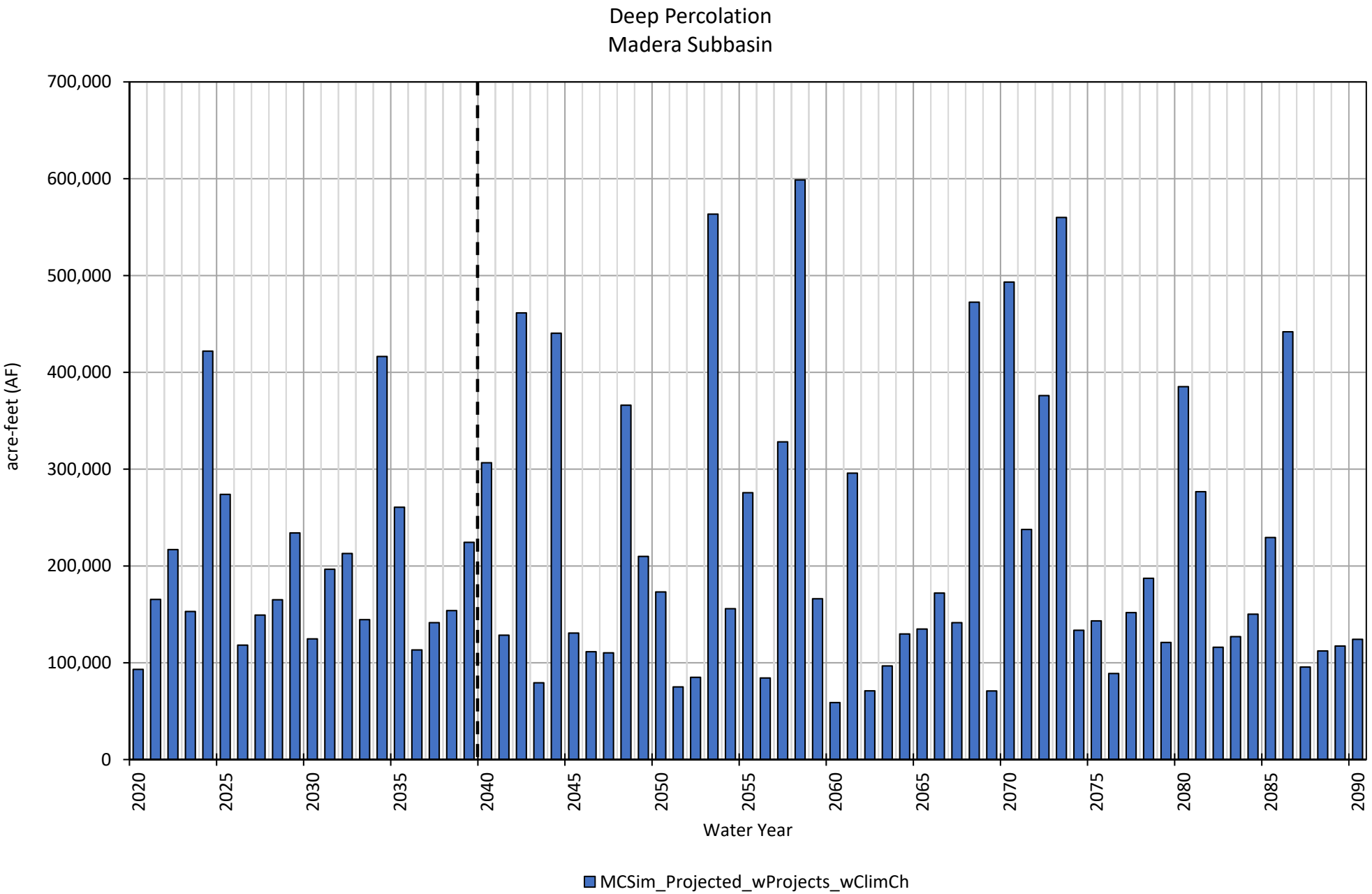
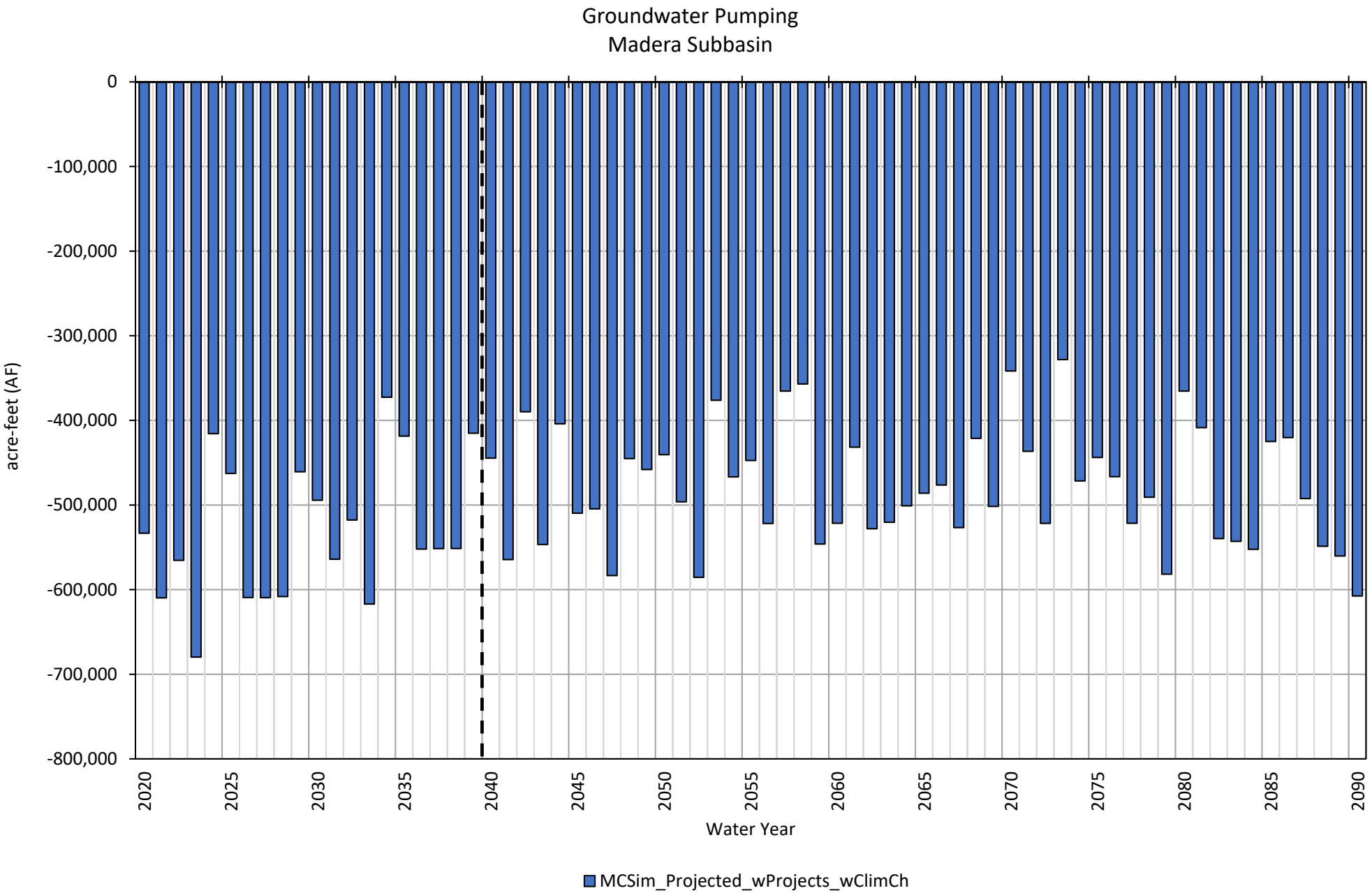
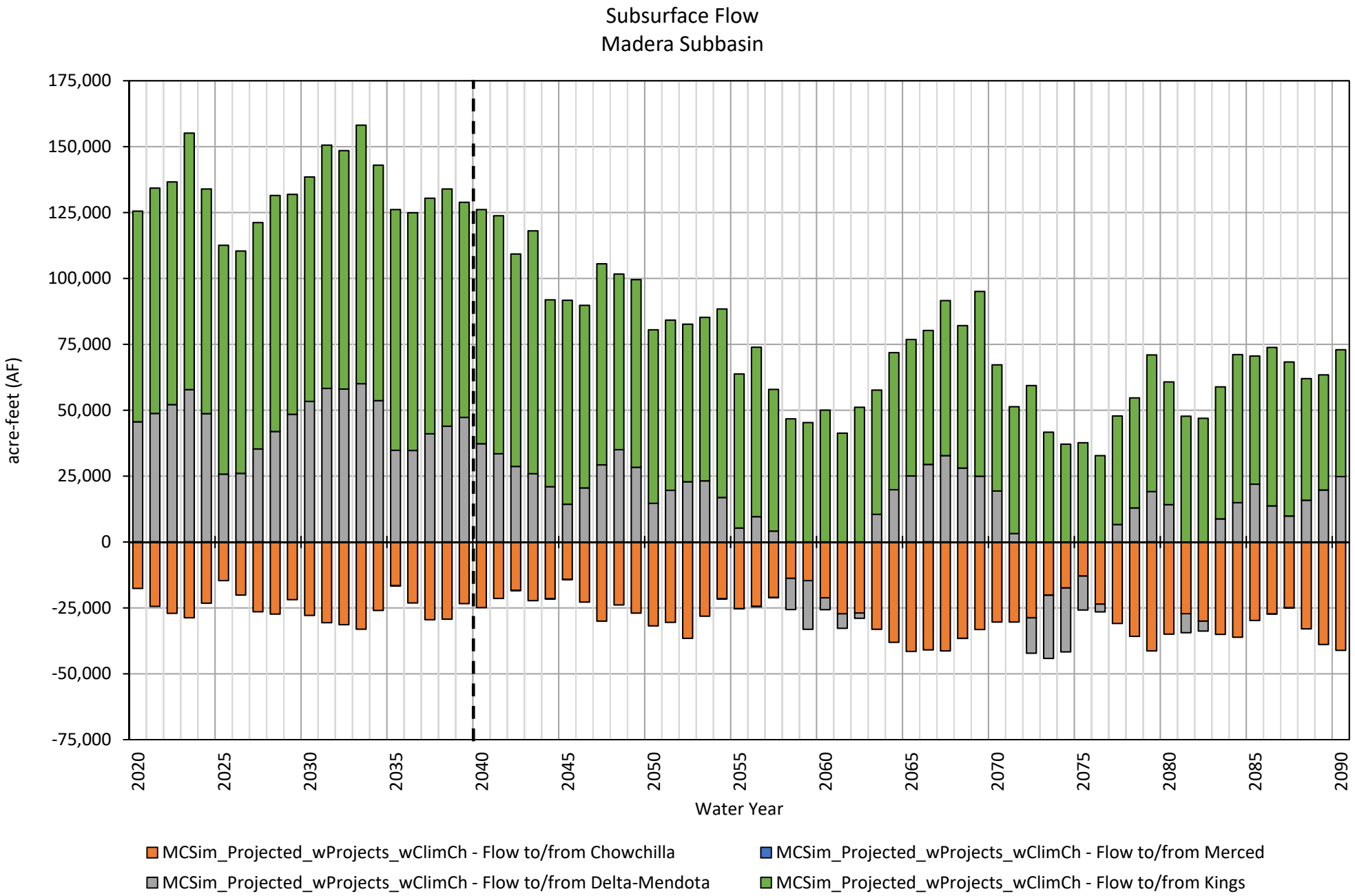
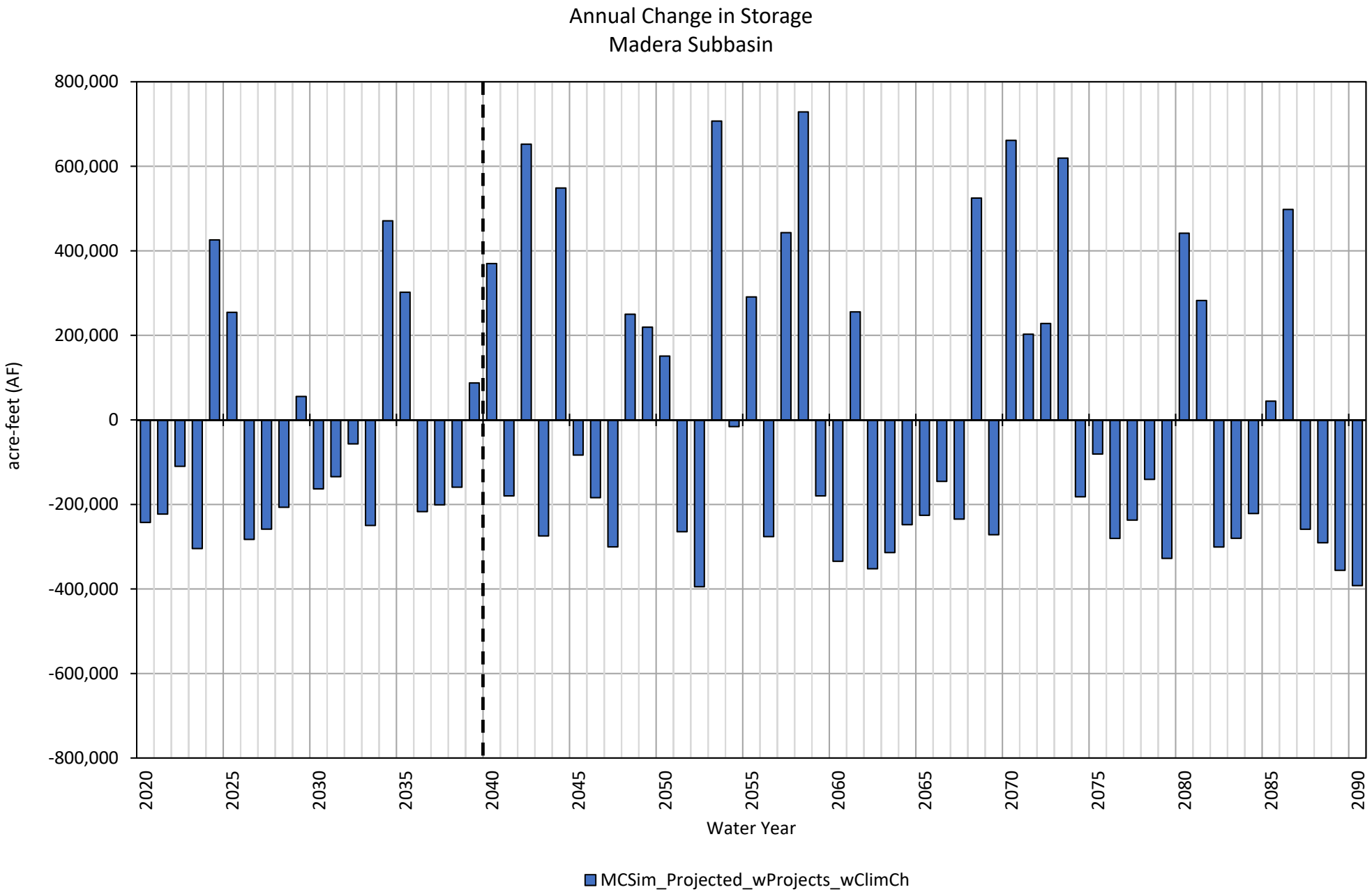
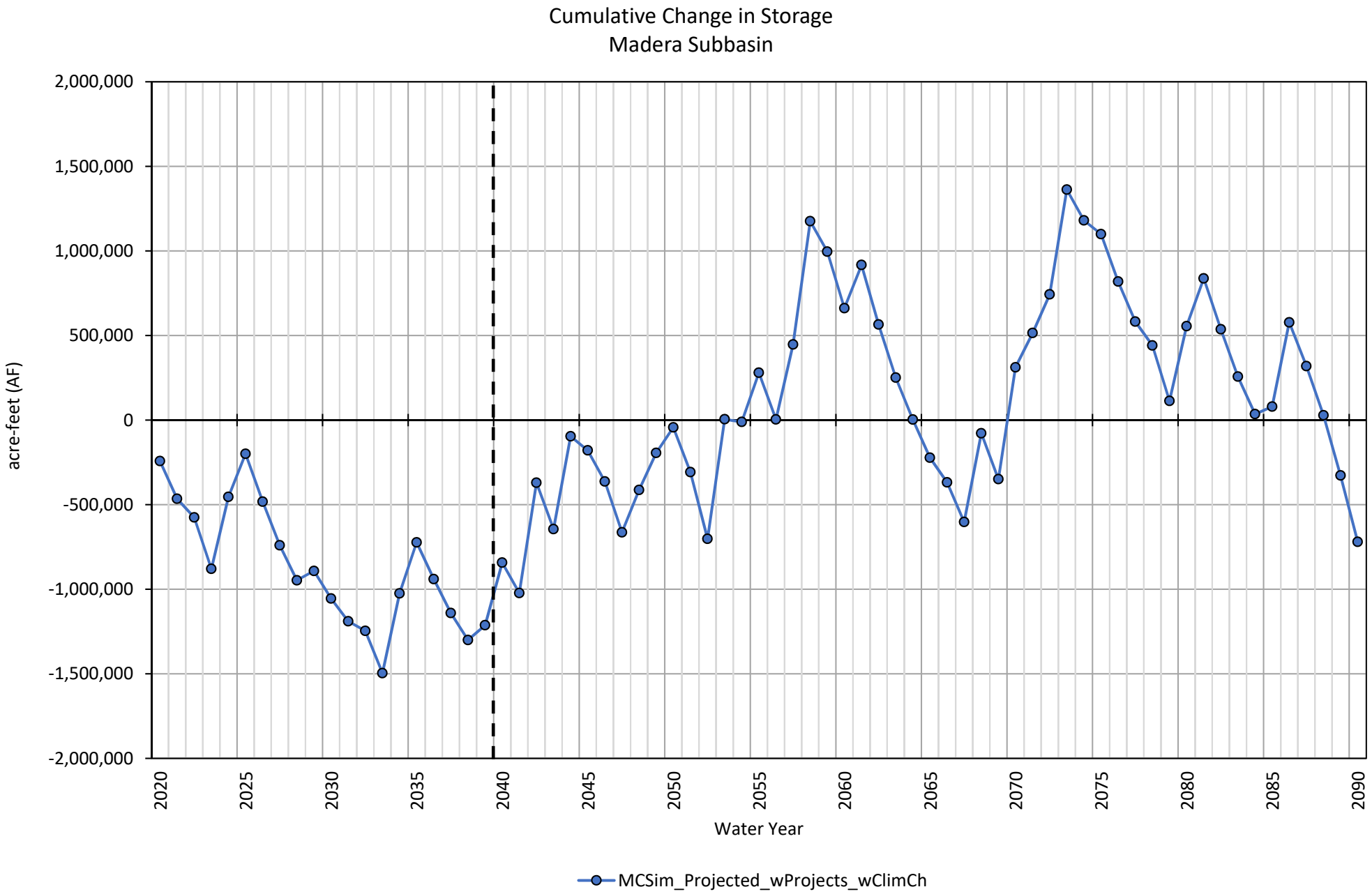

Deep Percolation
Madera Subbasin
700,000
600,000
500,000
400,000
300,000
200,000
100,000
0
acre-feet (AF)
2020
2025
2030
2035
2040
2045
2050
2055
2060
2065
2070
2075
2080
2085
2090
Water Year
MCSim_Projected_wProjects_wClimCh


Groundwater Pumping
Madera Subbasin
0
-100,000
-200,000
-300,000
-400,000
-500,000
-600,000
-700,000
-800,000
acre-feet (AF)
2020
2025
2030
2035
2040
2045
2050
2055
2060
2065
2070
2075
2080
2085
2090
Water Year
MCSim_Projected_wProjects_wClimCh

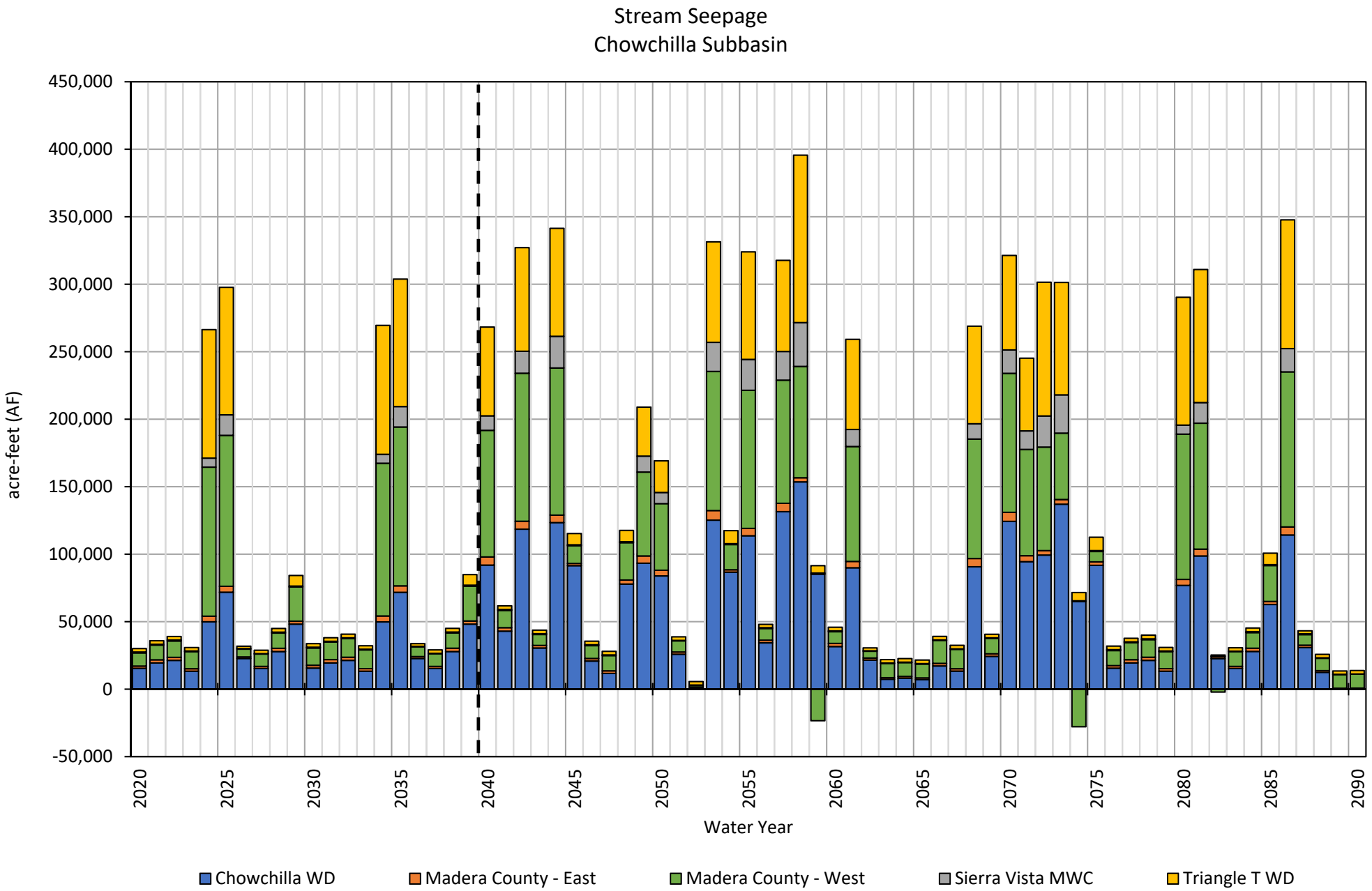

Subsurface Flow
Madera Subbasin
175,000
150,000
125,000
100,000
75,000
50,000
25,000
0
-25,000
-50,000
-75,000
acre-feet (AF)
2020
2025
2030
2035
2040
2045
2050
2055
2060
2065
2070
2075
2080
2085
2090
Water Year
MCSim_Projected_wProjects_wClimCh - Flow to/from Chowchilla
MCSim_Projected_wProjects_wClimCh - Flow to/from Merced
MCSim_Projected_wProjects_wClimCh - Flow to/from Delta-Mendota
MCSim_Projected_wProjects_wClimCh - Flow to/from Kings

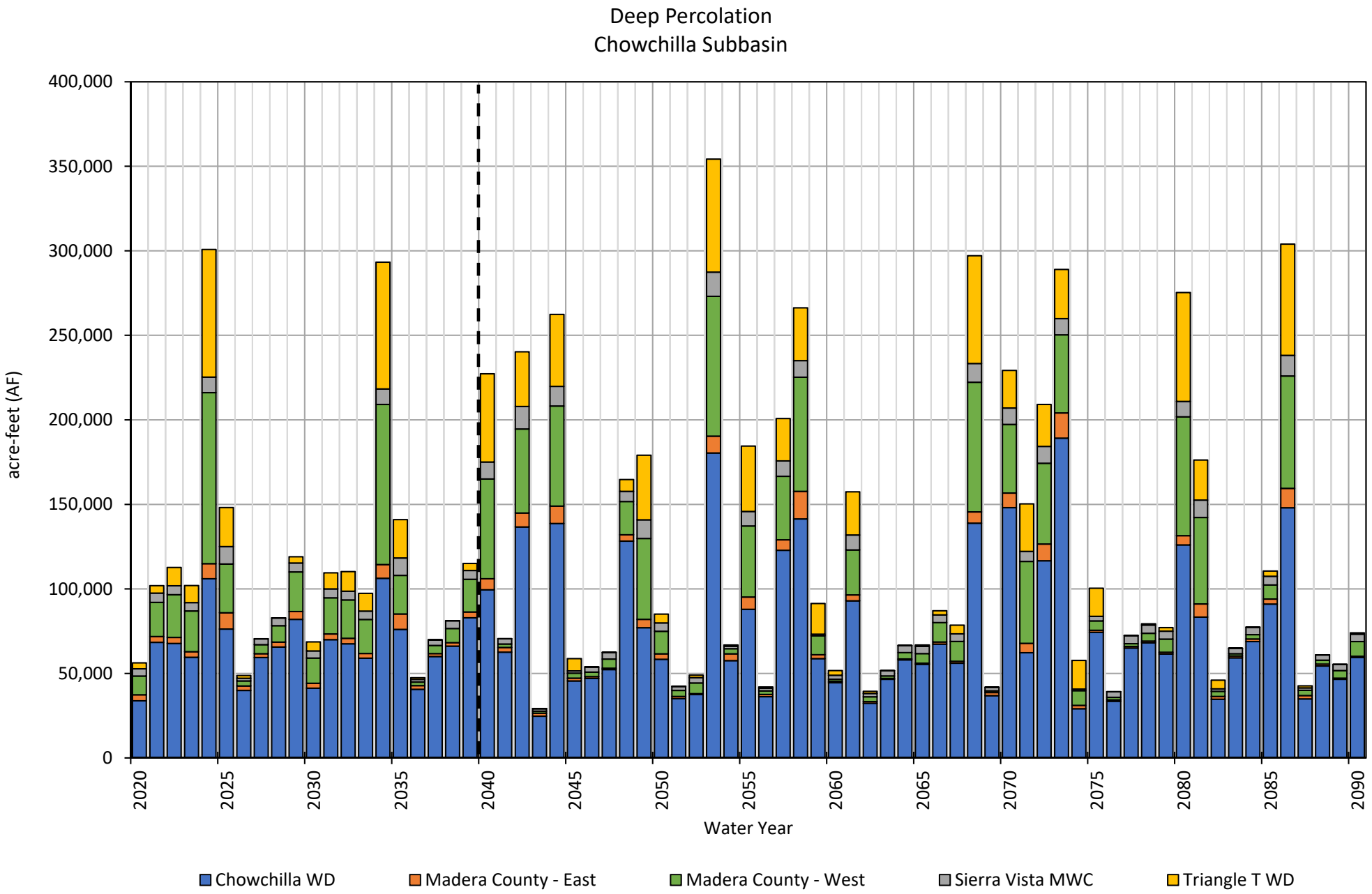

Annual Change in Storage
Madera Subbasin
800,000
600,000
400,000
200,000
0
-200,000
-400,000
-600,000
-800,000
acre-feet (AF)
2020
2025
2030
2035
2040
2045
2050
2055
2060
2065
2070
2075
2080
2085
2090
Water Year
MCSim_Projected_wProjects_wClimCh

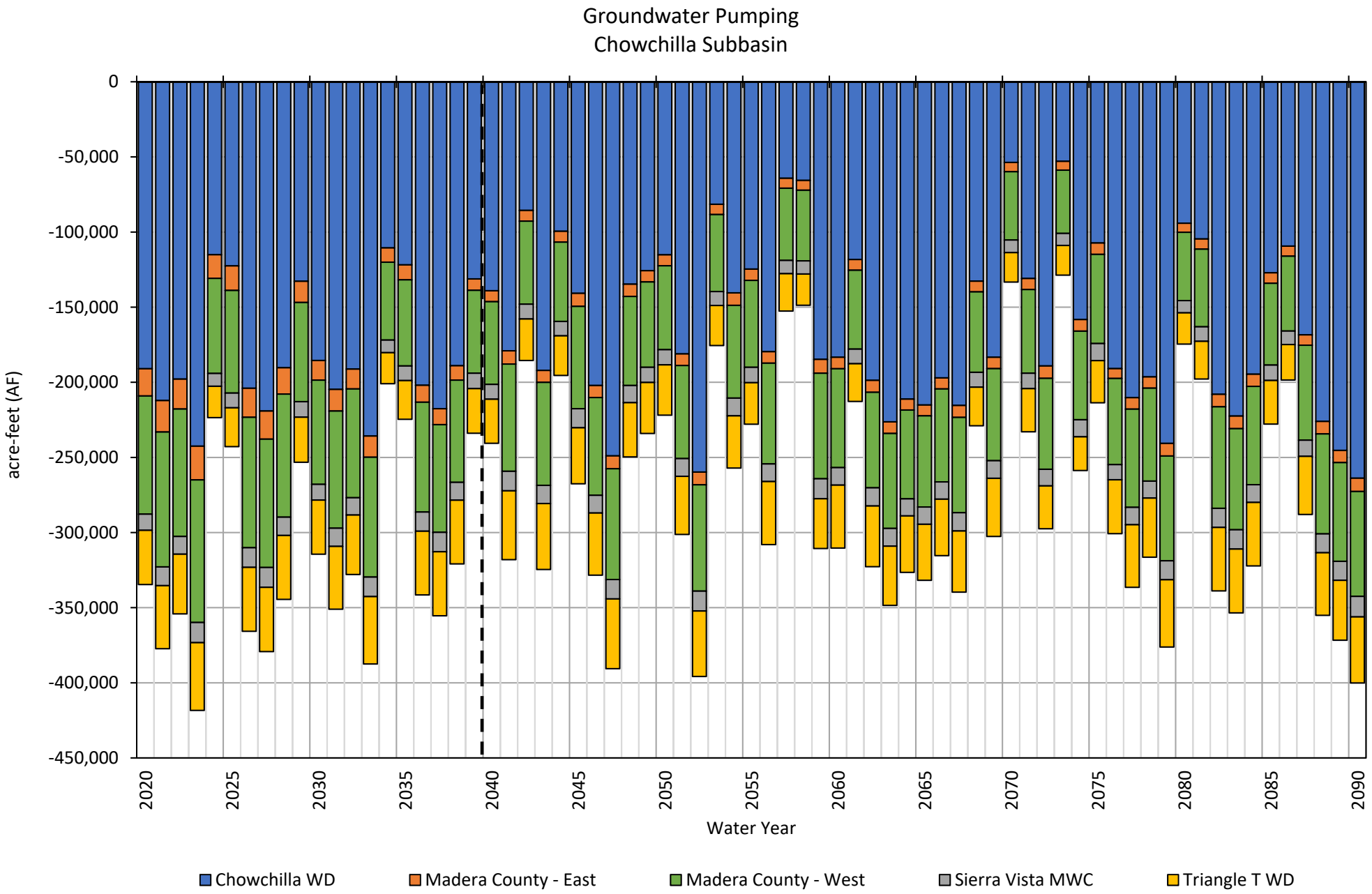

Cumulative Change in Storage
Madera Subbasin
2,000,000
1,500,000
1,000,000
500,000
0
-500,000
-1,000,000
-1,500,000
-2,000,000
acre-feet (AF)
2020
2025
2030
2035
2040
2045
2050
2055
2060
2065
2070
2075
2080
2085
2090
Water Year
MCSim_Projected_wProjects_wClimCh

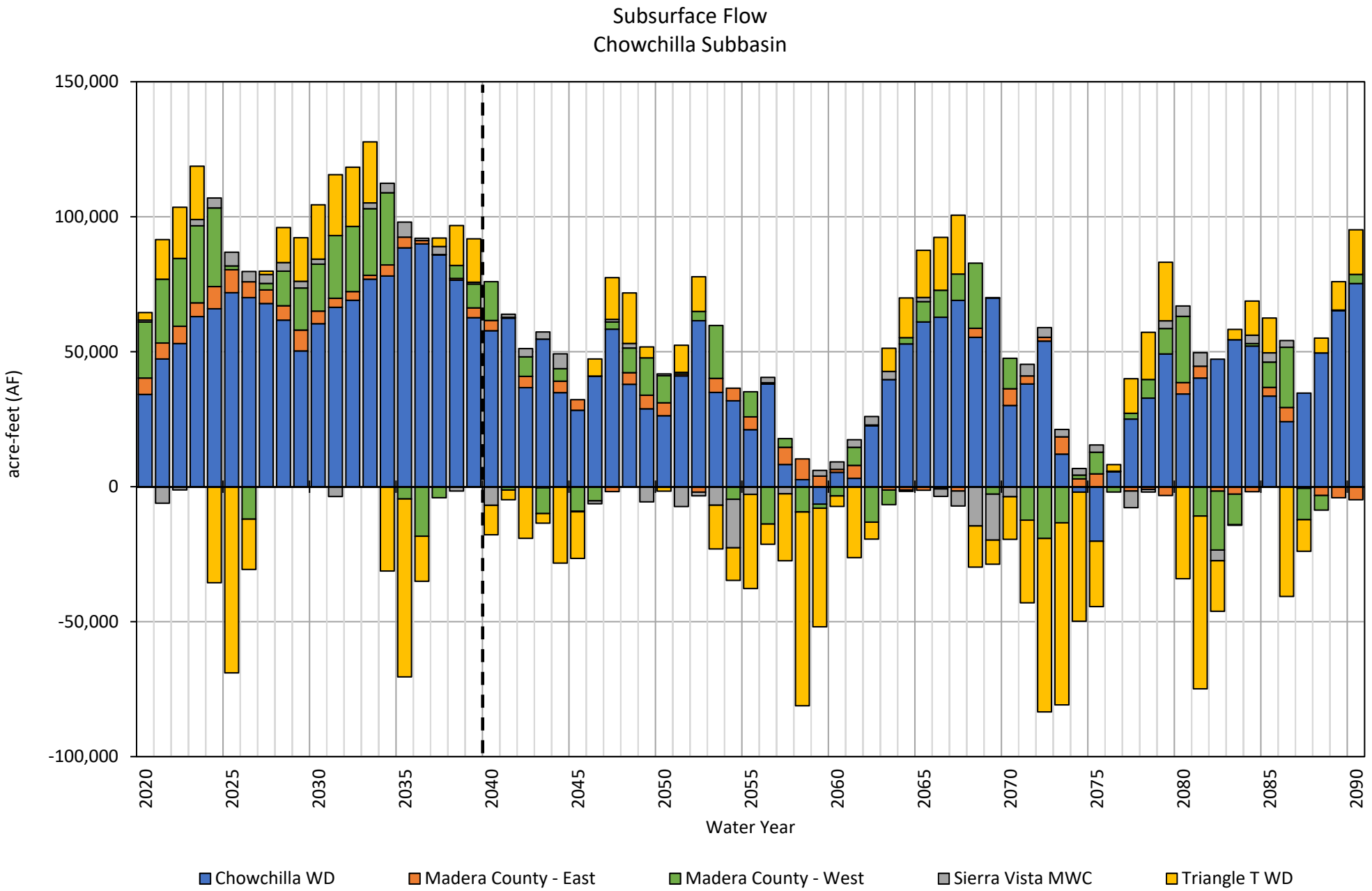
MCSim Projected with Projects with Climate Change Water Budget by GSA
Chowchilla Subbasin

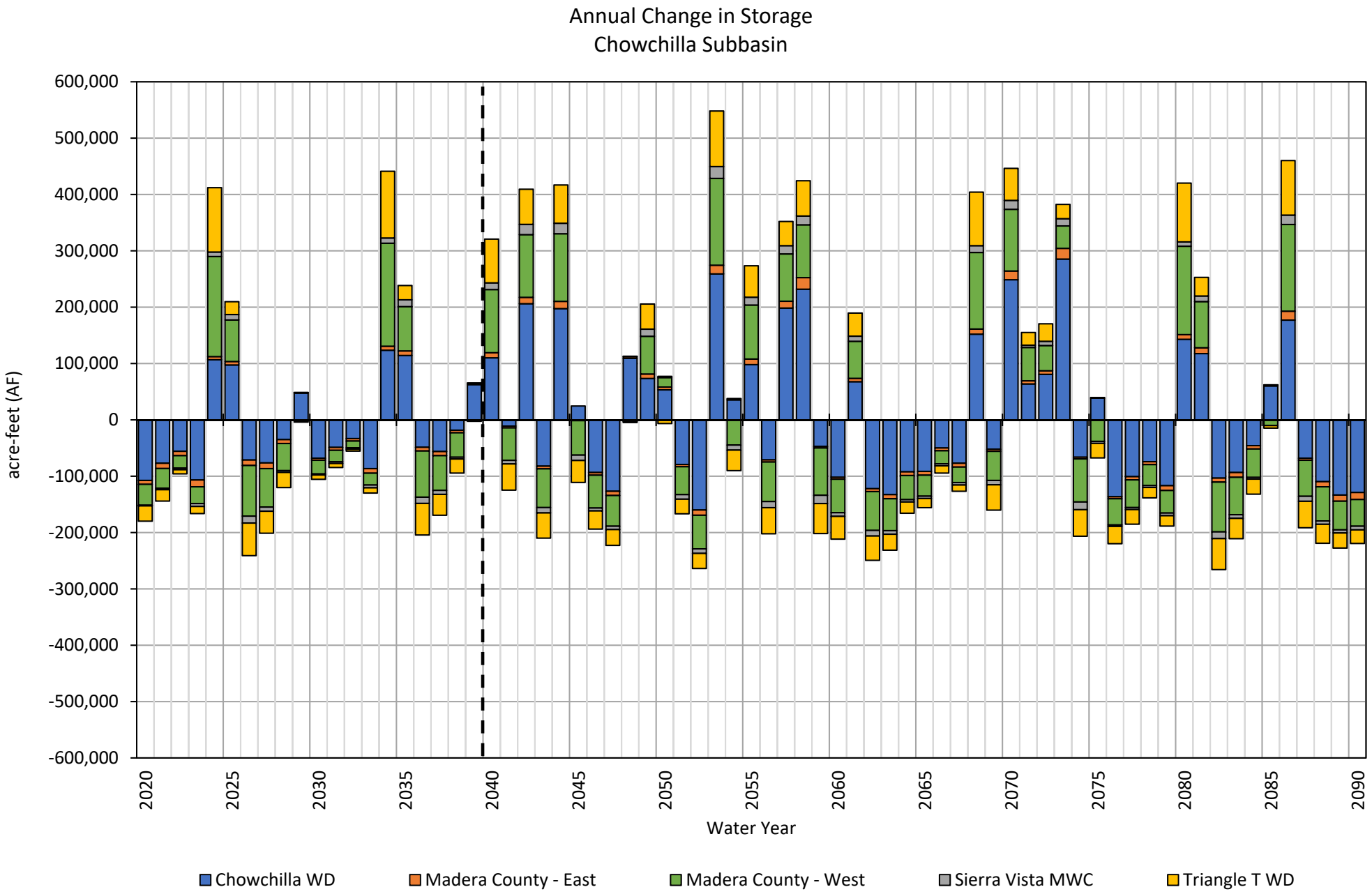
	Average Annual Water Budget (AF/m)									
	Chowchilla Water District		Madera County - East		Madera County - West		Sierra Vista Mutual Water Company		Triangle T Water District	
	Implementation Period, 2020-2039	Sustainability Period, 2040-2090	Implementation Period, 2020-2039	Sustainability Period, 2040-2090	Implementation Period, 2020-2039	Sustainability Period, 2040-2090	Implementation Period, 2020-2039	Sustainability Period, 2040-2090	Implementation Period, 2020-2039	Sustainability Period, 2040-2090
Total Stream Seepage	30,553	58,799	2,471	2,889	32,868	37,204	2,617	6,481	21,514	29,098
In-Channel Seepage	*2,491*	*2,875*	*1,330*	*767*	*13,482*	*7,091*	*-130*	*-599*	*-675*	*-1,328*
Conveyance Losses	*28,062*	*55,924*	*1,140*	*2,122*	*19,385*	*30,113*	*2,748*	*7,080*	*22,189*	*30,426*
Deep Percolation	66,428	76,694	4,180	3,820	24,177	21,495	5,396	5,544	13,642	15,192
General Head Boundary Conditions	0	0	0	0	0	0	0	0	0	0
Small Watershed Baseflow	0	0	0	0	0	0	0	0	0	0
Small Watershed Percolation	0	0	0	0	0	0	0	0	0	0
Groundwater Pumping	-180,847	-163,157	-14,813	-7,585	-73,814	-60,103	-11,436	-11,097	-36,657	-34,435
Total Subsurface Inflow	66,967	36,794	4,520	1,582	12,512	1,398	2,033	-703	-1,463	-9,990
Average Annual Change in Storage	-16,898	9,130	-3,642	705	-4,258	-6	-1,390	224	-2,964	-135
Total Cumulative Change in Storage	-337,968	465,614	-72,832	35,945	-85,151	-318	-27,793	11,444	-59,275	-6,909

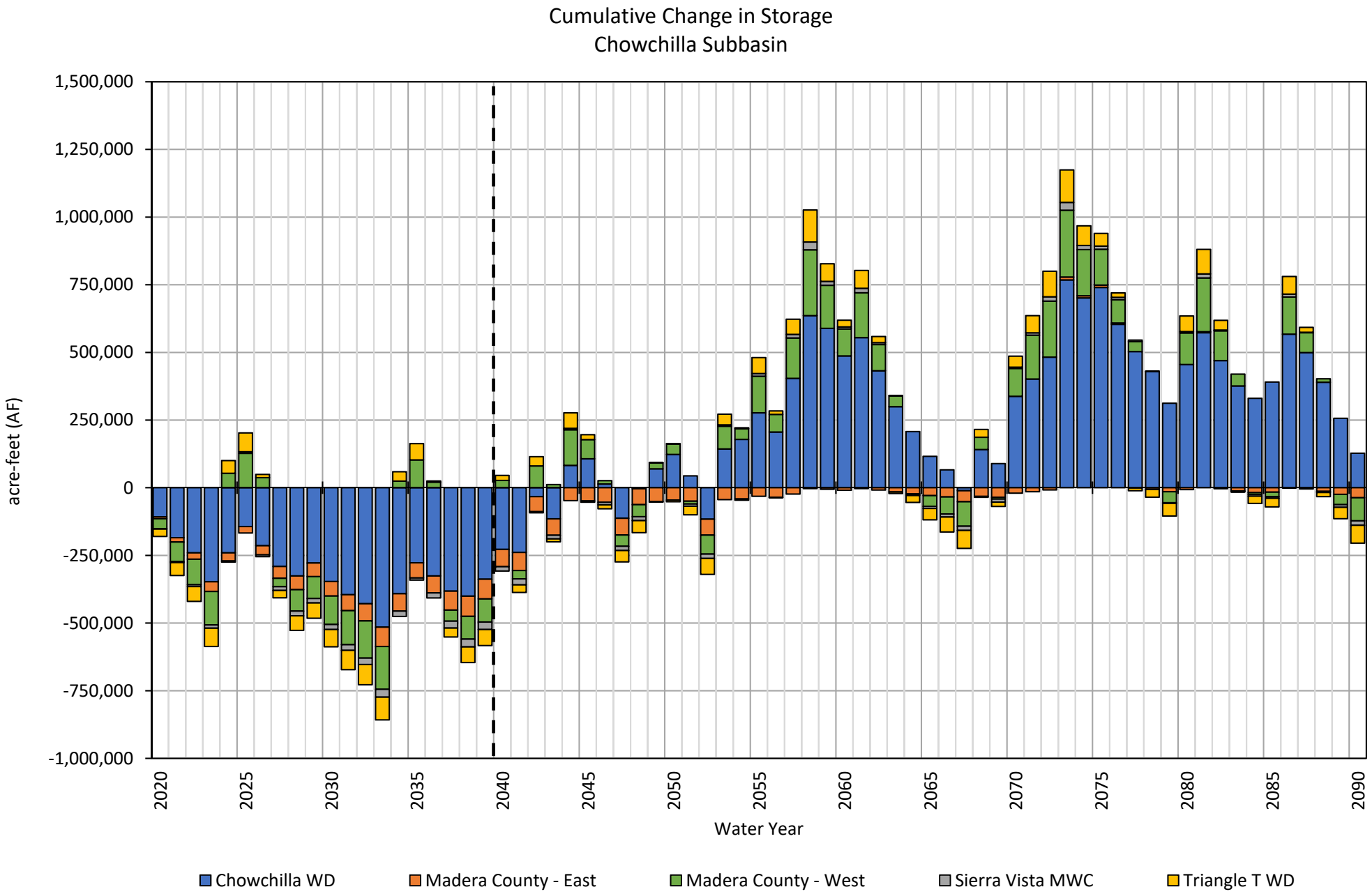

Stream Seepage
Chowchilla Subbasin
450,000
400,000
350,000
300,000
250,000
200,000
150,000
100,000
50,000
0
-50,000
acre-feet (AF)
2020
2025
2030
2035
2040
2045
2050
2055
2060
2065
2070
2075
2080
2085
2090
Water Year
Chowchilla WD
Madera County - East
Madera County - West
Sierra Vista MWC
Triangle T WD


Deep Percolation
Chowchilla Subbasin
400,000
350,000
300,000
250,000
200,000
150,000
100,000
50,000
0
acre-feet (AF)
2020
2025
2030
2035
2040
2045
2050
2055
2060
2065
2070
2075
2080
2085
2090
Water Year
Chowchilla WD
Madera County - East
Madera County - West
Sierra Vista MWC
Triangle T WD


Groundwater Pumping
Chowchilla Subbasin
0
-50,000
-100,000
-150,000
-200,000
-250,000
-300,000
-350,000
-400,000
-450,000
acre-feet (AF)
2020
2025
2030
2035
2040
2045
2050
2055
2060
2065
2070
2075
2080
2085
2090
Water Year
Chowchilla WD
Madera County - East
Madera County - West
Sierra Vista MWC
Triangle T WD


Subsurface Flow
Chowchilla Subbasin
150,000
100,000
50,000
0
-50,000
-100,000
acre-feet (AF)
2020
2025
2030
2035
2040
2045
2050
2055
2060
2065
2070
2075
2080
2085
2090
Water Year
Chowchilla WD
Madera County - East
Madera County - West
Sierra Vista MWC
Triangle T WD


Annual Change in Storage
Chowchilla Subbasin
600,000
500,000
400,000
300,000
200,000
100,000
0
-100,000
-200,000
-300,000
-400,000
-500,000
-600,000
acre-feet (AF)
2020
2025
2030
2035
2040
2045
2050
2055
2060
2065
2070
2075
2080
2085
2090
Water Year
Chowchilla WD
Madera County - East
Madera County - West
Sierra Vista MWC
Triangle T WD

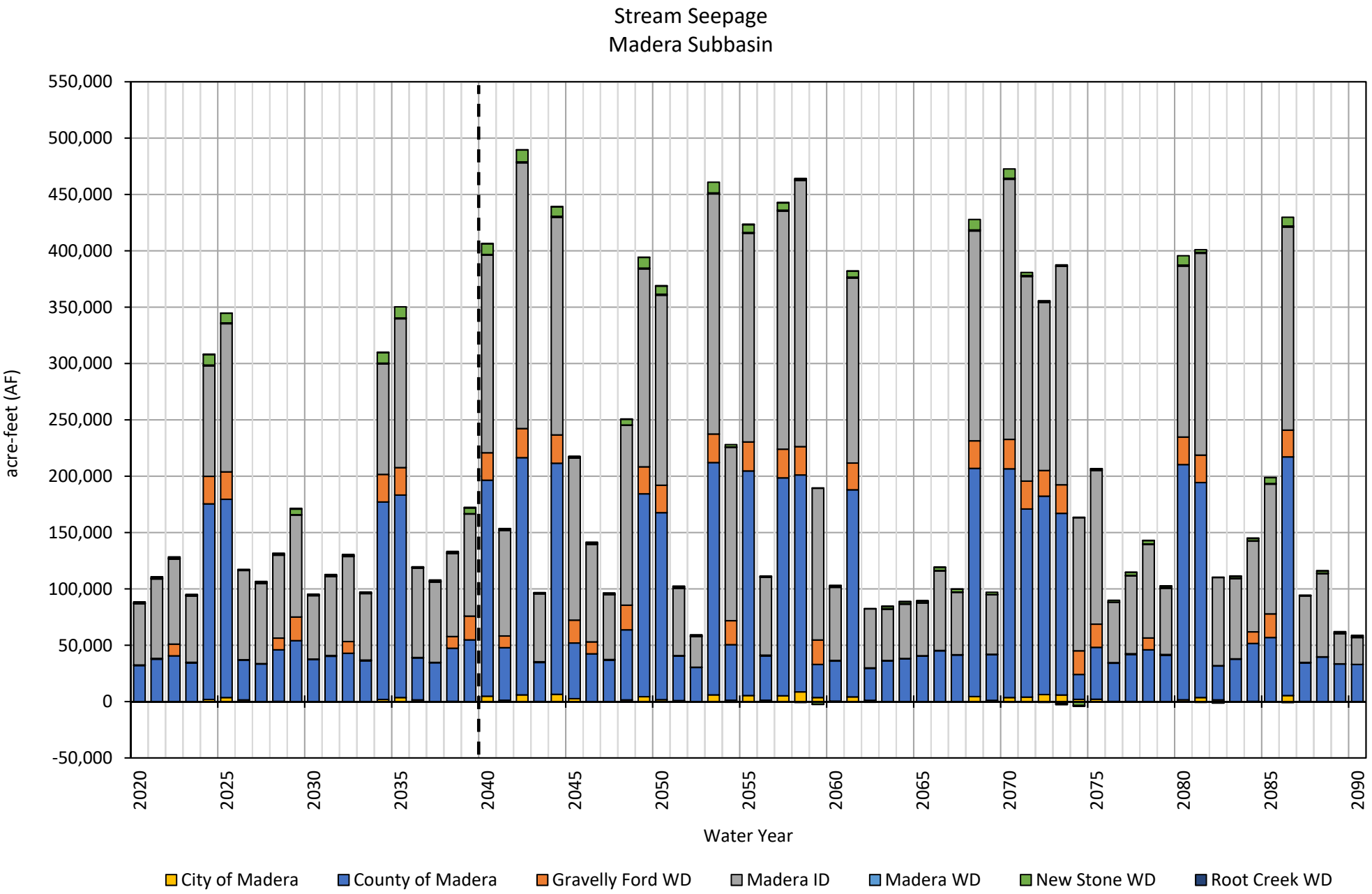

Cumulative Change in Storage
Chowchilla Subbasin
acre-feet (AF)
1,500,000
1,250,000
1,000,000
750,000
500,000
250,000
0
-250,000
-500,000
-750,000
-1,000,000
2020
2025
2030
2035
2040
2045
2050
2055
2060
2065
2070
2075
2080
2085
2090
Water Year
Chowchilla WD
Madera County - East
Madera County - West
Sierra Vista MWC
Triangle T WD

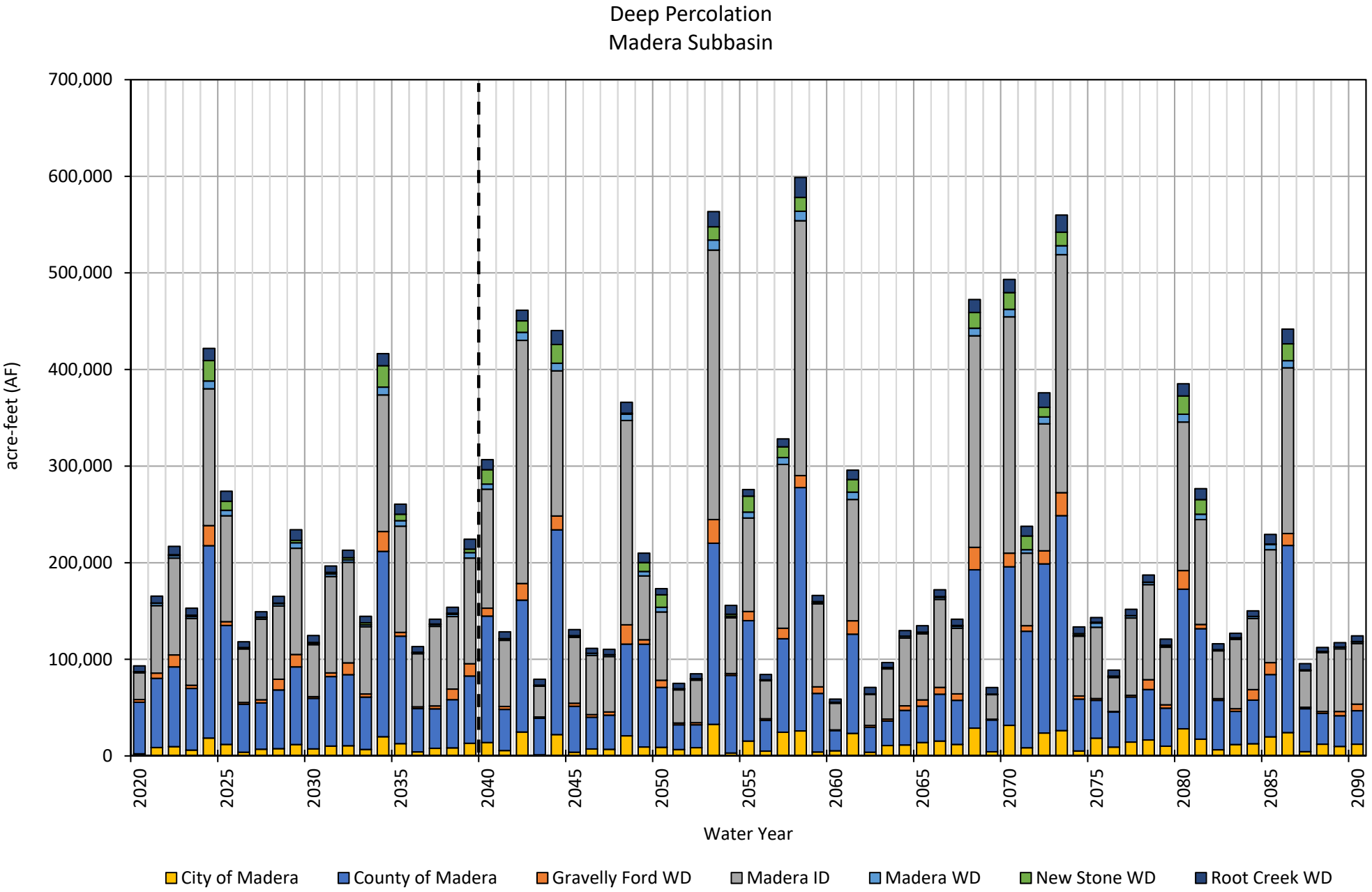
MCSim Projected with Projects with Climate Change Water Budget by GSA
Madera Subbasin

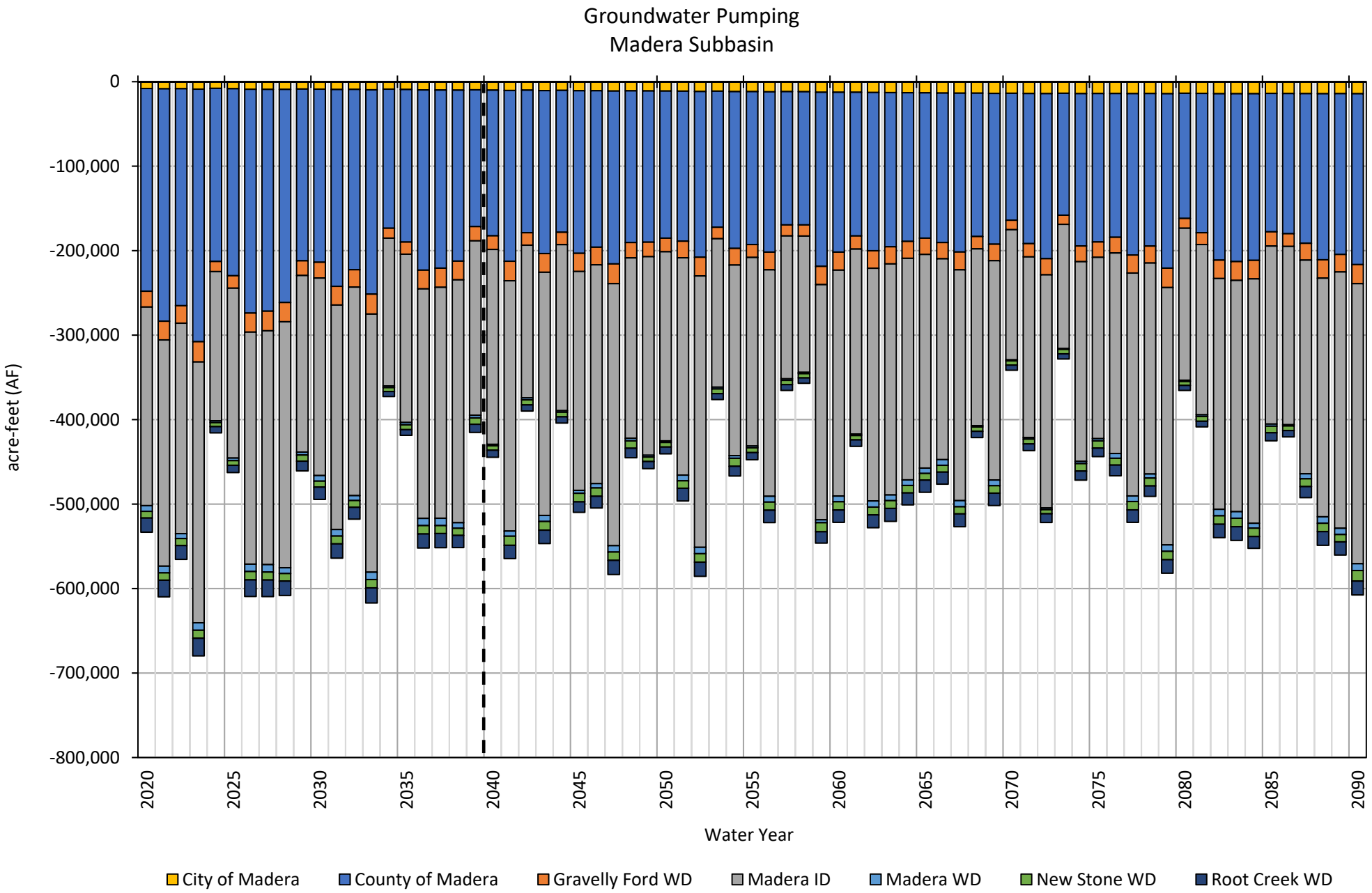
	Average Annual Water Budget (AF/m)							
	City of Madera		Madera County		Gravelly Ford Water District		Madera Irrigation District	
	Implementation Period, 2020-2039	Sustainability Period, 2040-2090	Implementation Period, 2020-2039	Sustainability Period, 2040-2090	Implementation Period, 2020-2039	Sustainability Period, 2040-2090	Implementation Period, 2020-2039	Sustainability Period, 2040-2090
Total Stream Seepage	738	2,123	67,366	93,343	9,304	12,624	80,460	116,466
In-Channel Seepage	*738*	*2,123*	*40,570*	*37,859*	*209*	*294*	*17,547*	*19,279*
Conveyance Losses	*0*	*0*	*26,796*	*55,484*	*9,094*	*12,330*	*62,913*	*97,187*
Deep Percolation	9,402	13,765	79,634	80,402	7,585	7,476	87,167	99,774
General Head Boundary Conditions	0	0	0	0	0	0	0	0
Small Watershed Baseflow	0	0	495	664	0	0	0	0
Small Watershed Percolation	0	0	0	200	0	0	0	3
Groundwater Pumping	-9,013	-12,748	-225,328	-180,292	-19,670	-18,518	-247,743	-243,340
Total Subsurface Inflow	-3,162	-2,558	53,386	10,835	2,357	-1,717	48,736	31,251
Average Annual Change in Storage	-2,034	584	-24,447	5,153	-425	-135	-31,381	4,154
Total Cumulative Change in Storage	-40,684	29,761	-488,940	262,783	-8,502	-6,865	-627,610	211,862

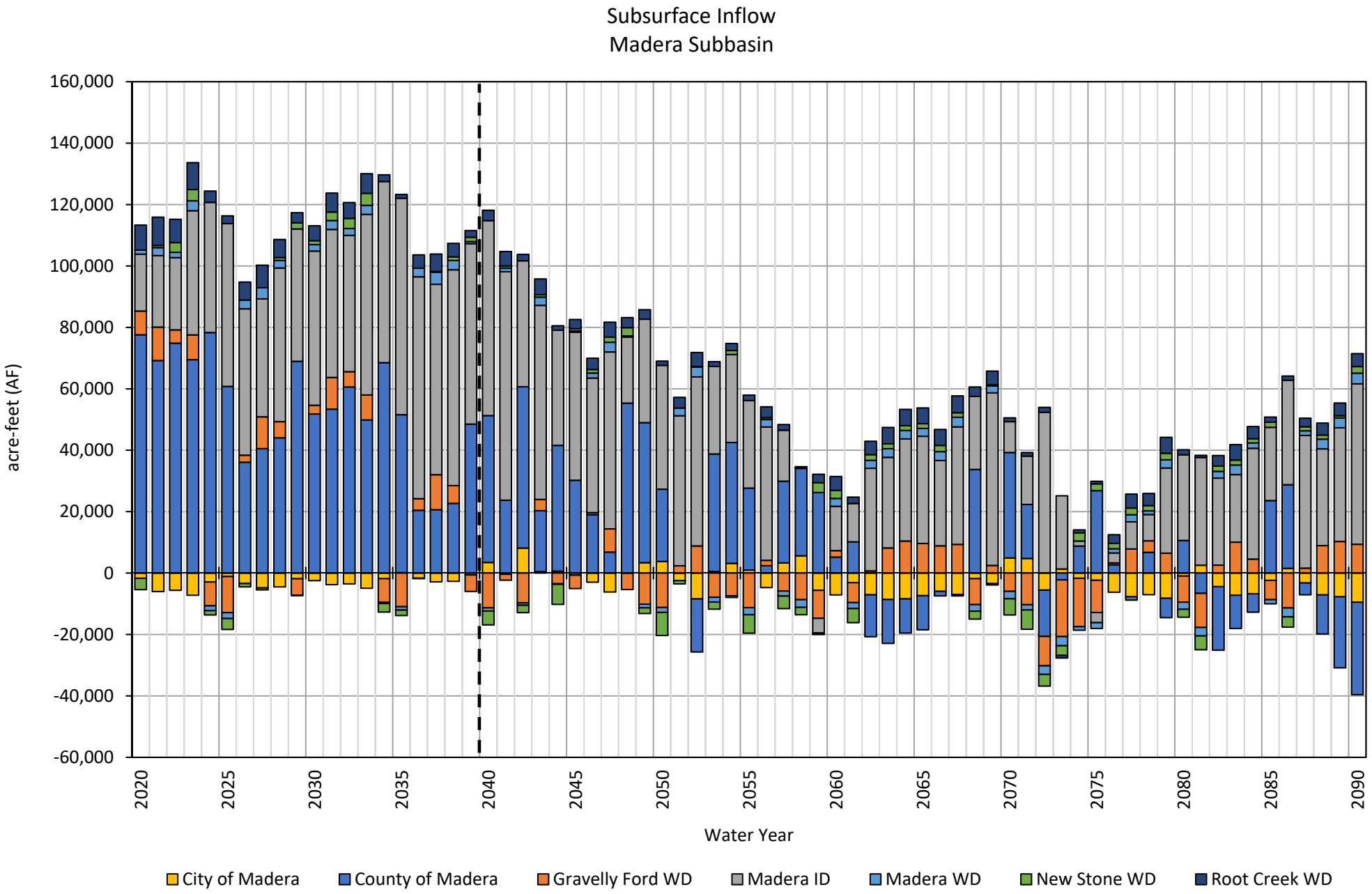
MCSim Projected with Projects with Climate Change Water Budget by GSA
Madera Subbasin

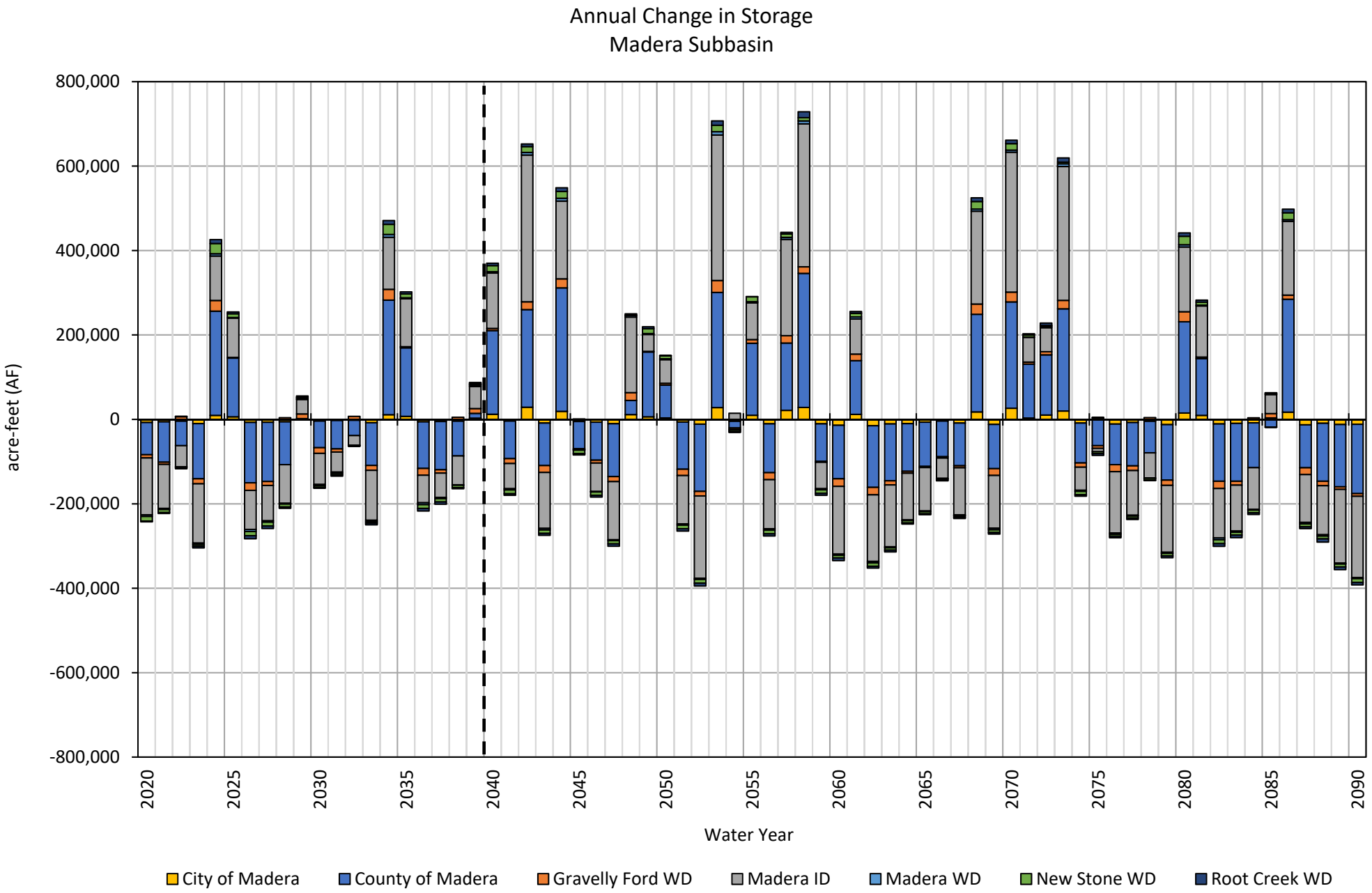
	Average Annual Water Budget (AF/m)					
	Madera Water District		New Stone Water District		Root Creek Water District	
	Implementation Period, 2020-2039	Sustainability Period, 2040-2090	Implementation Period, 2020-2039	Sustainability Period, 2040-2090	Implementation Period, 2020-2039	Sustainability Period, 2040-2090
Total Stream Seepage	301	509	2,797	3,034	666	72
In-Channel Seepage	*301*	*509*	*470*	*-1,865*	*-180*	*-774*
Conveyance Losses	*0*	*0*	*2,327*	*4,899*	*846*	*846*
Deep Percolation	3,268	3,665	3,915	5,376	8,018	8,401
General Head Boundary Conditions	0	0	0	0	0	0
Small Watershed Baseflow	0	0	0	0	0	0
Small Watershed Percolation	0	0	0	0	0	0
Groundwater Pumping	-6,159	-4,477	-7,989	-7,975	-14,553	-11,792
Total Subsurface Inflow	1,674	487	472	-475	5,241	3,086
Average Annual Change in Storage	-916	185	-805	-40	-628	-233
Total Cumulative Change in Storage	-18,319	9,423	-16,097	-2,042	-12,554	-11,884

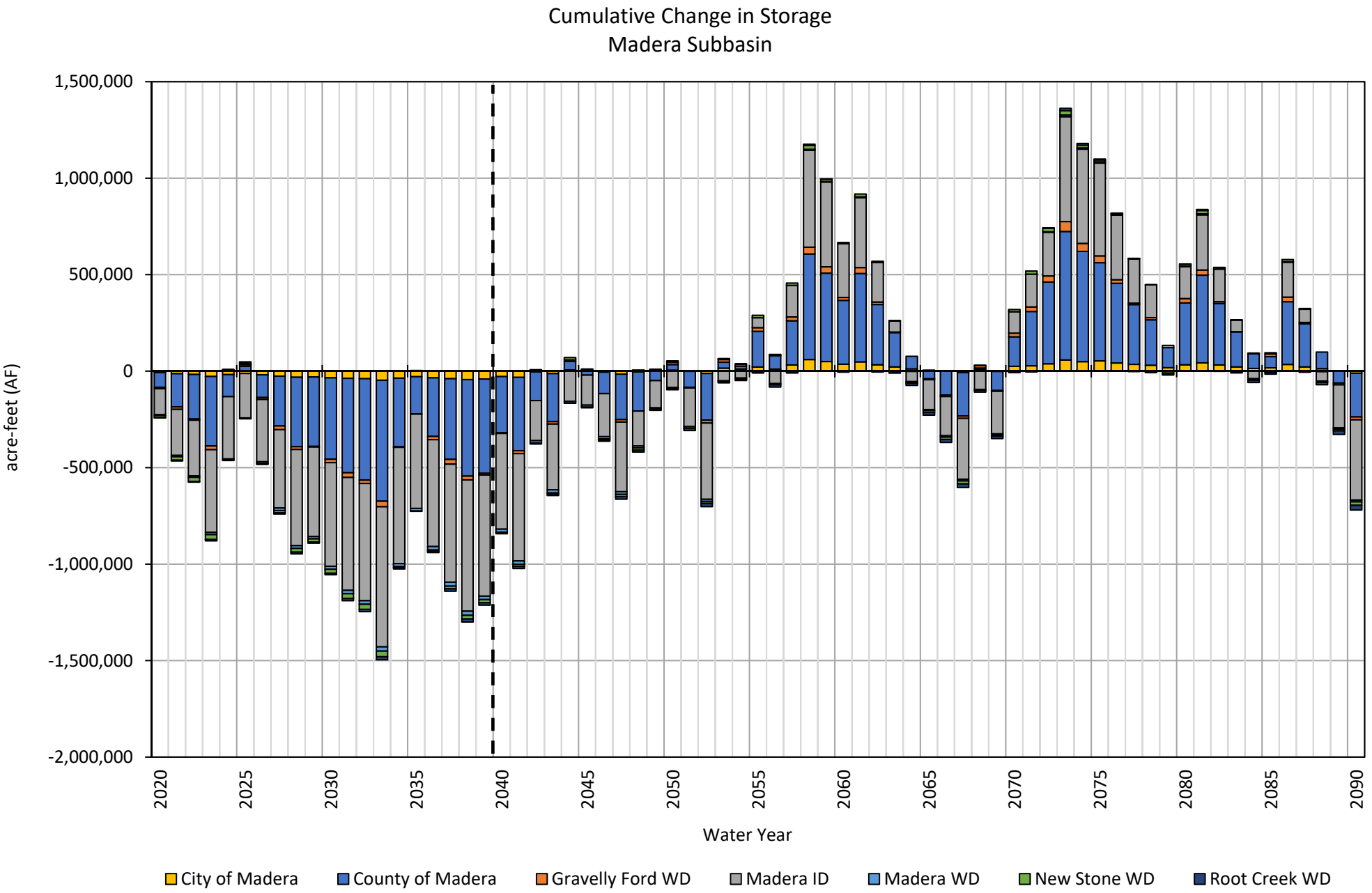

Stream Seepage
Madera Subbasin
550,000
500,000
450,000
400,000
350,000
300,000
250,000
200,000
150,000
100,000
50,000
0
-50,000
acre-feet (AF)
2020
2025
2030
2035
2040
2045
2050
2055
2060
2065
2070
2075
2080
2085
2090
Water Year
City of Madera
County of Madera
Gravelly Ford WD
Madera ID
Madera WD
New Stone WD
Root Creek WD


Deep Percolation
Madera Subbasin
700,000
600,000
500,000
400,000
300,000
200,000
100,000
0
acre-feet (AF)
2020
2025
2030
2035
2040
2045
2050
2055
2060
2065
2070
2075
2080
2085
2090
Water Year
City of Madera
County of Madera
Gravelly Ford WD
Madera ID
Madera WD
New Stone WD
Root Creek WD


Groundwater Pumping
Madera Subbasin
0
-100,000
-200,000
-300,000
-400,000
-500,000
-600,000
-700,000
-800,000
acre-feet (AF)
2020
2025
2030
2035
2040
2045
2050
2055
2060
2065
2070
2075
2080
2085
2090
Water Year
City of Madera
County of Madera
Gravelly Ford WD
Madera ID
Madera WD
New Stone WD
Root Creek WD

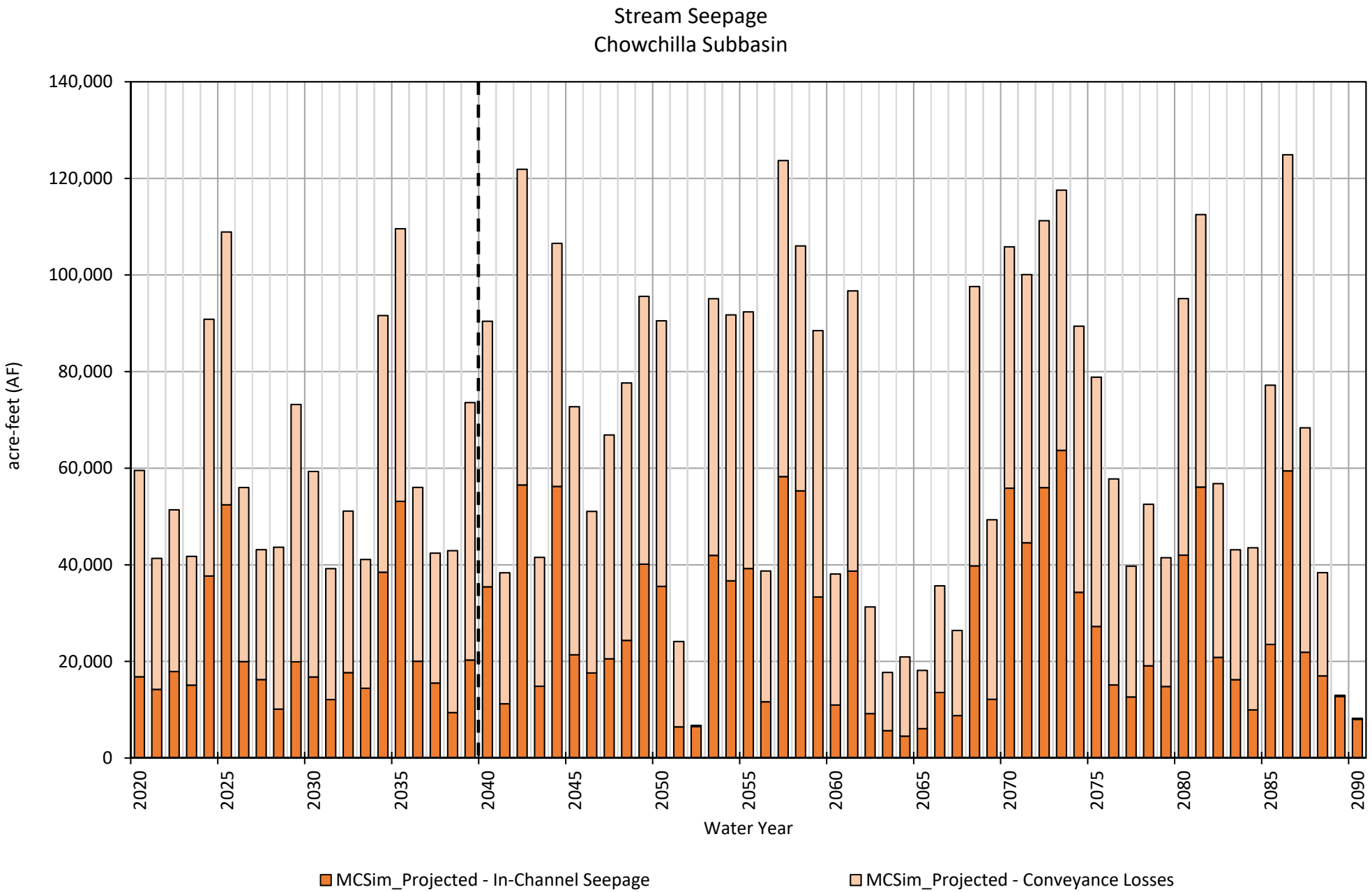

Subsurface Inflow
Madera Subbasin
160,000
140,000
120,000
100,000
80,000
60,000
40,000
20,000
0
-20,000
-40,000
-60,000
acre-feet (AF)
2020
2025
2030
2035
2040
2045
2050
2055
2060
2065
2070
2075
2080
2085
2090
Water Year
City of Madera
County of Madera
Gravelly Ford WD
Madera ID
Madera WD
New Stone WD
Root Creek WD

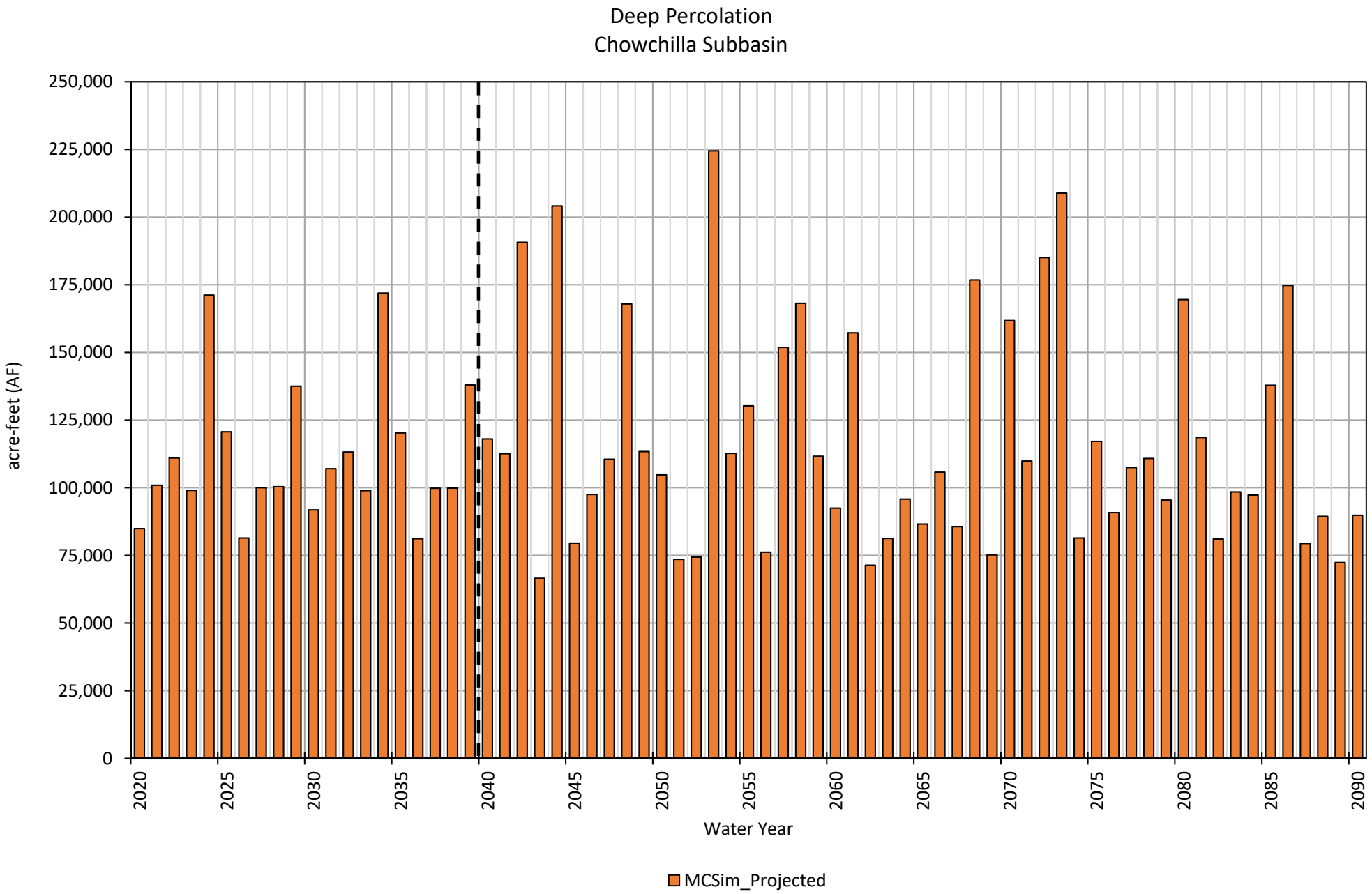

Annual Change in Storage
Madera Subbasin
800,000
600,000
400,000
200,000
0
-200,000
-400,000
-600,000
-800,000
acre-feet (AF)
2020
2025
2030
2035
2040
2045
2050
2055
2060
2065
2070
2075
2080
2085
2090
Water Year
City of Madera
County of Madera
Gravelly Ford WD
Madera ID
Madera WD
New Stone WD
Root Creek WD

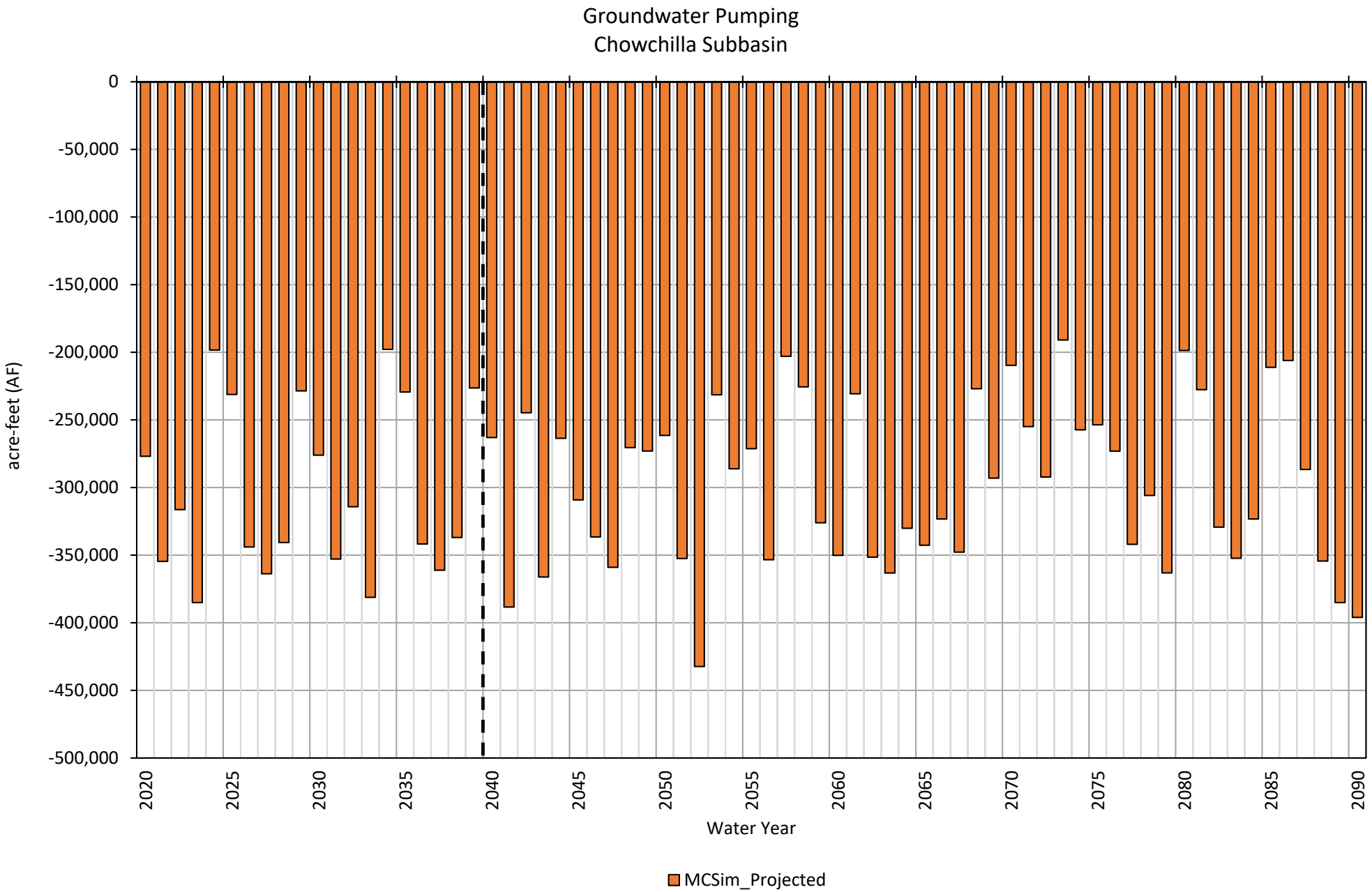

Cumulative Change in Storage
Madera Subbasin
1,500,000
1,000,000
500,000
0
-500,000
-1,000,000
-1,500,000
-2,000,000
acre-feet (AF)
2020
2025
2030
2035
2040
2045
2050
2055
2060
2065
2070
2075
2080
2085
2090
Water Year
City of Madera
County of Madera
Gravelly Ford WD
Madera ID
Madera WD
New Stone WD
Root Creek WD

