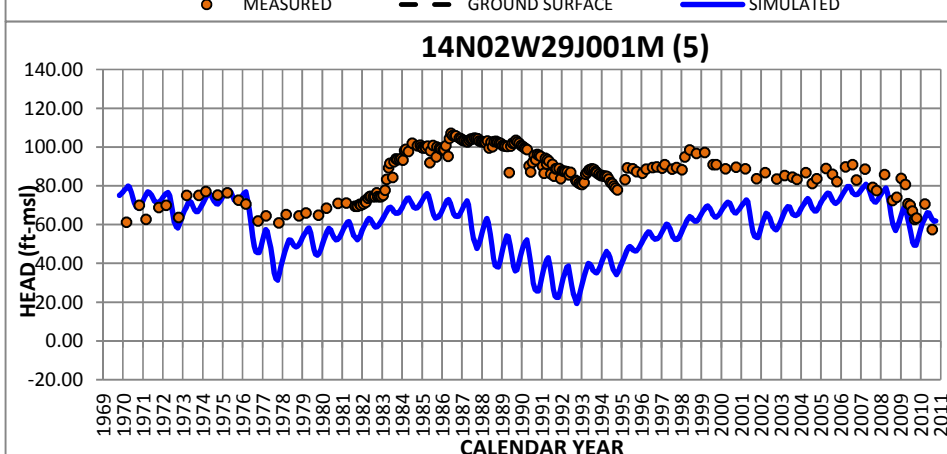
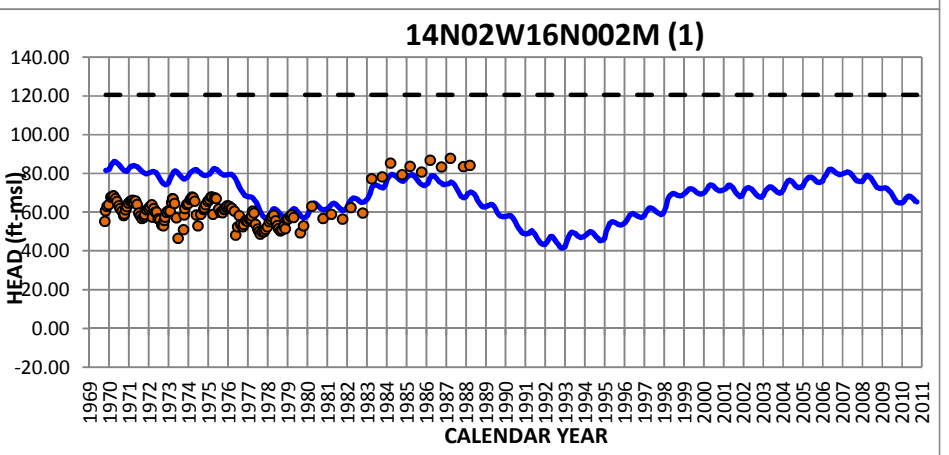
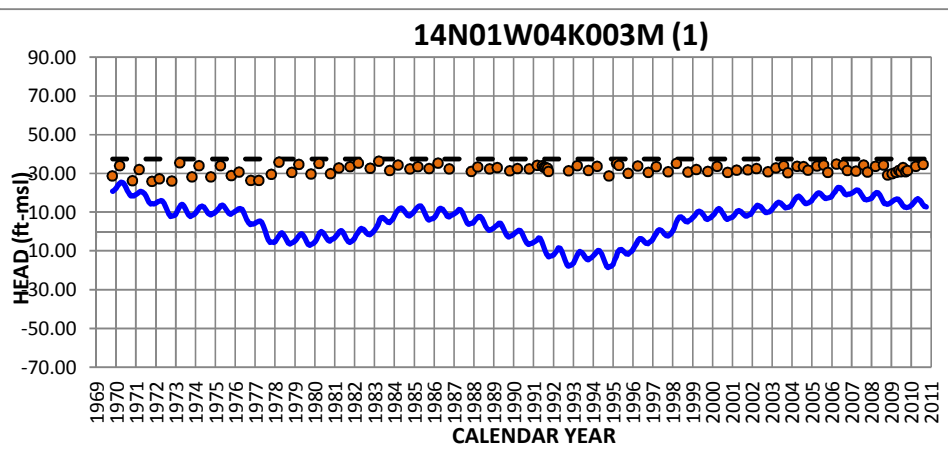
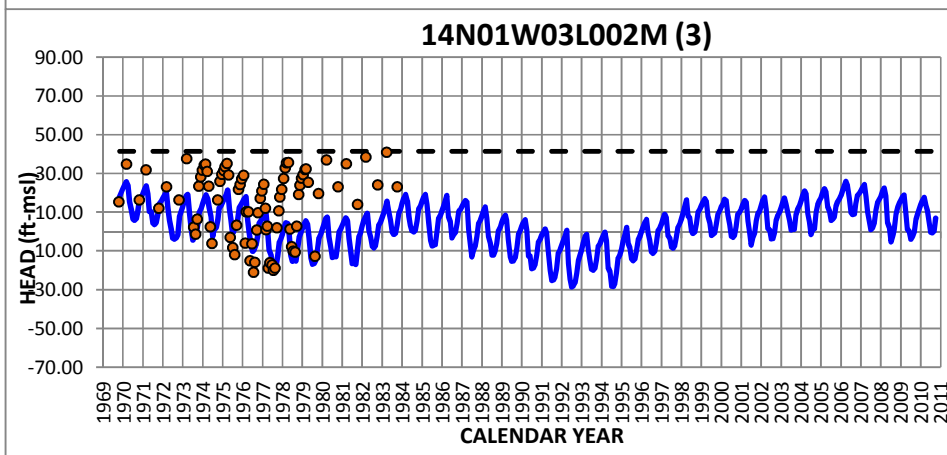
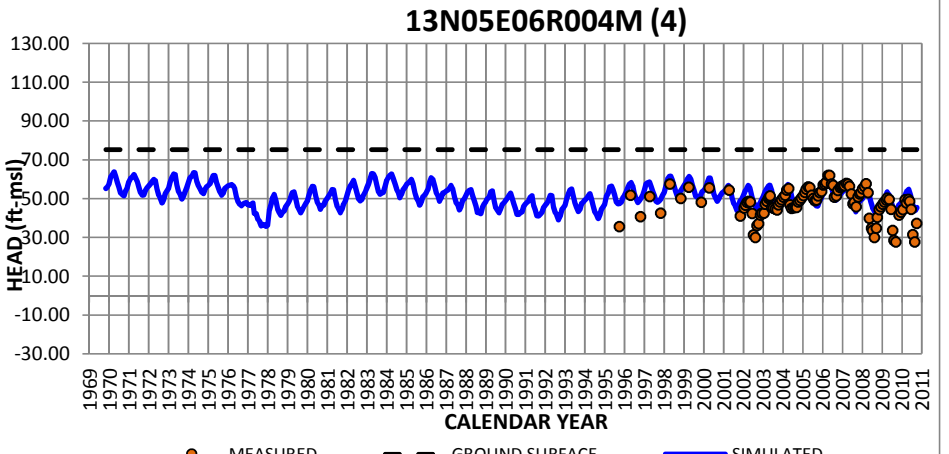
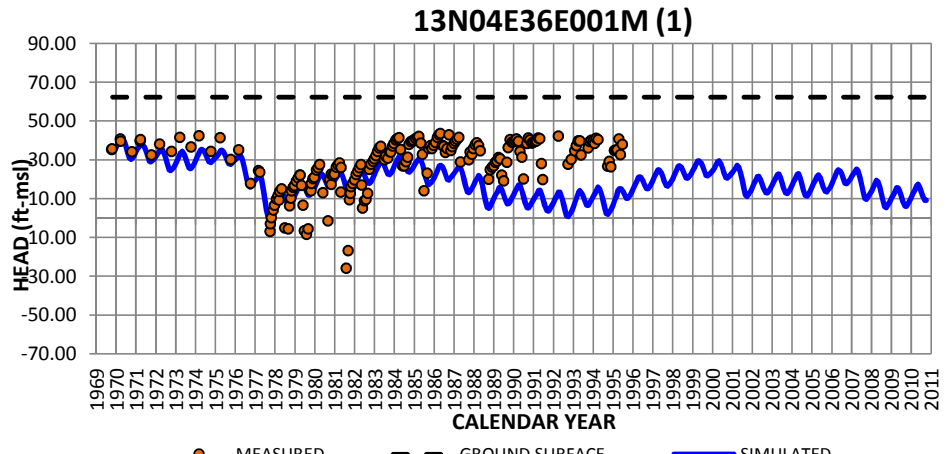
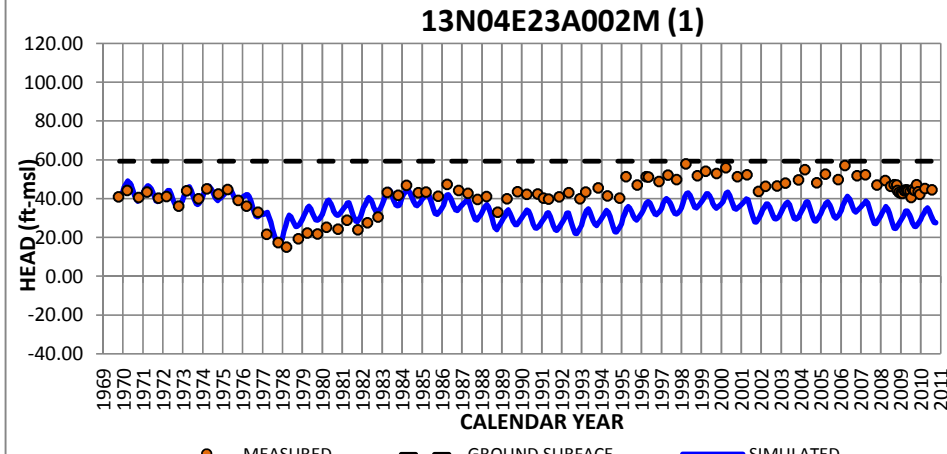
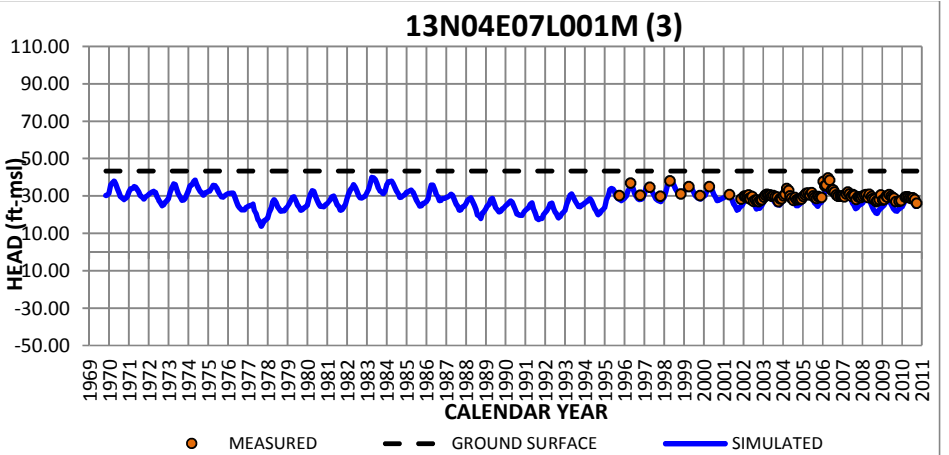
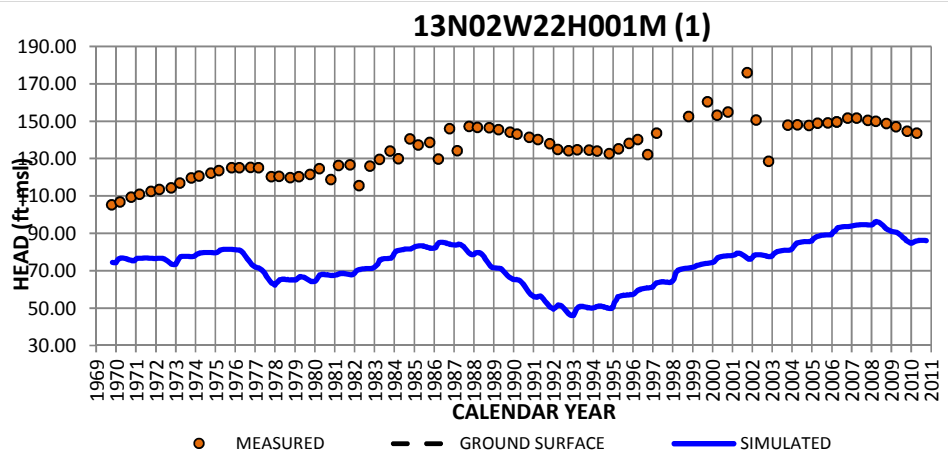
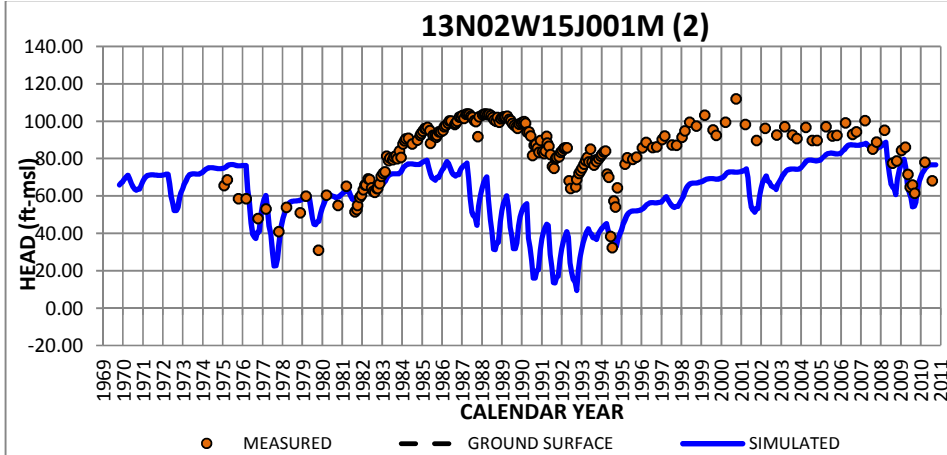


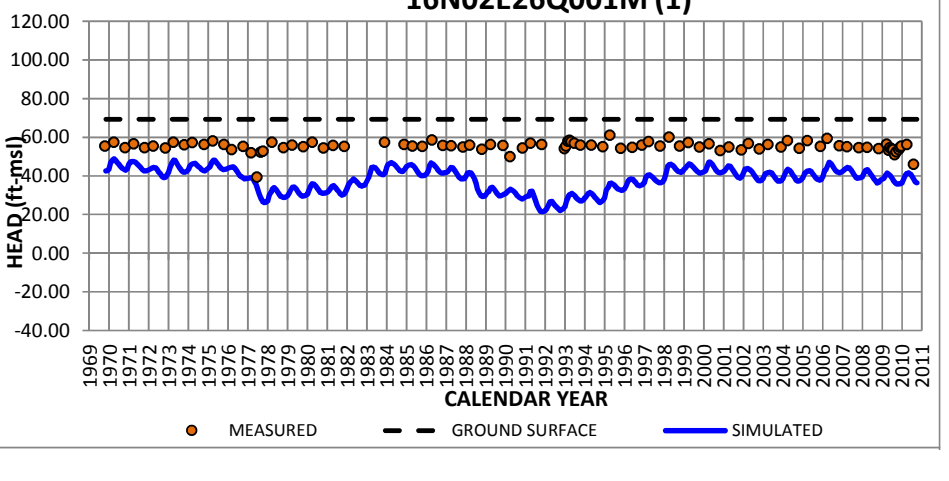
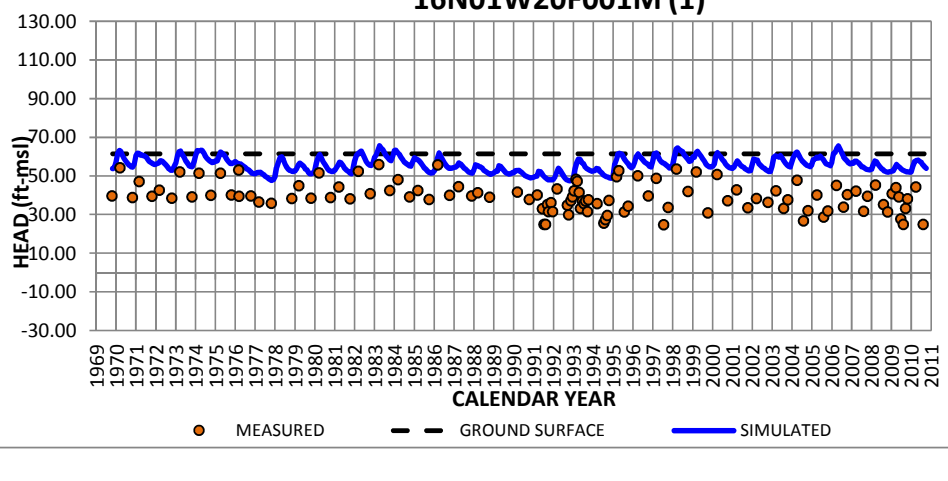
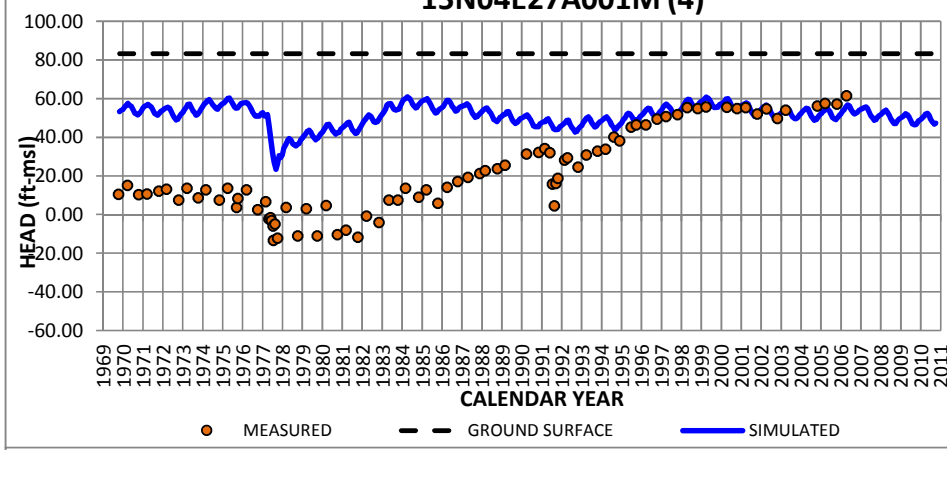
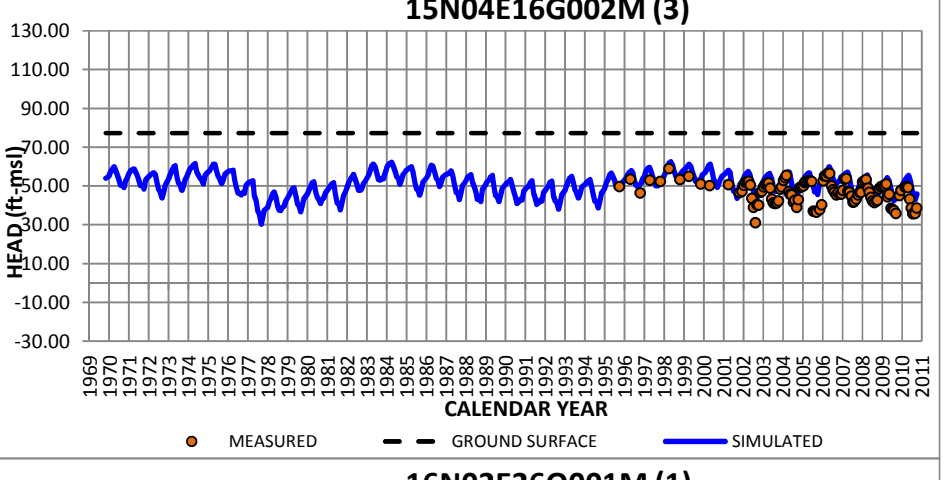
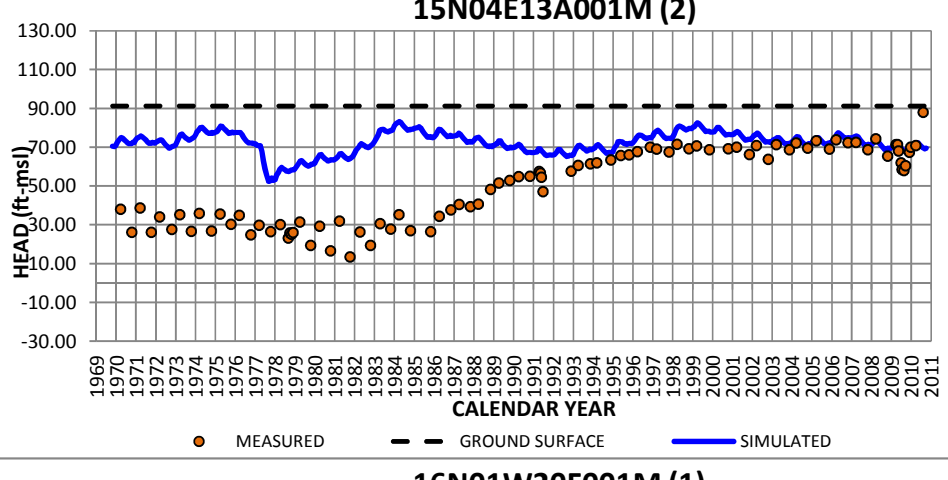
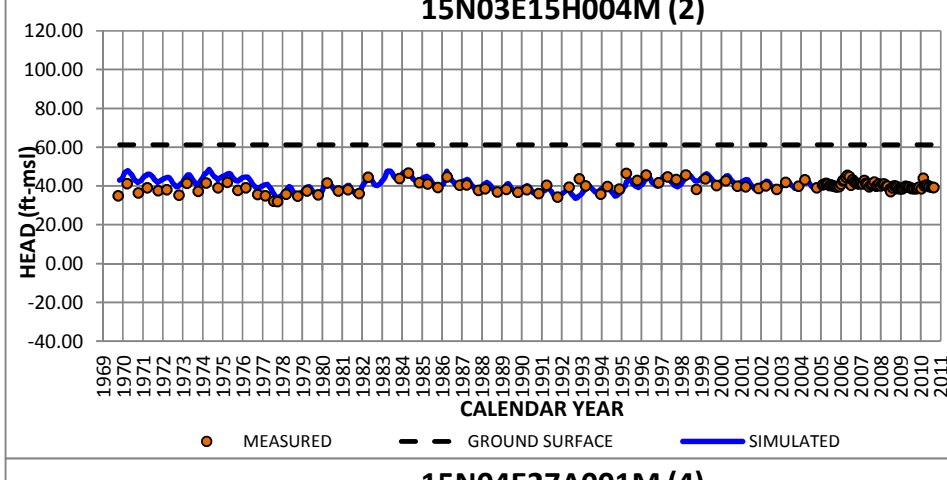
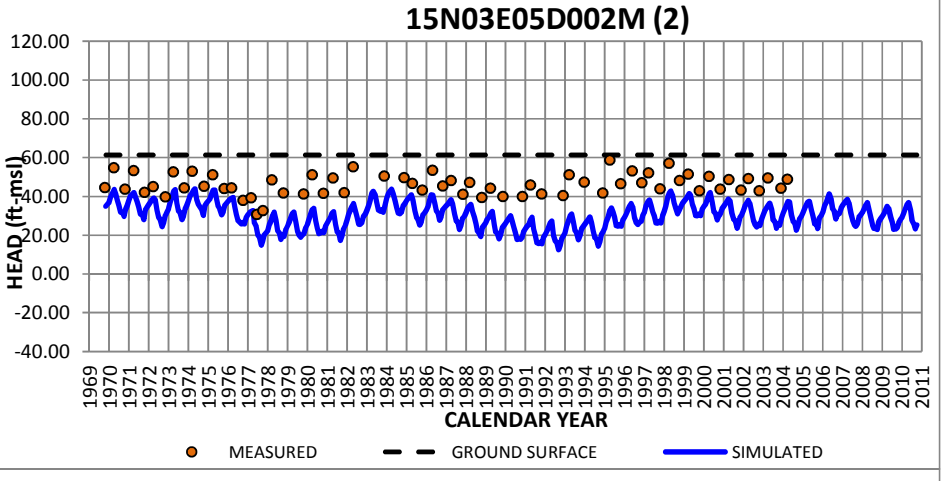
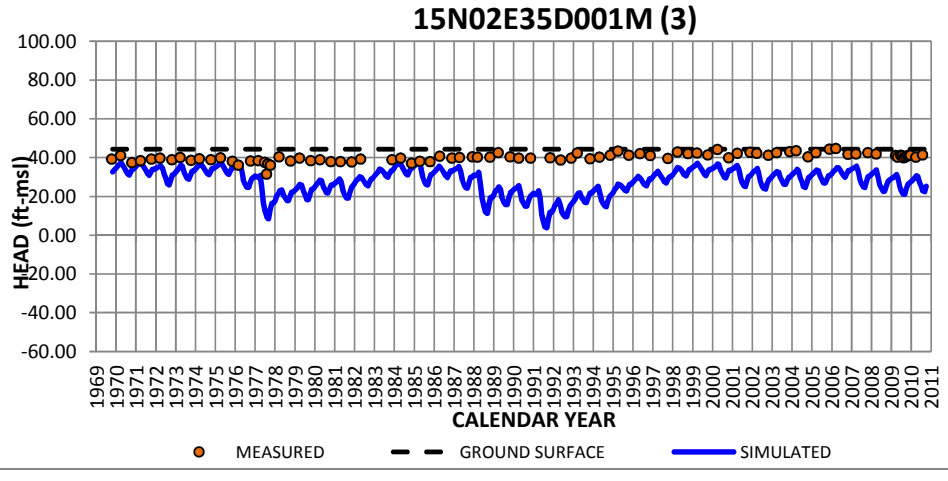
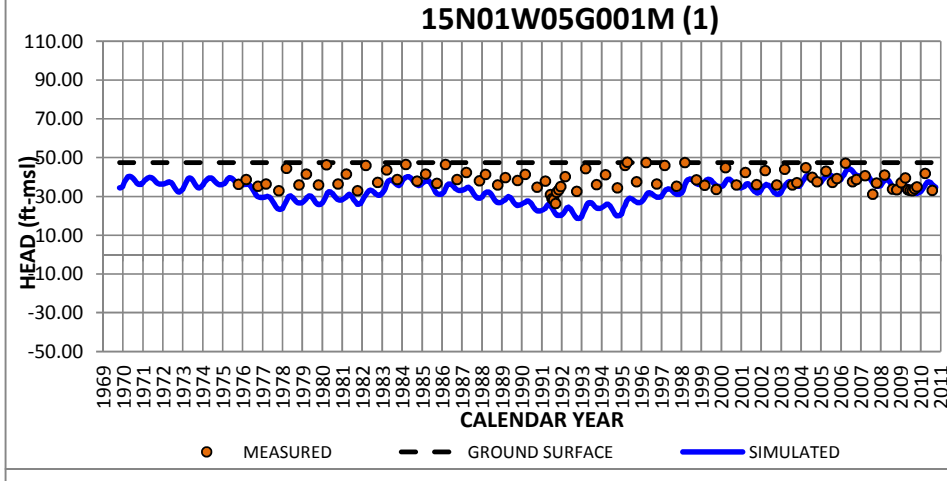
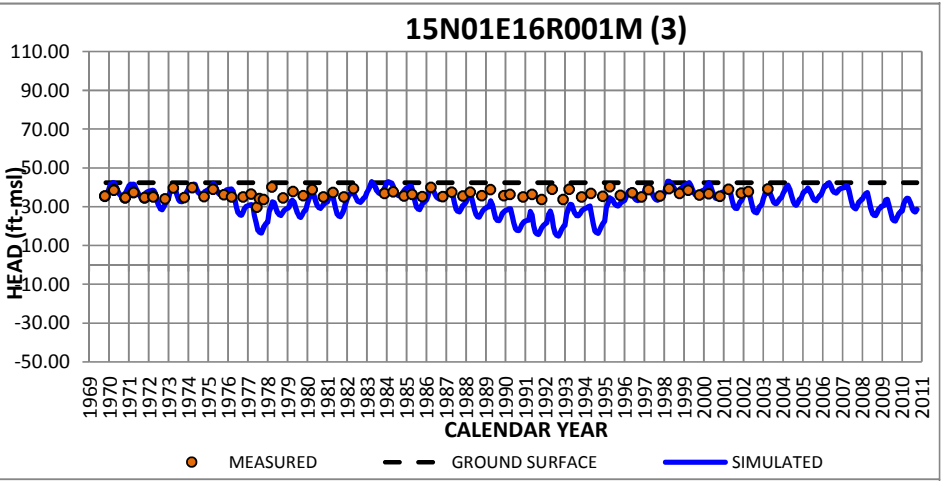
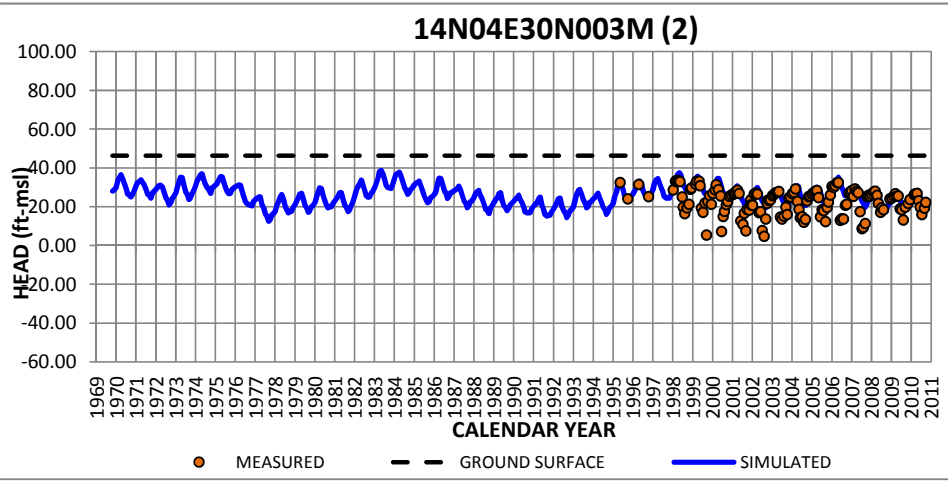
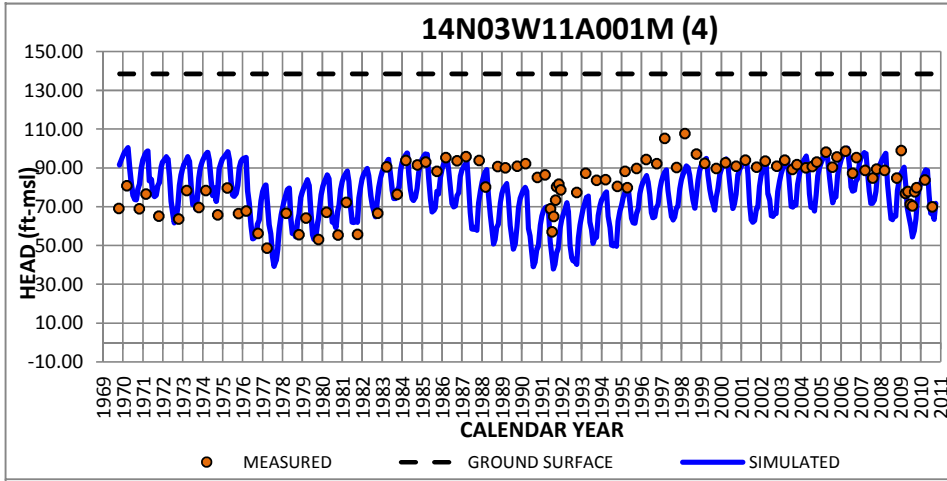