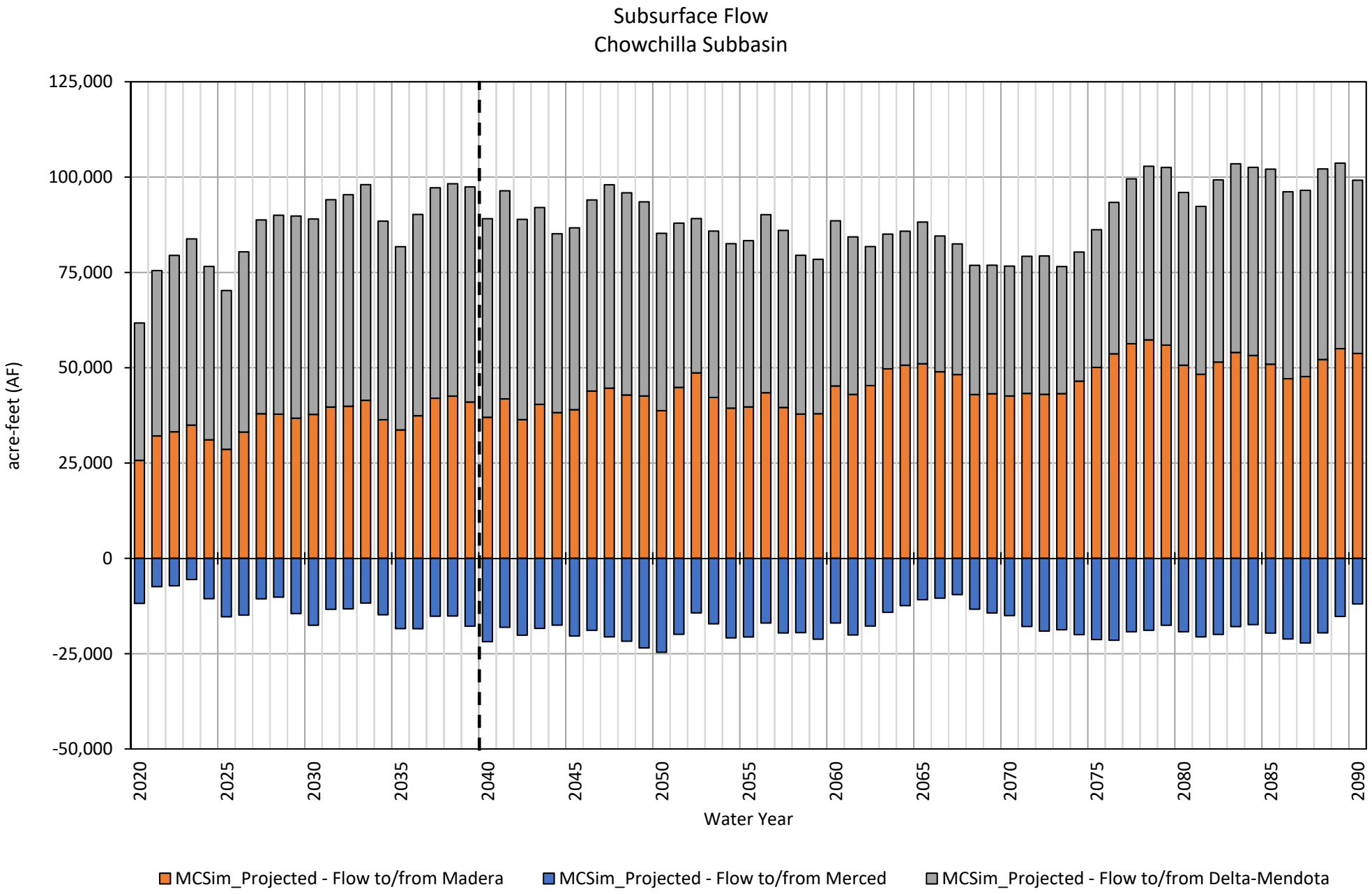
MCSim Projected Water Budget
Chowchilla Subbasin

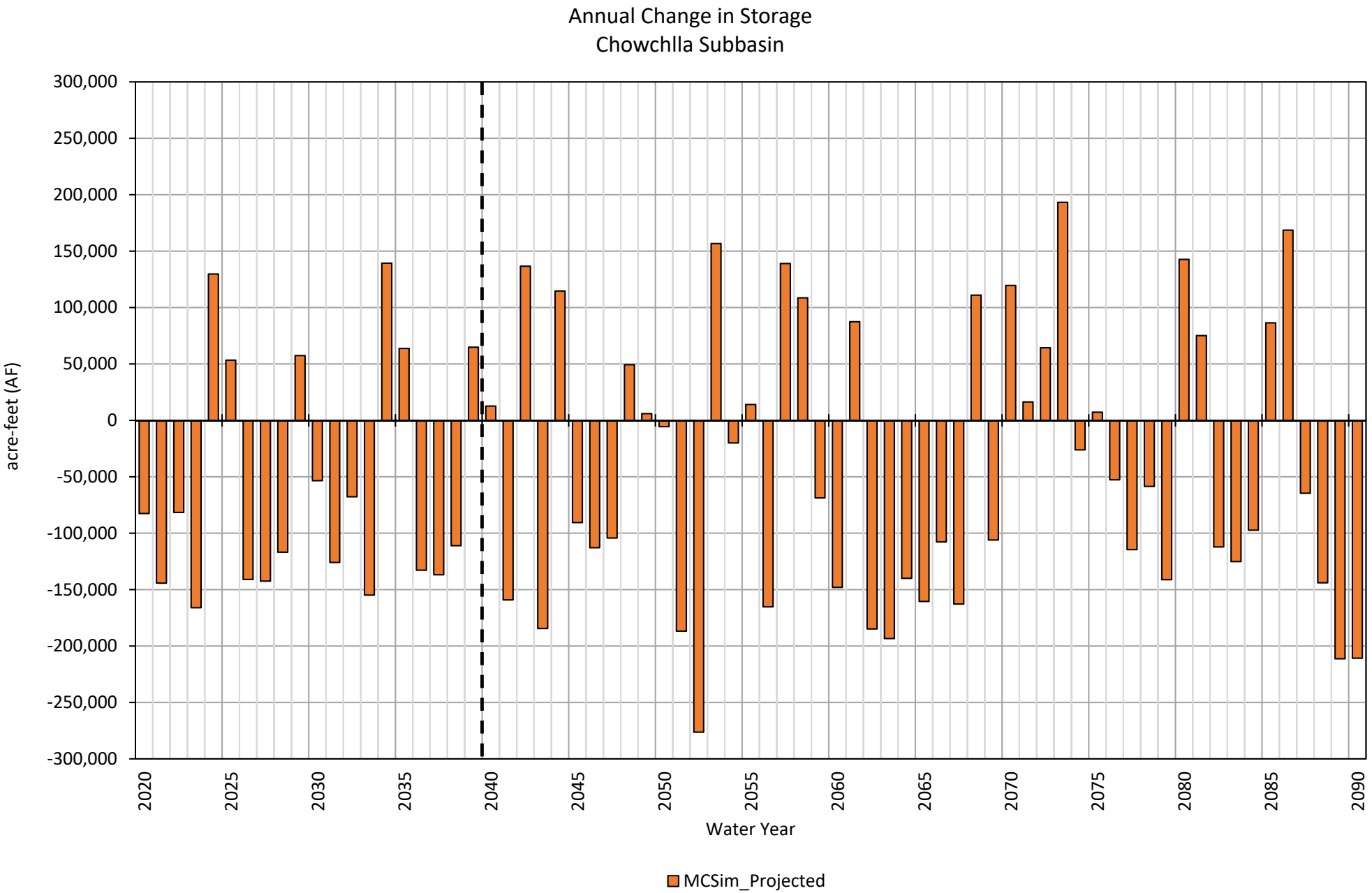
	Average Annual Water Budget (AF/m)	
	Implementation Period 2020-2039	**Sustainability Period 2040-2090**
Total Stream Seepage	60,828	67,205
In-Channel Seepage	*21,913*	*27,524*
Conveyance Losses	*38,915*	*39,681*
Deep Percolation	111,459	117,534
General Head Boundary Conditions	0	0
Small Watershed Baseflow	0	0
Small Watershed Percolation	0	0
Groundwater Pumping	-302,847	-297,844
Total Subsurface Inflow	73,123	71,430
Flow to(+)/from(-) Madera	*36,156*	*45,951*
Flow to(+)/from(-) Merced	*-13,183*	*-18,225*
Flow to(+)/from(-) Delta-Mendota	*50,150*	*43,704*
Average Annual Change in Storage	-57,436	-41,674
Total Cumulative Change in Storage	-1,148,730	-2,125,394

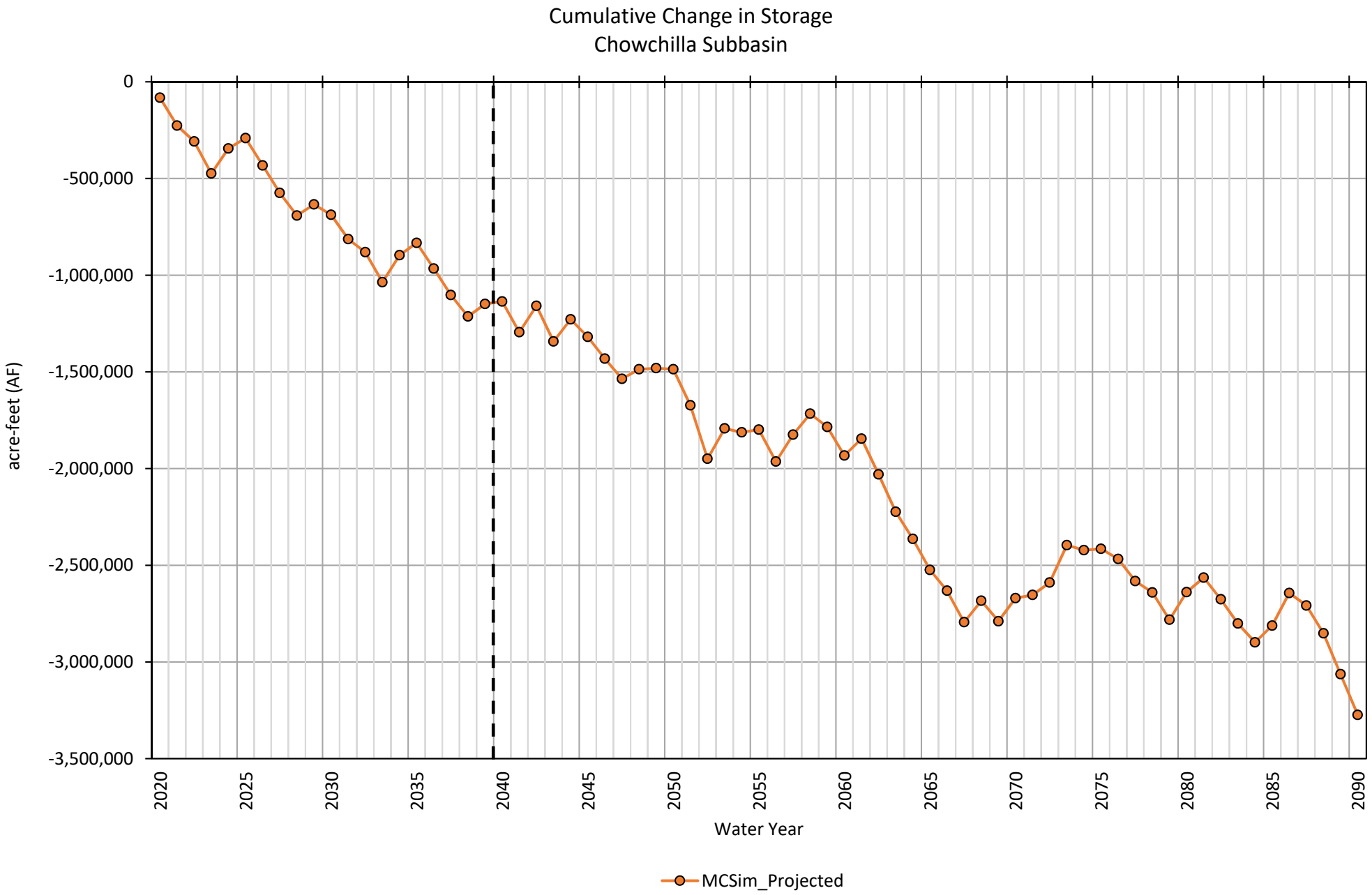

Stream Seepage
Chowchilla Subbasin
140,000
120,000
100,000
80,000
60,000
40,000
20,000
0
acre-feet (AF)
2020
2025
2030
2035
2040
2045
2050
2055
2060
2065
2070
2075
2080
2085
2090
Water Year
MCSim_Projected - In-Channel Seepage
MCSim_Projected - Conveyance Losses


Deep Percolation
Chowchilla Subbasin
250,000
225,000
200,000
175,000
150,000
125,000
100,000
75,000
50,000
25,000
0
acre-feet (AF)
2020
2025
2030
2035
2040
2045
2050
2055
2060
2065
2070
2075
2080
2085
2090
Water Year
MCSim_Projected


Groundwater Pumping
Chowchilla Subbasin
0
-50,000
-100,000
-150,000
-200,000
-250,000
-300,000
-350,000
-400,000
-450,000
-500,000
acre-feet (AF)
2020
2025
2030
2035
2040
2045
2050
2055
2060
2065
2070
2075
2080
2085
2090
Water Year
MCSim_Projected


Subsurface Flow
Chowchilla Subbasin
125,000
100,000
75,000
50,000
25,000
0
-25,000
-50,000
acre-feet (AF)
2020
2025
2030
2035
2040
2045
2050
2055
2060
2065
2070
2075
2080
2085
2090
Water Year
MCSim_Projected - Flow to/from Madera
MCSim_Projected - Flow to/from Merced
MCSim_Projected - Flow to/from Delta-Mendota


Annual Change in Storage
Chowchlla Subbasin
300,000
250,000
200,000
150,000
100,000
50,000
0
-50,000
-100,000
-150,000
-200,000
-250,000
-300,000
acre-feet (AF)
2020
2025
2030
2035
2040
2045
2050
2055
2060
2065
2070
2075
2080
2085
2090
Water Year
MCSim_Projected

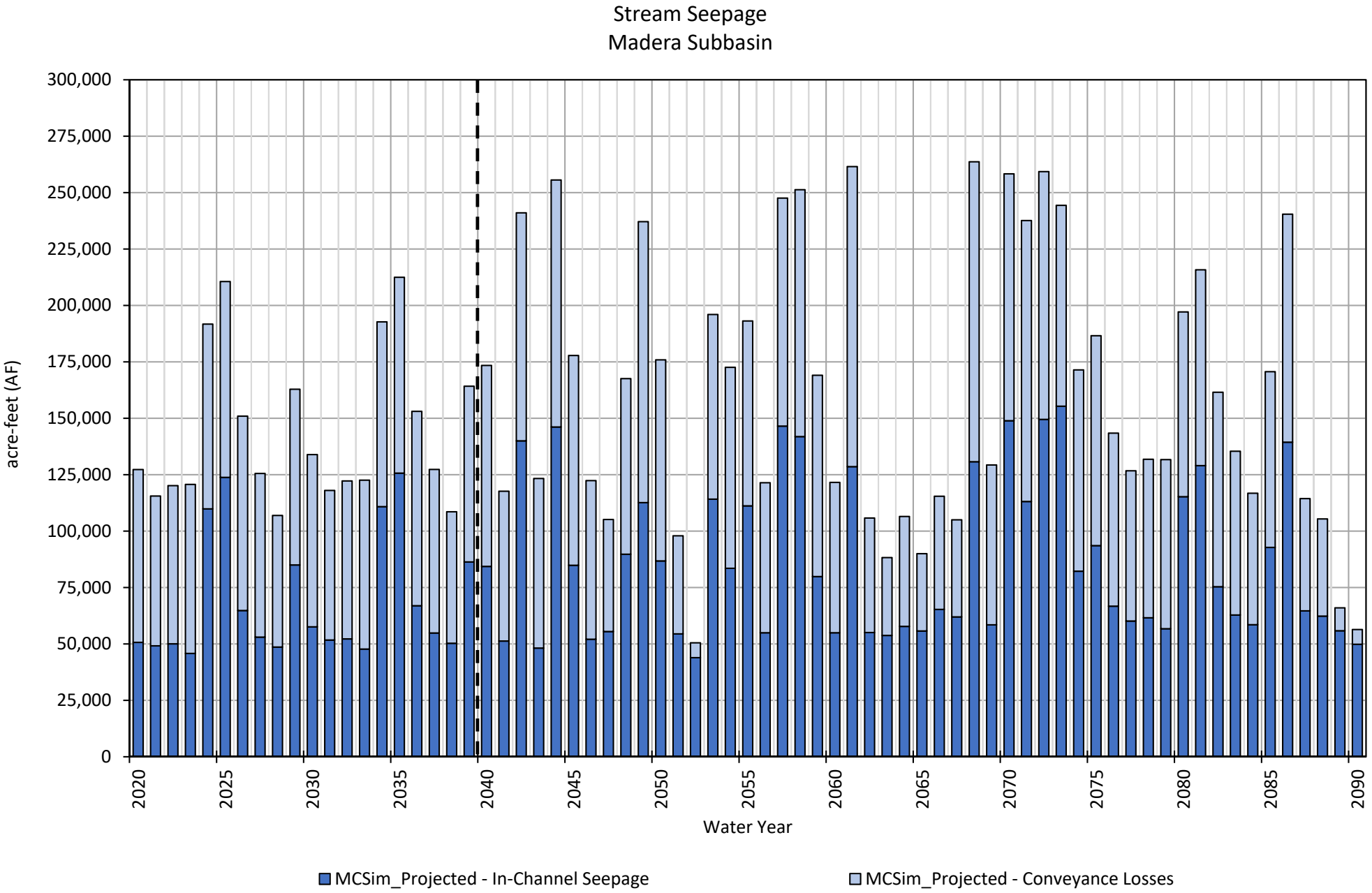


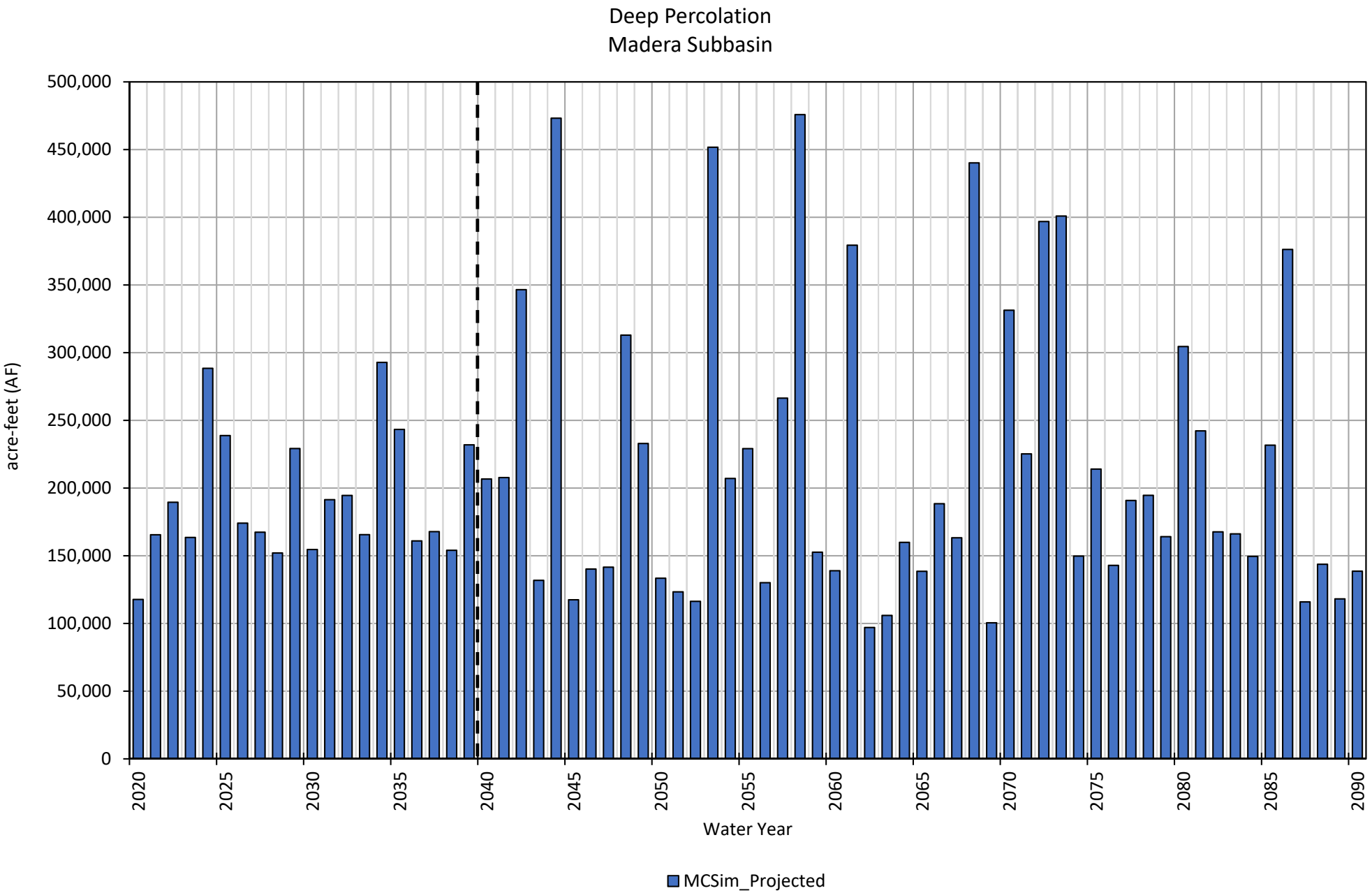
MCSim - Projected, Chowchilla Subbasin

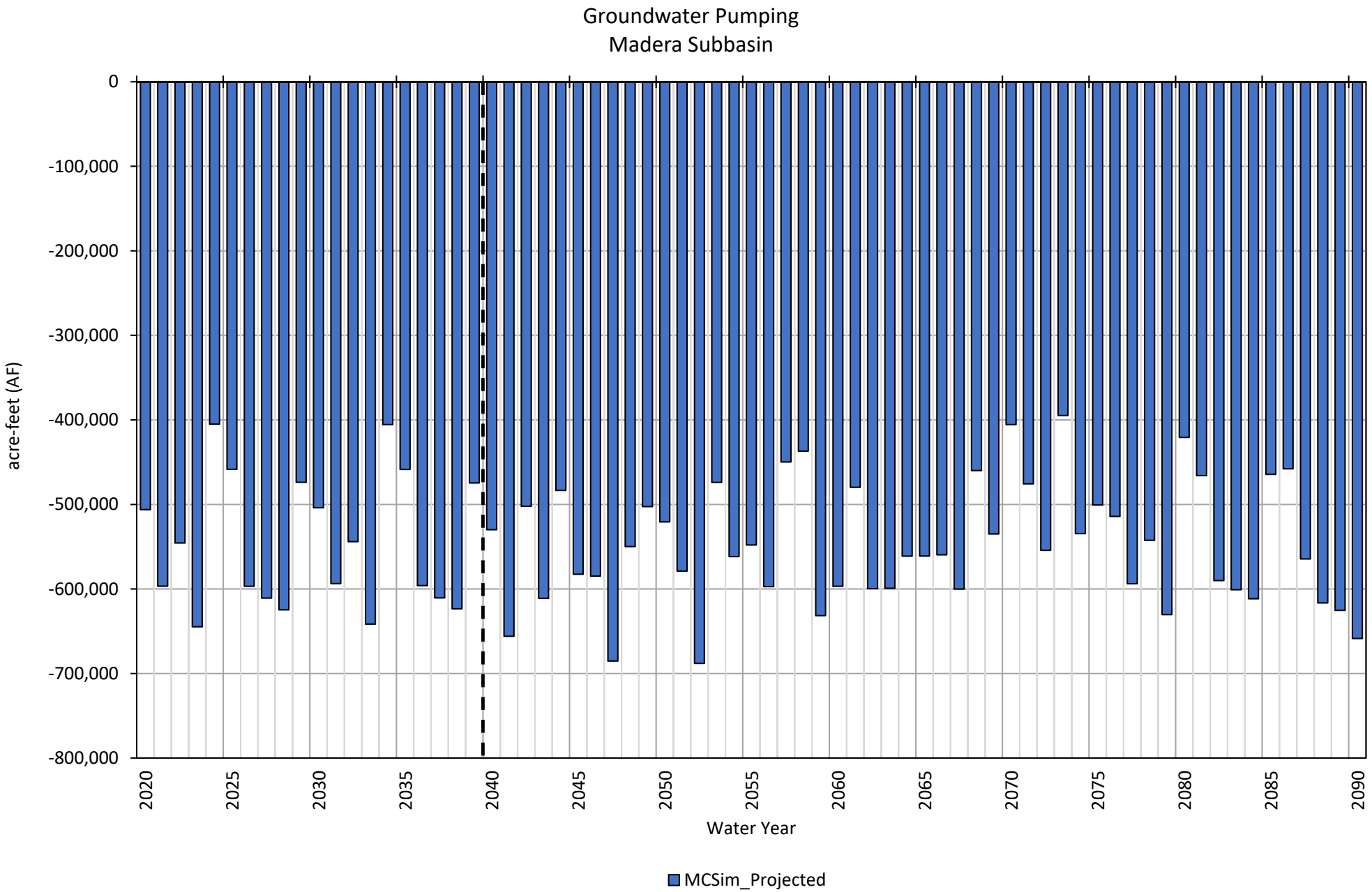
Appendix D.4.a.

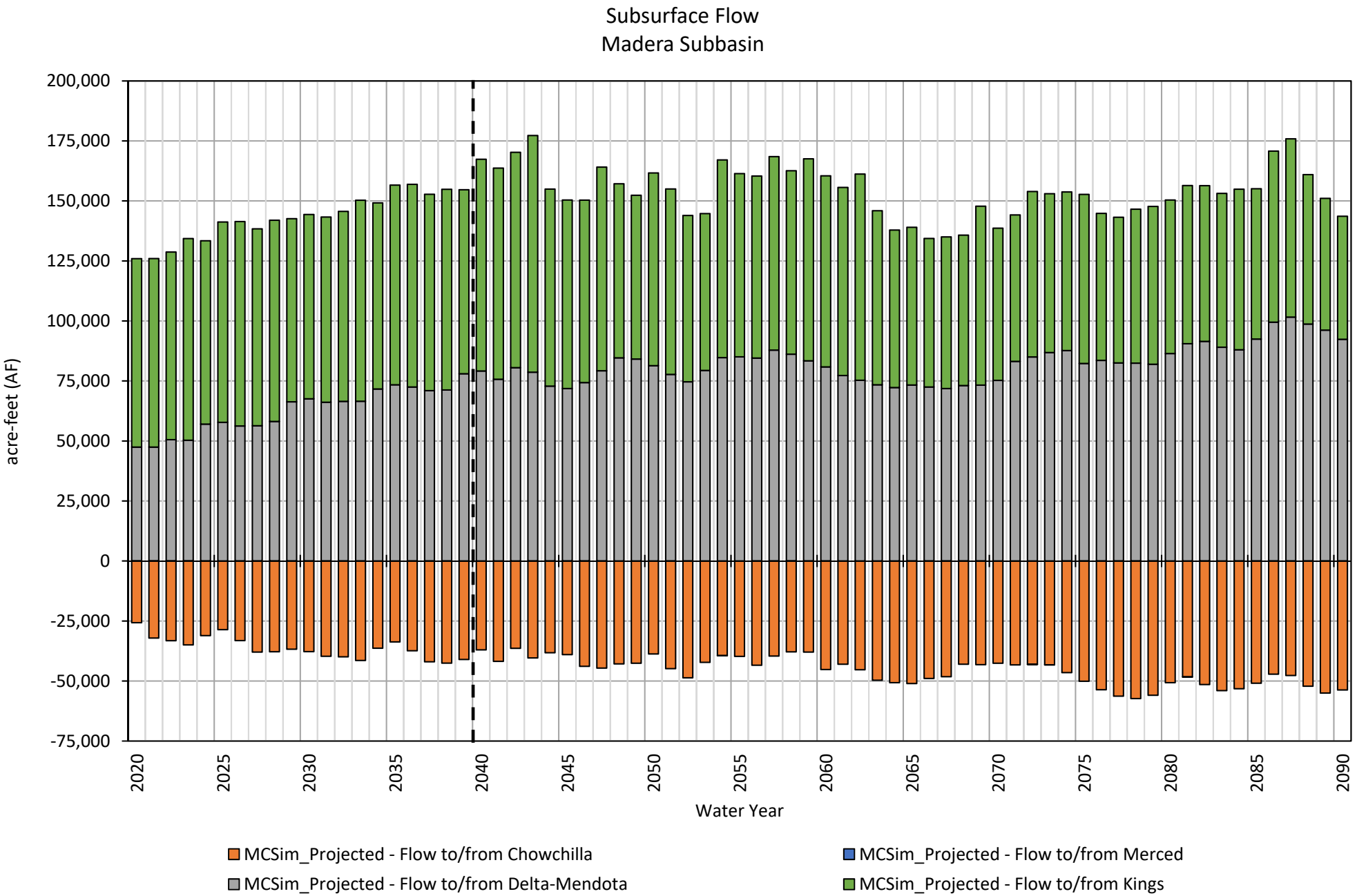
MCSim Projected Water Budget
Madera Subbasin

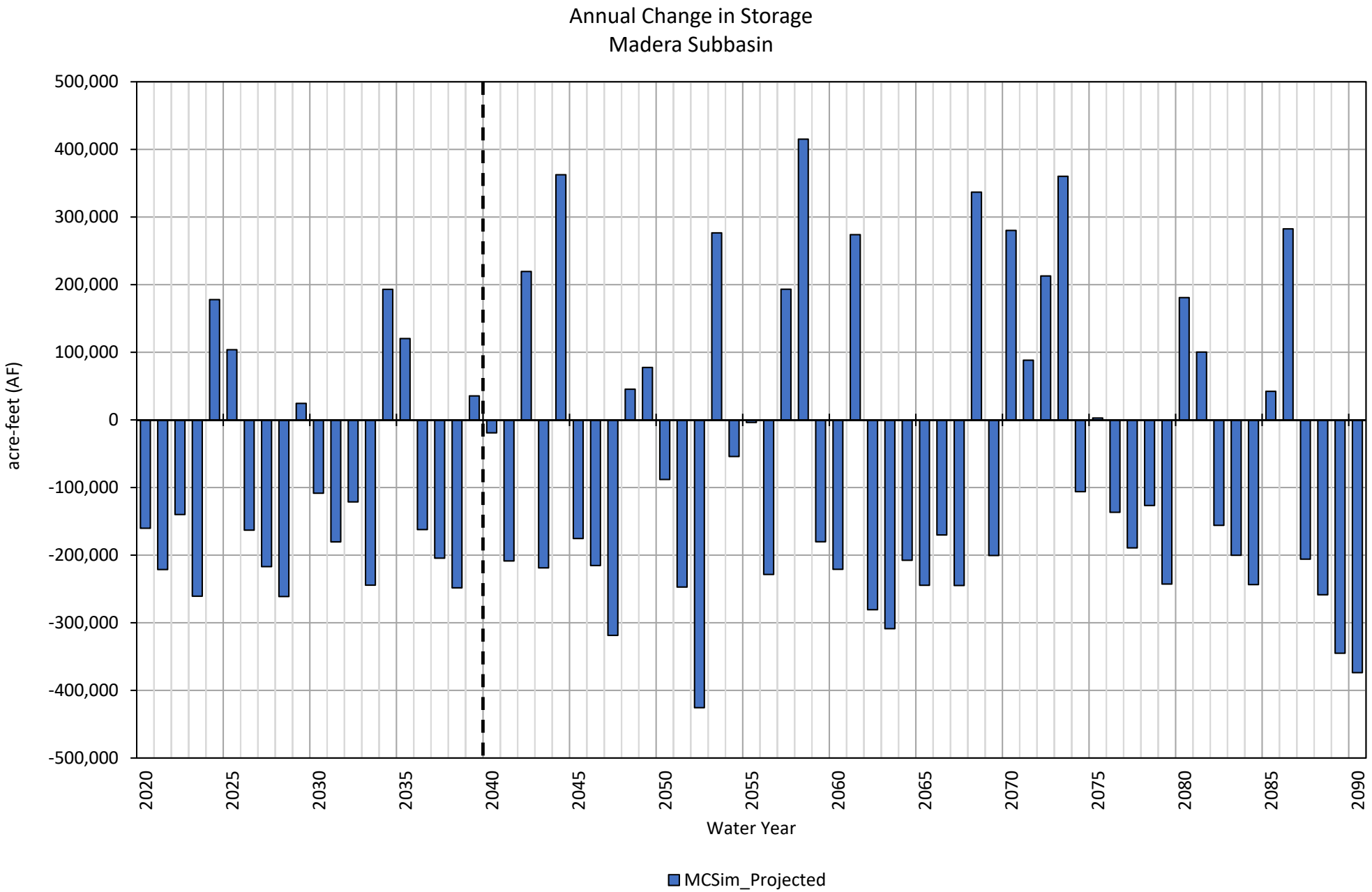
	Average Annual Water Budget (AF/m)	
	Implementation Period 2020-2040	**Sustainability Period 2040-2090**
Total Stream Seepage	144,372	161,856
In-Channel Seepage	69,255	86,240
Conveyance Losses	75,117	75,616
Deep Percolation	192,180	217,143
General Head Boundary Conditions	0	0
Small Watershed Baseflow	313	148
Small Watershed Percolation	0	0
Groundwater Pumping	-545,727	-548,011
Total Subsurface Inflow	106,974	108,189
Flow to(+)/from(-) Chowchilla	-36,156	-45,951
Flow to(+)/from(-) Merced	63	42
Flow to(+)/from(-) Delta-Mendota	62,545	82,435
Flow to(+)/from(-) Kings	80,521	71,663
Average Annual Change in Storage	-101,888	-60,676
Total Cumulative Change in Storage	-2,037,765	-3,094,457

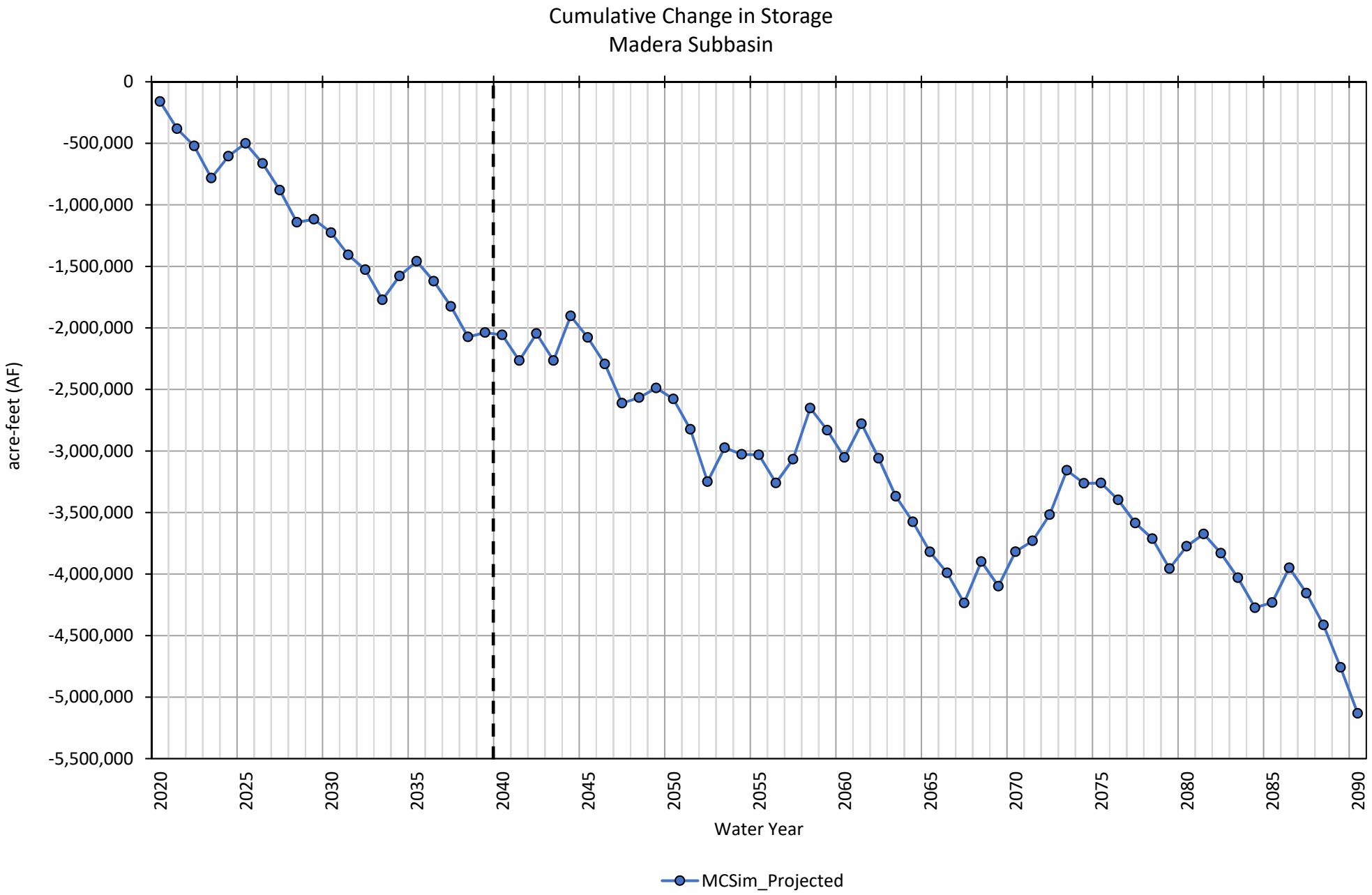

Stream Seepage
Madera Subbasin
acre-feet (AF)
300,000
275,000
250,000
225,000
200,000
175,000
150,000
125,000
100,000
75,000
50,000
25,000
0
2020
2025
2030
2035
2040
2045
2050
2055
2060
2065
2070
2075
2080
2085
2090
Water Year
MCSim_Projected - In-Channel Seepage
MCSim_Projected - Conveyance Losses


Deep Percolation
Madera Subbasin
500,000
450,000
400,000
350,000
300,000
250,000
200,000
150,000
100,000
50,000
0
acre-feet (AF)
2020
2025
2030
2035
2040
2045
2050
2055
2060
2065
2070
2075
2080
2085
2090
Water Year
MCSim_Projected


Groundwater Pumping
Madera Subbasin
0
-100,000
-200,000
-300,000
-400,000
-500,000
-600,000
-700,000
-800,000
acre-feet (AF)
2020
2025
2030
2035
2040
2045
2050
2055
2060
2065
2070
2075
2080
2085
2090
Water Year
MCSim_Projected


Subsurface Flow
Madera Subbasin
200,000
175,000
150,000
125,000
100,000
75,000
50,000
25,000
0
-25,000
-50,000
-75,000
acre-feet (AF)
2020
2025
2030
2035
2040
2045
2050
2055
2060
2065
2070
2075
2080
2085
2090
Water Year
MCSim_Projected - Flow to/from Chowchilla
MCSim_Projected - Flow to/from Merced
MCSim_Projected - Flow to/from Delta-Mendota
MCSim_Projected - Flow to/from Kings


Annual Change in Storage
Madera Subbasin
500,000
400,000
300,000
200,000
100,000
0
-100,000
-200,000
-300,000
-400,000
-500,000
acre-feet (AF)
2020
2025
2030
2035
2040
2045
2050
2055
2060
2065
2070
2075
2080
2085
2090
Water Year
MCSim_Projected

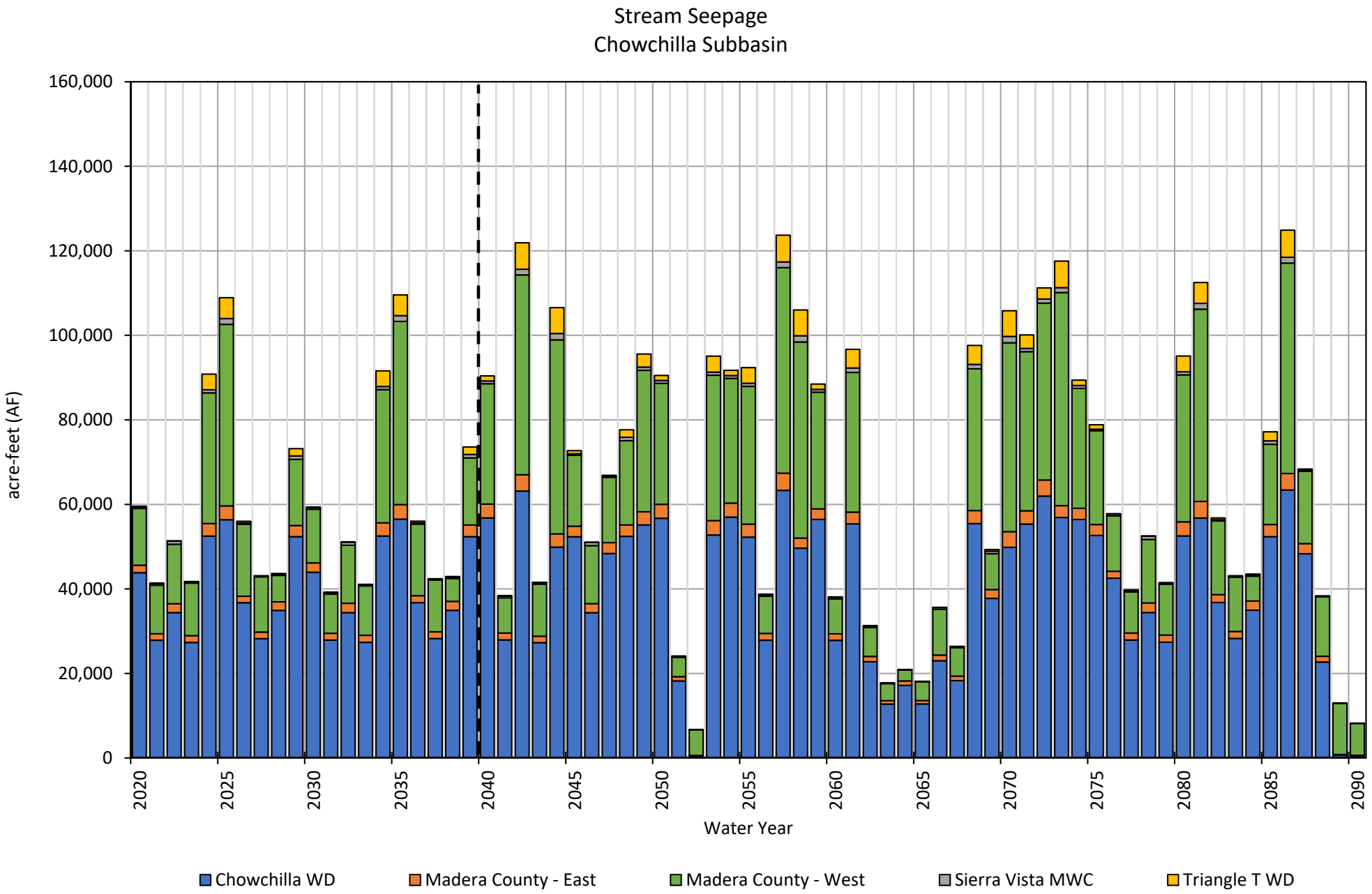


MCSim - Projected, Madera Subbasin

Appendix D.4.b.

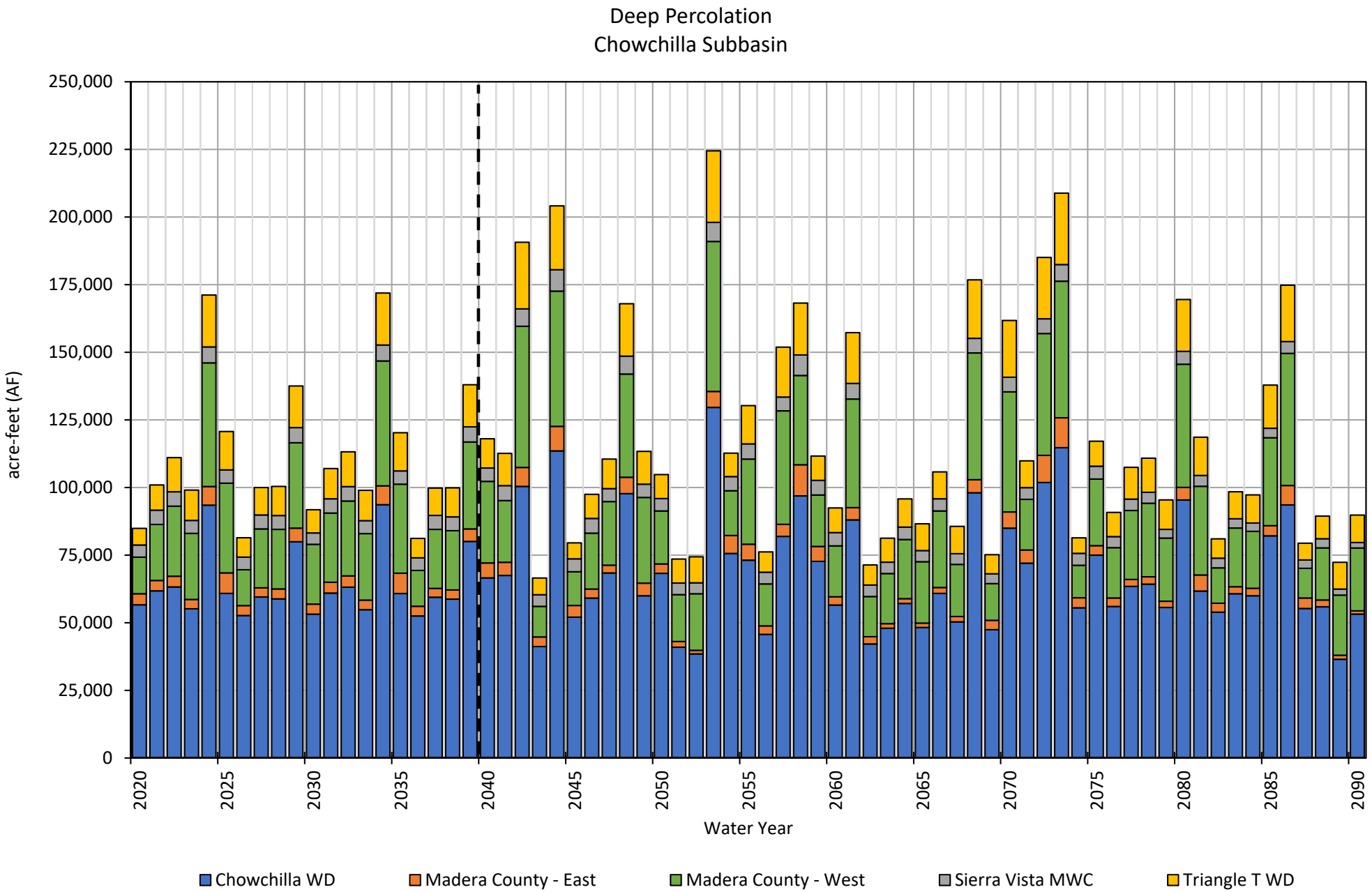
MCSim Projected Water Budget by GSA
Chowchilla Subbasin

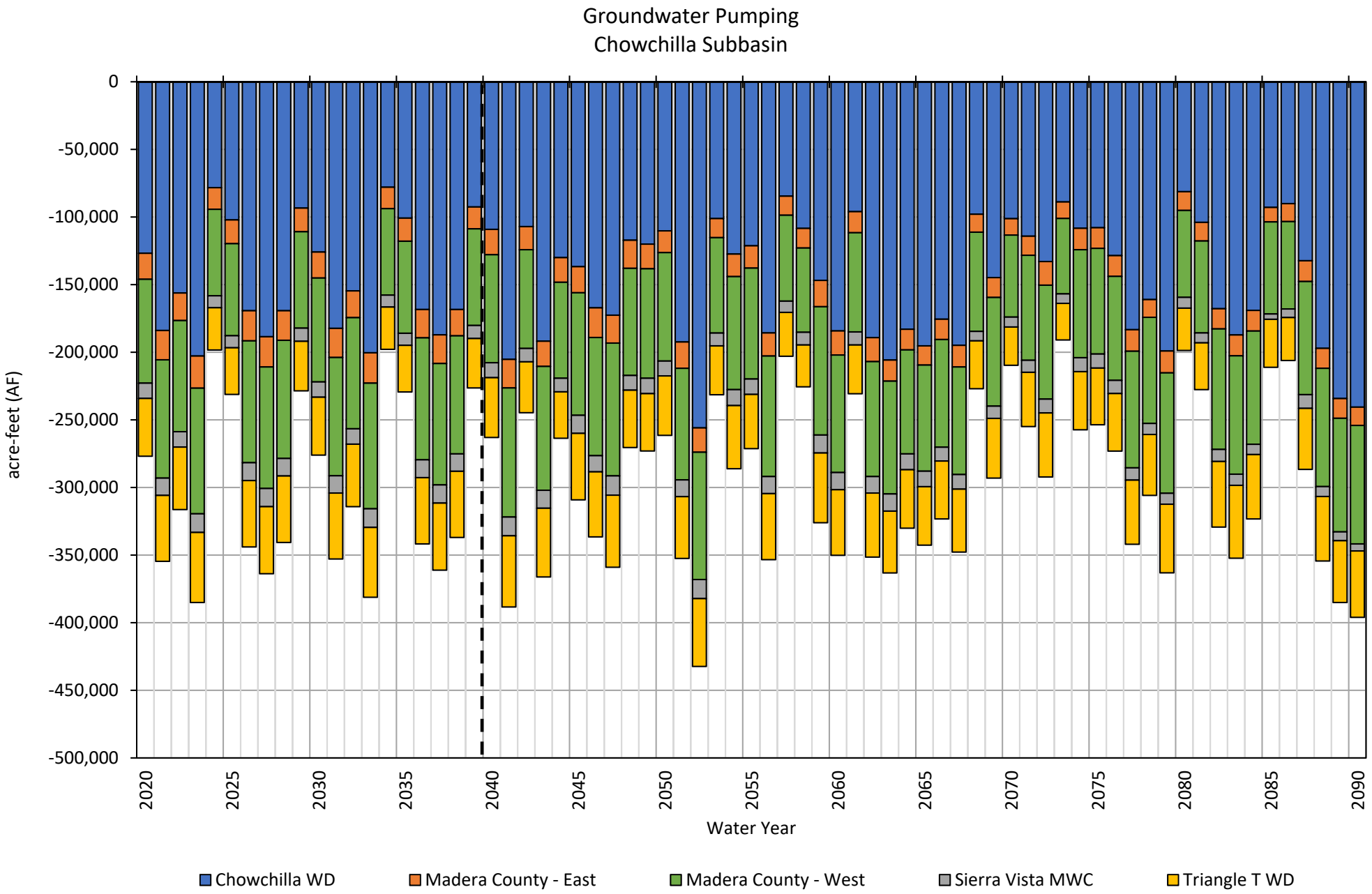
	Average Annual Water Budget (AF/m)									
	Chowchilla Water District		Madera County - East		Madera County - West		Sierra Vista Mutual Water Company		Triangle T Water District	
	Implementation Period, 2020-2039	Sustainability Period, 2040-2090	Implementation Period, 2020-2039	Sustainability Period, 2040-2090	Implementation Period, 2020-2039	Sustainability Period, 2040-2090	Implementation Period, 2020-2039	Sustainability Period, 2040-2090	Implementation Period, 2020-2039	Sustainability Period, 2040-2090
Total Stream Seepage	39,466	40,162	2,172	2,286	17,503	22,329	571	623	1,116	1,804
In-Channel Seepage	*2,521*	*3,043*	*2,073*	*2,237*	*17,048*	*21,732*	*58*	*89*	*214*	*422*
Conveyance Losses	*36,946*	*37,119*	*99*	*49*	*455*	*596*	*513*	*534*	*902*	*1,382*
Deep Percolation	63,978	68,605	4,521	4,278	26,011	27,251	5,102	4,661	11,848	12,740
General Head Boundary Conditions	0	0	0	0	0	0	0	0	0	0
Small Watershed Baseflow	0	0	0	0	0	0	0	0	0	0
Small Watershed Percolation	0	0	0	0	0	0	0	0	0	0
Groundwater Pumping	-146,469	-148,640	-19,823	-16,046	-80,996	-80,037	-11,618	-10,001	-43,940	-43,120
Total Subsurface Inflow	20,805	20,803	8,066	7,850	26,741	24,002	3,409	3,361	26,146	25,971
Average Annual Change in Storage	-22,221	-19,070	-5,064	-1,632	-10,742	-6,456	-2,536	-1,357	-4,830	-2,604
Total Cumulative Change in Storage	-444,423	-972,552	-101,275	-83,247	-214,836	-329,234	-50,711	-69,183	-96,604	-132,807



MCSim - Projected, Chowchilla Subbasin by GSA

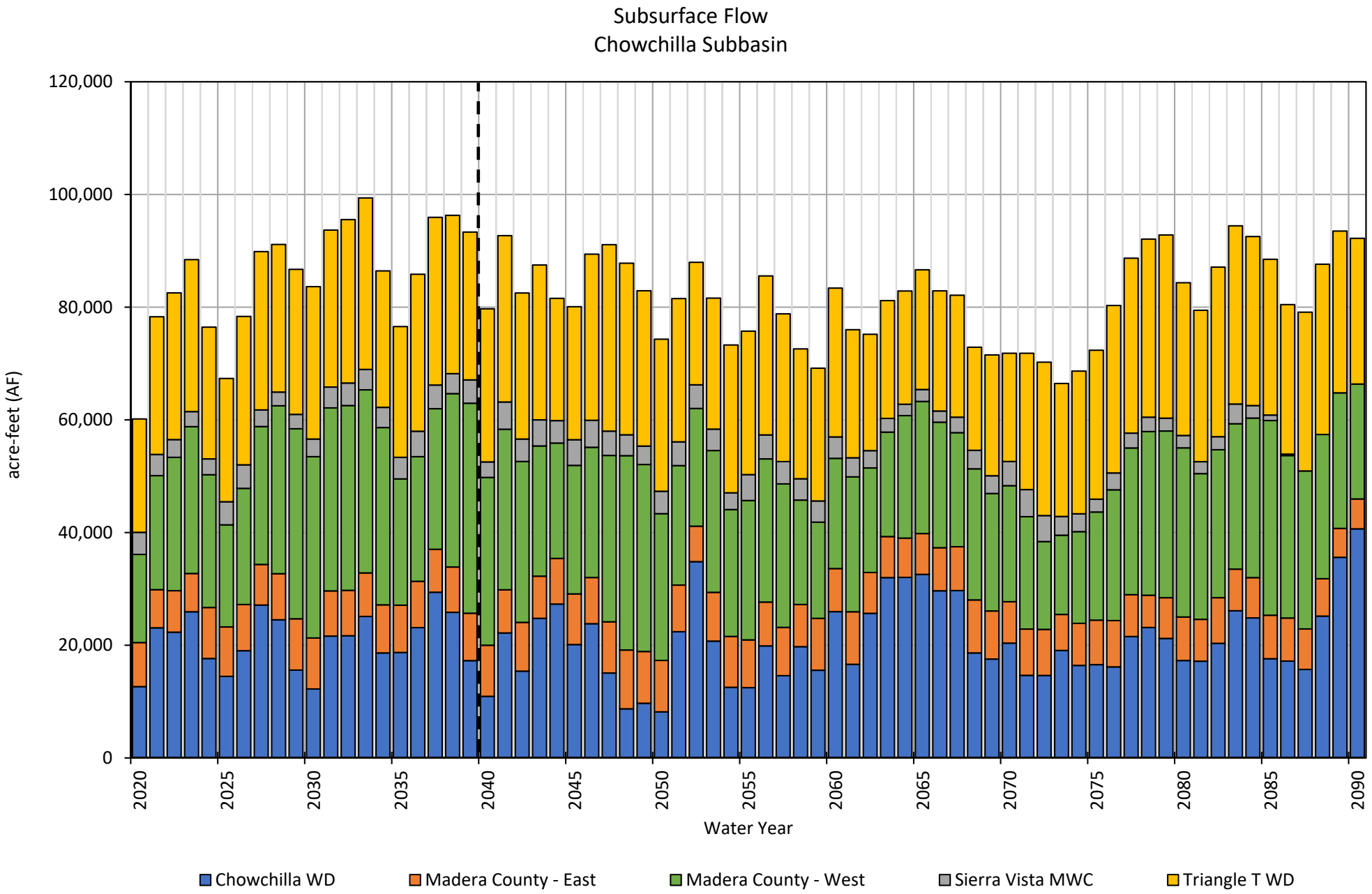
Appendix D.4.c.

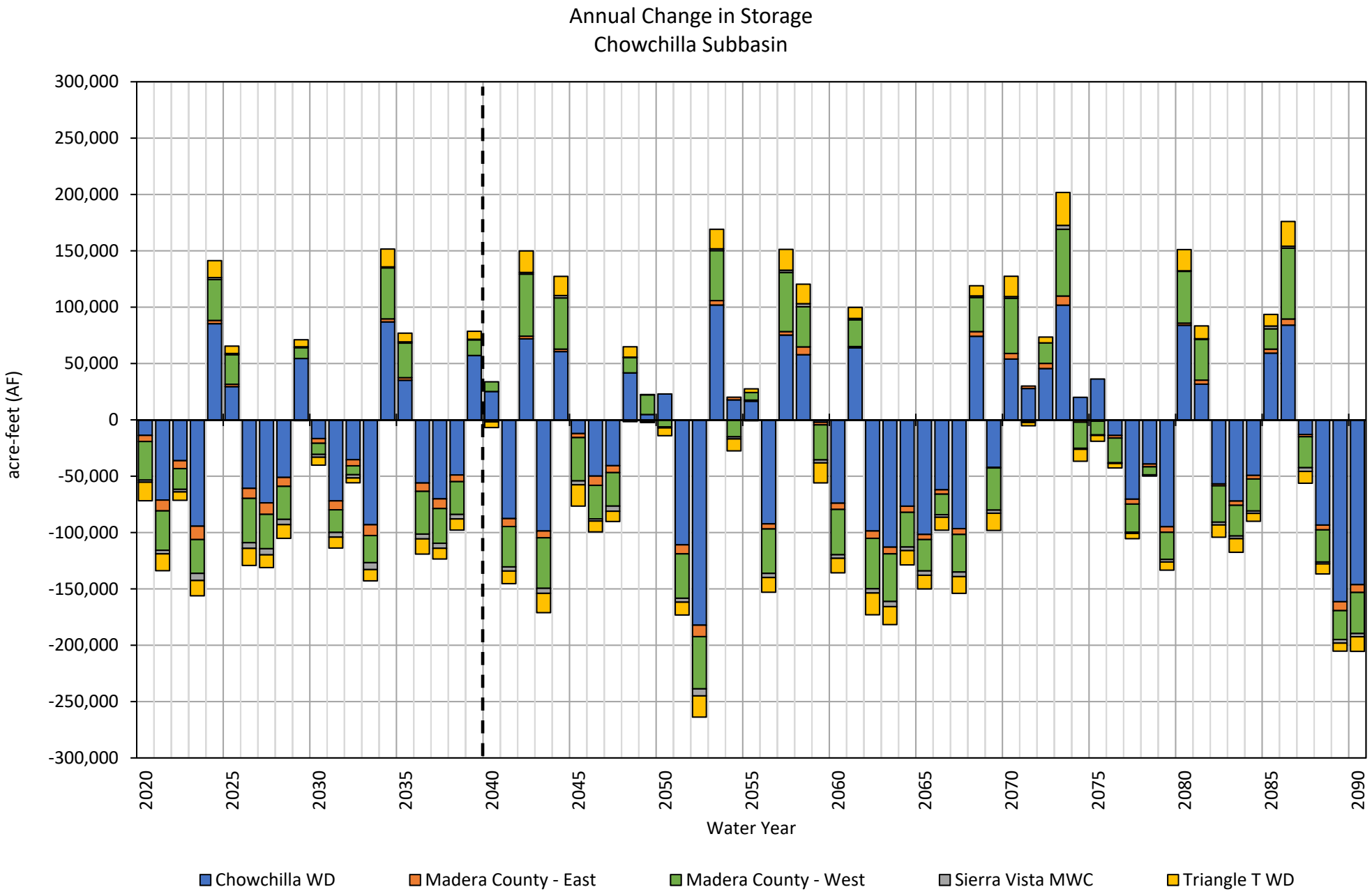

Deep Percolation
Chowchilla Subbasin
250,000
225,000
200,000
175,000
150,000
125,000
100,000
75,000
50,000
25,000
0
acre-feet (AF)
2020
2025
2030
2035
2040
2045
2050
2055
2060
2065
2070
2075
2080
2085
2090
Water Year
Chowchilla WD
Madera County - East
Madera County - West
Sierra Vista MWC
Triangle T WD



MCSim - Projected, Chowchilla Subbasin by GSA

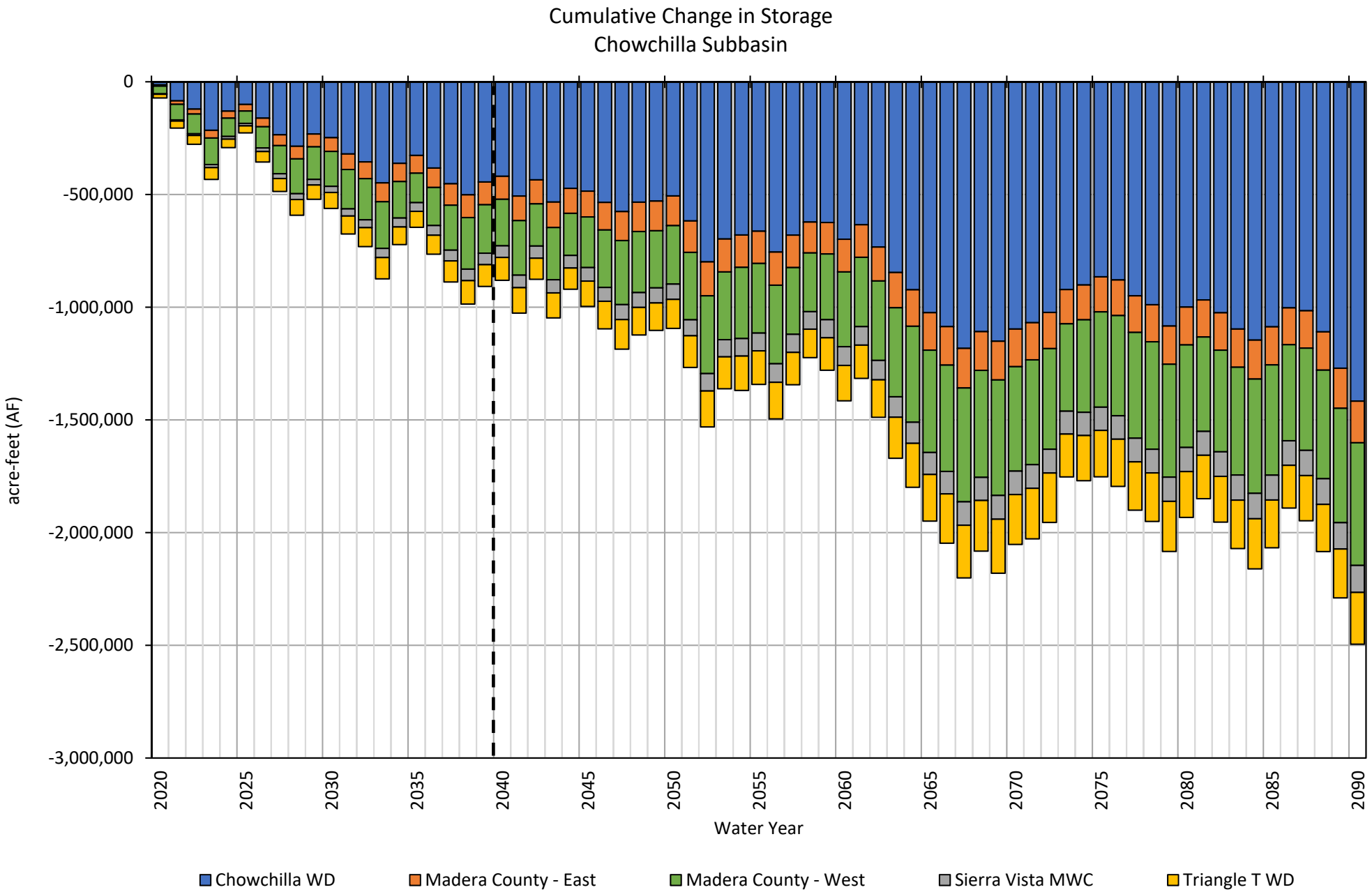
Appendix D.4.c.


Subsurface Flow
Chowchilla Subbasin
120,000
100,000
80,000
60,000
40,000
20,000
0
acre-feet (AF)
2020
2025
2030
2035
2040
2045
2050
2055
2060
2065
2070
2075
2080
2085
2090
Water Year
Chowchilla WD
Madera County - East
Madera County - West
Sierra Vista MWC
Triangle T WD



MCSim - Projected, Chowchilla Subbasin by GSA

Appendix D.4.c.

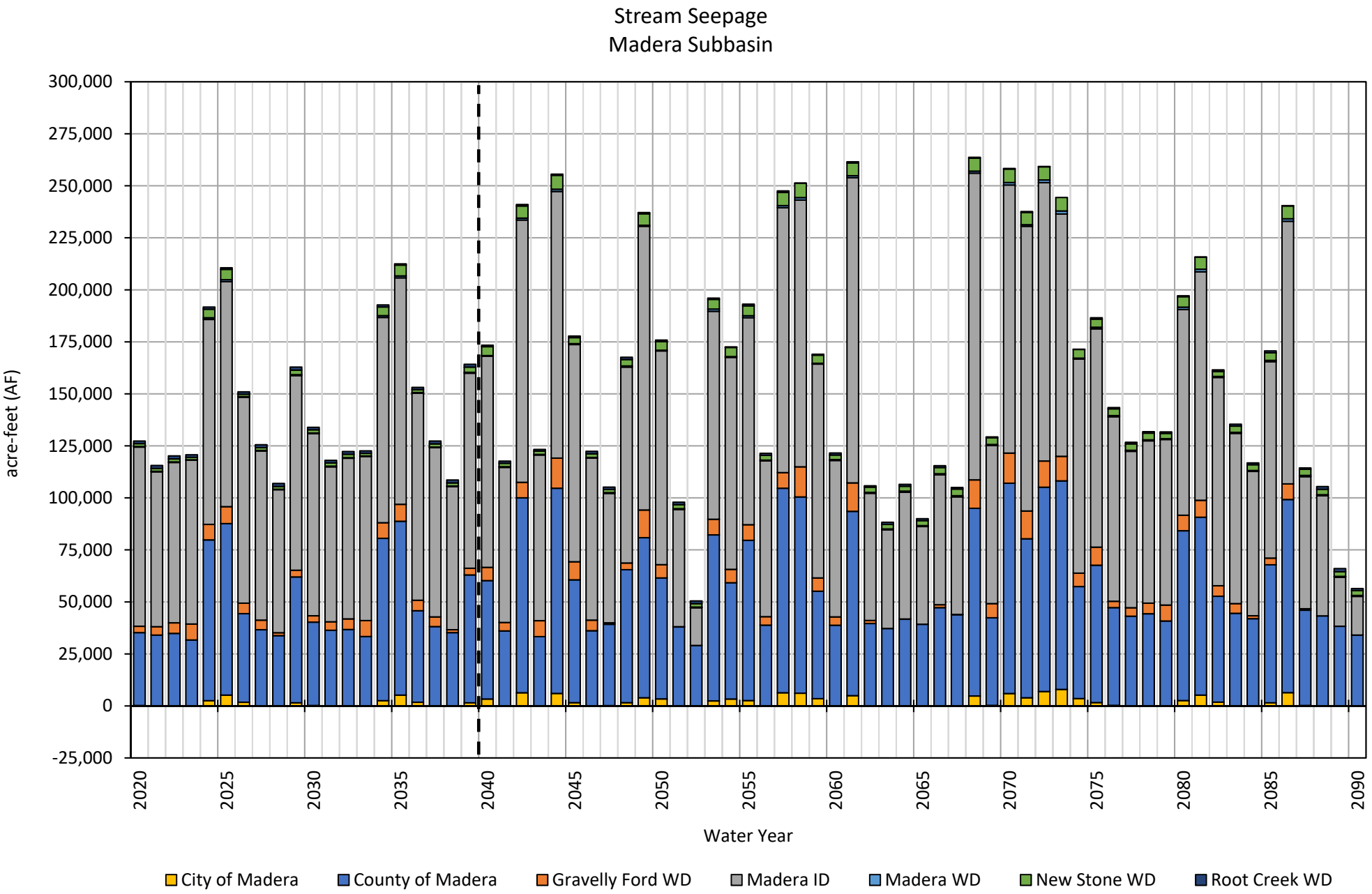

Cumulative Change in Storage
Chowchilla Subbasin
0
-500,000
-1,000,000
-1,500,000
-2,000,000
-2,500,000
-3,000,000
acre-feet (AF)
2020
2025
2030
2035
2040
2045
2050
2055
2060
2065
2070
2075
2080
2085
2090
Water Year
Chowchilla WD
Madera County - East
Madera County - West
Sierra Vista MWC
Triangle T WD

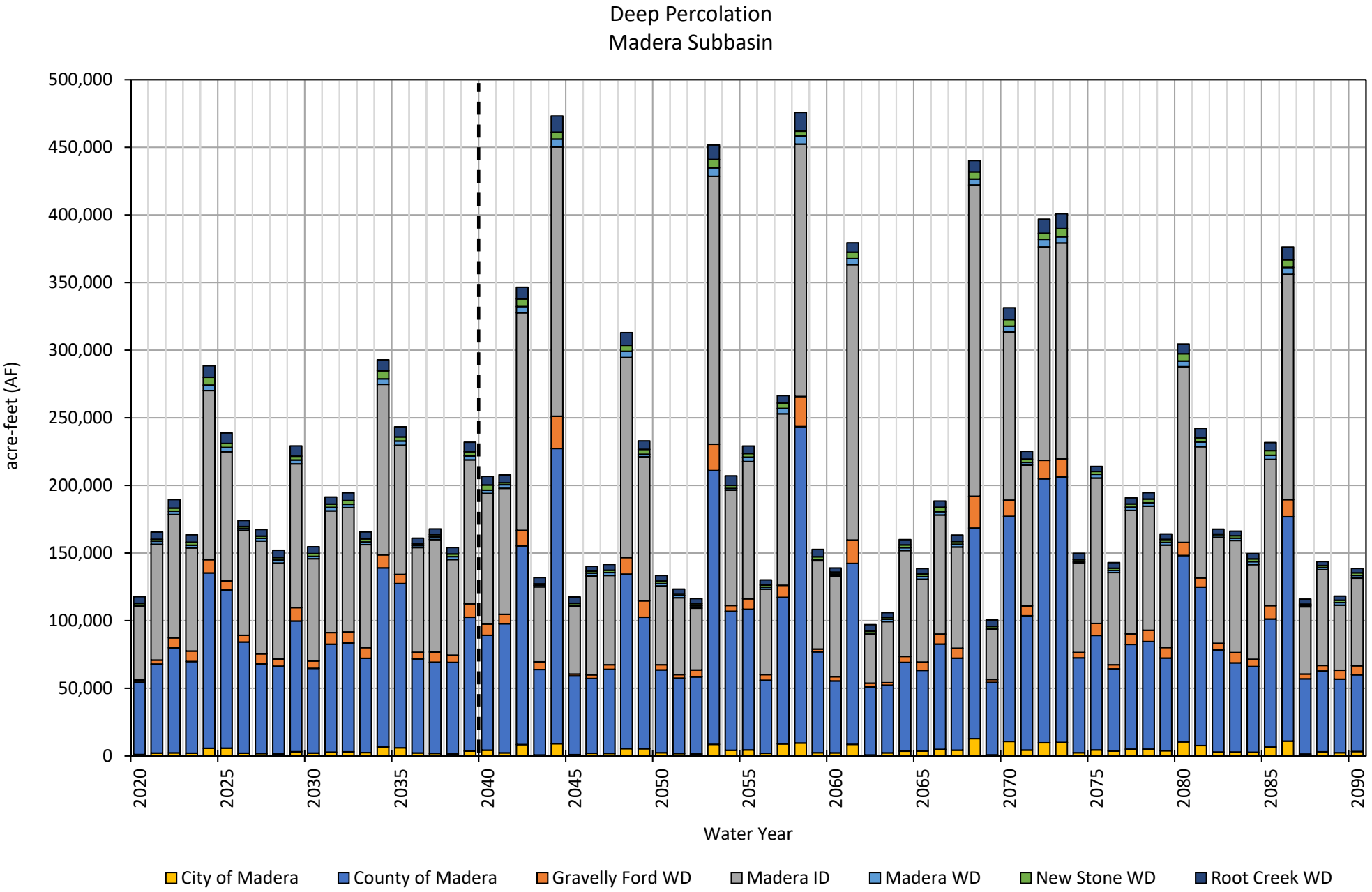
MCSim Projected Water Budget by GSA
Madera Subbasin

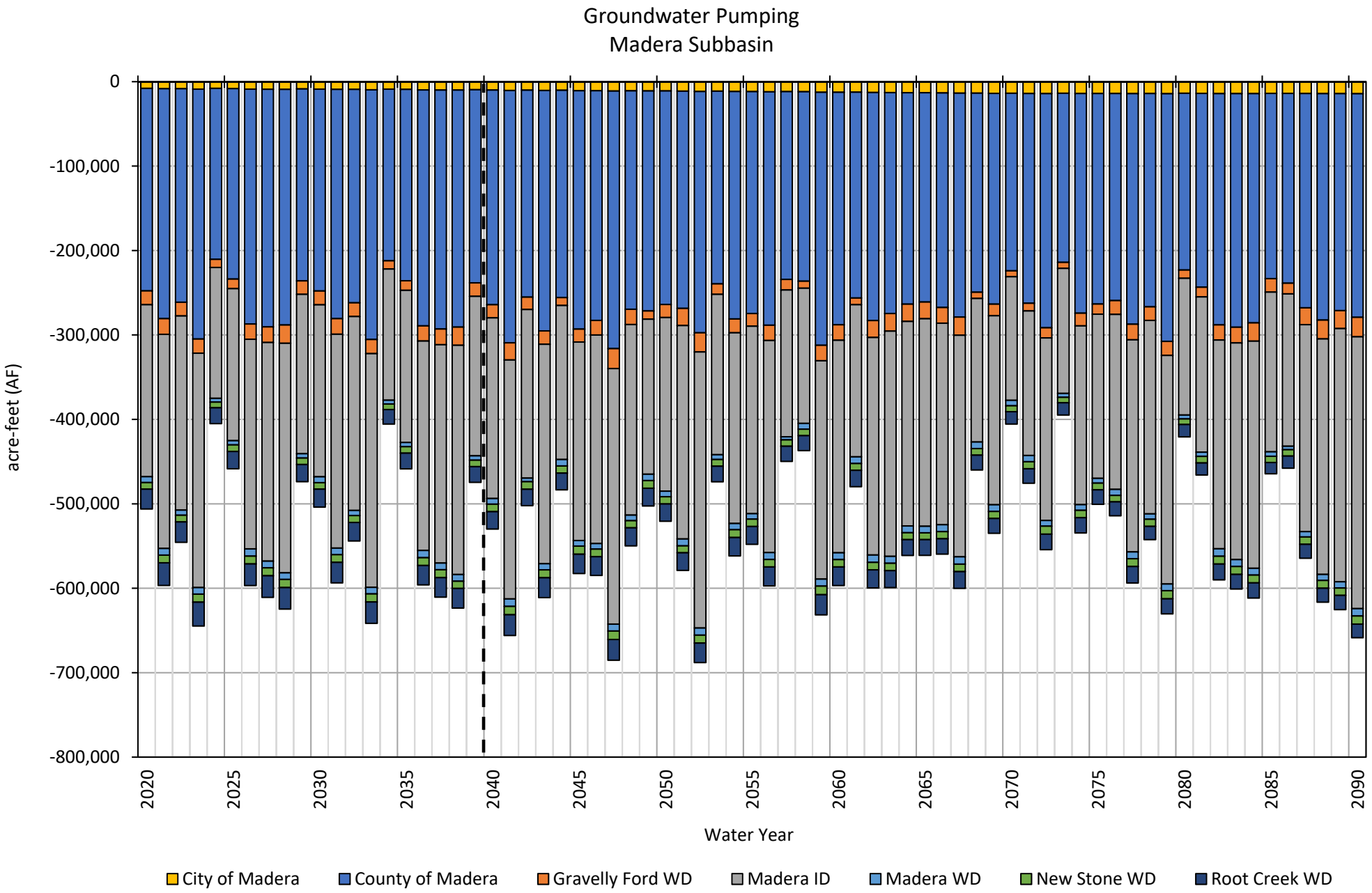
	Average Annual Water Budget (AF/m)							
	City of Madera		Madera County		Gravelly Ford Water District		Madera Irrigation District	
	Implementation Period, 2020-2039	Sustainability Period, 2040-2090	Implementation Period, 2020-2039	Sustainability Period, 2040-2090	Implementation Period, 2020-2039	Sustainability Period, 2040-2090	Implementation Period, 2020-2039	Sustainability Period, 2040-2090
Total Stream Seepage	1,141	2,135	47,763	59,190	4,981	5,841	86,744	89,550
In-Channel Seepage	*1,141*	*2,135*	*46,649*	*58,082*	*125*	*267*	*18,452*	*21,476*
Conveyance Losses	*0*	*0*	*1,114*	*1,108*	*4,856*	*5,574*	*68,292*	*68,075*
Deep Percolation	3,014	4,802	83,517	95,596	6,924	8,010	87,954	97,591
General Head Boundary Conditions	0	0	0	0	0	0	0	0
Small Watershed Baseflow	0	0	313	148	0	0	0	0
Small Watershed Percolation	0	0	0	0	0	0	0	0
Groundwater Pumping	-8,956	-12,703	-255,805	-256,871	-16,308	-15,936	-226,697	-227,844
Total Subsurface Inflow	2,006	4,159	75,835	77,069	1,950	809	10,970	12,088
Average Annual Change in Storage	-2,796	-1,608	-48,377	-24,869	-2,452	-1,276	-41,030	-28,615
Total Cumulative Change in Storage	-55,911	-81,986	-967,535	-1,268,302	-49,049	-65,066	-820,603	-1,459,340

MCSim Projected Water Budget by GSA
Madera Subbasin

	Average Annual Water Budget (AF/m)					
	Madera Water District		New Stone Water District		Root Creek Water District	
	Implementation Period, 2020-2039	Sustainability Period, 2040-2090	Implementation Period, 2020-2039	Sustainability Period, 2040-2090	Implementation Period, 2020-2039	Sustainability Period, 2040-2090
Total Stream Seepage	403	631	2,147	3,803	1,192	705
In-Channel Seepage	*403*	*631*	*2,147*	*3,803*	*337*	*-154*
Conveyance Losses	*0*	*0*	*0*	*0*	*855*	*859*
Deep Percolation	2,386	2,649	2,508	2,774	5,877	5,720
General Head Boundary Conditions	0	0	0	0	0	0
Small Watershed Baseflow	0	0	0	0	0	0
Small Watershed Percolation	0	0	0	0	0	0
Groundwater Pumping	-6,778	-7,101	-8,414	-8,601	-22,768	-18,955
Total Subsurface Inflow	2,842	3,232	2,364	1,583	11,008	9,250
Average Annual Change in Storage	-1,147	-589	-1,394	-440	-4,692	-3,280
Total Cumulative Change in Storage	-22,941	-30,020	-27,888	-22,454	-93,837	-167,289

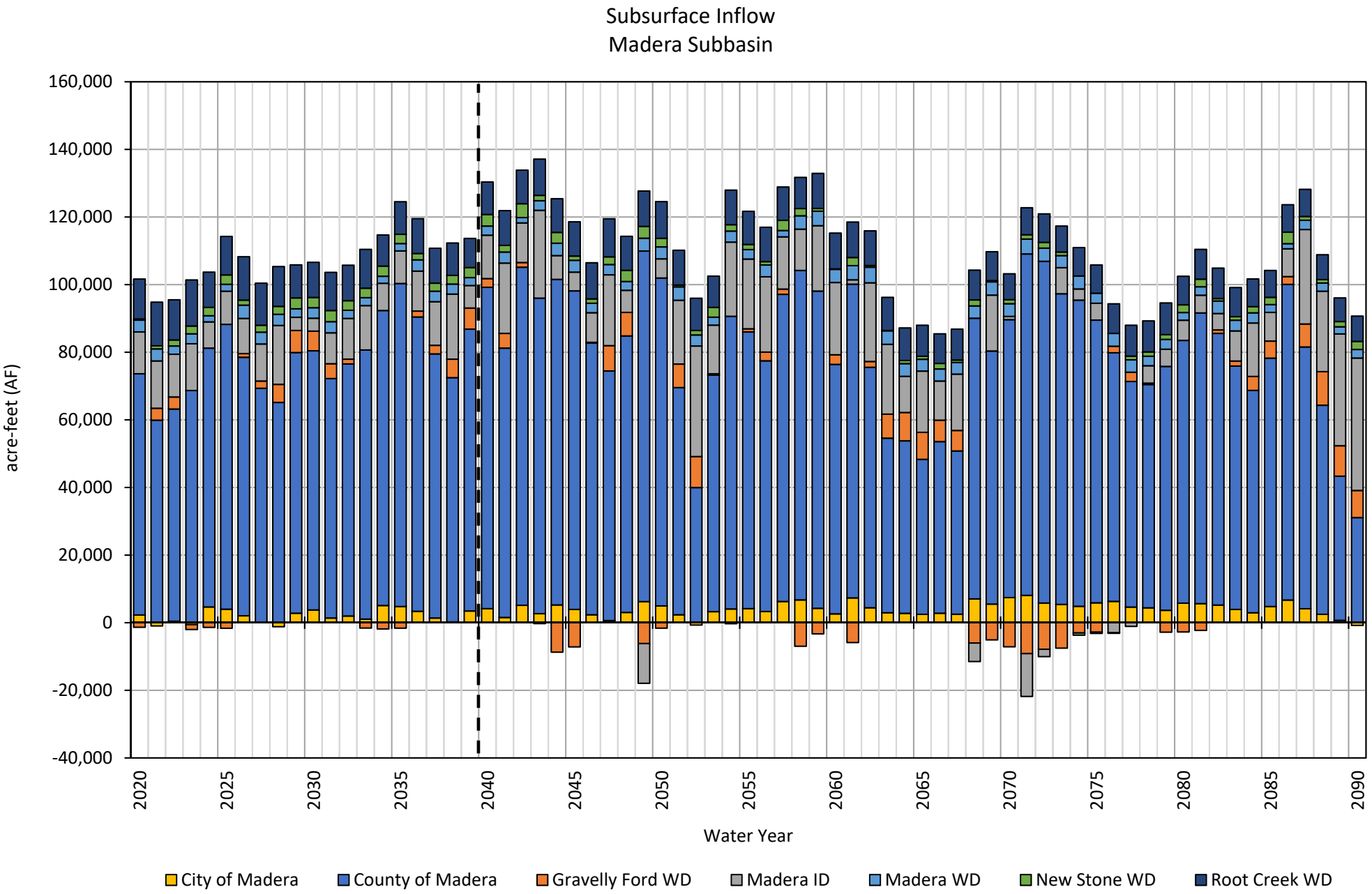

Stream Seepage
Madera Subbasin
acre-feet (AF)
300,000
275,000
250,000
225,000
200,000
175,000
150,000
125,000
100,000
75,000
50,000
25,000
0
-25,000
2020
2025
2030
2035
2040
2045
2050
2055
2060
2065
2070
2075
2080
2085
2090
Water Year
City of Madera
County of Madera
Gravelly Ford WD
Madera ID
Madera WD
New Stone WD
Root Creek WD


Deep Percolation
Madera Subbasin
acre-feet (AF)
500,000
450,000
400,000
350,000
300,000
250,000
200,000
150,000
100,000
50,000
0
2020
2025
2030
2035
2040
2045
2050
2055
2060
2065
2070
2075
2080
2085
2090
Water Year
City of Madera
County of Madera
Gravelly Ford WD
Madera ID
Madera WD
New Stone WD
Root Creek WD



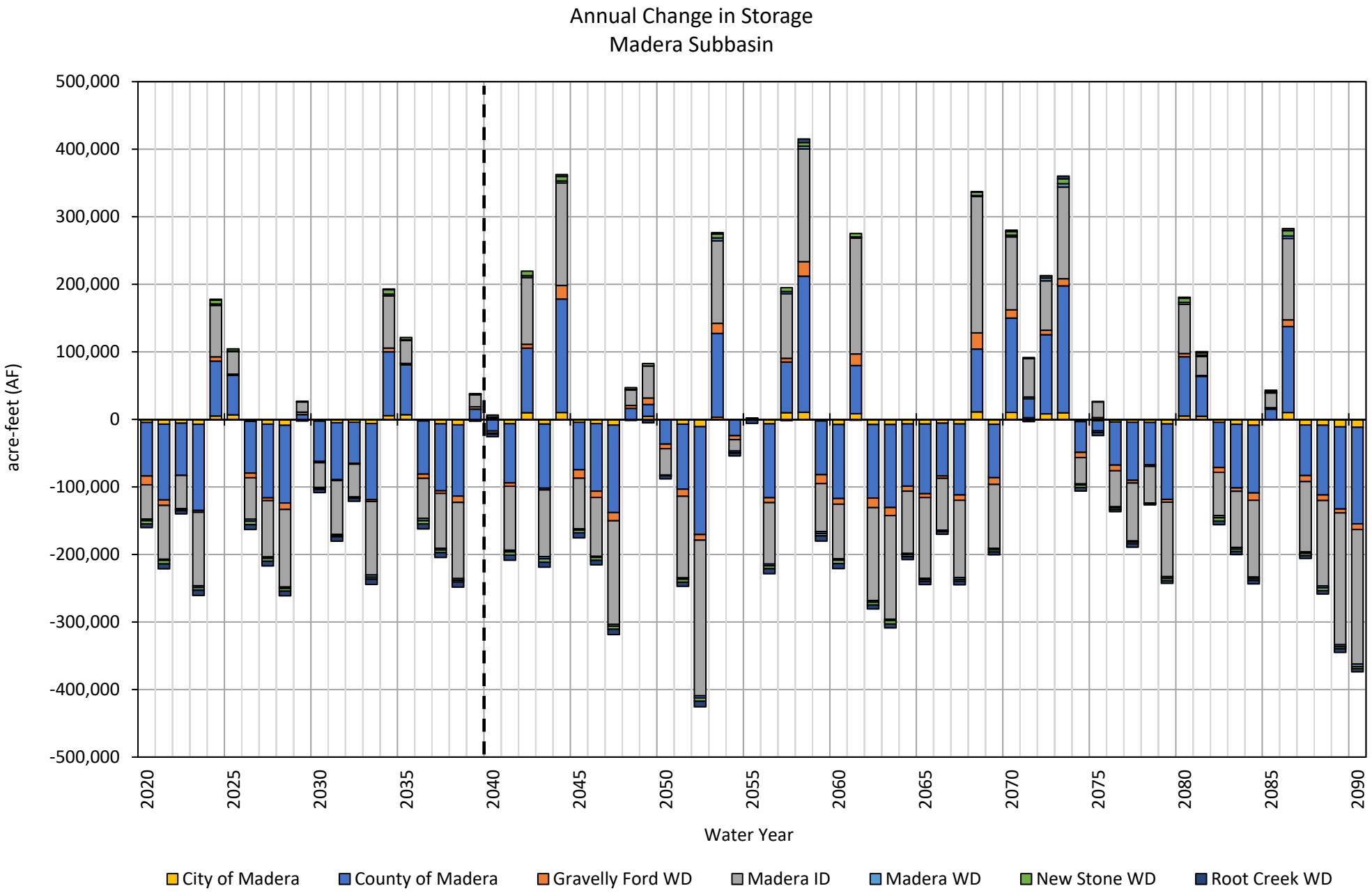
MCSim - Projected, Madera Subbasin by GSA

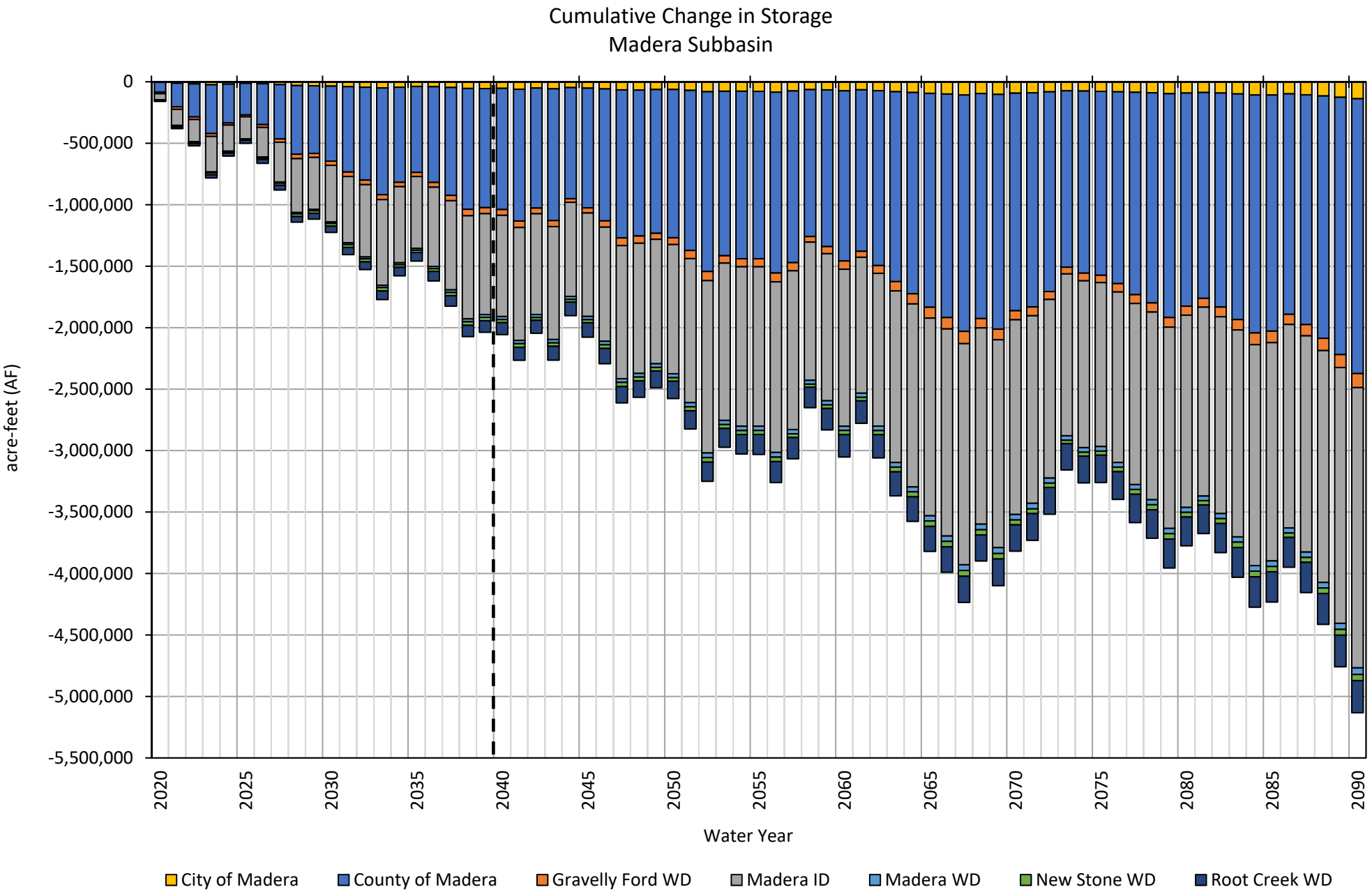
Appendix D.4.d.