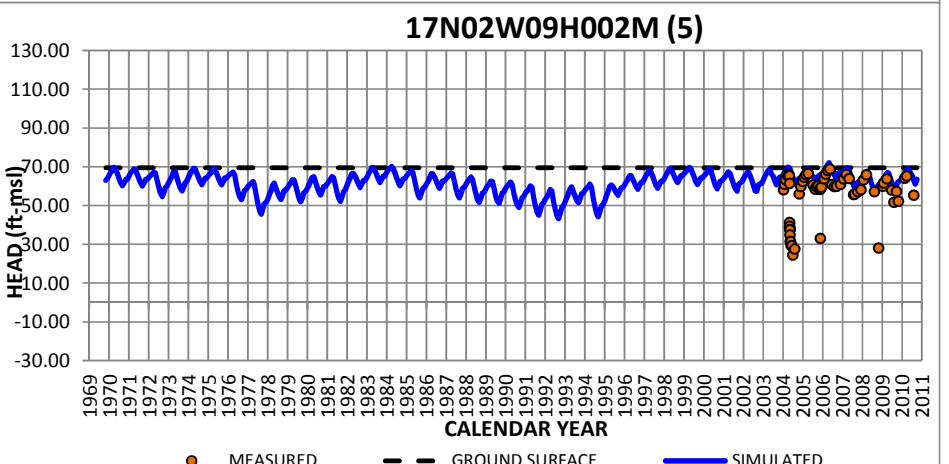
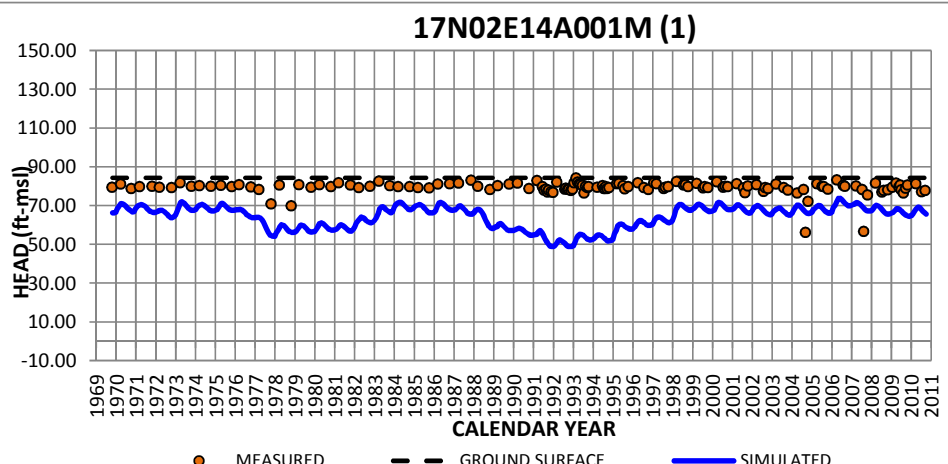
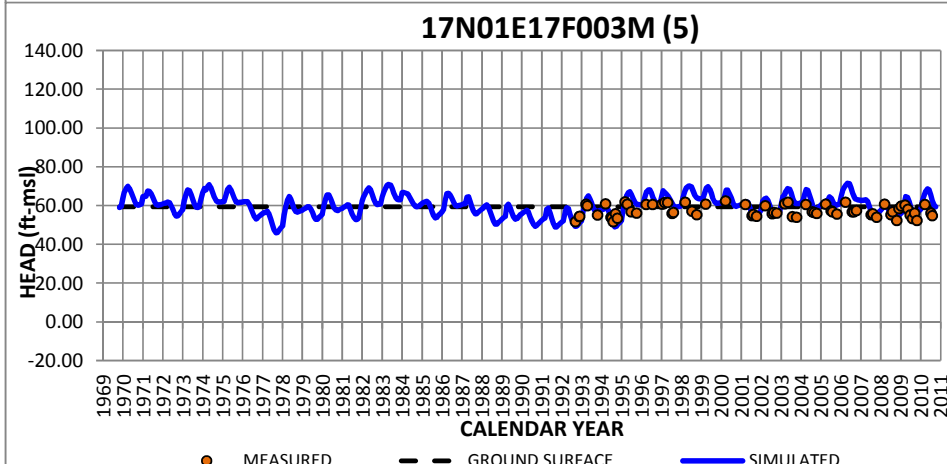
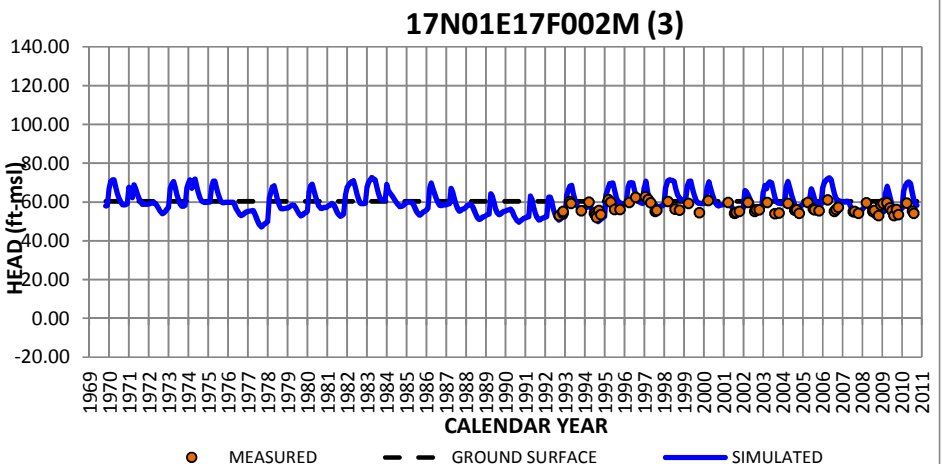
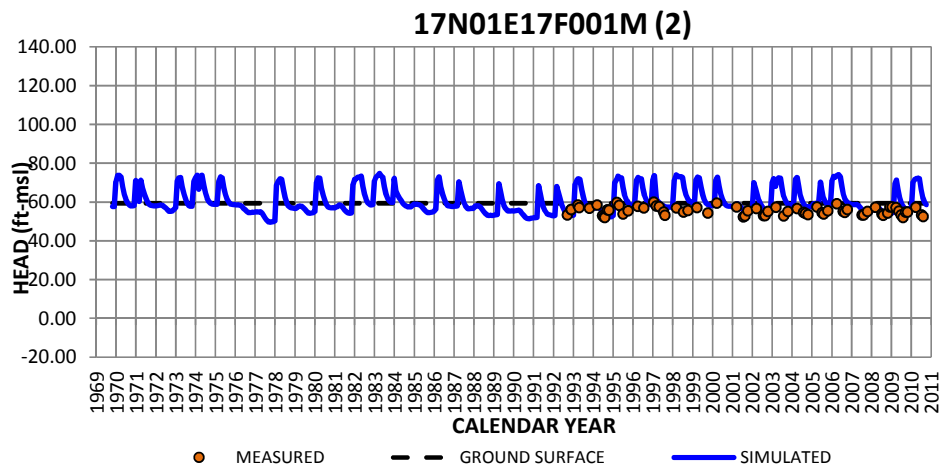
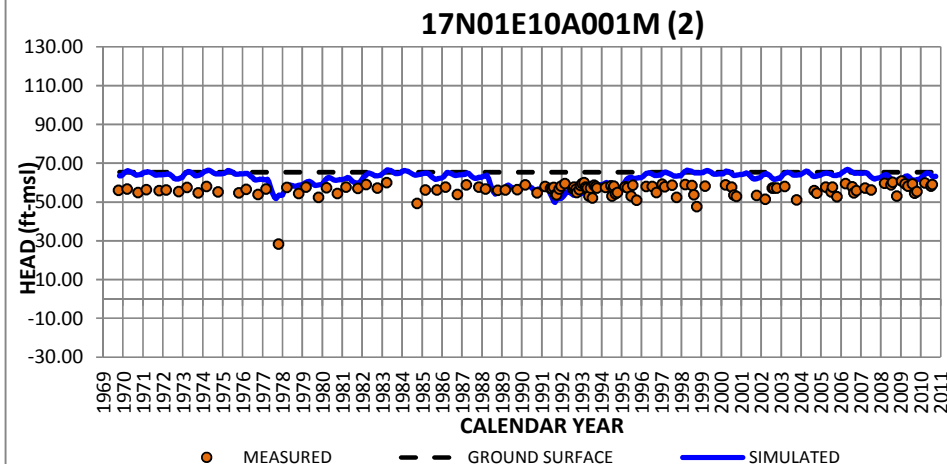
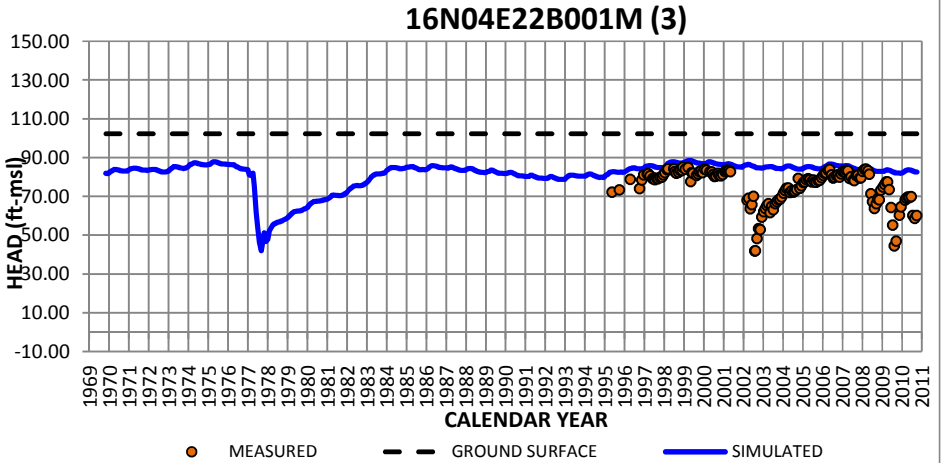
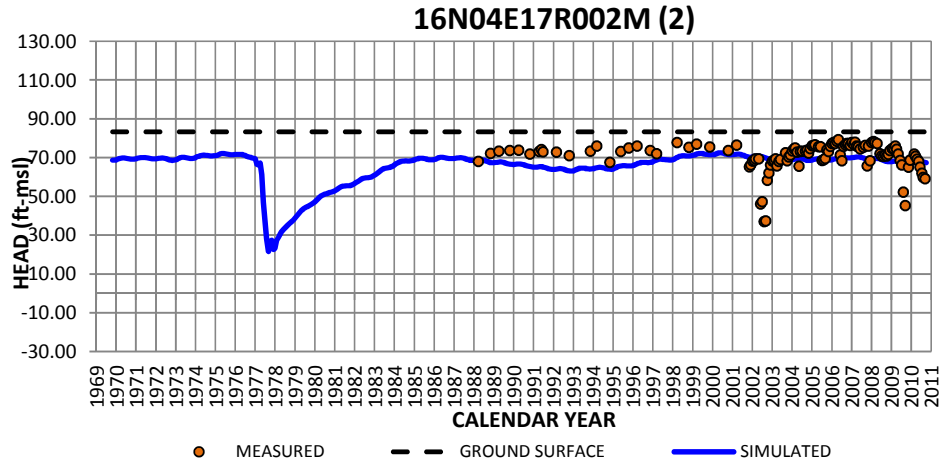
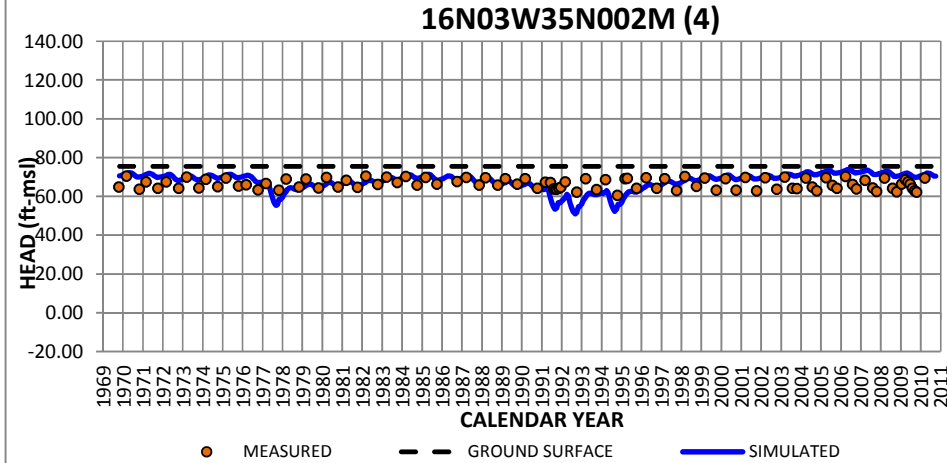
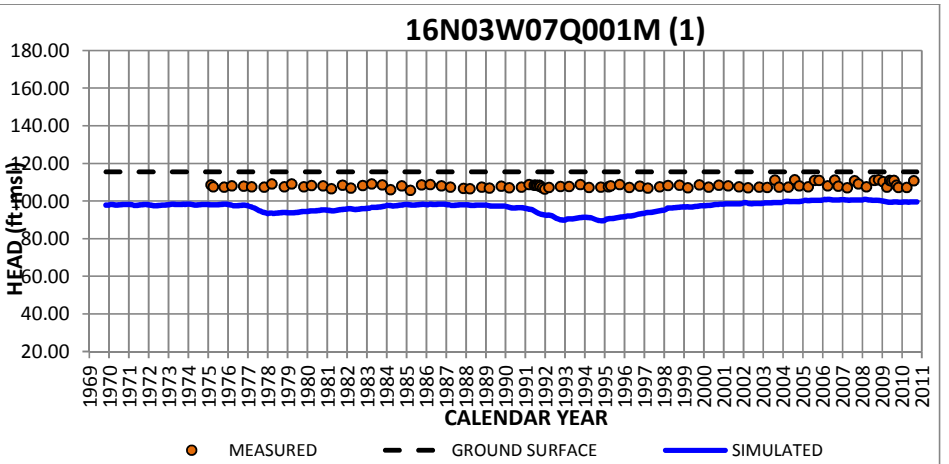
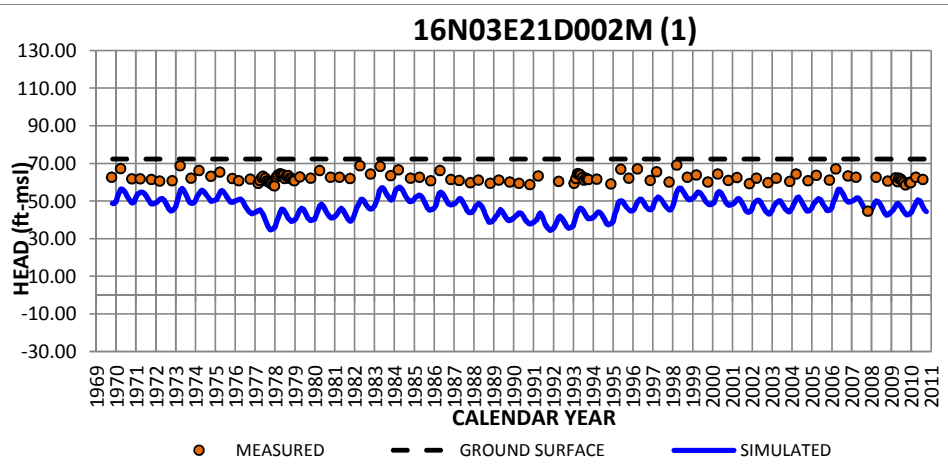
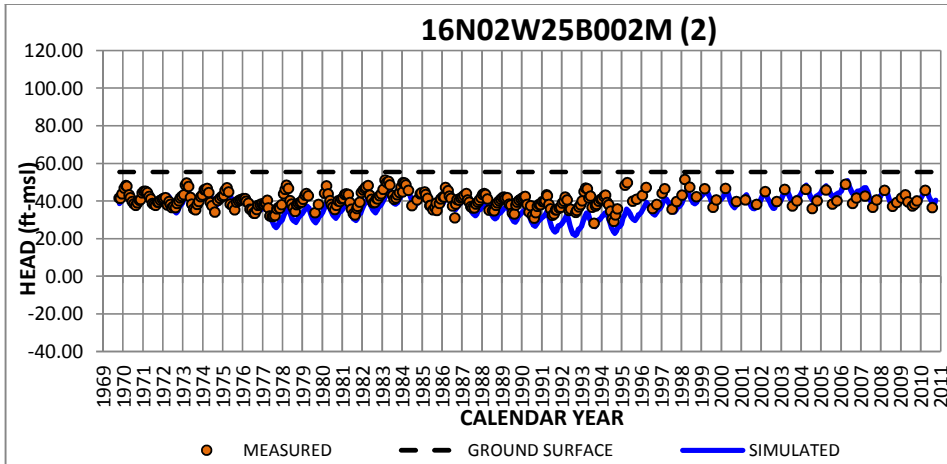