MCSim - Projected, Madera Subbasin by GSA

Appendix D.4.d.


Annual Change in Storage
Madera Subbasin
500,000
400,000
300,000
200,000
100,000
0
-100,000
-200,000
-300,000
-400,000
-500,000
acre-feet (AF)
2020
2025
2030
2035
2040
2045
2050
2055
2060
2065
2070
2075
2080
2085
2090
Water Year
City of Madera
County of Madera
Gravelly Ford WD
Madera ID
Madera WD
New Stone WD
Root Creek WD

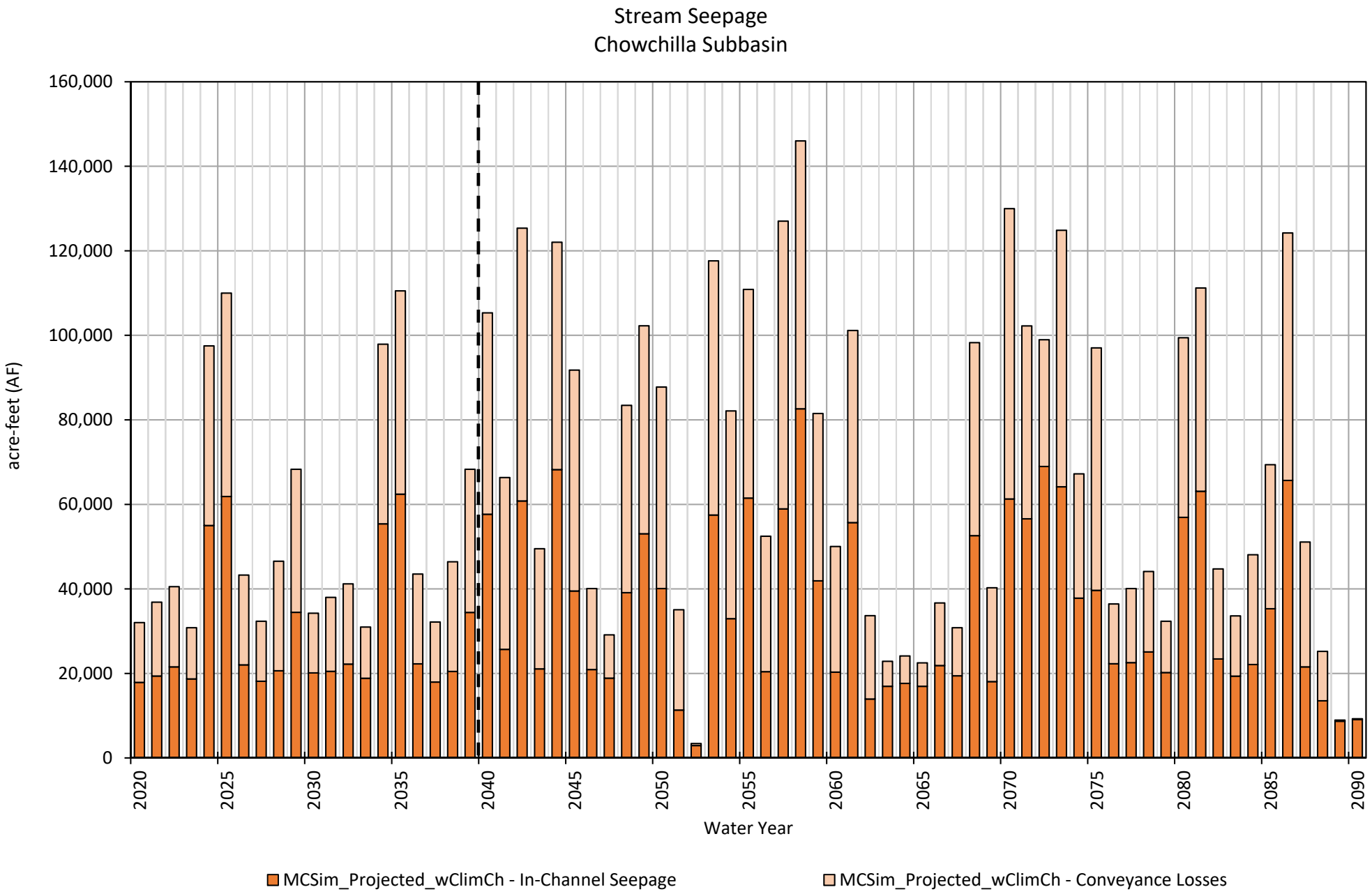


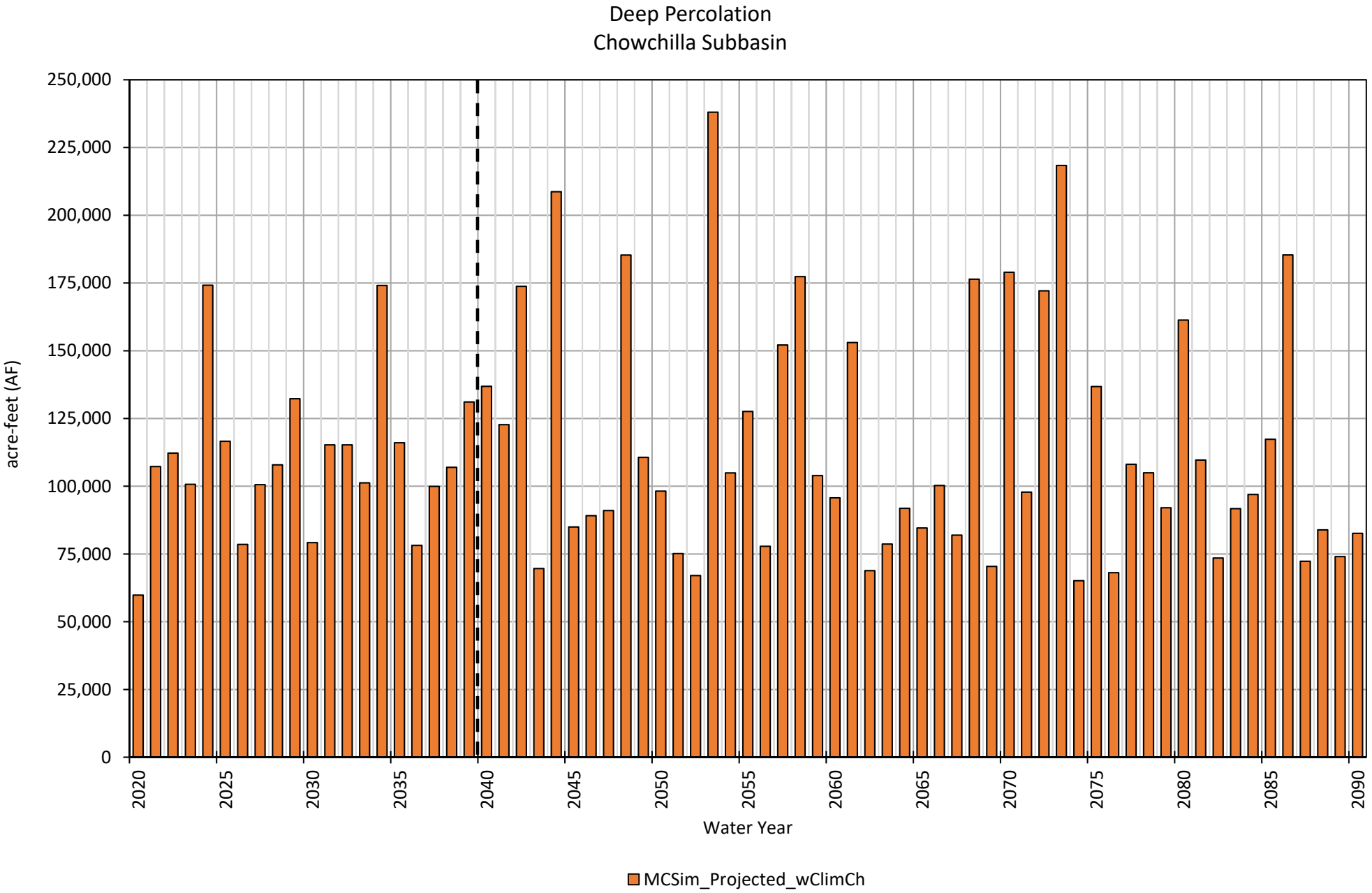
MCSim - Projected, Madera Subbasin by GSA

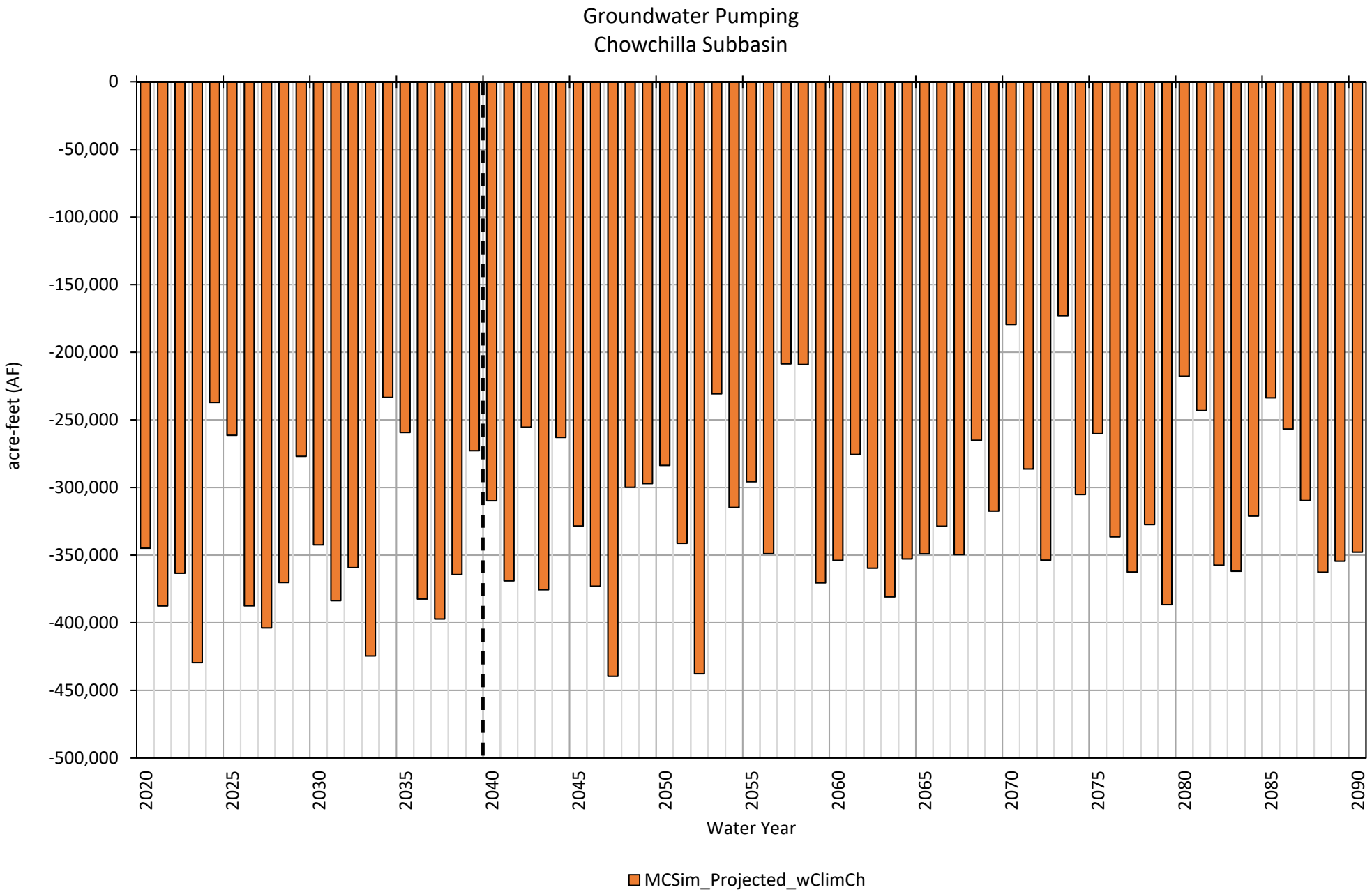
Appendix D.4.d.

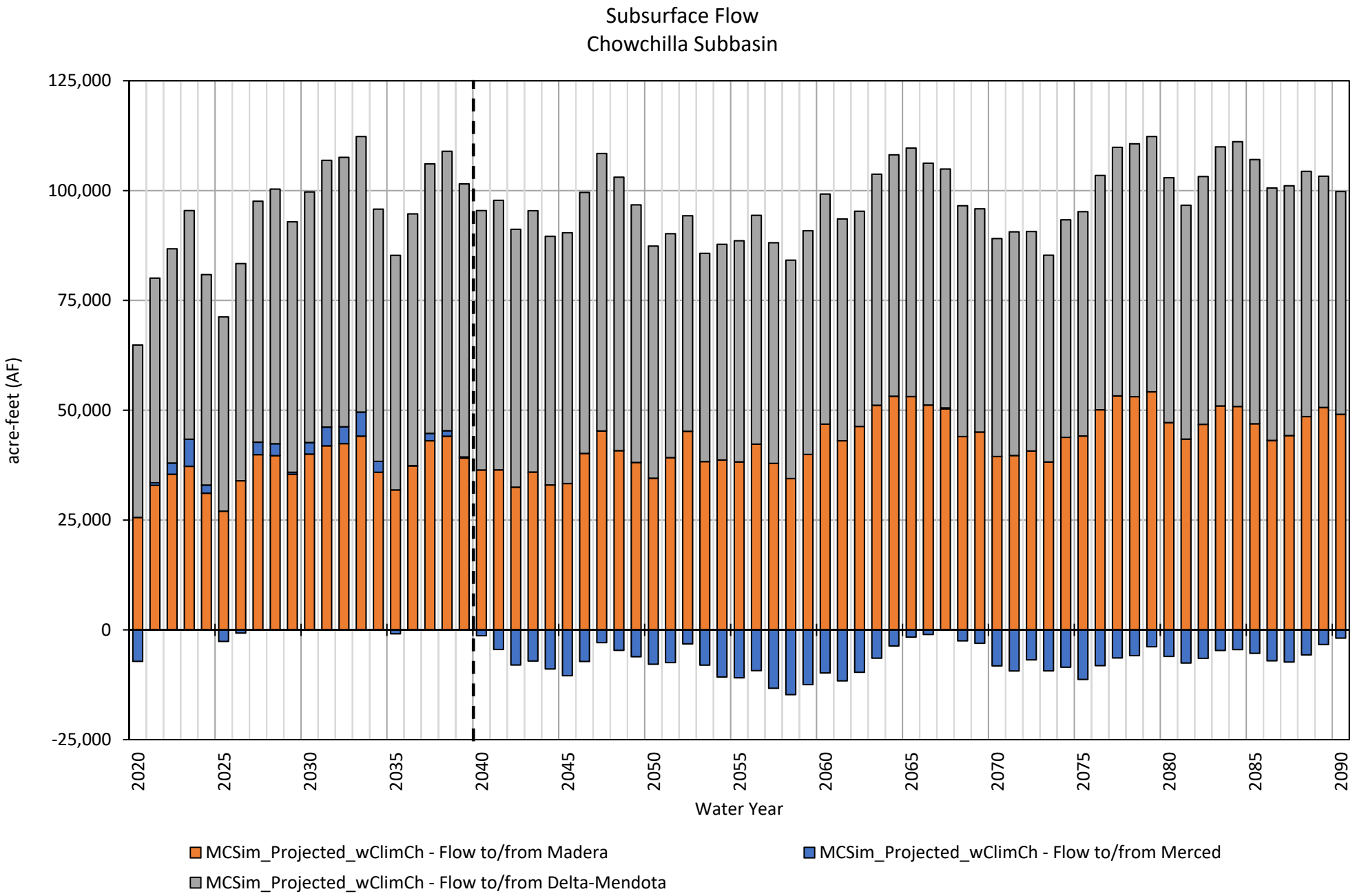
MCSim Projected with Climate Change Water Budget
Chowchilla Subbasin

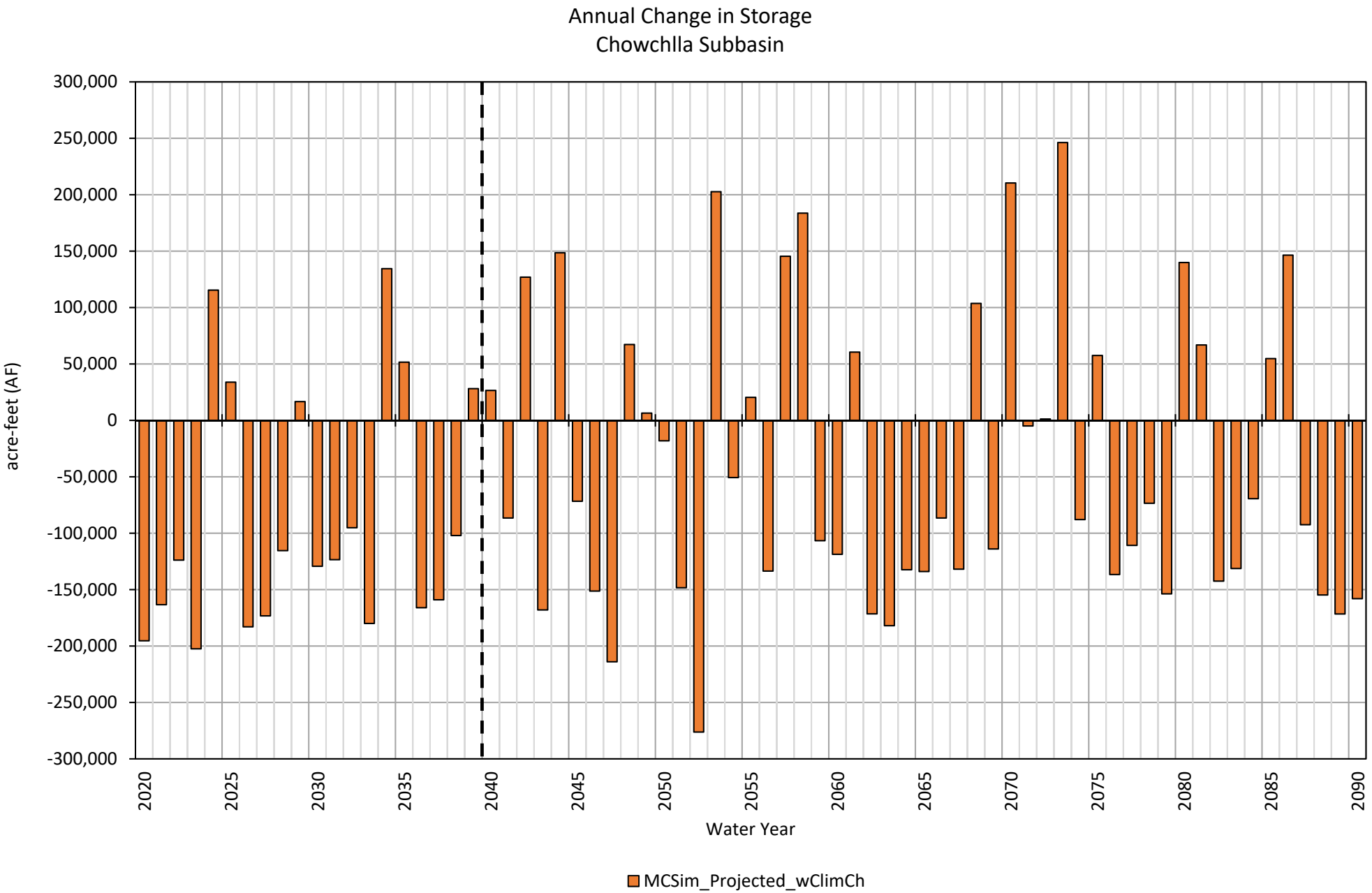
	Average Annual Water Budget (AF/m)	
	Implementation Period 2020-2039	**Sustainability Period 2040-2090**
Total Stream Seepage	54,071	68,979
In-Channel Seepage	*29,212*	*35,800*
Conveyance Losses	*24,859*	*33,180*
Deep Percolation	110,375	115,454
General Head Boundary Conditions	0	0
Small Watershed Baseflow	0	0
Small Watershed Percolation	0	0
Groundwater Pumping	-344,064	-314,134
Total Subsurface Inflow	93,042	91,118
Flow to(+)/from(-) Madera	*36,901*	*43,594*
Flow to(+)/from(-) Merced	*1,382*	*-6,778*
Flow to(+)/from(-) Delta-Mendota	*54,759*	*54,303*
Average Annual Change in Storage	-86,576	-38,582
Total Cumulative Change in Storage	-1,731,522	-1,967,706


Stream Seepage
Chowchilla Subbasin
160,000
140,000
120,000
100,000
80,000
60,000
40,000
20,000
0
acre-feet (AF)
2020
2025
2030
2035
2040
2045
2050
2055
2060
2065
2070
2075
2080
2085
2090
Water Year
MCSim_Projected_wClimCh - In-Channel Seepage
MCSim_Projected_wClimCh - Conveyance Losses


Deep Percolation
Chowchilla Subbasin
250,000
225,000
200,000
175,000
150,000
125,000
100,000
75,000
50,000
25,000
0
acre-feet (AF)
2020
2025
2030
2035
2040
2045
2050
2055
2060
2065
2070
2075
2080
2085
2090
Water Year
MCSim_Projected_wClimCh

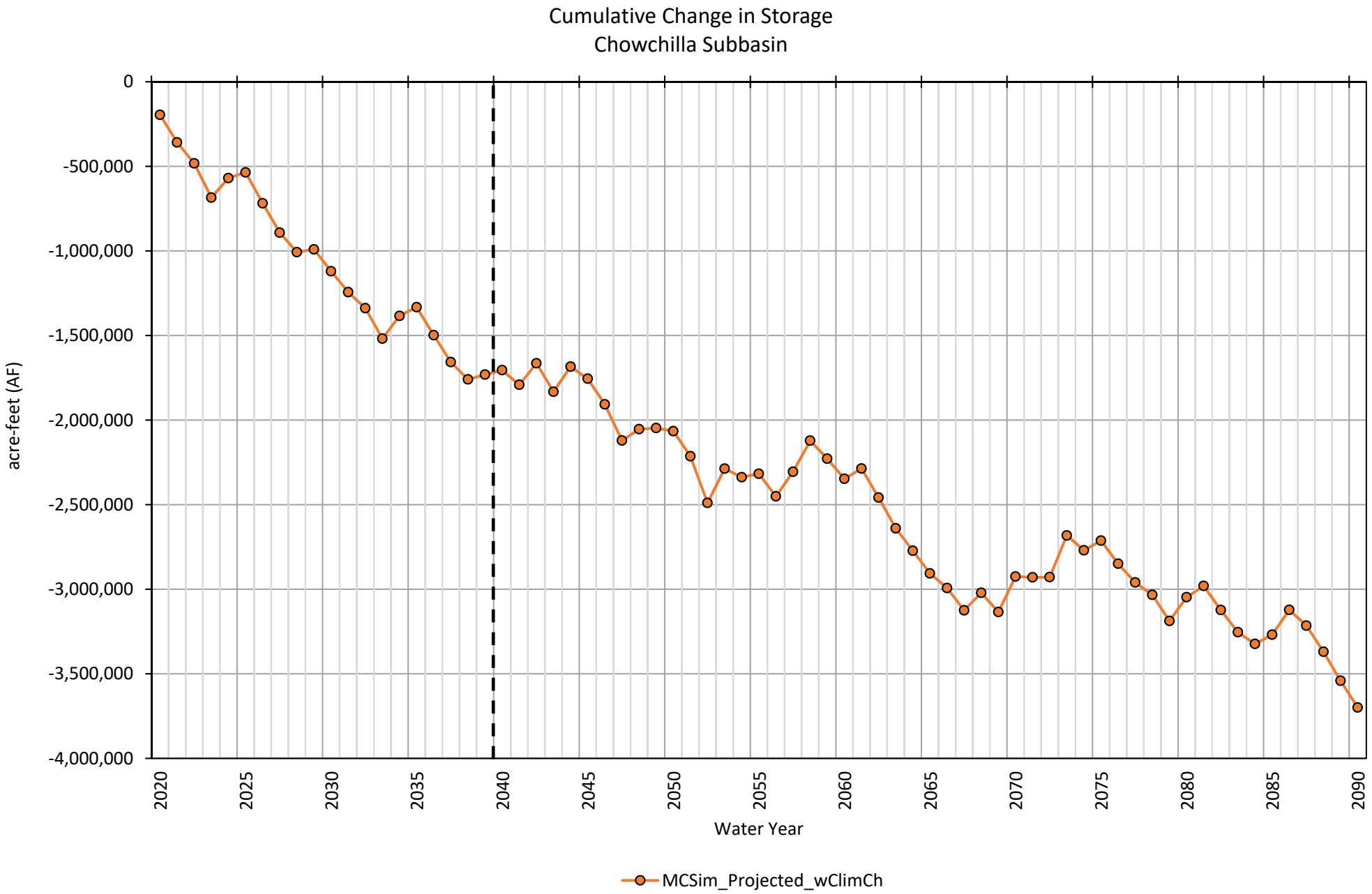

Groundwater Pumping
Chowchilla Subbasin
0
-50,000
-100,000
-150,000
-200,000
-250,000
-300,000
-350,000
-400,000
-450,000
-500,000
acre-feet (AF)
2020
2025
2030
2035
2040
2045
2050
2055
2060
2065
2070
2075
2080
2085
2090
Water Year
MCSim_Projected_wClimCh


Subsurface Flow
Chowchilla Subbasin
125,000
100,000
75,000
50,000
25,000
0
-25,000
acre-feet (AF)
2020
2025
2030
2035
2040
2045
2050
2055
2060
2065
2070
2075
2080
2085
2090
Water Year
MCSim_Projected_wClimCh - Flow to/from Madera
MCSim_Projected_wClimCh - Flow to/from Merced
MCSim_Projected_wClimCh - Flow to/from Delta-Mendota



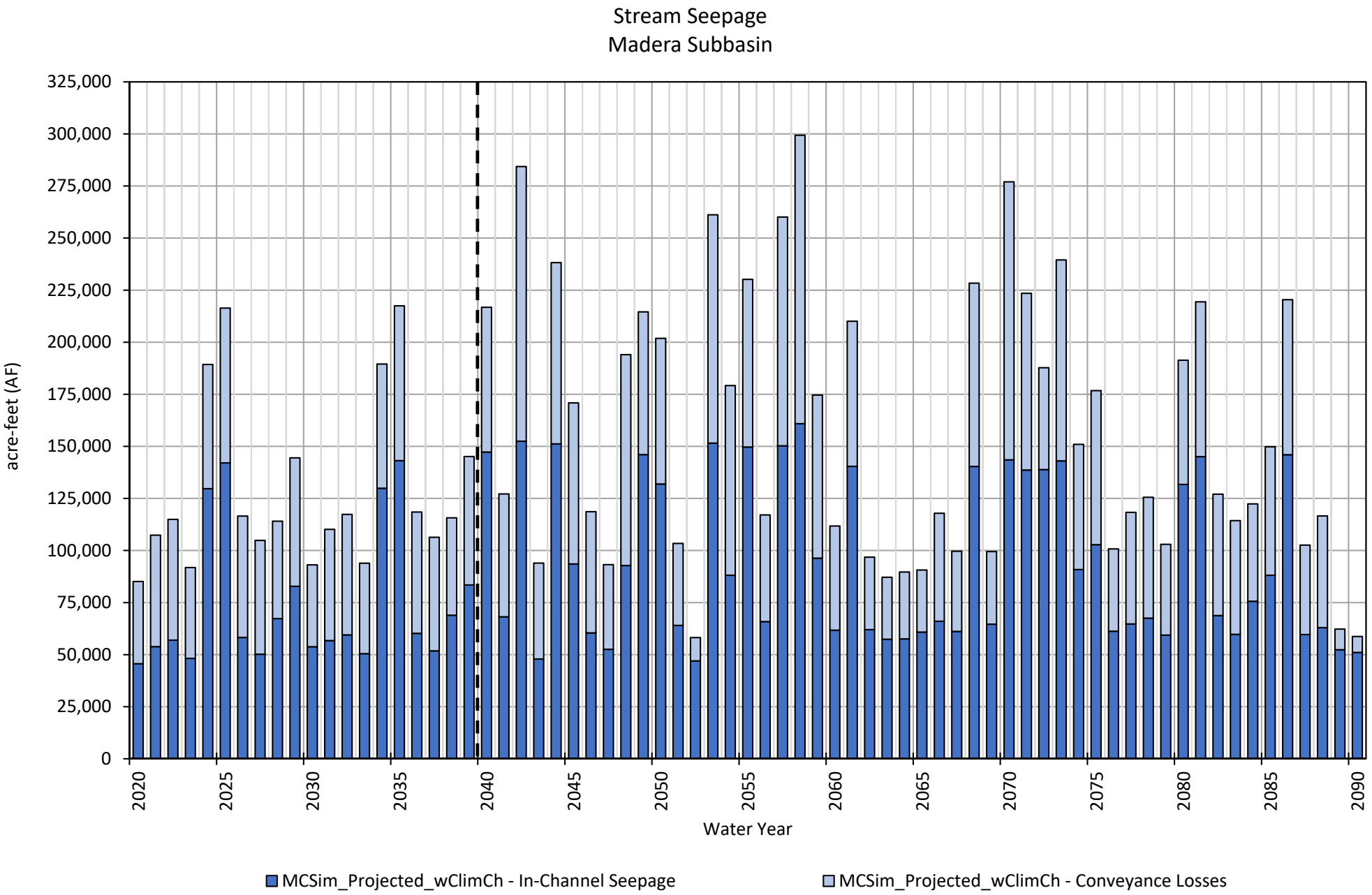
MCSim - Projected with Climate Change, Chowchilla Subbasin

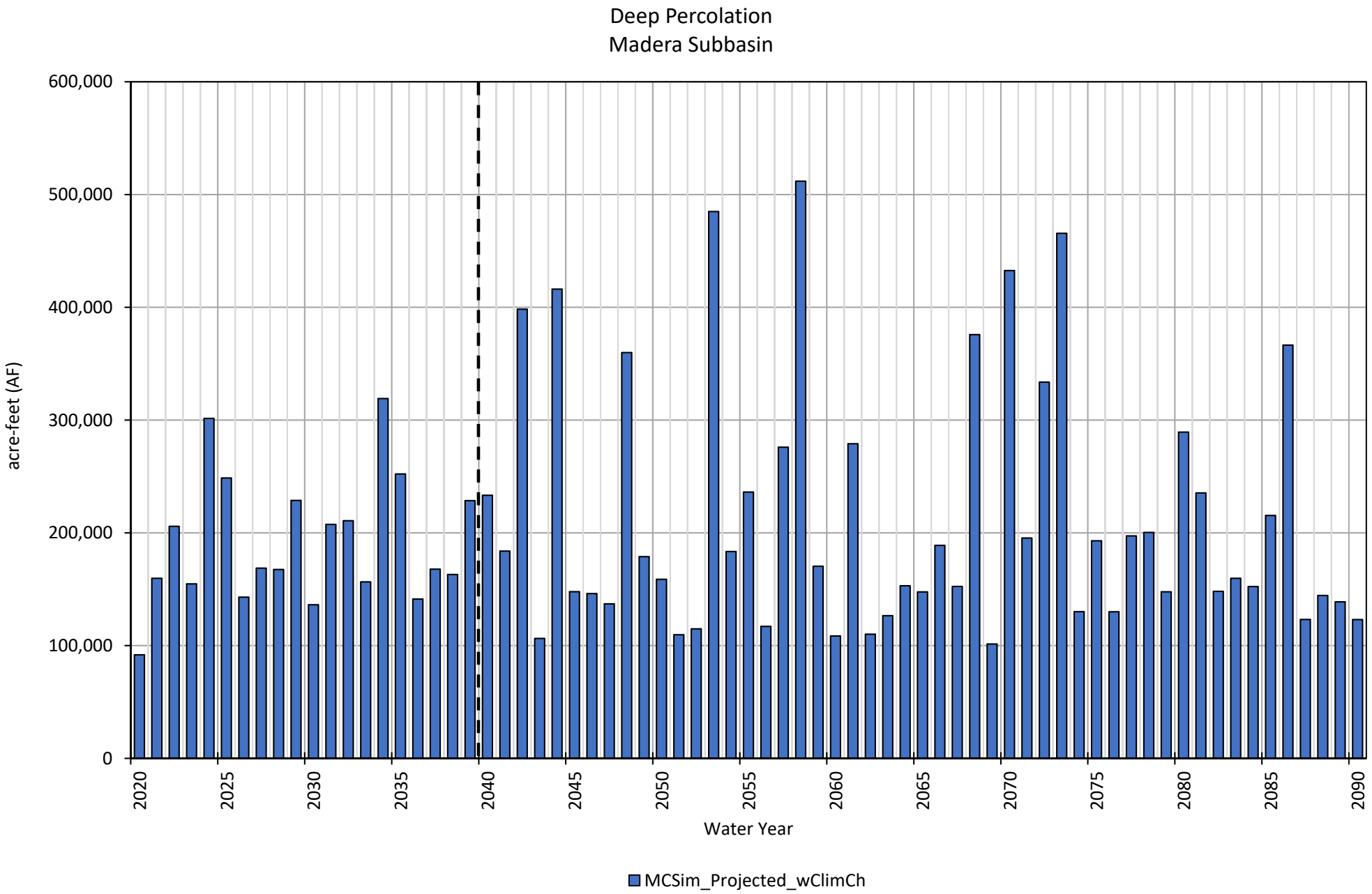
Appendix D.5.a.

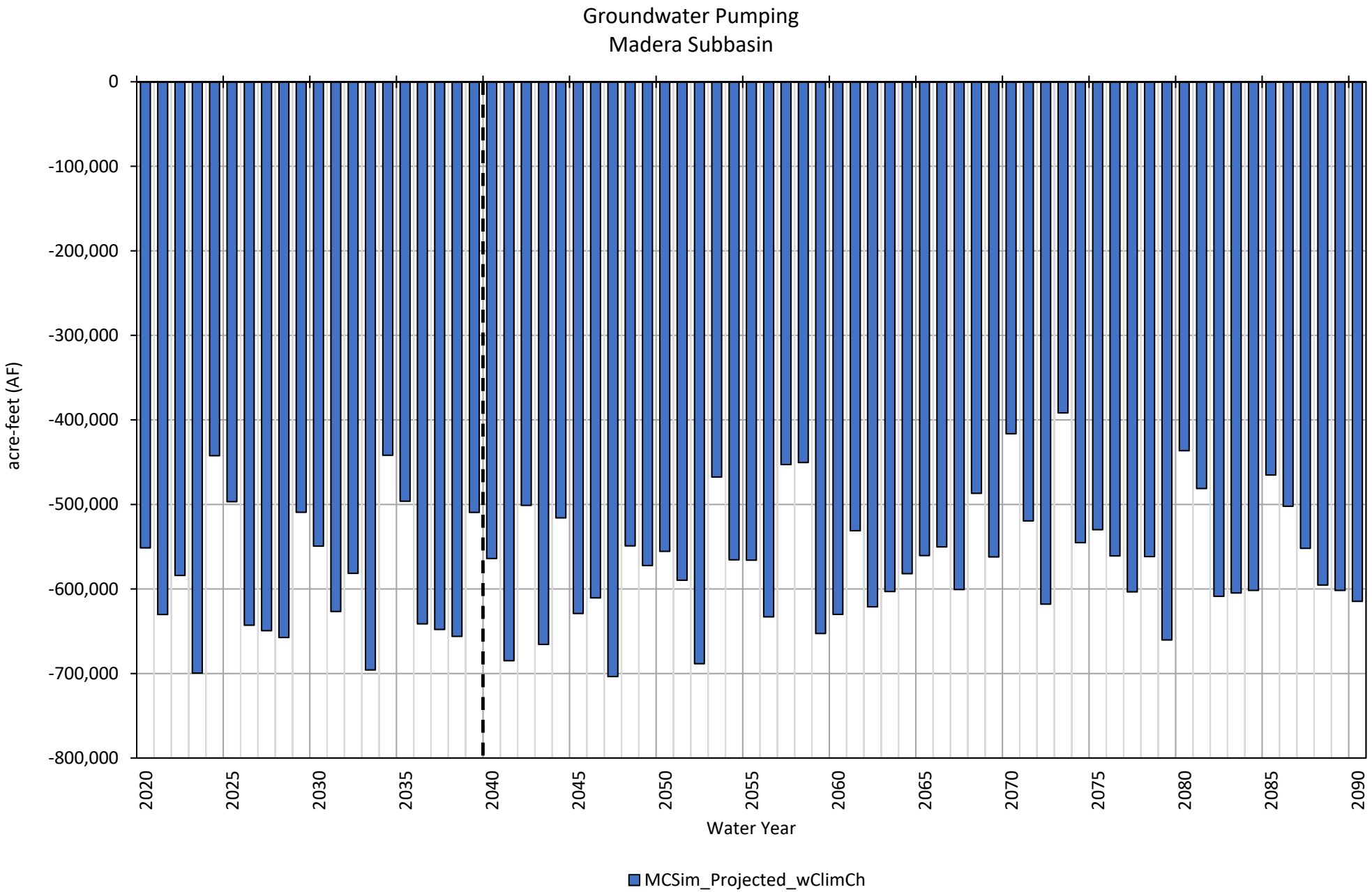

Cumulative Change in Storage
Chowchilla Subbasin
0
-500,000
-1,000,000
-1,500,000
-2,000,000
-2,500,000
-3,000,000
-3,500,000
-4,000,000
acre-feet (AF)
2020
2025
2030
2035
2040
2045
2050
2055
2060
2065
2070
2075
2080
2085
2090
Water Year
MCSim_Projected_wClimCh

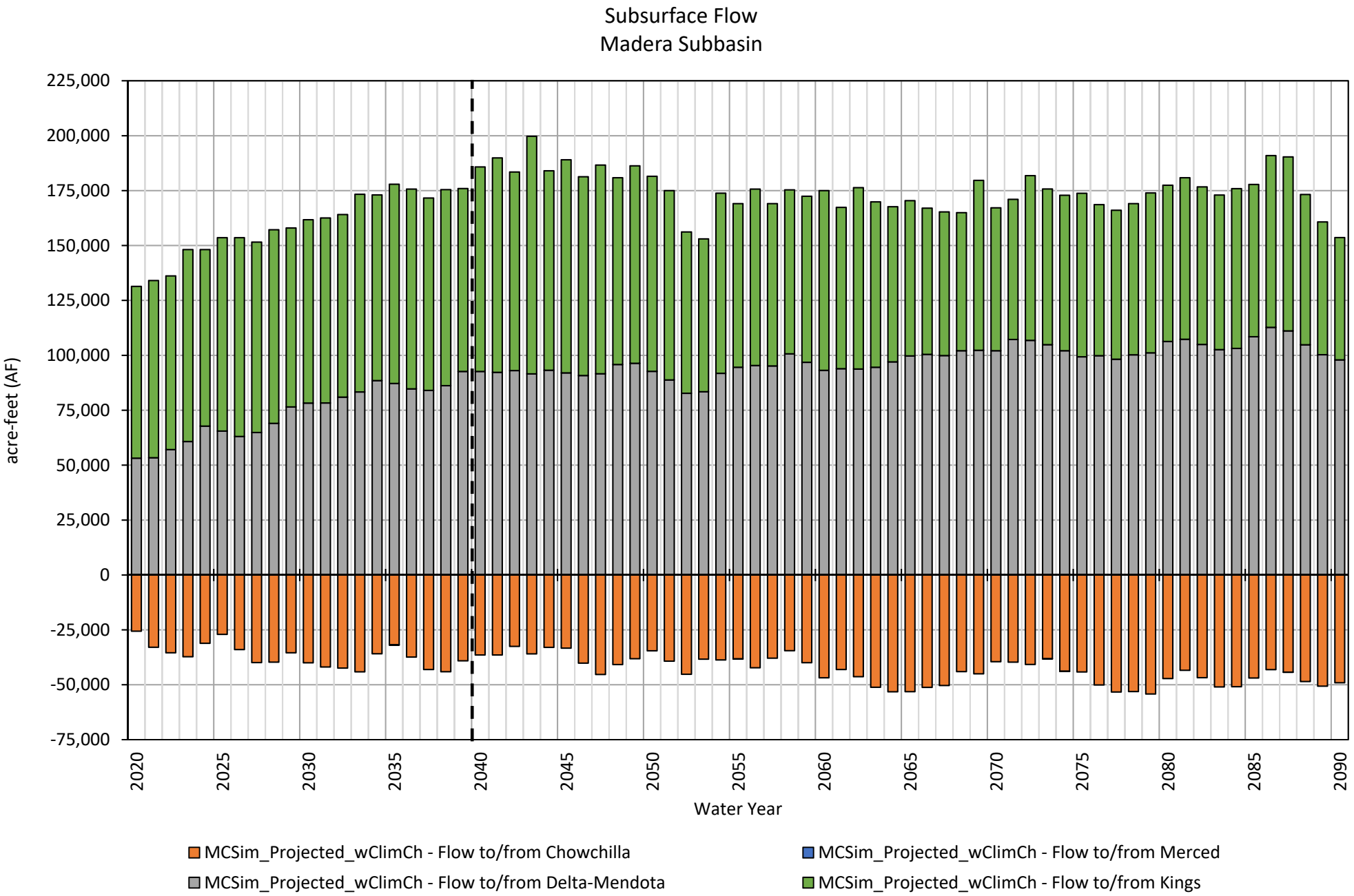
MCSim Projected with Climate Change Water Budget
Madera Subbasin

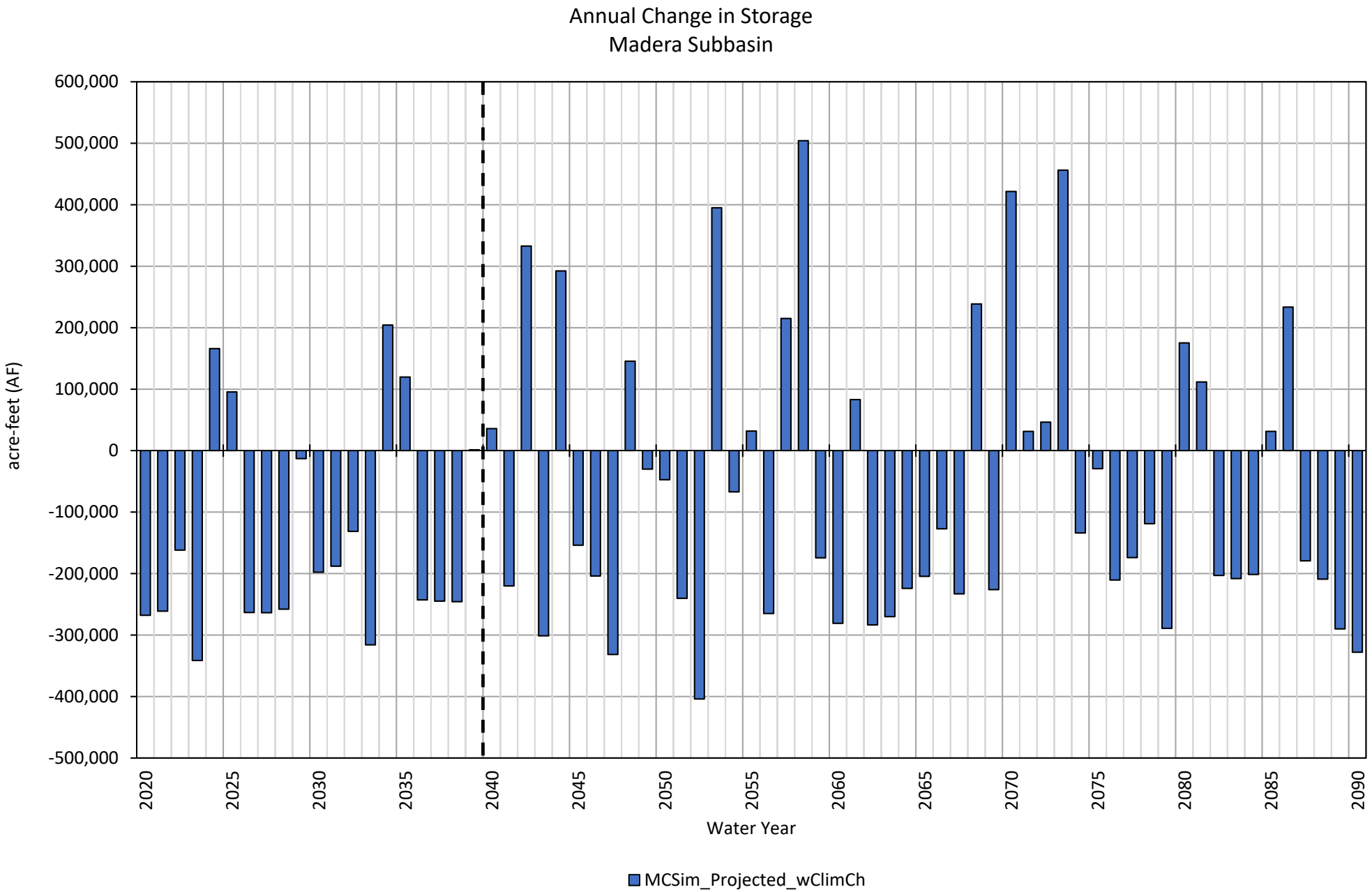
	Average Annual Water Budget (AF/m)	
	Implementation Period 2020-2040	**Sustainability Period 2040-2090**
Total Stream Seepage	129,602	157,970
In-Channel Seepage	74,650	94,935
Conveyance Losses	54,952	63,035
Deep Percolation	192,666	214,438
General Head Boundary Conditions	0	0
Small Watershed Baseflow	495	664
Small Watershed Percolation	0	203
Groundwater Pumping	-585,466	-565,019
Total Subsurface Inflow	122,256	131,357
Flow to(+)/from(-) Chowchilla	-36,901	-43,594
Flow to(+)/from(-) Merced	61	42
Flow to(+)/from(-) Delta-Mendota	73,702	98,190
Flow to(+)/from(-) Kings	85,395	76,718
Average Annual Change in Storage	-140,448	-60,386
Total Cumulative Change in Storage	-2,808,958	-3,079,702

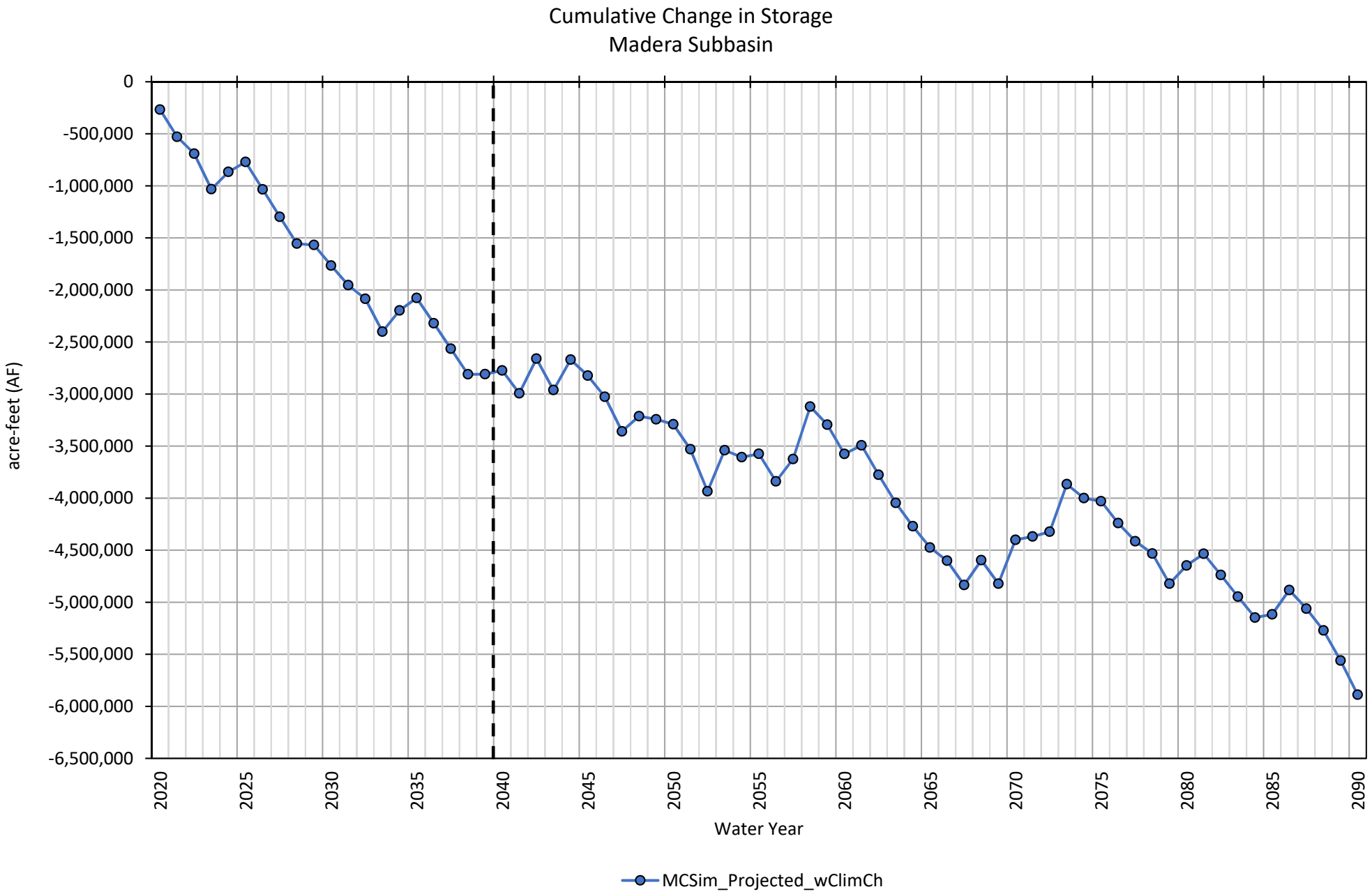

Stream Seepage
Madera Subbasin
acre-feet (AF)
325,000
300,000
275,000
250,000
225,000
200,000
175,000
150,000
125,000
100,000
75,000
50,000
25,000
0
2020
2025
2030
2035
2040
2045
2050
2055
2060
2065
2070
2075
2080
2085
2090
Water Year
MCSim_Projected_wClimCh - In-Channel Seepage
MCSim_Projected_wClimCh - Conveyance Losses


Deep Percolation
Madera Subbasin
600,000
500,000
400,000
300,000
200,000
100,000
0
acre-feet (AF)
2020
2025
2030
2035
2040
2045
2050
2055
2060
2065
2070
2075
2080
2085
2090
Water Year
MCSim_Projected_wClimCh


Groundwater Pumping
Madera Subbasin
0
-100,000
-200,000
-300,000
-400,000
-500,000
-600,000
-700,000
-800,000
acre-feet (AF)
2020
2025
2030
2035
2040
2045
2050
2055
2060
2065
2070
2075
2080
2085
2090
Water Year
MCSim_Projected_wClimCh

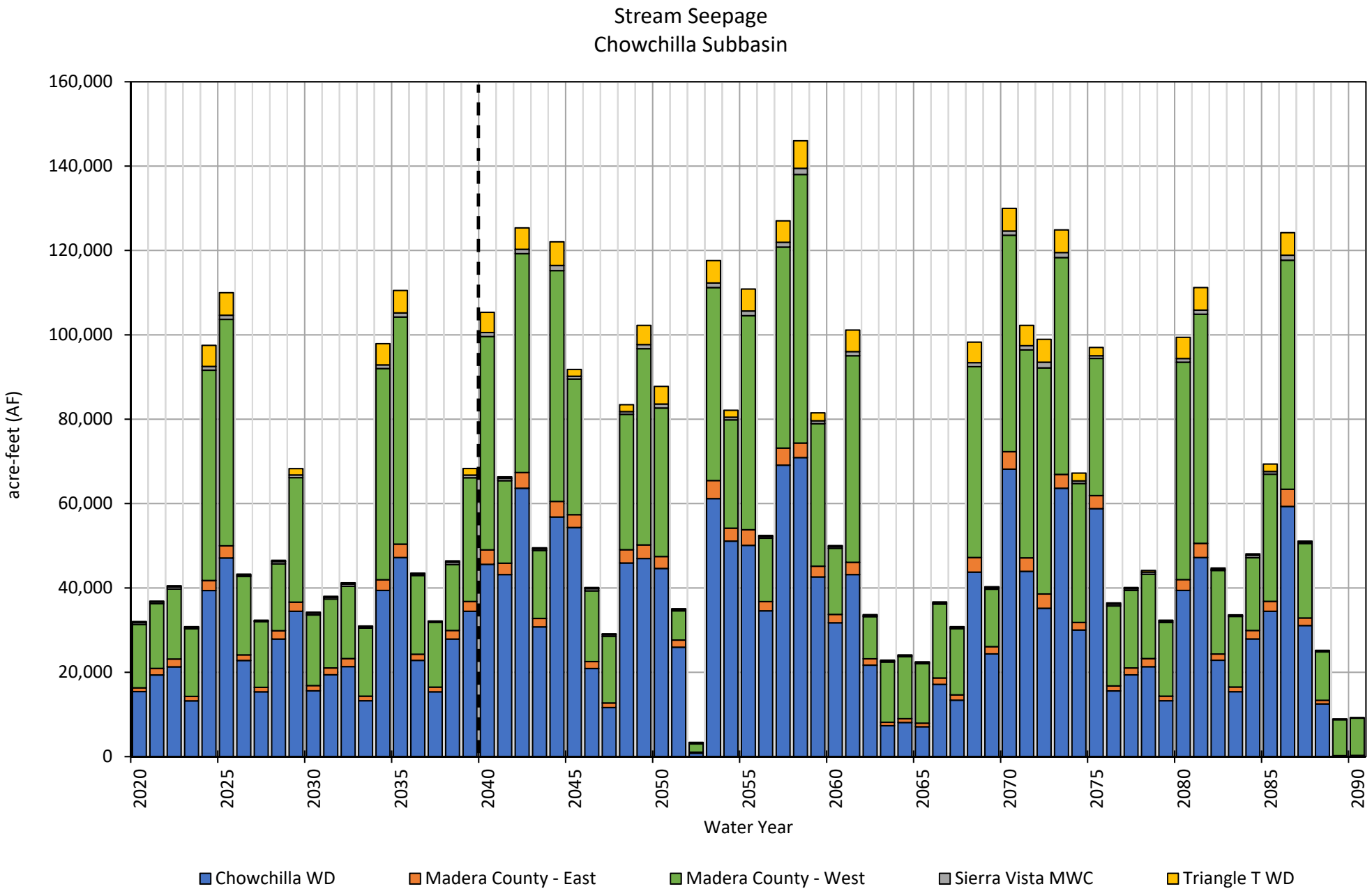

Subsurface Flow
Madera Subbasin
225,000
200,000
175,000
150,000
125,000
100,000
75,000
50,000
25,000
0
-25,000
-50,000
-75,000
acre-feet (AF)
2020
2025
2030
2035
2040
2045
2050
2055
2060
2065
2070
2075
2080
2085
2090
Water Year
MCSim_Projected_wClimCh - Flow to/from Chowchilla
MCSim_Projected_wClimCh - Flow to/from Merced
MCSim_Projected_wClimCh - Flow to/from Delta-Mendota
MCSim_Projected_wClimCh - Flow to/from Kings


Annual Change in Storage
Madera Subbasin
600,000
500,000
400,000
300,000
200,000
100,000
0
-100,000
-200,000
-300,000
-400,000
-500,000
acre-feet (AF)
2020
2025
2030
2035
2040
2045
2050
2055
2060
2065
2070
2075
2080
2085
2090
Water Year
MCSim_Projected_wClimCh


Cumulative Change in Storage
Madera Subbasin
0
-500,000
-1,000,000
-1,500,000
-2,000,000
-2,500,000
-3,000,000
-3,500,000
-4,000,000
-4,500,000
-5,000,000
-5,500,000
-6,000,000
-6,500,000
acre-feet (AF)
2020
2025
2030
2035
2040
2045
2050
2055
2060
2065
2070
2075
2080
2085
2090
Water Year
MCSim_Projected_wClimCh

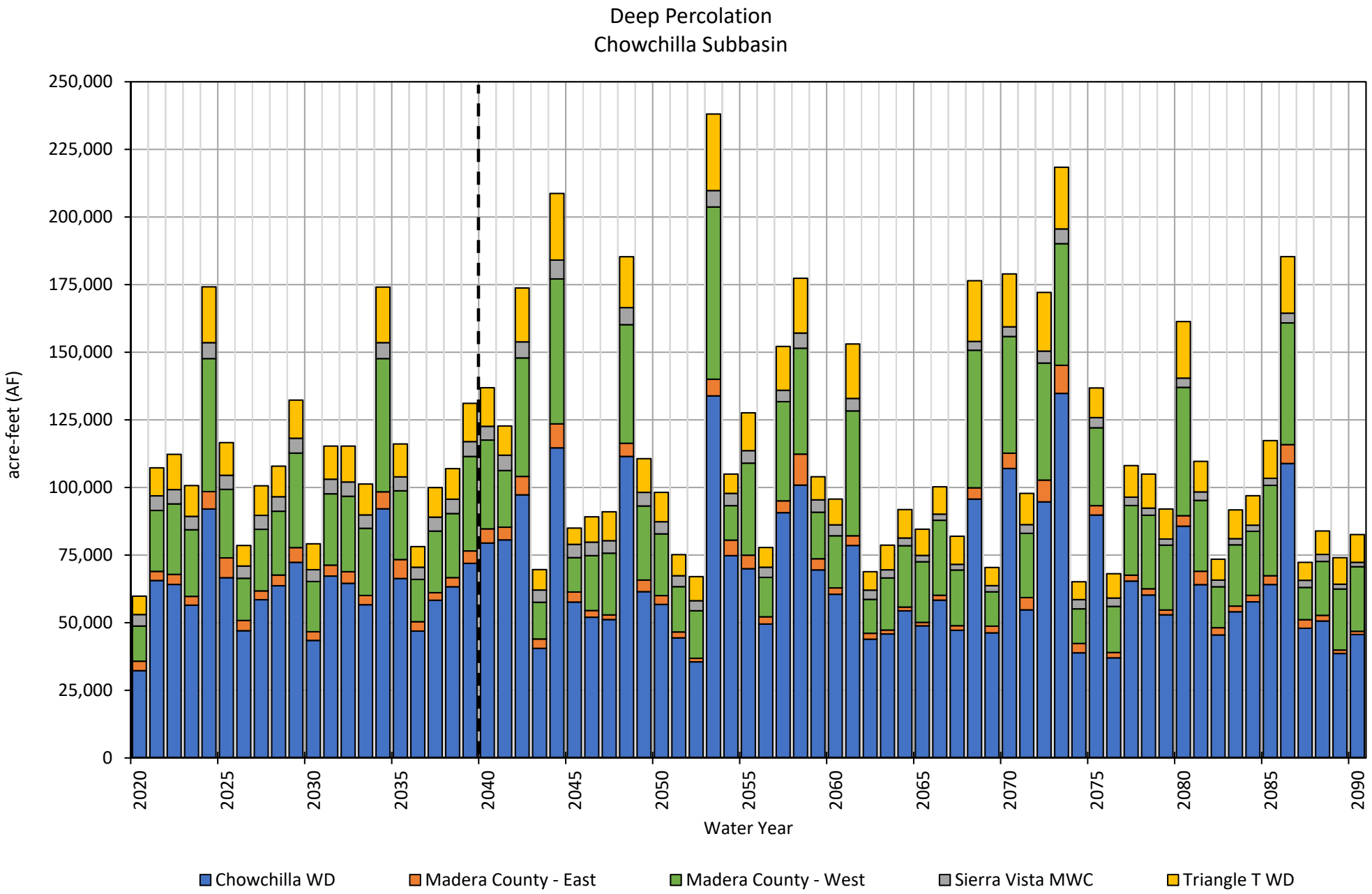
MCSim Projected with Climate Change Water Budget by GSA
Chowchilla Subbasin

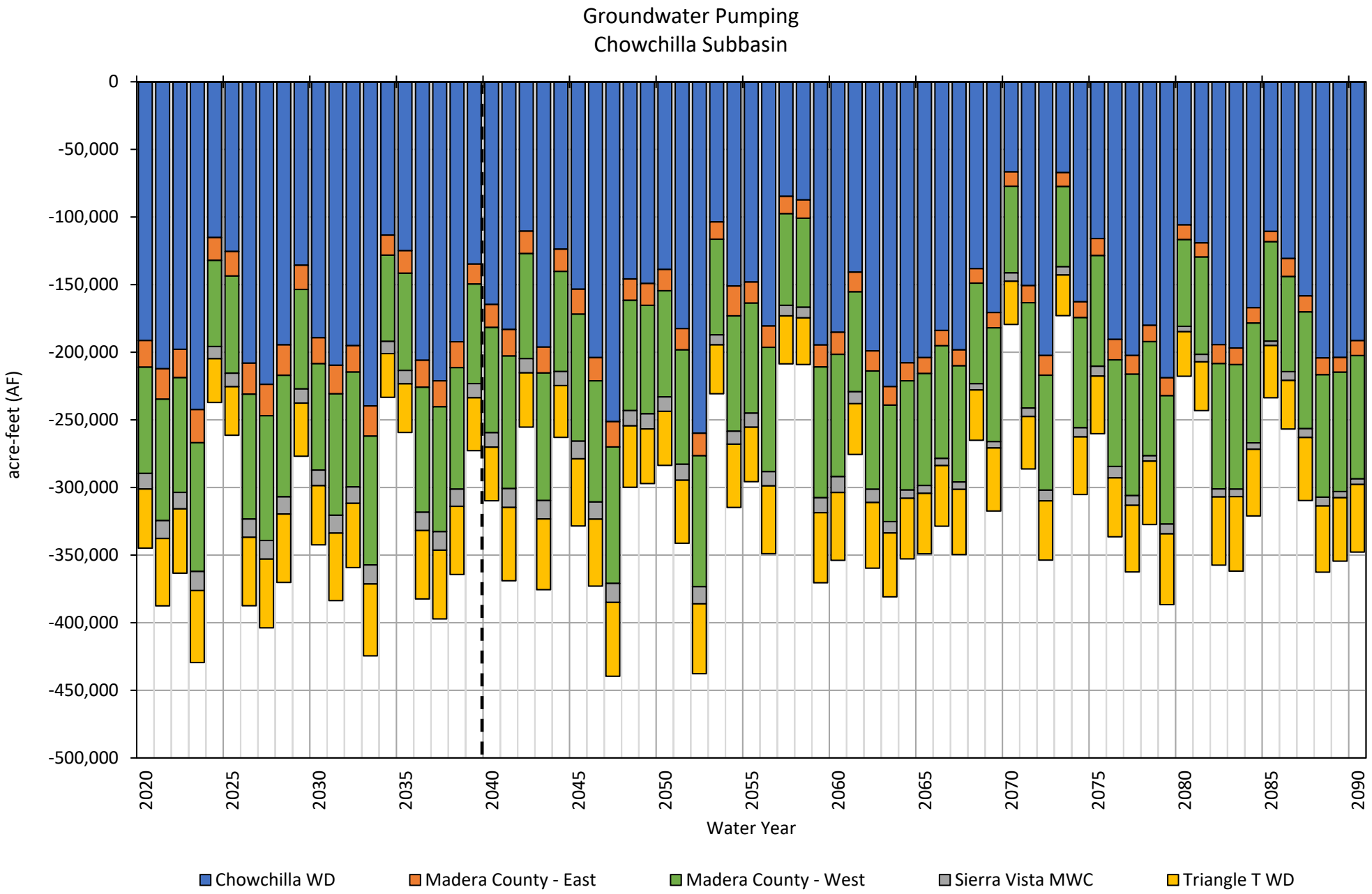
	Average Annual Water Budget (AF/m)									
	Chowchilla Water District		Madera County - East		Madera County - West		Sierra Vista Mutual Water Company		Triangle T Water District	
	Implementation Period, 2020-2039	Sustainability Period, 2040-2090	Implementation Period, 2020-2039	Sustainability Period, 2040-2090	Implementation Period, 2020-2039	Sustainability Period, 2040-2090	Implementation Period, 2020-2039	Sustainability Period, 2040-2090	Implementation Period, 2020-2039	Sustainability Period, 2040-2090
Total Stream Seepage	25,655	34,282	1,782	2,296	24,766	29,584	514	624	1,354	2,193
In-Channel Seepage	*2,752*	*4,168*	*1,696*	*2,201*	*24,296*	*28,690*	*43*	*95*	*424*	*647*
Conveyance Losses	*22,903*	*30,114*	*86*	*95*	*470*	*894*	*471*	*530*	*930*	*1,547*
Deep Percolation	62,476	67,649	4,330	3,777	26,348	27,521	5,151	3,791	12,070	12,715
General Head Boundary Conditions	0	0	0	0	0	0	0	0	0	0
Small Watershed Baseflow	0	0	0	0	0	0	0	0	0	0
Small Watershed Percolation	0	0	0	0	0	0	0	0	0	0
Groundwater Pumping	-183,637	-164,836	-19,818	-14,025	-83,193	-82,805	-12,051	-8,159	-45,364	-44,310
Total Subsurface Inflow	46,264	43,266	6,931	6,813	20,275	19,521	2,718	2,553	26,958	27,048
Average Annual Change in Storage	-49,242	-19,638	-6,775	-1,139	-11,804	-6,179	-3,668	-1,191	-4,983	-2,353
Total Cumulative Change in Storage	-984,846	-1,001,563	-135,507	-58,071	-236,070	-315,140	-73,355	-60,738	-99,652	-119,988



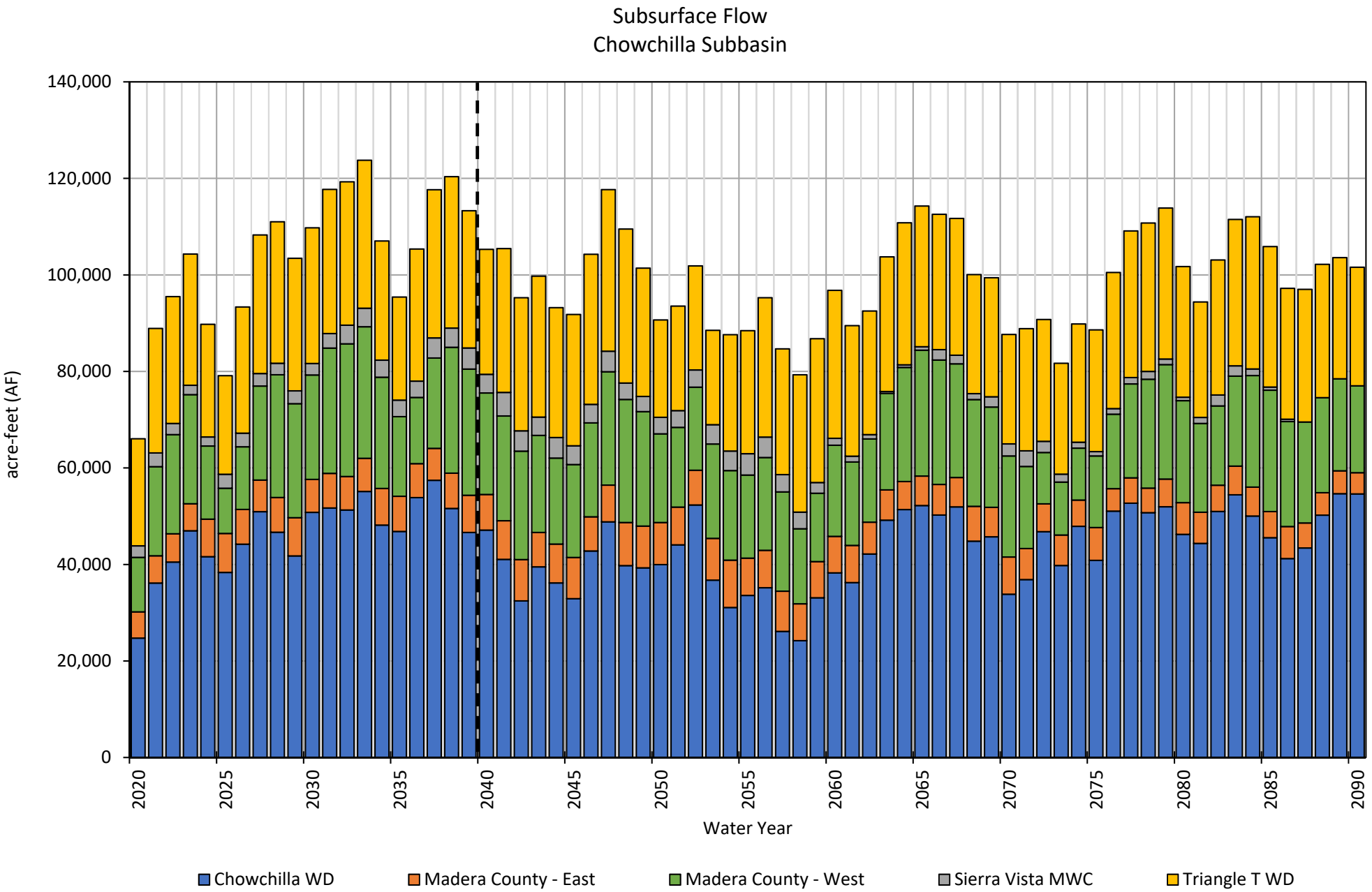
MCSim - Projected with Climate Change, Chowchilla Subbasin by GSA

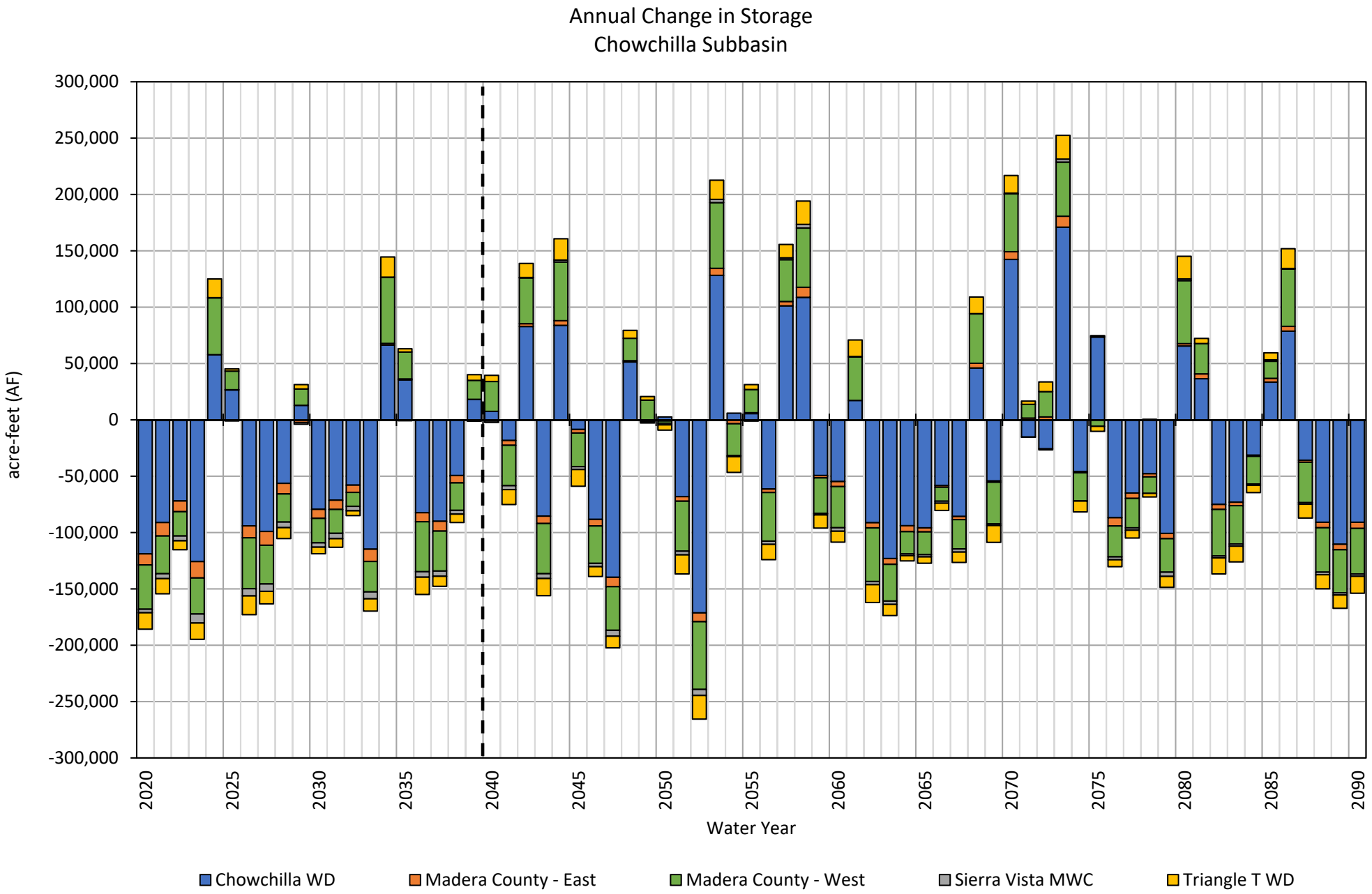
Appendix D.5.c.


Deep Percolation
Chowchilla Subbasin
250,000
225,000
200,000
175,000
150,000
125,000
100,000
75,000
50,000
25,000
0
acre-feet (AF)
2020
2025
2030
2035
2040
2045
2050
2055
2060
2065
2070
2075
2080
2085
2090
Water Year
Chowchilla WD
Madera County - East
Madera County - West
Sierra Vista MWC
Triangle T WD



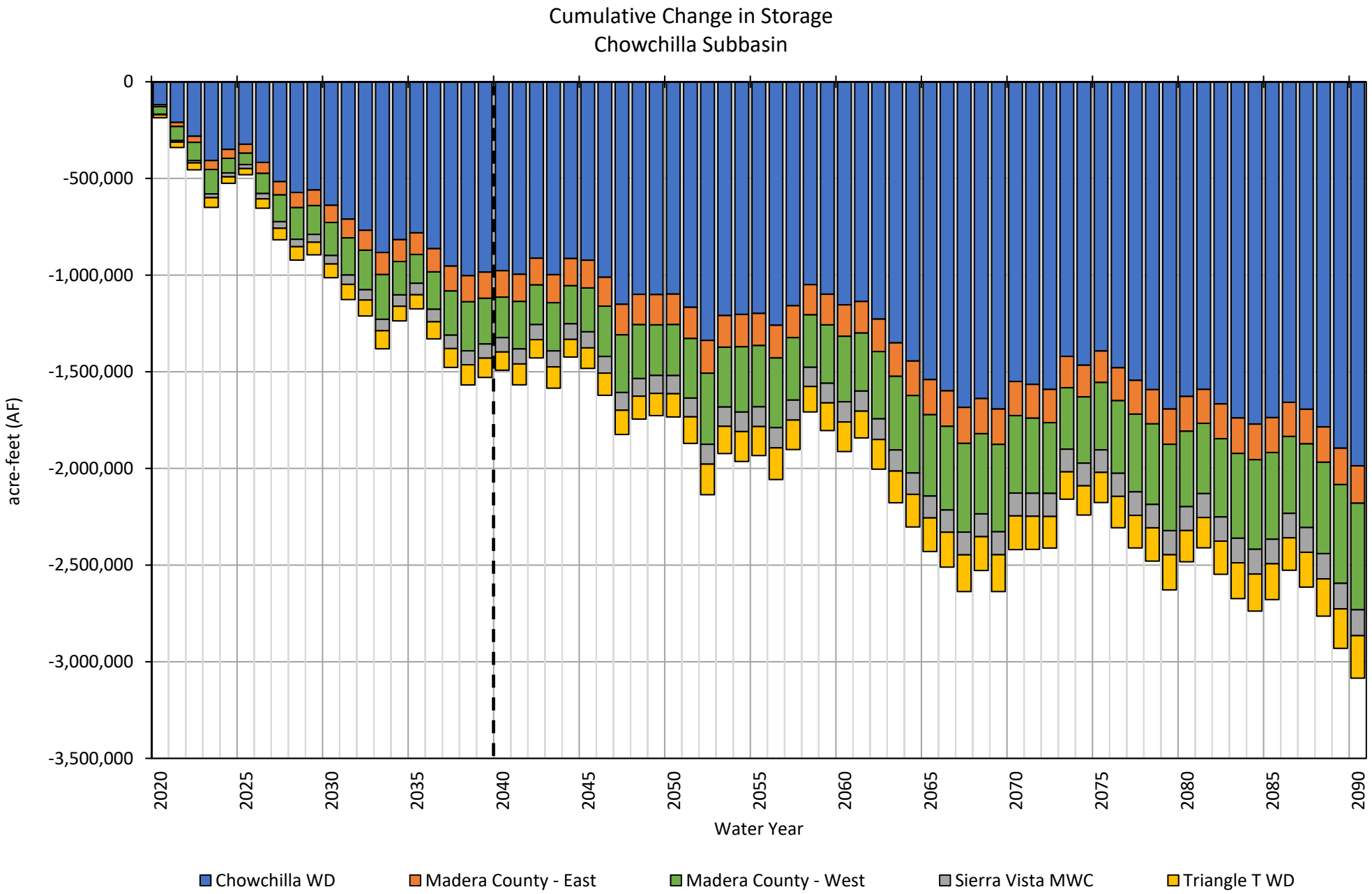
MCSim - Projected with Climate Change, Chowchilla Subbasin by GSA


Subsurface Flow
Chowchilla Subbasin
140,000
120,000
100,000
80,000
60,000
40,000
20,000
0
acre-feet (AF)
2020
2025
2030
2035
2040
2045
2050
2055
2060
2065
2070
2075
2080
2085
2090
Water Year
Chowchilla WD
Madera County - East
Madera County - West
Sierra Vista MWC
Triangle T WD



MCSim - Projected with Climate Change, Chowchilla Subbasin by GSA

Appendix D.5.c.

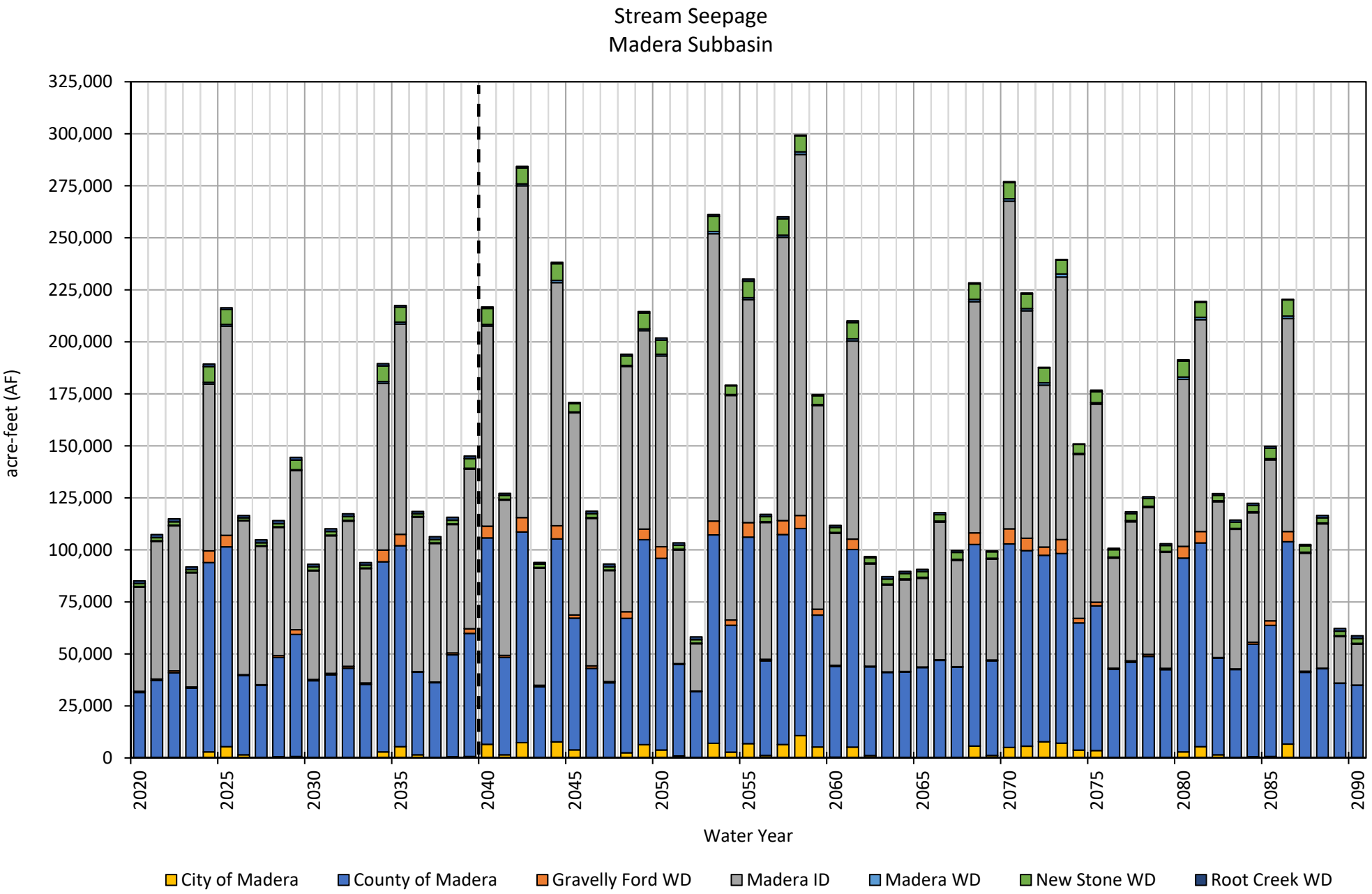

Cumulative Change in Storage
Chowchilla Subbasin
0
-500,000
-1,000,000
-1,500,000
-2,000,000
-2,500,000
-3,000,000
-3,500,000
acre-feet (AF)
2020
2025
2030
2035
2040
2045
2050
2055
2060
2065
2070
2075
2080
2085
2090
Water Year
Chowchilla WD
Madera County - East
Madera County - West
Sierra Vista MWC
Triangle T WD

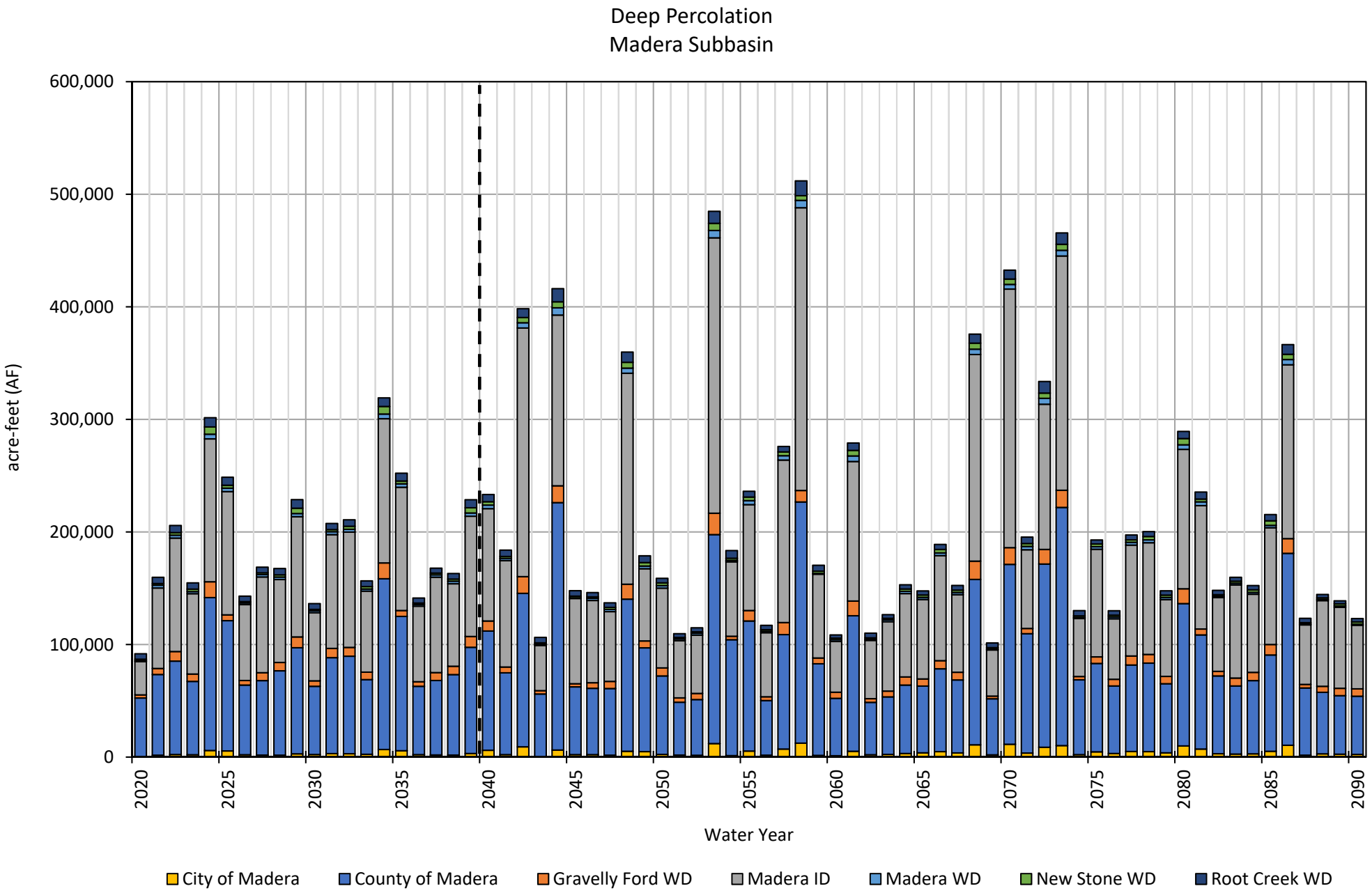
MCSim Projected with Climate Change Water Budget by GSA
Madera Subbasin

	Average Annual Water Budget (AF/m)							
	City of Madera		Madera County		Gravelly Ford Water District		Madera Irrigation District	
	Implementation Period, 2020-2039	Sustainability Period, 2040-2090	Implementation Period, 2020-2039	Sustainability Period, 2040-2090	Implementation Period, 2020-2039	Sustainability Period, 2040-2090	Implementation Period, 2020-2039	Sustainability Period, 2040-2090
Total Stream Seepage	1,131	2,856	51,841	64,595	1,768	2,660	70,192	81,797
In-Channel Seepage	*1,131*	*2,856*	*50,746*	*63,488*	*209*	*297*	*18,739*	*23,077*
Conveyance Losses	*0*	*0*	*1,094*	*1,107*	*1,559*	*2,363*	*51,453*	*58,719*
Deep Percolation	2,935	4,608	84,157	92,051	7,268	7,773	87,411	99,192
General Head Boundary Conditions	0	0	0	0	0	0	0	0
Small Watershed Baseflow	0	0	495	664	0	0	0	0
Small Watershed Percolation	0	0	0	200	0	0	0	3
Groundwater Pumping	-9,013	-12,518	-262,714	-253,270	-19,856	-19,339	-254,430	-245,385
Total Subsurface Inflow	883	3,140	65,496	71,307	8,293	7,575	31,972	36,030
Average Annual Change in Storage	-4,064	-1,914	-60,726	-24,452	-2,527	-1,332	-64,855	-28,363
Total Cumulative Change in Storage	-81,285	-97,624	-1,214,524	-1,247,065	-50,545	-67,938	-1,297,096	-1,446,536

MCSim Projected with Climate Change Water Budget by GSA
Madera Subbasin

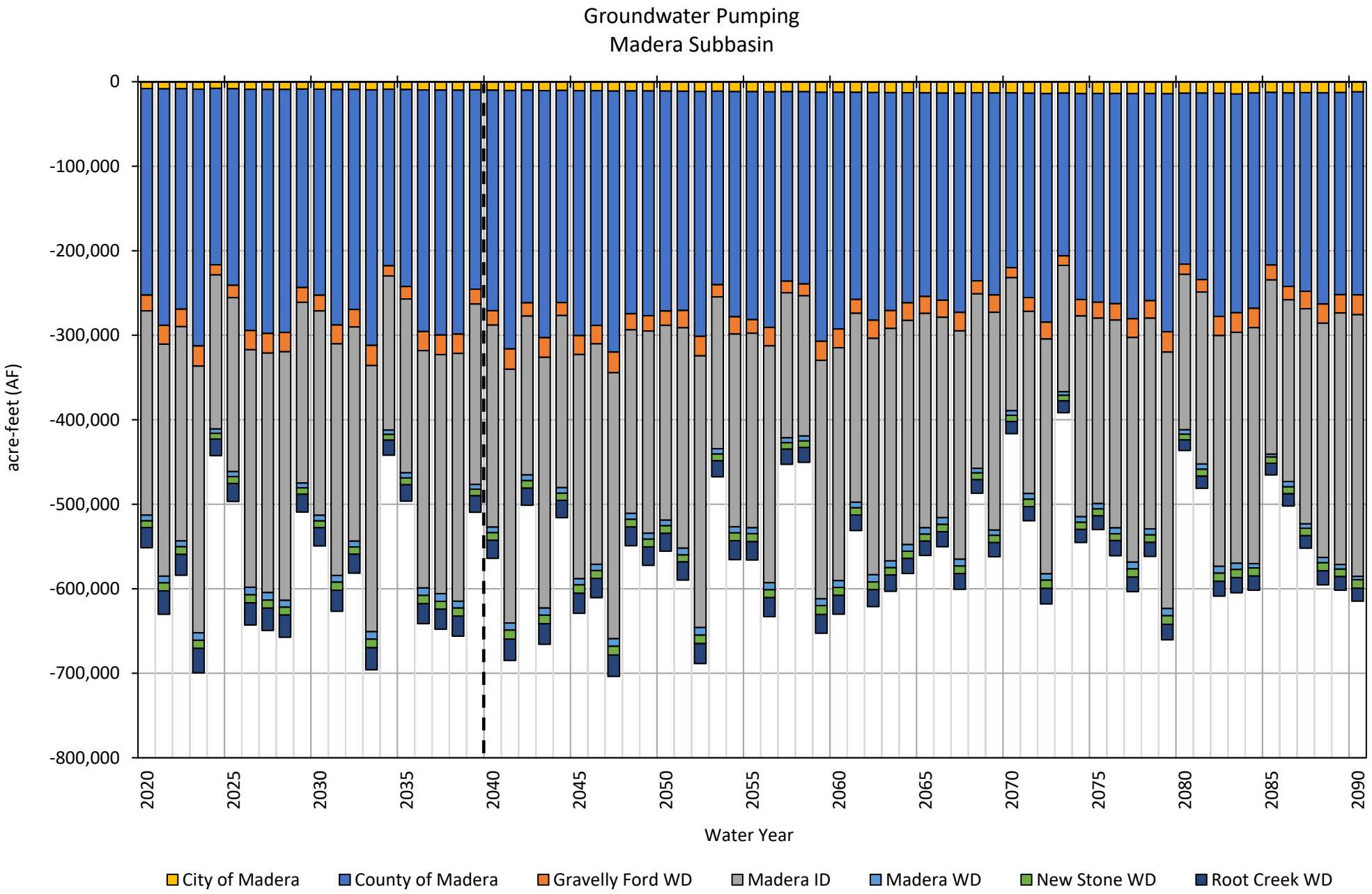
	Average Annual Water Budget (AF/m)					
	Madera Water District		New Stone Water District		Root Creek Water District	
	Implementation Period, 2020-2039	Sustainability Period, 2040-2090	Implementation Period, 2020-2039	Sustainability Period, 2040-2090	Implementation Period, 2020-2039	Sustainability Period, 2040-2090
Total Stream Seepage	419	670	2,996	4,598	1,254	795
In-Channel Seepage	*419*	*670*	*2,996*	*4,598*	*408*	*-51*
Conveyance Losses	*0*	*0*	*0*	*0*	*846*	*846*
Deep Percolation	2,414	2,611	2,605	2,721	5,876	5,482
General Head Boundary Conditions	0	0	0	0	0	0
Small Watershed Baseflow	0	0	0	0	0	0
Small Watershed Percolation	0	0	0	0	0	0
Groundwater Pumping	-7,291	-6,873	-8,724	-8,887	-23,439	-18,746
Total Subsurface Inflow	2,688	3,103	1,734	1,090	11,191	9,113
Average Annual Change in Storage	-1,770	-489	-1,388	-479	-5,117	-3,356
Total Cumulative Change in Storage	-35,393	-24,916	-27,770	-24,442	-102,345	-171,181

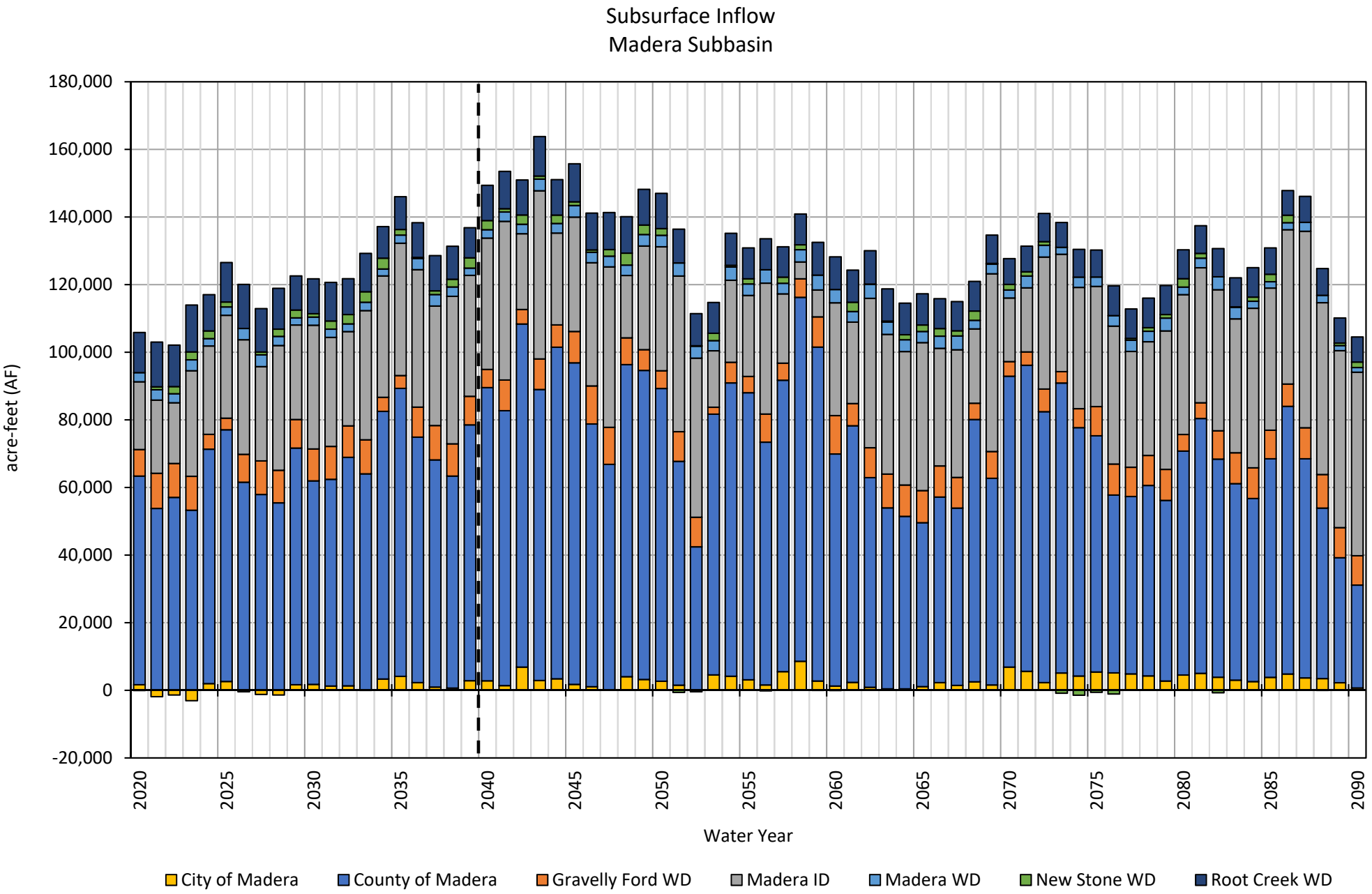

Stream Seepage
Madera Subbasin
acre-feet (AF)
325,000
300,000
275,000
250,000
225,000
200,000
175,000
150,000
125,000
100,000
75,000
50,000
25,000
0
2020
2025
2030
2035
2040
2045
2050
2055
2060
2065
2070
2075
2080
2085
2090
Water Year
City of Madera
County of Madera
Gravelly Ford WD
Madera ID
Madera WD
New Stone WD
Root Creek WD

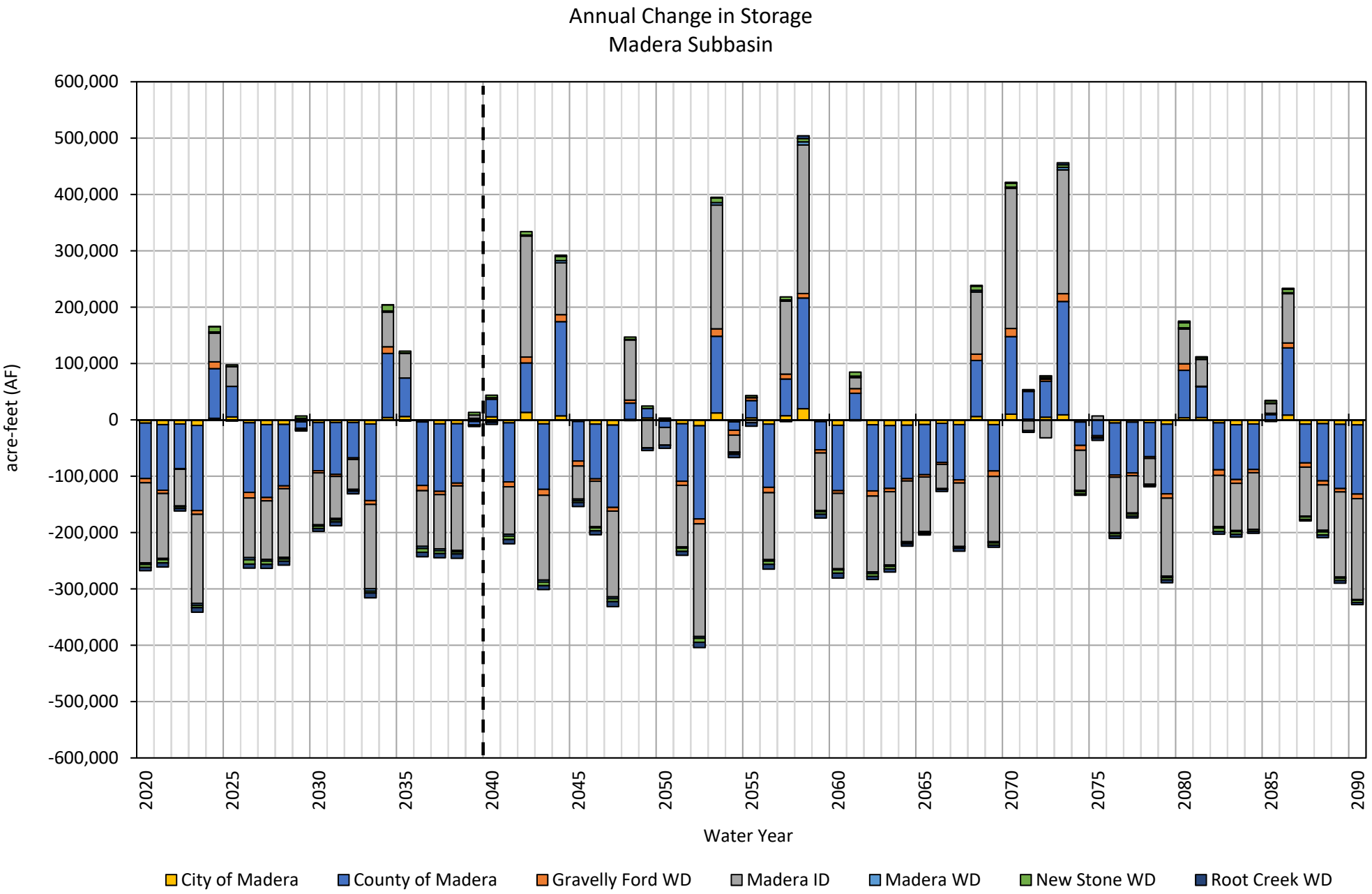


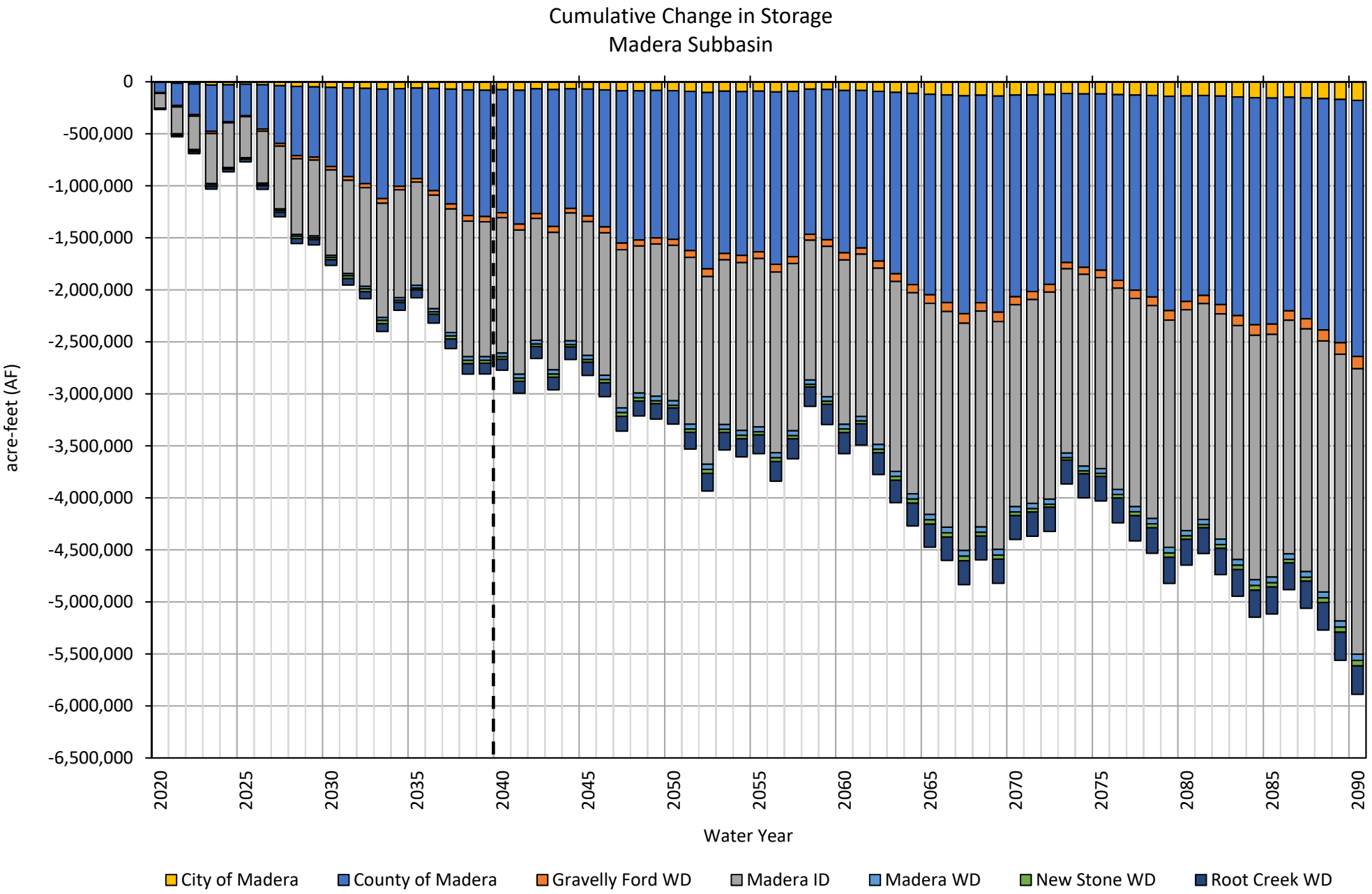
MCSim - Projected with Climate Change, Madera Subbasin by GSA

Appendix D.5.d.


Groundwater Pumping
Madera Subbasin
0
-100,000
-200,000
-300,000
-400,000
-500,000
-600,000
-700,000
-800,000
acre-feet (AF)
2020
2025
2030
2035
2040
2045
2050
2055
2060
2065
2070
2075
2080
2085
2090
Water Year
City of Madera
County of Madera
Gravelly Ford WD
Madera ID
Madera WD
New Stone WD
Root Creek WD


Subsurface Inflow
Madera Subbasin
180,000
160,000
140,000
120,000
100,000
80,000
60,000
40,000
20,000
0
-20,000
acre-feet (AF)
2020
2025
2030
2035
2040
2045
2050
2055
2060
2065
2070
2075
2080
2085
2090
Water Year
City of Madera
County of Madera
Gravelly Ford WD
Madera ID
Madera WD
New Stone WD
Root Creek WD


Annual Change in Storage
Madera Subbasin
600,000
500,000
400,000
300,000
200,000
100,000
0
-100,000
-200,000
-300,000
-400,000
-500,000
-600,000
acre-feet (AF)
2020
2025
2030
2035
2040
2045
2050
2055
2060
2065
2070
2075
2080
2085
2090
Water Year
City of Madera
County of Madera
Gravelly Ford WD
Madera ID
Madera WD
New Stone WD
Root Creek WD



MCSim - Projected with Climate Change, Madera Subbasin by GSA

Appendix D.5.d.

APPENDIX E

Groundwater Elevation Hydrographs for
Projected Future Scenarios

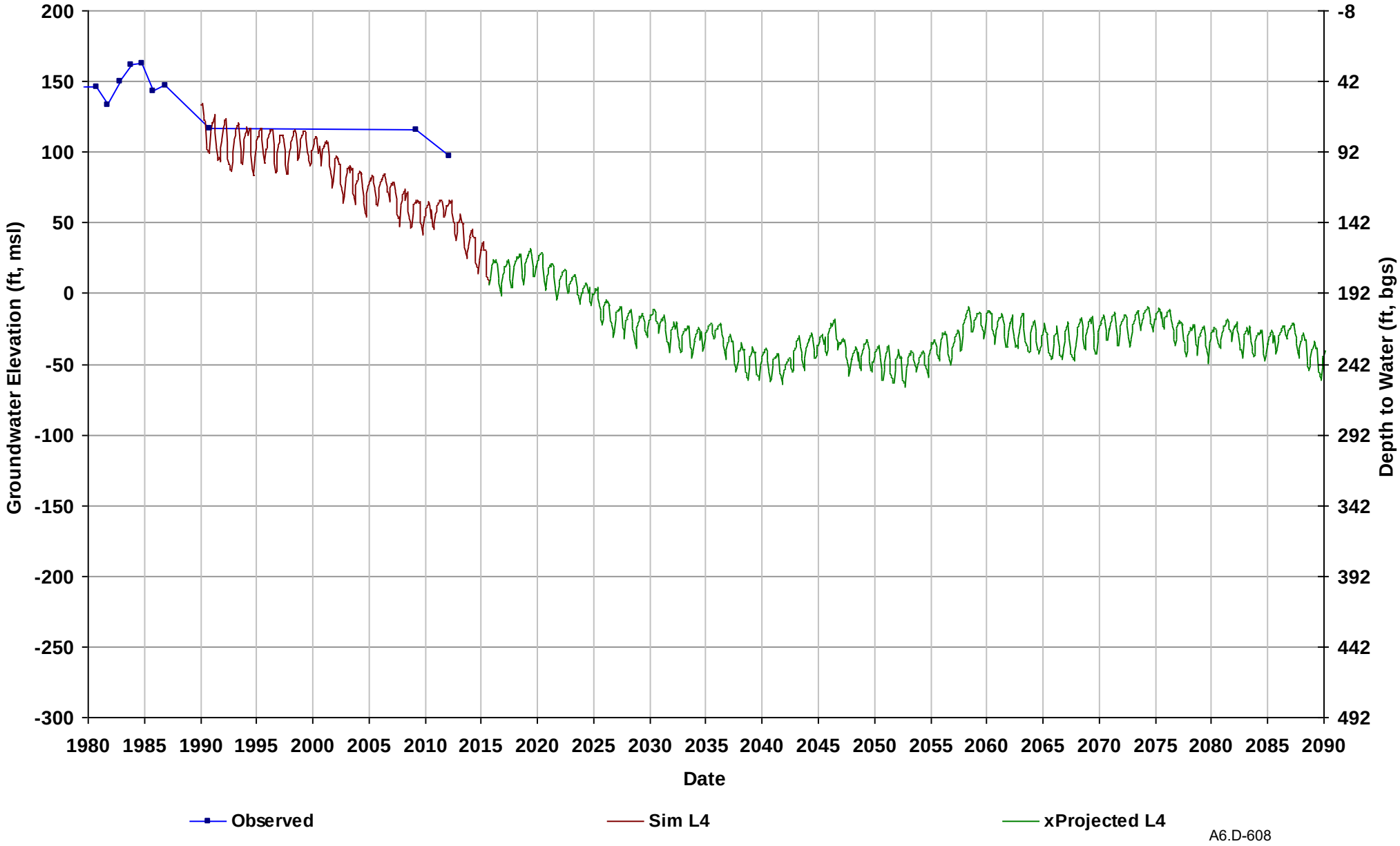
Appendix E

Groundwater Elevation Hydrographs for Projected Future Scenarios

1. Projected with Projects
2. Projected with Projects with Climate Change
3. Projected
4. Projected with Climate Change

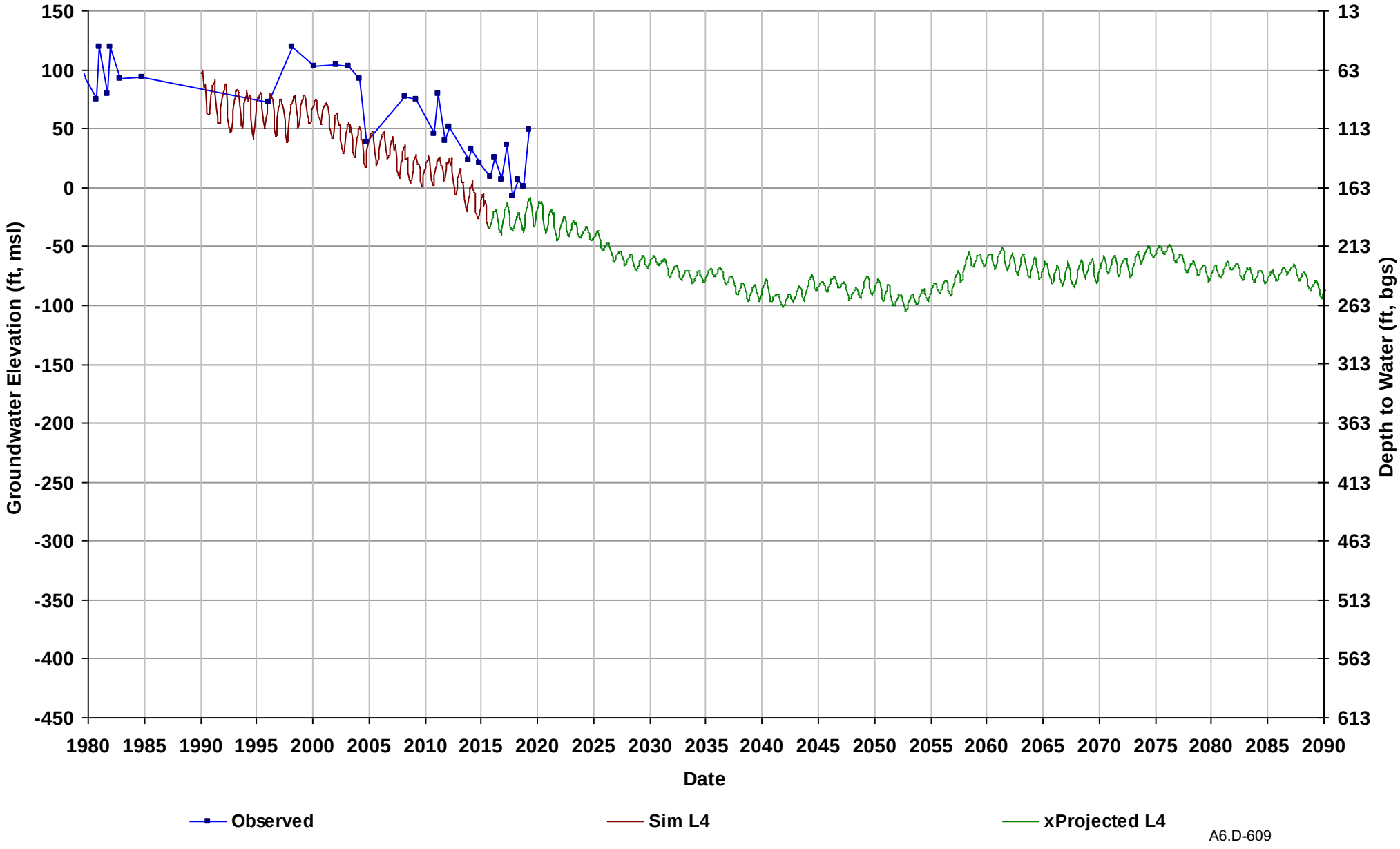
Well Name: 08S14E13L002M
Depth Zone: Lower; Within CC
Subbasin: Merced
GSE (ft, msl): 192

Total Depth (ft): 530
Perf Top (ft): 193
Perf Bottom (ft): 200
Top Model Layer: 4
Bottom Model Layer: 4



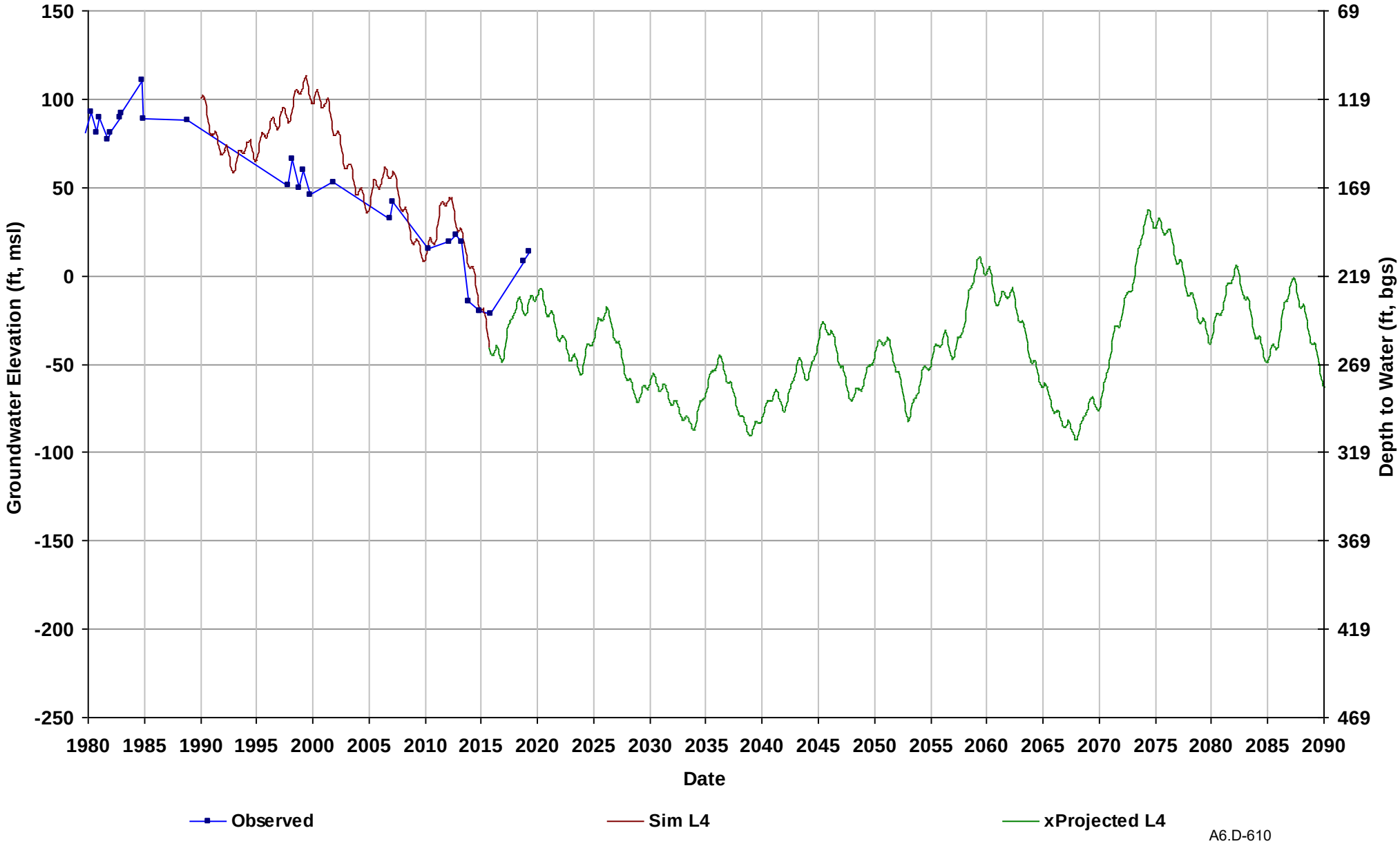
Well Name: 08S14E20J001M
Depth Zone: Composite; Within CC
Subbasin: Merced
GSE (ft, msl): 163

Total Depth (ft): 435
Perf Top (ft): 150
Perf Bottom (ft): 430
Top Model Layer: 4
Bottom Model Layer: 4



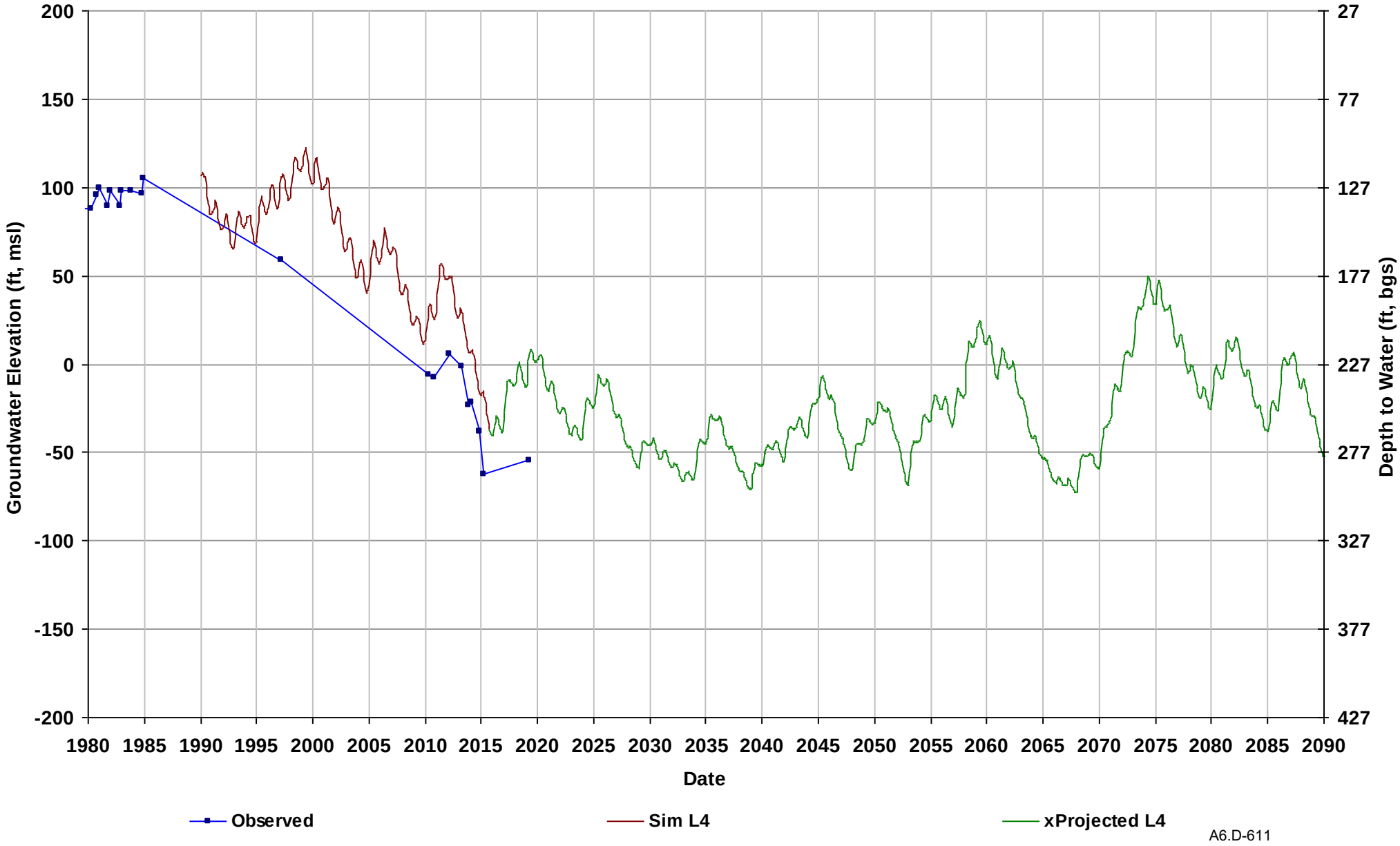
Well Name: 08S15E34L001M
Depth Zone: Composite or Lower; Wi
Subbasin: Merced
GSE (ft, msl): 219

Total Depth (ft): 247
Perf Top (ft):
Perf Bottom (ft):
Top Model Layer: 4
Bottom Model Layer: 4



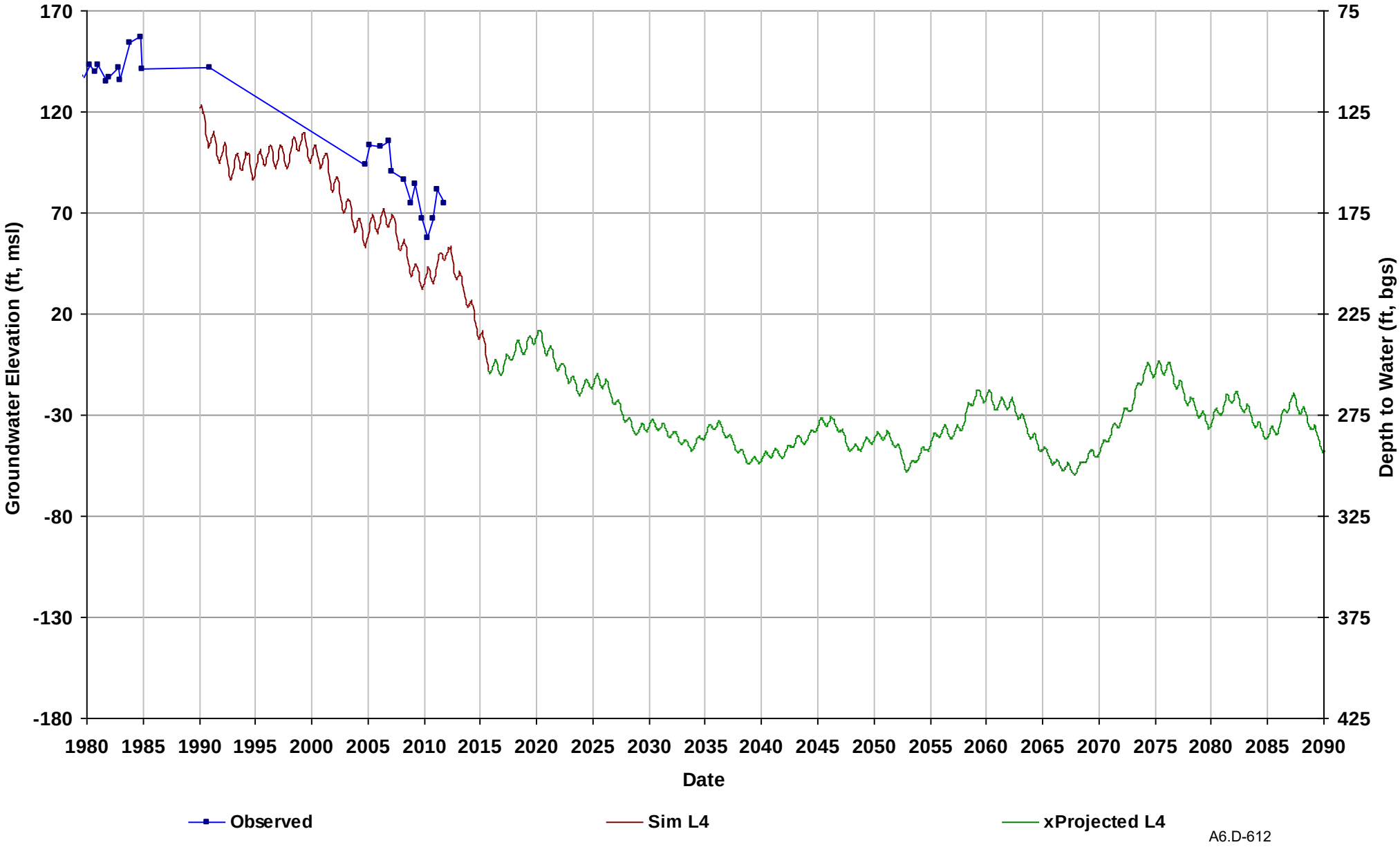
Well Name: 08S15E36G001M
Depth Zone: Lower; Within CC
Subbasin: Merced
GSE (ft, msl): 227

Total Depth (ft): 509
Perf Top (ft): 176
Perf Bottom (ft): 376
Top Model Layer: 4
Bottom Model Layer: 4



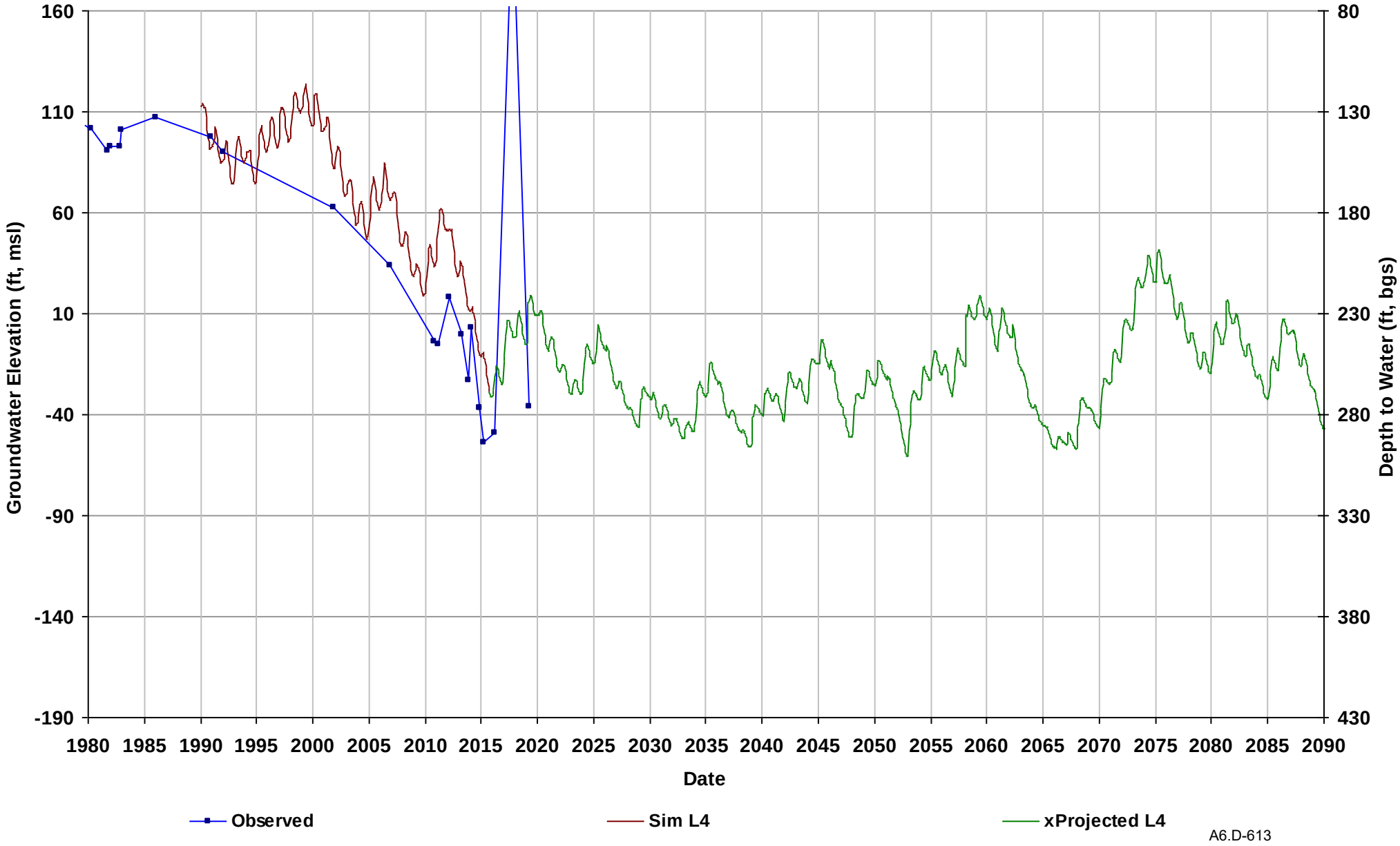
Well Name: 08S16E19D001M
Depth Zone: Unknown; Outside CC
Subbasin: Merced
GSE (ft, msl): 245

Total Depth (ft):
Perf Top (ft):
Perf Bottom (ft):
Top Model Layer: 4
Bottom Model Layer: 4



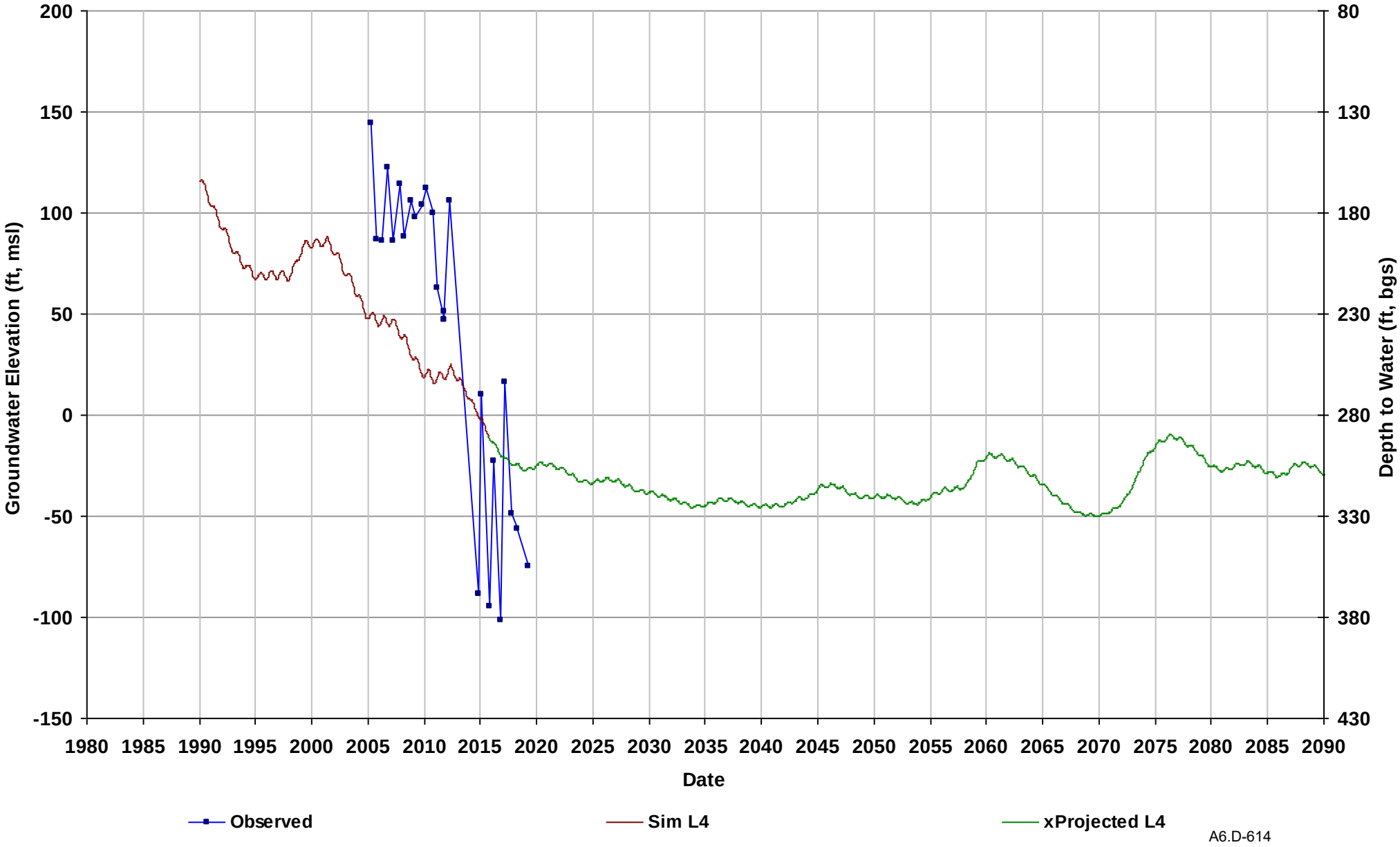
Well Name: 08S16E31C001M
Depth Zone: Composite or Lower; O
Subbasin: Merced
GSE (ft, msl): 240

Total Depth (ft): 412
Perf Top (ft):
Perf Bottom (ft):
Top Model Layer: 4
Bottom Model Layer: 4



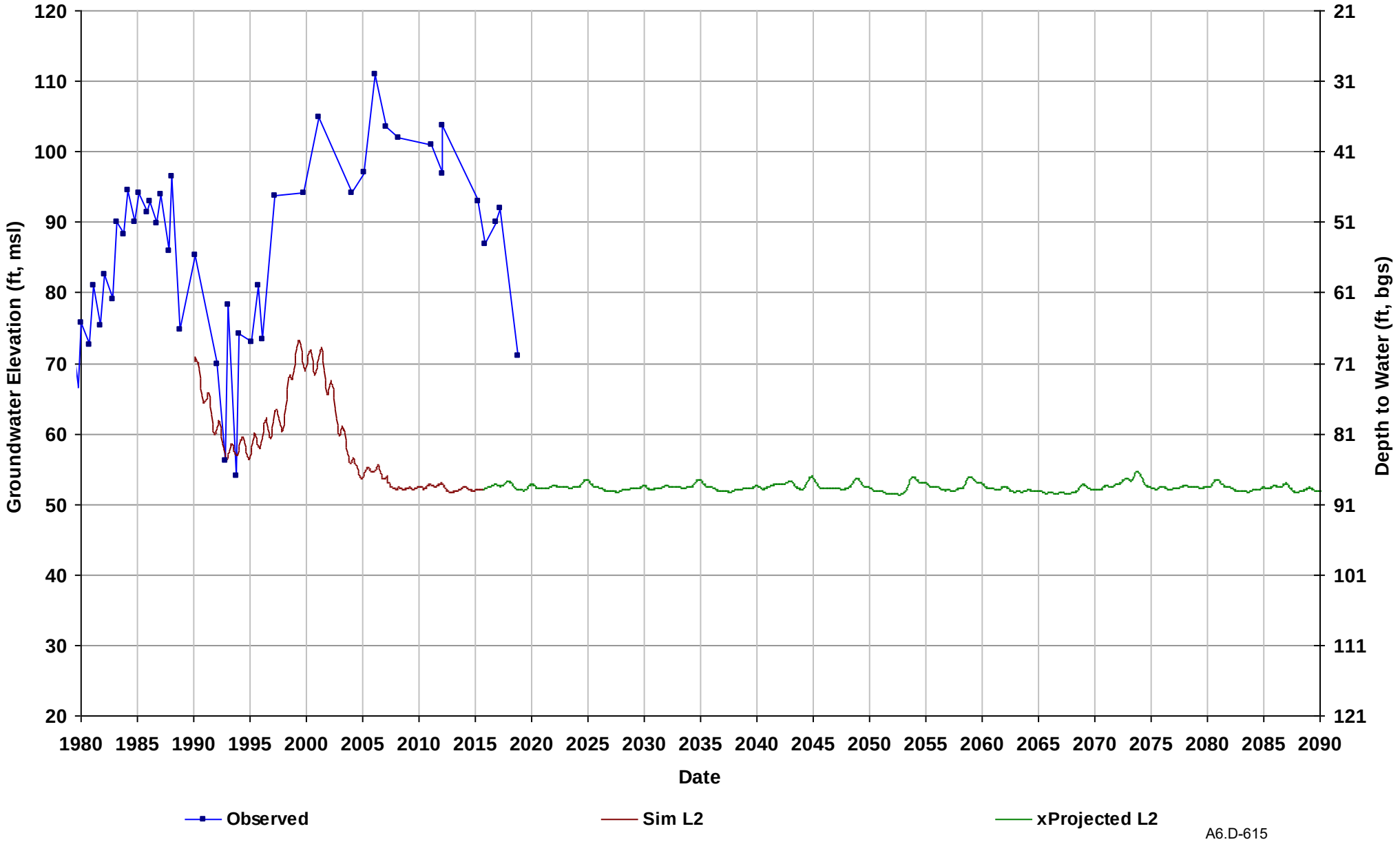
Well Name: 08S16E34J001M
Depth Zone: Lower; Outside CC
Subbasin: Merced
GSE (ft, msl): 280

Total Depth (ft): 639
Perf Top (ft): 180
Perf Bottom (ft): 639
Top Model Layer: 4
Bottom Model Layer: 4



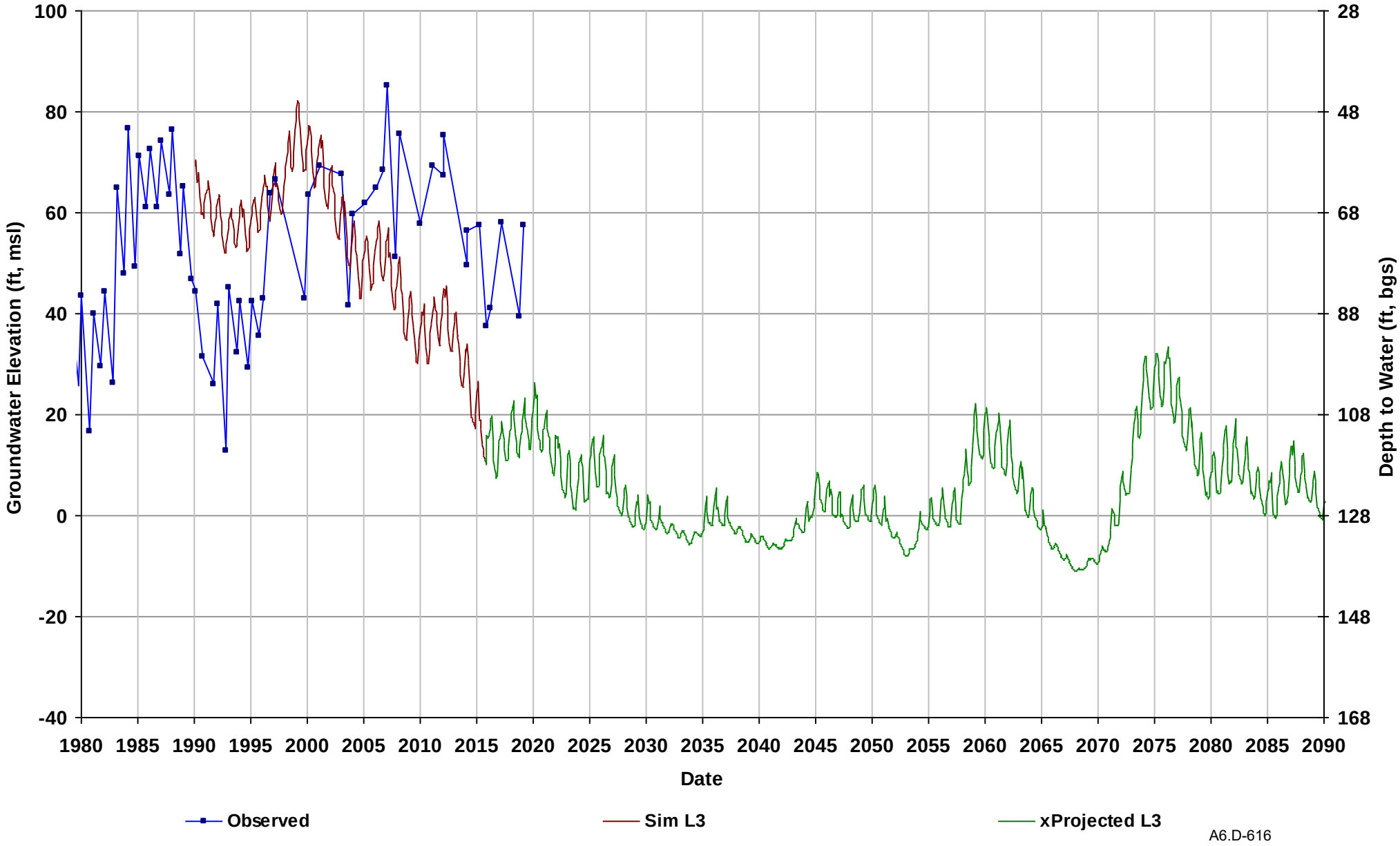
Well Name: 09S13E12R001M
Depth Zone: Unknown; Within CC
Subbasin: Merced
GSE (ft, msl): 141

Total Depth (ft):
Perf Top (ft):
Perf Bottom (ft):
Top Model Layer: 2
Bottom Model Layer: 2



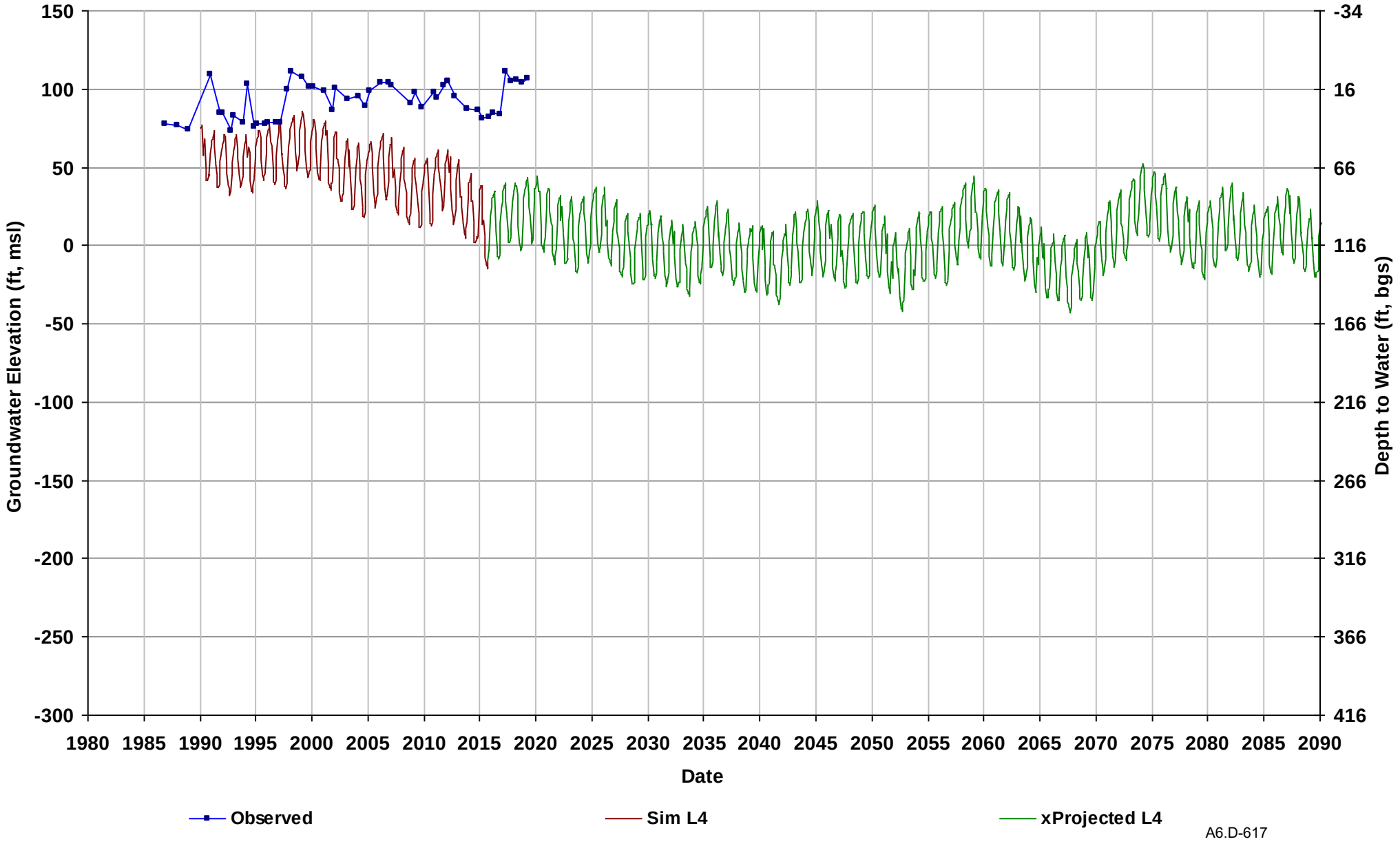
Well Name: 09S13E22H002M
Depth Zone: Unknown; Within CC
Subbasin: Merced
GSE (ft, msl): 127

Total Depth (ft):
Perf Top (ft):
Perf Bottom (ft):
Top Model Layer: 3
Bottom Model Layer: 3



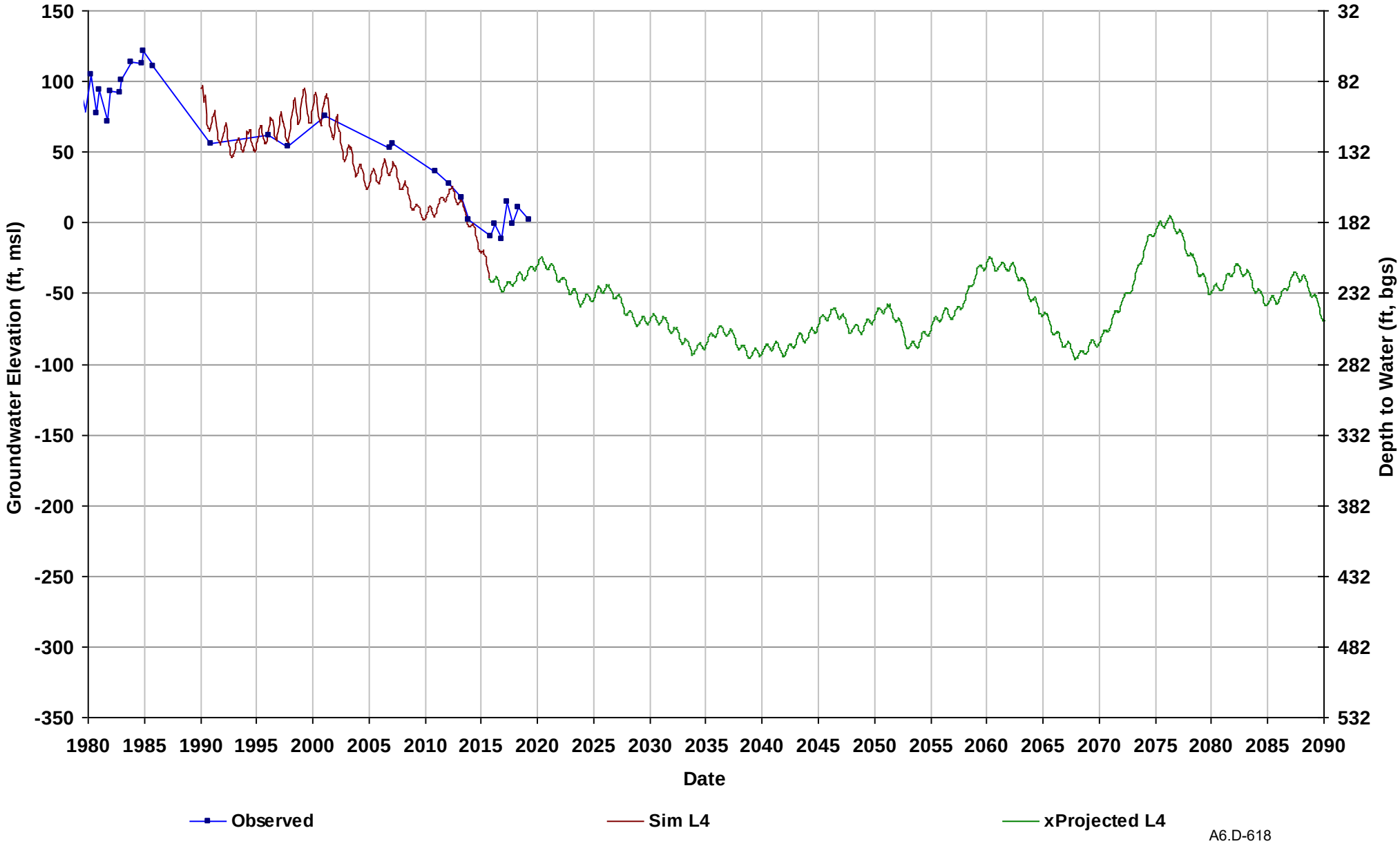
Well Name: 09S13E32A001M
Depth Zone: Composite; Within CC
Subbasin: Merced
GSE (ft, msl): 116

Total Depth (ft): 616
Perf Top (ft): 150
Perf Bottom (ft): 509
Top Model Layer: 4
Bottom Model Layer: 4



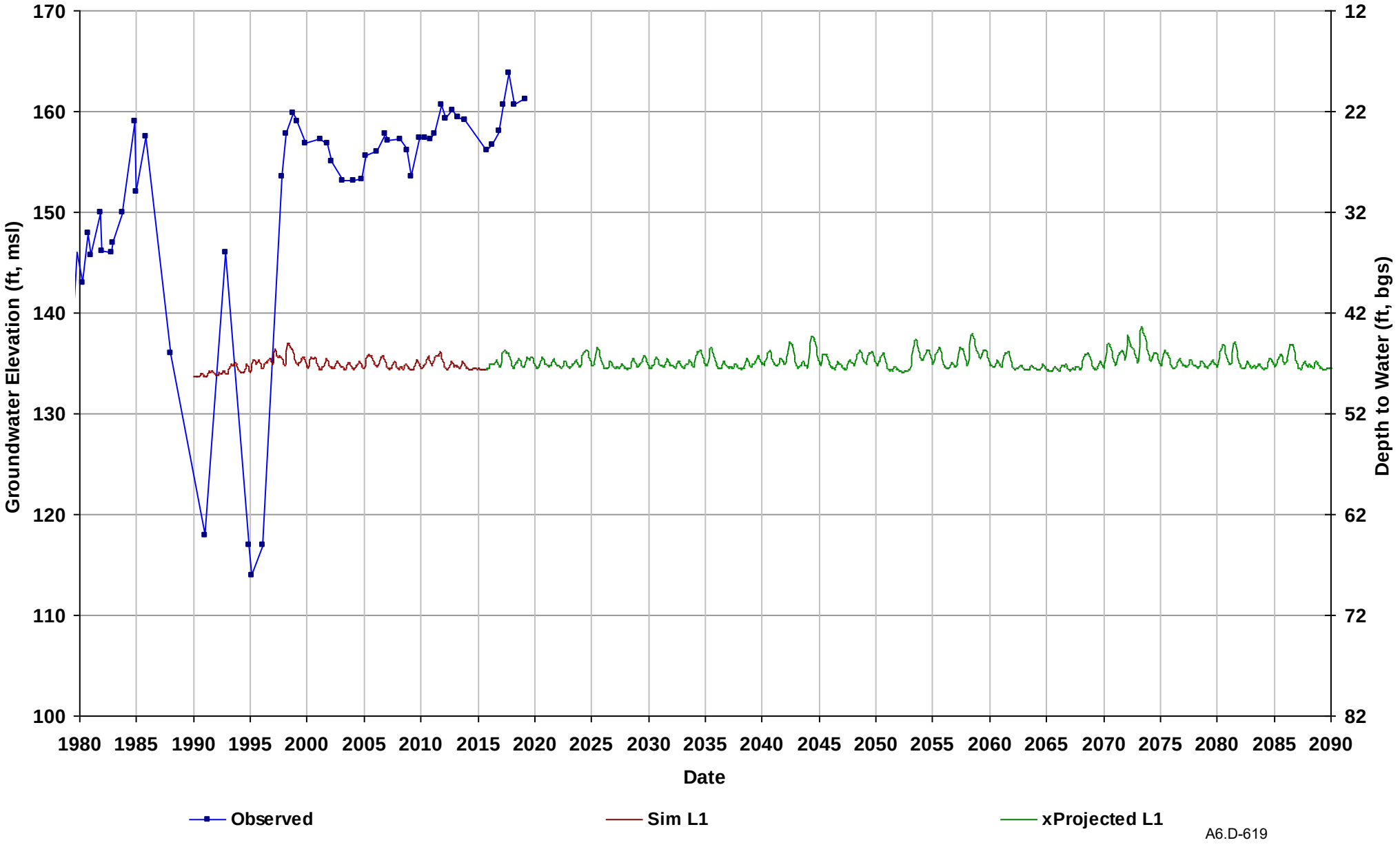
Well Name: 09S14E01B001M
Depth Zone: Lower; Within CC
Subbasin: Merced
GSE (ft, msl): 182

Total Depth (ft): 345
Perf Top (ft): 225
Perf Bottom (ft): 345
Top Model Layer: 4
Bottom Model Layer: 4



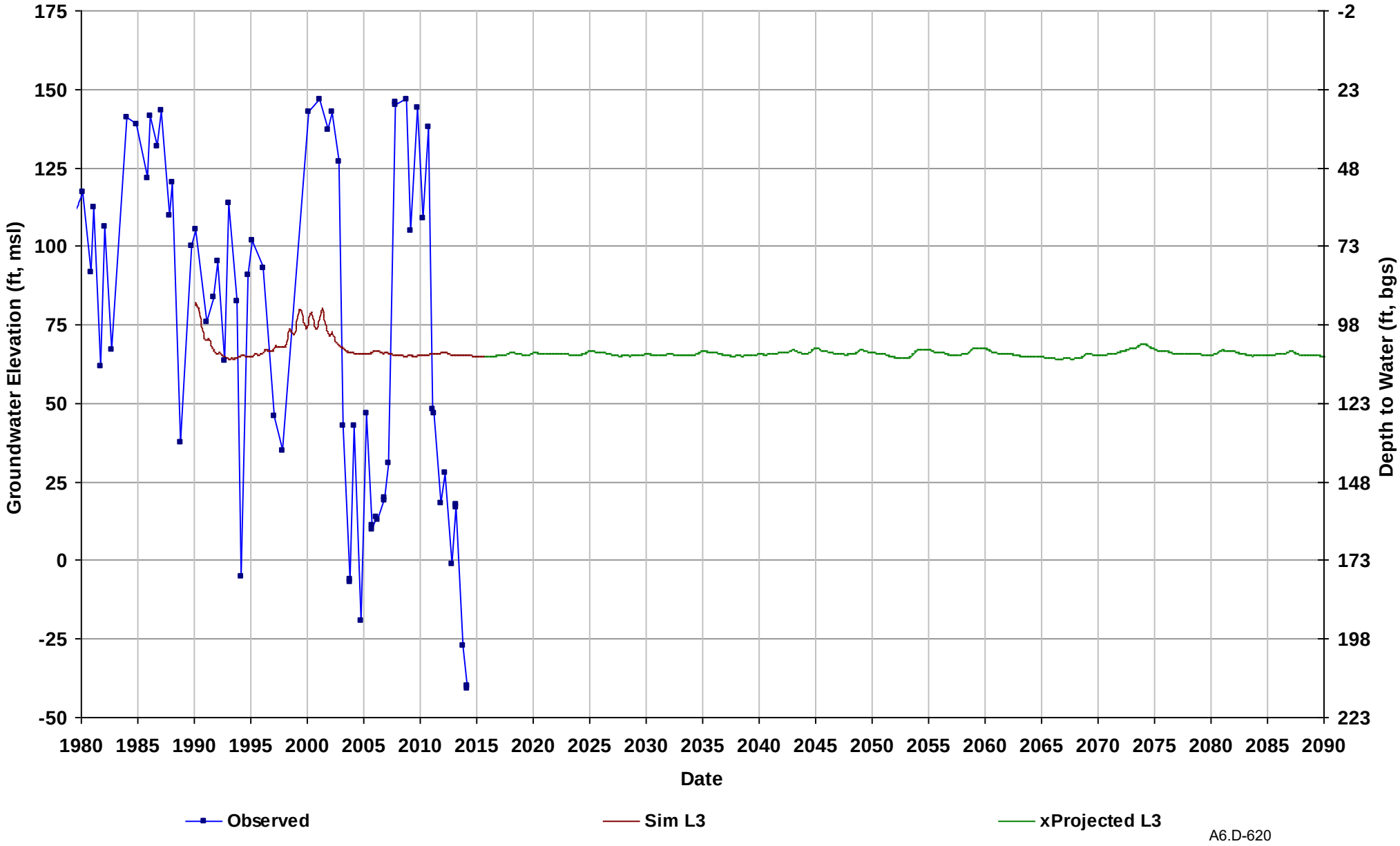
Well Name: 09S14E01B003M
Depth Zone: Upper; Within CC
Subbasin: Merced
GSE (ft, msl): 182

Total Depth (ft): 68
Perf Top (ft):
Perf Bottom (ft):
Top Model Layer: 1
Bottom Model Layer: 1



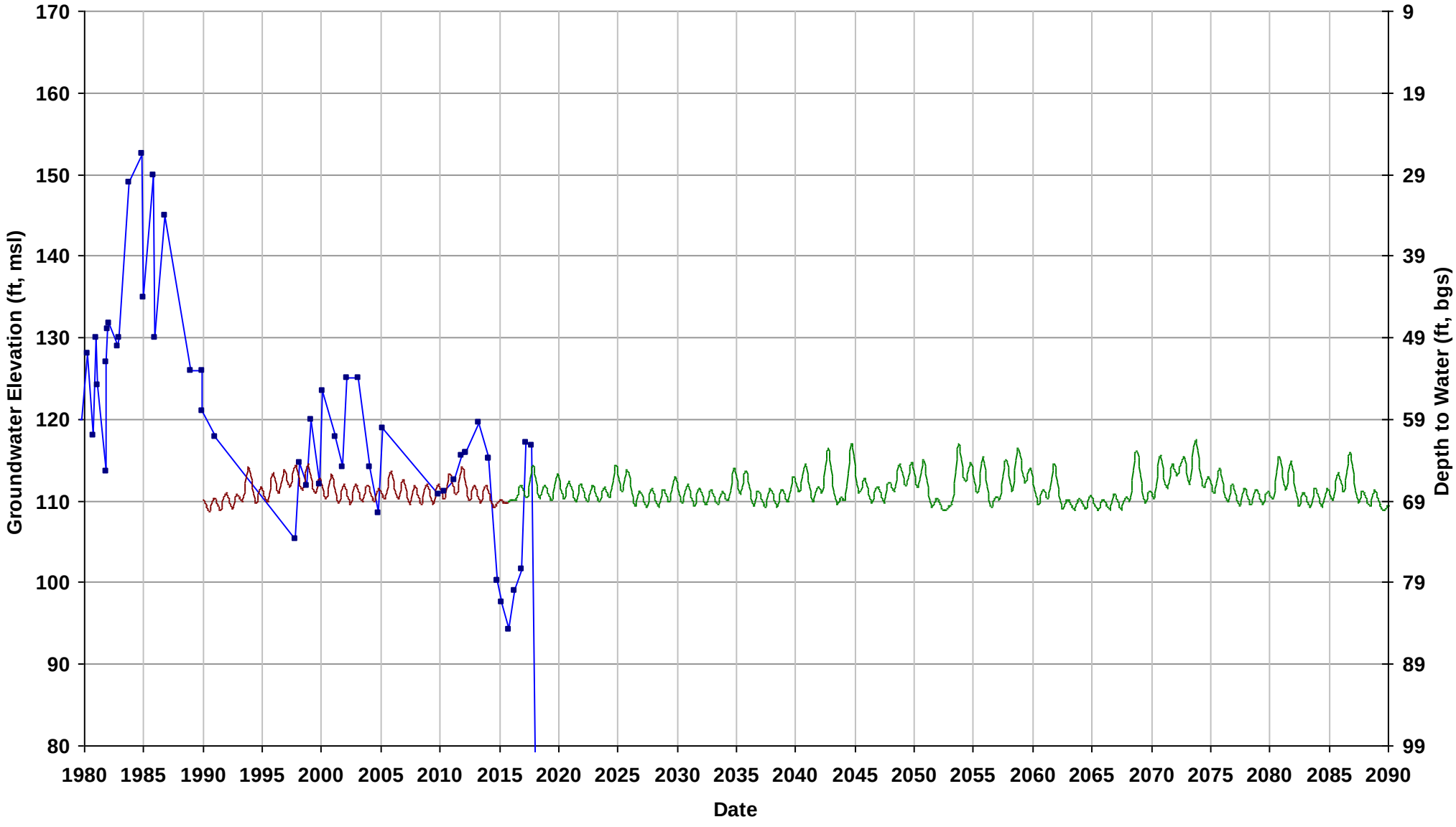
Well Name: 09S14E11F001M
Depth Zone: Unknown; Within CC
Subbasin: Merced
GSE (ft, msl): 173

Total Depth (ft):
Perf Top (ft):
Perf Bottom (ft):
Top Model Layer: 3
Bottom Model Layer: 3



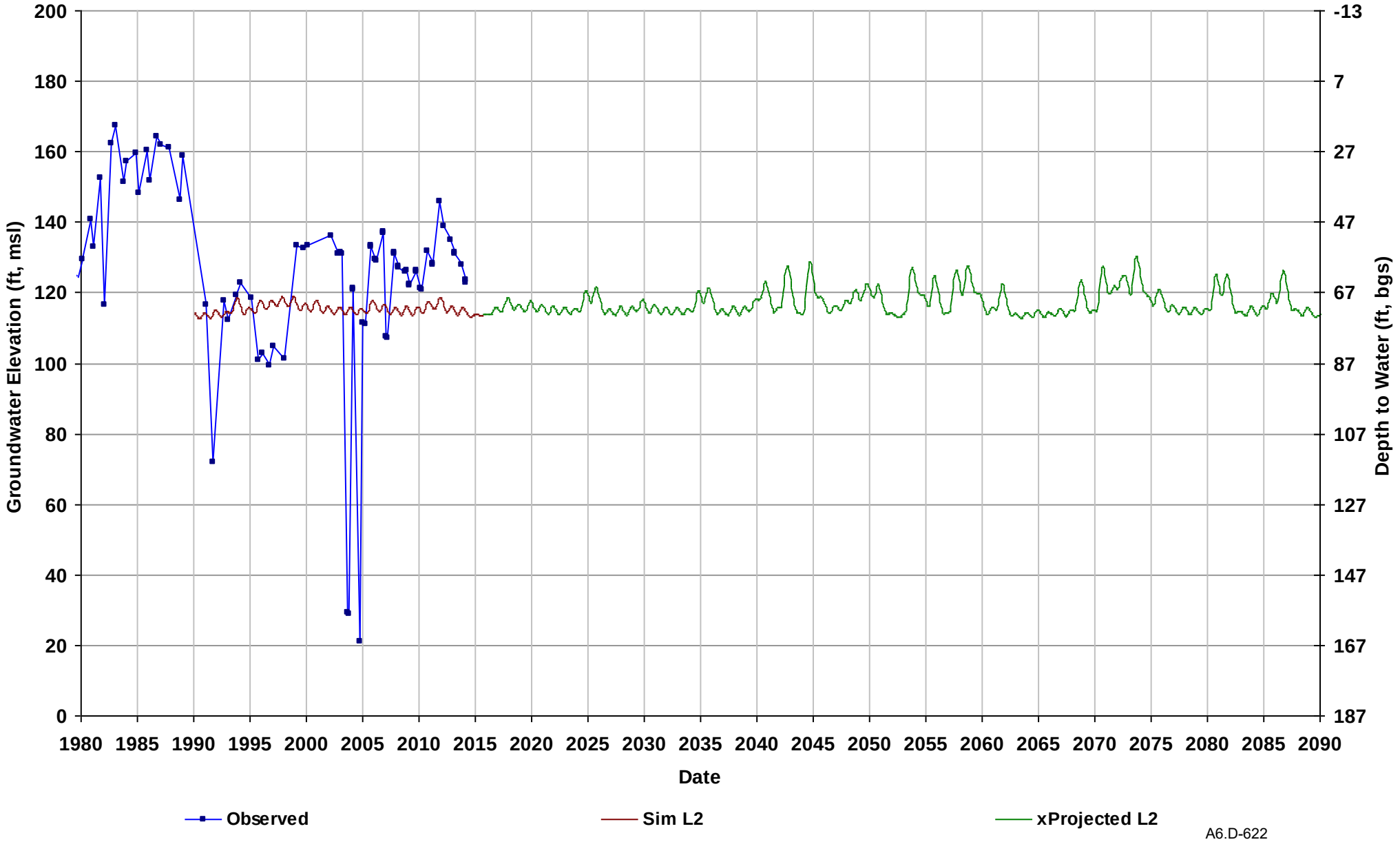
Well Name: 09S14E14R001M
Depth Zone: Composite or Lower; Wi
Subbasin: Chowchilla
GSE (ft, msl): 179

Total Depth (ft): 560
Perf Top (ft):
Perf Bottom (ft):
Top Model Layer: 2
Bottom Model Layer: 2



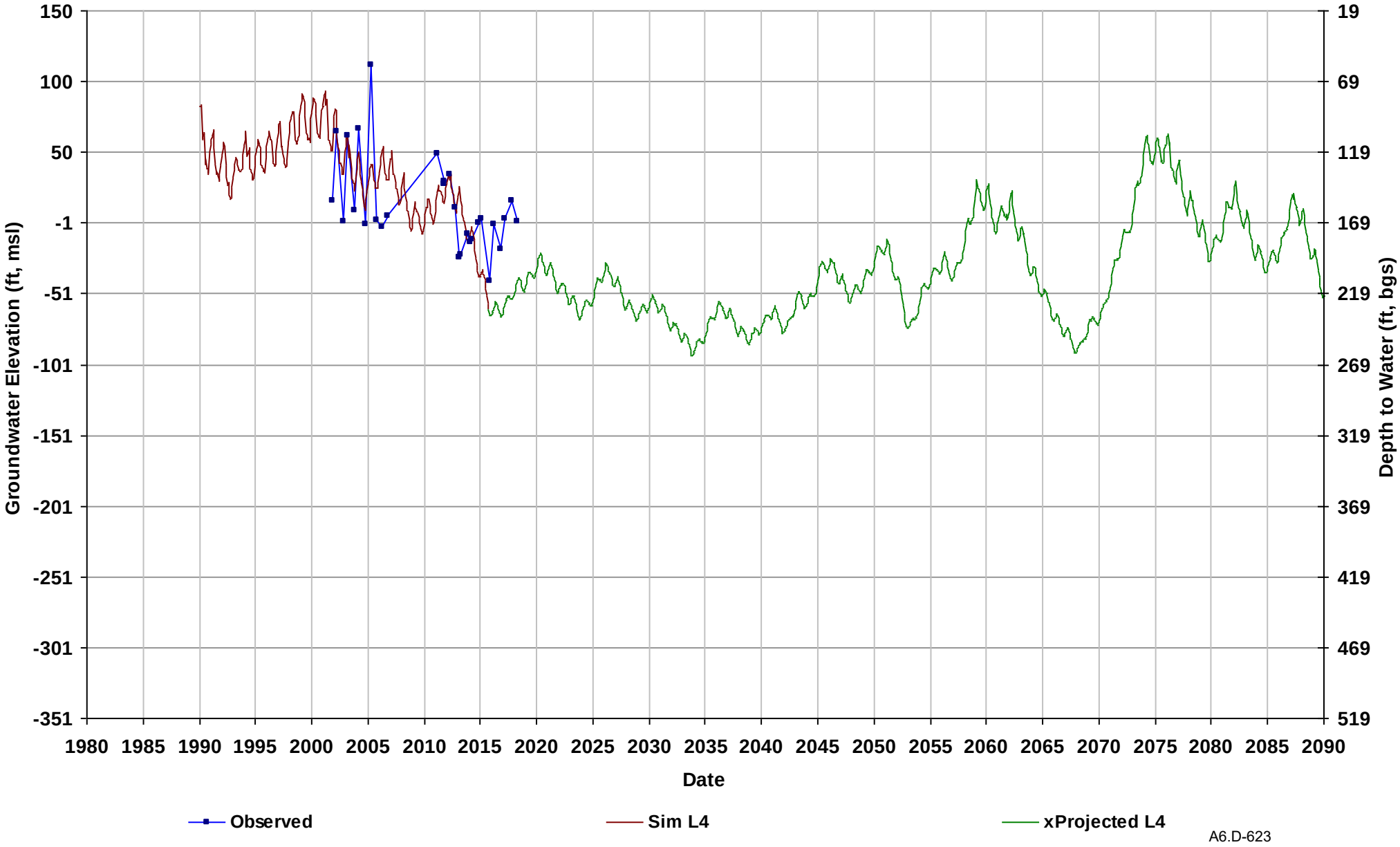
Well Name: 09S14E25A001M
Depth Zone: Unknown; Within CC
Subbasin: Chowchilla
GSE (ft, msl): 187

Total Depth (ft):
Perf Top (ft):
Perf Bottom (ft):
Top Model Layer: 2
Bottom Model Layer: 2



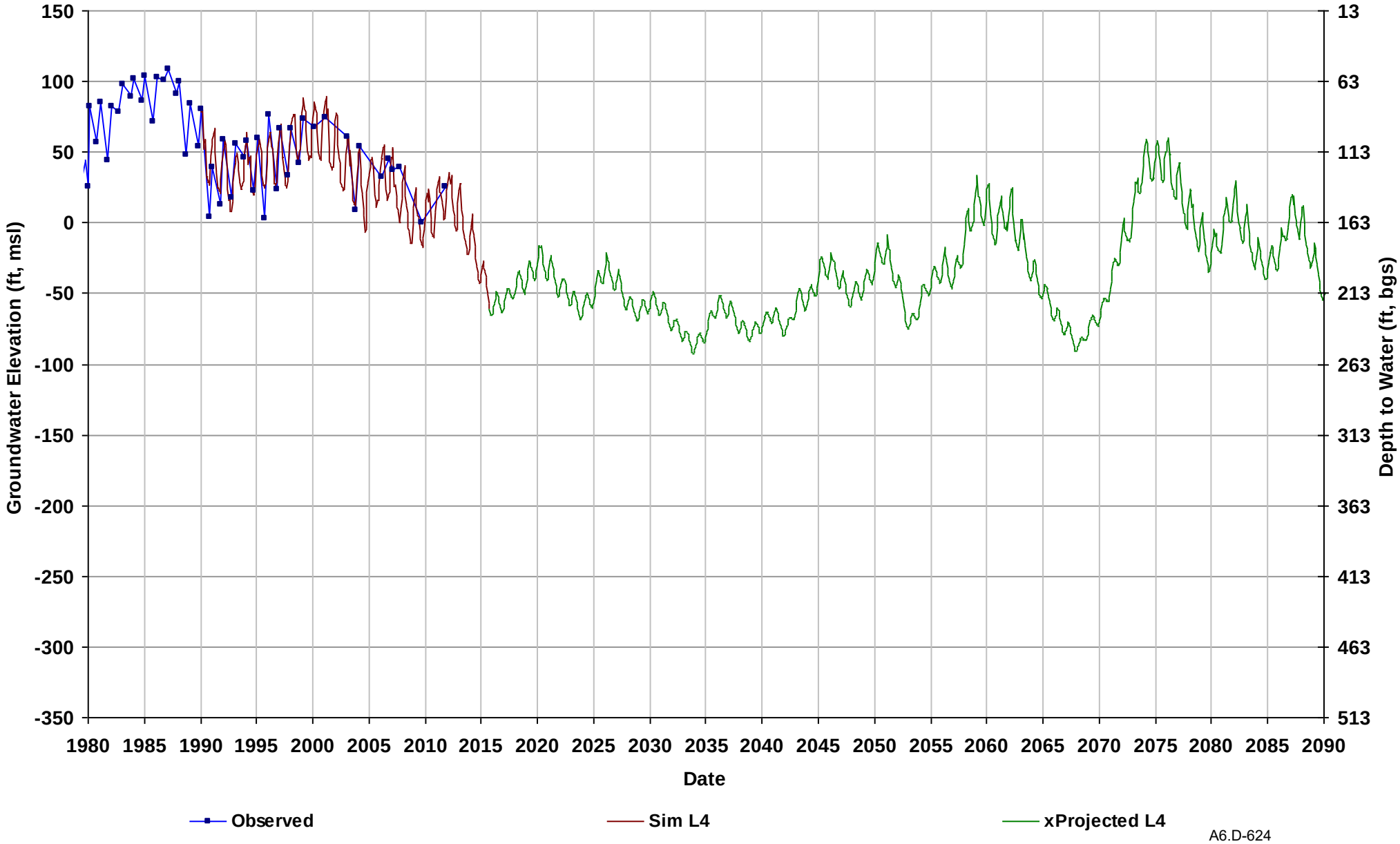
Well Name: 09S14E27R001M
Depth Zone: Lower; Within CC
Subbasin: Chowchilla
GSE (ft, msl): 168