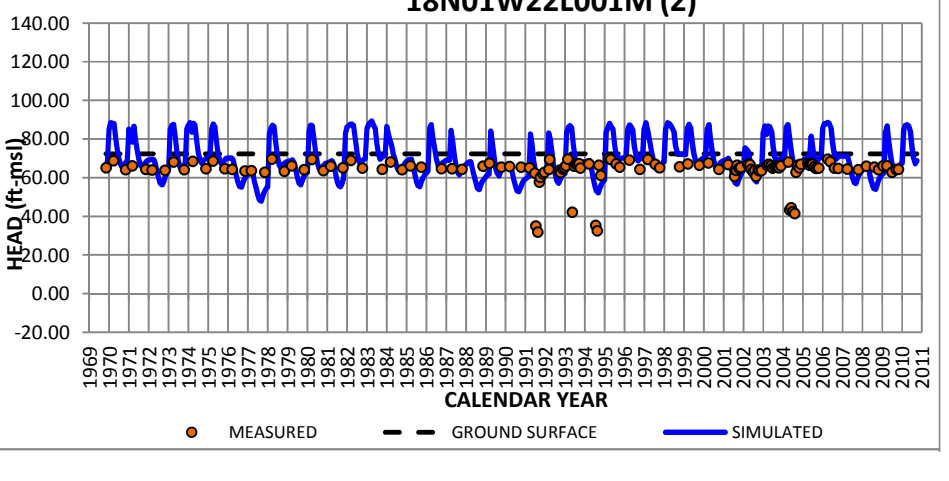
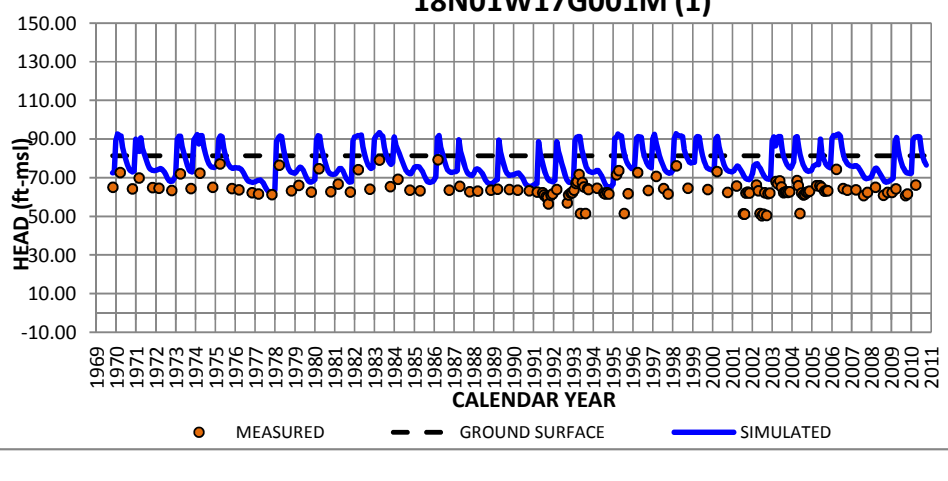
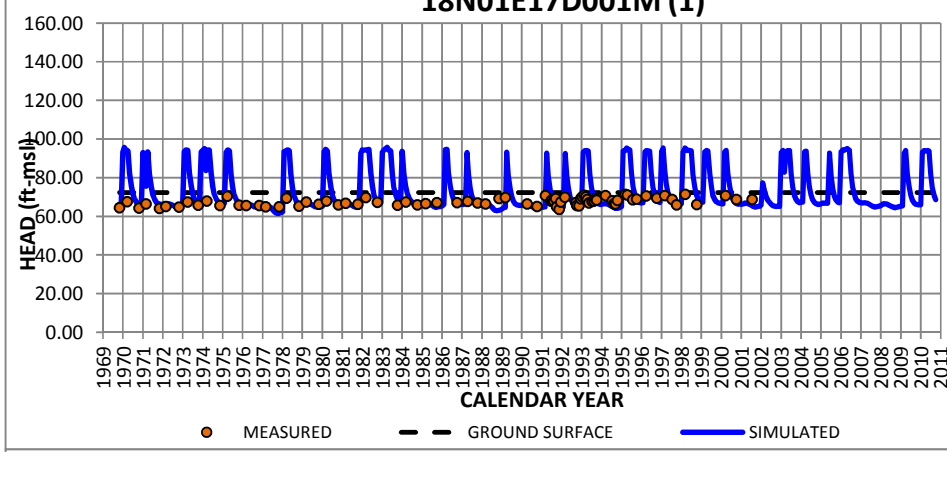
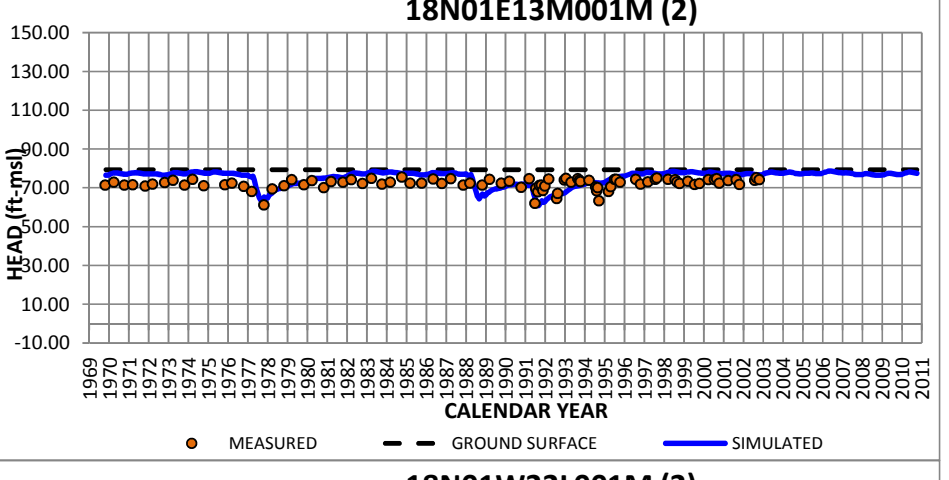
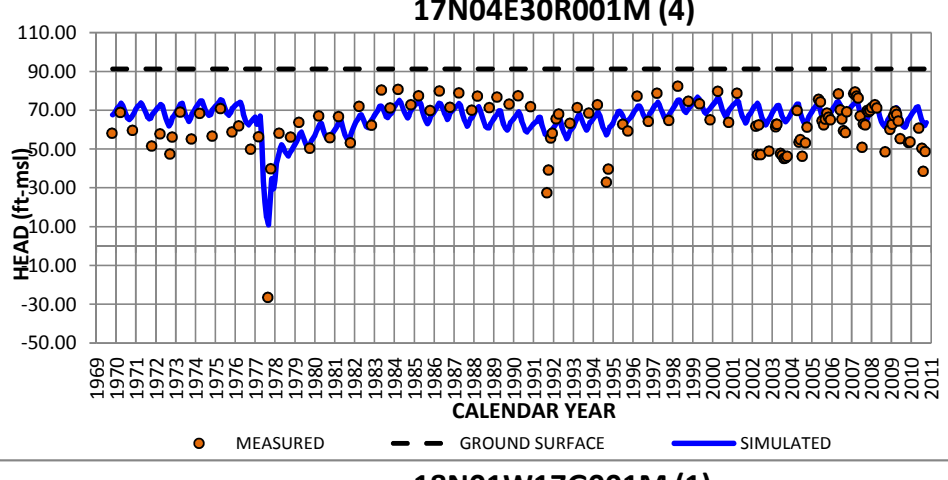
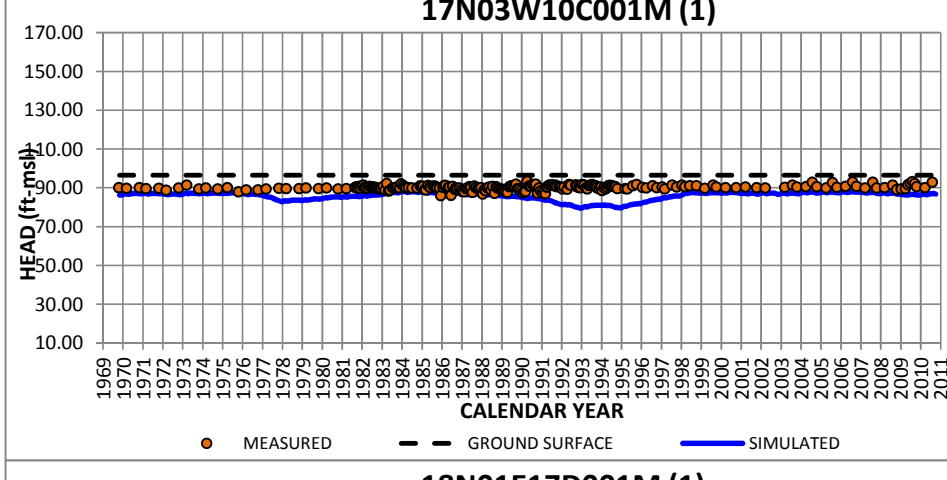
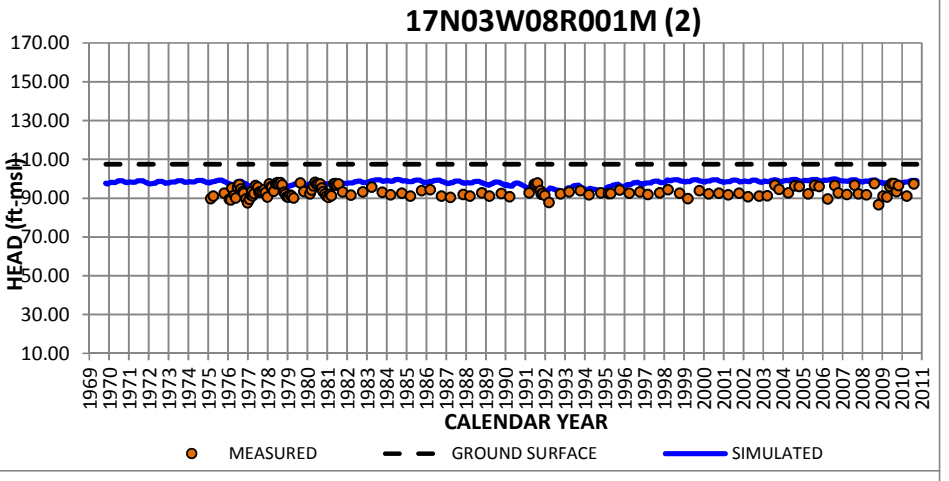
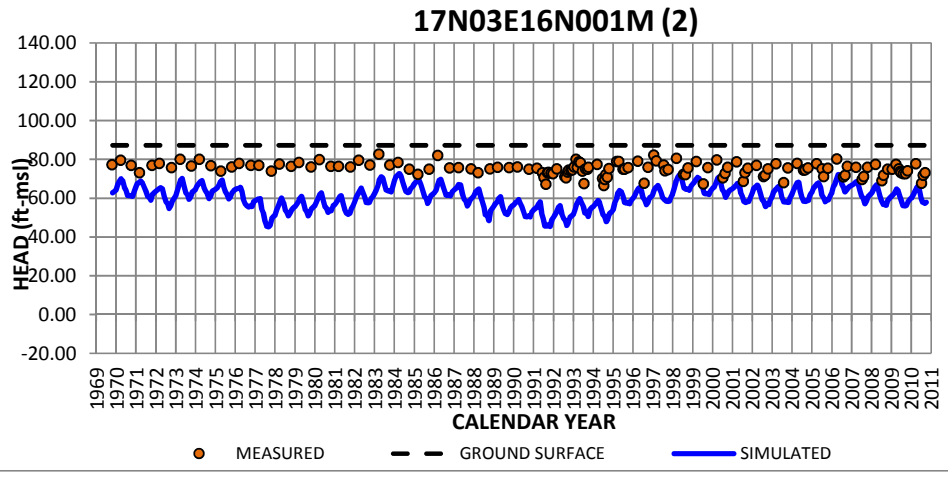
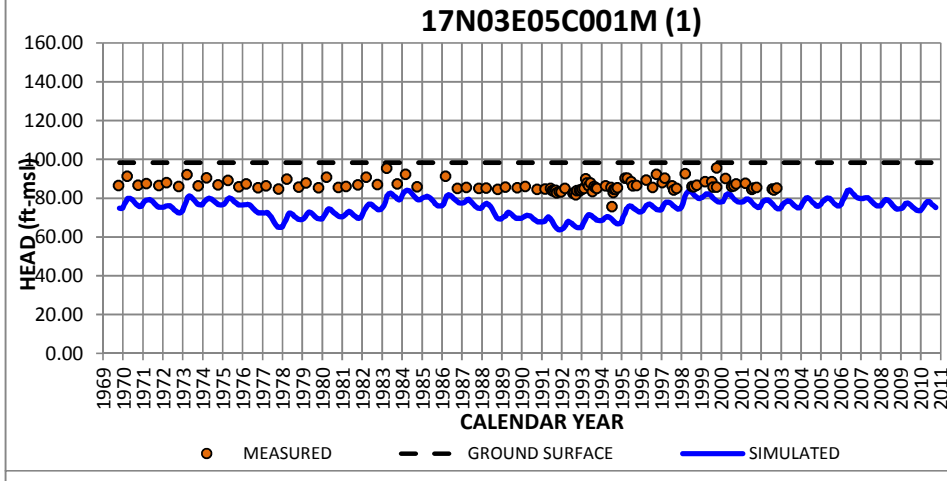
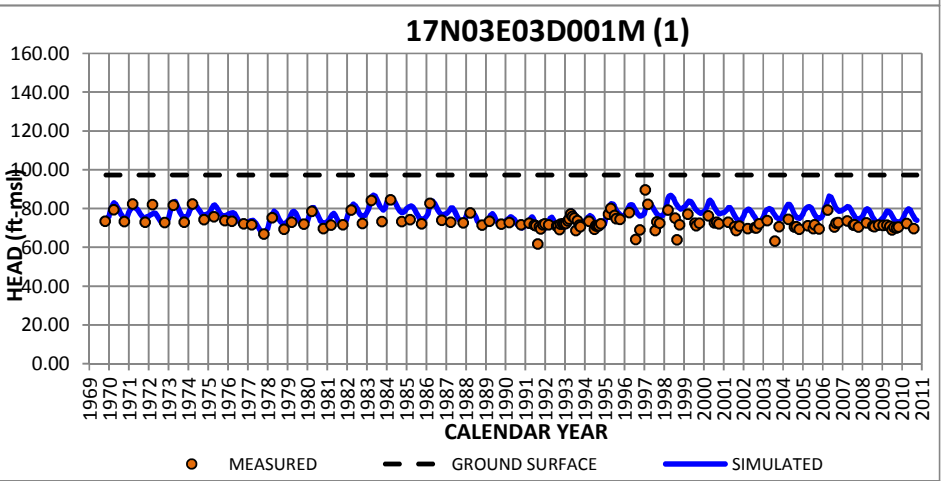
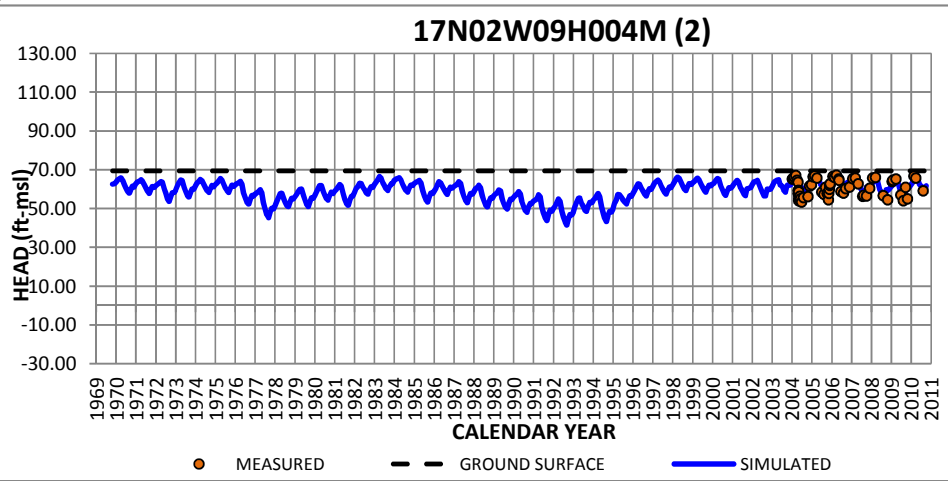
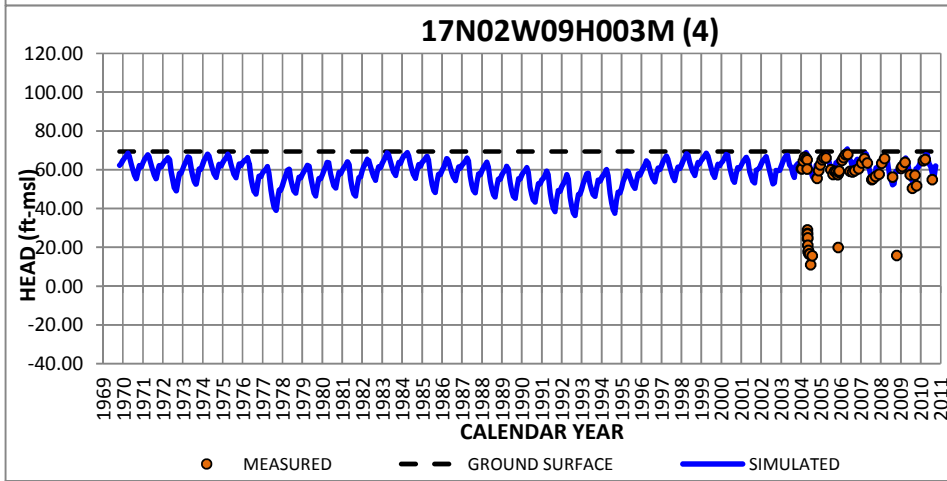


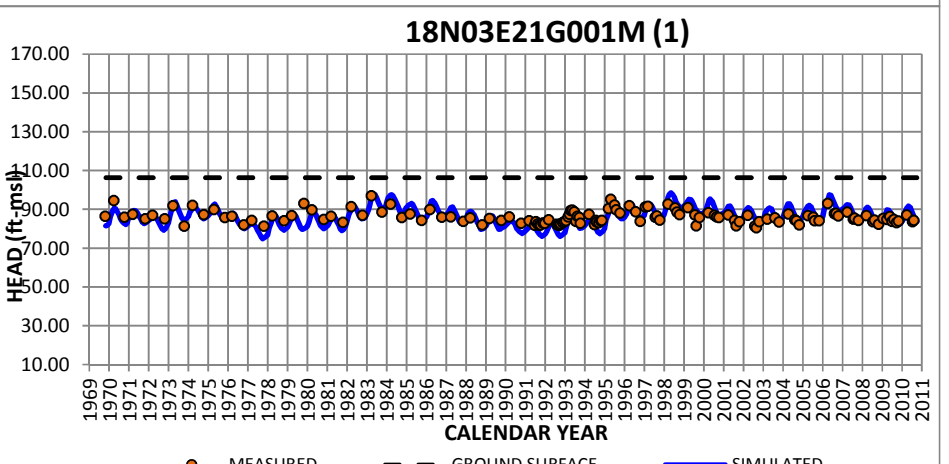
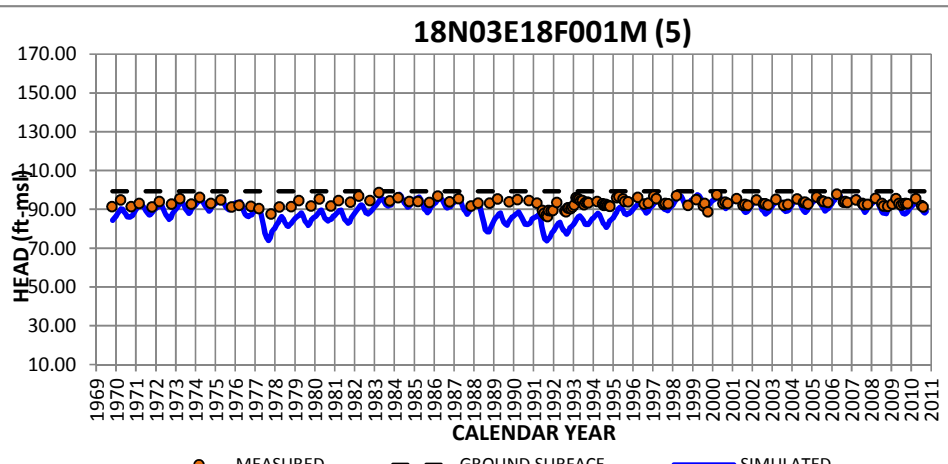
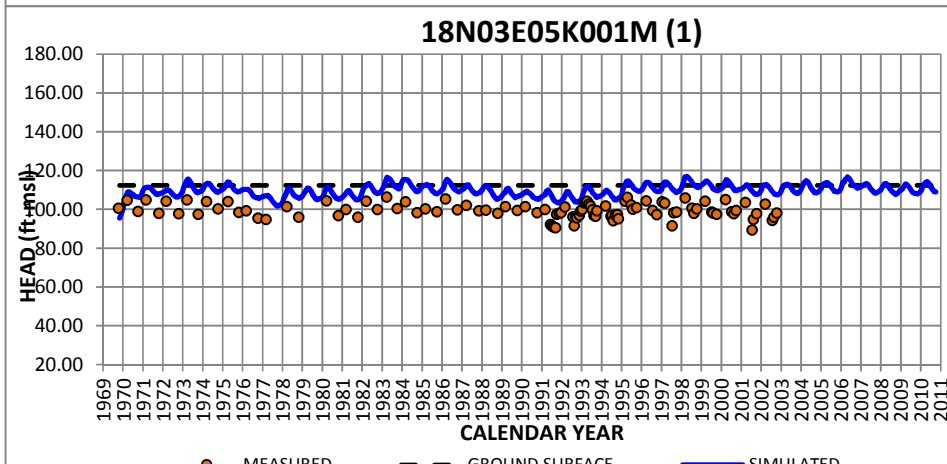
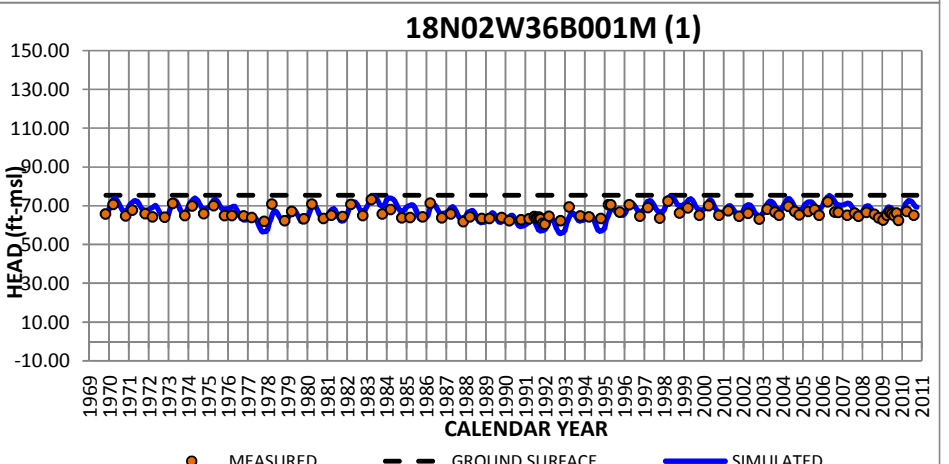
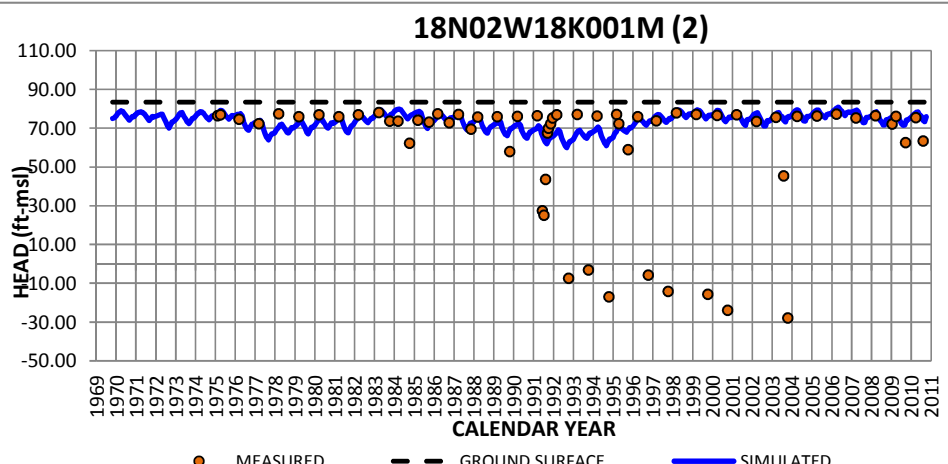
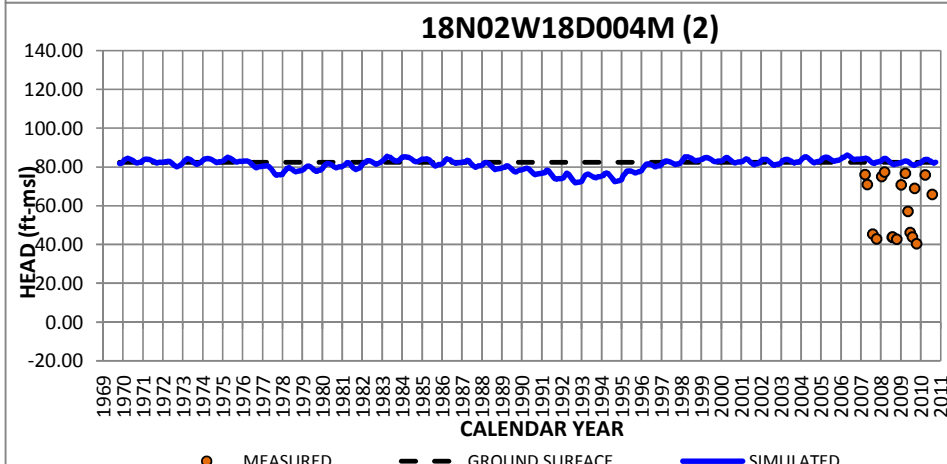
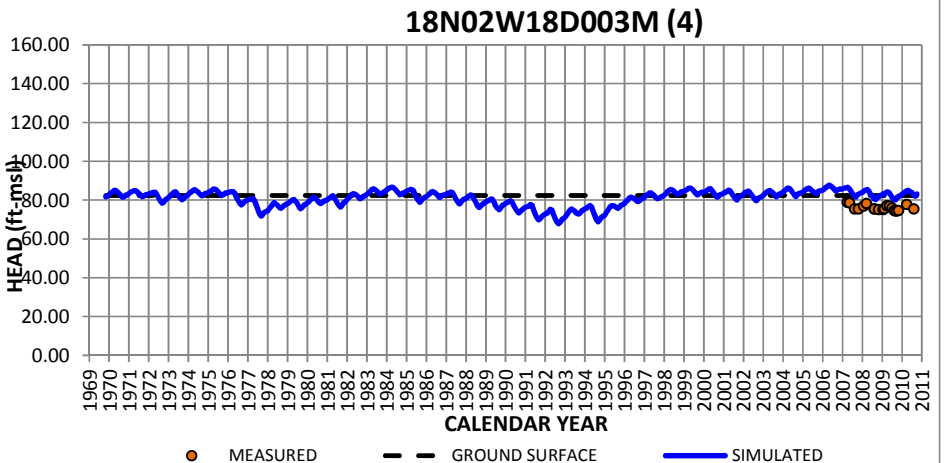
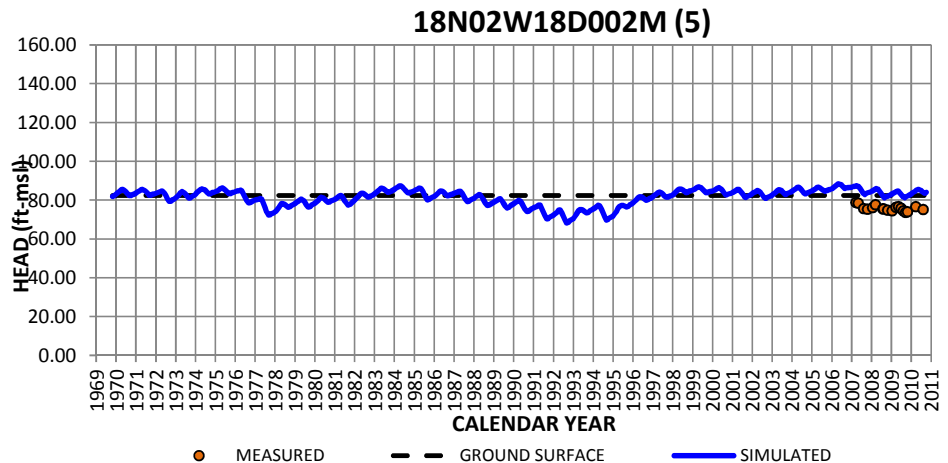
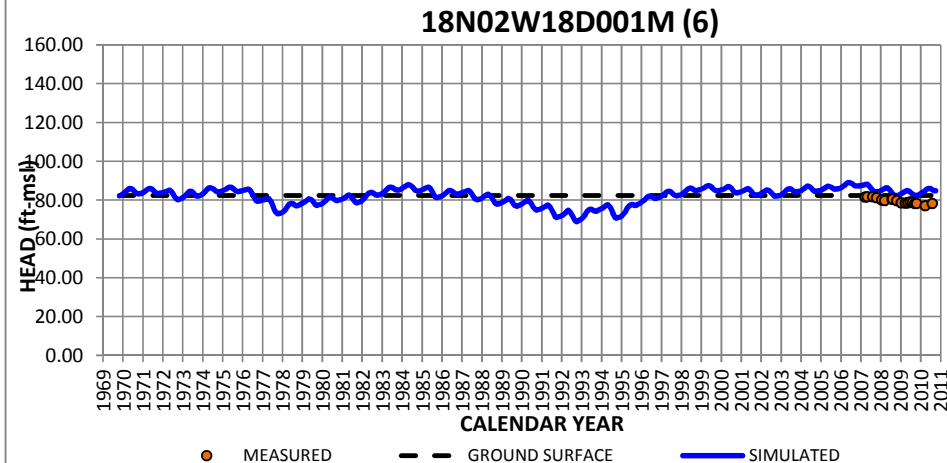
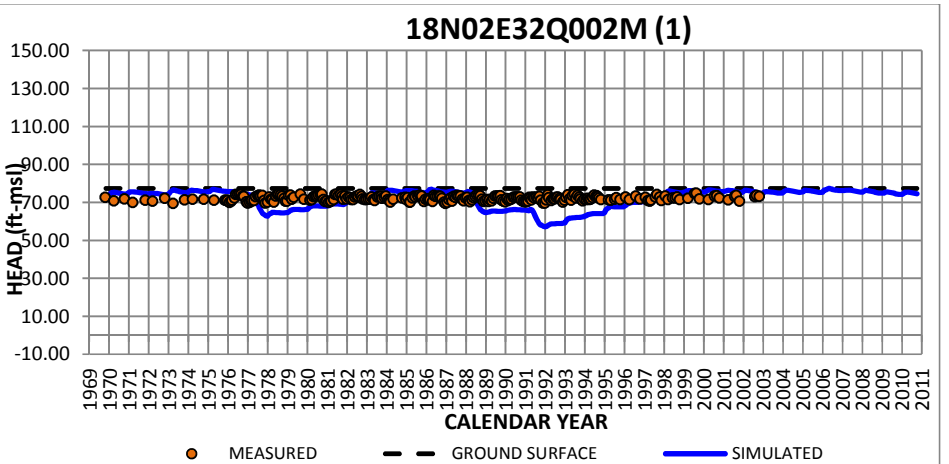
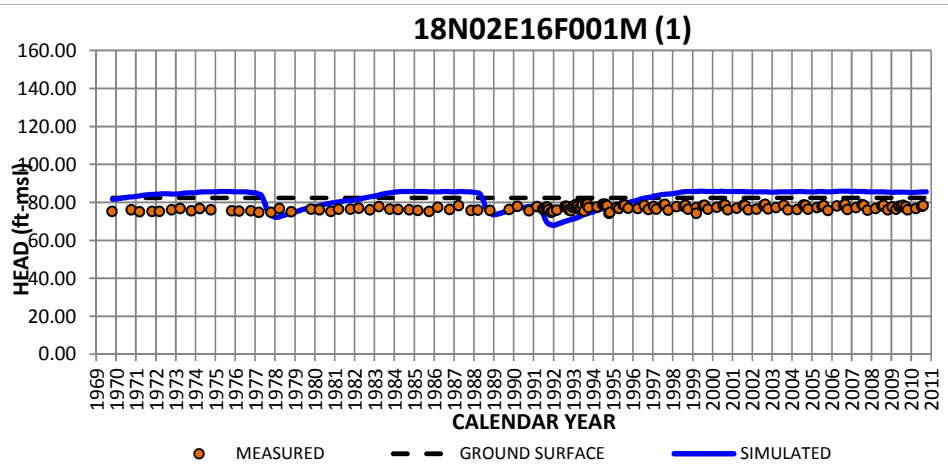
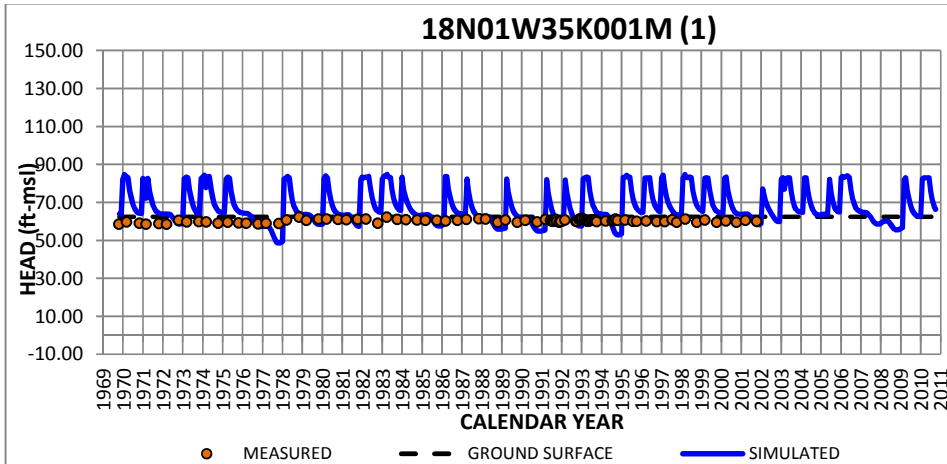


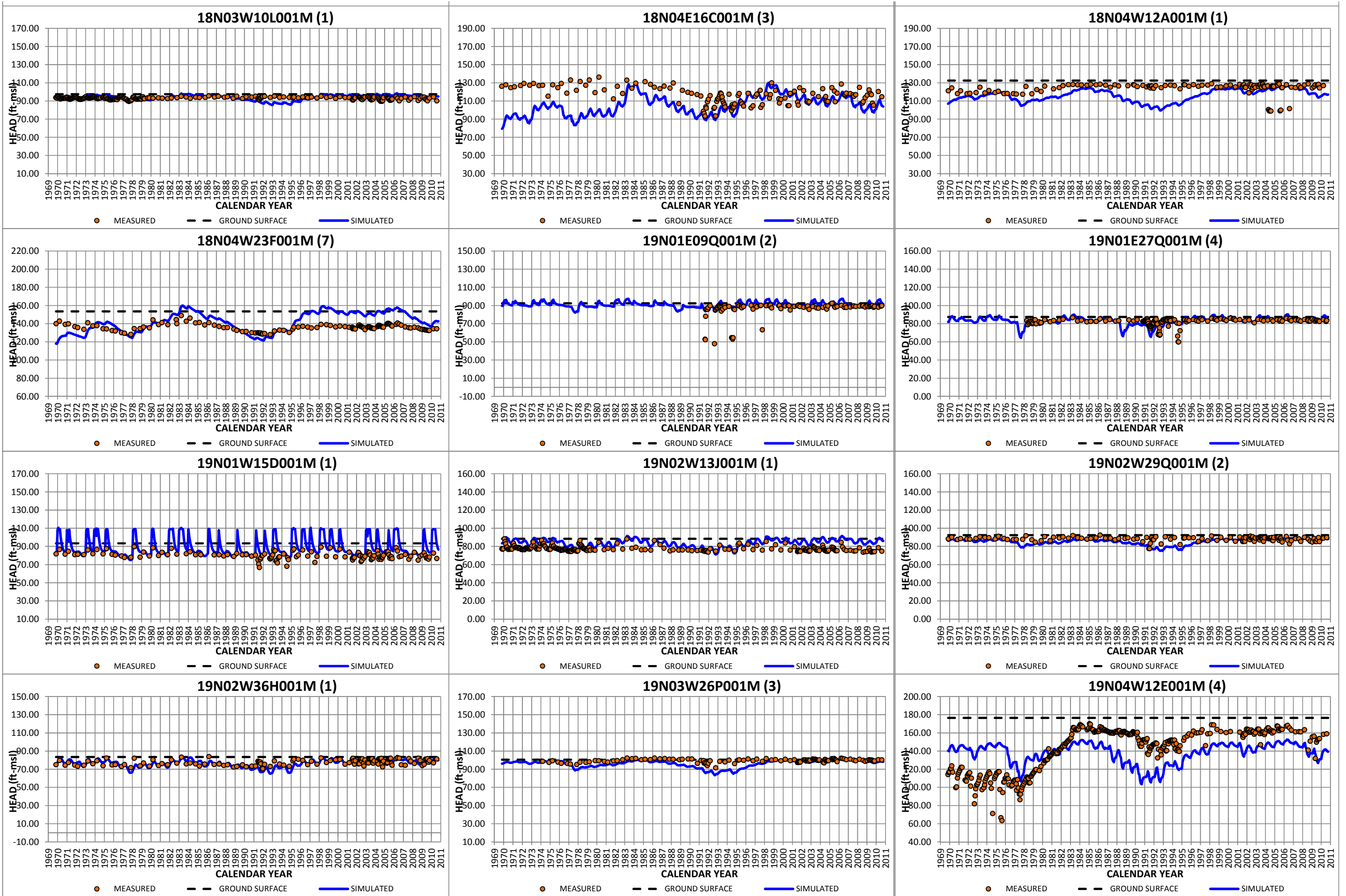


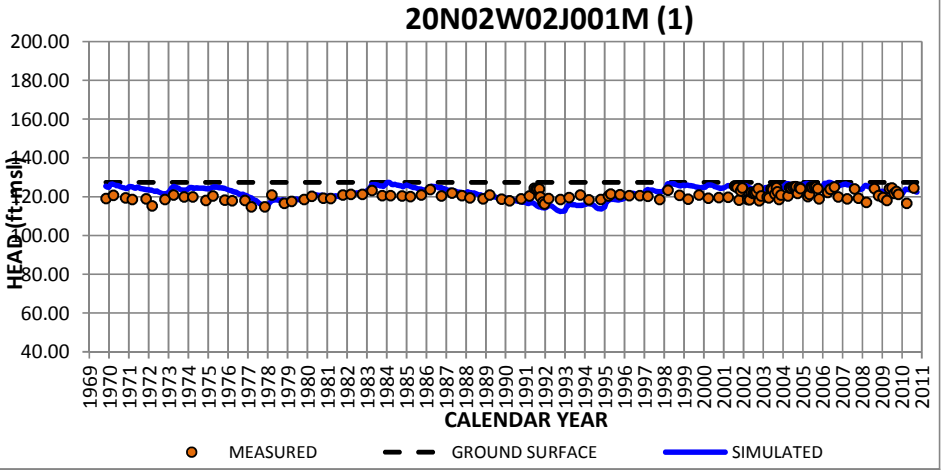
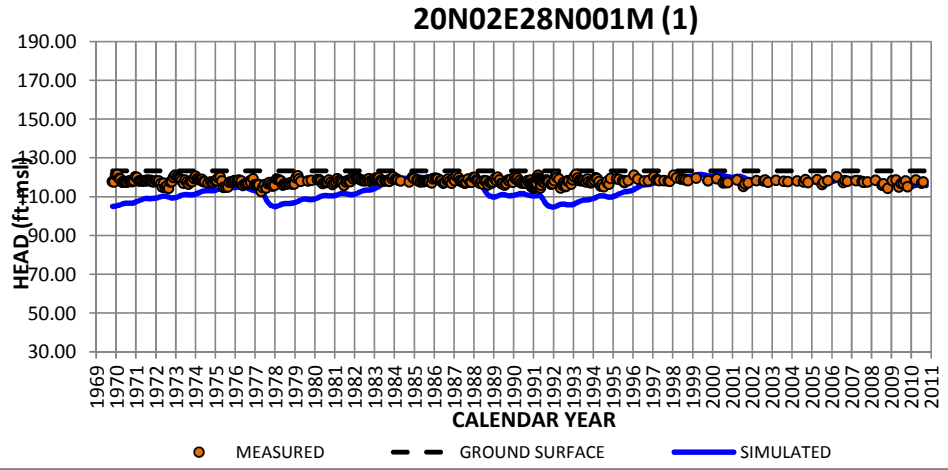
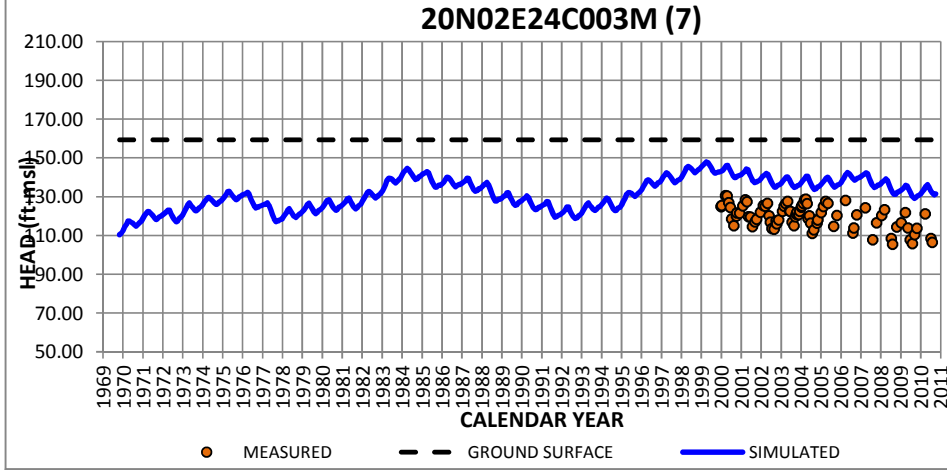
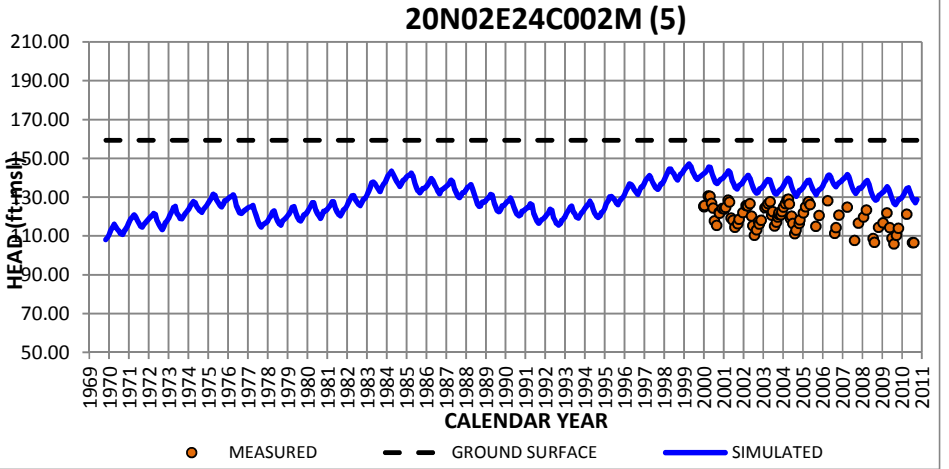
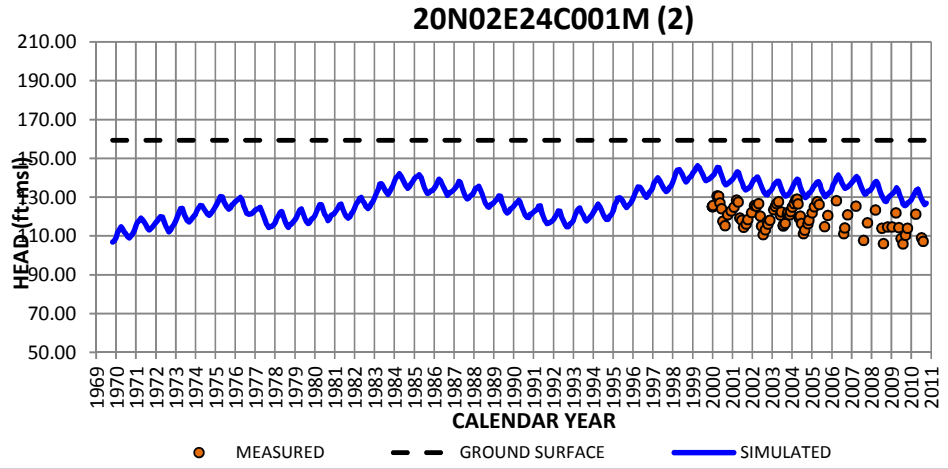
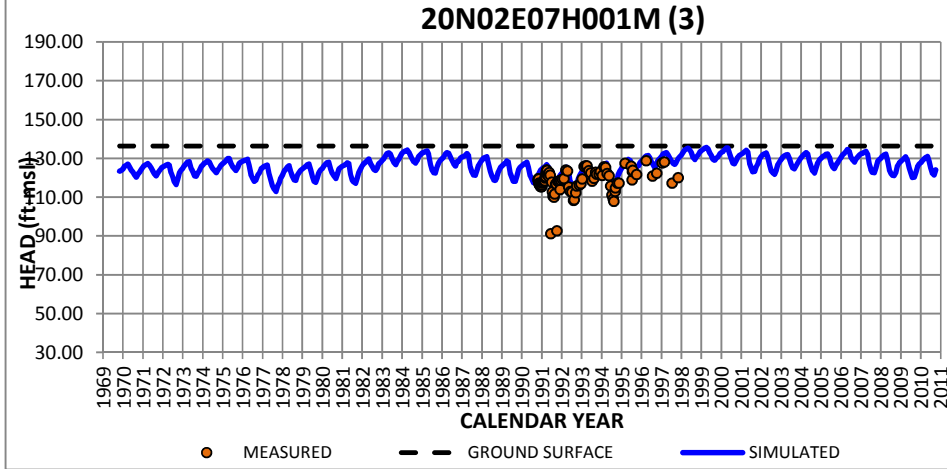
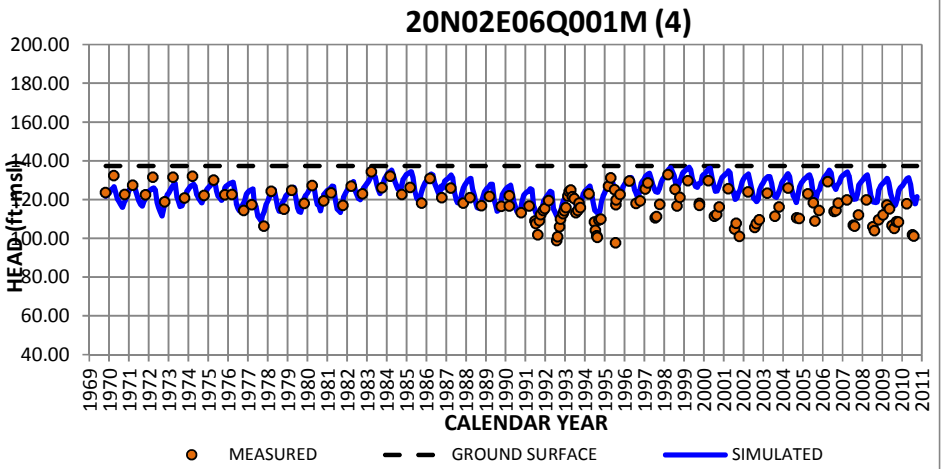
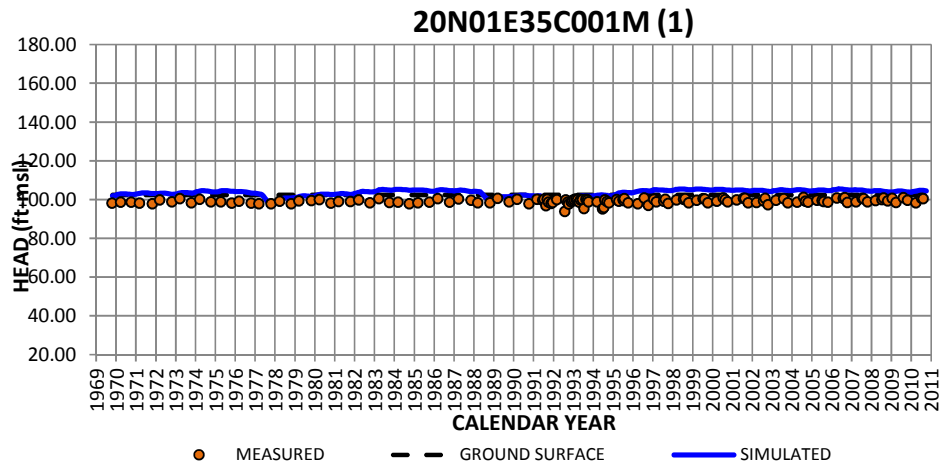
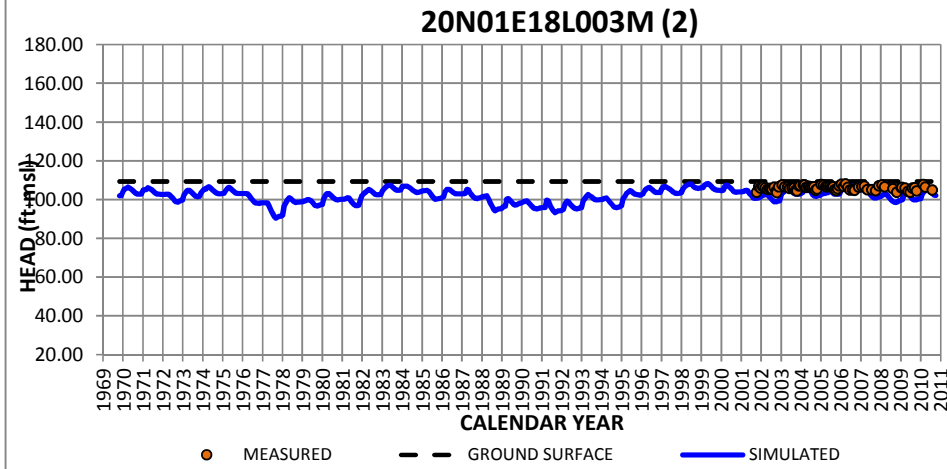
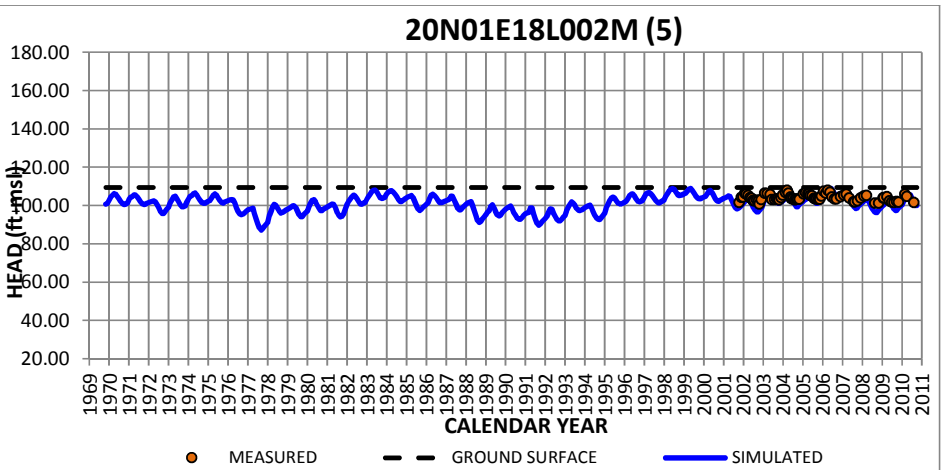
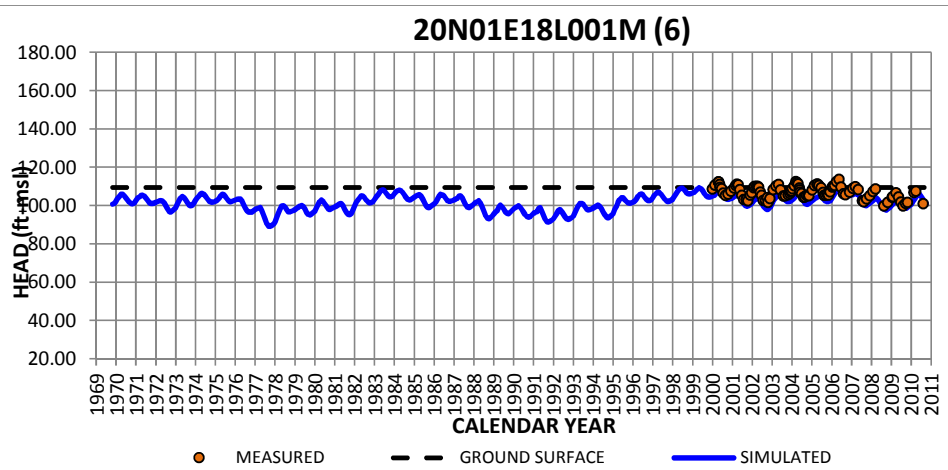
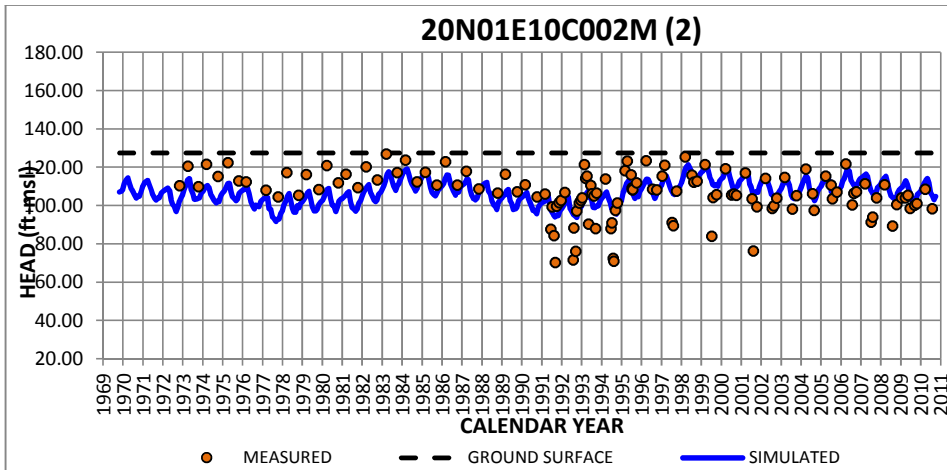