Total Depth (ft): 275
Perf Top (ft): 160
Perf Bottom (ft): 275
Top Model Layer: 4
Bottom Model Layer: 4



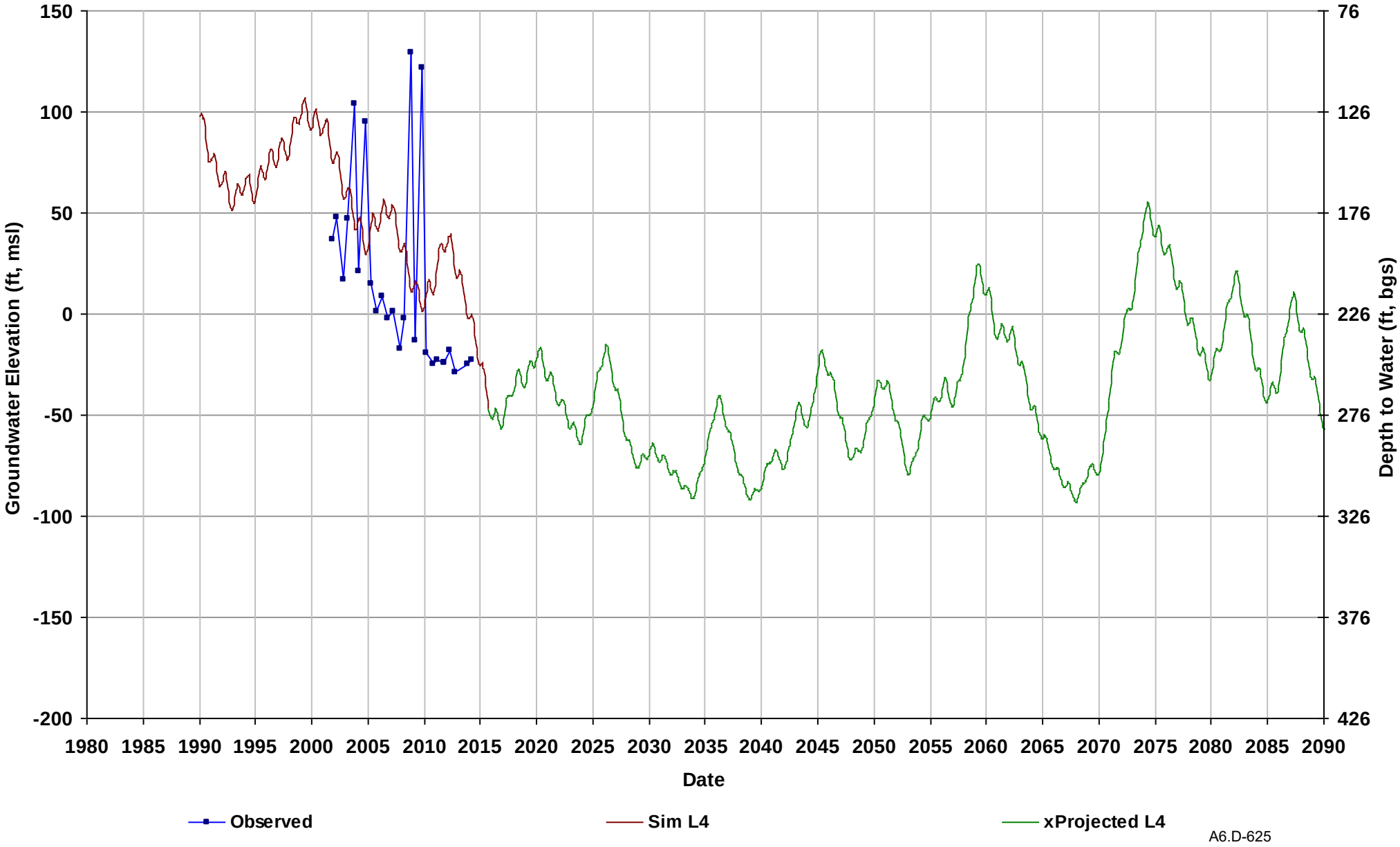
Well Name: 09S14E33A001M
Depth Zone: Lower; Within CC
Subbasin: Merced
GSE (ft, msl): 163

Total Depth (ft): 632
Perf Top (ft): 240
Perf Bottom (ft): 580
Top Model Layer: 4
Bottom Model Layer: 4



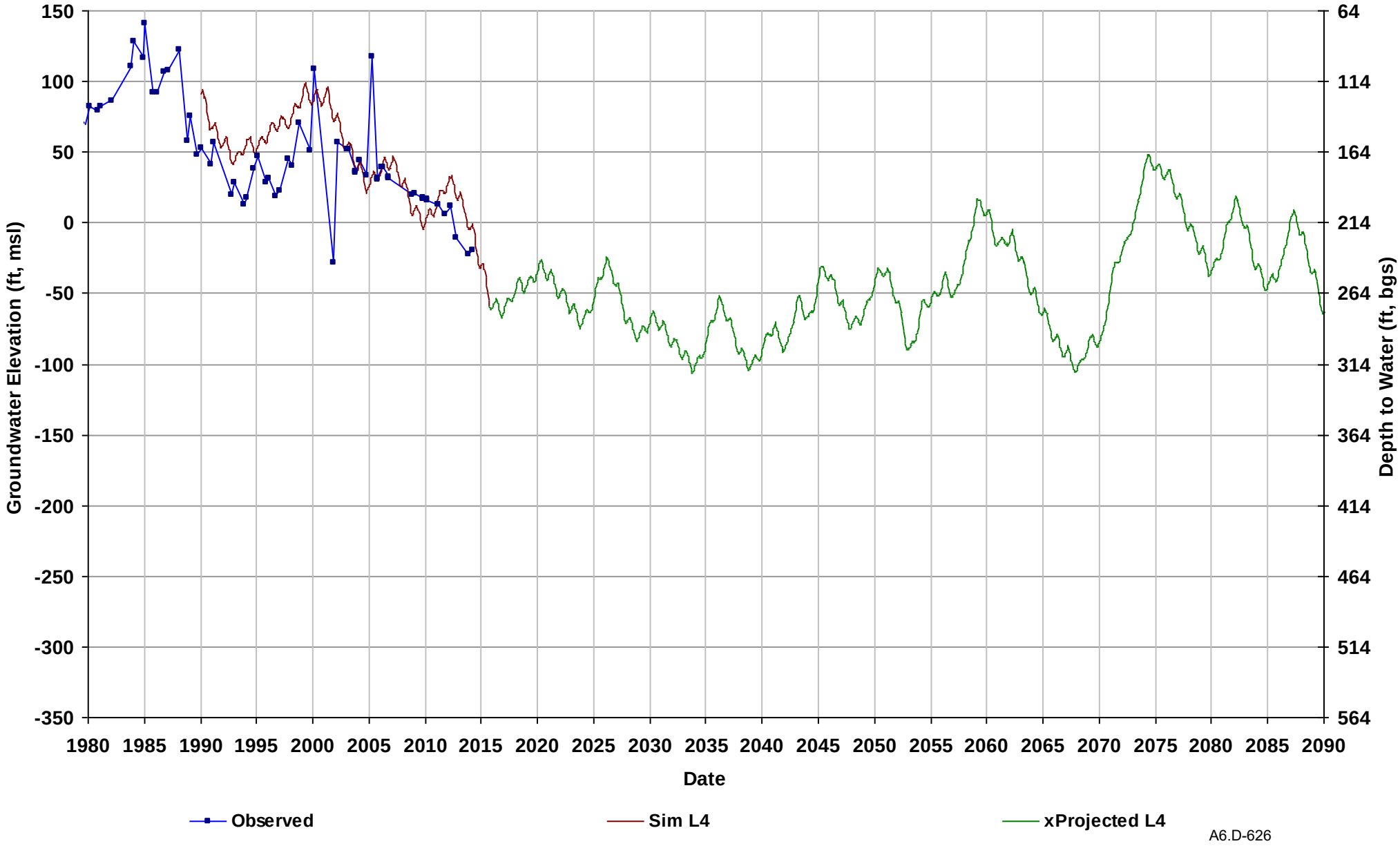
Well Name: 09S15E02A001M
Depth Zone: Lower; Within CC
Subbasin: Merced
GSE (ft, msl): 226

Total Depth (ft): 800
Perf Top (ft): 300
Perf Bottom (ft): 800
Top Model Layer: 4
Bottom Model Layer: 4



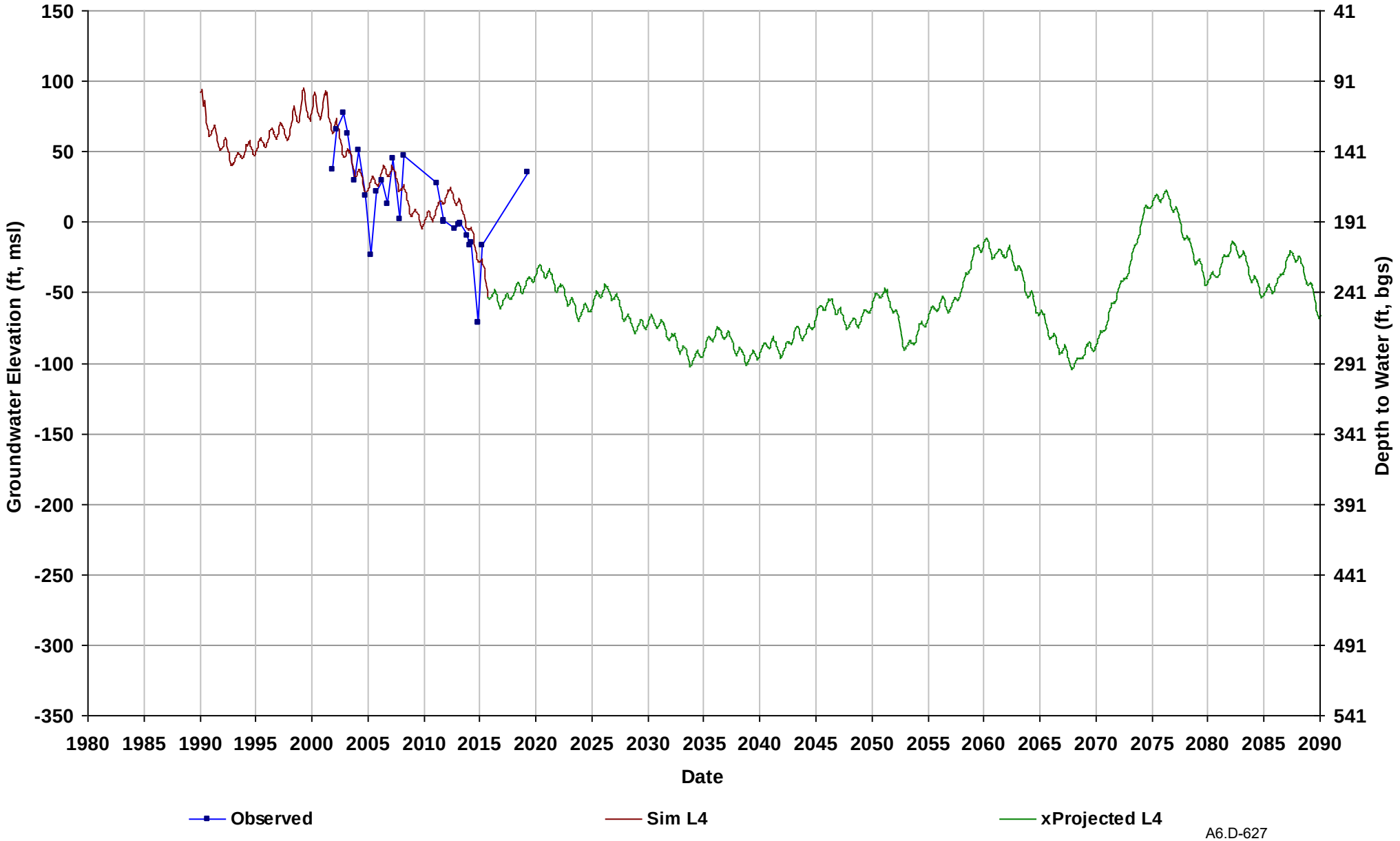
Well Name: 09S15E04R001M
Depth Zone: Unknown; Within CC
Subbasin: Chowchilla
GSE (ft, msl): 214

Total Depth (ft):
Perf Top (ft):
Perf Bottom (ft):
Top Model Layer: 4
Bottom Model Layer: 4



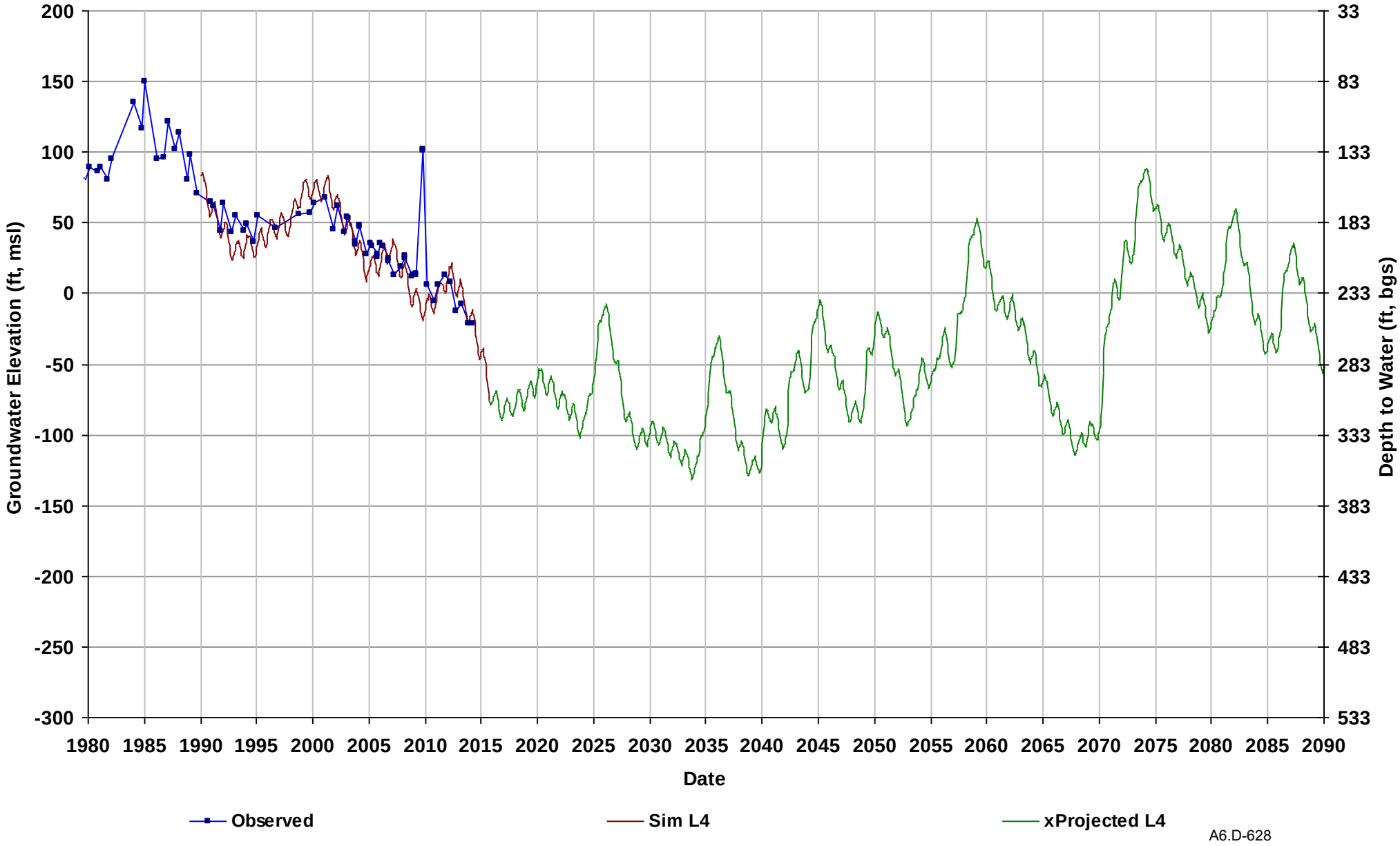
Well Name: 09S15E06P001M
Depth Zone: Lower; Within CC
Subbasin: Chowchilla
GSE (ft, msl): 191

Total Depth (ft): 780
Perf Top (ft): 230
Perf Bottom (ft): 775
Top Model Layer: 4
Bottom Model Layer: 4



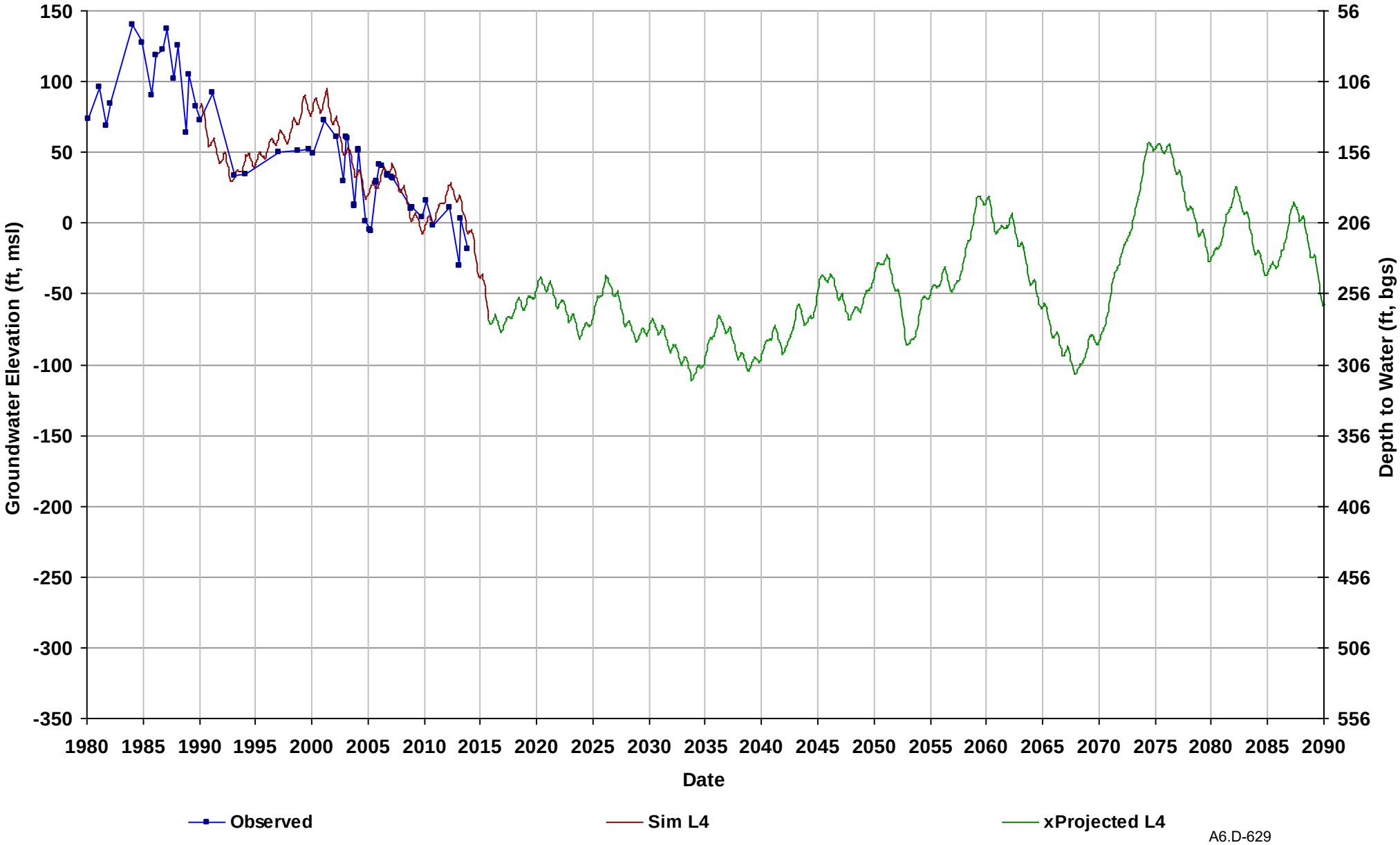
Well Name: 09S15E13E002M
Depth Zone: Unknown; Within CC
Subbasin: Chowchilla
GSE (ft, msl): 232

Total Depth (ft):
Perf Top (ft):
Perf Bottom (ft):
Top Model Layer: 4
Bottom Model Layer: 4



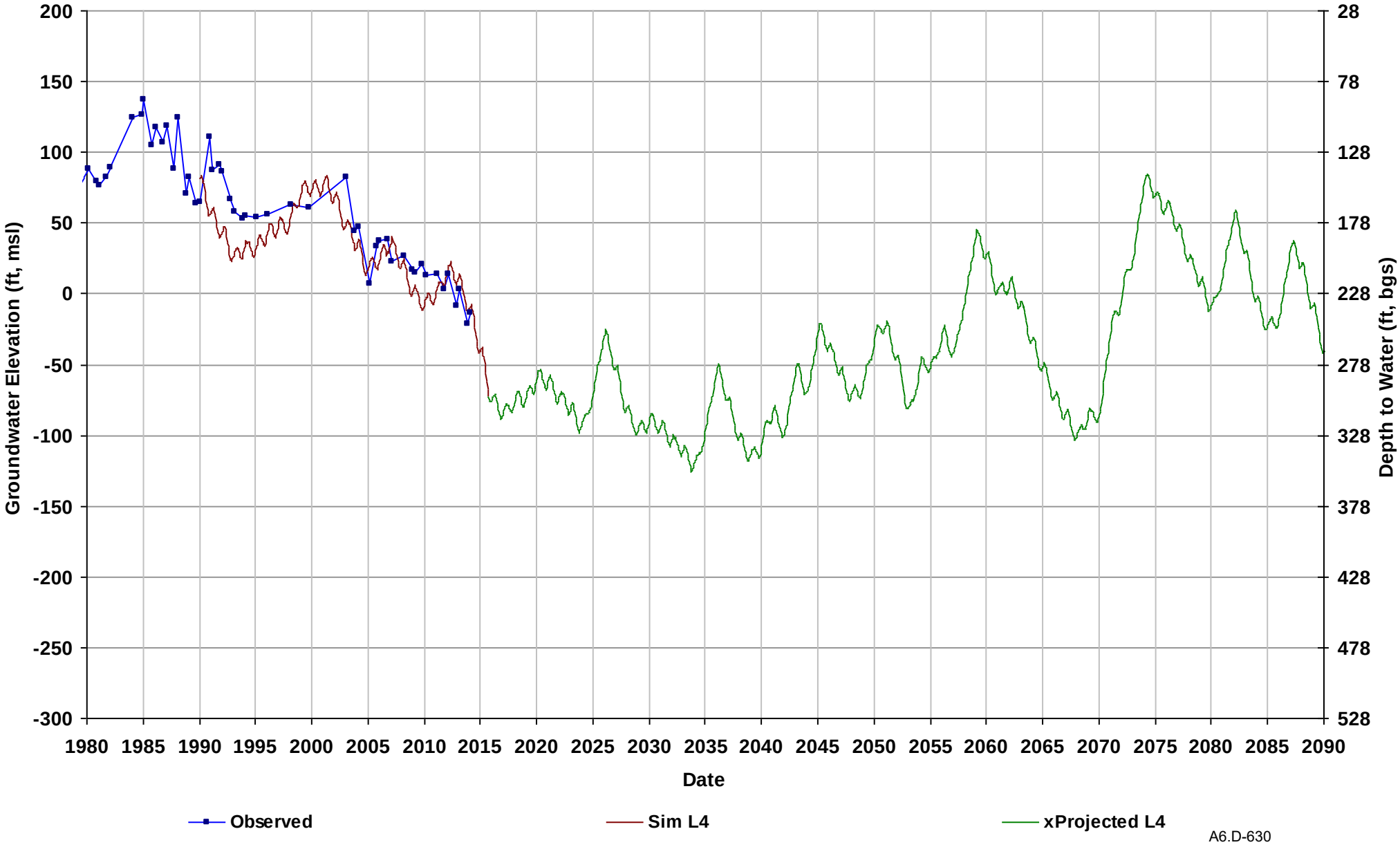
Well Name: 09S15E17R001M
Depth Zone: Unknown; Within CC
Subbasin: Chowchilla
GSE (ft, msl): 206

Total Depth (ft):
Perf Top (ft):
Perf Bottom (ft):
Top Model Layer: 4
Bottom Model Layer: 4



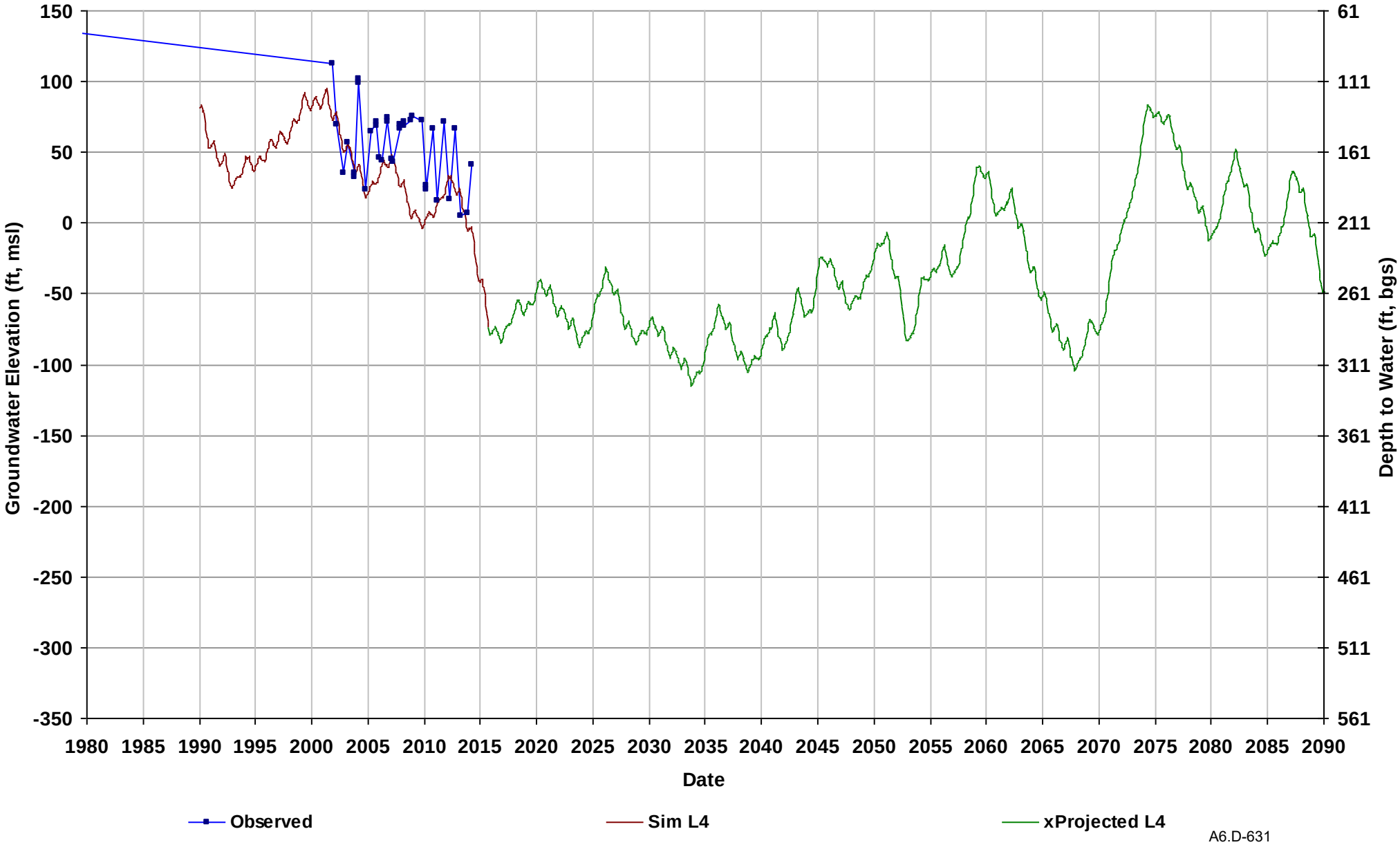
Well Name: 09S15E23J2
Depth Zone: Lower; Within CC
Subbasin: Chowchilla
GSE (ft, msl): 228

Total Depth (ft): 291
Perf Top (ft): 290.5
Perf Bottom (ft): 291
Top Model Layer: 4
Bottom Model Layer: 4



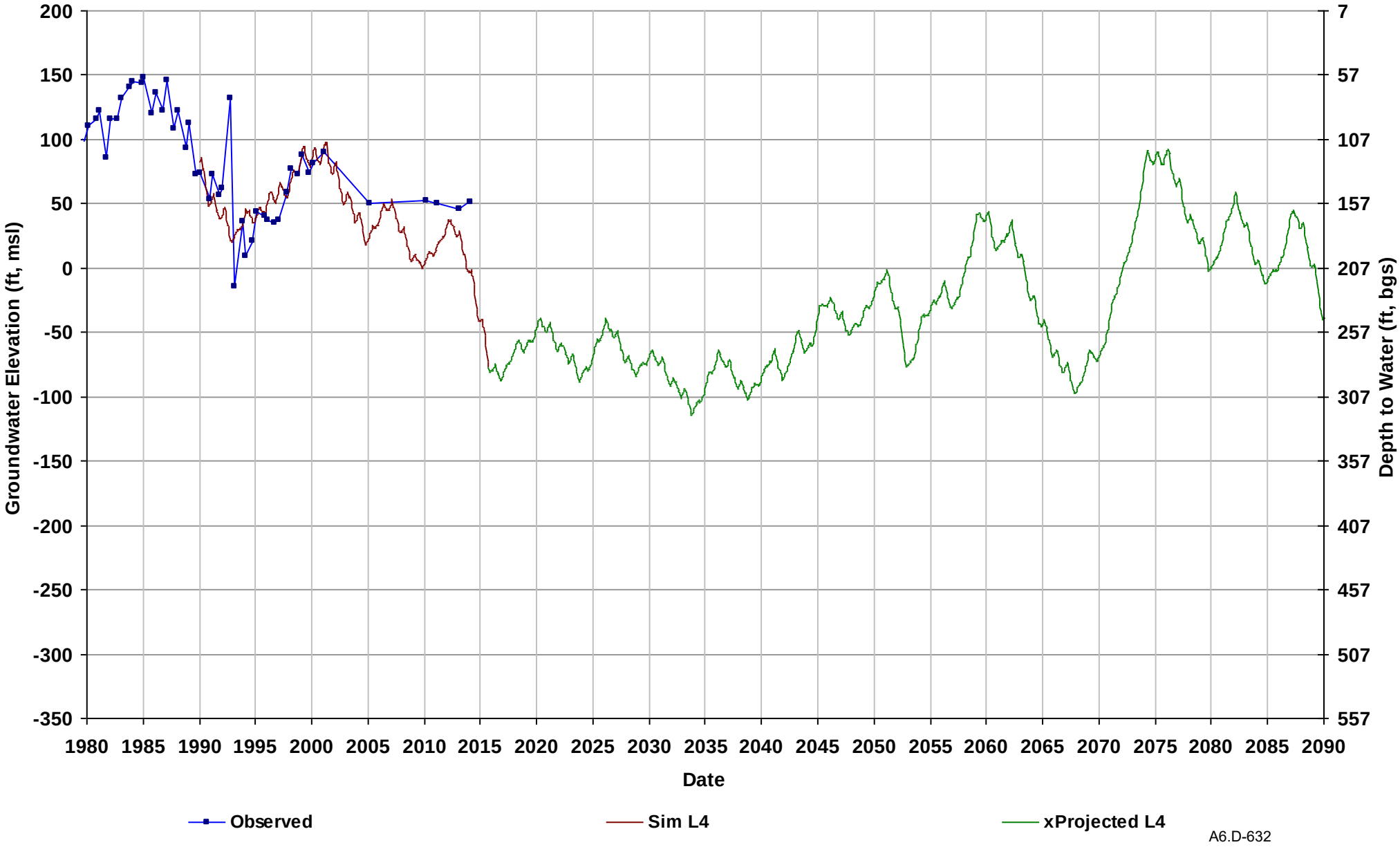
Well Name: 09S15E28A001M
Depth Zone: Unknown; Within CC
Subbasin: Chowchilla
GSE (ft, msl): 210

Total Depth (ft):
Perf Top (ft):
Perf Bottom (ft):
Top Model Layer: 4
Bottom Model Layer: 4



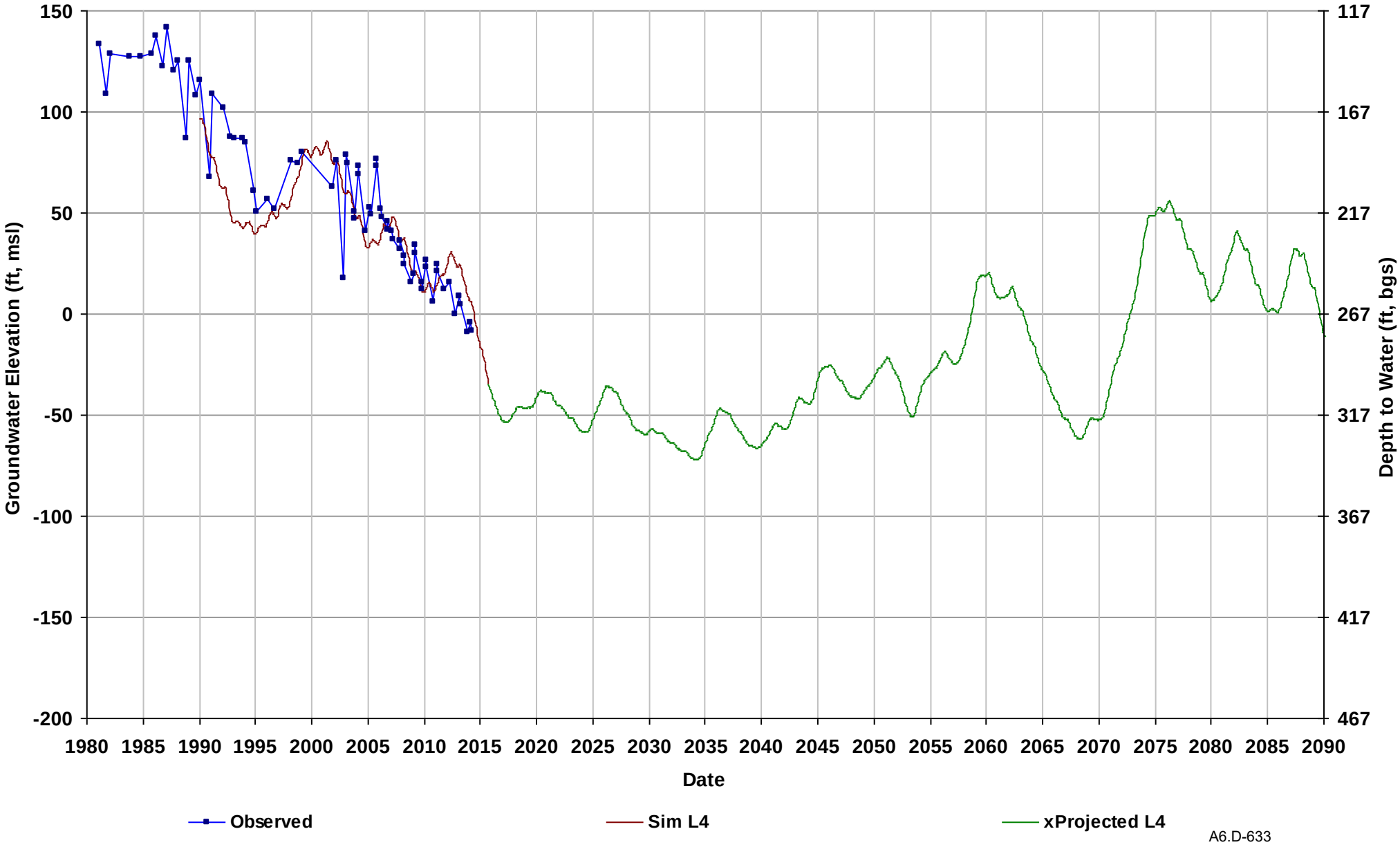
Well Name: 09S15E33J002M
Depth Zone: Unknown; Within CC
Subbasin: Chowchilla
GSE (ft, msl): 207

Total Depth (ft):
Perf Top (ft):
Perf Bottom (ft):
Top Model Layer: 4
Bottom Model Layer: 4



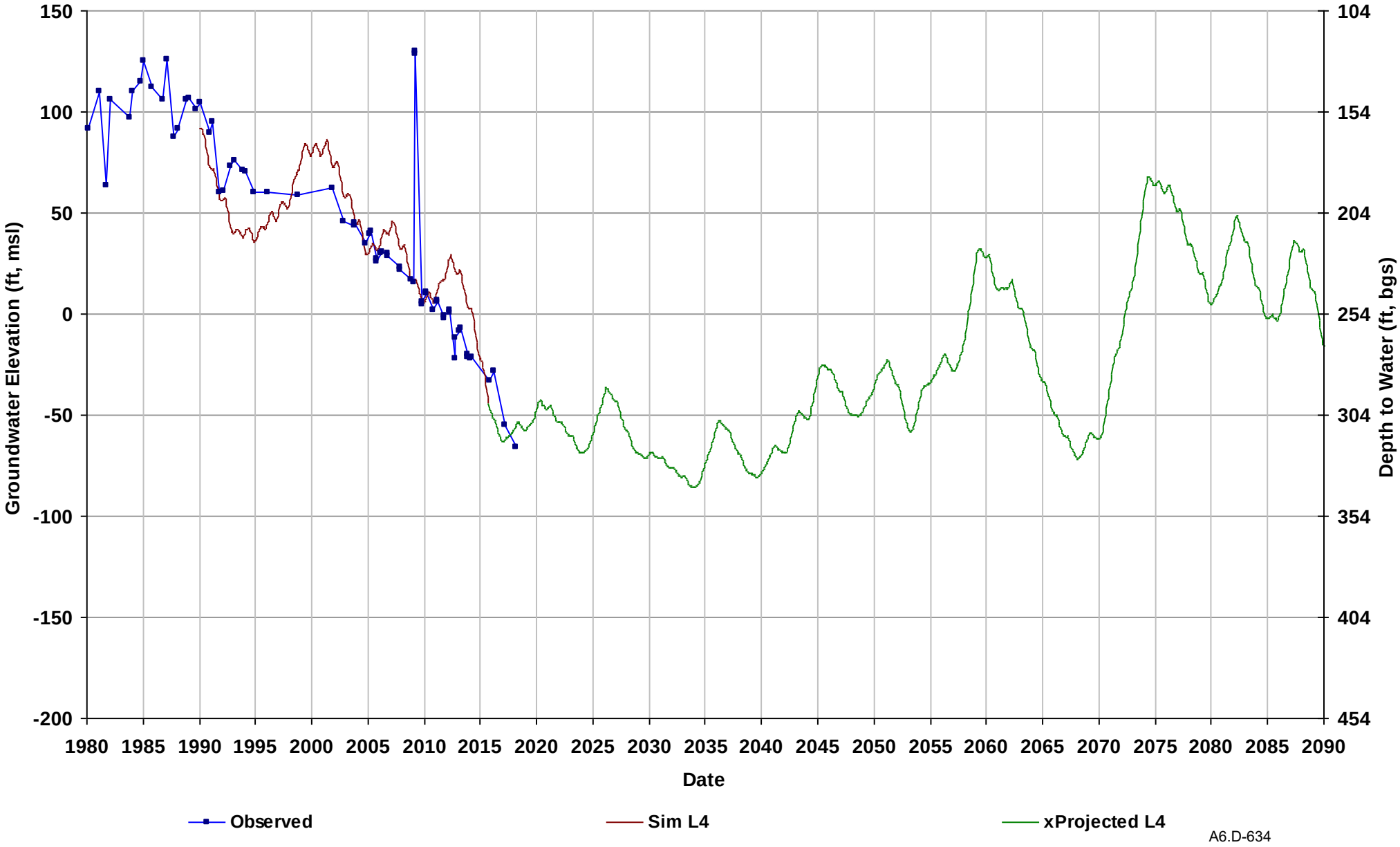
Well Name: 09S16E15Q001M
Depth Zone: Unknown; Outside CC
Subbasin: Chowchilla
GSE (ft, msl): 267

Total Depth (ft):
Perf Top (ft):
Perf Bottom (ft):
Top Model Layer: 4
Bottom Model Layer: 4



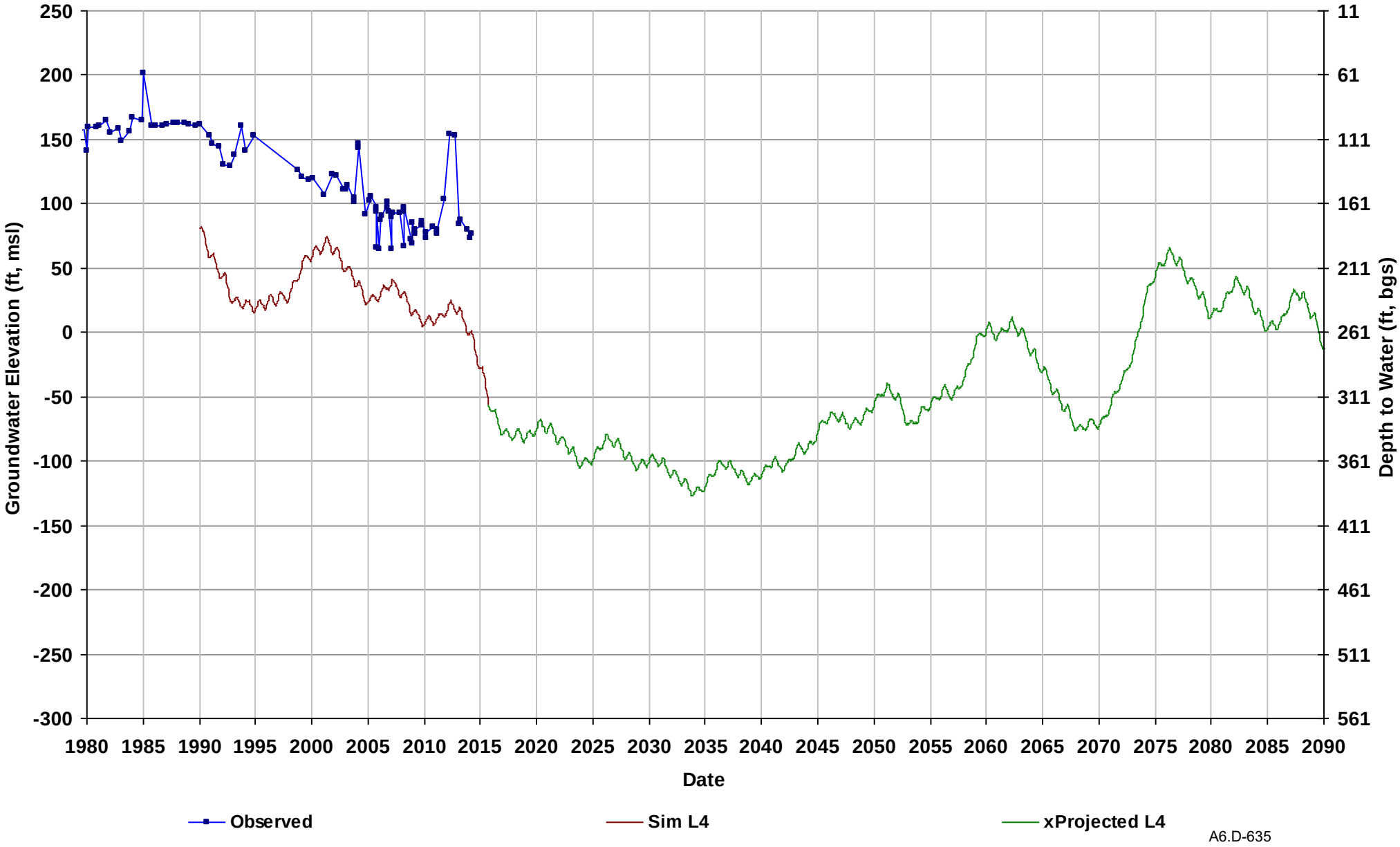
Well Name: 09S16E16N001M
Depth Zone: Lower; Within CC
Subbasin: Chowchilla
GSE (ft, msl): 254

Total Depth (ft): 466
Perf Top (ft): 218
Perf Bottom (ft): 464
Top Model Layer: 4
Bottom Model Layer: 4



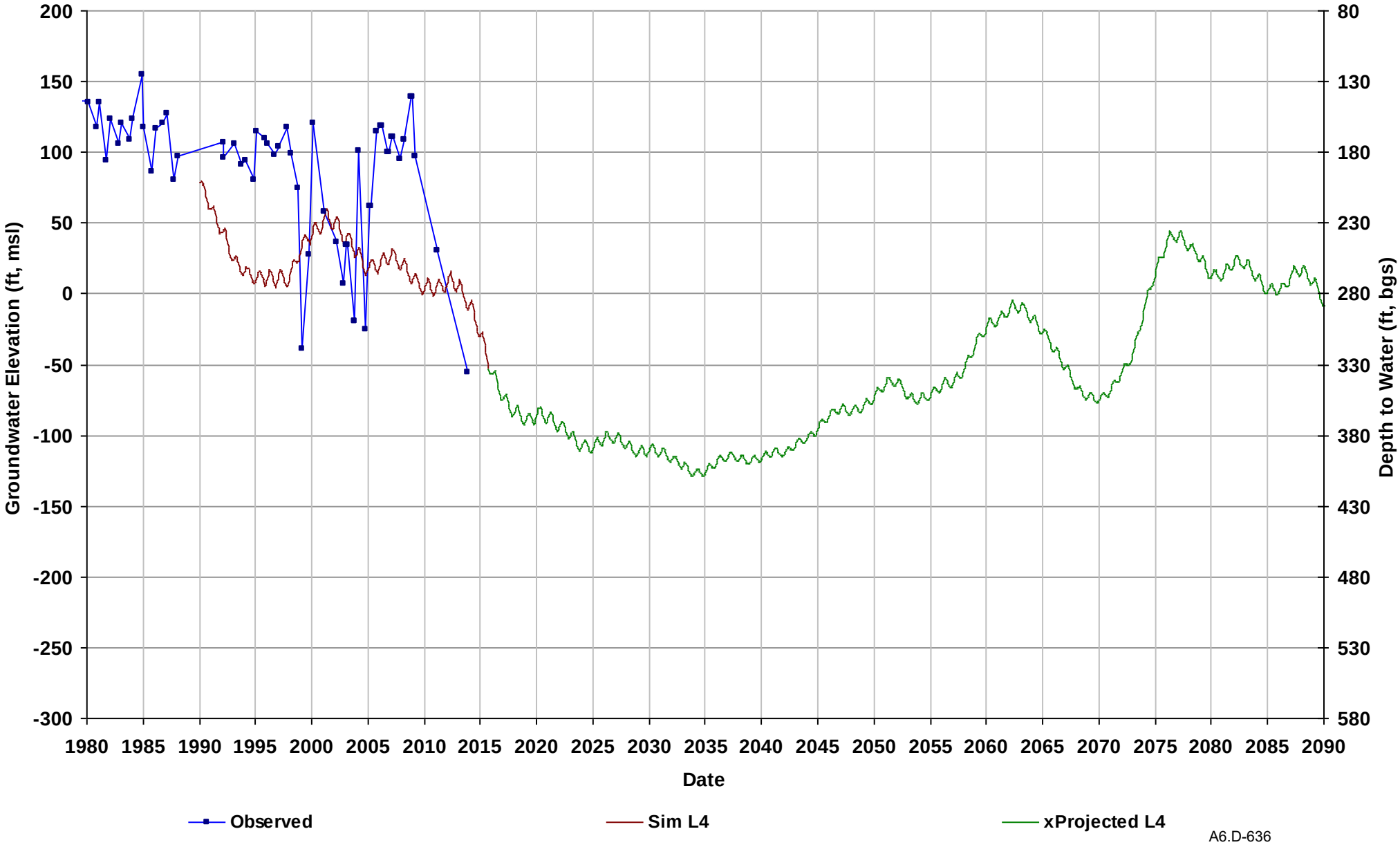
Well Name: 09S16E34J001M
Depth Zone: Unknown; Outside CC
Subbasin: Chowchilla
GSE (ft, msl): 261

Total Depth (ft):
Perf Top (ft):
Perf Bottom (ft):
Top Model Layer: 4
Bottom Model Layer: 4



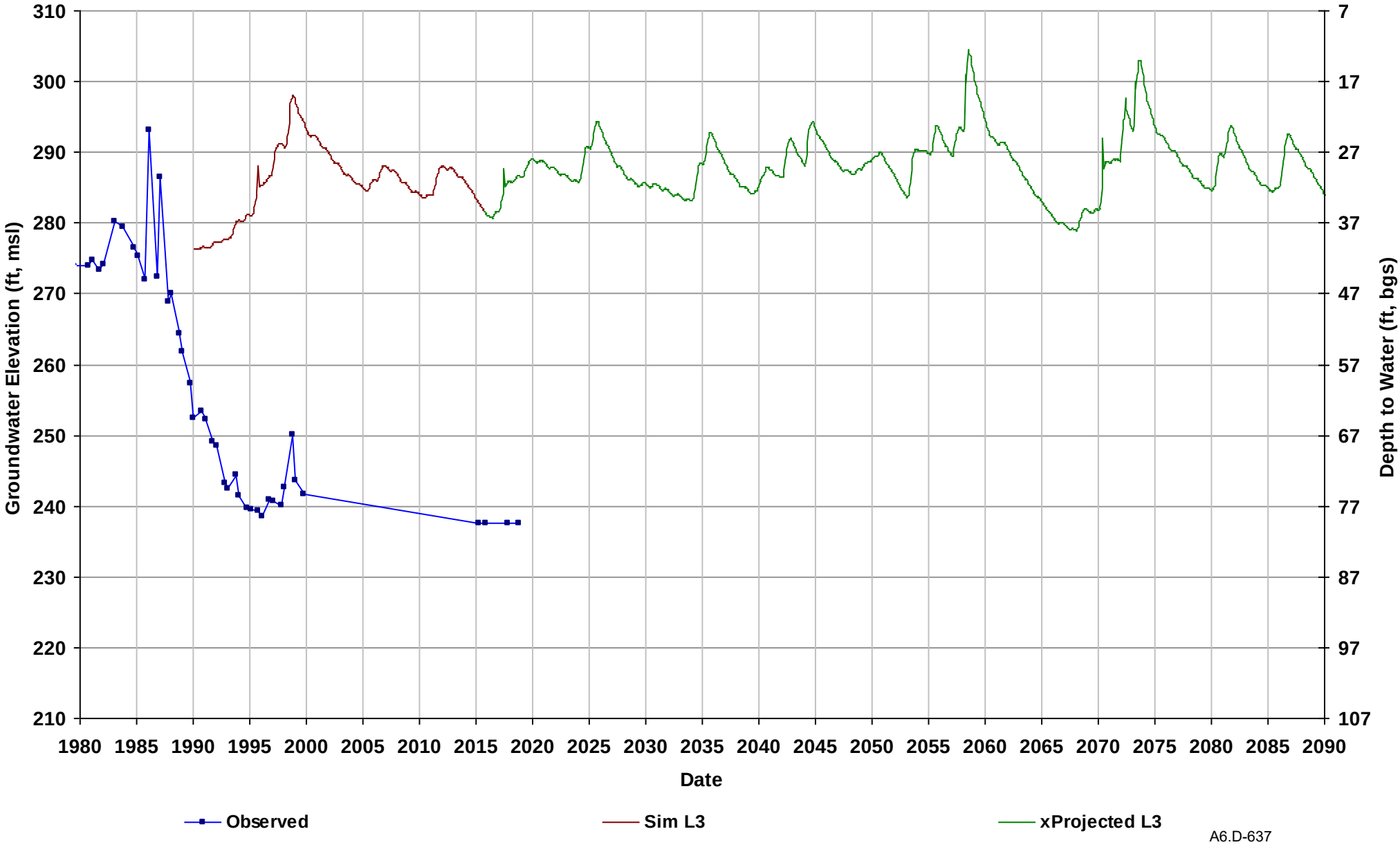
Well Name: 09S16E36J001M
Depth Zone: Unknown; Outside CC
Subbasin: Chowchilla
GSE (ft, msl): 280

Total Depth (ft):
Perf Top (ft):
Perf Bottom (ft):
Top Model Layer: 4
Bottom Model Layer: 4



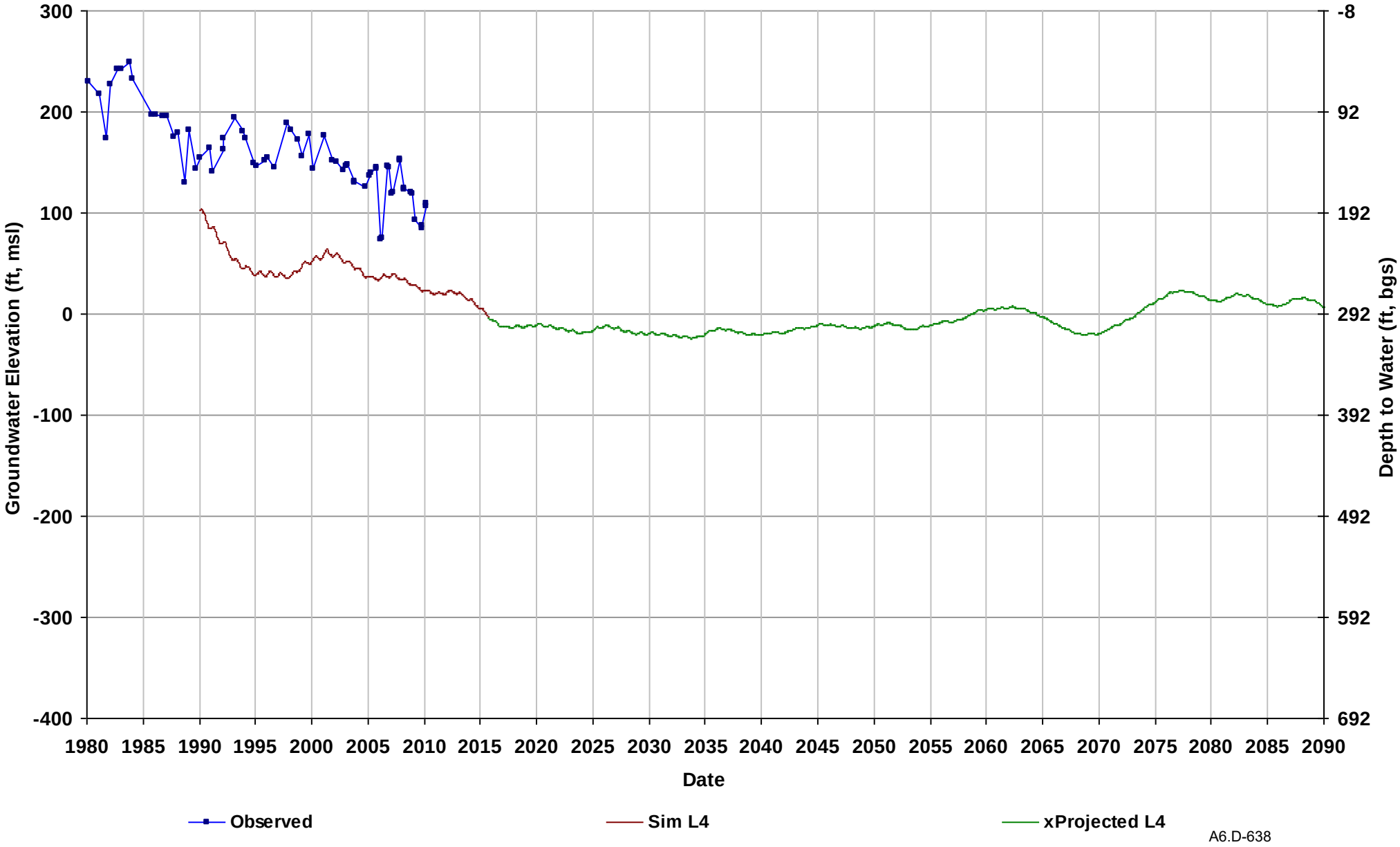
Well Name: 09S17E09D001M
Depth Zone: Unknown; Outside CC
Subbasin: Merced
GSE (ft, msl): 317

Total Depth (ft):
Perf Top (ft):
Perf Bottom (ft):
Top Model Layer: 3
Bottom Model Layer: 3



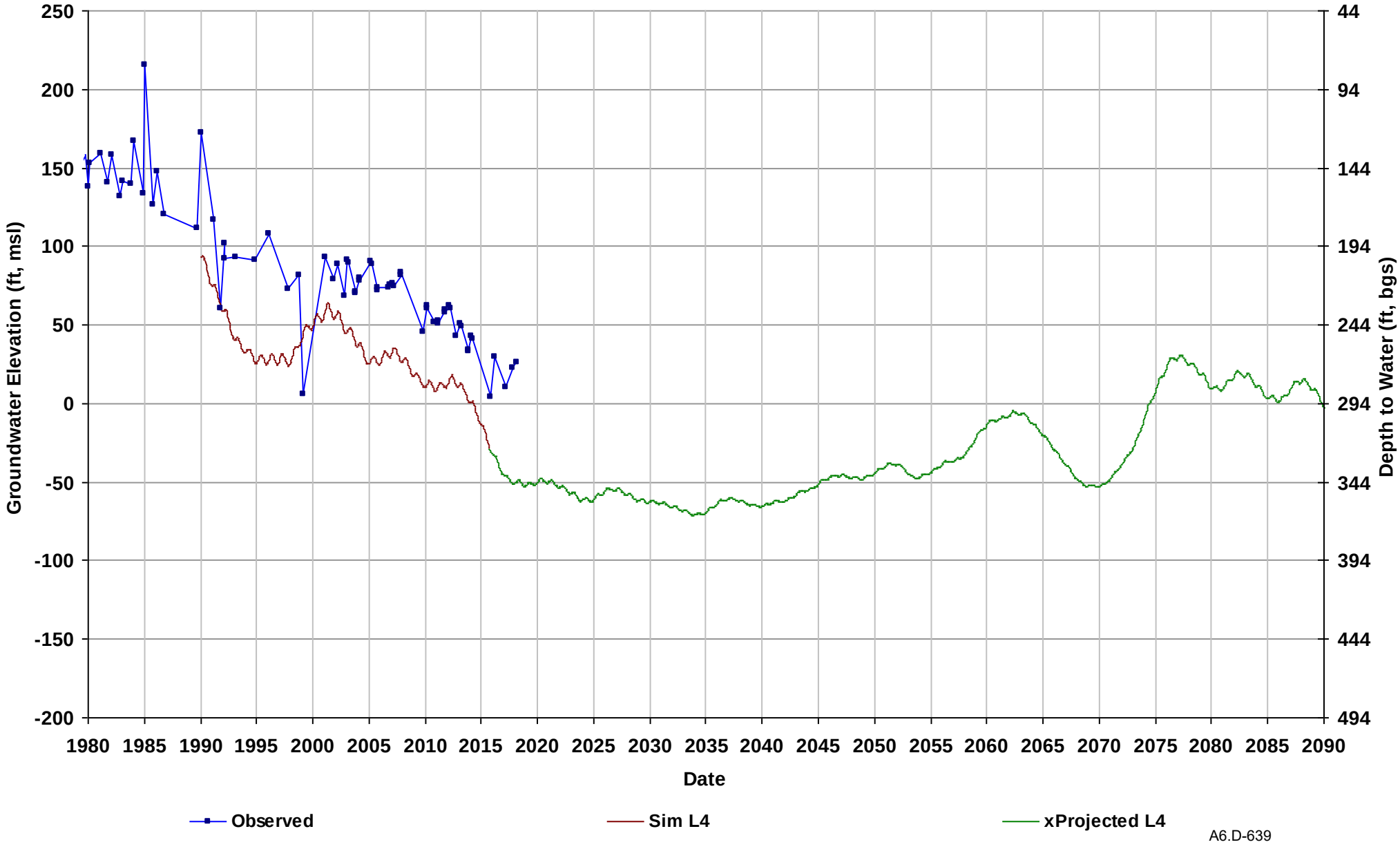
Well Name: 09S17E17F001M
Depth Zone: Unknown; Outside CC
Subbasin: Chowchilla
GSE (ft, msl): 292

Total Depth (ft):
Perf Top (ft):
Perf Bottom (ft):
Top Model Layer: 4
Bottom Model Layer: 4



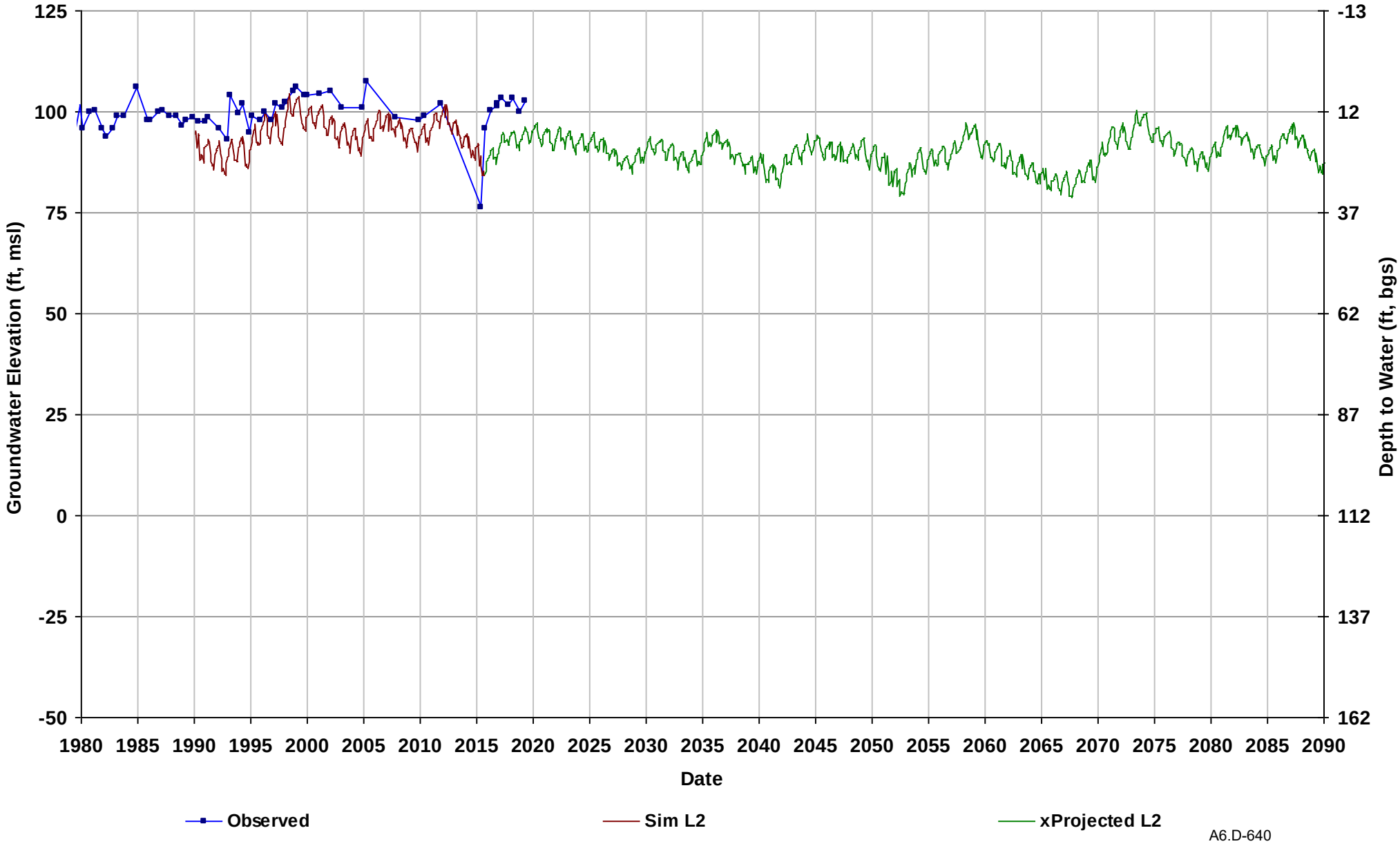
Well Name: 09S17E19L001M
Depth Zone: Lower; Outside CC
Subbasin: Chowchilla
GSE (ft, msl): 294

Total Depth (ft): 648
Perf Top (ft): 240
Perf Bottom (ft): 620
Top Model Layer: 4
Bottom Model Layer: 4



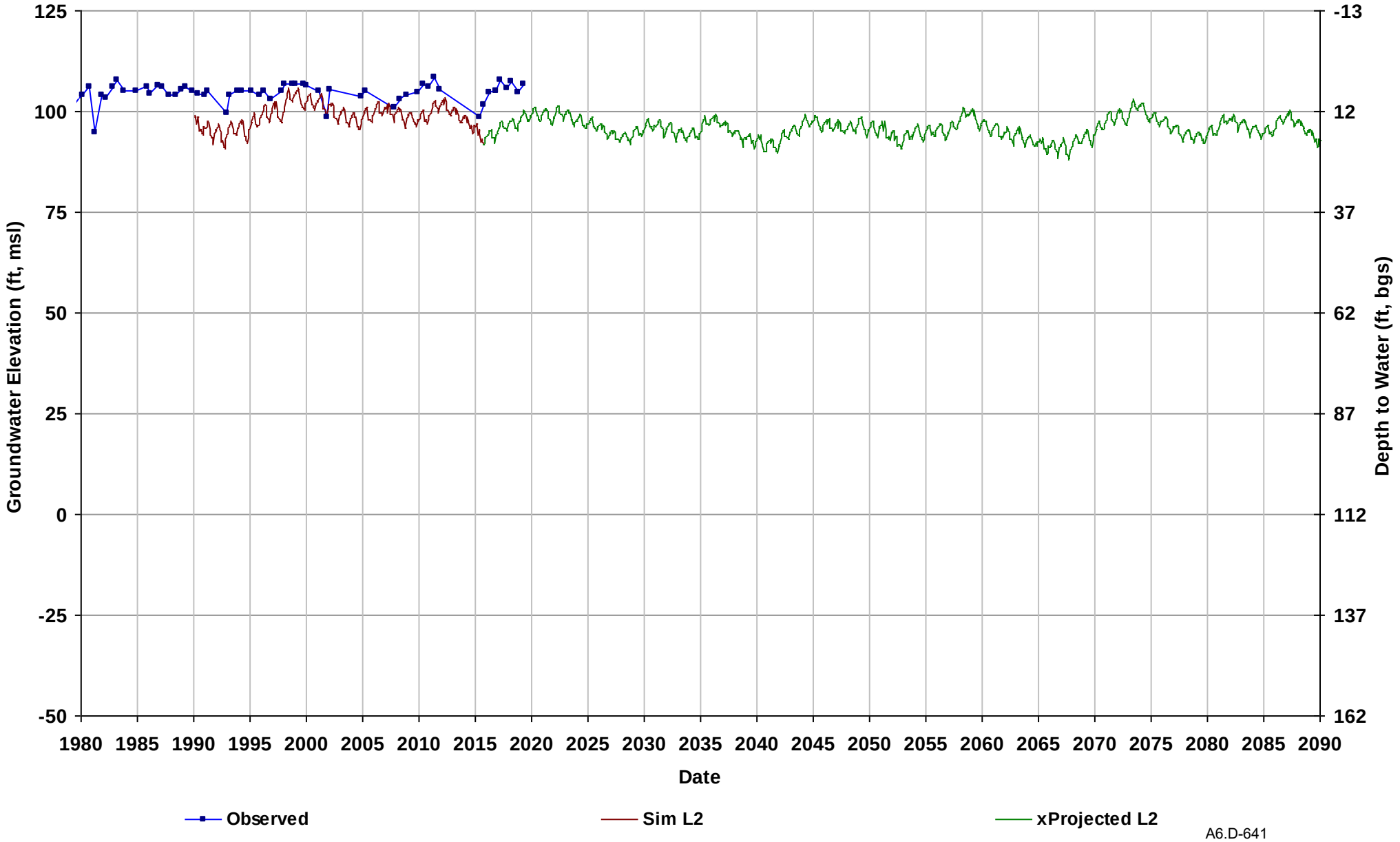
Well Name: 10S12E13L001M
Depth Zone: Upper; Within CC
Subbasin: Delta-Mendota
GSE (ft, msl): 112

Total Depth (ft): 200
Perf Top (ft): 80
Perf Bottom (ft): 180
Top Model Layer: 2
Bottom Model Layer: 2



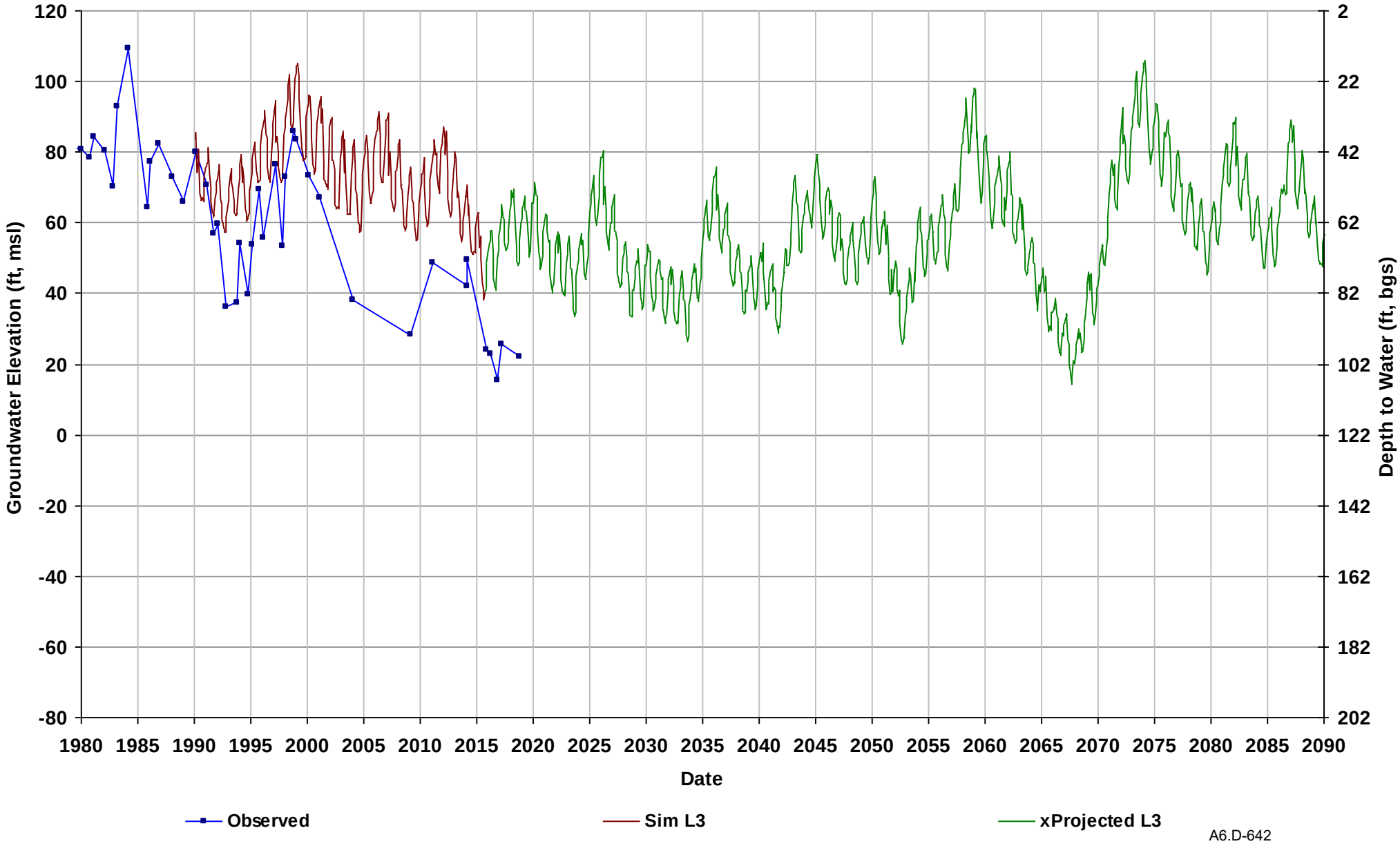
Well Name: 10S12E26H001M
Depth Zone: Upper; Within CC
Subbasin: Delta-Mendota
GSE (ft, msl): 112

Total Depth (ft): 158
Perf Top (ft): 60
Perf Bottom (ft): 150
Top Model Layer: 2
Bottom Model Layer: 2



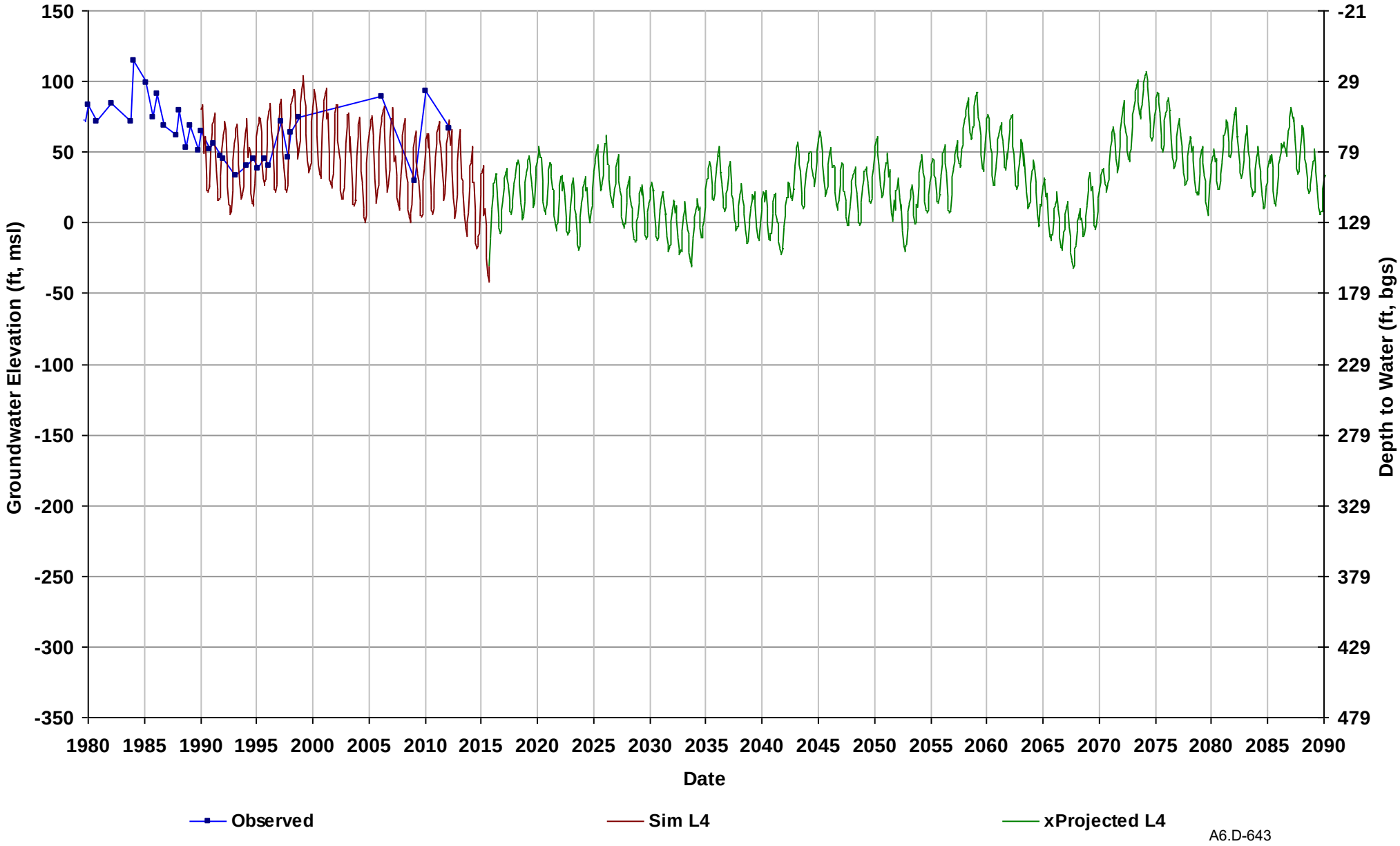
Well Name: 10S13E15A001M
Depth Zone: Upper; Within CC
Subbasin: Merced
GSE (ft, msl): 122

Total Depth (ft): 200
Perf Top (ft):
Perf Bottom (ft):
Top Model Layer: 3
Bottom Model Layer: 3



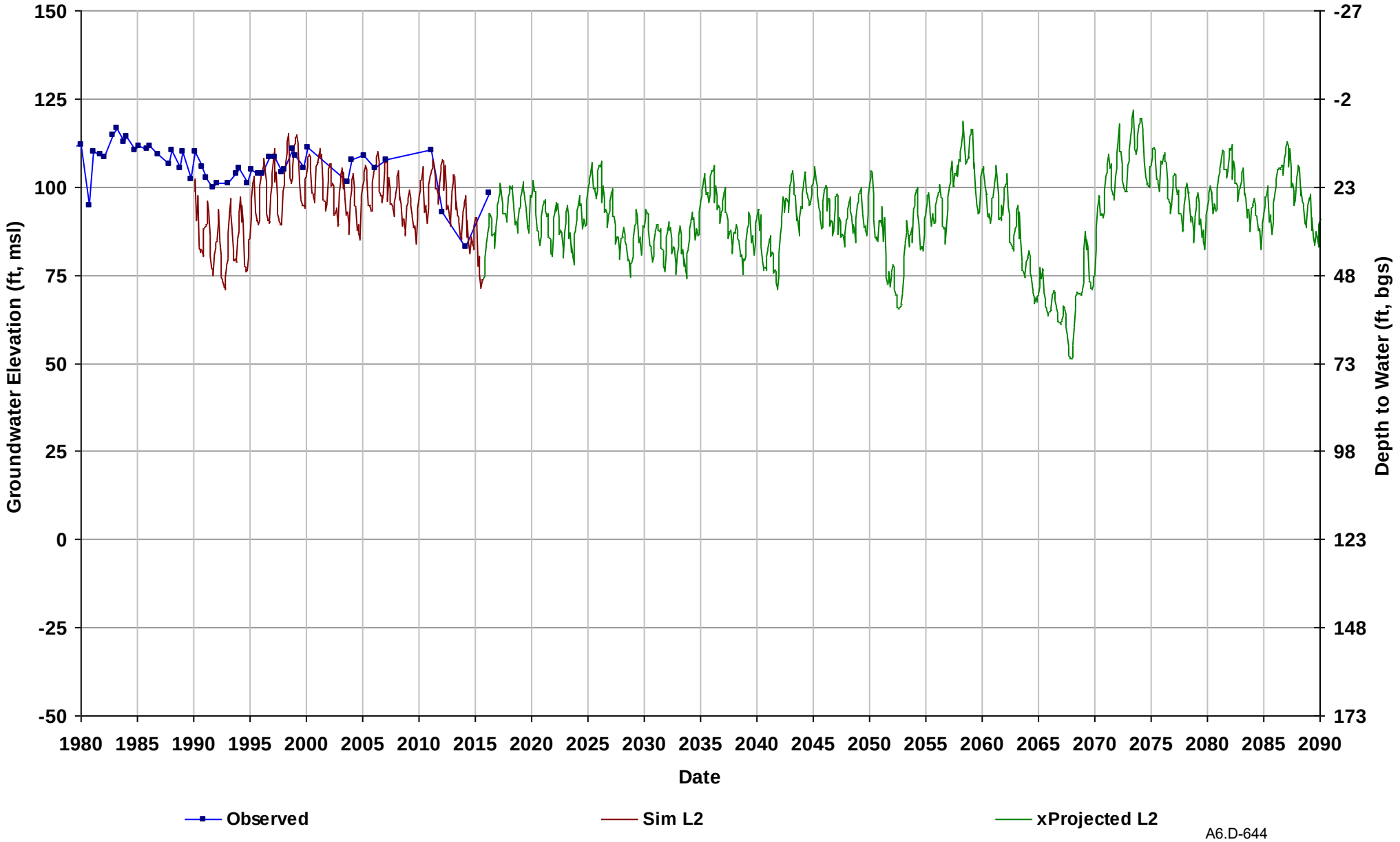
Well Name: 10S13E24L001M
Depth Zone: Unknown; Within CC
Subbasin: Chowchilla
GSE (ft, msl): 129

Total Depth (ft):
Perf Top (ft):
Perf Bottom (ft):
Top Model Layer: 4
Bottom Model Layer: 4



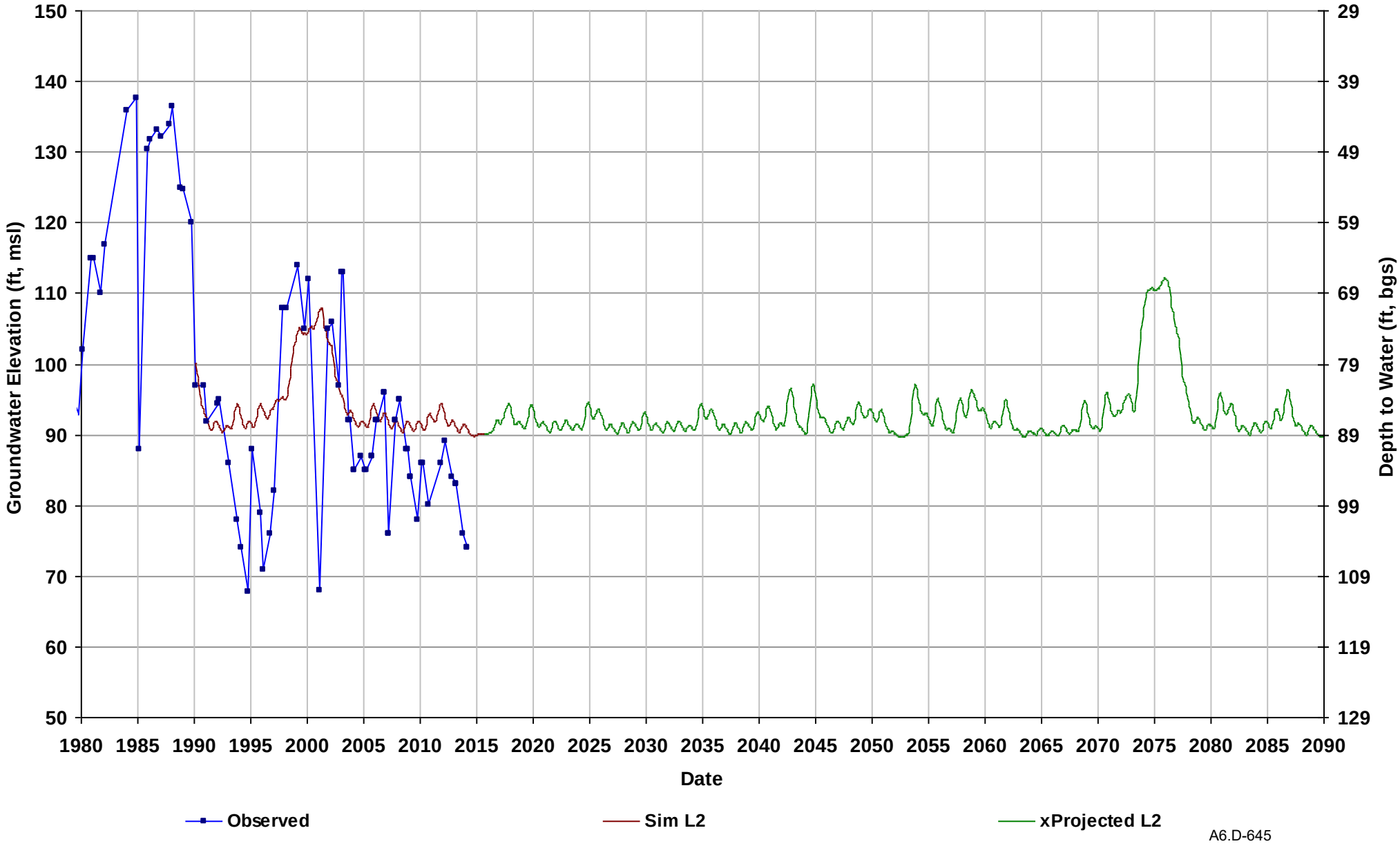
Well Name: 10S13E34G001M
Depth Zone: Unknown; Within CC
Subbasin: Chowchilla
GSE (ft, msl): 123

Total Depth (ft):
Perf Top (ft):
Perf Bottom (ft):
Top Model Layer: 2
Bottom Model Layer: 2



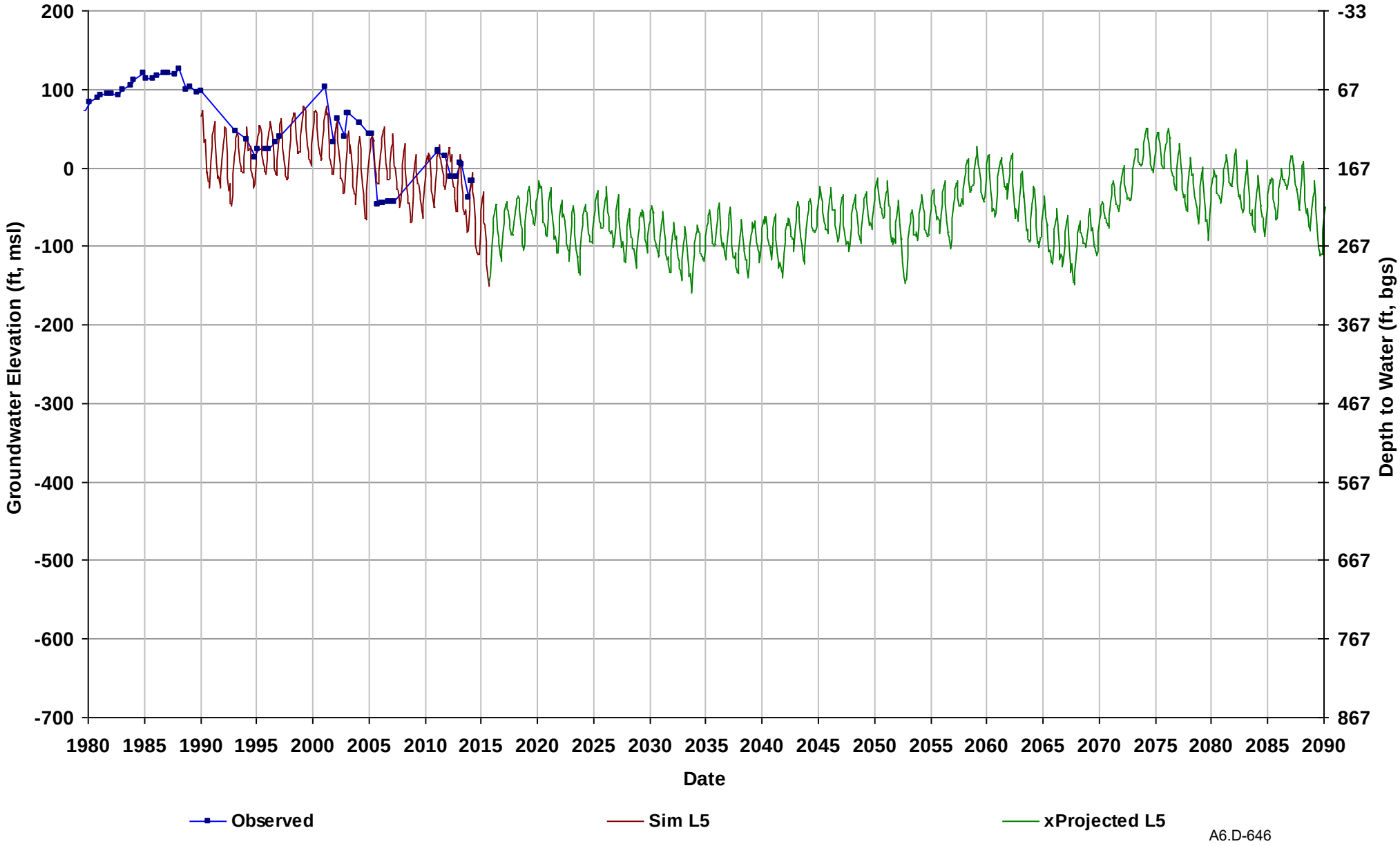
Well Name: 10S14E01R002M
Depth Zone: Unknown; Within CC
Subbasin: Chowchilla
GSE (ft, msl): 179

Total Depth (ft):
Perf Top (ft):
Perf Bottom (ft):
Top Model Layer: 2
Bottom Model Layer: 2



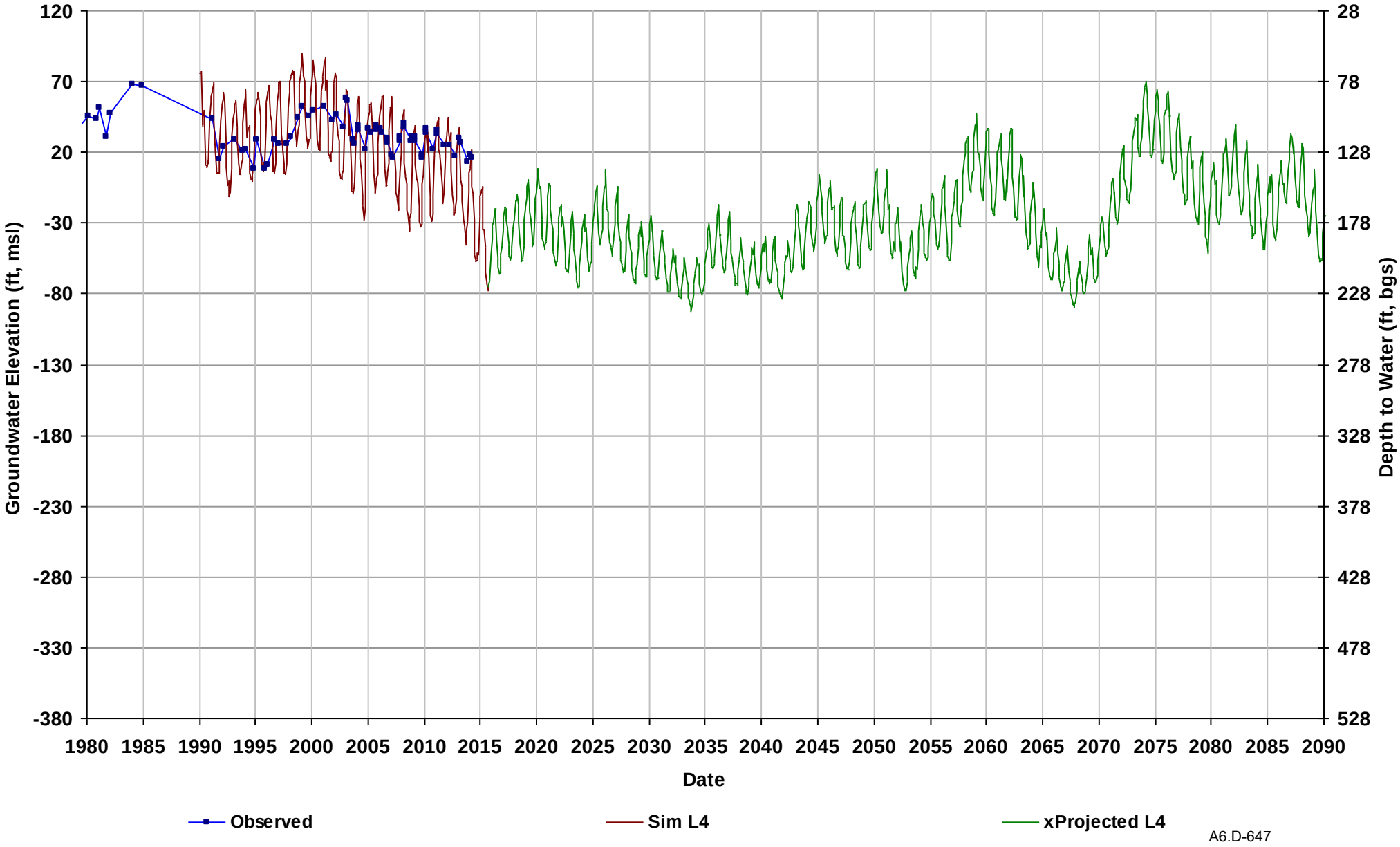
Well Name: 10S14E03A001M
Depth Zone: Unknown; Within CC
Subbasin: Chowchilla
GSE (ft, msl): 167

Total Depth (ft):
Perf Top (ft):
Perf Bottom (ft):
Top Model Layer: 5
Bottom Model Layer: 5



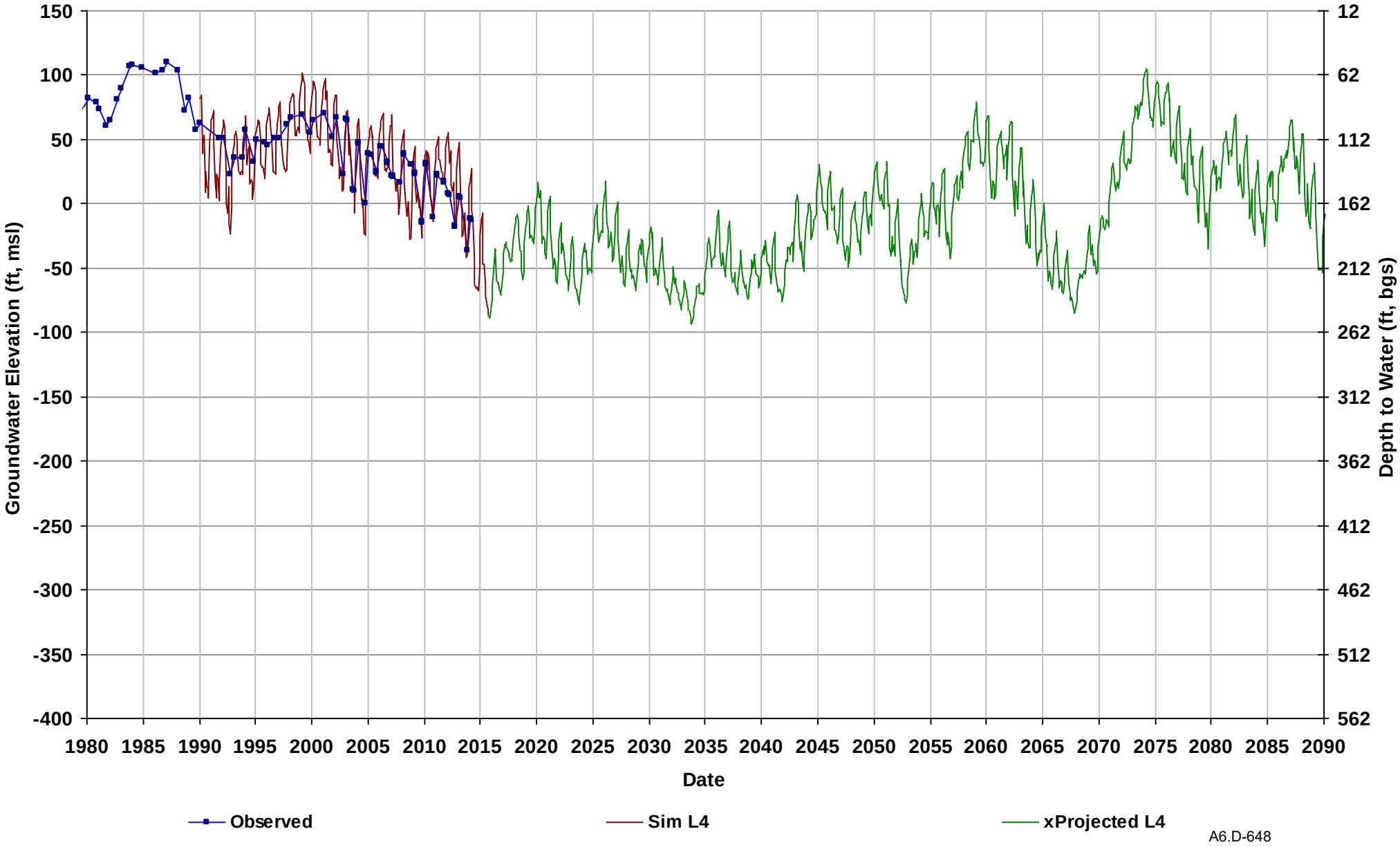
Well Name: 10S14E05C003M
Depth Zone: Unknown; Within CC
Subbasin: Chowchilla
GSE (ft, msl): 148

Total Depth (ft):
Perf Top (ft):
Perf Bottom (ft):
Top Model Layer: 4
Bottom Model Layer: 4



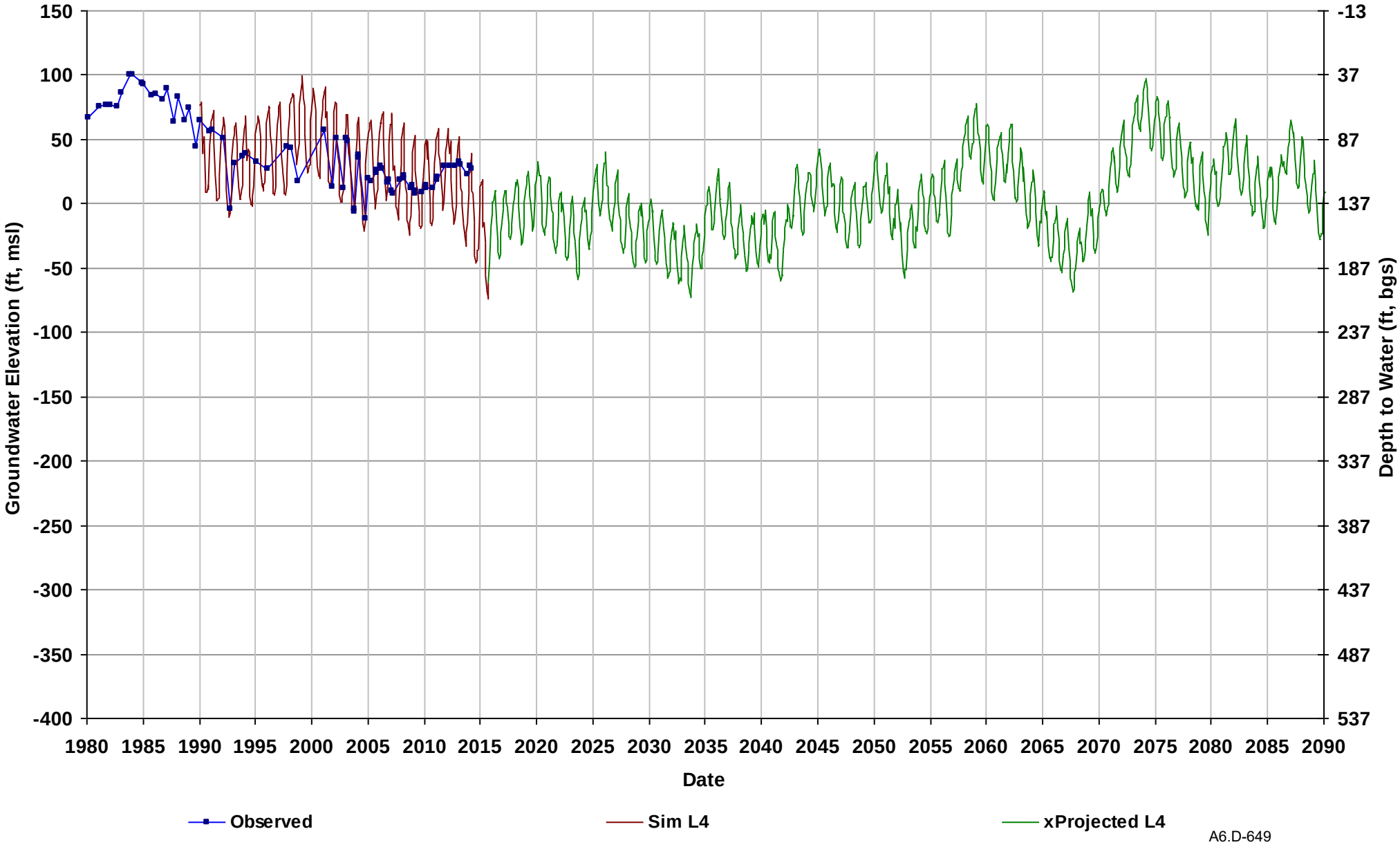
Well Name: 10S14E15H001M
Depth Zone: Unknown; Within CC
Subbasin: Chowchilla
GSE (ft, msl): 162

Total Depth (ft):
Perf Top (ft):
Perf Bottom (ft):
Top Model Layer: 4
Bottom Model Layer: 4



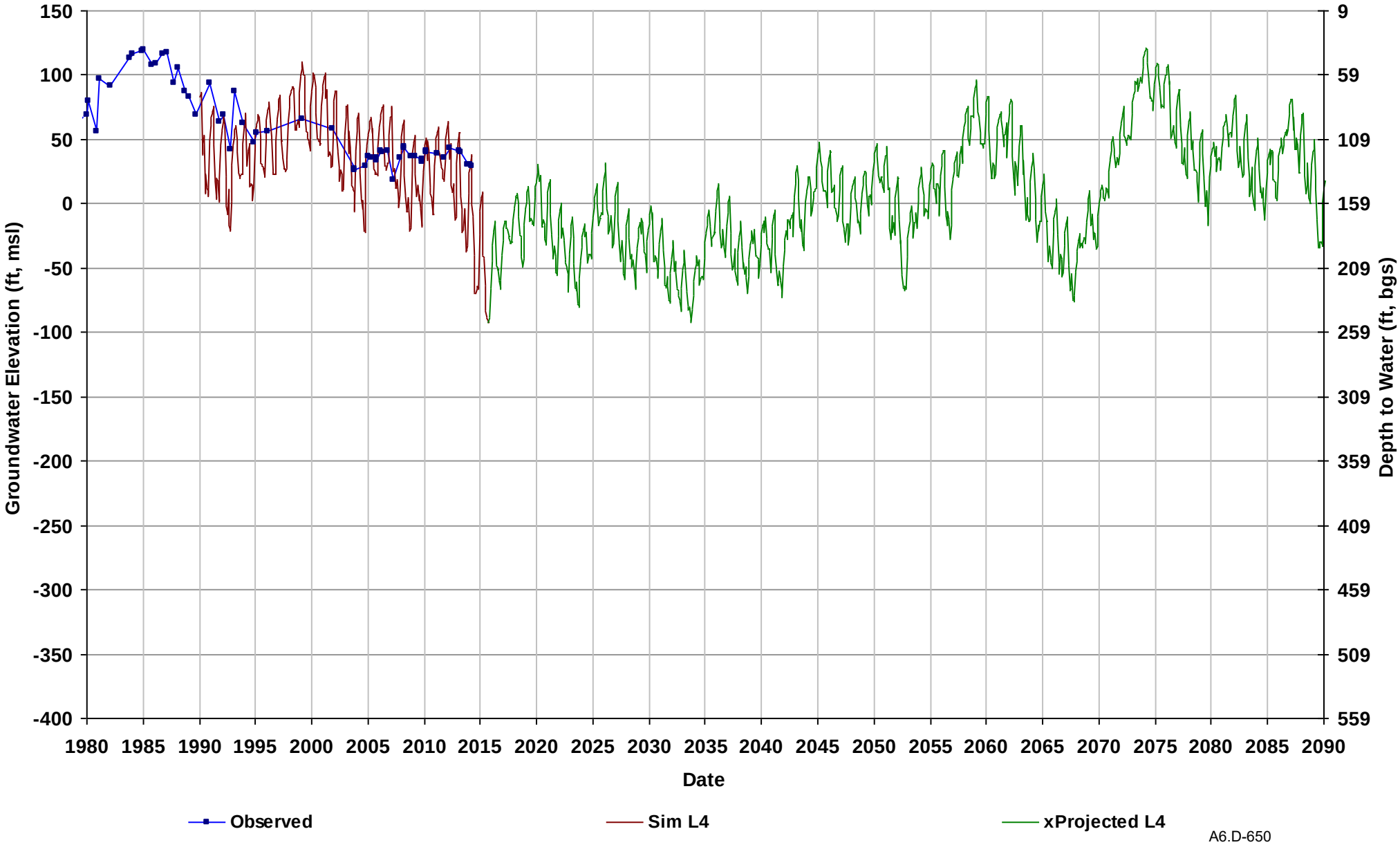
Well Name: 10S14E18K001M
Depth Zone: Unknown; Within CC
Subbasin: Chowchilla
GSE (ft, msl): 137

Total Depth (ft):
Perf Top (ft):
Perf Bottom (ft):
Top Model Layer: 4
Bottom Model Layer: 4



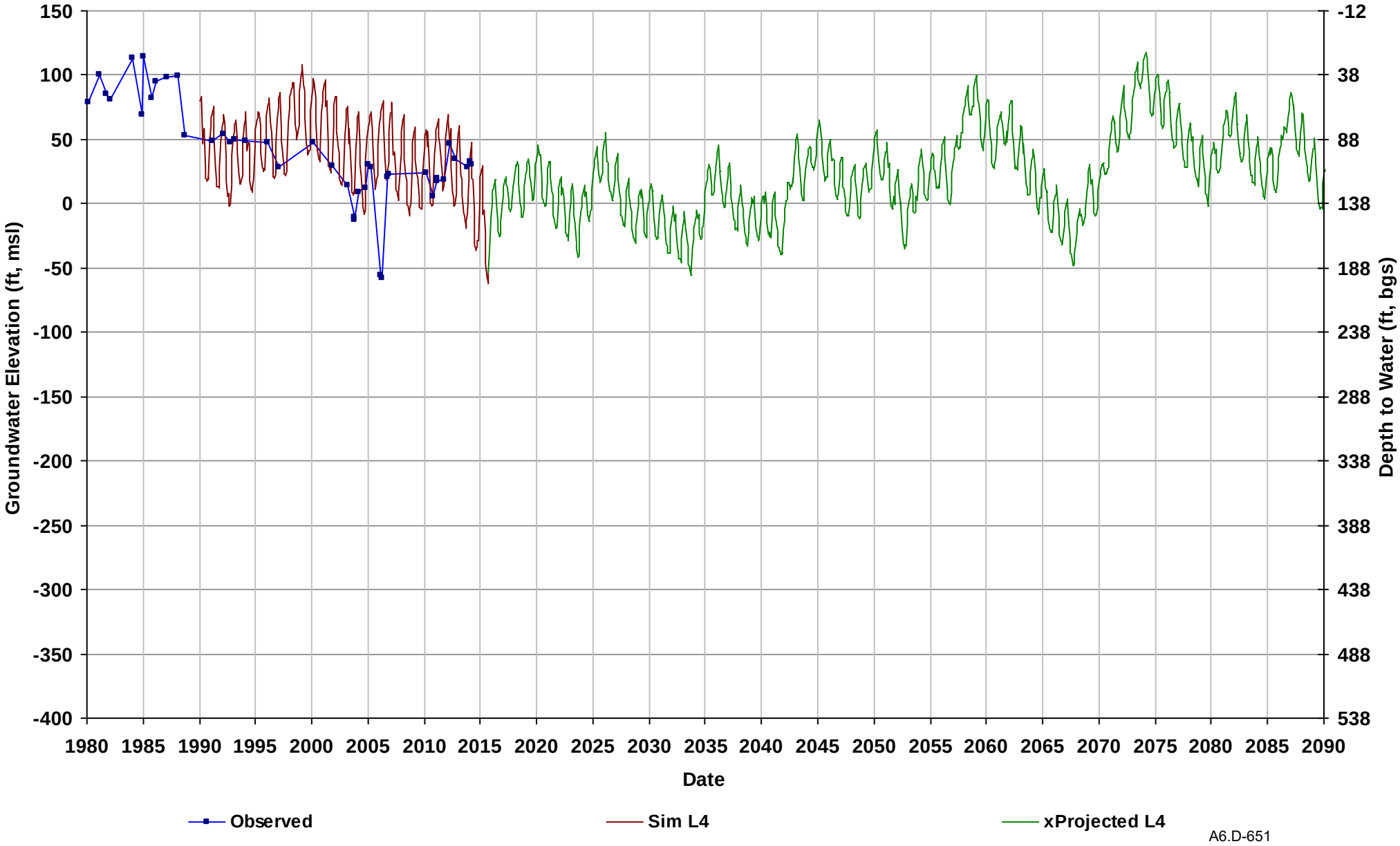
Well Name: 10S14E26C002M
Depth Zone: Unknown; Within CC
Subbasin: Chowchilla
GSE (ft, msl): 158

Total Depth (ft):
Perf Top (ft):
Perf Bottom (ft):
Top Model Layer: 4
Bottom Model Layer: 4



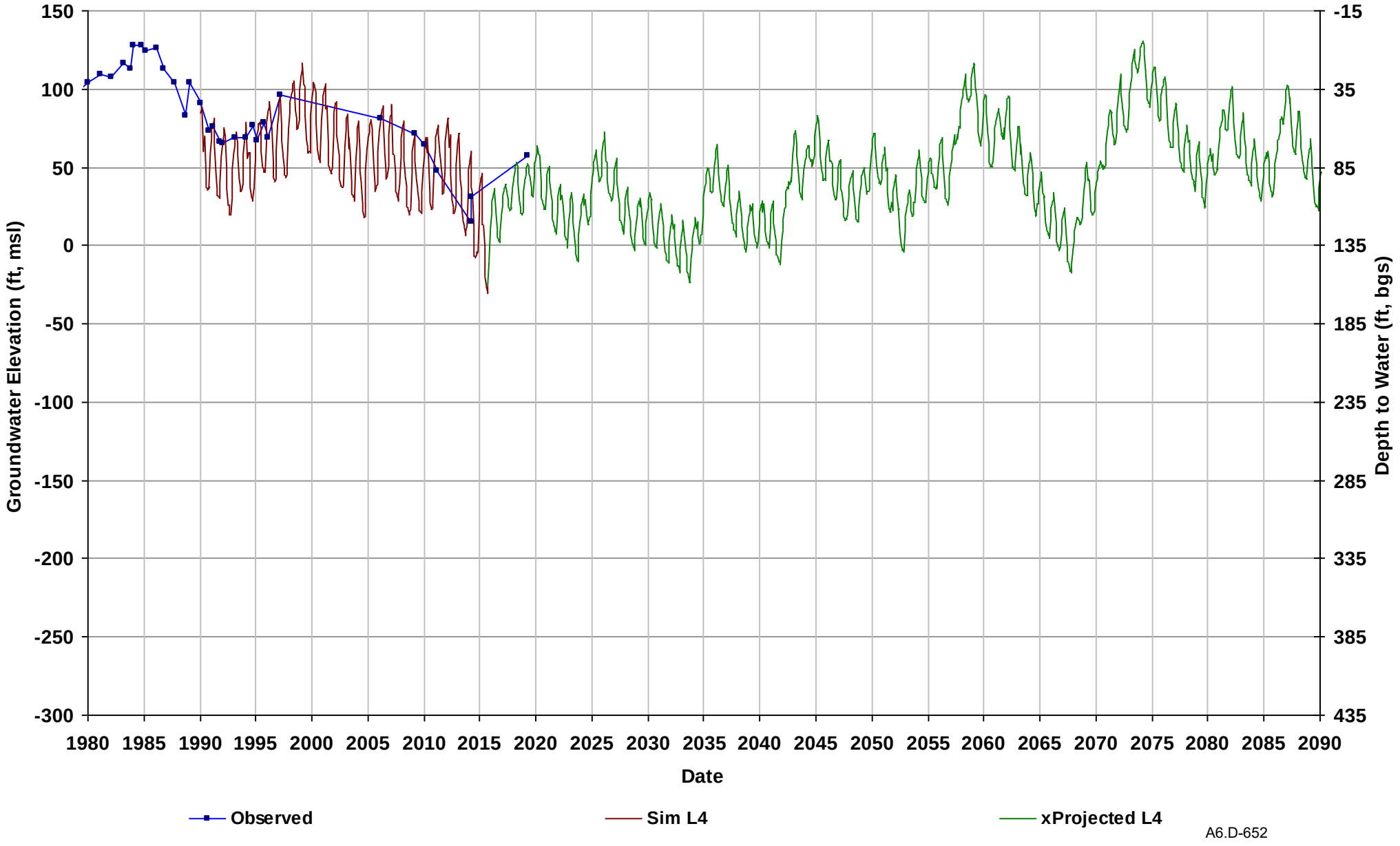
Well Name: 10S14E29C002M
Depth Zone: Unknown; Within CC
Subbasin: Chowchilla
GSE (ft, msl): 138

Total Depth (ft):
Perf Top (ft):
Perf Bottom (ft):
Top Model Layer: 4
Bottom Model Layer: 4



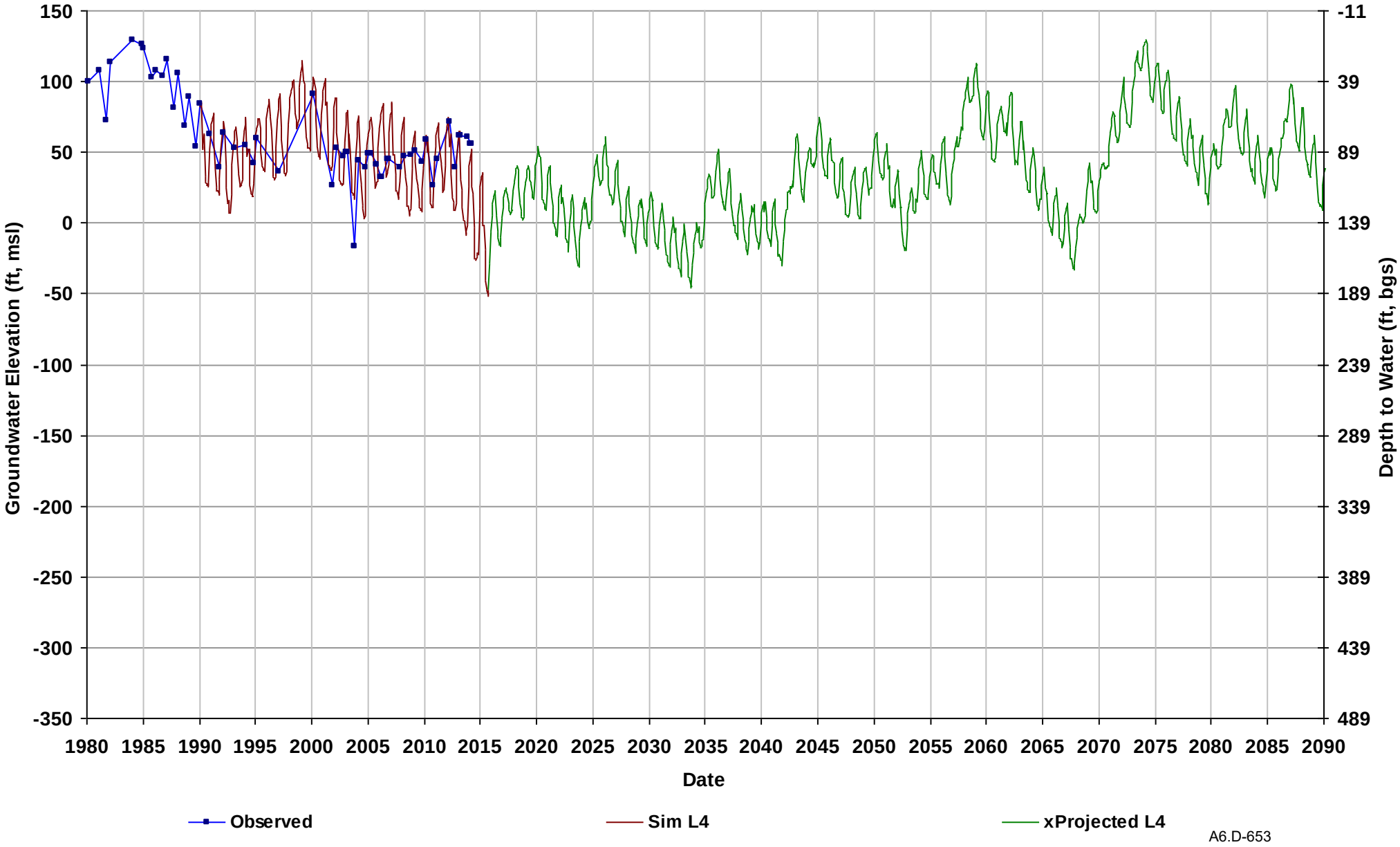
Well Name: 10S14E32Q001M
Depth Zone: Unknown; Within CC
Subbasin: Chowchilla
GSE (ft, msl): 134

Total Depth (ft):
Perf Top (ft):
Perf Bottom (ft):
Top Model Layer: 4
Bottom Model Layer: 4



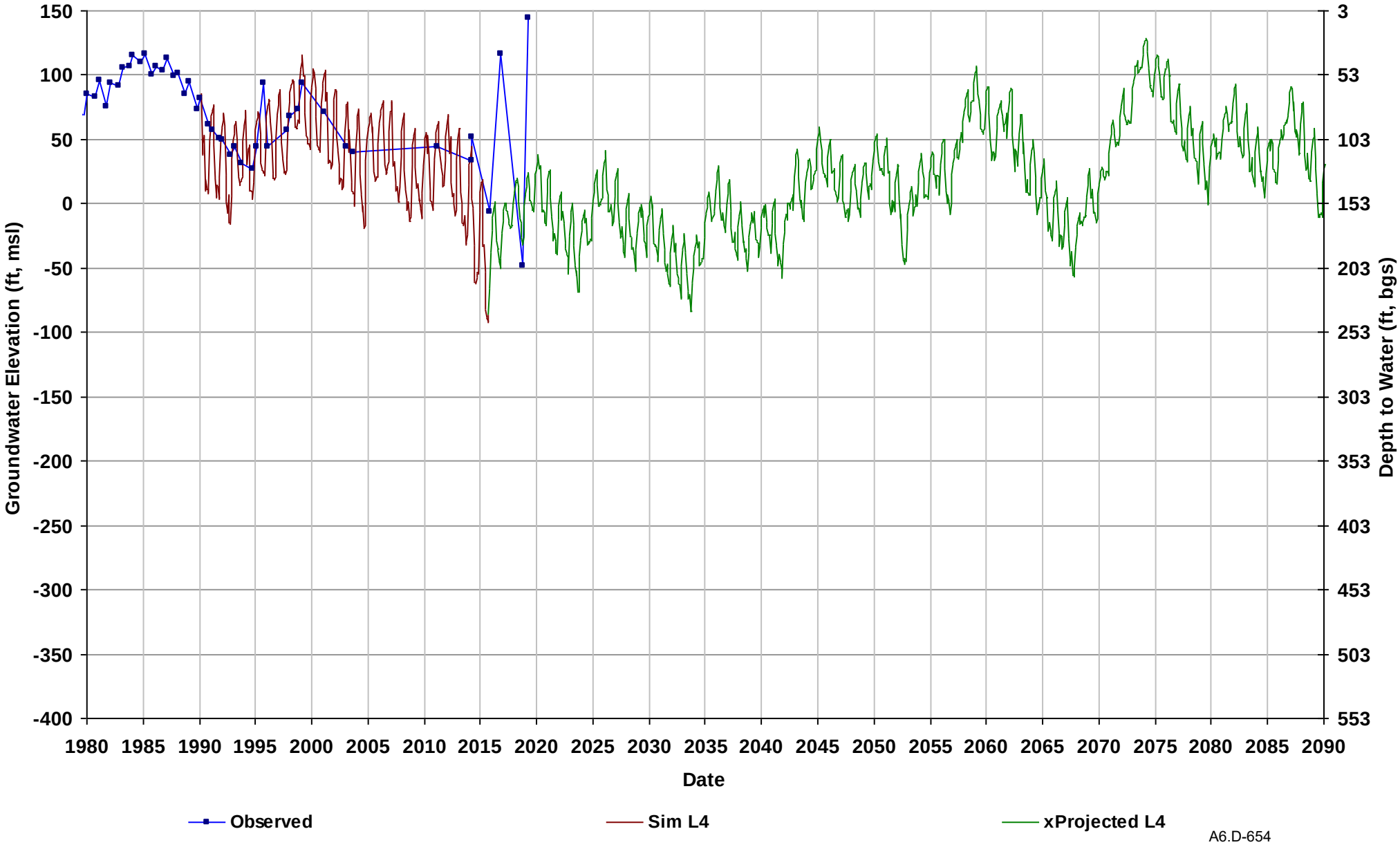
Well Name: 10S14E33L002M
Depth Zone: Unknown; Within CC
Subbasin: Chowchilla
GSE (ft, msl): 139

Total Depth (ft):
Perf Top (ft):
Perf Bottom (ft):
Top Model Layer: 4
Bottom Model Layer: 4



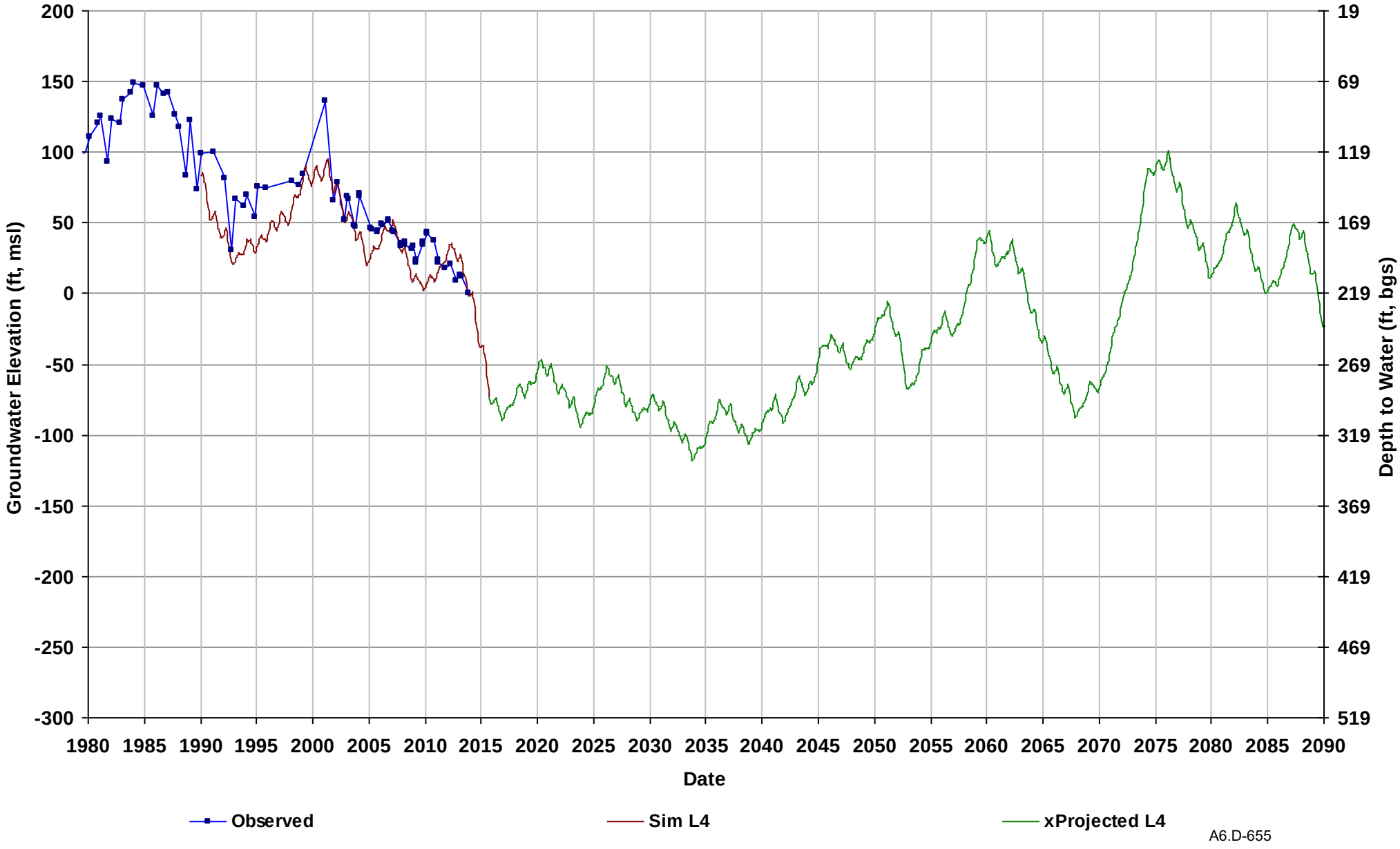
Well Name: 10S14E35F001M
Depth Zone: Unknown; Within CC
Subbasin: Chowchilla
GSE (ft, msl): 153

Total Depth (ft):
Perf Top (ft):
Perf Bottom (ft):
Top Model Layer: 4
Bottom Model Layer: 4



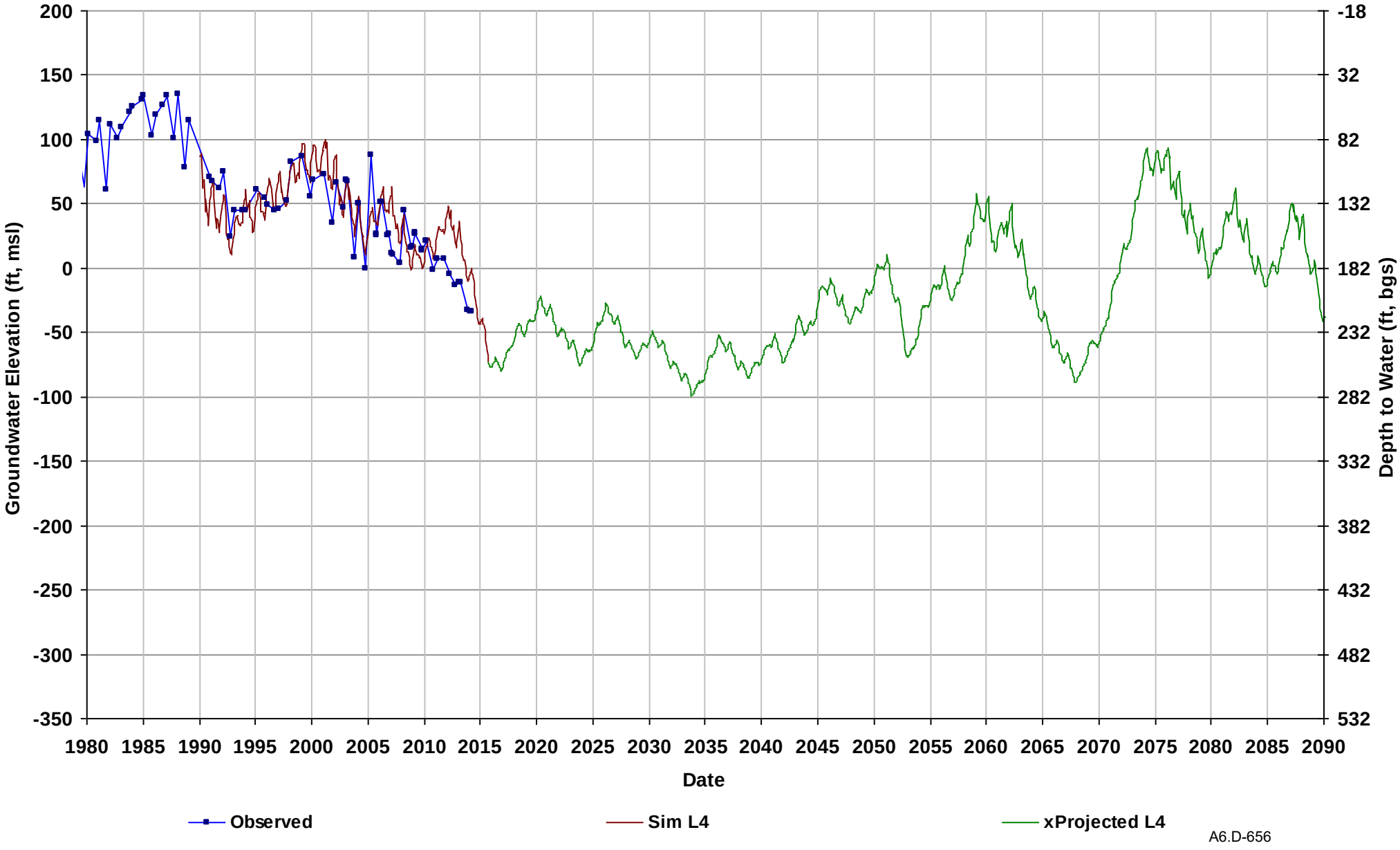
Well Name: 10S15E01E001M
Depth Zone: Unknown; Within CC
Subbasin: Chowchilla
GSE (ft, msl): 218

Total Depth (ft):
Perf Top (ft):
Perf Bottom (ft):
Top Model Layer: 4
Bottom Model Layer: 4



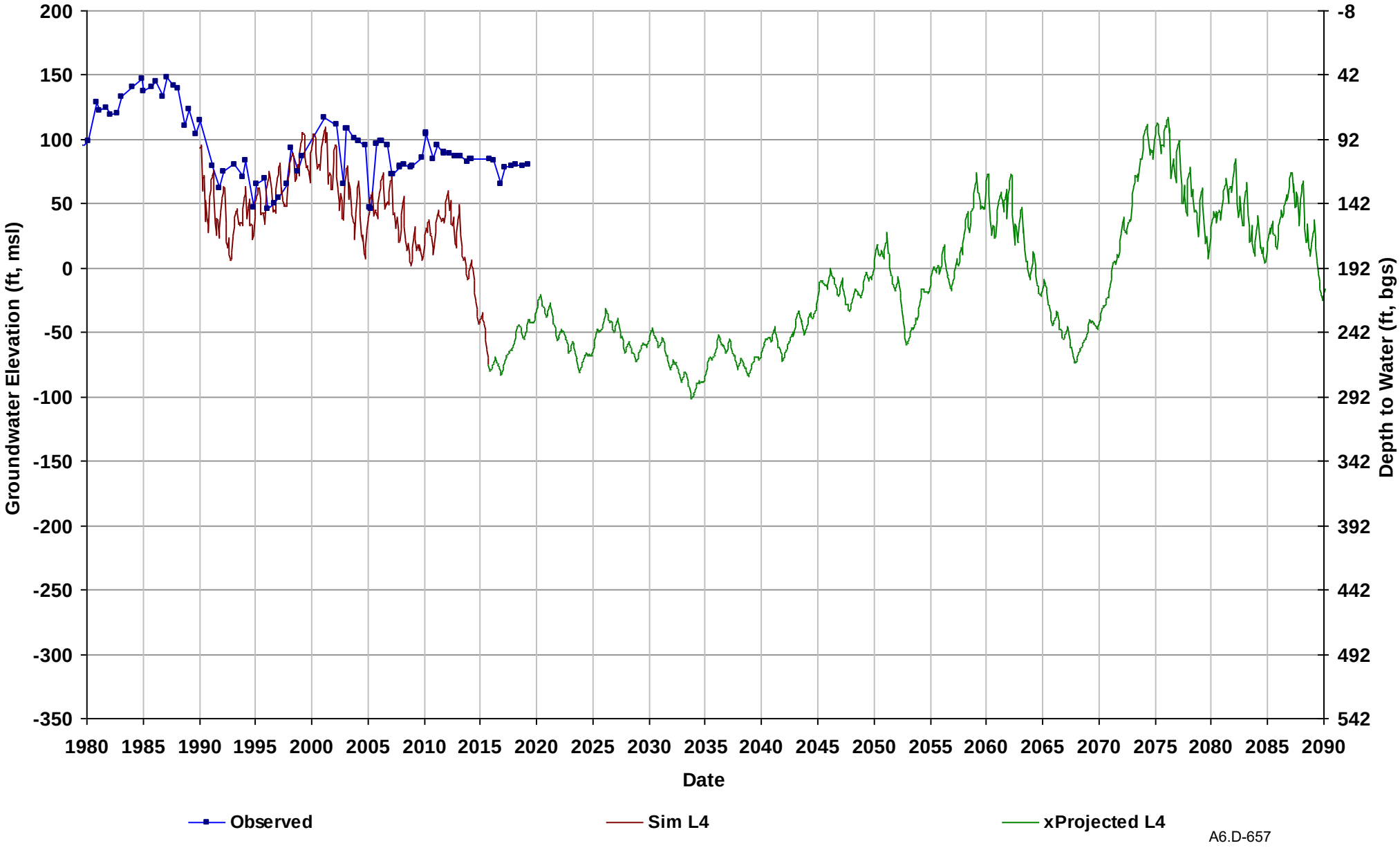
Well Name: 10S15E06L001M
Depth Zone: Unknown; Within CC
Subbasin: Chowchilla
GSE (ft, msl): 182

Total Depth (ft):
Perf Top (ft):
Perf Bottom (ft):
Top Model Layer: 4
Bottom Model Layer: 4



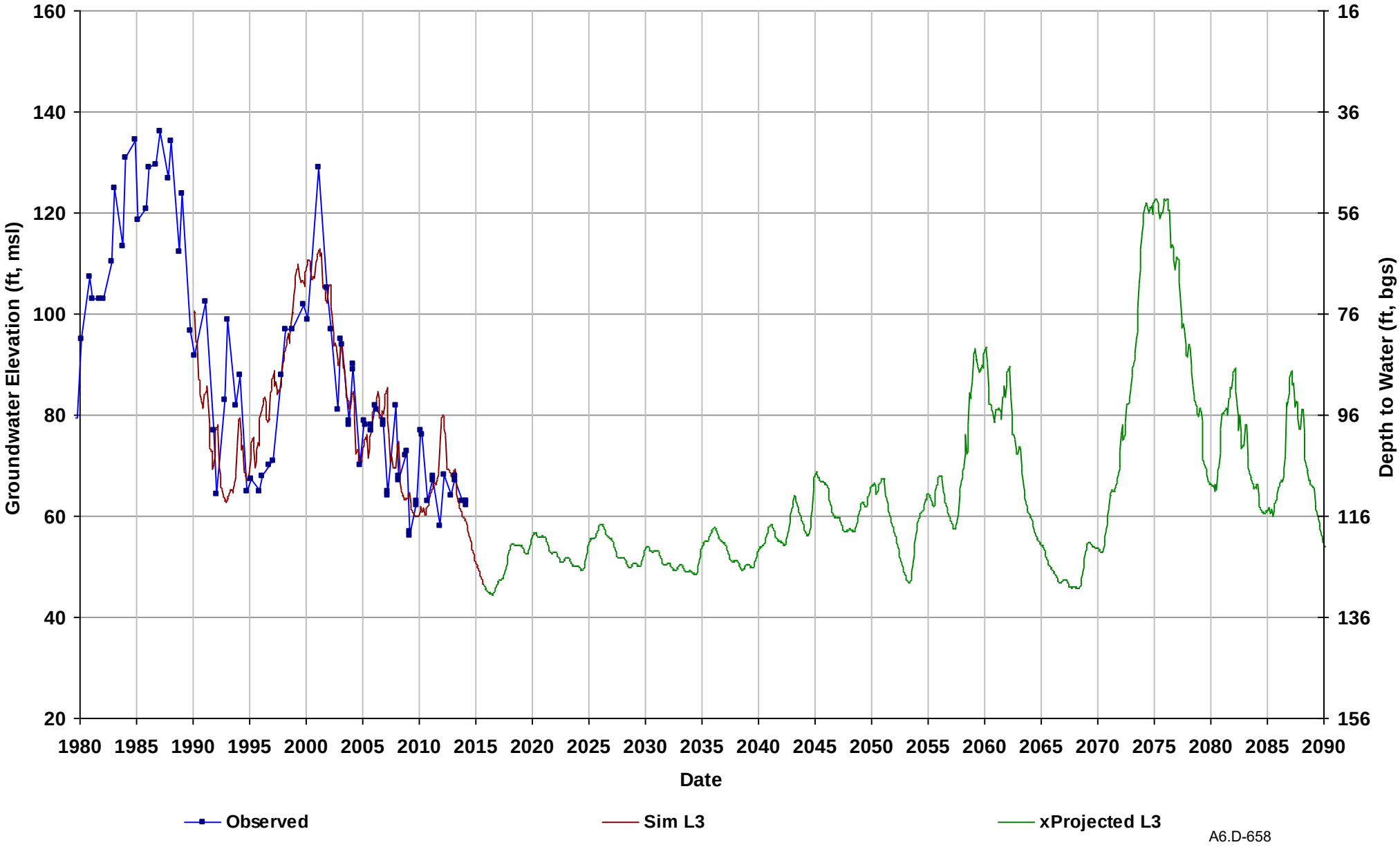
Well Name: 10S15E16R002M
Depth Zone: Lower; Within CC
Subbasin: Chowchilla
GSE (ft, msl): 191

Total Depth (ft): 529
Perf Top (ft): 187
Perf Bottom (ft): 529
Top Model Layer: 4
Bottom Model Layer: 4



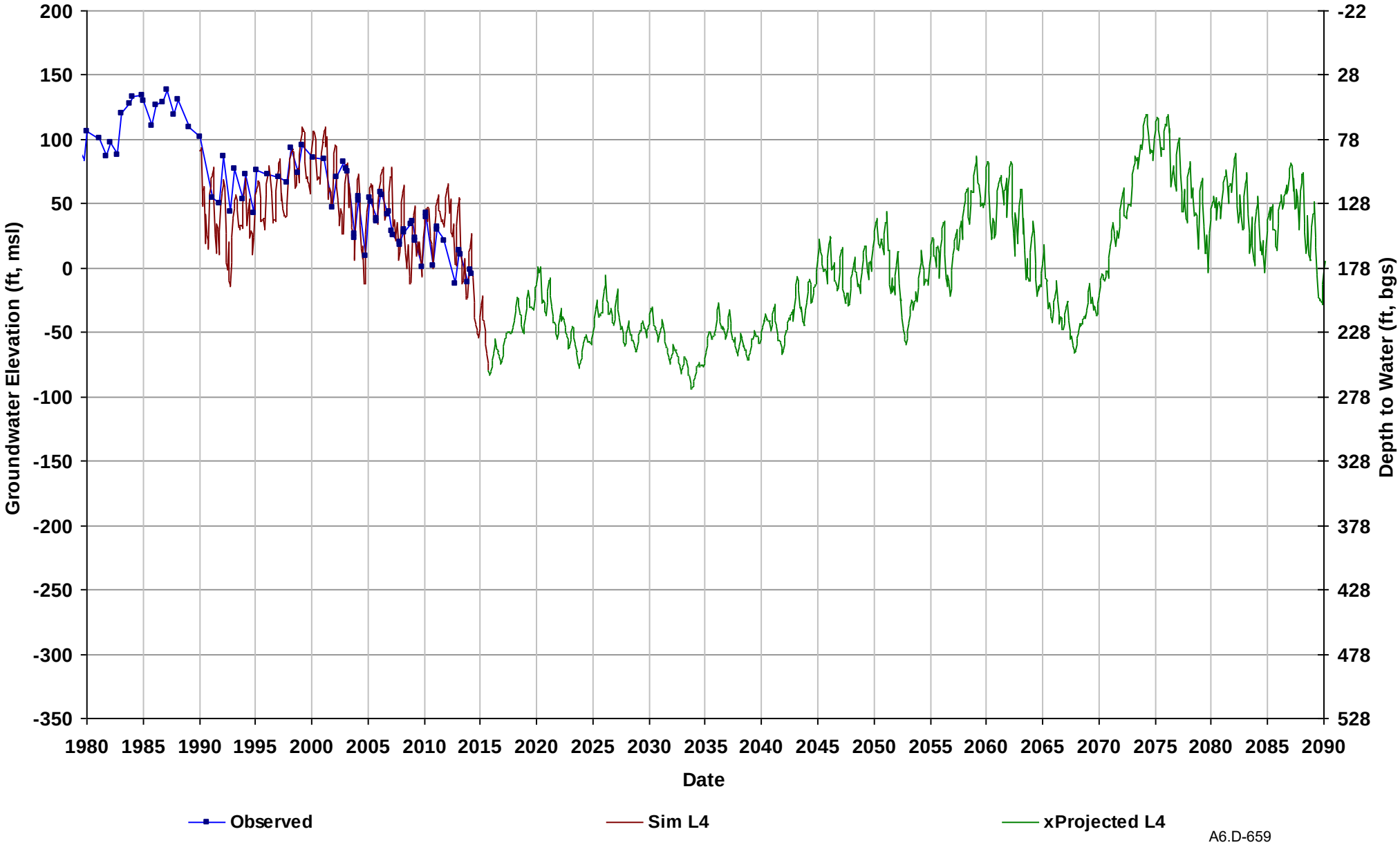
Well Name: 10S15E18L001M
Depth Zone: Unknown; Within CC
Subbasin: Chowchilla
GSE (ft, msl): 176

Total Depth (ft):
Perf Top (ft):
Perf Bottom (ft):
Top Model Layer: 3
Bottom Model Layer: 3



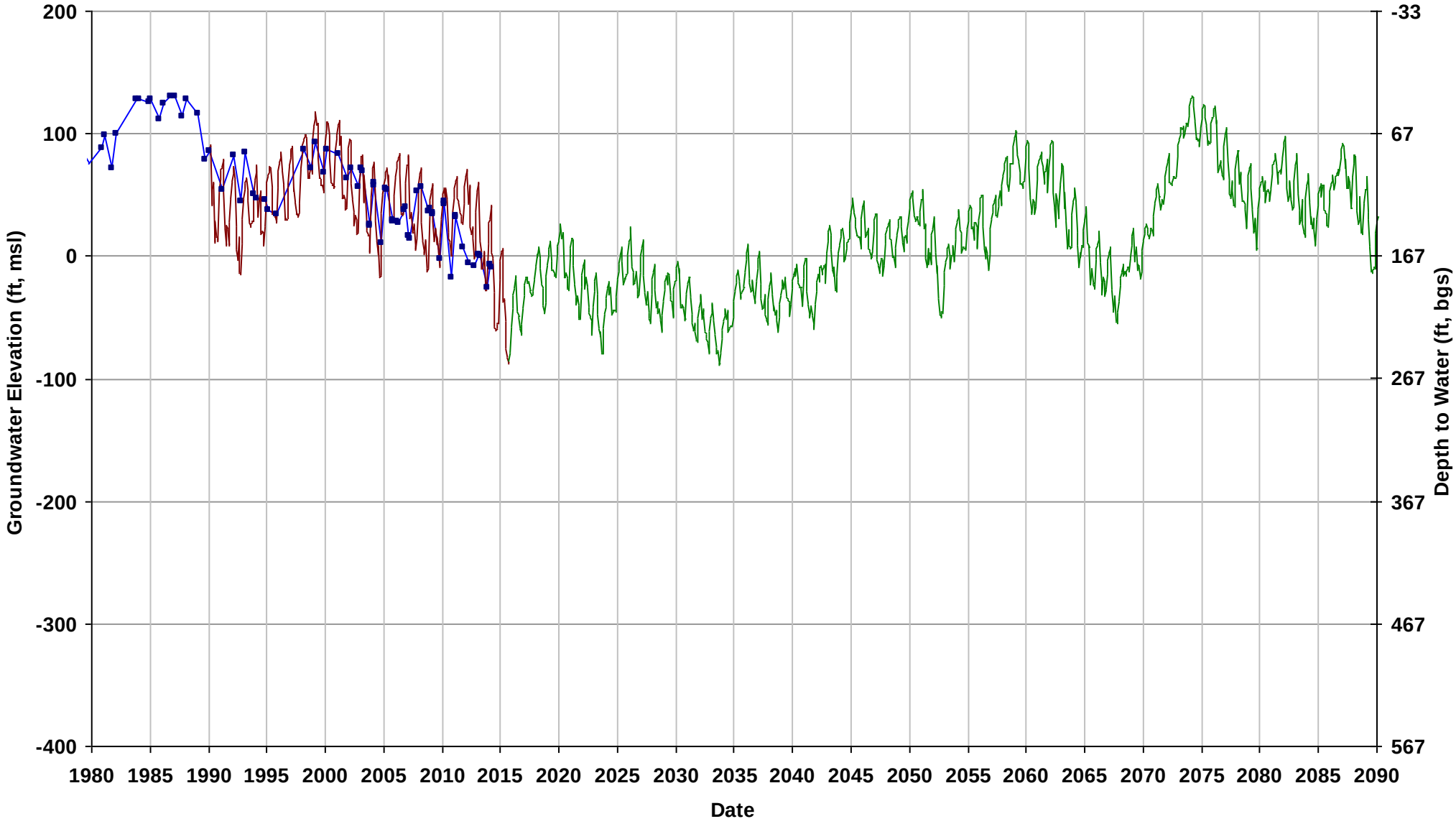
Well Name: 10S15E29A002M
Depth Zone: Unknown; Within CC
Subbasin: Chowchilla
GSE (ft, msl): 178

Total Depth (ft):
Perf Top (ft):
Perf Bottom (ft):
Top Model Layer: 4
Bottom Model Layer: 4



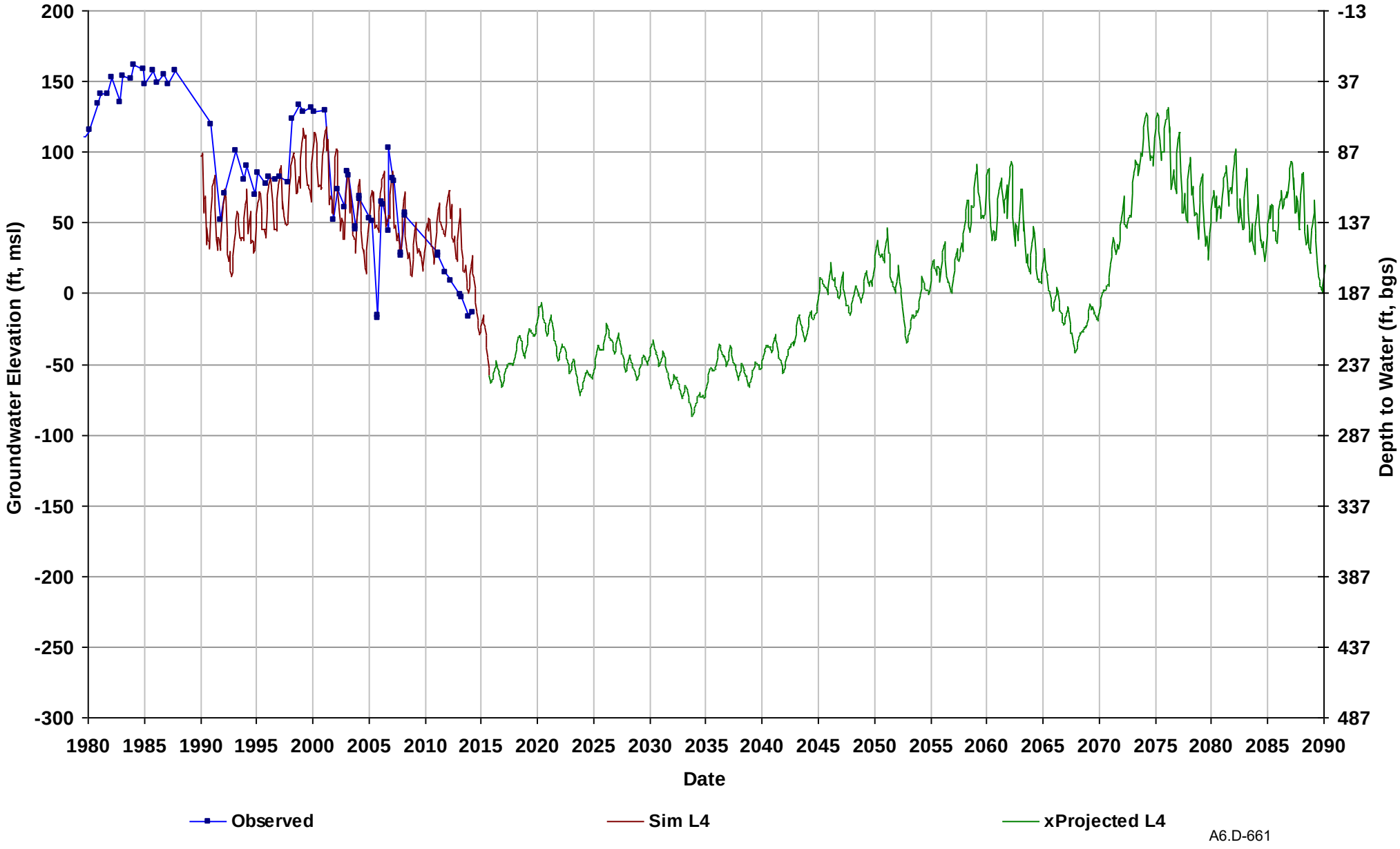
Well Name: 10S15E32L001M
Depth Zone: Unknown; Within CC
Subbasin: Chowchilla
GSE (ft, msl): 166

Total Depth (ft):
Perf Top (ft):
Perf Bottom (ft):
Top Model Layer: 4
Bottom Model Layer: 4



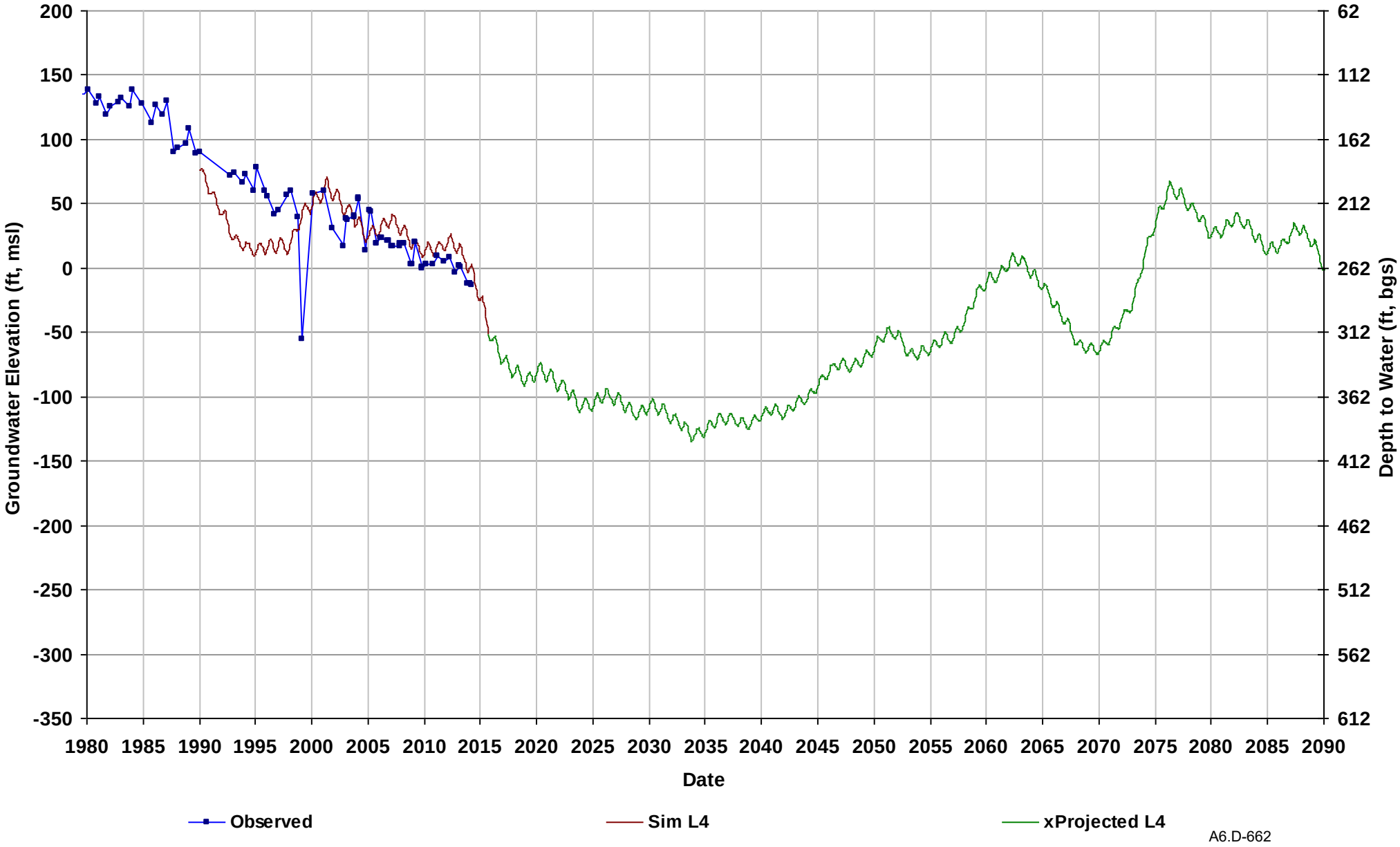
Well Name: 10S15E35A002M
Depth Zone: Unknown; Outside CC
Subbasin: Chowchilla
GSE (ft, msl): 187

Total Depth (ft):
Perf Top (ft):
Perf Bottom (ft):
Top Model Layer: 4
Bottom Model Layer: 4



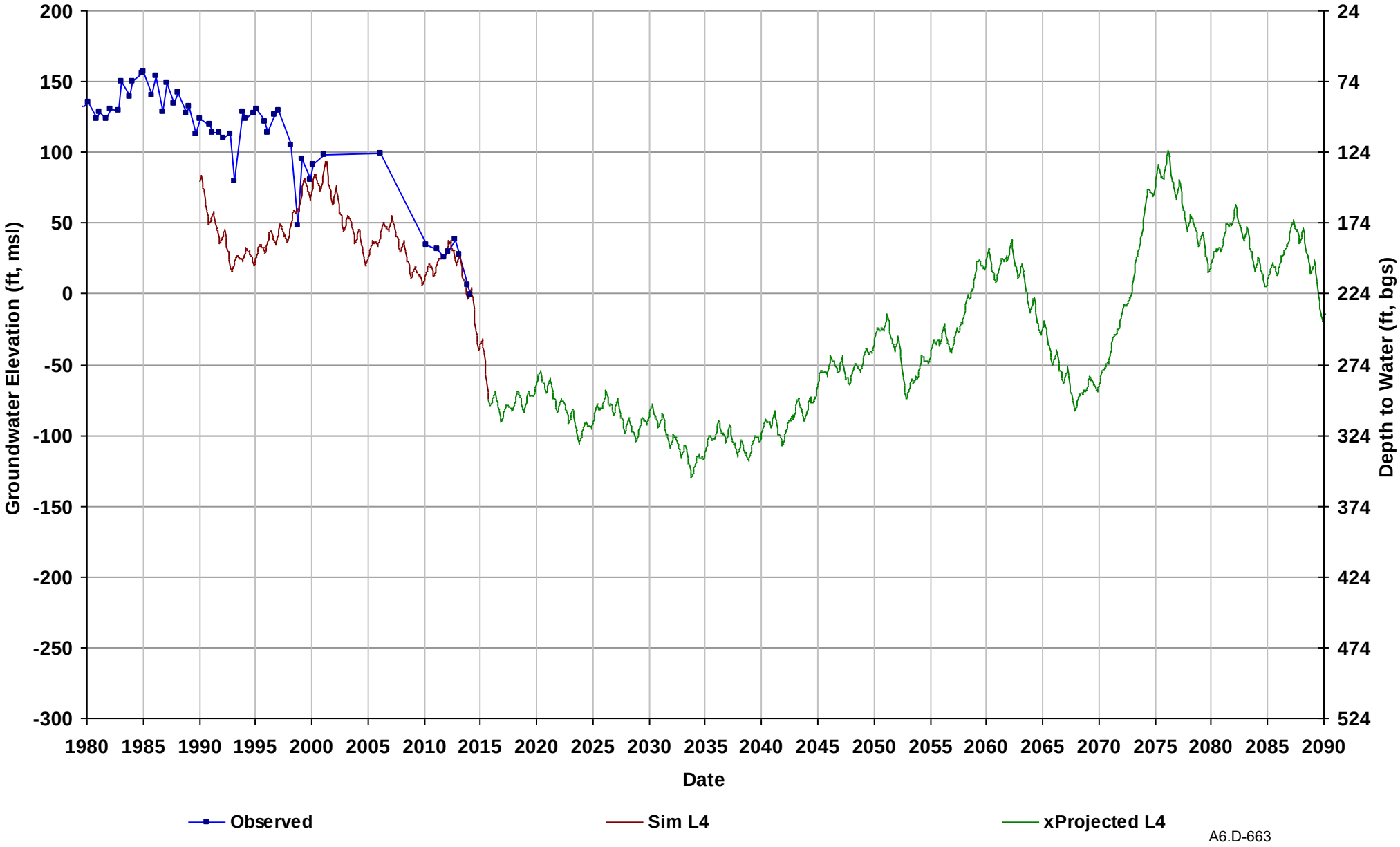
Well Name: 10S16E12K001M
Depth Zone: Unknown; Outside CC
Subbasin: Madera
GSE (ft, msl): 262

Total Depth (ft):
Perf Top (ft):
Perf Bottom (ft):
Top Model Layer: 4
Bottom Model Layer: 4



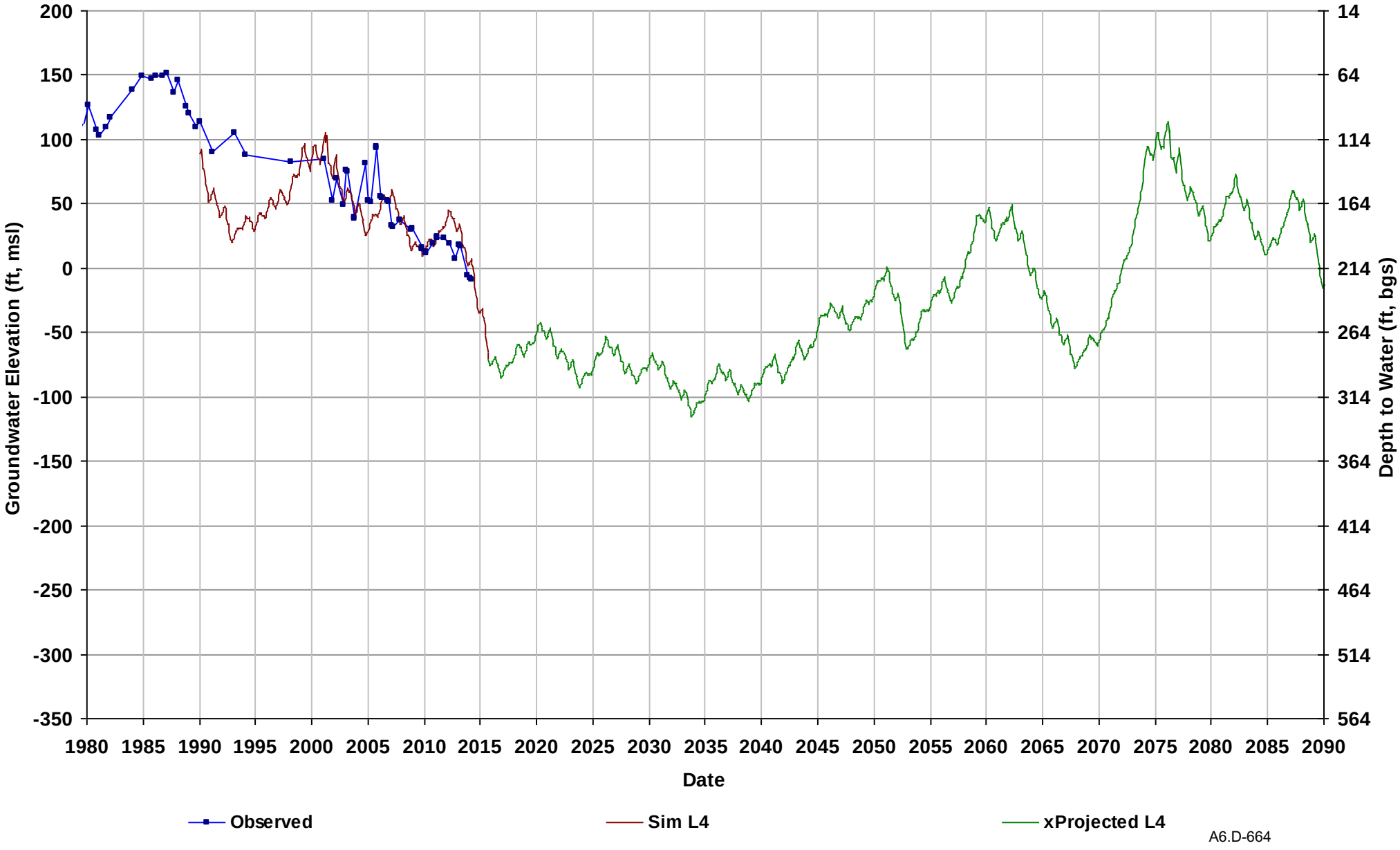
Well Name: 10S16E17C001M
Depth Zone: Unknown; Outside CC
Subbasin: Chowchilla
GSE (ft, msl): 224

Total Depth (ft):
Perf Top (ft):
Perf Bottom (ft):
Top Model Layer: 4
Bottom Model Layer: 4



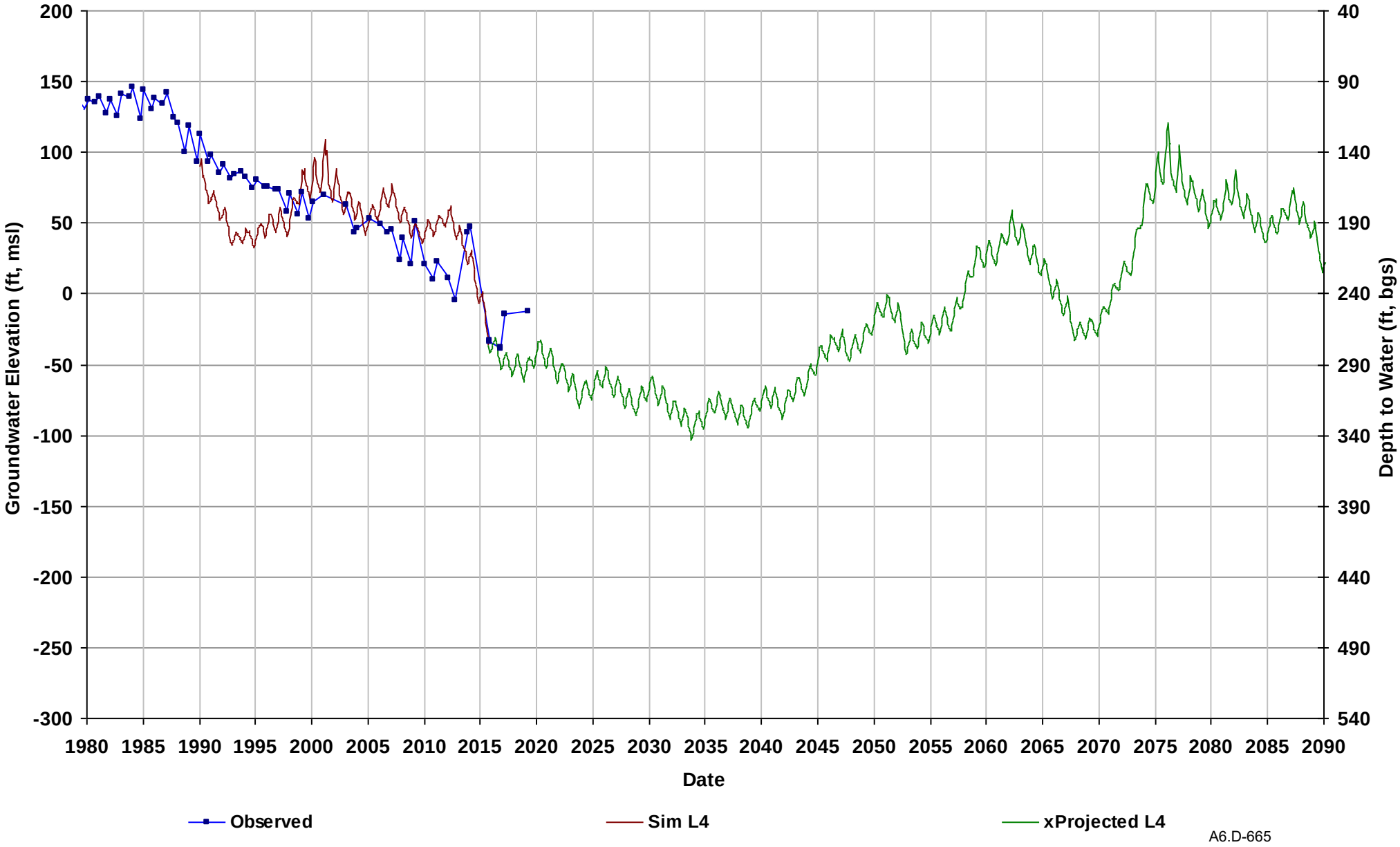
Well Name: 10S16E18D002M
Depth Zone: Unknown; Within CC
Subbasin: Chowchilla
GSE (ft, msl): 214

Total Depth (ft):
Perf Top (ft):
Perf Bottom (ft):
Top Model Layer: 4
Bottom Model Layer: 4



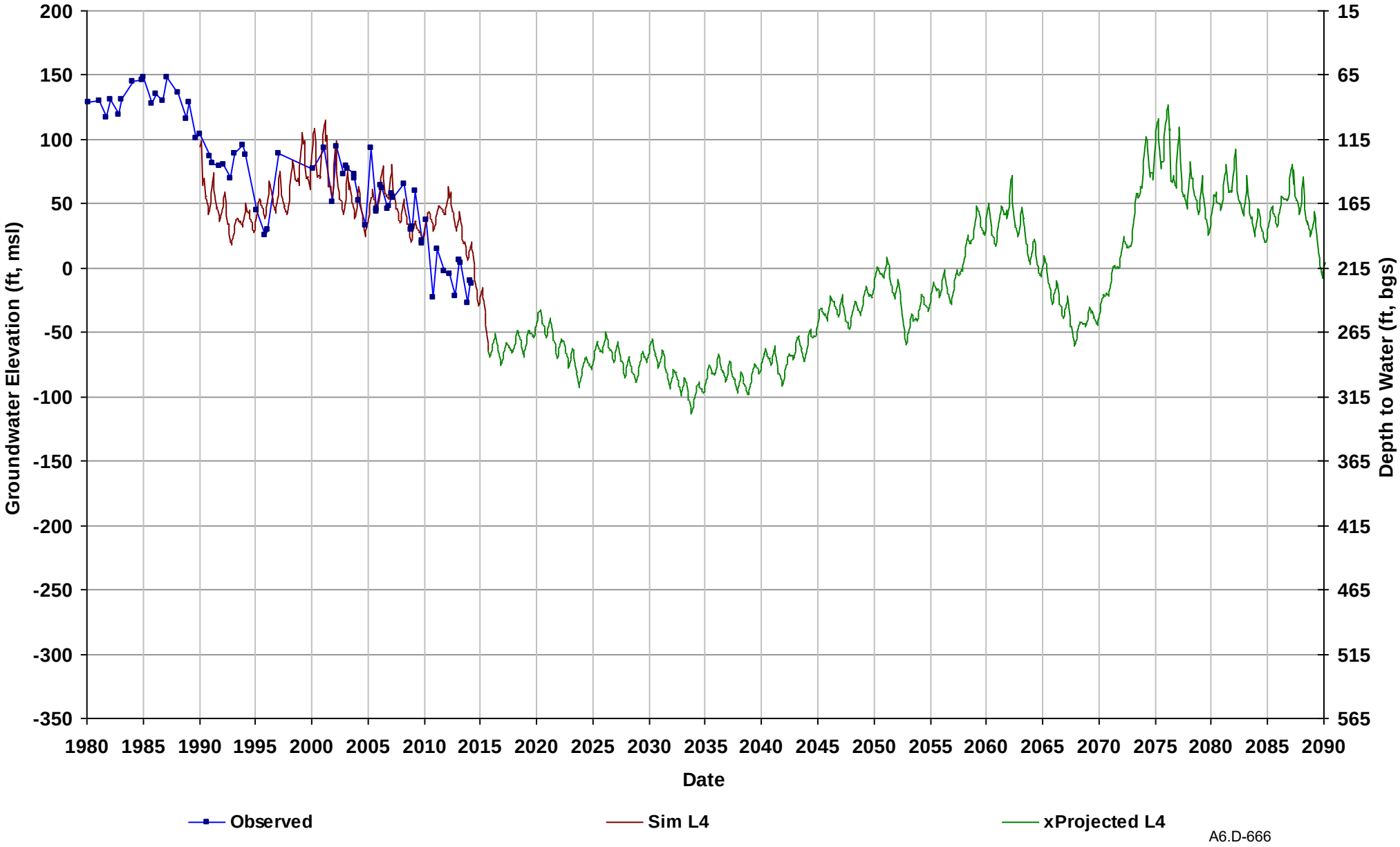
Well Name: 10S16E25F002M
Depth Zone: Lower; Outside CC
Subbasin: Madera
GSE (ft, msl): 239

Total Depth (ft): 516
Perf Top (ft): 260
Perf Bottom (ft): 507
Top Model Layer: 4
Bottom Model Layer: 4



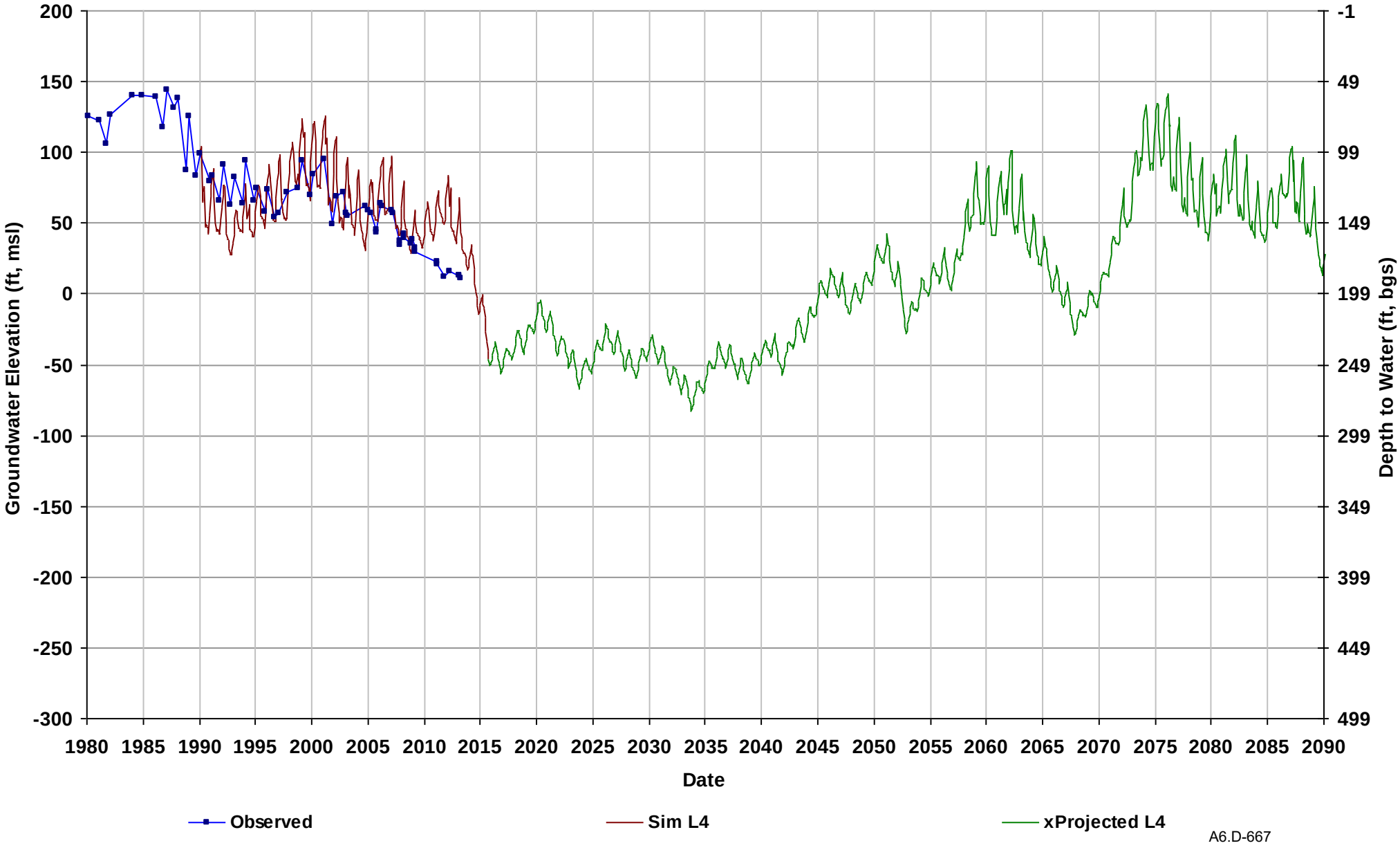
Well Name: 10S16E29A001M
Depth Zone: Unknown; Outside CC
Subbasin: Chowchilla
GSE (ft, msl): 215

Total Depth (ft):
Perf Top (ft):
Perf Bottom (ft):
Top Model Layer: 4
Bottom Model Layer: 4



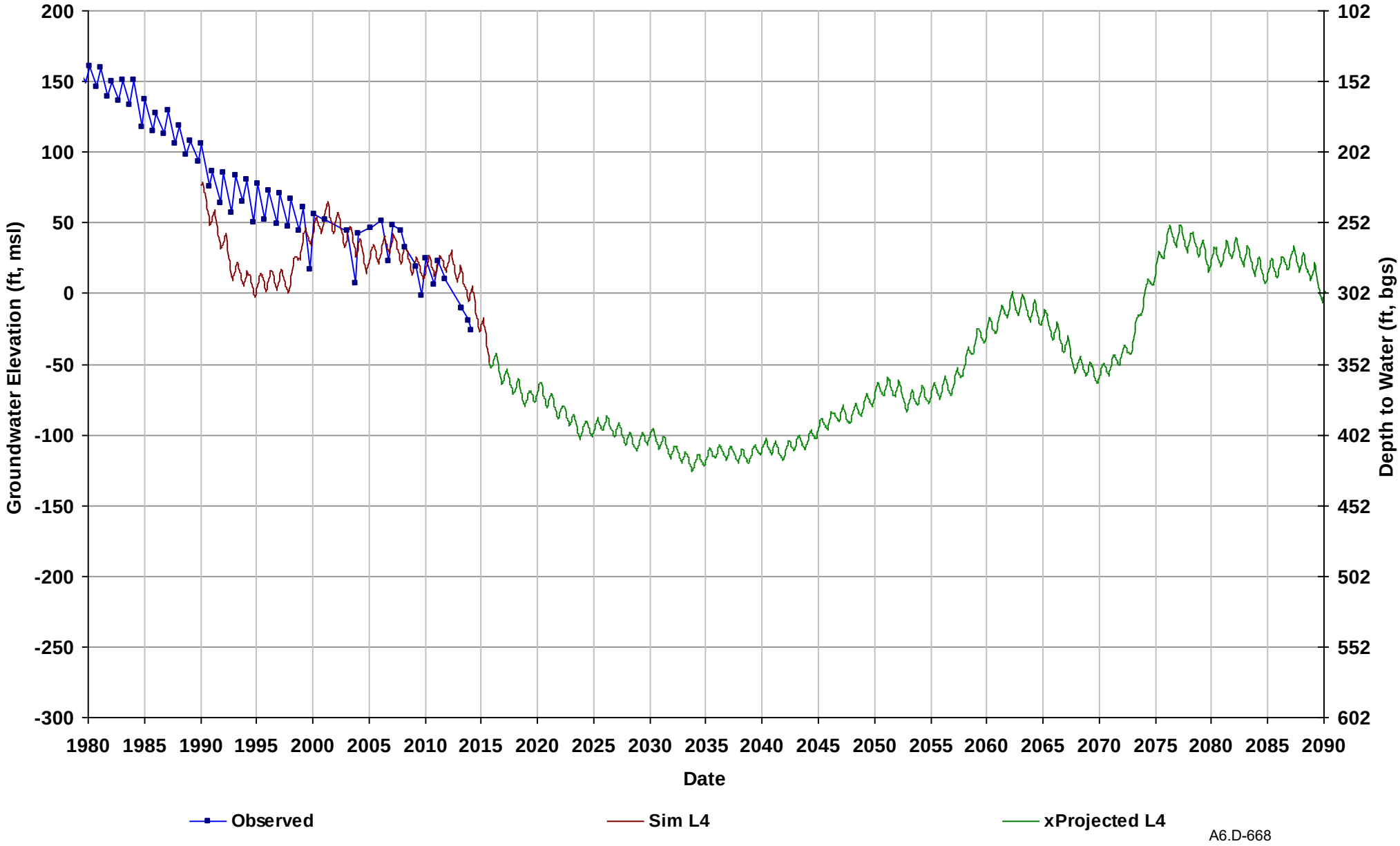
Well Name: 10S16E31J001M
Depth Zone: Unknown; Outside CC
Subbasin: Chowchilla
GSE (ft, msl): 198