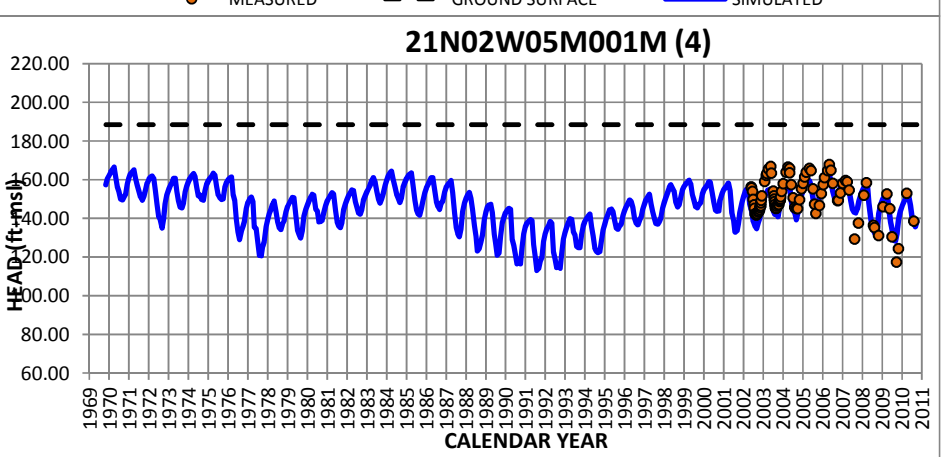
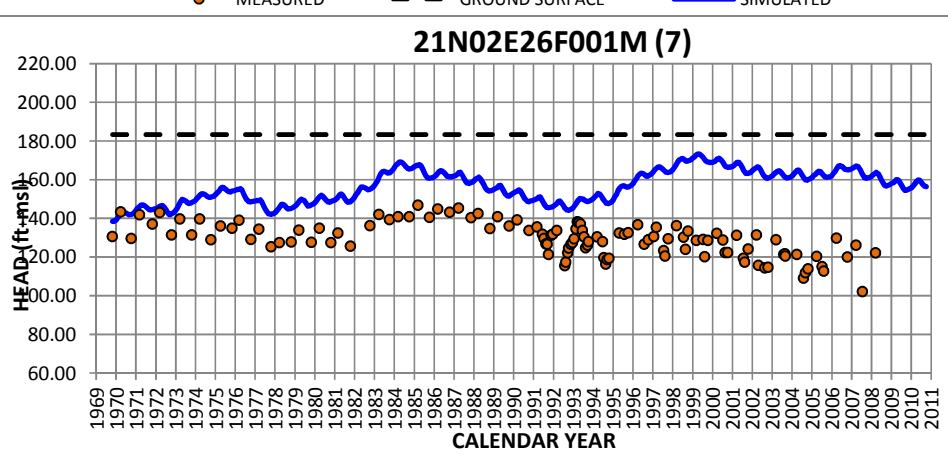
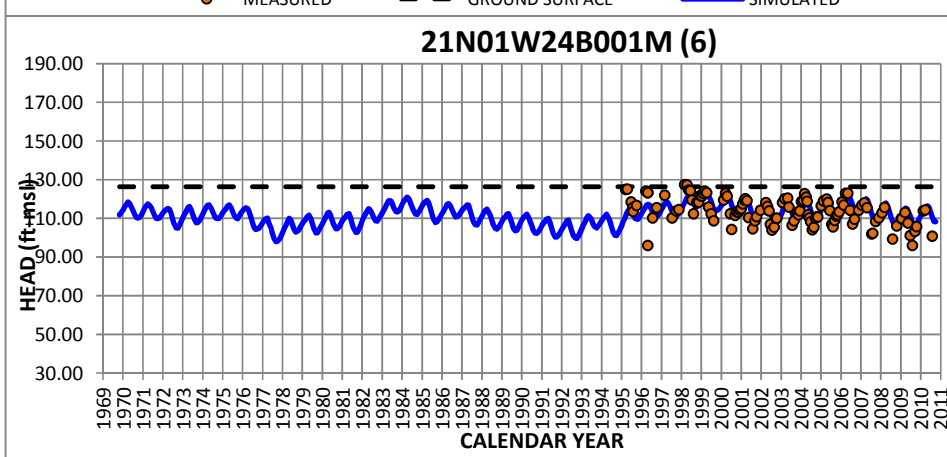
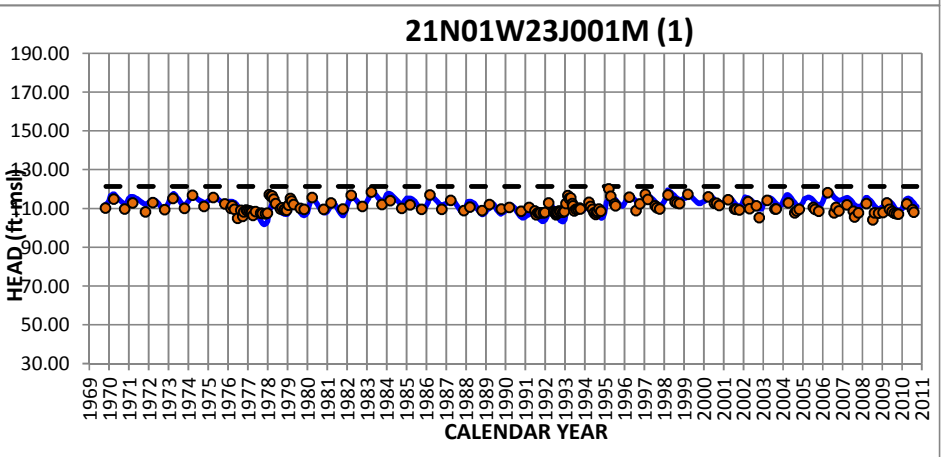
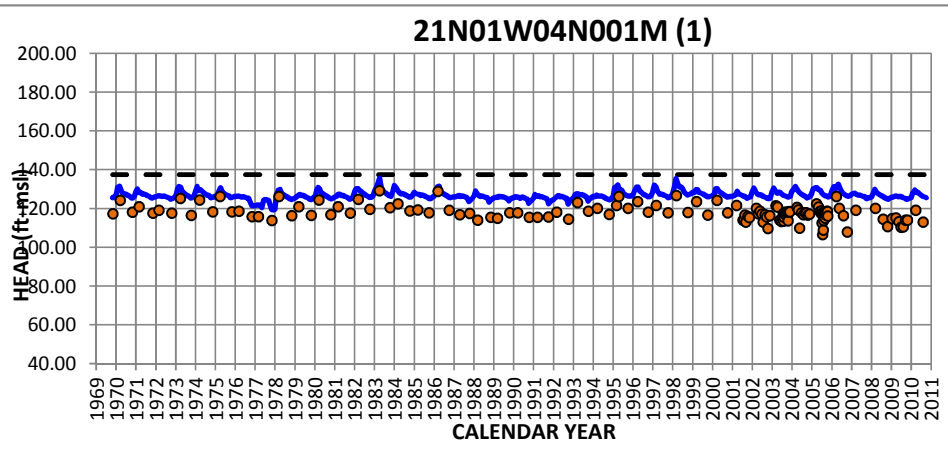
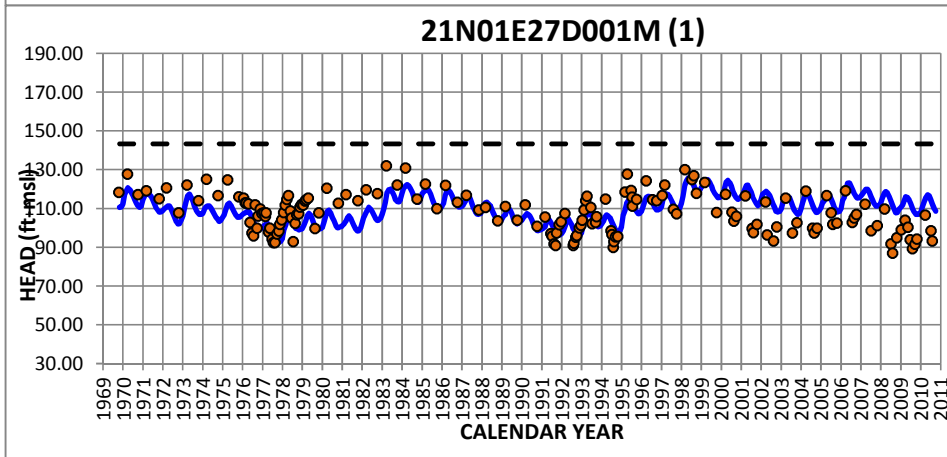
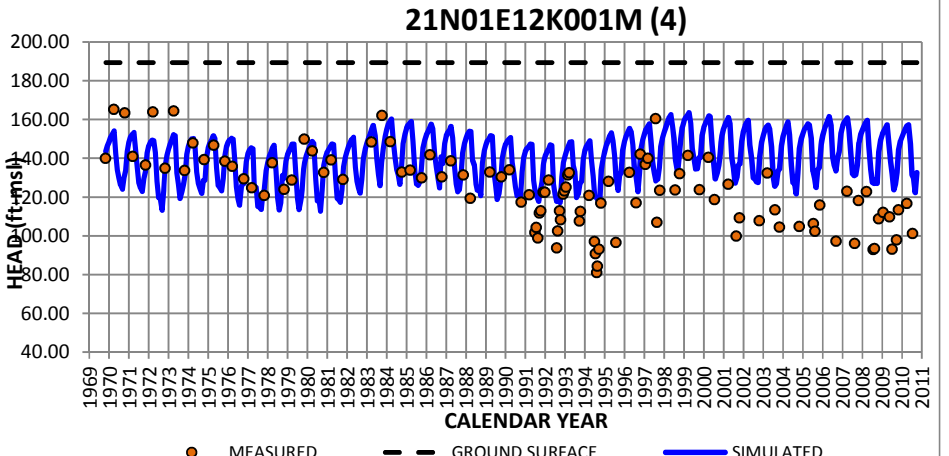
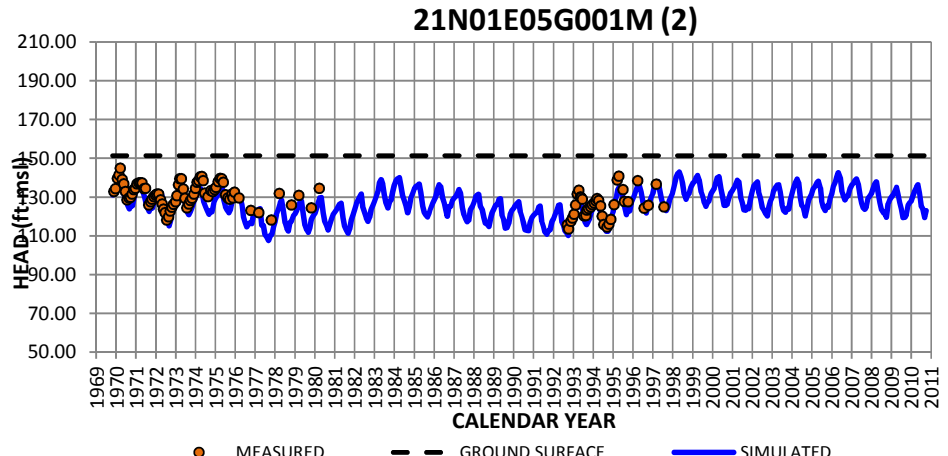
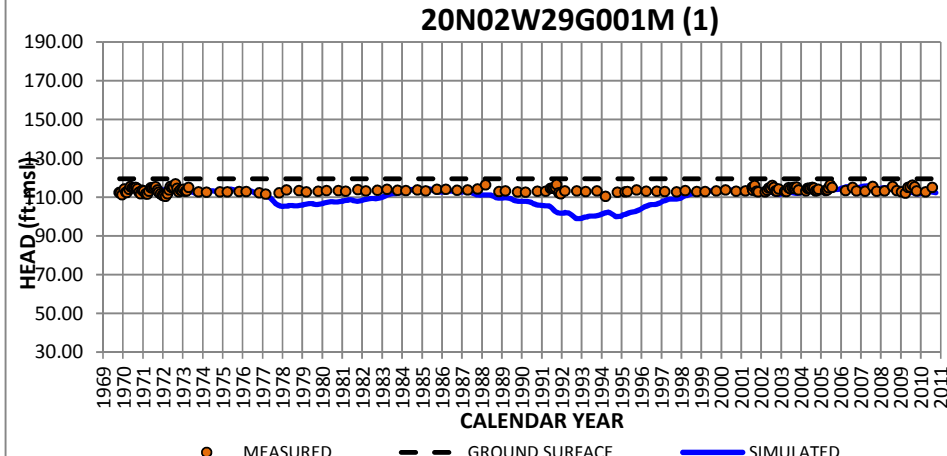
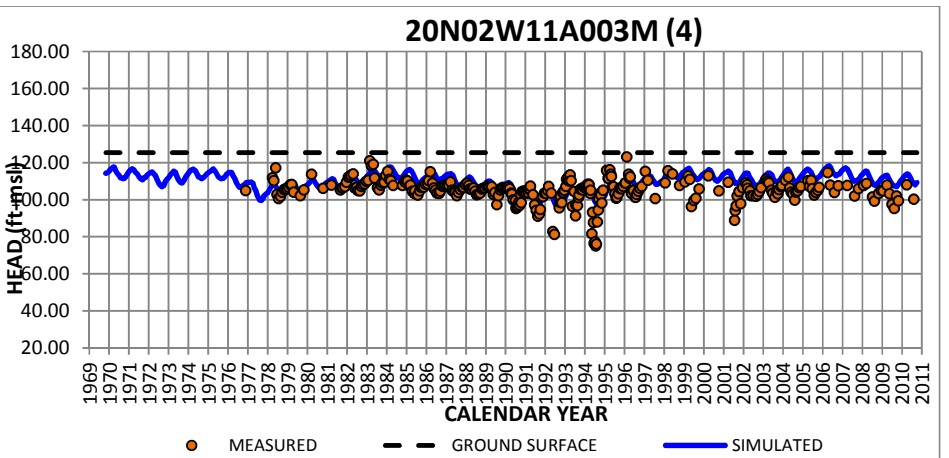
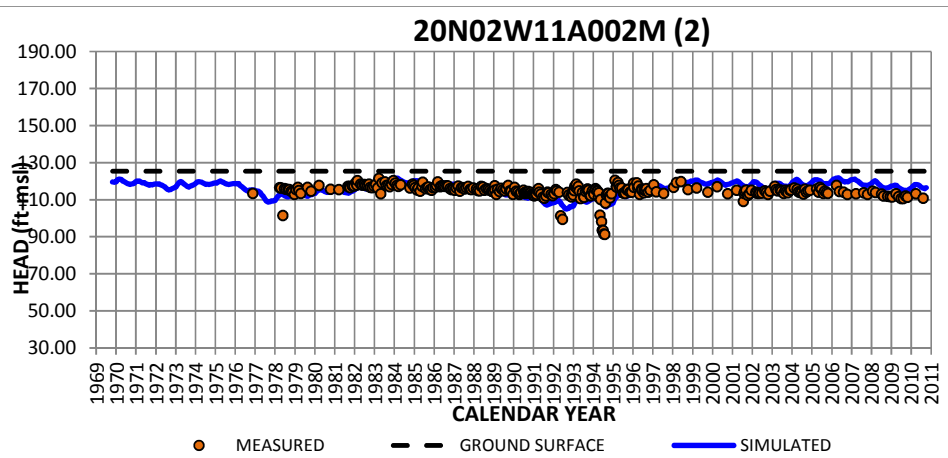
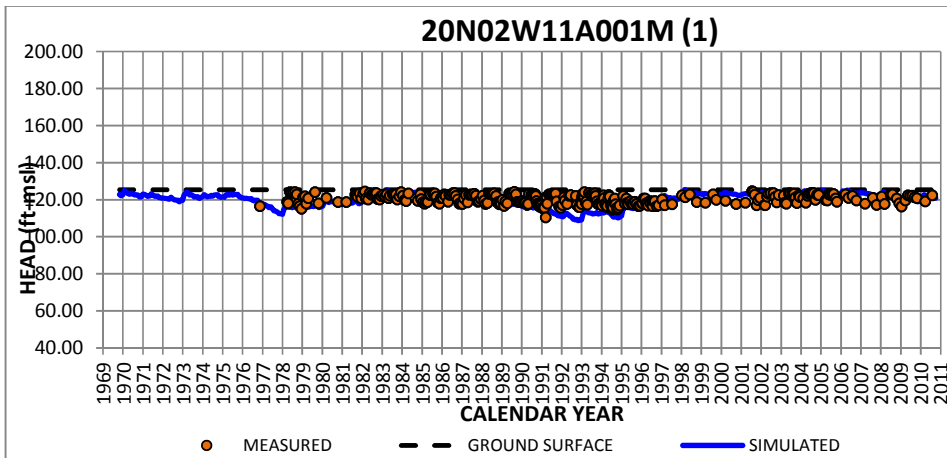


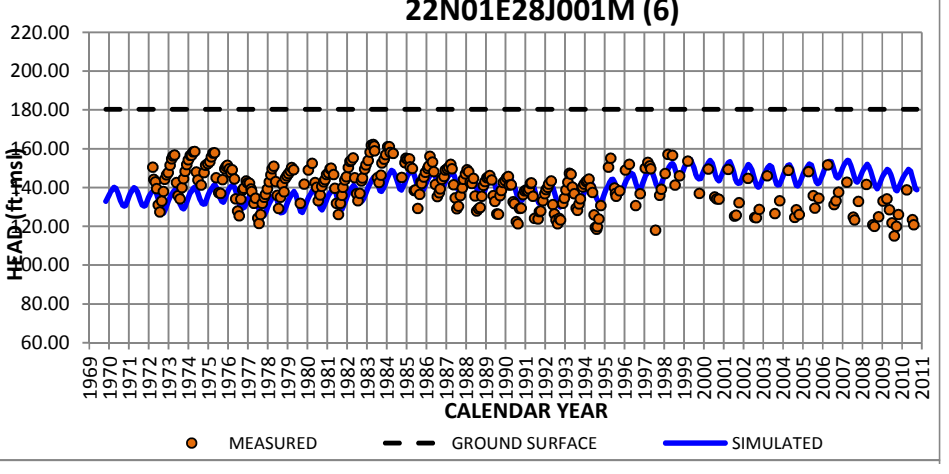
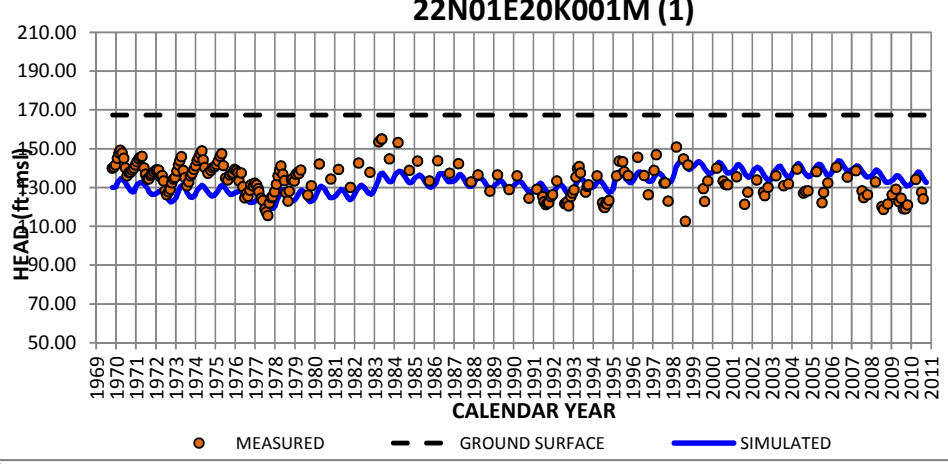
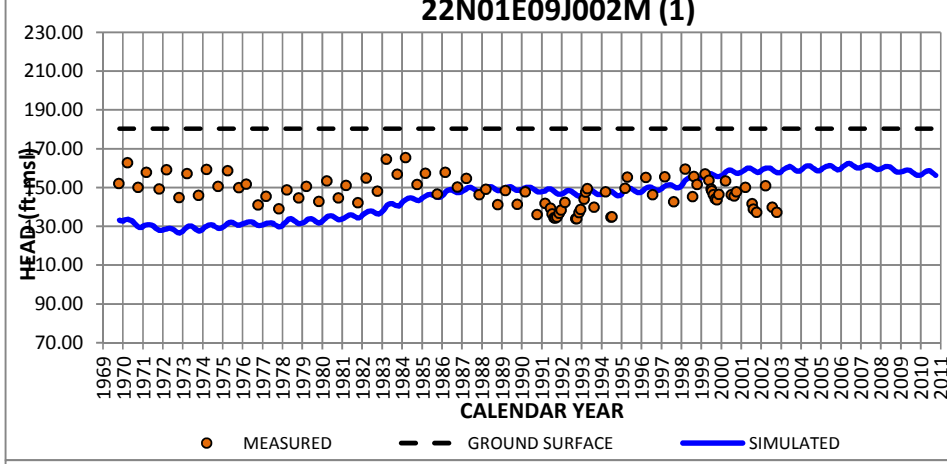
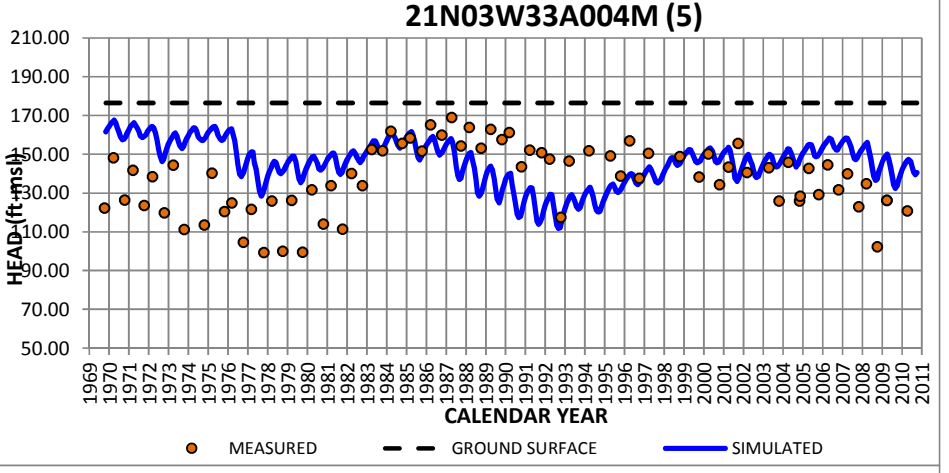
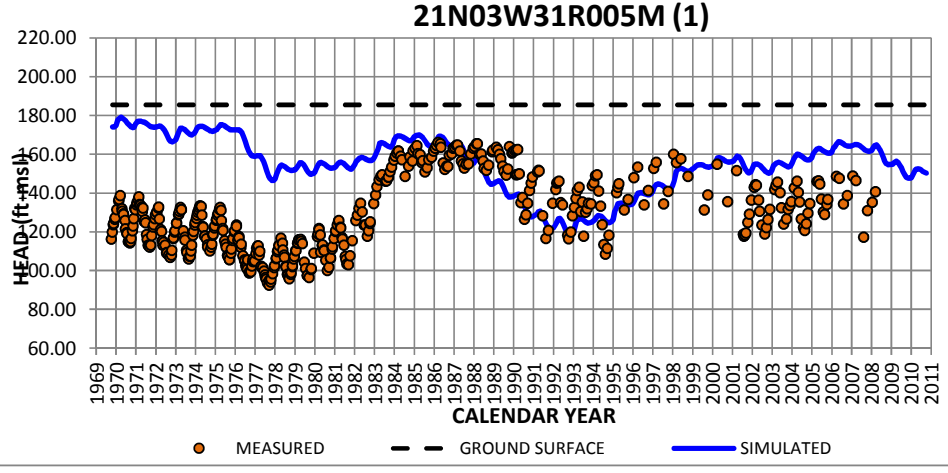
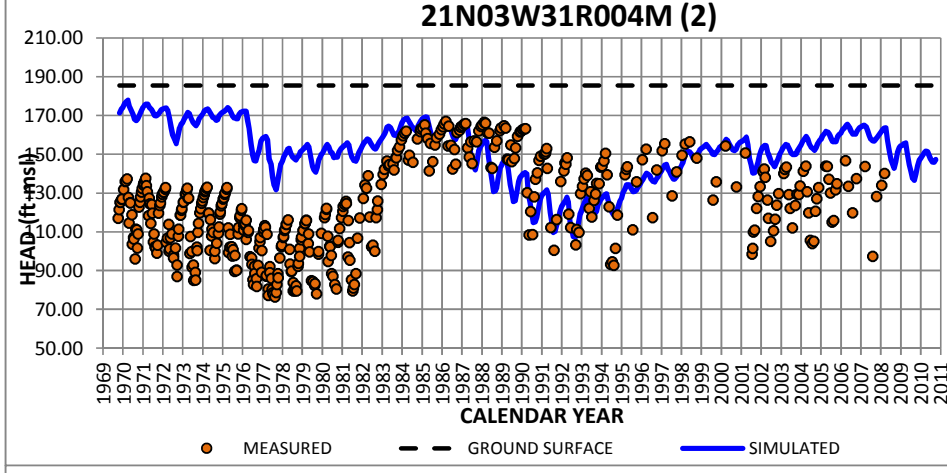
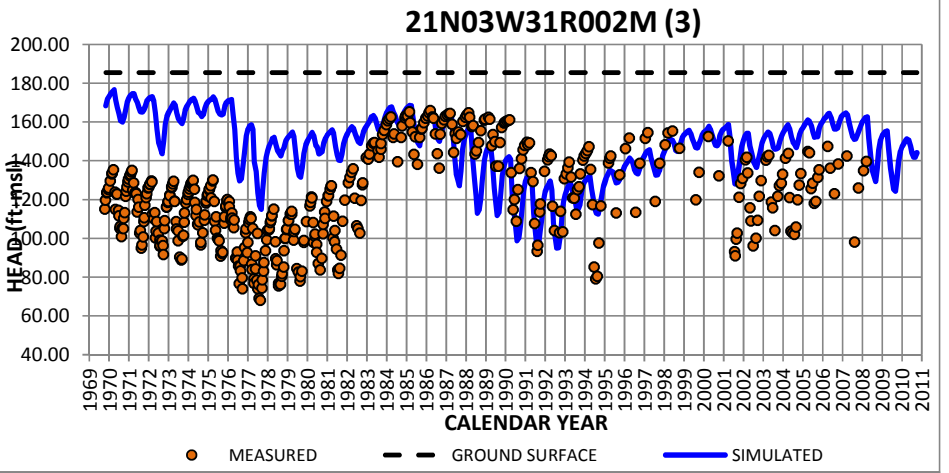
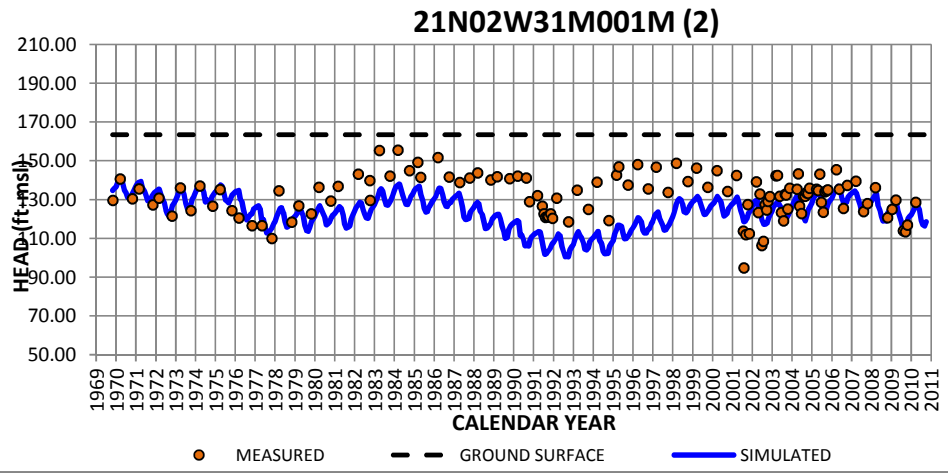
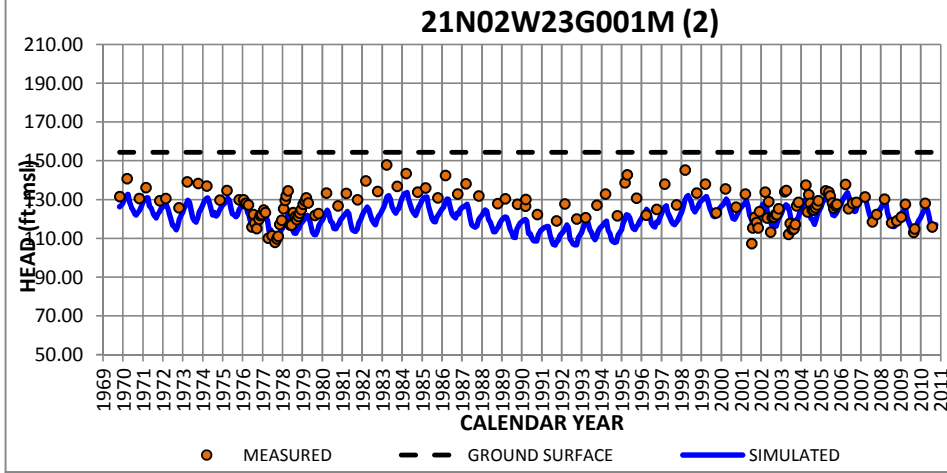
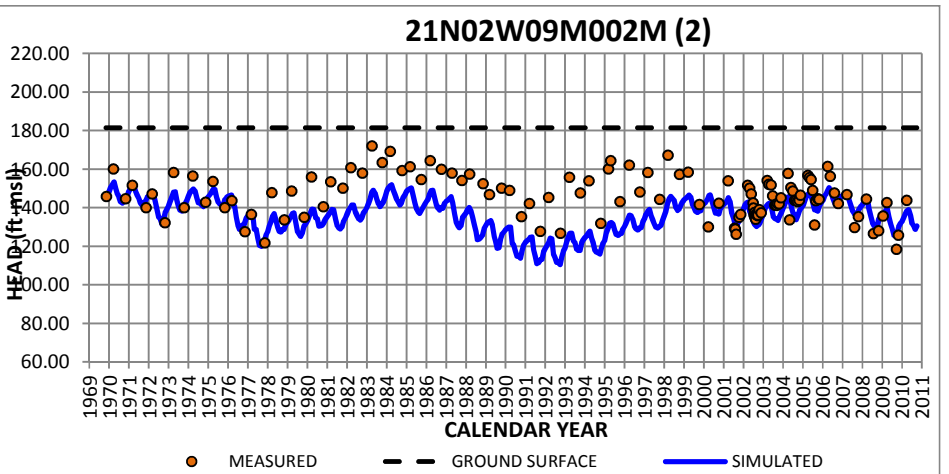
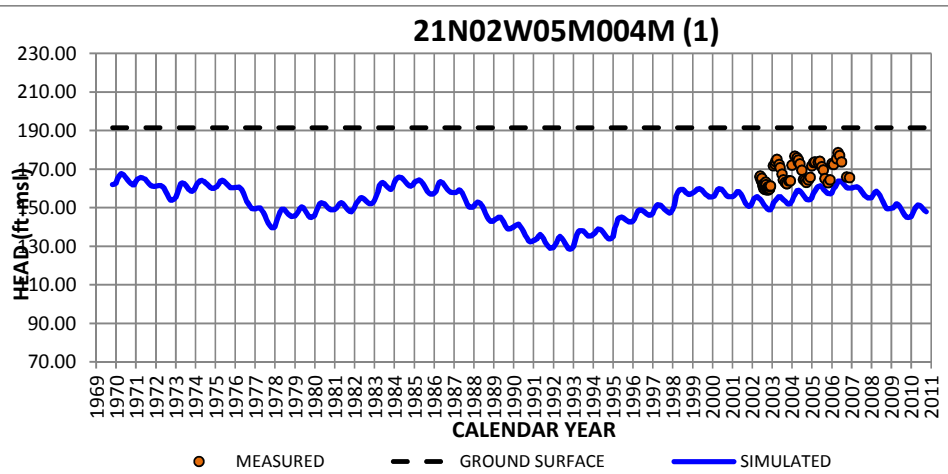
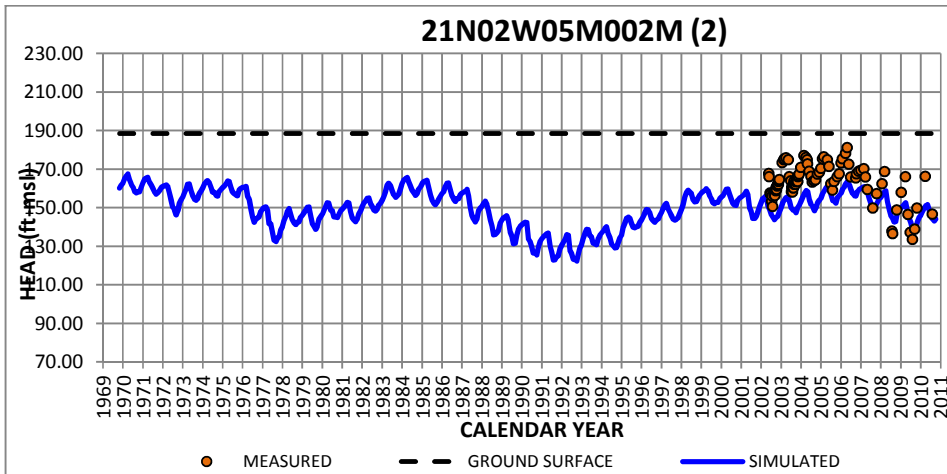


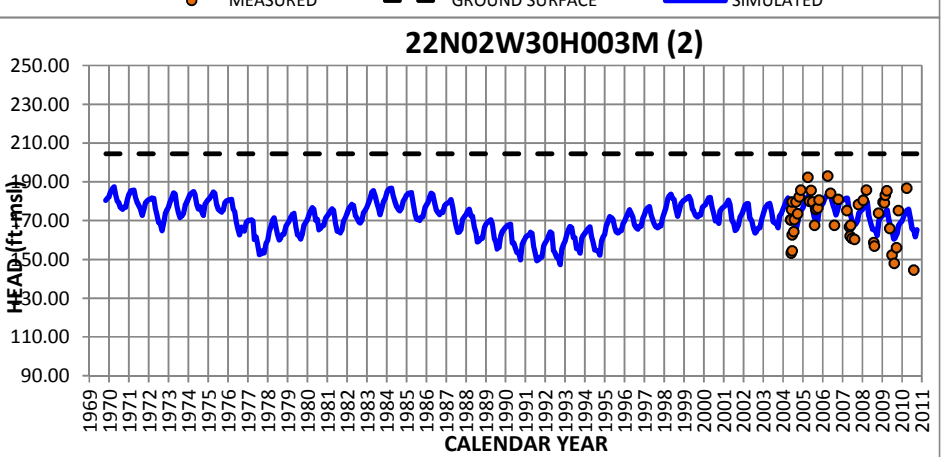
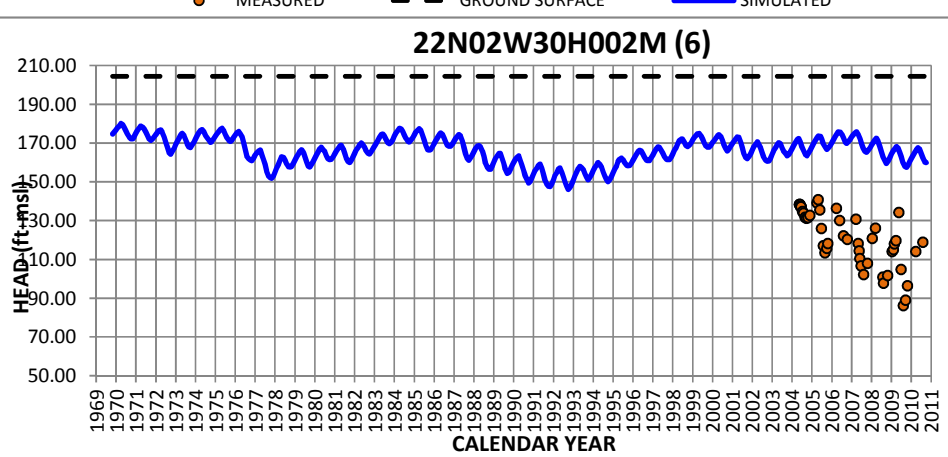
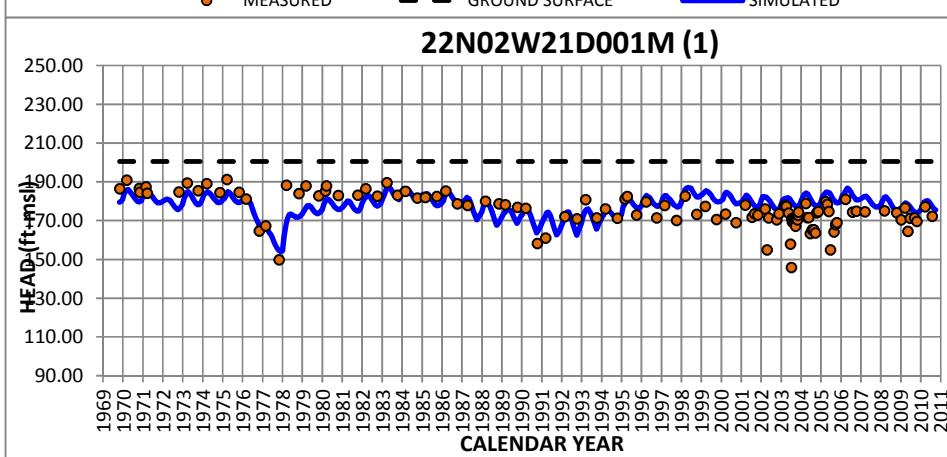
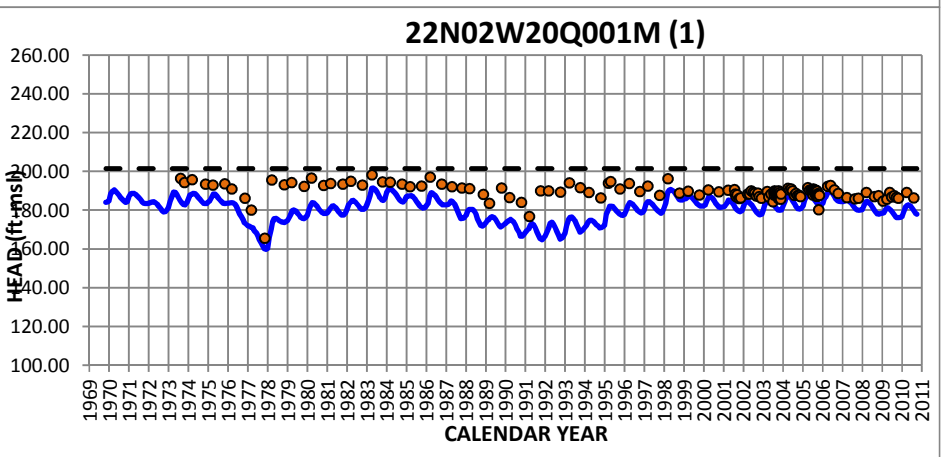
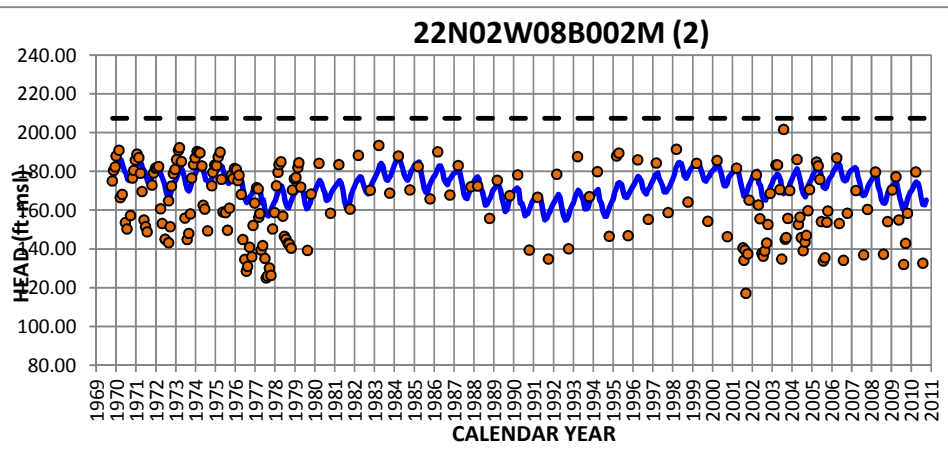
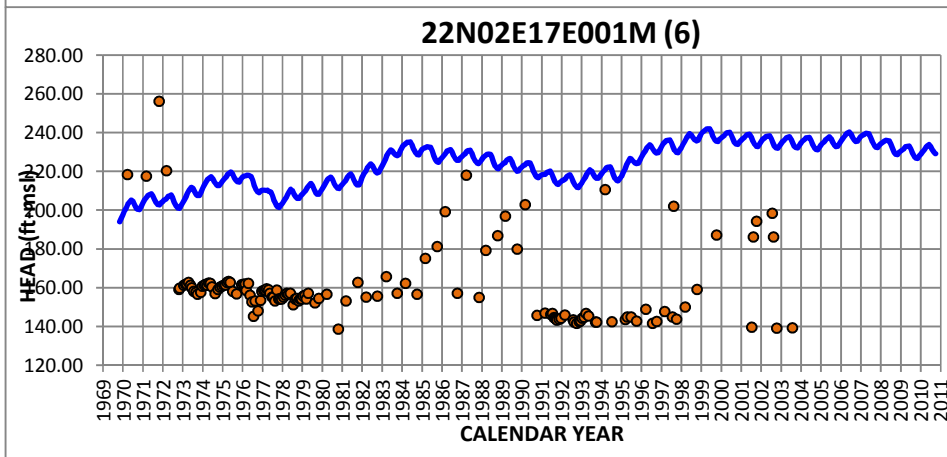
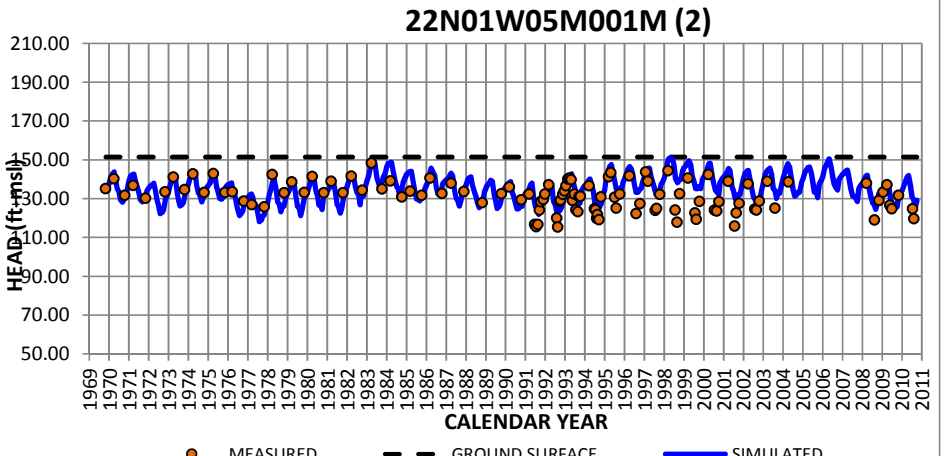
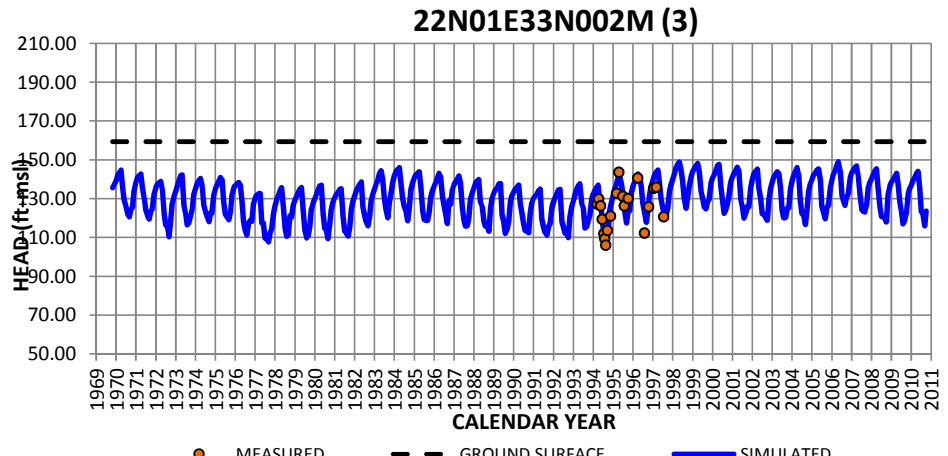
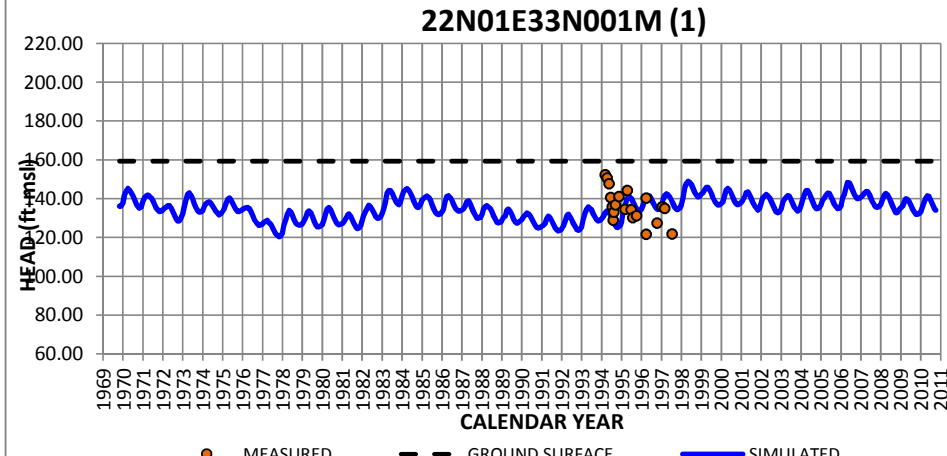
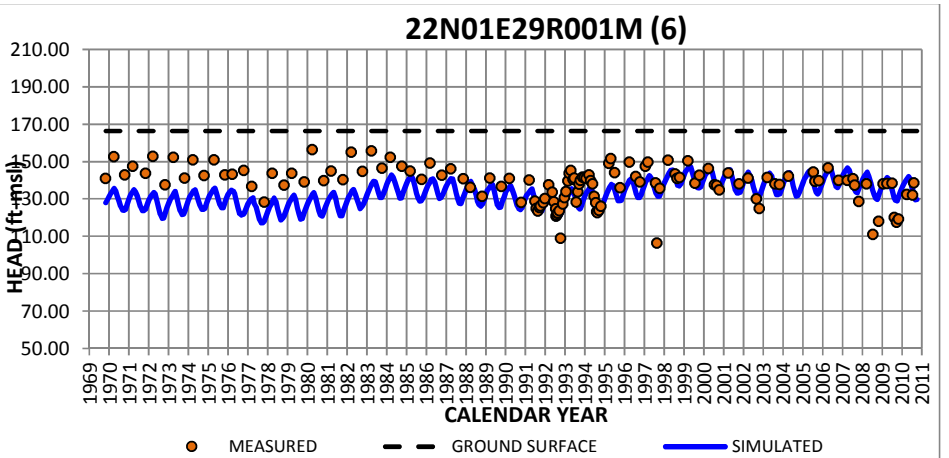
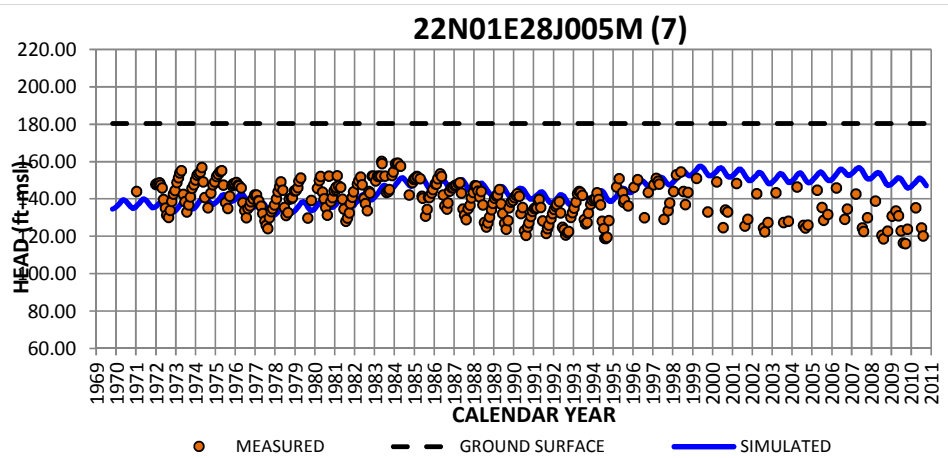
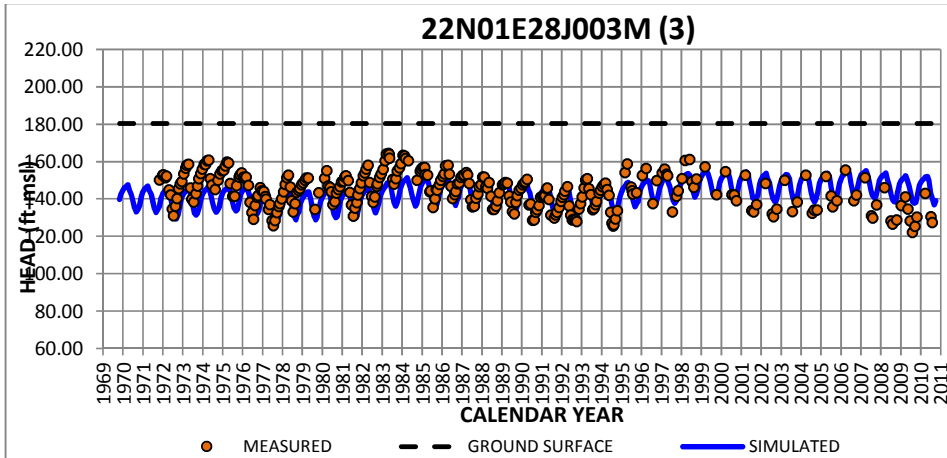