Total Depth (ft):
Perf Top (ft):
Perf Bottom (ft):
Top Model Layer: 4
Bottom Model Layer: 4



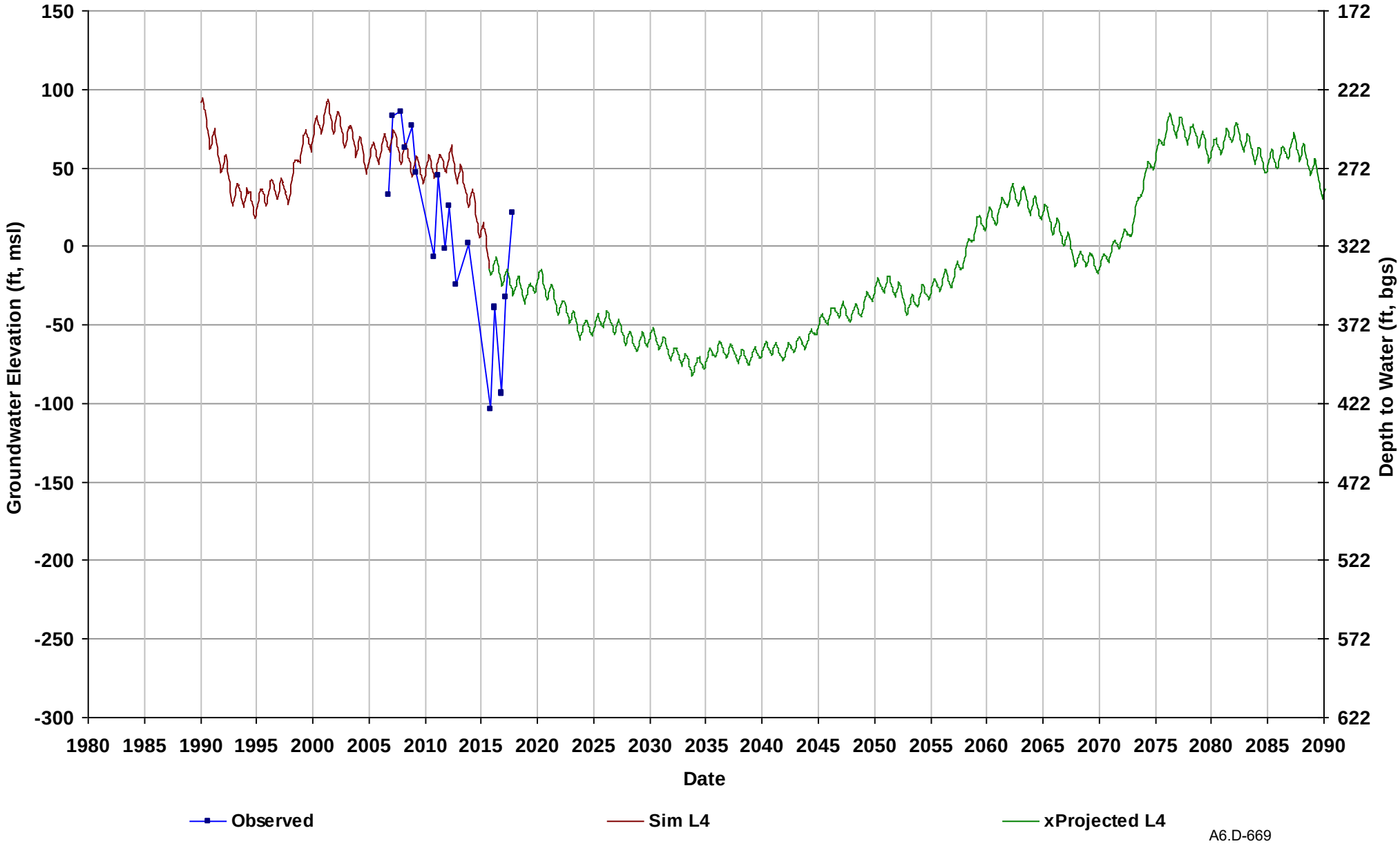
Well Name: 10S17E03F001M
Depth Zone: Unknown; Outside CC
Subbasin: Madera
GSE (ft, msl): 302

Total Depth (ft):
Perf Top (ft):
Perf Bottom (ft):
Top Model Layer: 4
Bottom Model Layer: 4



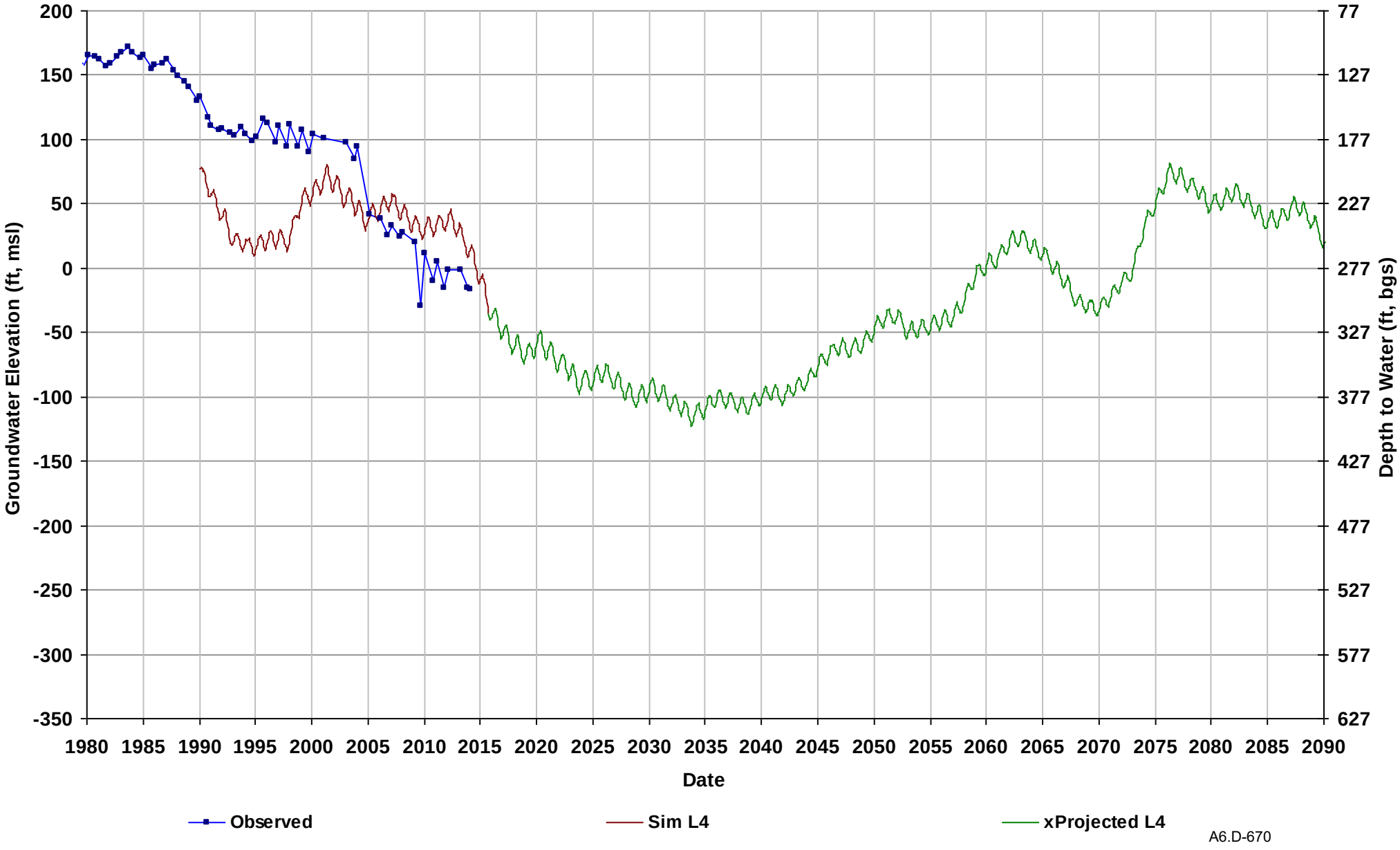
Well Name: 10S17E12C001M
Depth Zone: Lower; Outside CC
Subbasin: Madera
GSE (ft, msl): 321

Total Depth (ft): 640
Perf Top (ft): 140
Perf Bottom (ft): 502
Top Model Layer: 4
Bottom Model Layer: 4



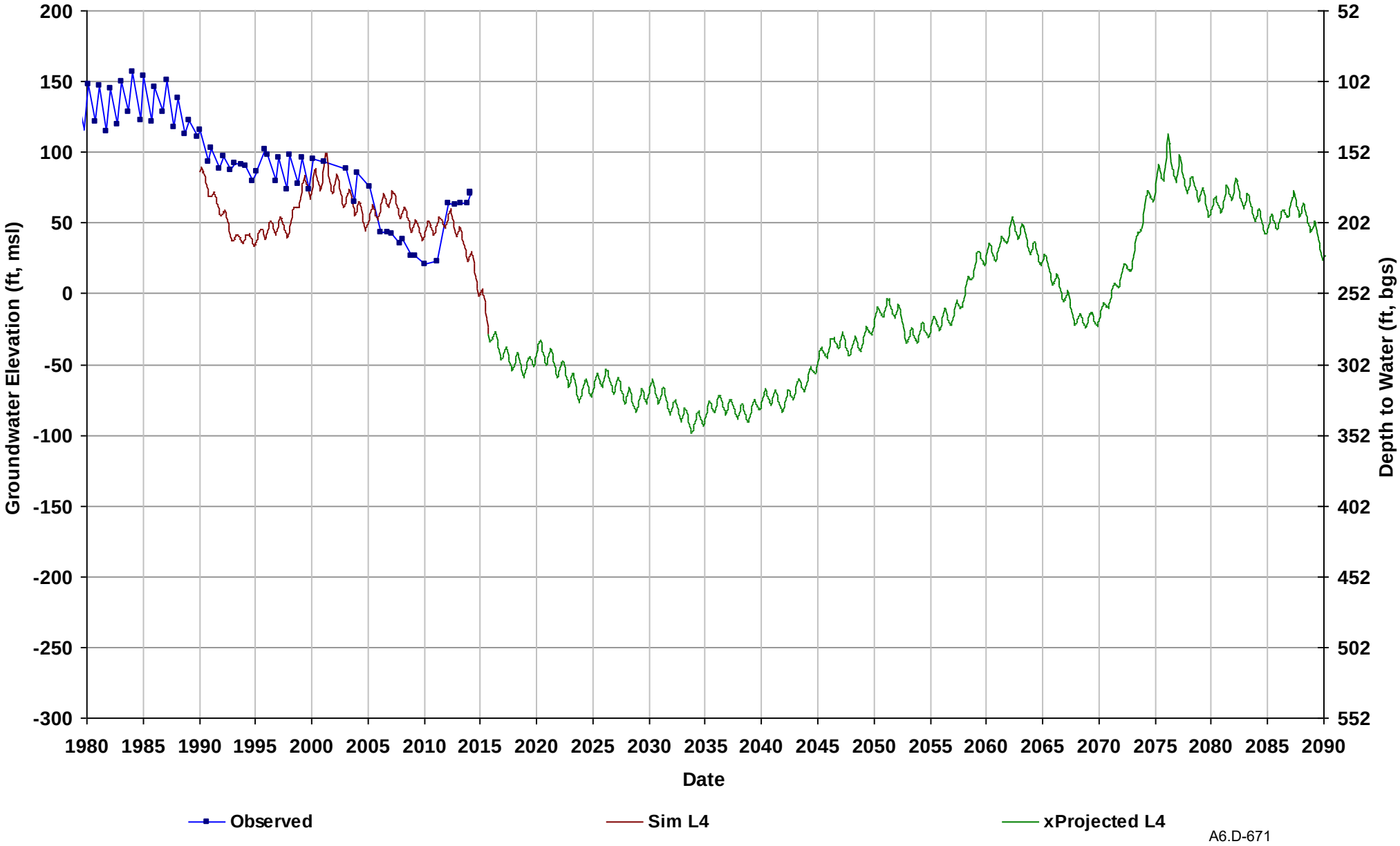
Well Name: 10S17E22D001M
Depth Zone: Lower; Outside CC
Subbasin: Madera
GSE (ft, msl): 277

Total Depth (ft): 250
Perf Top (ft): 140
Perf Bottom (ft): 250
Top Model Layer: 4
Bottom Model Layer: 4



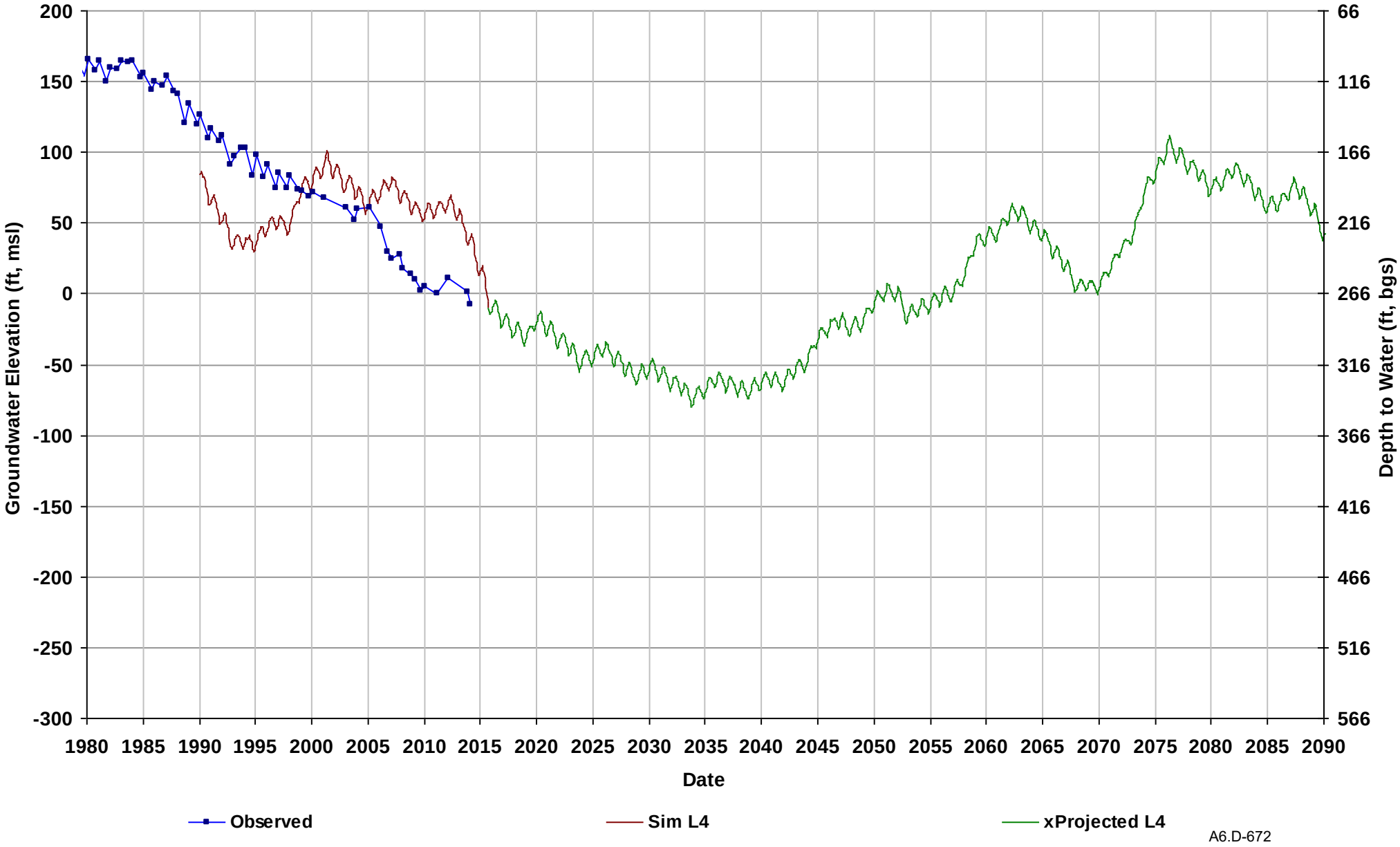
Well Name: 10S17E30B002M
Depth Zone: Unknown; Outside CC
Subbasin: Madera
GSE (ft, msl): 252

Total Depth (ft):
Perf Top (ft):
Perf Bottom (ft):
Top Model Layer: 4
Bottom Model Layer: 4



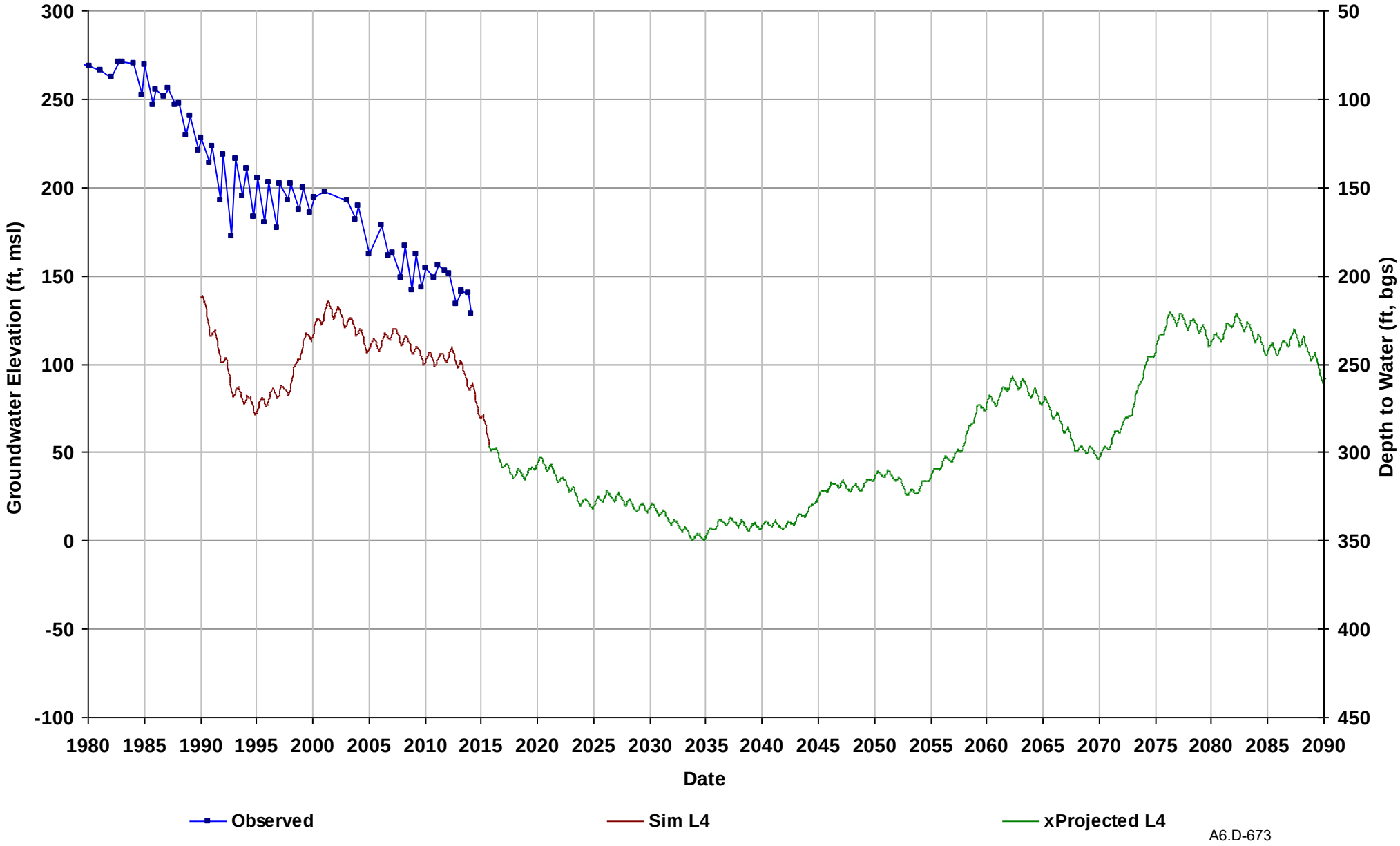
Well Name: 10S17E34A002M
Depth Zone: Unknown; Outside CC
Subbasin: Madera
GSE (ft, msl): 266

Total Depth (ft):
Perf Top (ft):
Perf Bottom (ft):
Top Model Layer: 4
Bottom Model Layer: 4



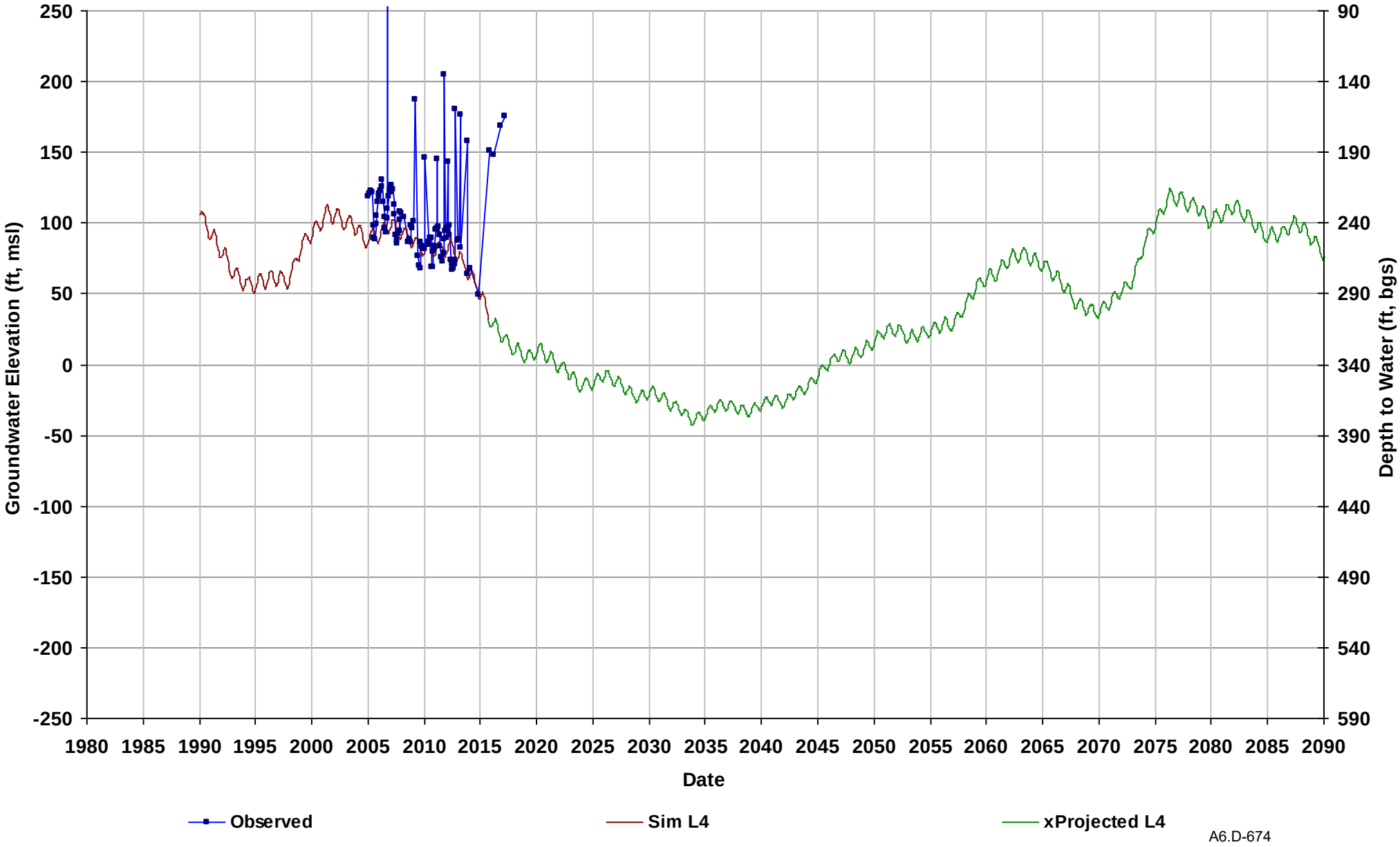
Well Name: 10S18E09C001M
Depth Zone: Unknown; Outside CC
Subbasin: Madera
GSE (ft, msl): 350

Total Depth (ft):
Perf Top (ft):
Perf Bottom (ft):
Top Model Layer: 4
Bottom Model Layer: 4



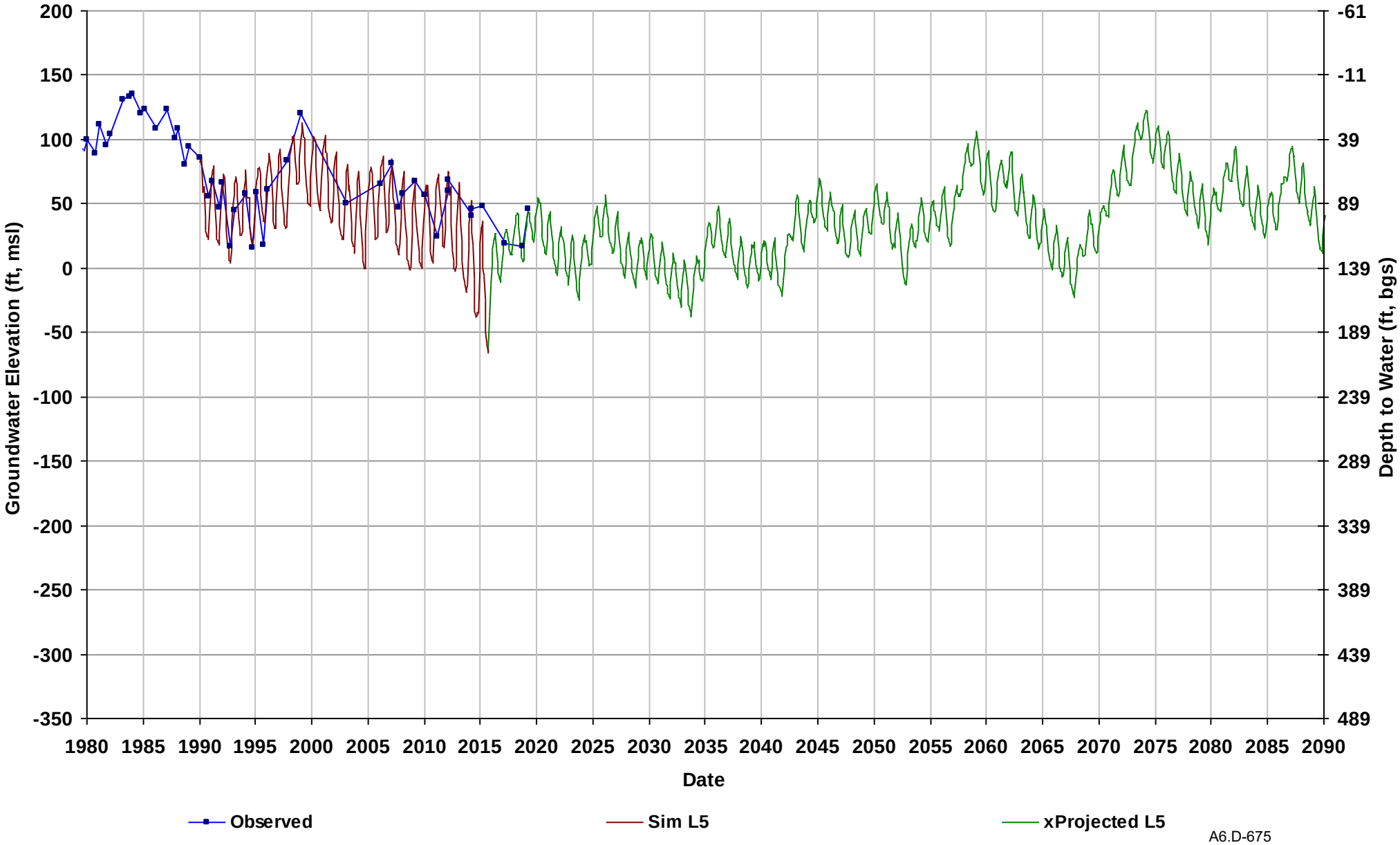
Well Name: 10S18E27N001M
Depth Zone: Unknown; Outside CC
Subbasin: Madera
GSE (ft, msl): 340

Total Depth (ft):
Perf Top (ft):
Perf Bottom (ft):
Top Model Layer: 4
Bottom Model Layer: 4



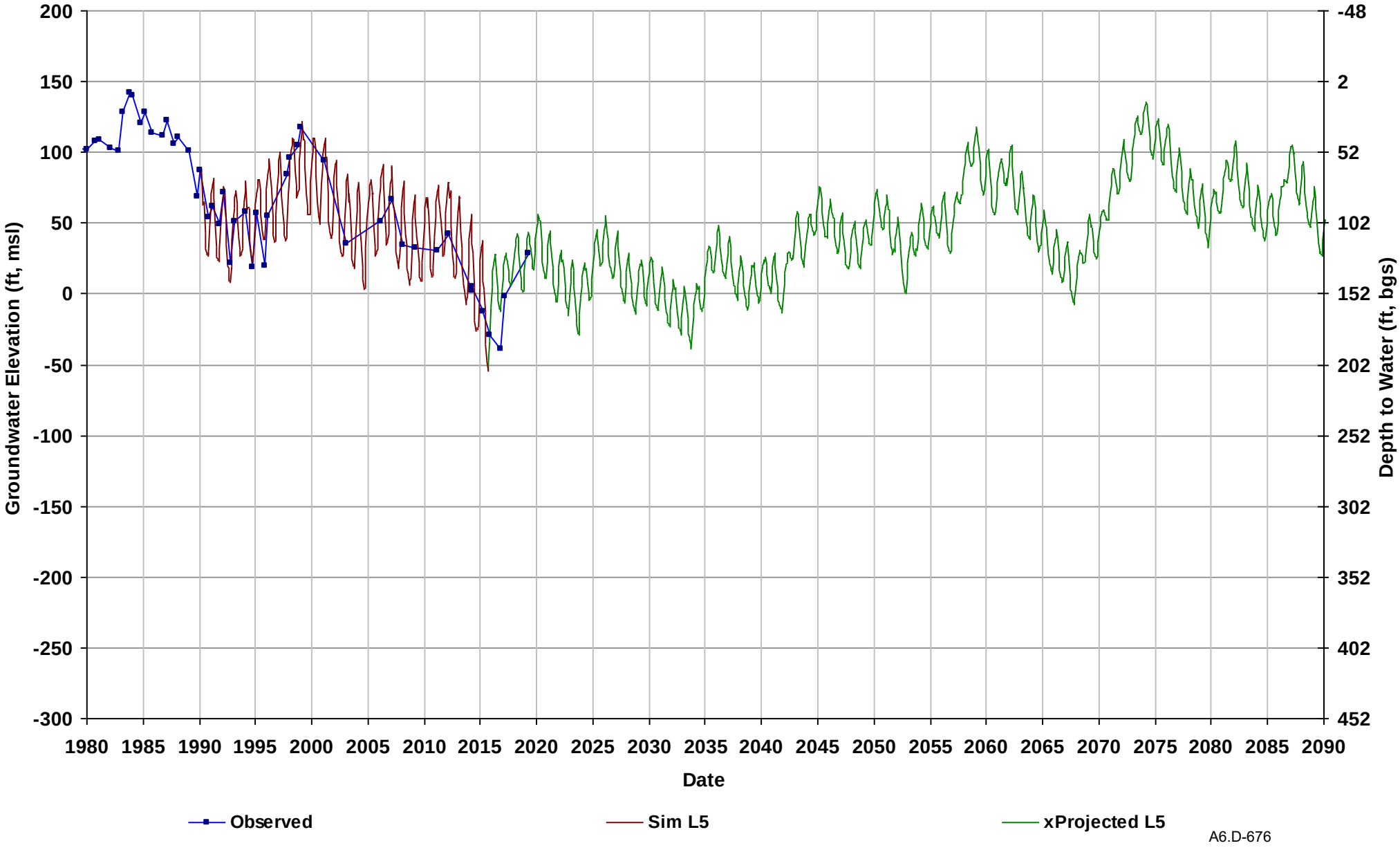
Well Name: 11S14E09A003M
Depth Zone: Unknown; Within CC
Subbasin: Chowchilla
GSE (ft, msl): 138

Total Depth (ft):
Perf Top (ft):
Perf Bottom (ft):
Top Model Layer: 5
Bottom Model Layer: 5



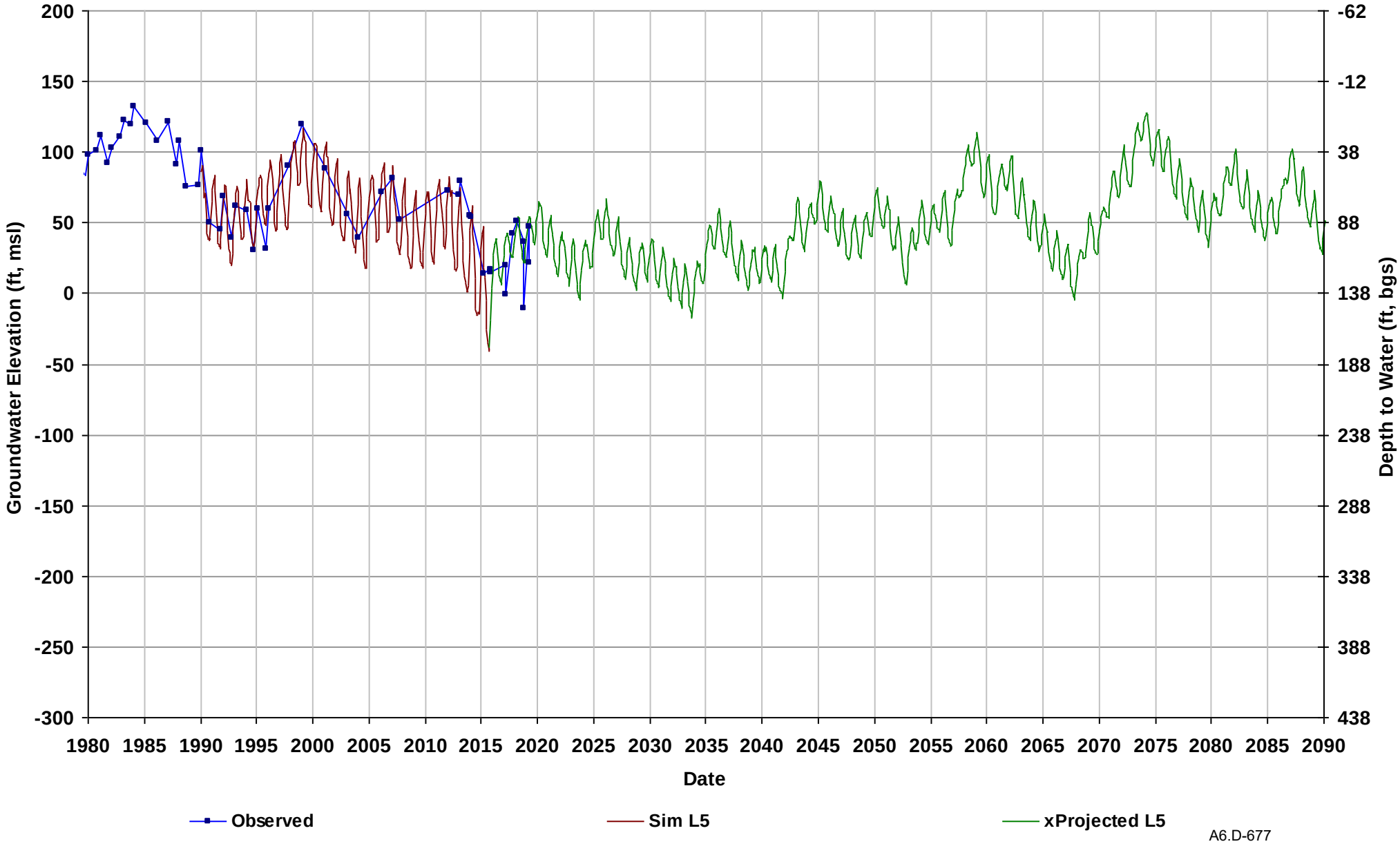
Well Name: 11S14E13R001M
Depth Zone: Unknown; Within CC
Subbasin: Chowchilla
GSE (ft, msl): 152

Total Depth (ft):
Perf Top (ft):
Perf Bottom (ft):
Top Model Layer: 5
Bottom Model Layer: 5



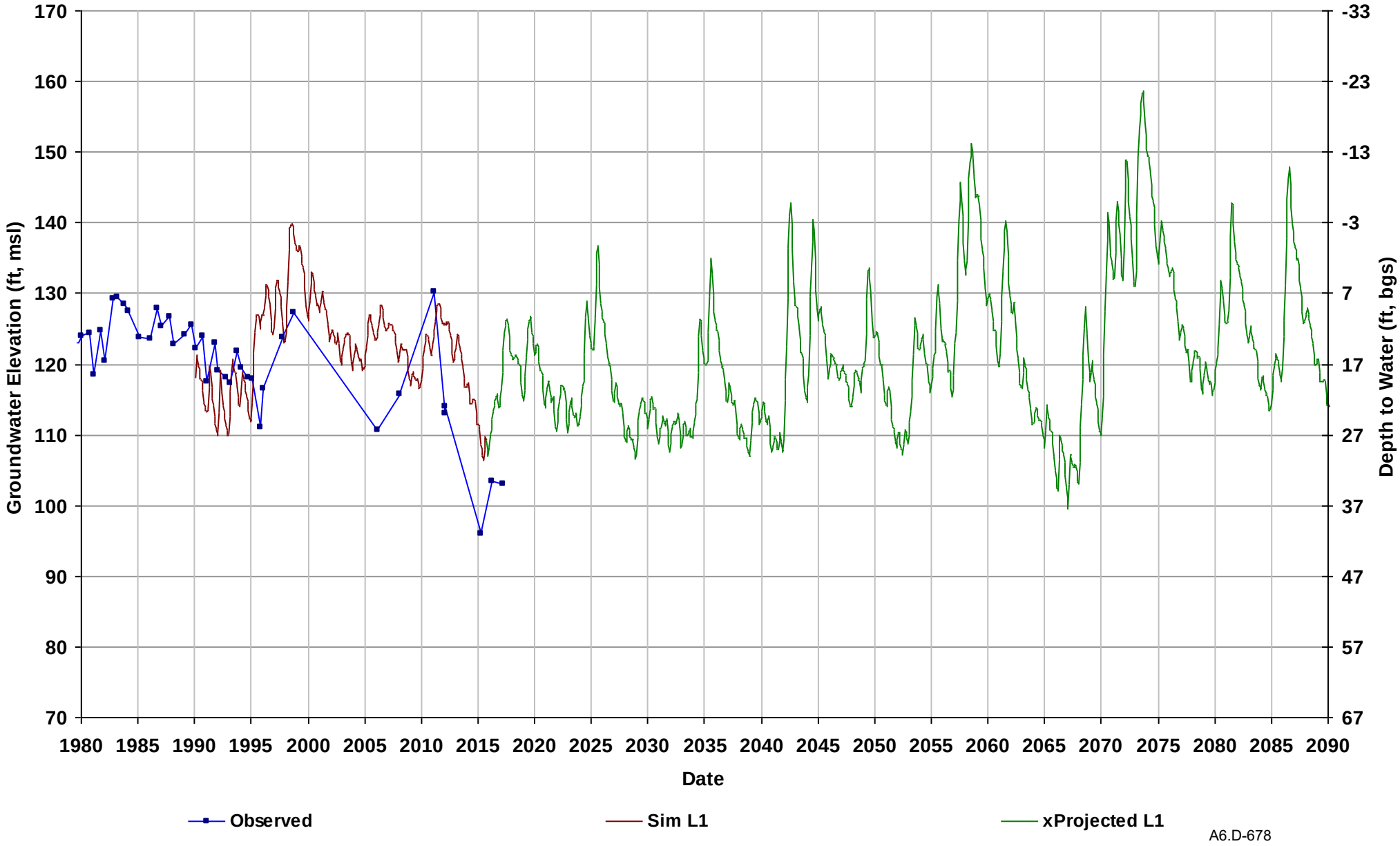
Well Name: 11S14E16A001M
Depth Zone: Unknown; Within CC
Subbasin: Chowchilla
GSE (ft, msl): 137

Total Depth (ft):
Perf Top (ft):
Perf Bottom (ft):
Top Model Layer: 5
Bottom Model Layer: 5



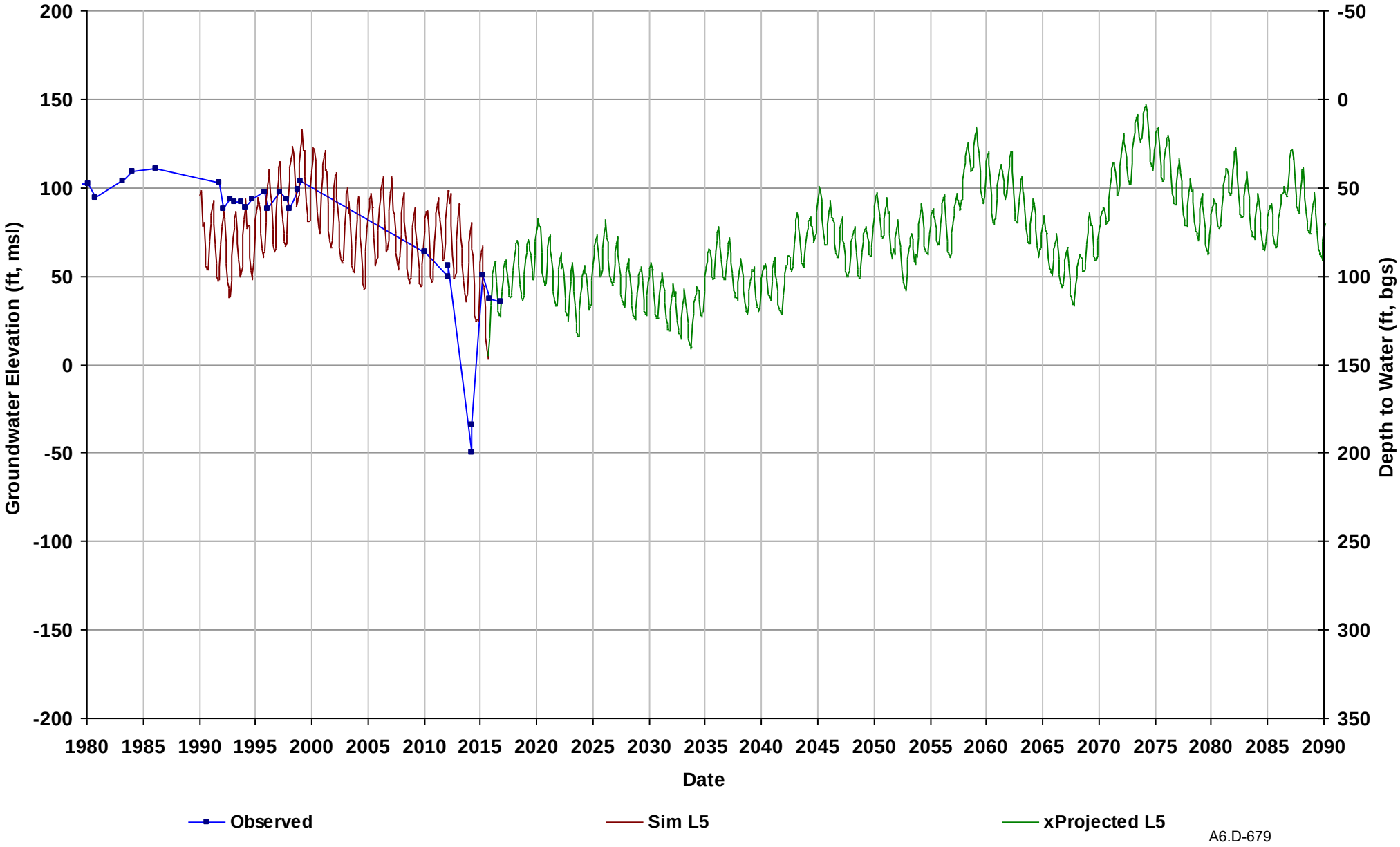
Well Name: 11S14E33L001M
Depth Zone: Unknown; Within CC
Subbasin: Delta-Mendota
GSE (ft, msl): 137

Total Depth (ft):
Perf Top (ft):
Perf Bottom (ft):
Top Model Layer: 1
Bottom Model Layer: 1



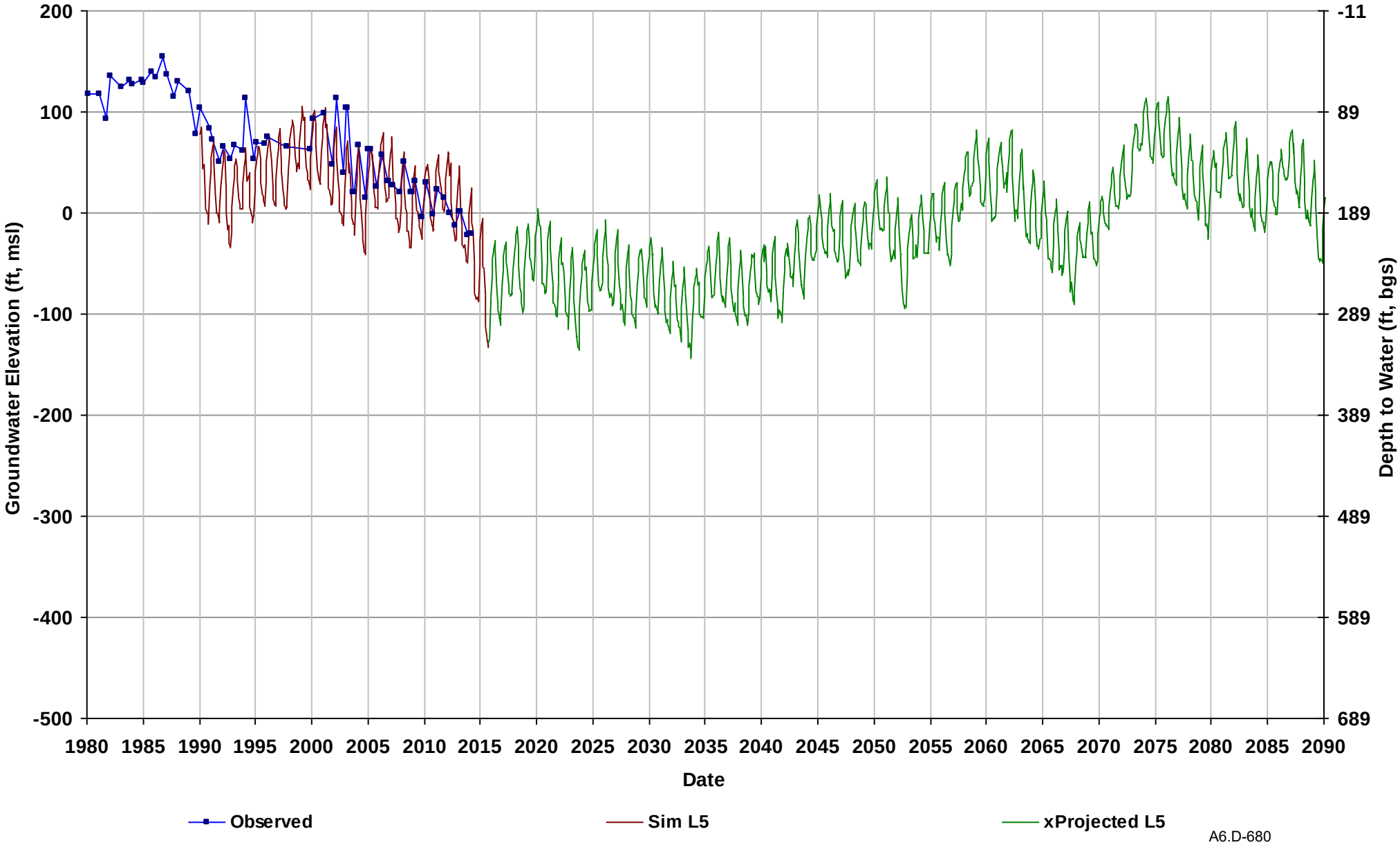
Well Name: 11S14E36R001M
Depth Zone: Unknown; Within CC
Subbasin: Madera
GSE (ft, msl): 150

Total Depth (ft):
Perf Top (ft):
Perf Bottom (ft):
Top Model Layer: 5
Bottom Model Layer: 5



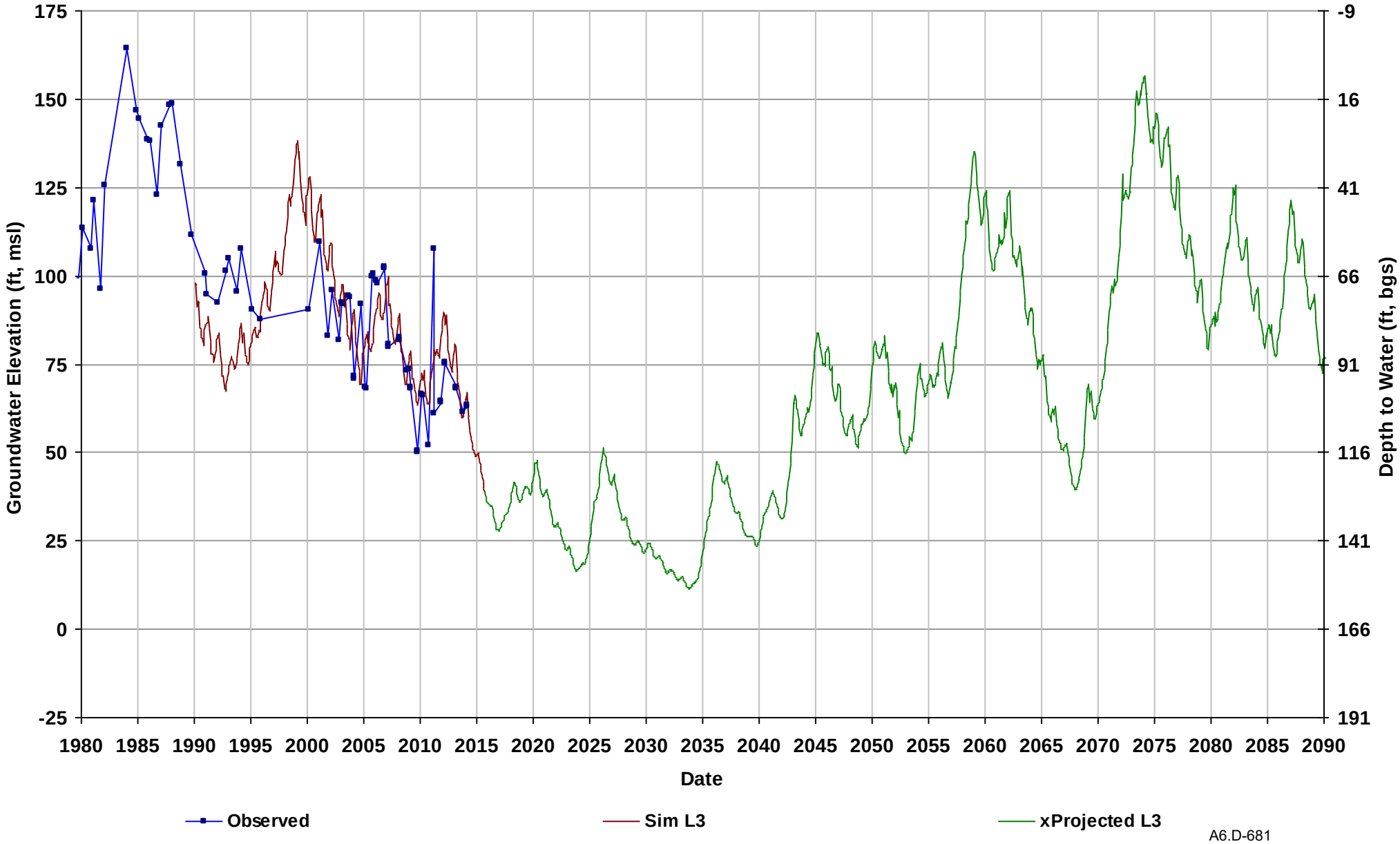
Well Name: 11S15E01H002M
Depth Zone: Unknown; Outside CC
Subbasin: Madera
GSE (ft, msl): 189

Total Depth (ft):
Perf Top (ft):
Perf Bottom (ft):
Top Model Layer: 5
Bottom Model Layer: 5



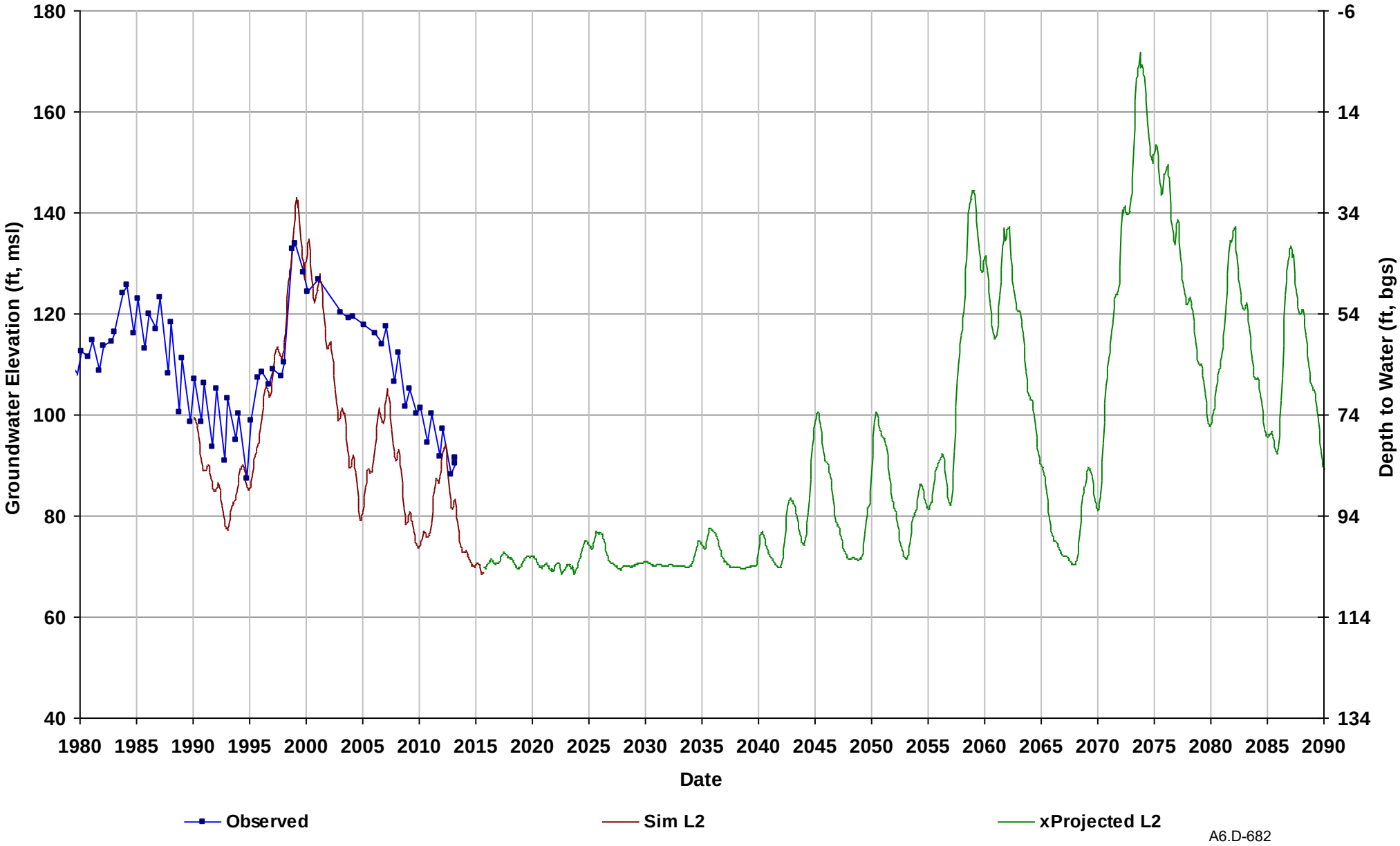
Well Name: 11S15E09C001M
Depth Zone: Unknown; Within CC
Subbasin: Chowchilla
GSE (ft, msl): 166

Total Depth (ft):
Perf Top (ft):
Perf Bottom (ft):
Top Model Layer: 3
Bottom Model Layer: 3



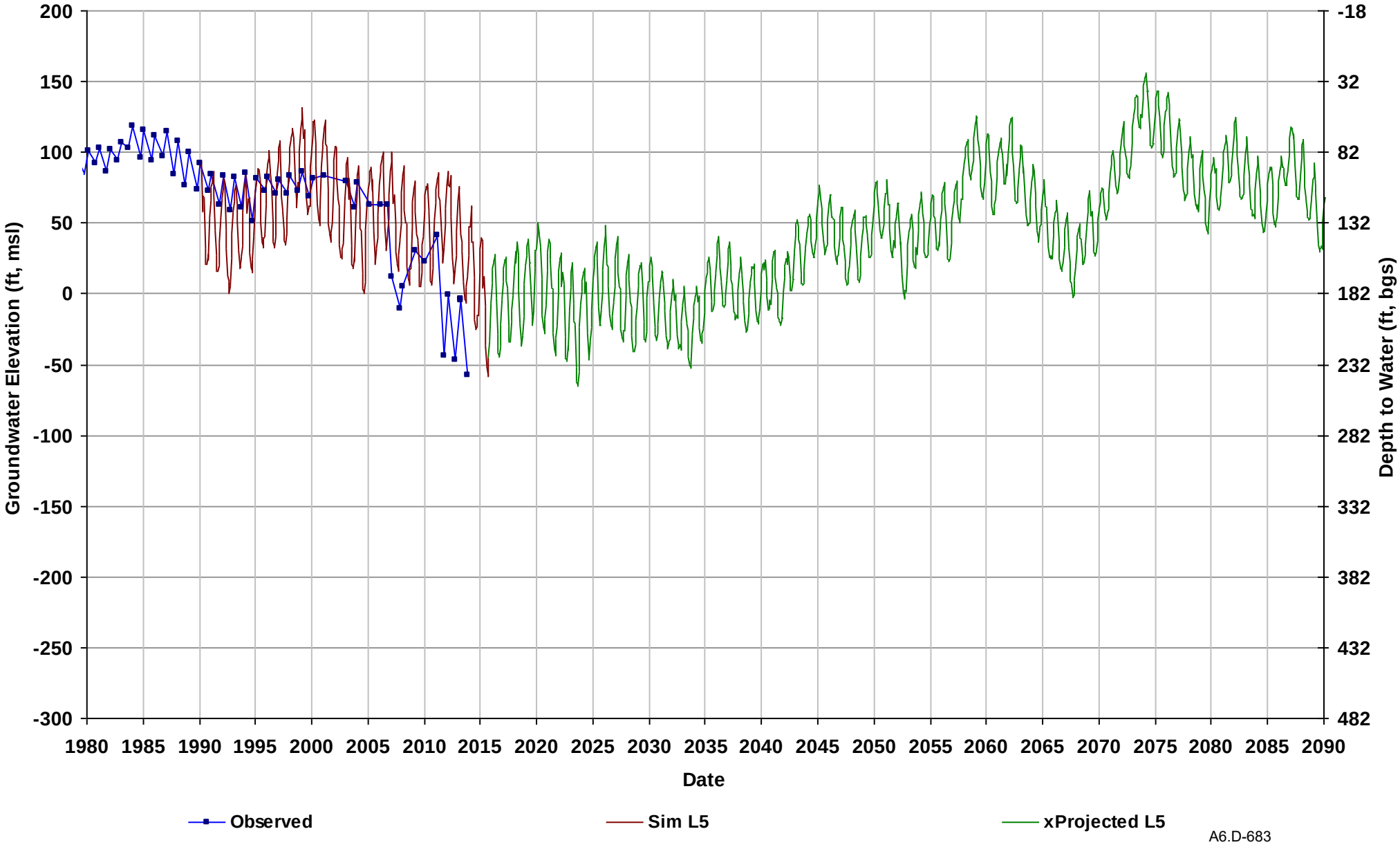
Well Name: 11S15E10J001M
Depth Zone: Unknown; Within CC
Subbasin: Madera
GSE (ft, msl): 174

Total Depth (ft):
Perf Top (ft):
Perf Bottom (ft):
Top Model Layer: 2
Bottom Model Layer: 2



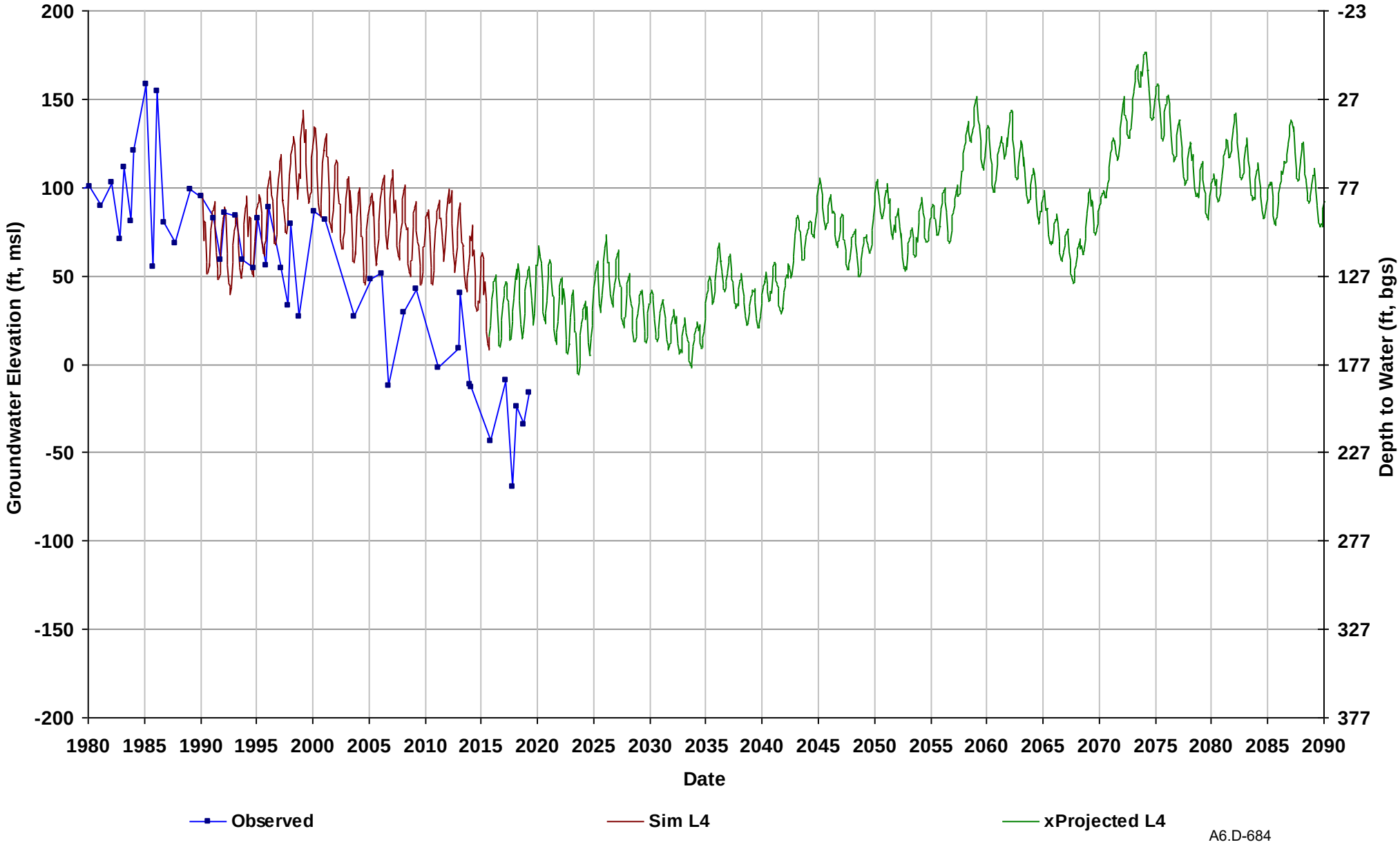
Well Name: 11S15E25A001M
Depth Zone: Unknown; Within CC
Subbasin: Madera
GSE (ft, msl): 182

Total Depth (ft):
Perf Top (ft):
Perf Bottom (ft):
Top Model Layer: 5
Bottom Model Layer: 5



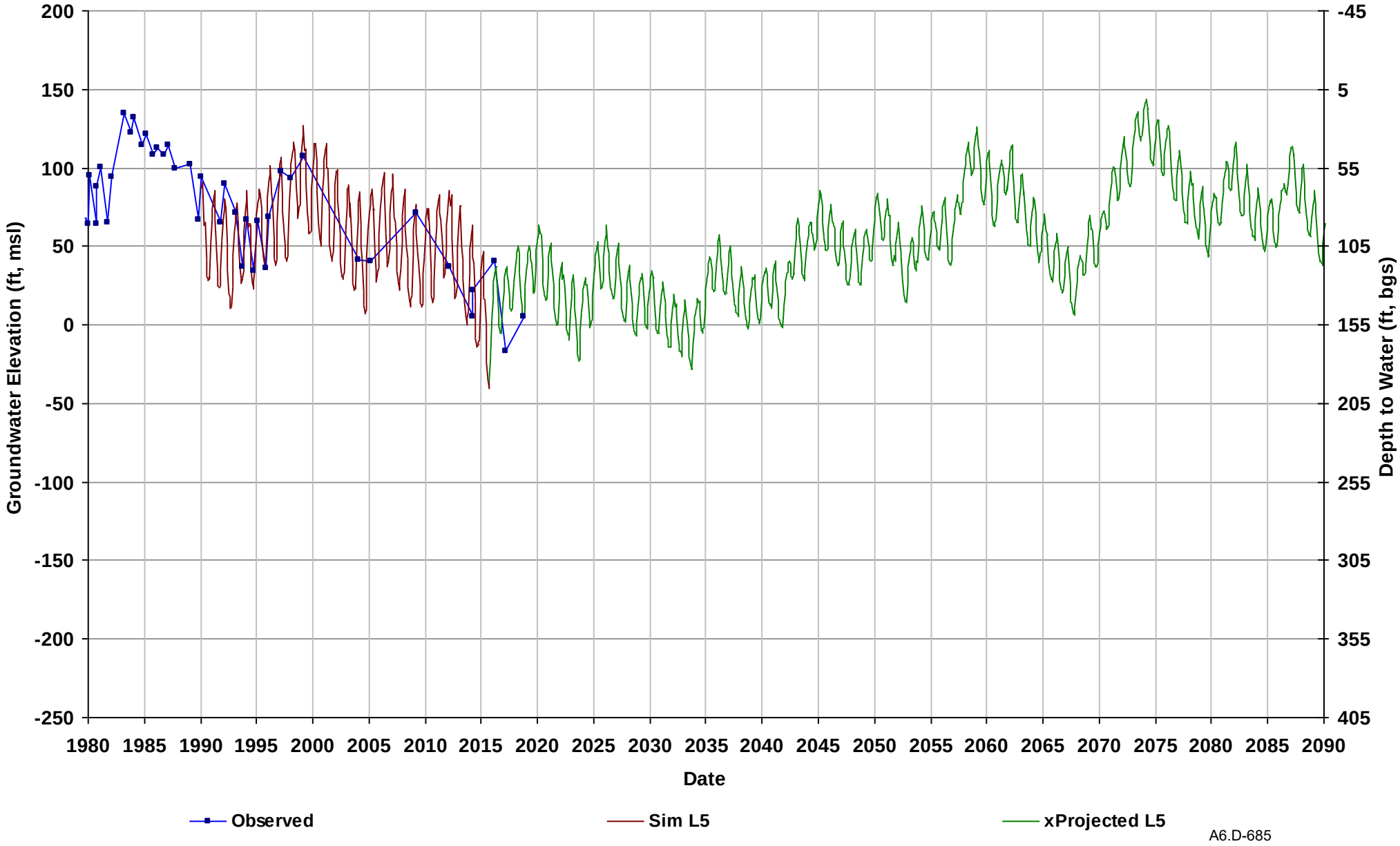
Well Name: 11S15E26R001M
Depth Zone: Composite; Within CC
Subbasin: Madera
GSE (ft, msl): 177

Total Depth (ft): 425
Perf Top (ft): 190
Perf Bottom (ft): 418
Top Model Layer: 4
Bottom Model Layer: 4



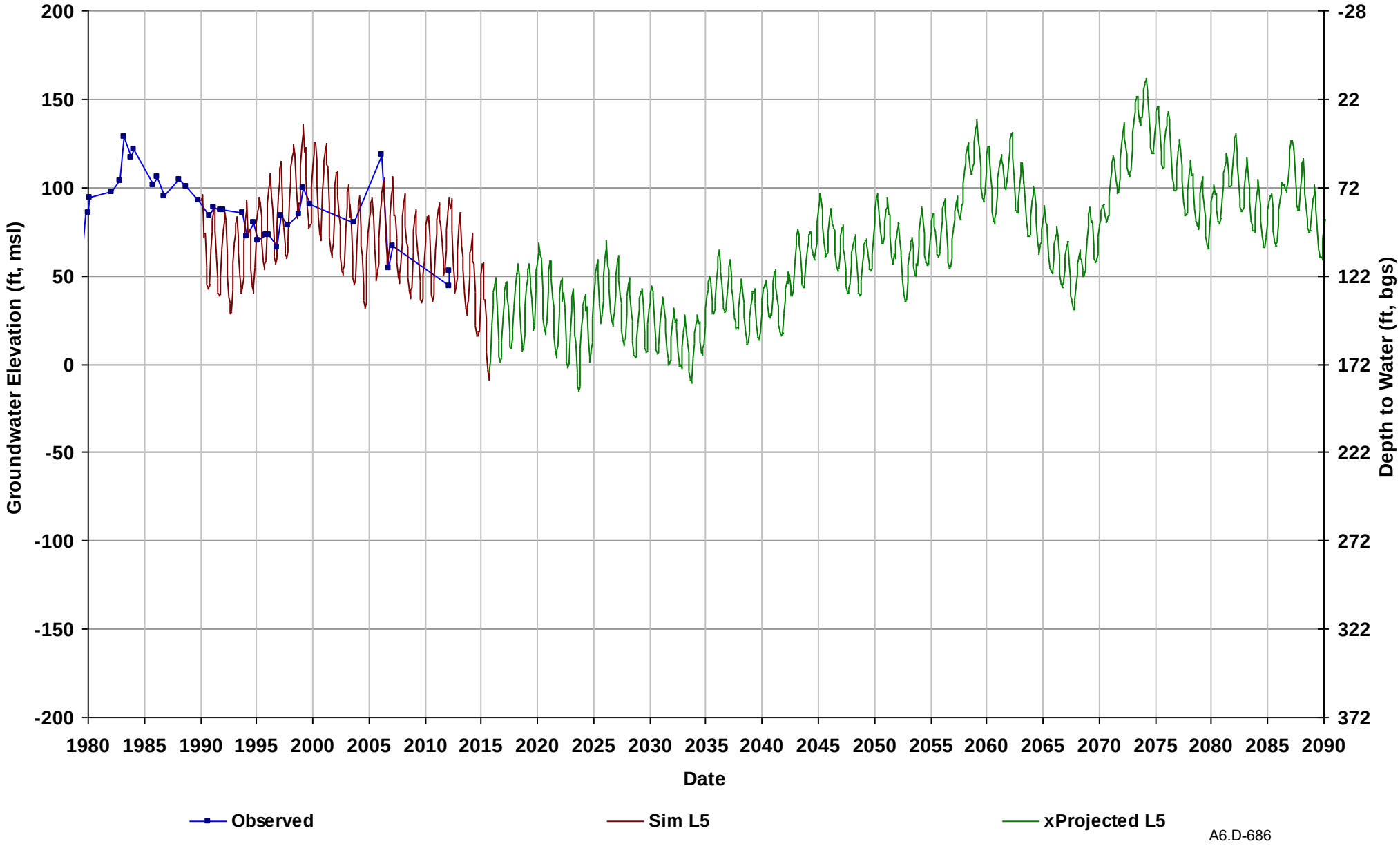
Well Name: 11S15E30A001M
Depth Zone: Unknown; Within CC
Subbasin: Madera
GSE (ft, msl): 155

Total Depth (ft):
Perf Top (ft):
Perf Bottom (ft):
Top Model Layer: 5
Bottom Model Layer: 5



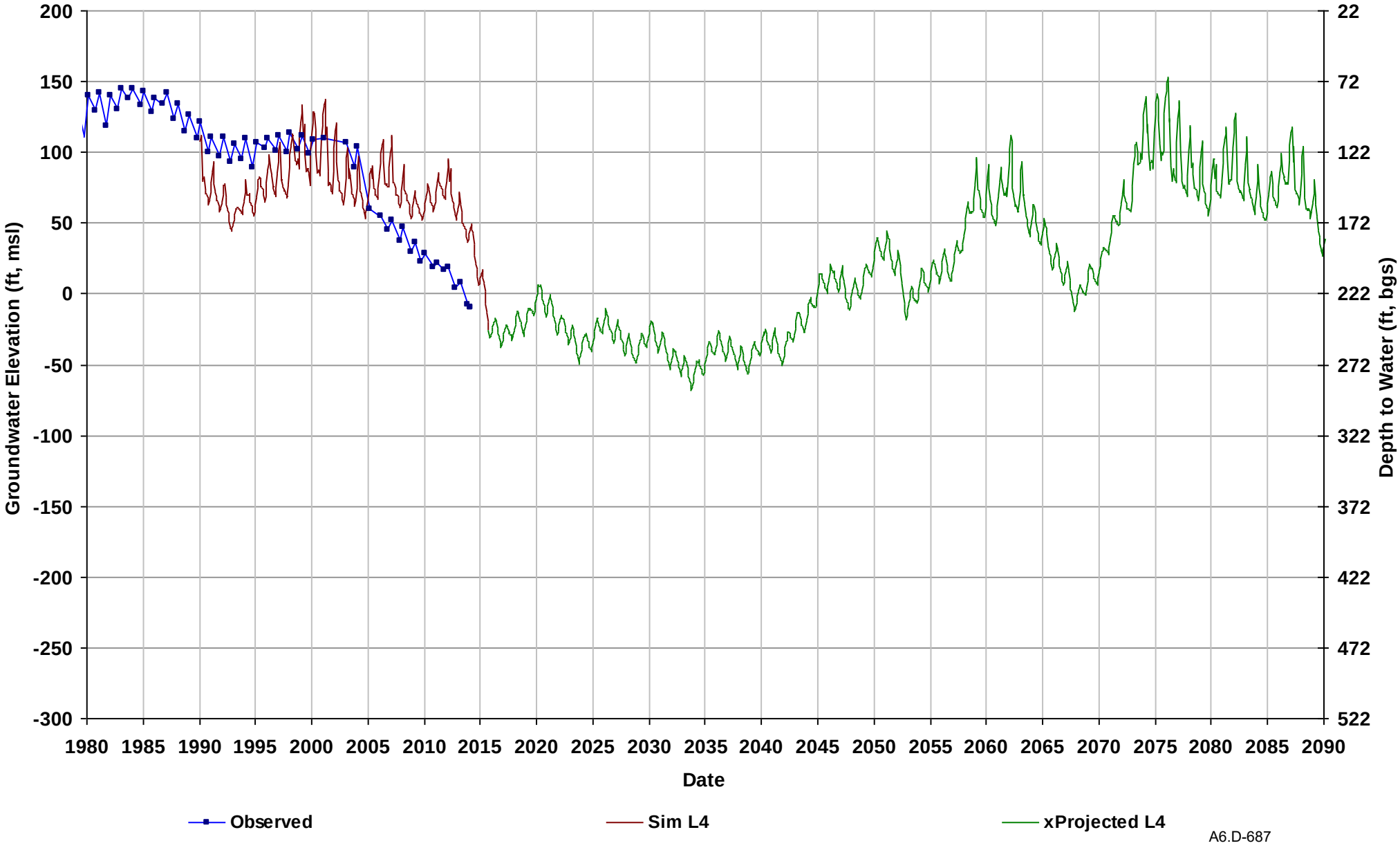
Well Name: 11S15E35P001M
Depth Zone: Unknown; Inside CC
Subbasin: Madera
GSE (ft, msl): 172

Total Depth (ft):
Perf Top (ft):
Perf Bottom (ft):
Top Model Layer: 5
Bottom Model Layer: 5



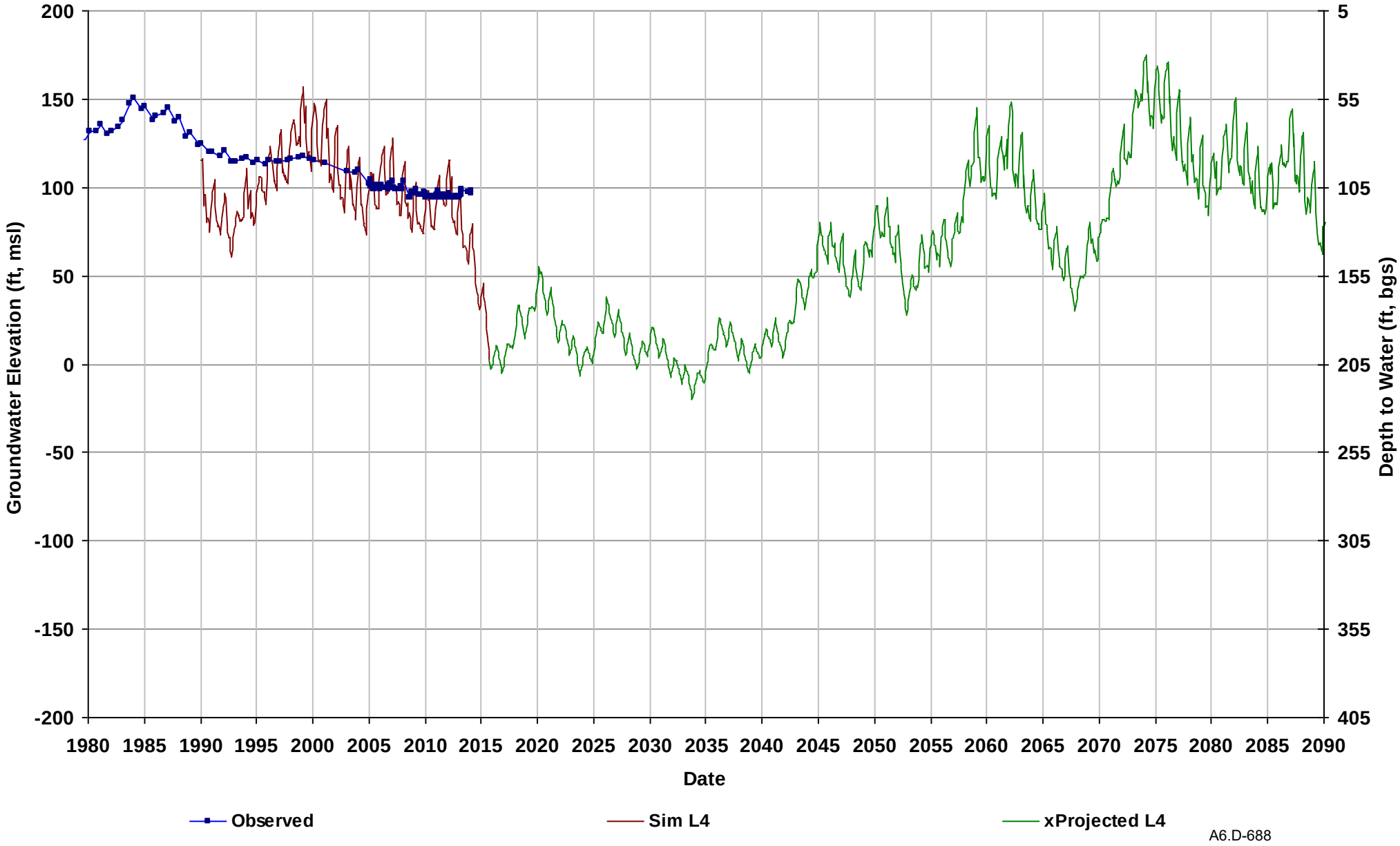
Well Name: 11S16E03A001M
Depth Zone: Unknown; Outside CC
Subbasin: Madera
GSE (ft, msl): 222

Total Depth (ft):
Perf Top (ft):
Perf Bottom (ft):
Top Model Layer: 4
Bottom Model Layer: 4



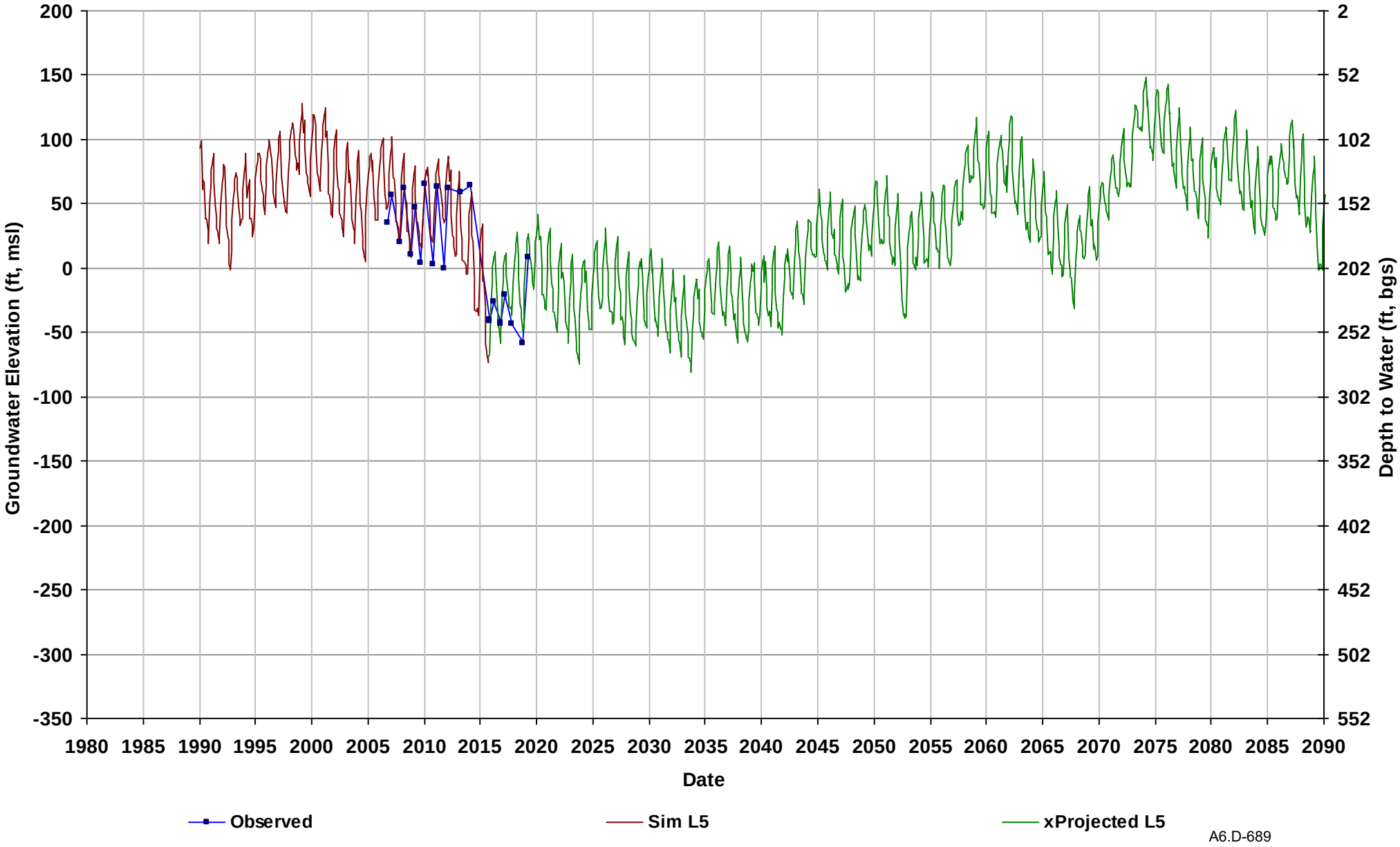
Well Name: 11S16E10N001M
Depth Zone: Unknown; Within CC
Subbasin: Madera
GSE (ft, msl): 204

Total Depth (ft):
Perf Top (ft):
Perf Bottom (ft):
Top Model Layer: 4
Bottom Model Layer: 4



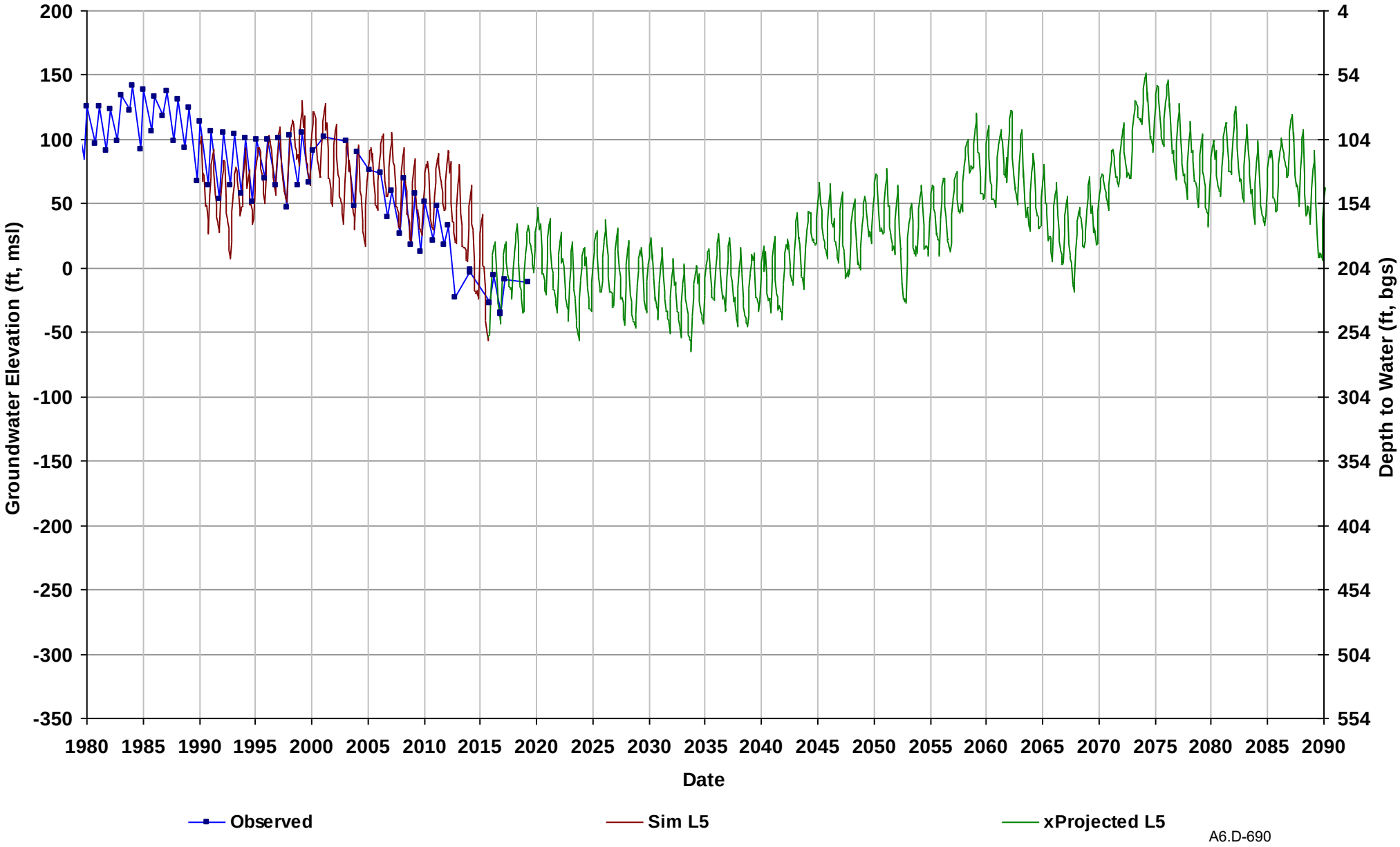
Well Name: 11S16E21A001M
Depth Zone: Lower; Within CC
Subbasin: Madera
GSE (ft, msl): 202