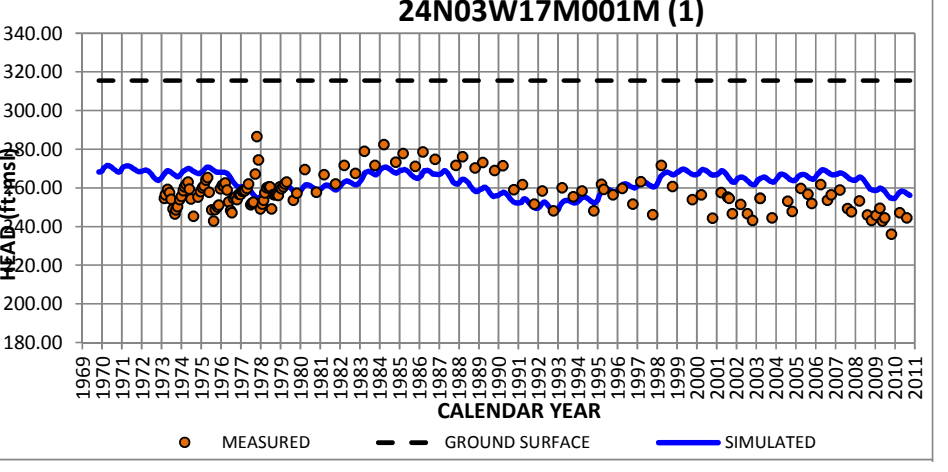
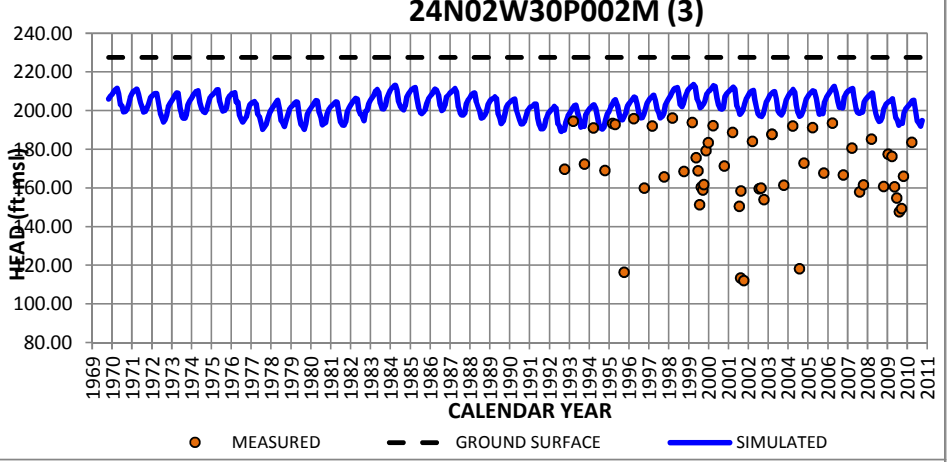
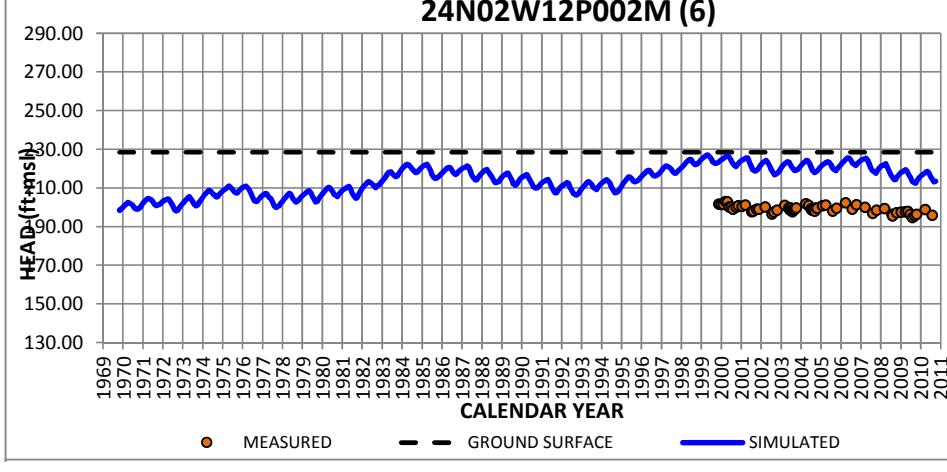
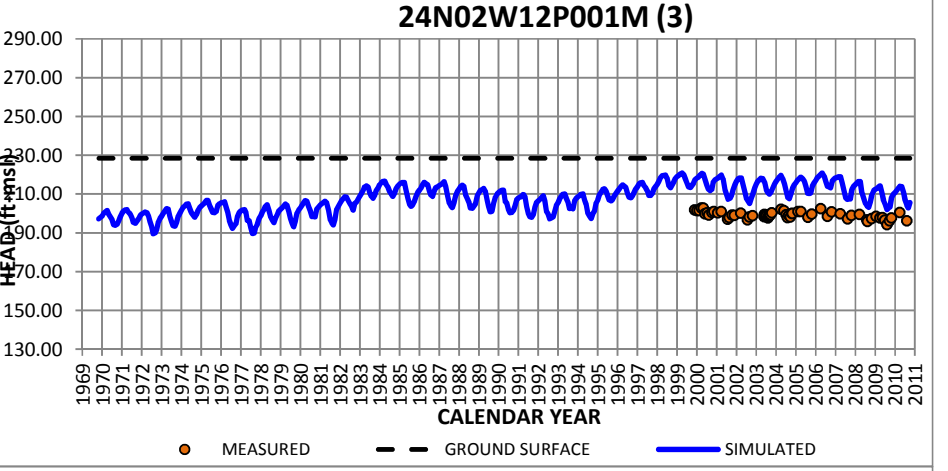
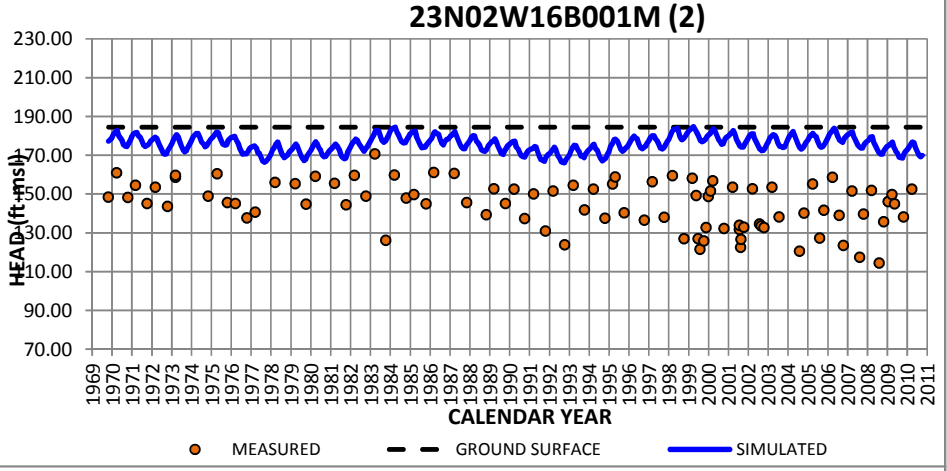
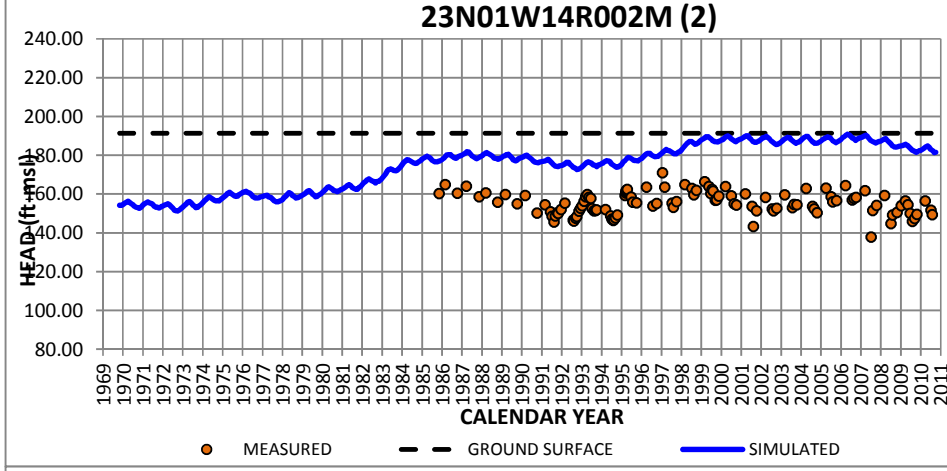
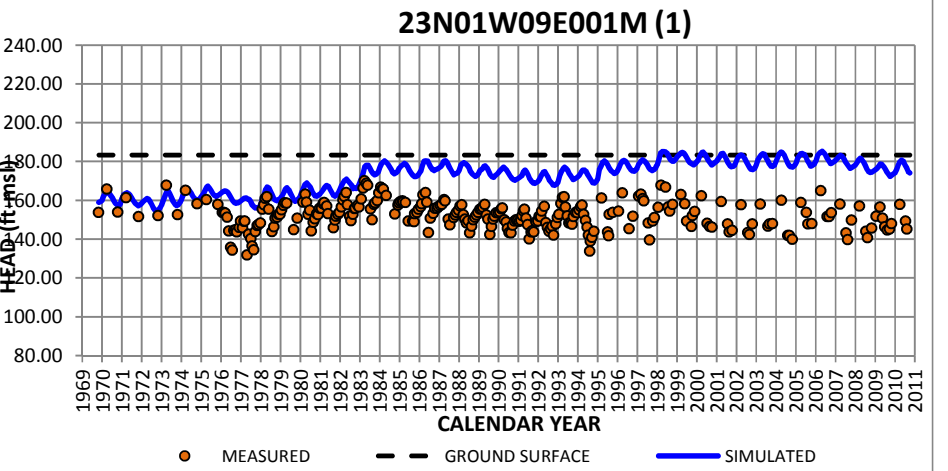
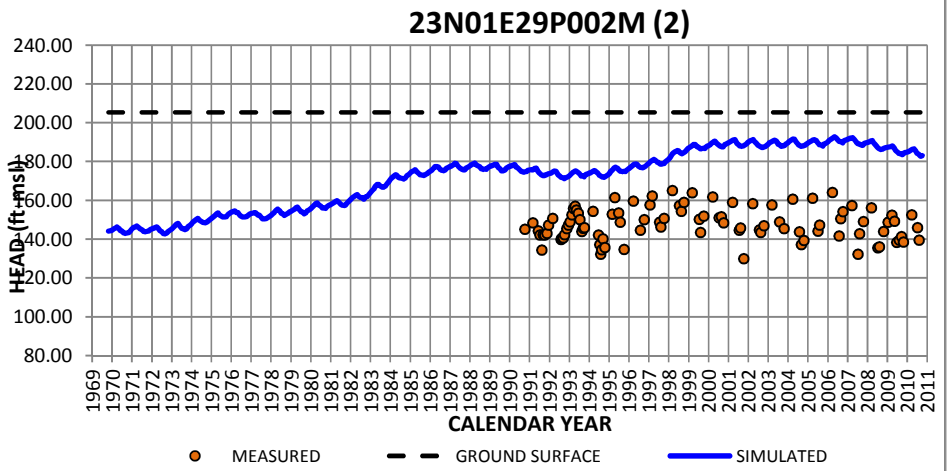
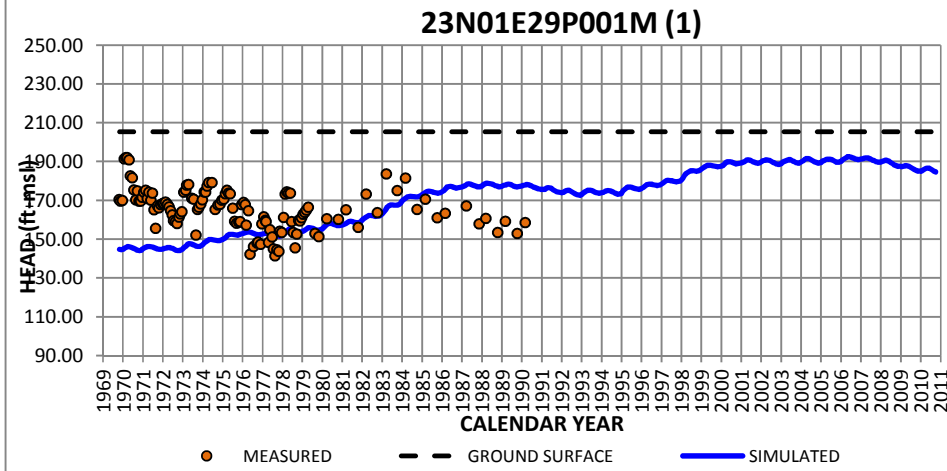
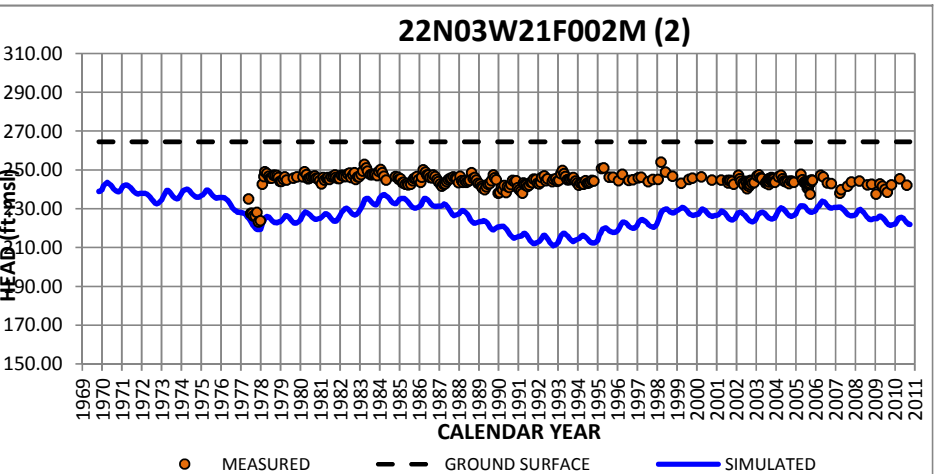
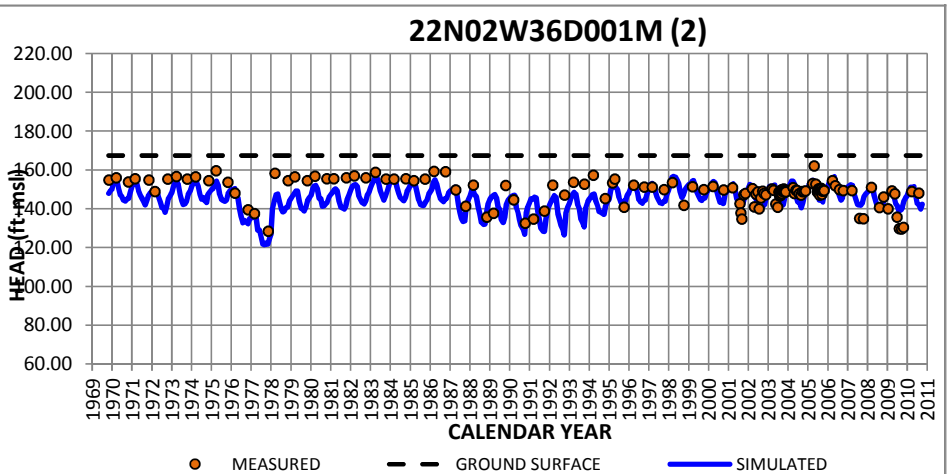
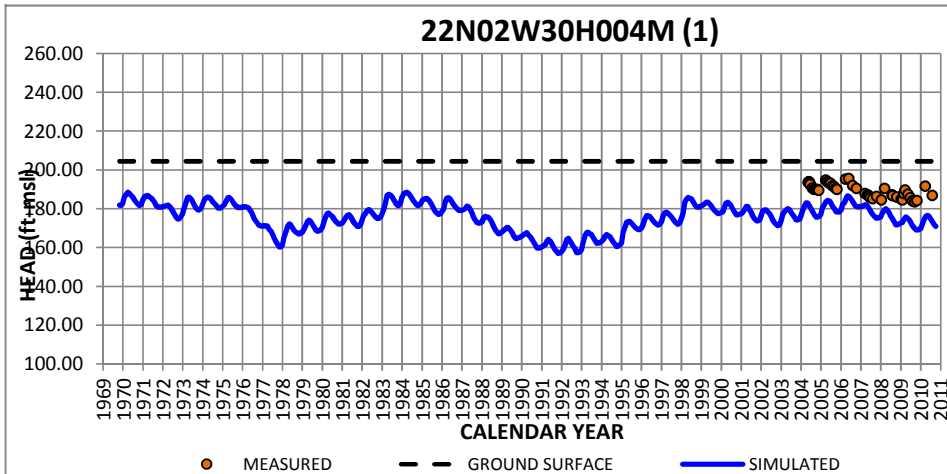


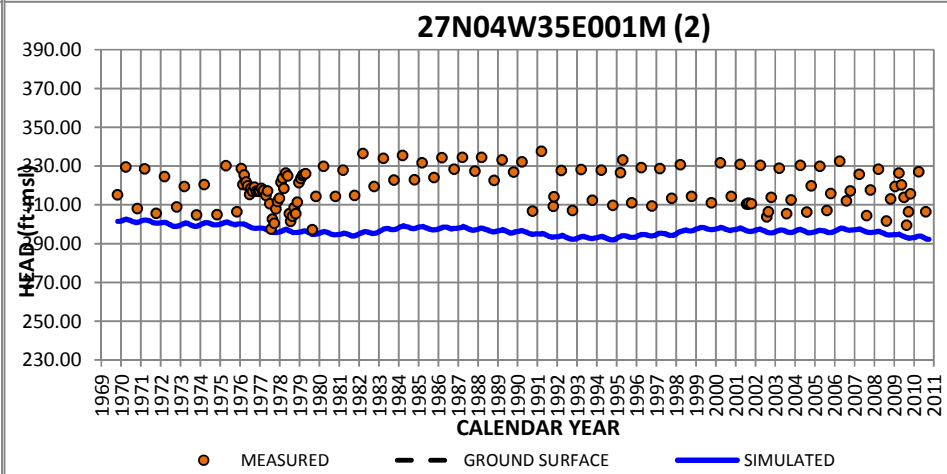
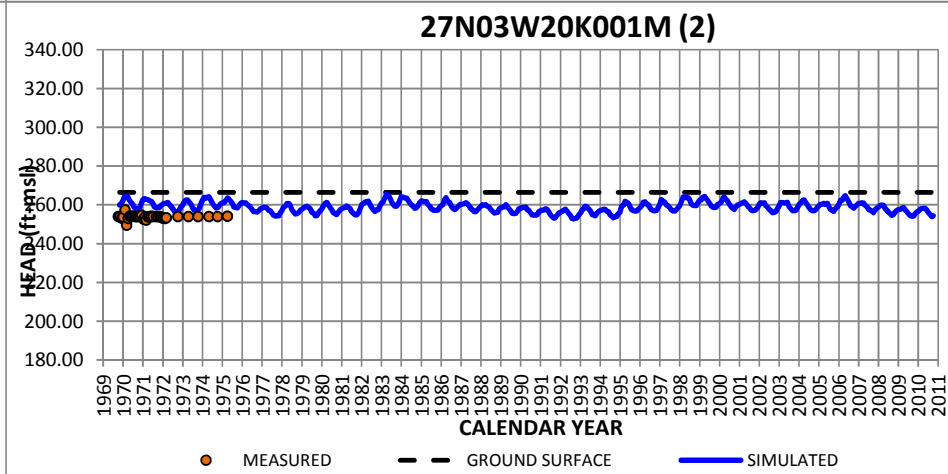
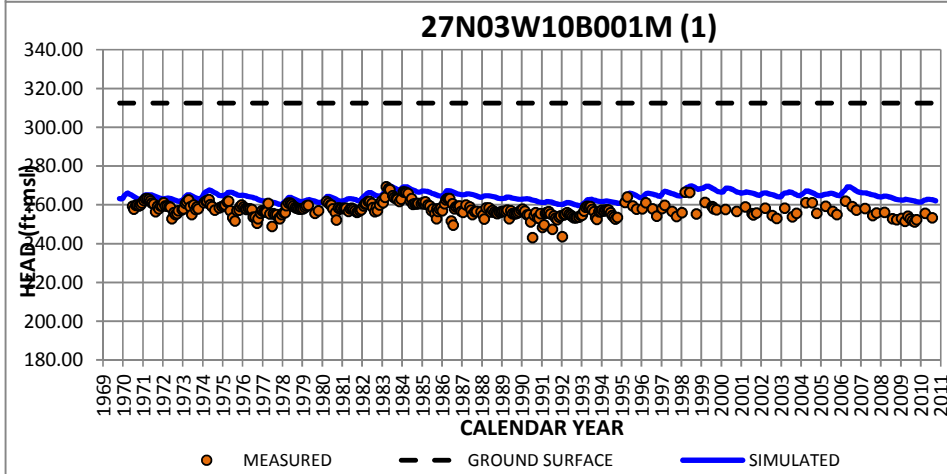
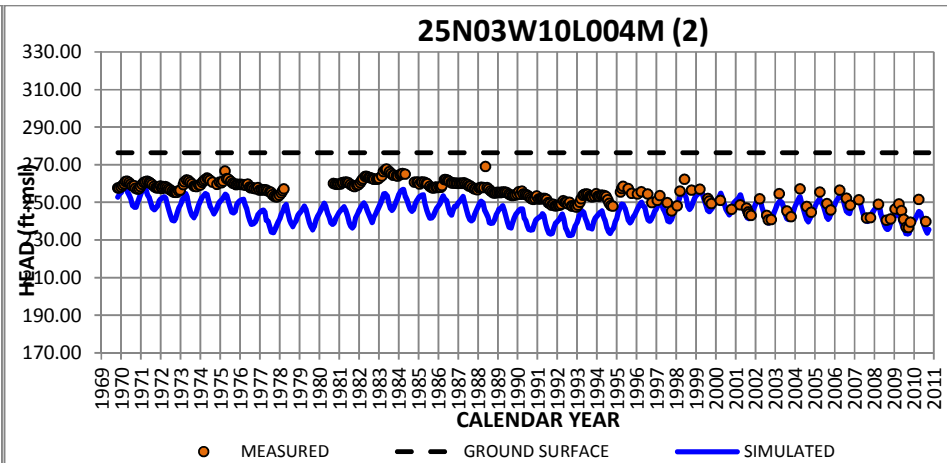
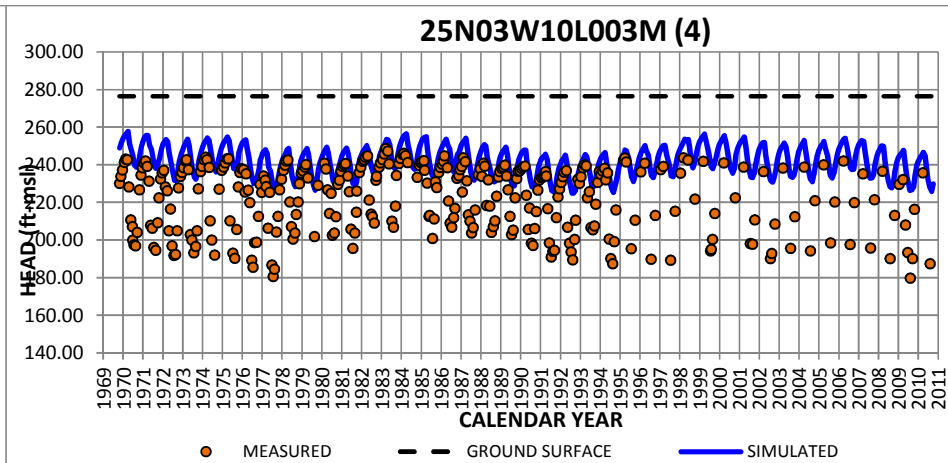
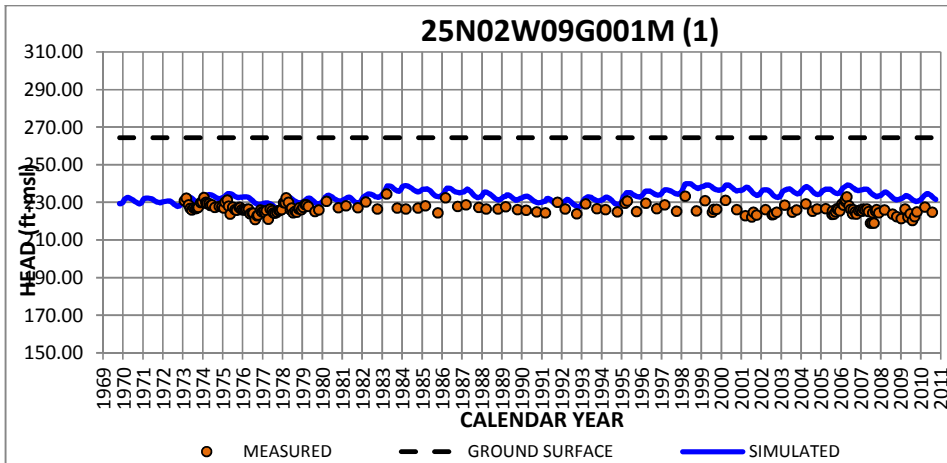












Appendix D
SACFEM2013.feb File

```
rem*****
rem    BEGIN SIMULATION
rem*****
LOAD
  h1=zero.par
  h2=zero.par
  h3=zero.par
  h4=zero.par
  h5=zero.par
  h6=zero.par
  h7=zero.par
  q1=zero.par
  q2=zero.par
  q3=zero.par
  q4=zero.par
  q5=zero.par
  q6=zero.par
  q7=zero.par
rem*****assign Transmissivity Values*****
LOAD
  x3=SACFEM_v2_Kh_1_mpd_120313.par
  x4=SACFEM_v2_Kh_2-5_mpd_120313.par
  x5=SACFEM_v2_Kh_6-7_mpd_120313.par
EVAL
  t1=mt1*x3
  t2=mt2*x4
  t3=mt3*x4
  t4=mt4*x4
  t5=mt5*x4
  t6=mt6*x5
  t7=mt7*x5
SAVE
  t1=Trans.t1
  t2=Trans.t2
  t3=Trans.t3
```

t4=Trans.t4

t5=Trans.t5

t6=Trans.t6

t7=Trans.t7

rem*****assign vertical resistance values *****

LOAD

x6=SACFEM_v2_KhKv_Ratio_500.par

EVAL

c2=50*mt1^2/2/t1+x6*mt2^2/2/t2

c3=x6*mt2^2/2/t2+x6*mt3^2/2/t3

c4=x6*mt3^2/2/t3+x6*mt4^2/2/t4

c5=x6*mt4^2/2/t4+x6*mt5^2/2/t5

c6=x6*mt5^2/2/t5+x6*mt6^2/2/t6

c7=x6*mt6^2/2/t6+x6*mt7^2/2/t7

rem*****load extra register files *****

LOAD

x1=SACFEM_v2_GSE_Combined_mNAVD88_120313.par

x8=SACFEM_v2_WL1_042314.par

rem*****open ftq files*****

LOAD

lb=SACFEM_v2_all.lb

open-q all=all.ftq upper=1 lower=7

rem*****open ftq files for Water Budget Areas*****

LOAD

lb=SACFEM_v2_WBAs_121013.lb

open-q

WBA_2=WBA_2.ftq upper=1 lower=7

WBA_3=WBA_3.ftq upper=1 lower=7

WBA_4=WBA_4.ftq upper=1 lower=7

WBA_5=WBA_5.ftq upper=1 lower=7

WBA_6=WBA_6.ftq upper=1 lower=7

WBA_9=WBA_9.ftq upper=1 lower=7

WBA_10=WBA_10.ftq upper=1 lower=7

WBA_11=WBA_11.ftq upper=1 lower=7

WBA_12=WBA_12.ftq upper=1 lower=7

WBA_13=WBA_13.ftq upper=1 lower=7
WBA_14=WBA_14.ftq upper=1 lower=7
WBA_16=WBA_16.ftq upper=1 lower=7
WBA_18=WBA_18.ftq upper=1 lower=7
WBA_19=WBA_19.ftq upper=1 lower=7
WBA_20=WBA_20.ftq upper=1 lower=7
WBA_21=WBA_21.ftq upper=1 lower=7
WBA_22=WBA_22.ftq upper=1 lower=7
WBA_23=WBA_23.ftq upper=1 lower=7
WBA_24=WBA_24.ftq upper=1 lower=7
WBA_25=WBA_25.ftq upper=1 lower=7
WBA_27=WBA_27.ftq upper=1 lower=7
WBA_07N=WBA_07N.ftq upper=1 lower=7
WBA_07S=WBA_07S.ftq upper=1 lower=7
WBA_08N=WBA_08N.ftq upper=1 lower=7
WBA_08NS=WBA_08NS.ftq upper=1 lower=7
WBA_08S=WBA_08S.ftq upper=1 lower=7
WBA_15N=WBA_15N.ftq upper=1 lower=7
WBA_15S=WBA_15S.ftq upper=1 lower=7
WBA_17N=WBA_17N.ftq upper=1 lower=7
WBA_17S=WBA_17S.ftq upper=1 lower=7
WBA_26N=WBA_26N.ftq upper=1 lower=7
WBA_26S=WBA_26S.ftq upper=1 lower=7
no_WBA_North=no_WBA_North.ftq upper=1 lower=7
no_WBA_South=no_WBA_South.ftq upper=1 lower=7
rem*****open ftq files for streams*****
LOAD
lb=SACFEM_v2_Streams_FTQ_042314.lb
open-q
AMERICAN_RIV=AMERICAN_RIV.ftq upper=1 lower=1
ANTELOPE_CR=ANTELOPE_CR.ftq upper=1 lower=1
AUBURN_RAVINE=AUBURN_RAVINE.ftq upper=1 lower=1
BEAR_RIV=BEAR_RIV.ftq upper=1 lower=1
BIG_CHICO_CR=BIG_CHICO_CR.ftq upper=1 lower=1
BLACK_BUTTE_RESERVOIR=BLACK_BUTTE_RESERVOIR.ftq upper=1 lower=1

BUTTE_BYPASS=BUTTE_BYPASS.ftq upper=1 lower=1
BUTTE_CR=BUTTE_CR.ftq upper=1 lower=1
CACHE_CR=CACHE_CR.ftq upper=1 lower=1
COLUSA_BD=COLUSA_BD.ftq upper=1 lower=1
CONSUMNES_RIV=CONSUMNES_RIV.ftq upper=1 lower=1
COON_CR=COON_CR.ftq upper=1 lower=1
CORTINA_CR=CORTINA_CR.ftq upper=1 lower=1
DEER_CR_BUTTECO=DEER_CR_BUTTECO.ftq upper=1 lower=1
DEER_CR_CONSUMNES=DEER_CR_CONSUMNES.ftq upper=1 lower=1
DRY_CR_PUTAH=DRY_CR_PUTAH.ftq upper=1 lower=1
DRY_CR_YUBA=DRY_CR_YUBA.ftq upper=1 lower=1
EASTSIDE_CROSS_CANAL=EASTSIDE_CROSS_CANAL.ftq upper=1 lower=1
ELDER_CR=ELDER_CR.ftq upper=1 lower=1
FEATHER_RIV=FEATHER_RIV.ftq upper=1 lower=1
FRENCH_CR=FRENCH_CR.ftq upper=1 lower=1
FRESHWATER_CR=FRESHWATER_CR.ftq upper=1 lower=1
FUNKS_CR=FUNKS_CR.ftq upper=1 lower=1
GCID_CANAL=GCID_CANAL.ftq upper=1 lower=1
HONCUT_CR=HONCUT_CR.ftq upper=1 lower=1
LITTLE_CHICO_CR=LITTLE_CHICO_CR.ftq upper=1 lower=1
LURLINE_CR=LURLINE_CR.ftq upper=1 lower=1
MILL_CR_BUTTECO=MILL_CR_BUTTECO.ftq upper=1 lower=1
MILL_CR_THOMES=MILL_CR_THOMES.ftq upper=1 lower=1
MOKELUMNE_RIV=MOKELUMNE_RIV.ftq upper=1 lower=1
N_HONCUT_CR=N_HONCUT_CR.ftq upper=1 lower=1
NF_WALKER_CR=NF_WALKER_CR.ftq upper=1 lower=1
PAYNES_CR=PAYNES_CR.ftq upper=1 lower=1
PUTAH_CR=PUTAH_CR.ftq upper=1 lower=1
RD108_MAIN_DRAIN=RD108_MAIN_DRAIN.ftq upper=1 lower=1
S_HONCUT_CR=S_HONCUT_CR.ftq upper=1 lower=1
SACRAMENTO_RIV=SACRAMENTO_RIV.ftq upper=1 lower=1
SALT_RIV=SALT_RIV.ftq upper=1 lower=1
SAN_JOAQUIN_RIV=SAN_JOAQUIN_RIV.ftq upper=1 lower=1
SAND_CR=SAND_CR.ftq upper=1 lower=1
SEVENMILE_CR=SEVENMILE_CR.ftq upper=1 lower=1

```

SF_WILLOW_CR=SF_WILLOW_CR.ftq upper=1 lower=1
SPRING_VALLEY_CR=SPRING_VALLEY_CR.ftq upper=1 lower=1
STONE_CORRAL_CR=STONE_CORRAL_CR.ftq upper=1 lower=1
STONEY_CR=STONEY_CR.ftq upper=1 lower=1
SUTTER_BYPASS=SUTTER_BYPASS.ftq upper=1 lower=1
SYCAMORE_SLOUGH_LOWER=SYCAMORE_SLOUGH_LOWER.ftq upper=1 lower=1
SYCAMORE_SLOUGH_UPPER=SYCAMORE_SLOUGH_UPPER.ftq upper=1 lower=1
THERMALITO=THERMALITO.ftq upper=1 lower=1
THOMES_CR=THOMES_CR.ftq upper=1 lower=1
WALKER_CR=WALKER_CR.ftq upper=1 lower=1
WILKINS_SLOUGH_CANAL=WILKINS_SLOUGH_CANAL.ftq upper=1 lower=1
WILLOW_CR=WILLOW_CR.ftq upper=1 lower=1
WILSON_CR=WILSON_CR.ftq upper=1 lower=1
YOLO_BYPASS=YOLO_BYPASS.ftq upper=1 lower=1
YUBA_RIV=YUBA_RIV.ftq upper=1 lower=1
*****open fth for WDL wells*****
load
lb=SACFEM_v2_WDL_Wells.lb
open-h
^=WDL_Hydrographs.ftq upper=1 lower=7
*****assign initial heads*****
load
h1=SACFEM_v2_09_86_Initial.h1
h2=SACFEM_v2_09_86_Initial.h2
h3=SACFEM_v2_09_86_Initial.h3
h4=SACFEM_v2_09_86_Initial.h4
h5=SACFEM_v2_09_86_Initial.h5
h6=SACFEM_v2_09_86_Initial.h6
h7=SACFEM_v2_09_86_Initial.h7

rem*****
rem   BEGIN TRANSIENT SIMULATION
rem*****

```


rem*****assign mountain-front recharge*****

LOAD

lb =SACFEM_v2_VoidPolygons2013_v2.lb

q1=zero.par

q2=zero.par

q3=zero.par

q4=zero.par

q5=zero.par

q6=zero.par

q7=zero.par

EVAL

x22=8071480 label=1

x22=35050083 label=2

x22=80605692 label=3

x22=76028964 label=4

x22=229983341 label=5

x22=949454 label=6

x22=3220633 label=7

x22=111833985 label=8

x22=897801 label=9

x22=22812497 label=10

x22=9639695 label=11

x22=6424725 label=12

x22=15522224 label=13

x22=4100614 label=14

x22=3571035 label=15

x22=20167473 label=16

x22=42791390 label=17

x22=9736556 label=18

x22=44503920 label=19

x22=2034253 label=20

x22=56249042 label=21

x22=776695 label=22

x22=7543586 label=23

```
x22=5209652 label=24
x22=1555595 label=25
x22=501520 label=26
x22=17635217 label=27
x22=5532887 label=28
x22=2311739 label=29
x22=2613399 label=30
x22=12198098 label=31
x22=2633584 label=32
x22=43738528 label=33
x22=57825106 label=34
rem*****adjust mountain-front recharge*****
LOAD
x23=SACFEM_v2_MtnFront_L_Factor_2013_v2.par
EVAL
x22=p*0.030*0.50/31 label=1
x22=p*0.030*0.50/31 label=2
x22=p*0.030*0.50/31 label=3
x22=p*0.030*0.50/31 label=4
x22=p*0.030*0.50/31 label=5
x22=p*0.030*1.00/31 label=6
x22=p*0.030*1.00/31 label=7
x22=p*0.030*1.00/31 label=8
x22=p*0.030*1.00/31 label=9
x22=p*0.030*1.00/31 label=10
x22=p*0.030*1.00/31 label=11
x22=p*0.030*1.00/31 label=12
x22=p*0.030*1.00/31 label=13
x22=p*0.030*1.50/31 label=14
x22=p*0.030*1.50/31 label=15
x22=p*0.030*1.50/31 label=16
x22=p*0.030*0.50/31 label=17
x22=p*0.030*0.50/31 label=18
x22=p*0.030*1.50/31 label=19
x22=p*0.030*1.00/31 label=20
```

x22=p*0.030*1.00/31 label=21
x22=p*0.030*1.50/31 label=22
x22=p*0.030*1.50/31 label=23
x22=p*0.030*1.00/31 label=24
x22=p*0.030*1.00/31 label=25
x22=p*0.030*1.00/31 label=26
x22=p*0.030*1.00/31 label=27
x22=p*0.030*1.00/31 label=28
x22=p*0.030*1.00/31 label=29
x22=p*0.030*1.00/31 label=30
x22=p*0.030*1.00/31 label=31
x22=p*0.030*1.00/31 label=32
x22=p*0.030*1.00/31 label=33
x22=p*0.030*1.00/31 label=34
q1=x22*x23*-1
Save Q1=10_69.q1

rem*****Normal/Wet Water Year*****

LOAD

storativity=SACFEM_v2.sto

wl1=SACFEM_v2_WL1_042314.par

dh1=SACFEM_v2_GSE_Combined_mNAVD88_120313.par

PPN=10_69.ppn

WH1=10_69.wh1

WC1=10_69.wc1

DC1=10_69.dc1

Q1=10_69.q1

Q2=10_69.q2

Q3=10_69.q3

Q4=10_69.q4

TIME

days=31

steps=1

RUN

itmin=50
itmax=600
relax=0
error=0.005
m3error=1

SAVE

h1=10_69.h1
h2=10_69.h2
h3=10_69.h3
h4=10_69.h4
h5=10_69.h5
h6=10_69.h6
h7=10_69.h7

rem*****assign mountain-front recharge*****

LOAD

lb =SACFEM_v2_VoidPolygons2013_v2.lb
q1=zero.par
q2=zero.par
q3=zero.par
q4=zero.par
q5=zero.par
q6=zero.par
q7=zero.par

EVAL

x22=8071480 label=1
x22=35050083 label=2
x22=80605692 label=3
x22=76028964 label=4
x22=229983341 label=5
x22=949454 label=6
x22=3220633 label=7
x22=111833985 label=8

x22=897801 label=9

x22=22812497 label=10

x22=9639695 label=11

x22=6424725 label=12

x22=15522224 label=13

x22=4100614 label=14

x22=3571035 label=15

x22=20167473 label=16

x22=42791390 label=17

x22=9736556 label=18

x22=44503920 label=19

x22=2034253 label=20

x22=56249042 label=21

x22=776695 label=22

x22=7543586 label=23

x22=5209652 label=24

x22=1555595 label=25

x22=501520 label=26

x22=17635217 label=27

x22=5532887 label=28

x22=2311739 label=29

x22=2613399 label=30

x22=12198098 label=31

x22=2633584 label=32

x22=43738528 label=33

x22=57825106 label=34

rem*****adjust mountain-front recharge*****

LOAD

x23=SACFEM_v2_MtnFront_L_Factor_2013_v2.par

EVAL

x22=p*0.049*0.50/30 label=1

x22=p*0.049*0.50/30 label=2

x22=p*0.049*0.50/30 label=3

x22=p*0.049*0.50/30 label=4

x22=p*0.049*0.50/30 label=5

x22=p*0.049*1.00/30 label=6

x22=p*0.049*1.00/30 label=7

x22=p*0.049*1.00/30 label=8

x22=p*0.049*1.00/30 label=9

x22=p*0.049*1.00/30 label=10

x22=p*0.049*1.00/30 label=11

x22=p*0.049*1.00/30 label=12

x22=p*0.049*1.00/30 label=13

x22=p*0.049*1.50/30 label=14

x22=p*0.049*1.50/30 label=15

x22=p*0.049*1.50/30 label=16

x22=p*0.049*0.50/30 label=17

x22=p*0.049*0.50/30 label=18

x22=p*0.049*1.50/30 label=19

x22=p*0.049*1.00/30 label=20

x22=p*0.049*1.00/30 label=21

x22=p*0.049*1.50/30 label=22

x22=p*0.049*1.50/30 label=23

x22=p*0.049*1.00/30 label=24

x22=p*0.049*1.00/30 label=25

x22=p*0.049*1.00/30 label=26

x22=p*0.049*1.00/30 label=27

x22=p*0.049*1.00/30 label=28

x22=p*0.049*1.00/30 label=29

x22=p*0.049*1.00/30 label=30

x22=p*0.049*1.00/30 label=31

x22=p*0.049*1.00/30 label=32

x22=p*0.049*1.00/30 label=33

x22=p*0.049*1.00/30 label=34

q1=x22*x23*-1

Save Q1=11_69.q1

rem*****Normal/Wet Water Year*****

LOAD

PPN=11_69.ppn

WH1=11_69.wh1

WC1=11_69.wc1

DC1=11_69.dc1

Q1=11_69.q1

Q2=11_69.q2

Q3=11_69.q3

Q4=11_69.q4

TIME

days=30

steps=1

RUN

itmin=50

itmax=600

relax=0

error=0.005

m3error=1

SAVE

h1=11_69.h1

h2=11_69.h2

h3=11_69.h3

h4=11_69.h4

h5=11_69.h5

h6=11_69.h6

h7=11_69.h7

rem*****assign mountain-front recharge*****

LOAD

lb =SACFEM_v2_VoidPolygons2013_v2.lb

q1=zero.par

q2=zero.par

q3=zero.par

q4=zero.par

q5=zero.par

q6=zero.par

q7=zero.par

EVAL

x22=8071480 label=1

x22=35050083 label=2

x22=80605692 label=3

x22=76028964 label=4

x22=229983341 label=5

x22=949454 label=6

x22=3220633 label=7

x22=111833985 label=8

x22=897801 label=9

x22=22812497 label=10

x22=9639695 label=11

x22=6424725 label=12

x22=15522224 label=13

x22=4100614 label=14

x22=3571035 label=15

x22=20167473 label=16

x22=42791390 label=17

x22=9736556 label=18

x22=44503920 label=19

x22=2034253 label=20

x22=56249042 label=21

x22=776695 label=22

x22=7543586 label=23

x22=5209652 label=24

x22=1555595 label=25

x22=501520 label=26

x22=17635217 label=27

x22=5532887 label=28

x22=2311739 label=29

x22=2613399 label=30

x22=12198098 label=31

x22=2633584 label=32

x22=43738528 label=33

x22=57825106 label=34

rem*****adjust mountain-front recharge*****

LOAD

x23=SACFEM_v2_MtnFront_L_Factor_2013_v2.par

EVAL

x22=p*0.102*0.50/31 label=1

x22=p*0.102*0.50/31 label=2

x22=p*0.102*0.50/31 label=3

x22=p*0.102*0.50/31 label=4

x22=p*0.102*0.50/31 label=5

x22=p*0.102*1.00/31 label=6

x22=p*0.102*1.00/31 label=7

x22=p*0.102*1.00/31 label=8

x22=p*0.102*1.00/31 label=9

x22=p*0.102*1.00/31 label=10

x22=p*0.102*1.00/31 label=11

x22=p*0.102*1.00/31 label=12

x22=p*0.102*1.00/31 label=13

x22=p*0.102*1.50/31 label=14

x22=p*0.102*1.50/31 label=15

x22=p*0.102*1.50/31 label=16

x22=p*0.102*0.50/31 label=17

x22=p*0.102*0.50/31 label=18

x22=p*0.102*1.50/31 label=19

x22=p*0.102*1.00/31 label=20

x22=p*0.102*1.00/31 label=21

x22=p*0.102*1.50/31 label=22

x22=p*0.102*1.50/31 label=23

x22=p*0.102*1.00/31 label=24

x22=p*0.102*1.00/31 label=25

x22=p*0.102*1.00/31 label=26

x22=p*0.102*1.00/31 label=27

x22=p*0.102*1.00/31 label=28

x22=p*0.102*1.00/31 label=29

x22=p*0.102*1.00/31 label=30

x22=p*0.102*1.00/31 label=31

x22=p*0.102*1.00/31 label=32

x22=p*0.102*1.00/31 label=33

x22=p*0.102*1.00/31 label=34

q1=x22*x23*-1

Save Q1=12_69.q1

rem*****Normal/Wet Water Year*****

LOAD

PPN=12_69.ppn

WH1=12_69.wh1

WC1=12_69.wc1

DC1=12_69.dc1

Q1=12_69.q1

Q2=12_69.q2

Q3=12_69.q3

Q4=12_69.q4

TIME

days=31

steps=1

RUN

itmin=50

itmax=600

relax=0

error=0.005

m3error=1

SAVE

h1=12_69.h1

h2=12_69.h2

h3=12_69.h3

h4=12_69.h4

h5=12_69.h5

h6=12_69.h6

h7=12_69.h7

rem*****assign mountain-front recharge*****

LOAD

lb =SACFEM_v2_VoidPolygons2013_v2.lb

q1=zero.par

q2=zero.par

q3=zero.par

q4=zero.par

q5=zero.par

q6=zero.par

q7=zero.par

EVAL

x22=8540053 label=1

x22=37478822 label=2

x22=84904385 label=3

x22=77394633 label=4

x22=232419920 label=5

x22=887594 label=6

x22=3023540 label=7

x22=105745704 label=8

x22=867913 label=9

x22=21415694 label=10

x22=9077969 label=11

x22=5757600 label=12

x22=13543439 label=13

x22=3414958 label=14

x22=2899943 label=15

x22=17517225 label=16

x22=35852152 label=17

x22=8297912 label=18

x22=46602663 label=19

x22=2184550 label=20
x22=59413680 label=21
x22=798035 label=22
x22=7919410 label=23
x22=5539452 label=24
x22=1670086 label=25
x22=545398 label=26
x22=19199301 label=27
x22=6086705 label=28
x22=2445877 label=29
x22=2748554 label=30
x22=13039352 label=31
x22=2866293 label=32
x22=51790487 label=33
x22=55248914 label=34
rem*****adjust mountain-front recharge*****
LOAD
x23=SACFEM_v2_MtnFront_L_Factor_2013_v2.par
EVAL
x22= $p*0.142*0.50/31$ label=1
x22= $p*0.142*0.50/31$ label=2
x22= $p*0.142*0.50/31$ label=3
x22= $p*0.142*0.50/31$ label=4
x22= $p*0.142*0.50/31$ label=5
x22= $p*0.142*1.00/31$ label=6
x22= $p*0.142*1.00/31$ label=7
x22= $p*0.142*1.00/31$ label=8
x22= $p*0.142*1.00/31$ label=9
x22= $p*0.142*1.00/31$ label=10
x22= $p*0.142*1.00/31$ label=11
x22= $p*0.142*1.00/31$ label=12
x22= $p*0.142*1.00/31$ label=13
x22= $p*0.142*1.50/31$ label=14
x22= $p*0.142*1.50/31$ label=15
x22= $p*0.142*1.50/31$ label=16

x22=p*0.142*0.50/31 label=17
x22=p*0.142*0.50/31 label=18
x22=p*0.142*1.50/31 label=19
x22=p*0.142*1.00/31 label=20
x22=p*0.142*1.00/31 label=21
x22=p*0.142*1.50/31 label=22
x22=p*0.142*1.50/31 label=23
x22=p*0.142*1.00/31 label=24
x22=p*0.142*1.00/31 label=25
x22=p*0.142*1.00/31 label=26
x22=p*0.142*1.00/31 label=27
x22=p*0.142*1.00/31 label=28
x22=p*0.142*1.00/31 label=29
x22=p*0.142*1.00/31 label=30
x22=p*0.142*1.00/31 label=31
x22=p*0.142*1.00/31 label=32
x22=p*0.142*1.00/31 label=33
x22=p*0.142*1.00/31 label=34
q1=x22*x23*-1
Save Q1=01_70.q1

rem*****Normal/Wet Water Year*****

LOAD

PPN=01_70.ppn

WH1=01_70.wh1

WC1=01_70.wc1

DC1=01_70.dc1

Q1=01_70.q1

Q2=01_70.q2

Q3=01_70.q3

Q4=01_70.q4

TIME

days=31

steps=1

RUN

itmin=50
itmax=600
relax=0
error=0.005
m3error=1

SAVE

h1=01_70.h1
h2=01_70.h2
h3=01_70.h3
h4=01_70.h4
h5=01_70.h5
h6=01_70.h6
h7=01_70.h7

rem*****assign mountain-front recharge*****

LOAD

lb =SACFEM_v2_VoidPolygons2013_v2.lb
q1=zero.par
q2=zero.par
q3=zero.par
q4=zero.par
q5=zero.par
q6=zero.par
q7=zero.par

EVAL

x22=8540053 label=1
x22=37478822 label=2
x22=84904385 label=3
x22=77394633 label=4
x22=232419920 label=5
x22=887594 label=6
x22=3023540 label=7

x22=105745704 label=8
x22=867913 label=9
x22=21415694 label=10
x22=9077969 label=11
x22=5757600 label=12
x22=13543439 label=13
x22=3414958 label=14
x22=2899943 label=15
x22=17517225 label=16
x22=35852152 label=17
x22=8297912 label=18
x22=46602663 label=19
x22=2184550 label=20
x22=59413680 label=21
x22=798035 label=22
x22=7919410 label=23
x22=5539452 label=24
x22=1670086 label=25
x22=545398 label=26
x22=19199301 label=27
x22=6086705 label=28
x22=2445877 label=29
x22=2748554 label=30
x22=13039352 label=31
x22=2866293 label=32
x22=51790487 label=33
x22=55248914 label=34
rem*****adjust mountain-front recharge*****
LOAD
x23=SACFEM_v2_MtnFront_L_Factor_2013_v2.par
EVAL
x22= $p*0.152*0.50/28$ label=1
x22= $p*0.152*0.50/28$ label=2
x22= $p*0.152*0.50/28$ label=3
x22= $p*0.152*0.50/28$ label=4

x22=p*0.152*0.50/28 label=5
x22=p*0.152*1.00/28 label=6
x22=p*0.152*1.00/28 label=7
x22=p*0.152*1.00/28 label=8
x22=p*0.152*1.00/28 label=9
x22=p*0.152*1.00/28 label=10
x22=p*0.152*1.00/28 label=11
x22=p*0.152*1.00/28 label=12
x22=p*0.152*1.00/28 label=13
x22=p*0.152*1.50/28 label=14
x22=p*0.152*1.50/28 label=15
x22=p*0.152*1.50/28 label=16
x22=p*0.152*0.50/28 label=17
x22=p*0.152*0.50/28 label=18
x22=p*0.152*1.50/28 label=19
x22=p*0.152*1.00/28 label=20
x22=p*0.152*1.00/28 label=21
x22=p*0.152*1.50/28 label=22
x22=p*0.152*1.50/28 label=23
x22=p*0.152*1.00/28 label=24
x22=p*0.152*1.00/28 label=25
x22=p*0.152*1.00/28 label=26
x22=p*0.152*1.00/28 label=27
x22=p*0.152*1.00/28 label=28
x22=p*0.152*1.00/28 label=29
x22=p*0.152*1.00/28 label=30
x22=p*0.152*1.00/28 label=31
x22=p*0.152*1.00/28 label=32
x22=p*0.152*1.00/28 label=33
x22=p*0.152*1.00/28 label=34
q1=x22*x23*-1
Save Q1=02_70.q1

rem*****Normal/Wet Water Year*****

LOAD

PPN=02_70.ppn
WH1=02_70.wh1
WC1=02_70.wc1
DC1=02_70.dc1
Q1=02_70.q1
Q2=02_70.q2
Q3=02_70.q3
Q4=02_70.q4

TIME

days=28
steps=1

RUN

itmin=50
itmax=600
relax=0
error=0.005
m3error=1

SAVE

h1=02_70.h1
h2=02_70.h2
h3=02_70.h3
h4=02_70.h4
h5=02_70.h5
h6=02_70.h6
h7=02_70.h7

<<THE LOOPING PORTION OF SACFEM2013.FEB CONTINUES FOLLOWING SIMILAR SYNTAX AS THE
PRECEDING STRESS PERIODS THROUGH SEPTEMBER 2010.>>