Total Depth (ft): 514
Perf Top (ft): 245
Perf Bottom (ft): 496
Top Model Layer: 5
Bottom Model Layer: 5



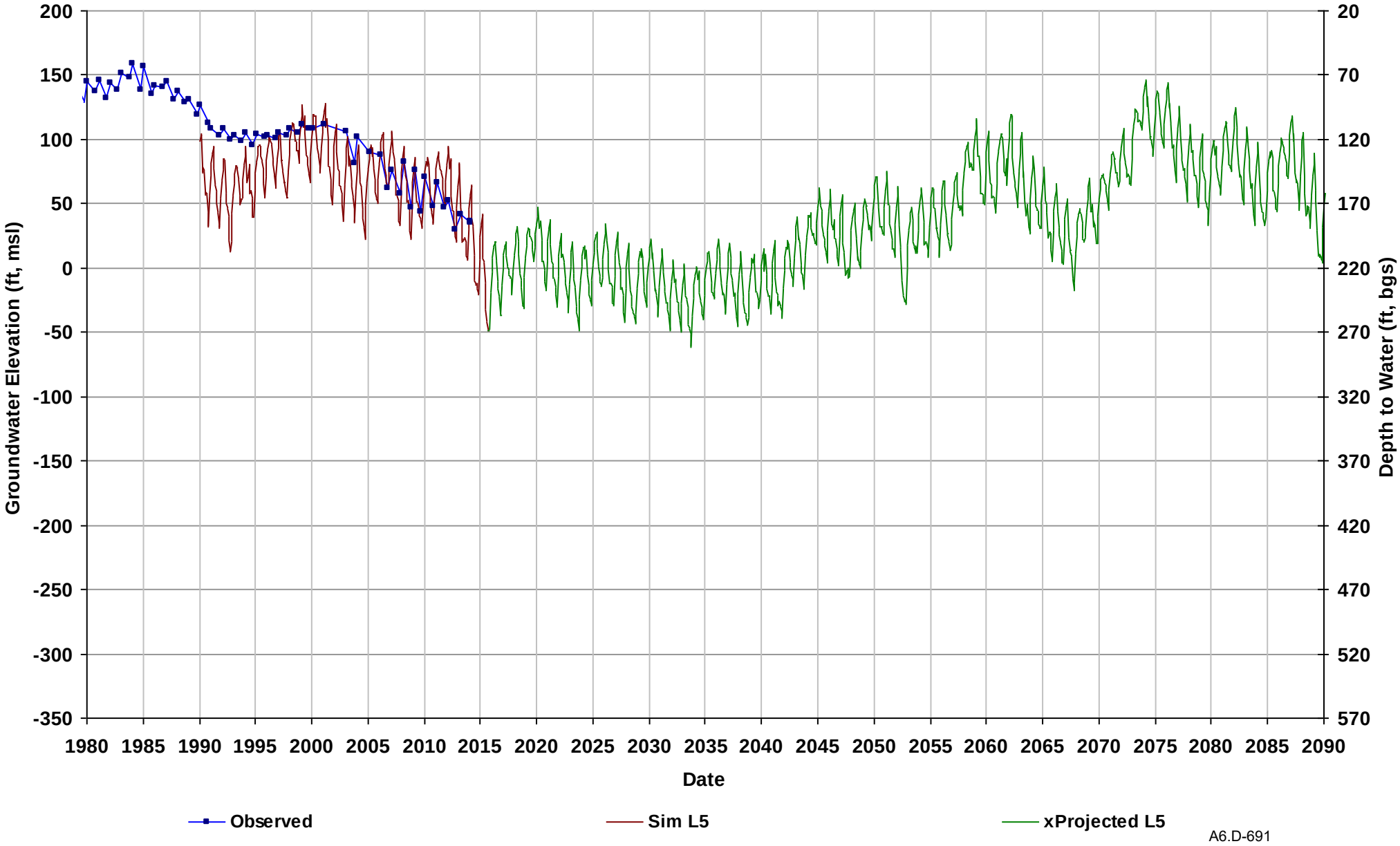
Well Name: 11S16E22K001M
Depth Zone: Lower; Within CC
Subbasin: Madera
GSE (ft, msl): 204

Total Depth (ft): 570
Perf Top (ft): 270
Perf Bottom (ft): 570
Top Model Layer: 5
Bottom Model Layer: 5



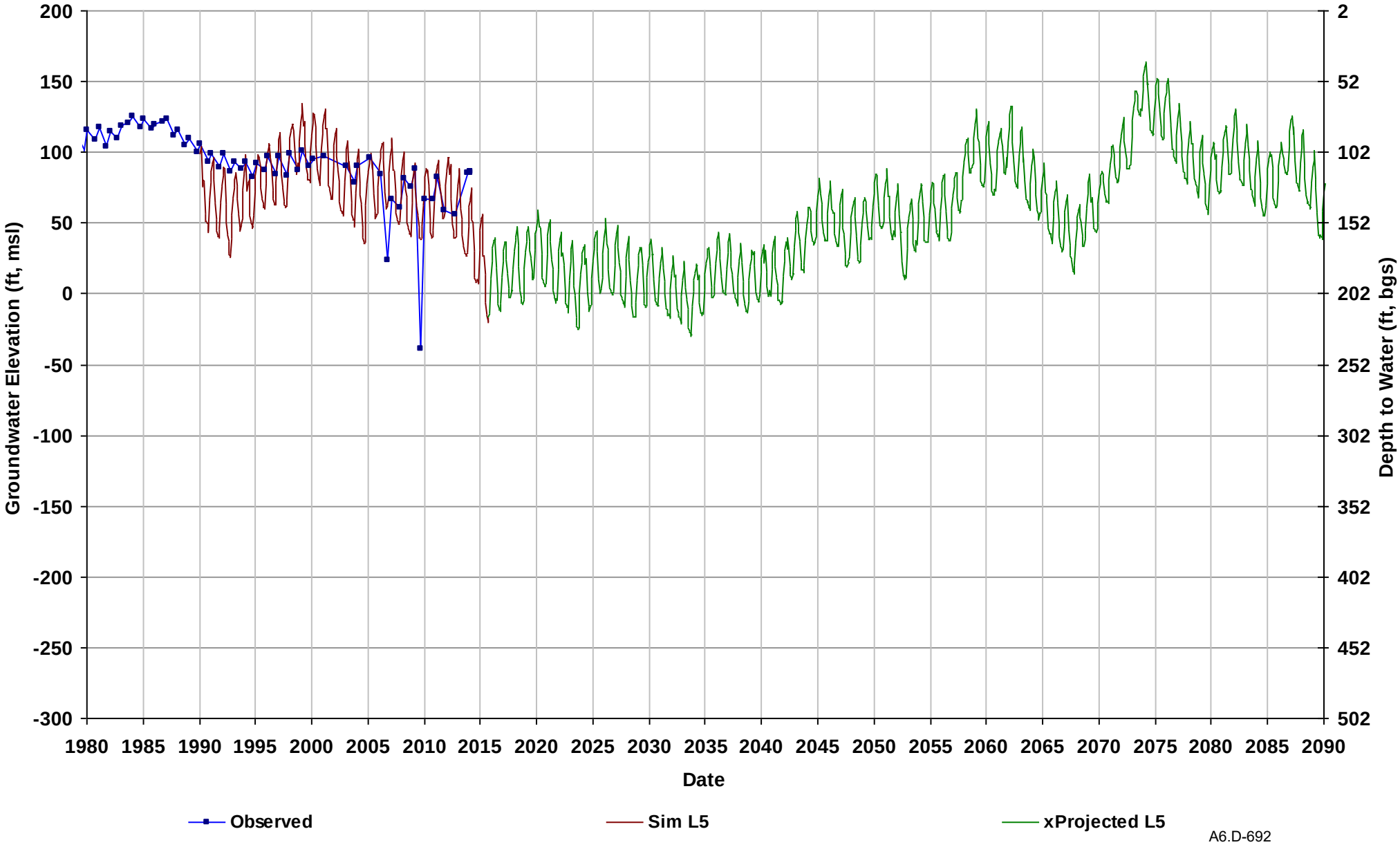
Well Name: 11S16E24M001M
Depth Zone: Unknown; Outside CC
Subbasin: Madera
GSE (ft, msl): 219

Total Depth (ft):
Perf Top (ft):
Perf Bottom (ft):
Top Model Layer: 5
Bottom Model Layer: 5



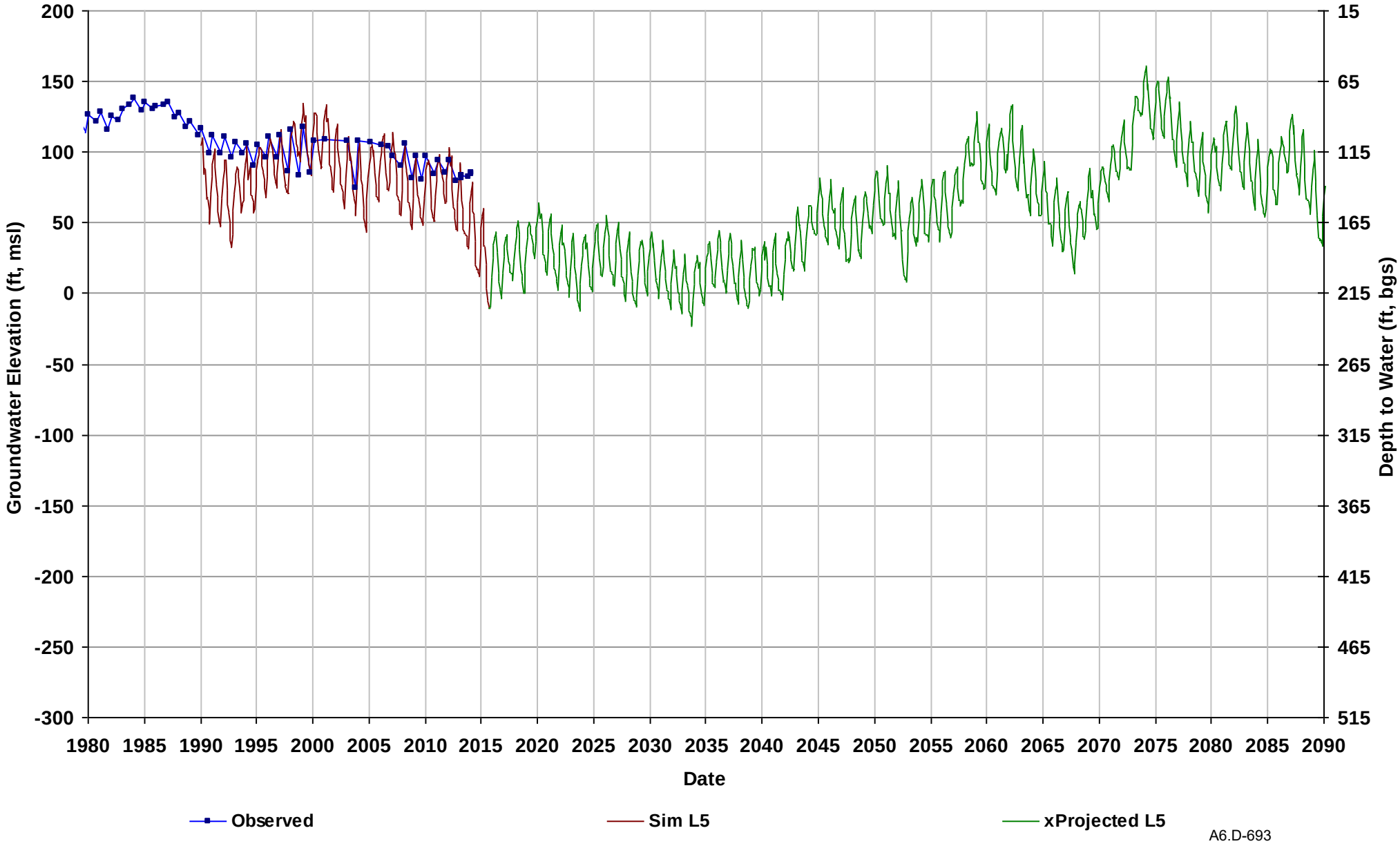
Well Name: 11S16E34D001M
Depth Zone: Unknown; Within CC
Subbasin: Madera
GSE (ft, msl): 202

Total Depth (ft):
Perf Top (ft):
Perf Bottom (ft):
Top Model Layer: 5
Bottom Model Layer: 5



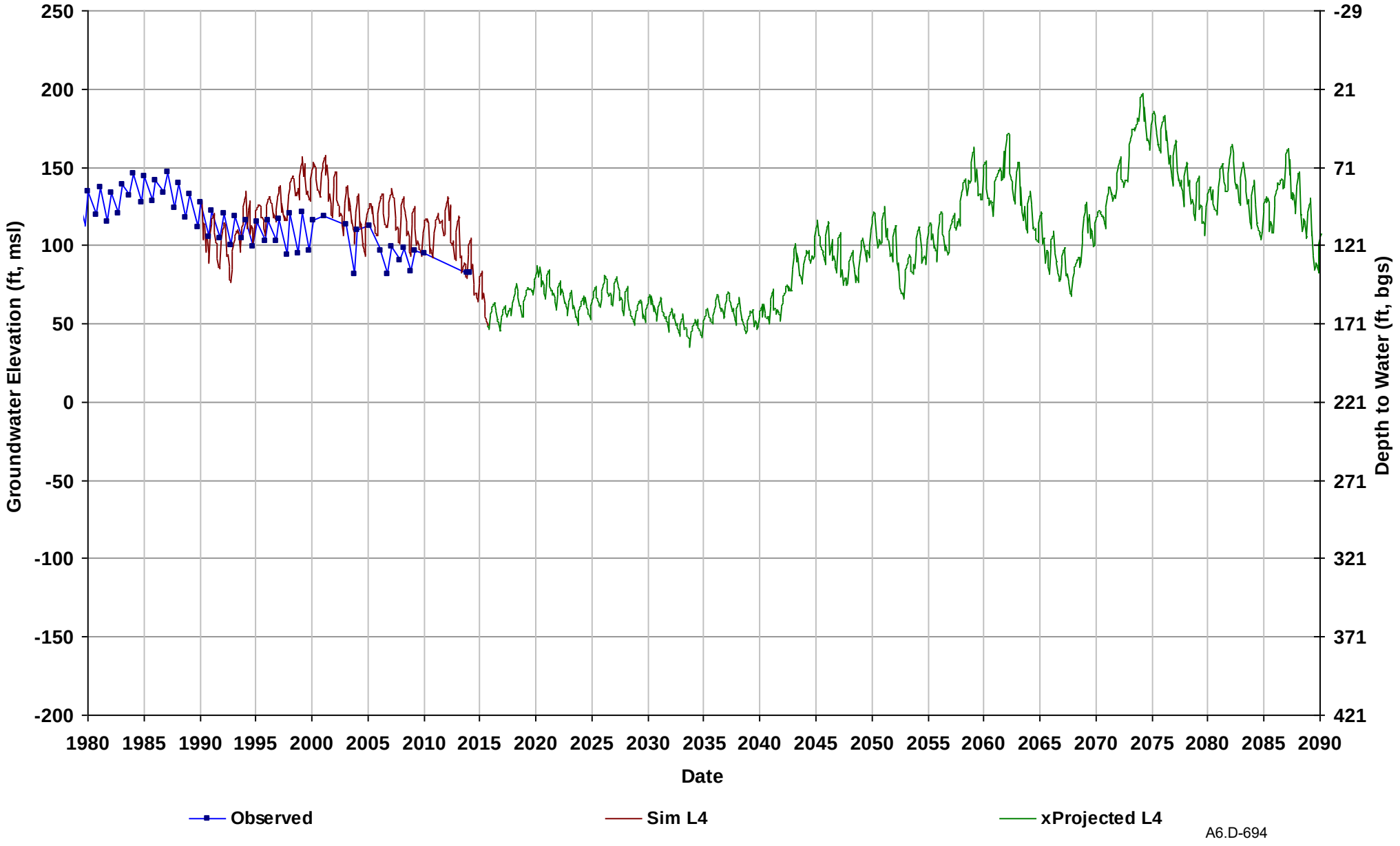
Well Name: 11S16E35H001M
Depth Zone: Unknown; Within CC
Subbasin: Madera
GSE (ft, msl): 215

Total Depth (ft):
Perf Top (ft):
Perf Bottom (ft):
Top Model Layer: 5
Bottom Model Layer: 5



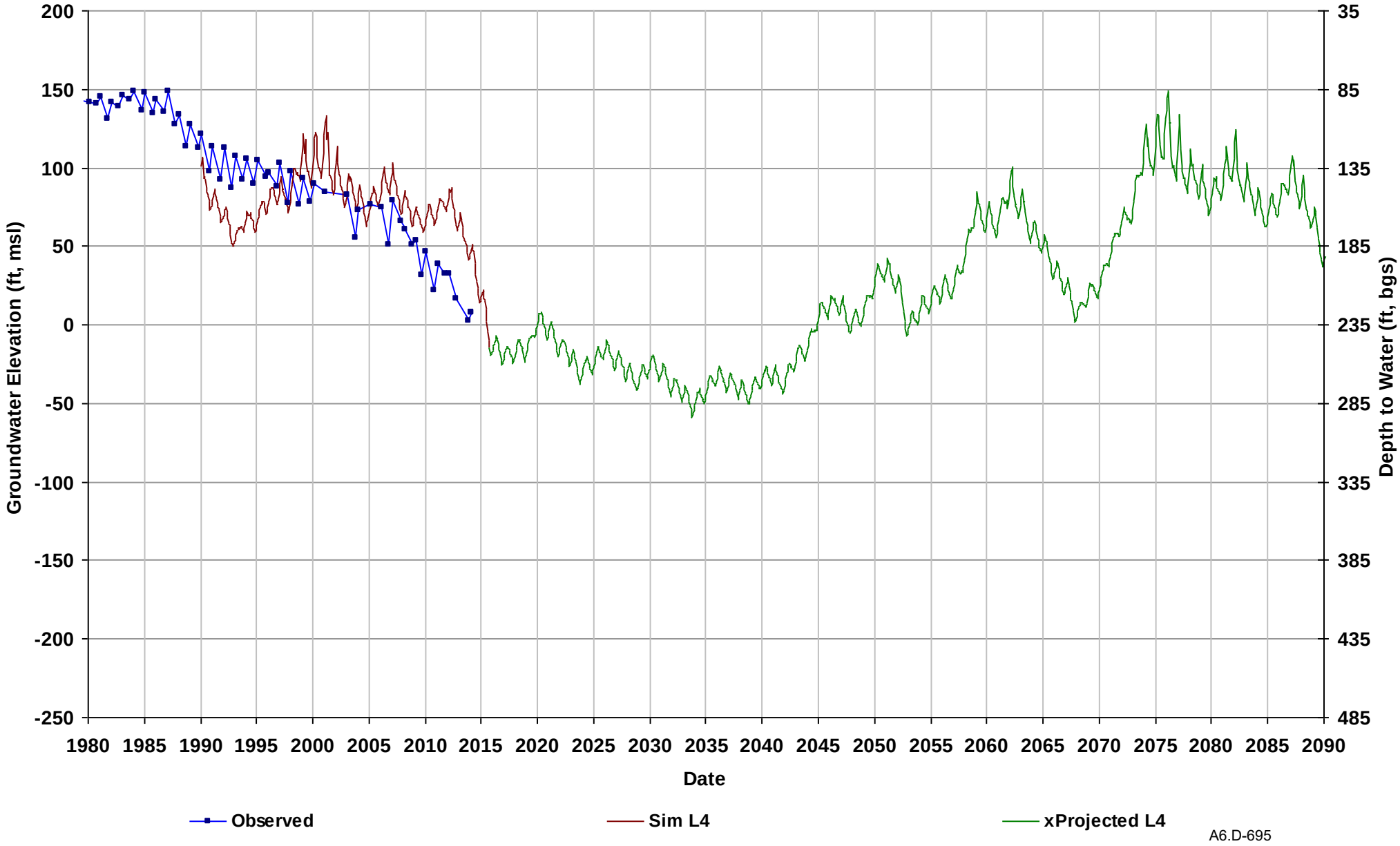
Well Name: 11S16E36J001M
Depth Zone: Unknown; Within CC
Subbasin: Madera
GSE (ft, msl): 221

Total Depth (ft):
Perf Top (ft):
Perf Bottom (ft):
Top Model Layer: 4
Bottom Model Layer: 4



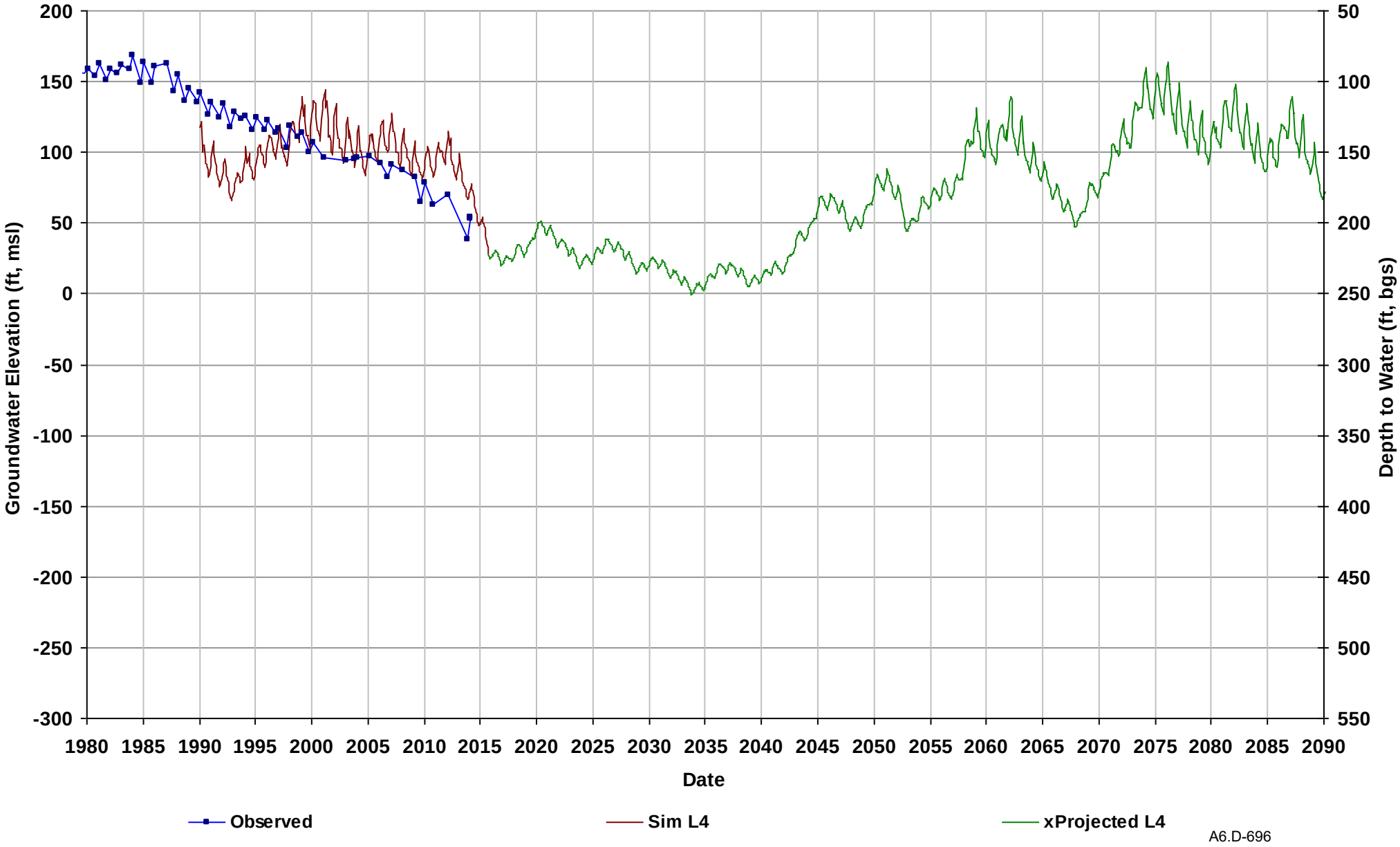
Well Name: 11S17E06C001M
Depth Zone: Unknown; Outside CC
Subbasin: Madera
GSE (ft, msl): 235

Total Depth (ft):
Perf Top (ft):
Perf Bottom (ft):
Top Model Layer: 4
Bottom Model Layer: 4



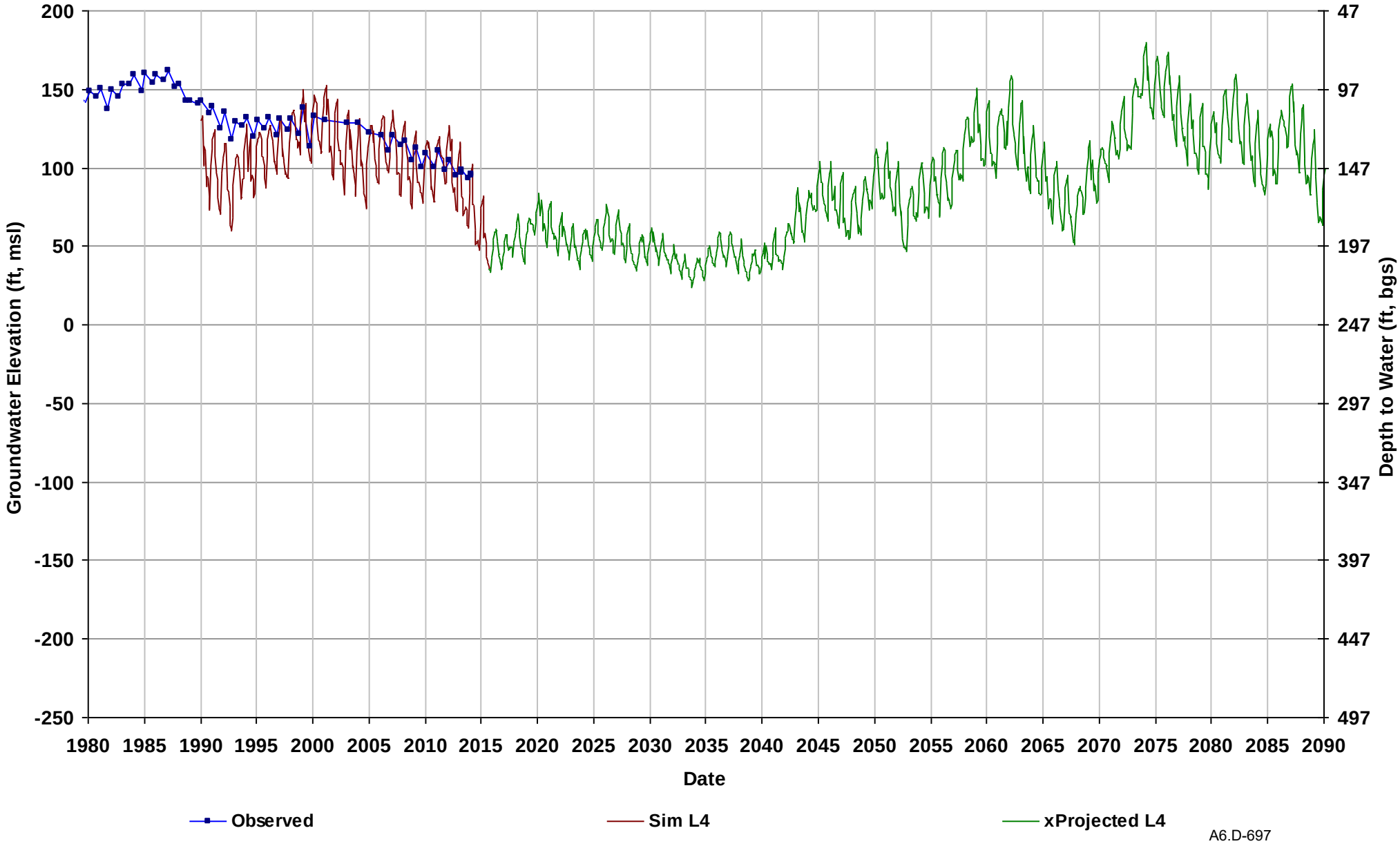
Well Name: 11S17E16H001M
Depth Zone: Unknown; Outside CC
Subbasin: Madera
GSE (ft, msl): 249

Total Depth (ft):
Perf Top (ft):
Perf Bottom (ft):
Top Model Layer: 4
Bottom Model Layer: 4



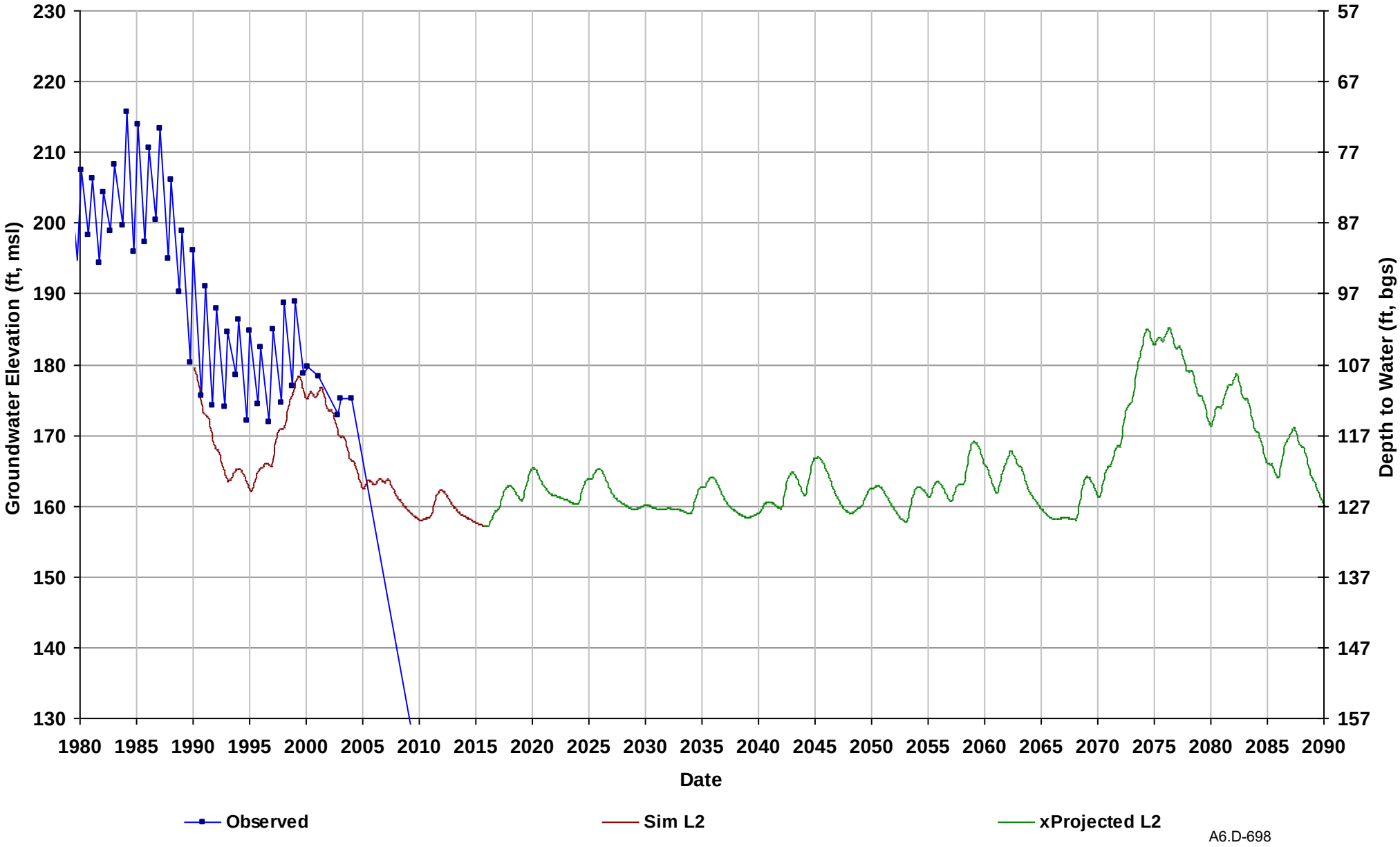
Well Name: 11S17E33H001M
Depth Zone: Unknown; Outside CC
Subbasin: Madera
GSE (ft, msl): 246

Total Depth (ft):
Perf Top (ft):
Perf Bottom (ft):
Top Model Layer: 4
Bottom Model Layer: 4



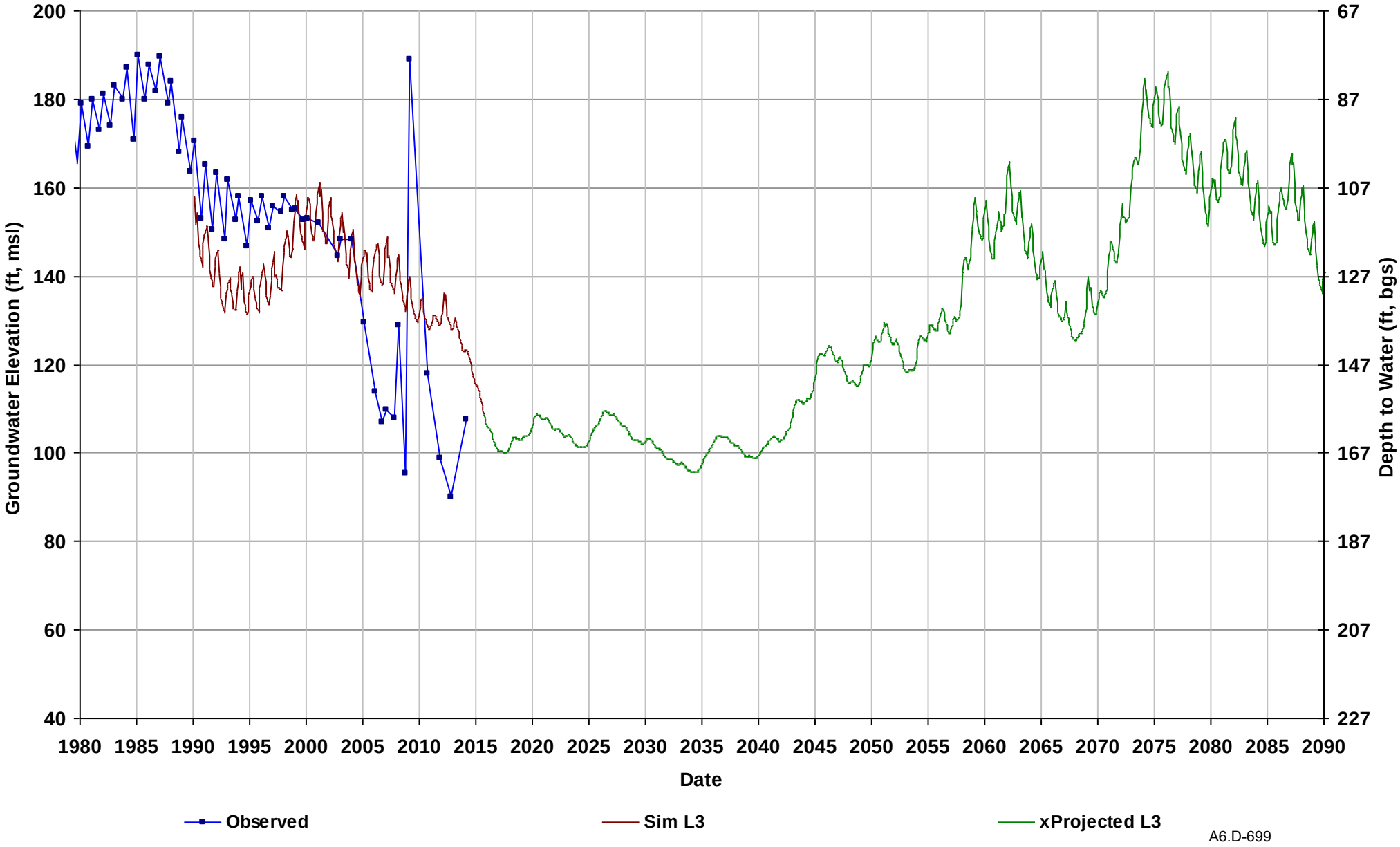
Well Name: 11S18E27F001M
Depth Zone: Unknown; Outside CC
Subbasin: Madera
GSE (ft, msl): 287

Total Depth (ft):
Perf Top (ft):
Perf Bottom (ft):
Top Model Layer: 2
Bottom Model Layer: 2



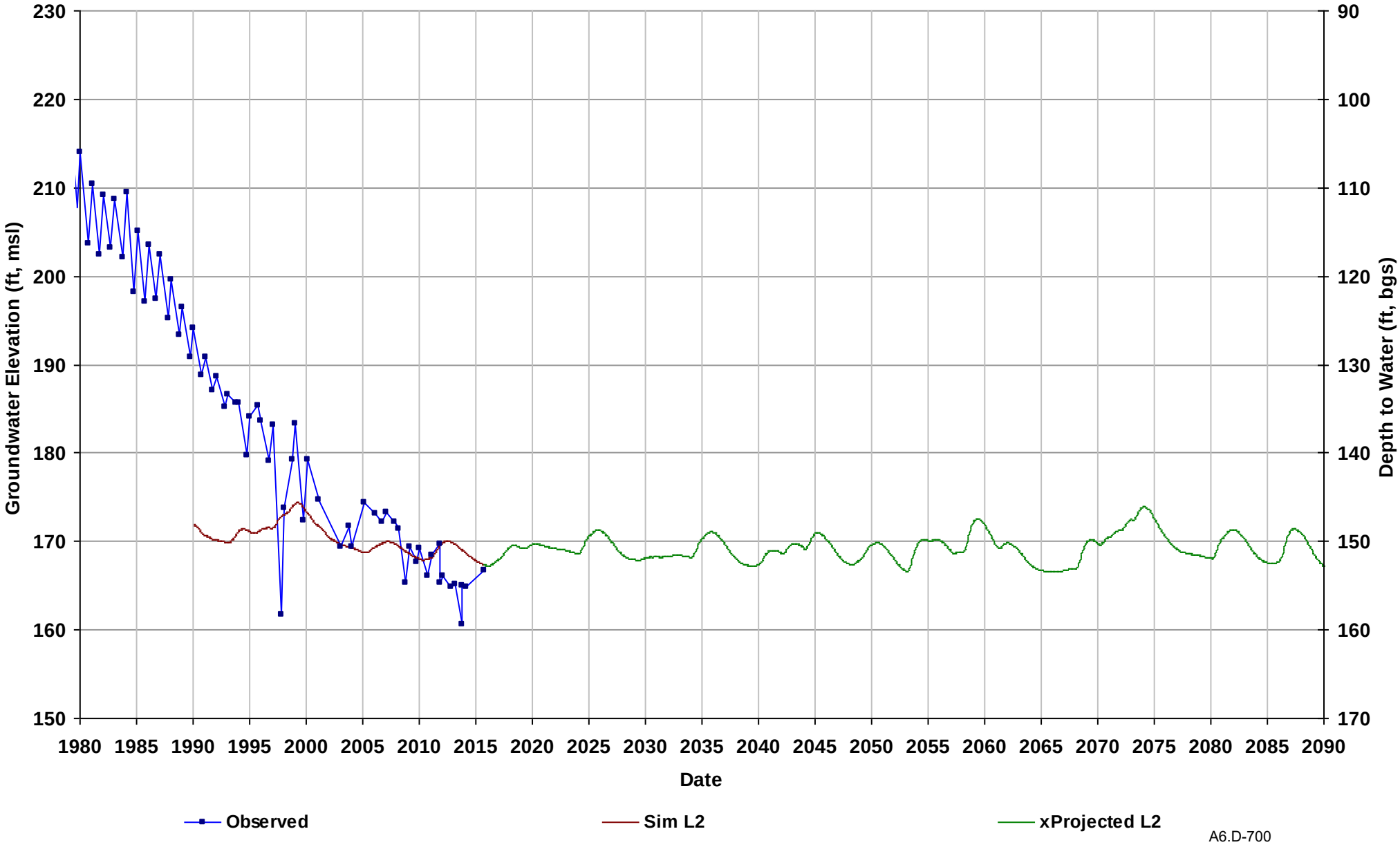
Well Name: 11S18E31A003M
Depth Zone: Unknown; Outside CC
Subbasin: Madera
GSE (ft, msl): 267

Total Depth (ft):
Perf Top (ft):
Perf Bottom (ft):
Top Model Layer: 3
Bottom Model Layer: 3



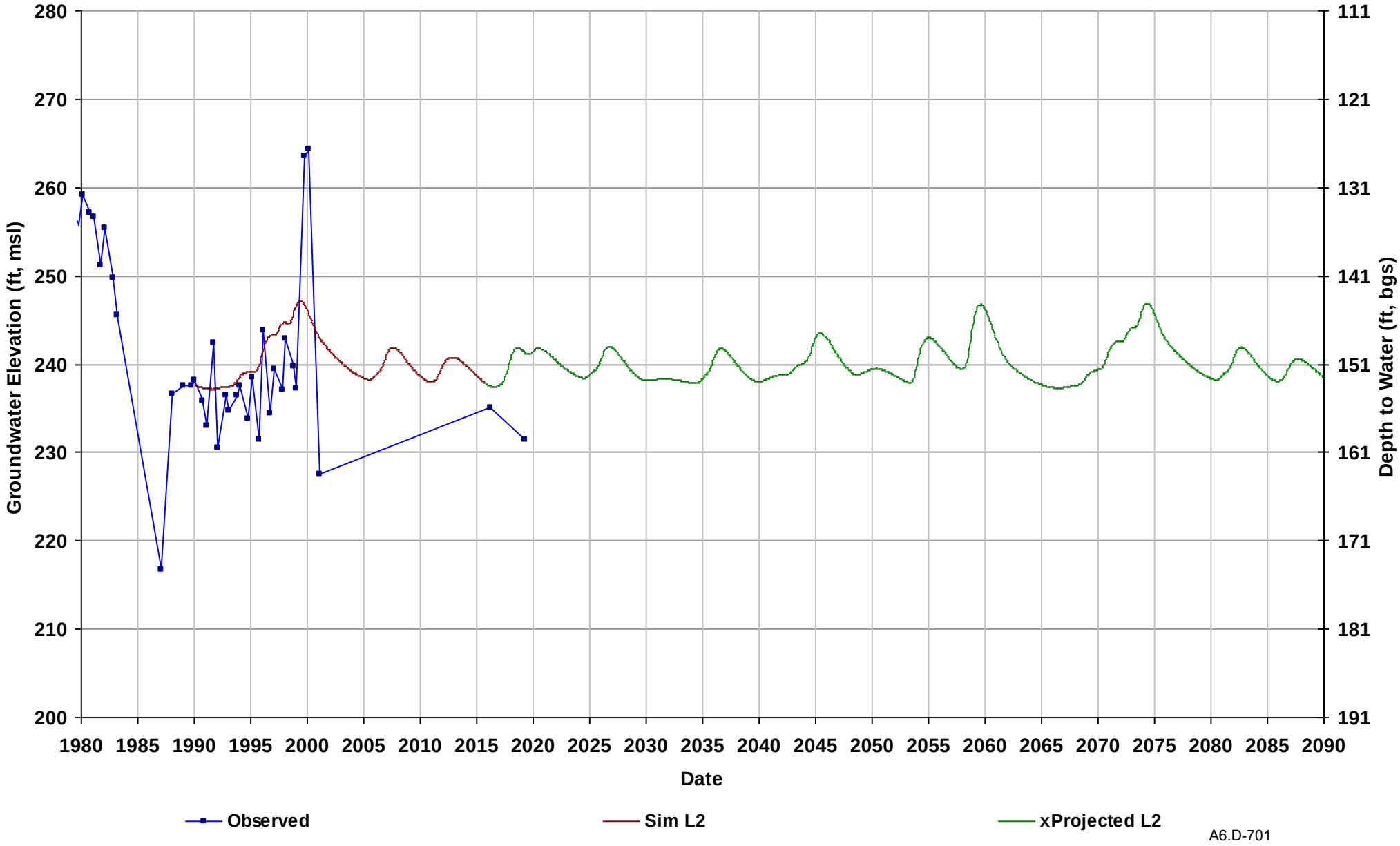
Well Name: 11S19E32R001M
Depth Zone: Unknown; Outside CC
Subbasin: Madera
GSE (ft, msl): 320

Total Depth (ft):
Perf Top (ft):
Perf Bottom (ft):
Top Model Layer: 2
Bottom Model Layer: 2



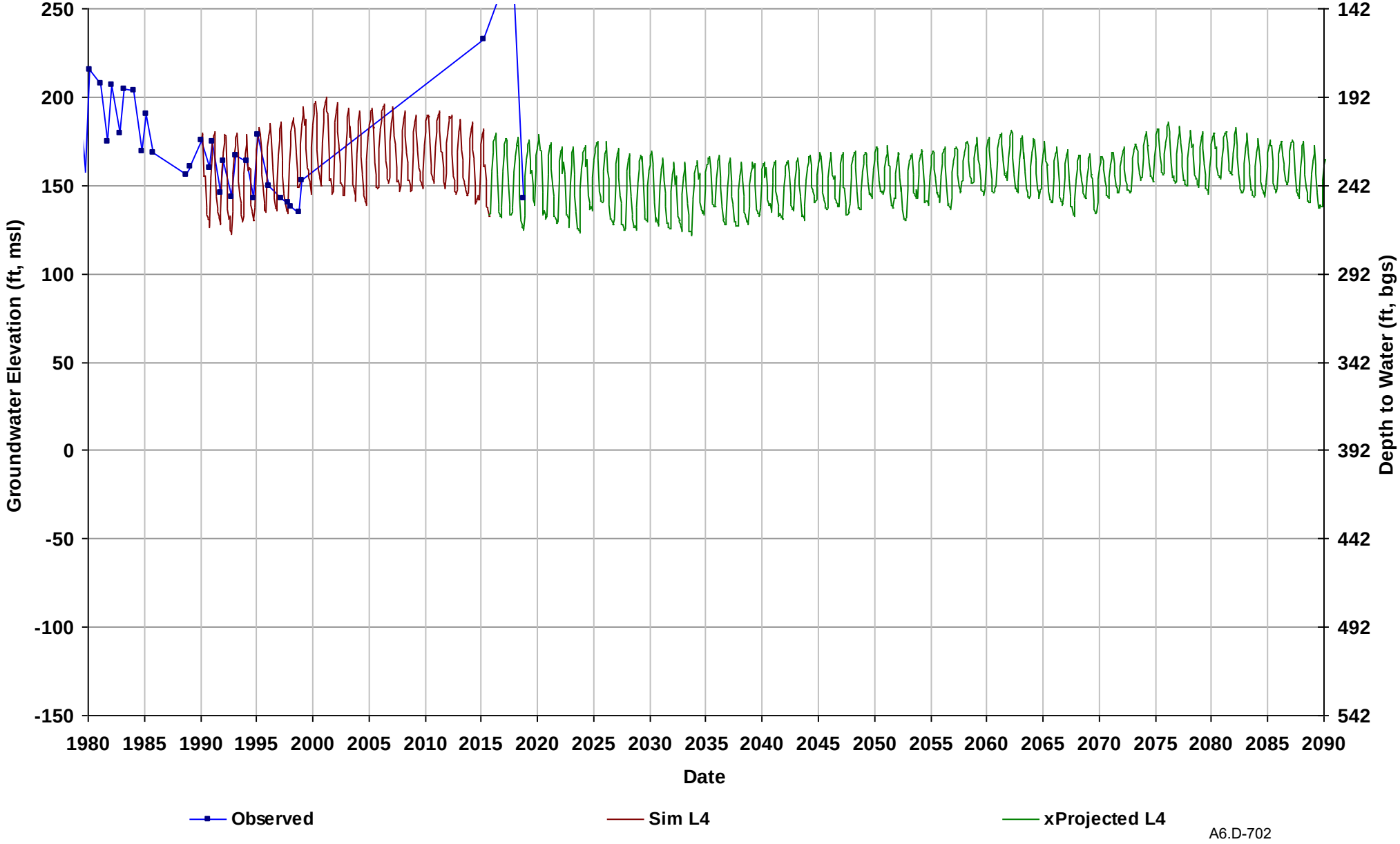
Well Name: 11S20E18L001M
Depth Zone: Unknown; Outside CC
Subbasin: Madera
GSE (ft, msl): 391

Total Depth (ft):
Perf Top (ft):
Perf Bottom (ft):
Top Model Layer: 2
Bottom Model Layer: 2



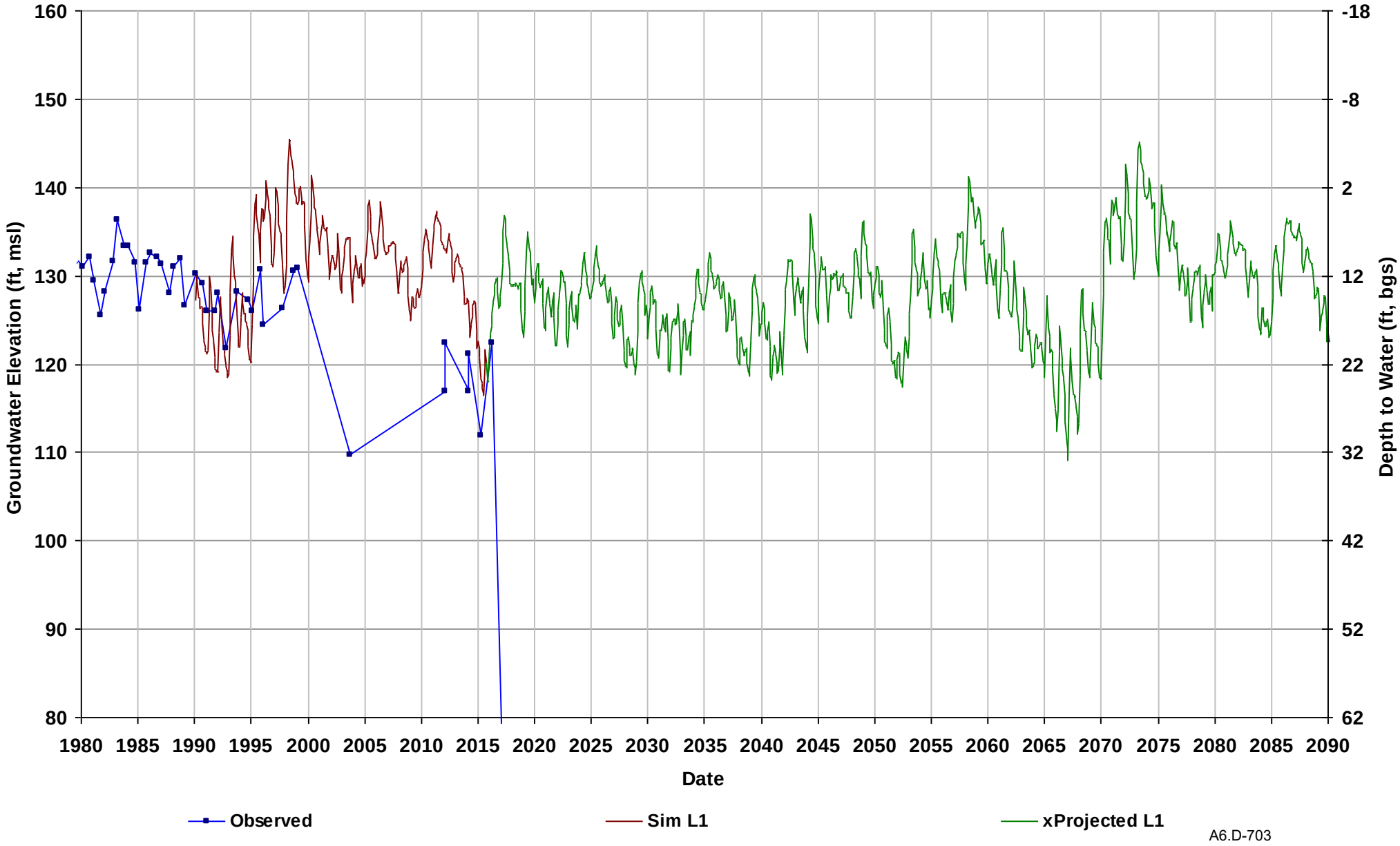
Well Name: 11S20E33K001M
Depth Zone: Unknown; Outside CC
Subbasin: Madera
GSE (ft, msl): 392

Total Depth (ft):
Perf Top (ft):
Perf Bottom (ft):
Top Model Layer: 4
Bottom Model Layer: 4



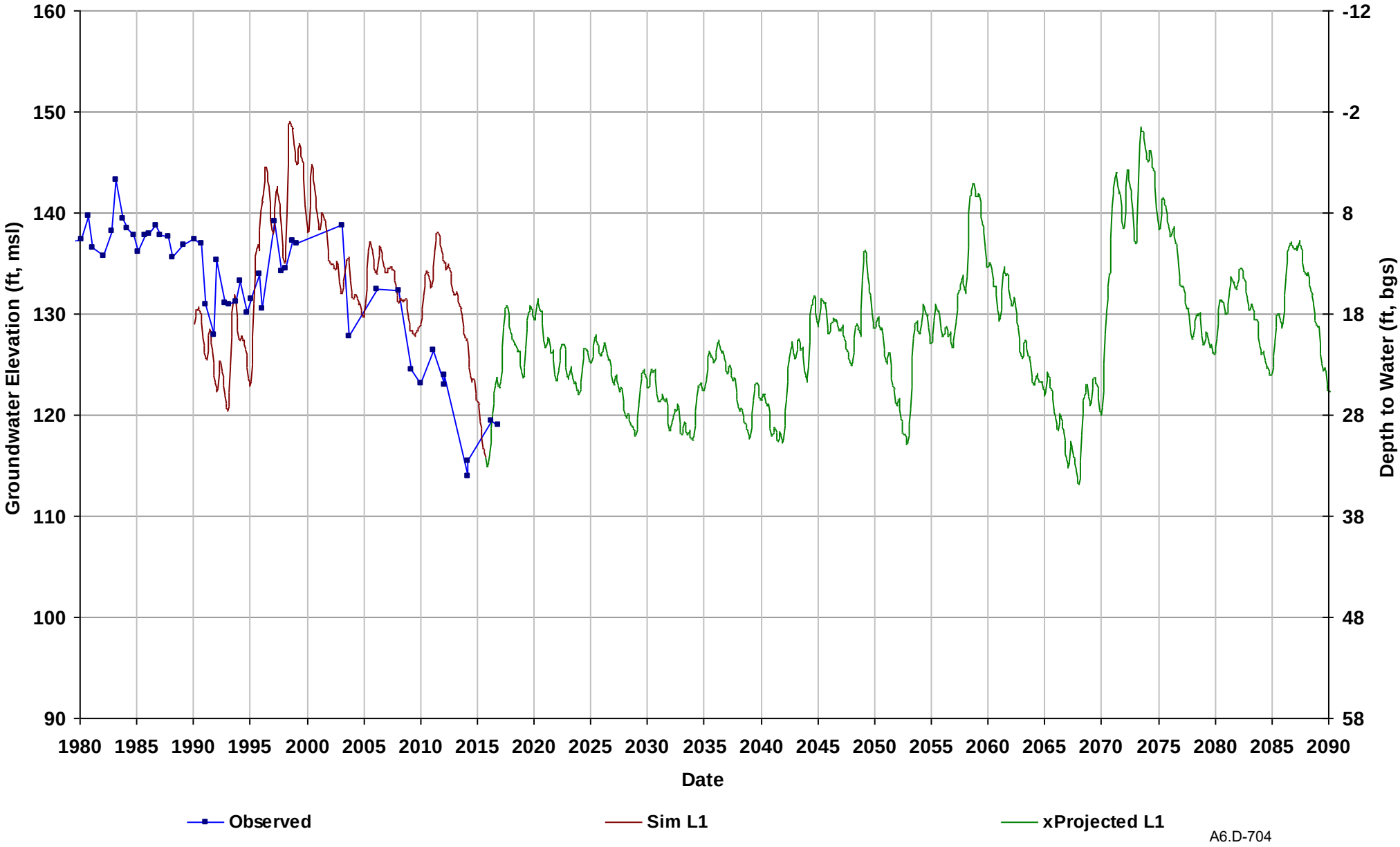
Well Name: 12S14E08R001M
Depth Zone: Unknown; Within CC
Subbasin: Delta-Mendota
GSE (ft, msl): 142

Total Depth (ft):
Perf Top (ft):
Perf Bottom (ft):
Top Model Layer: 1
Bottom Model Layer: 1



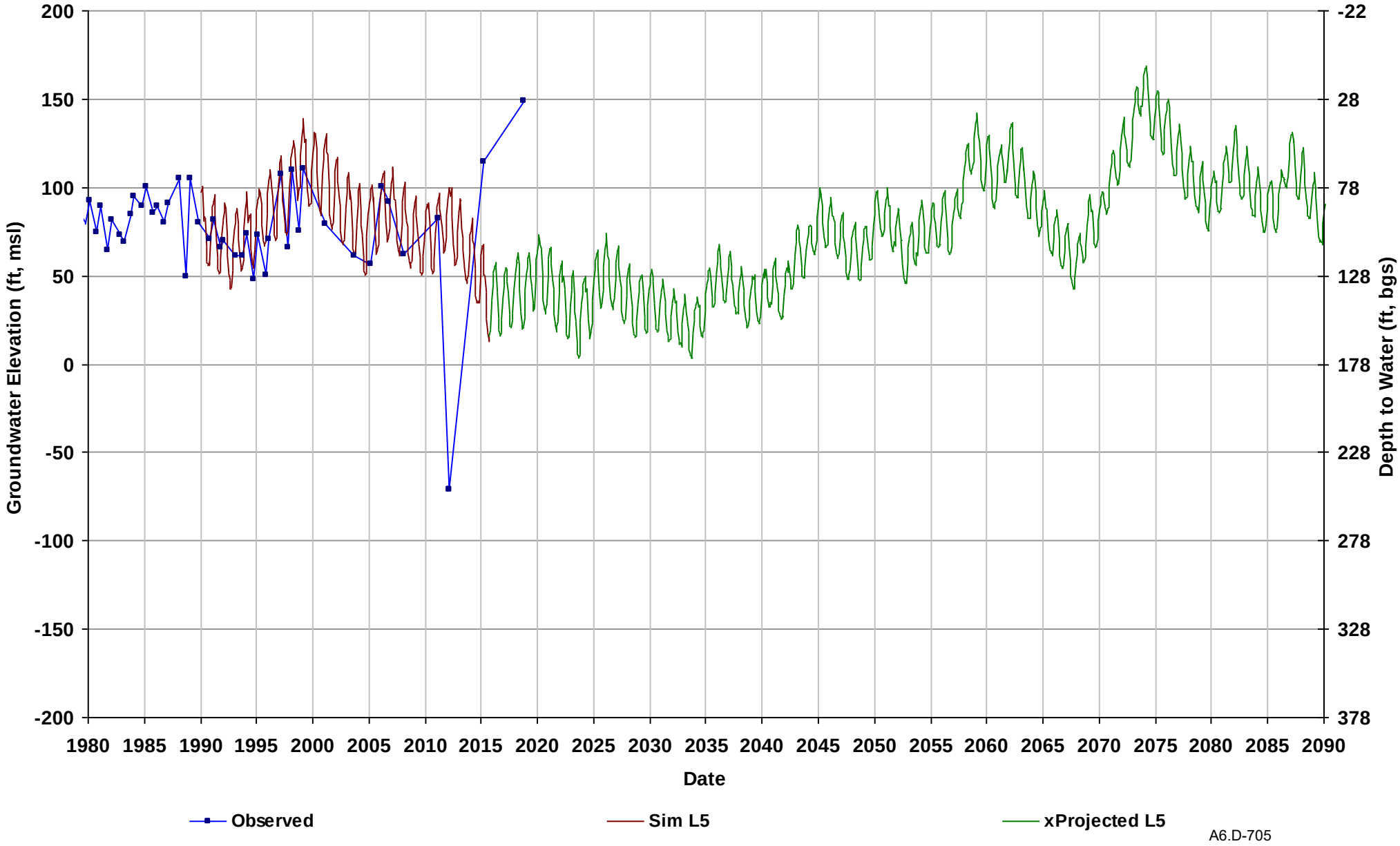
Well Name: 12S14E21H001M
Depth Zone: Unknown; Within CC
Subbasin: Delta-Mendota
GSE (ft, msl): 148

Total Depth (ft):
Perf Top (ft):
Perf Bottom (ft):
Top Model Layer: 1
Bottom Model Layer: 1



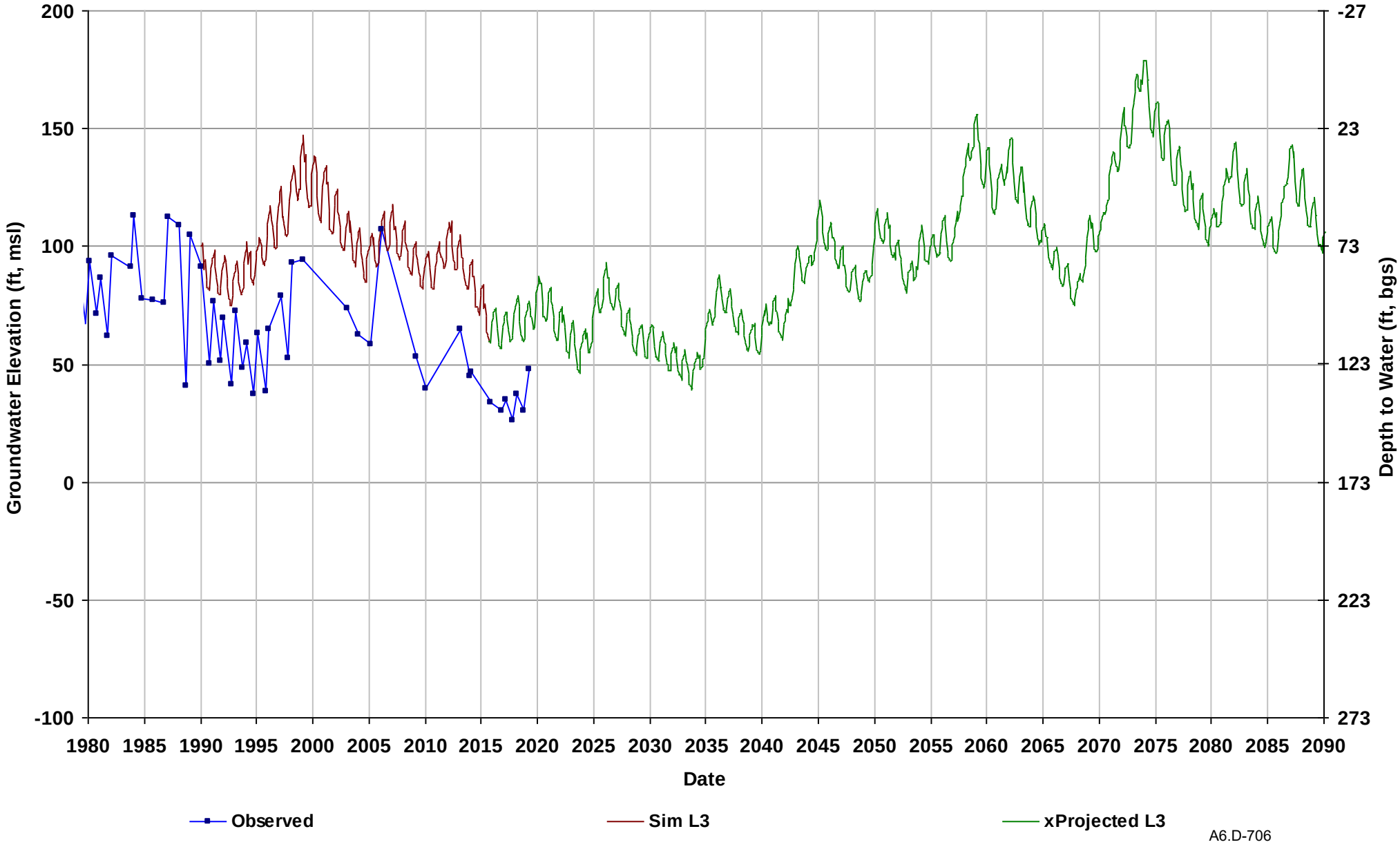
Well Name: 12S15E01R001M
Depth Zone: Unknown; Within CC
Subbasin: Madera
GSE (ft, msl): 177

Total Depth (ft):
Perf Top (ft):
Perf Bottom (ft):
Top Model Layer: 5
Bottom Model Layer: 5



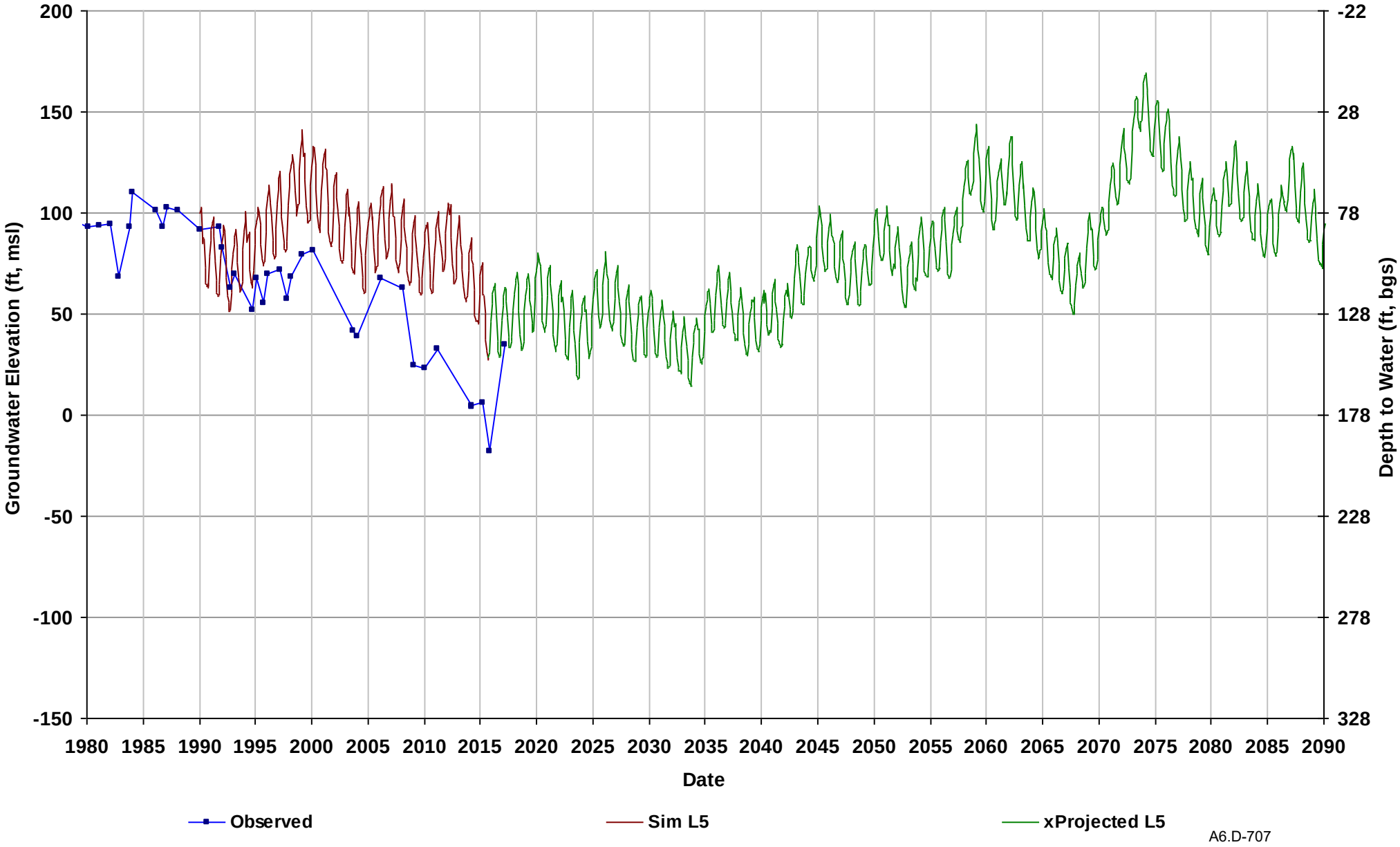
Well Name: 12S15E11R001M
Depth Zone: Upper; Within CC
Subbasin: Madera
GSE (ft, msl): 172

Total Depth (ft): 216
Perf Top (ft): 205
Perf Bottom (ft): 212
Top Model Layer: 3
Bottom Model Layer: 3



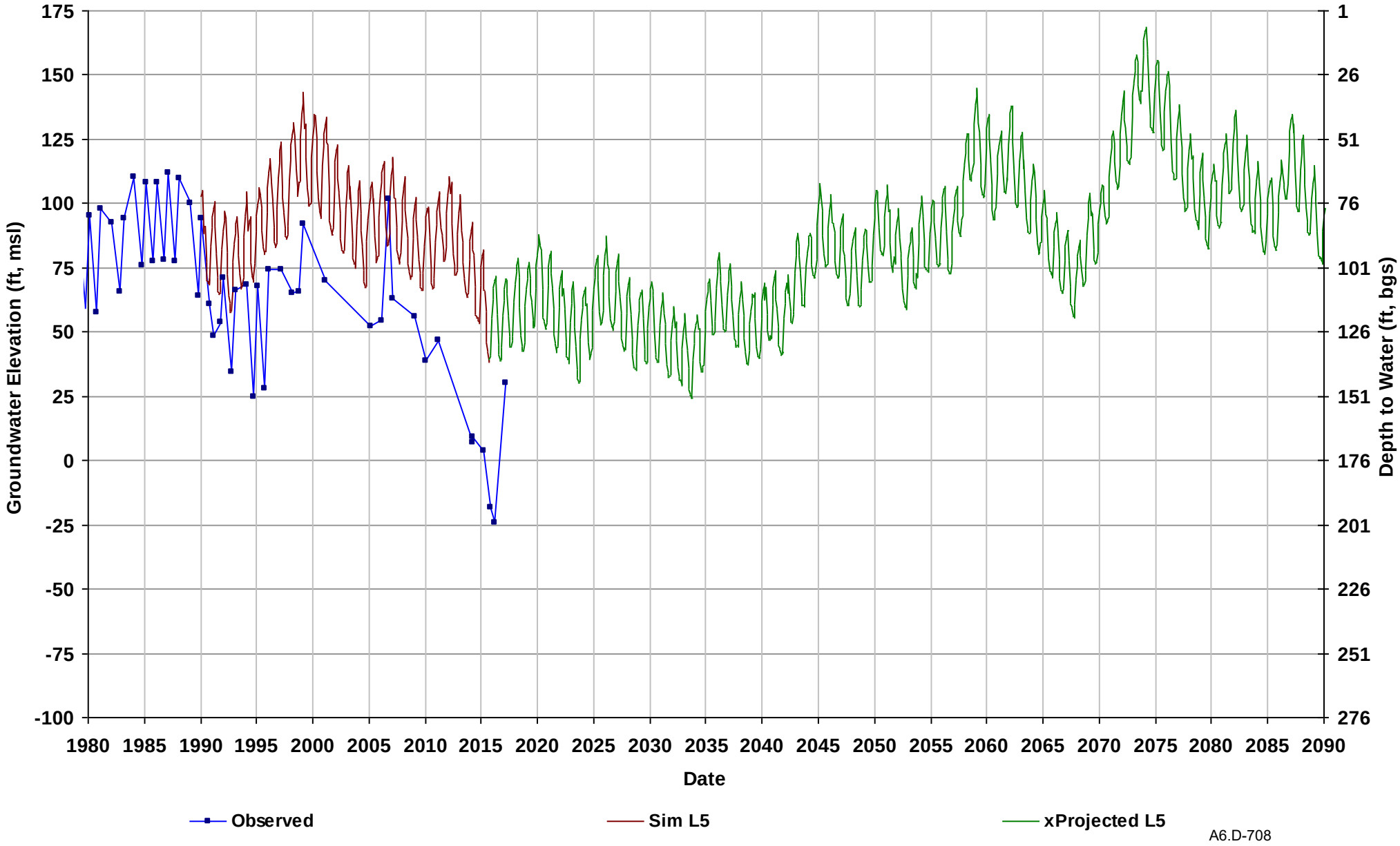
Well Name: 12S15E12R001M
Depth Zone: Unknown; Within CC
Subbasin: Madera
GSE (ft, msl): 178

Total Depth (ft):
Perf Top (ft):
Perf Bottom (ft):
Top Model Layer: 5
Bottom Model Layer: 5



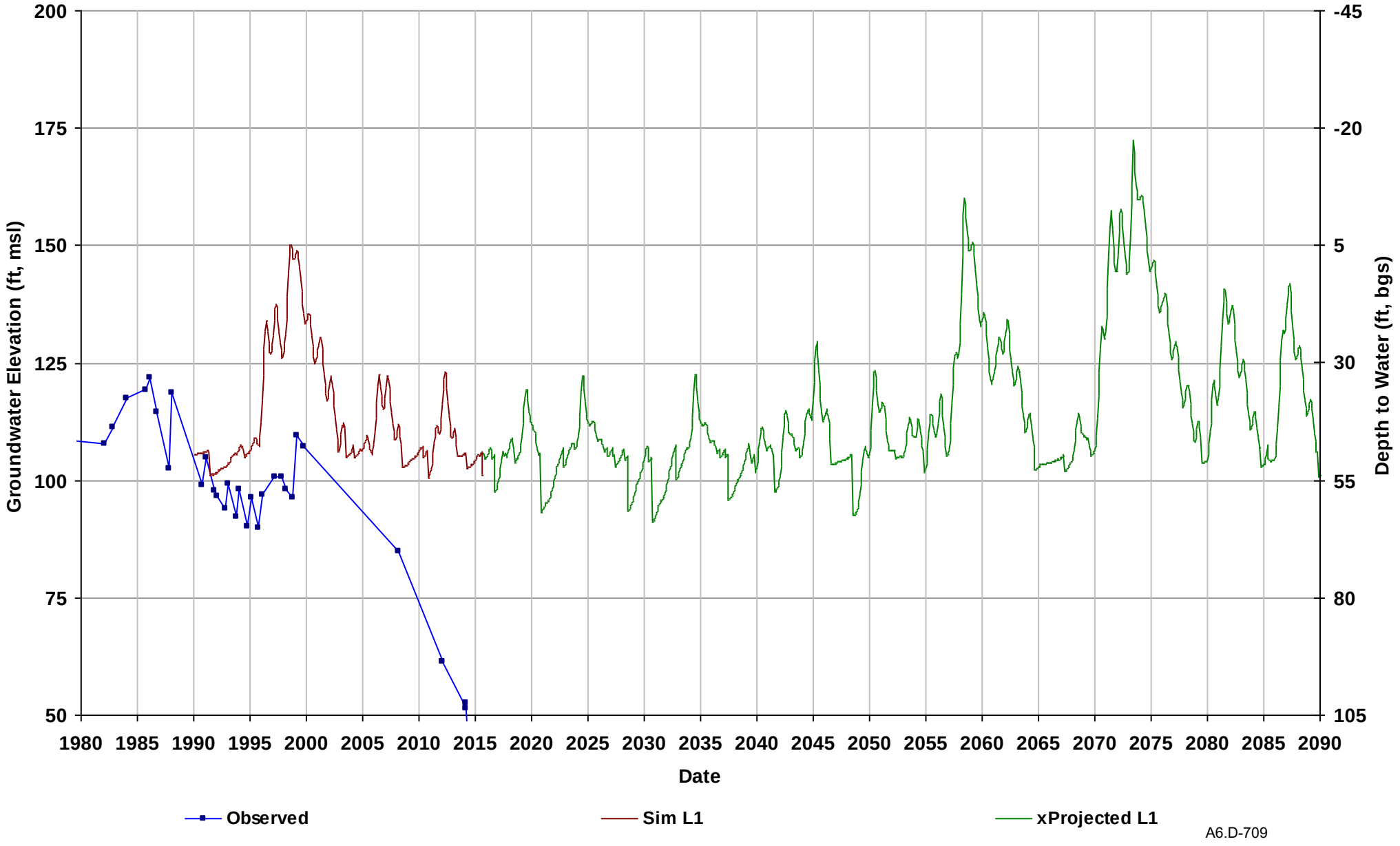
Well Name: 12S15E13R001M
Depth Zone: Unknown; Within CC
Subbasin: Madera
GSE (ft, msl): 176

Total Depth (ft):
Perf Top (ft):
Perf Bottom (ft):
Top Model Layer: 5
Bottom Model Layer: 5



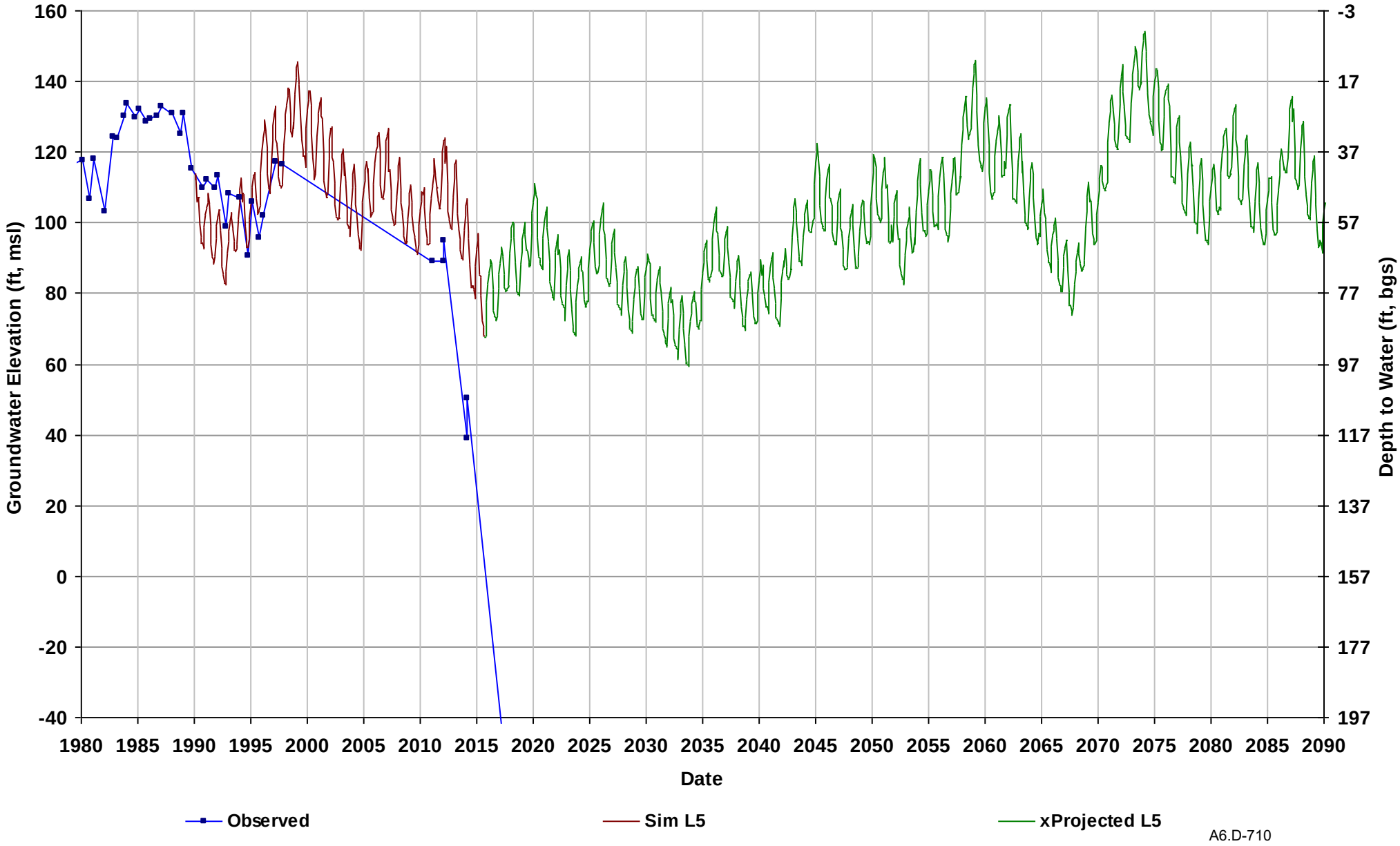
Well Name: 12S15E17E001M
Depth Zone: Upper; Within CC
Subbasin: Madera
GSE (ft, msl): 154

Total Depth (ft): 57
Perf Top (ft):
Perf Bottom (ft):
Top Model Layer: 1
Bottom Model Layer: 1



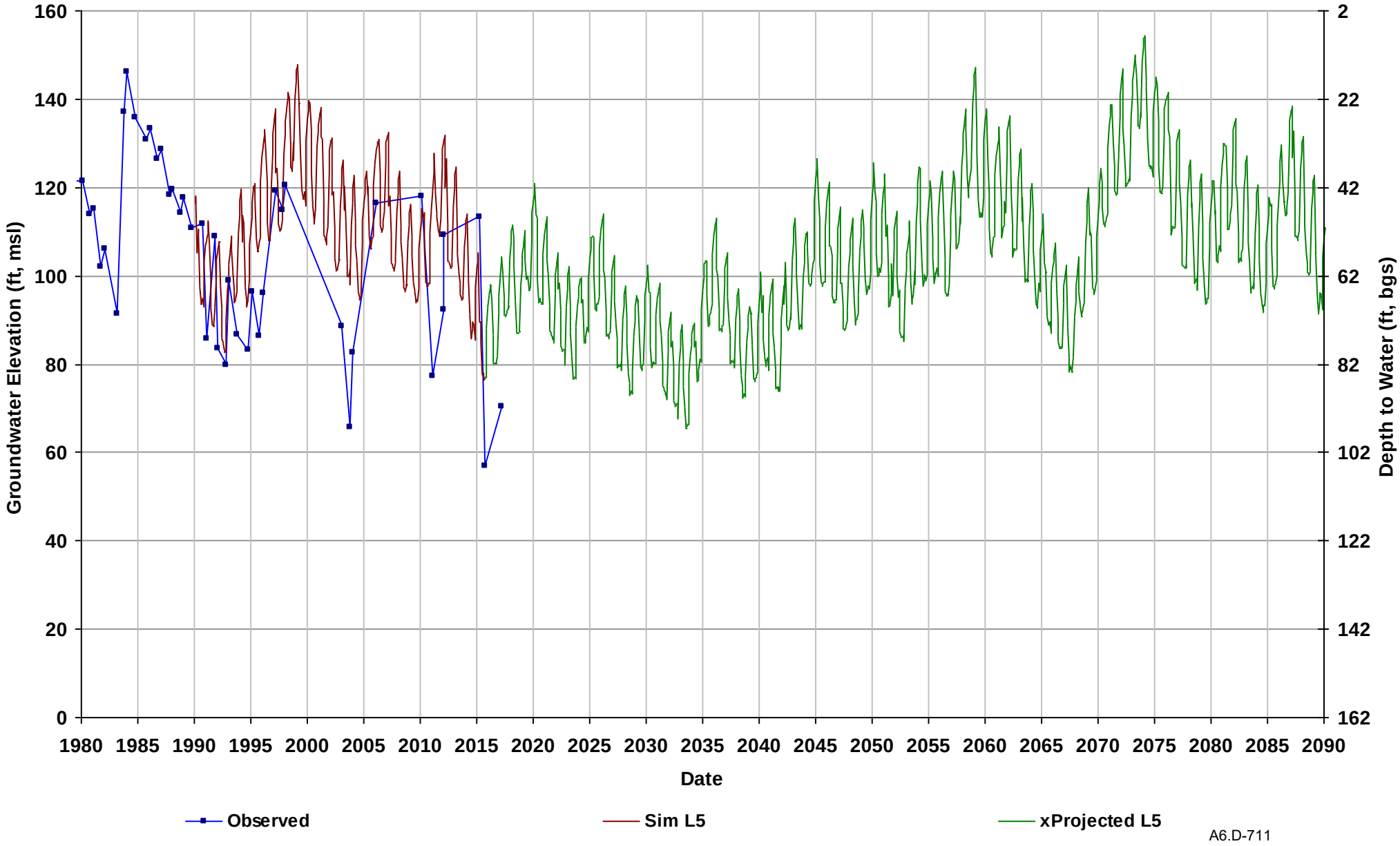
Well Name: 12S15E29C001M
Depth Zone: Unknown; Within CC
Subbasin: Madera
GSE (ft, msl): 156

Total Depth (ft):
Perf Top (ft):
Perf Bottom (ft):
Top Model Layer: 5
Bottom Model Layer: 5



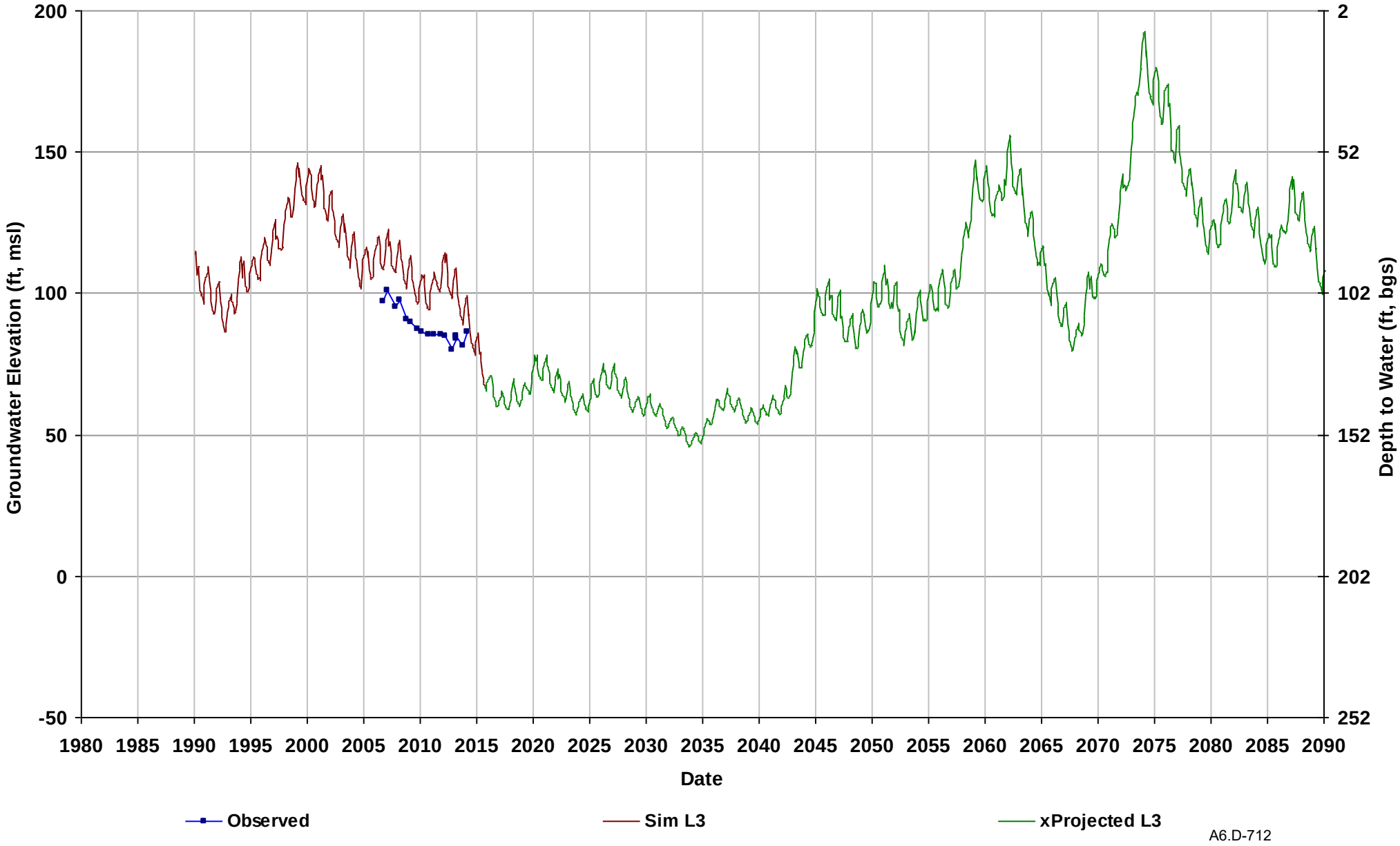
Well Name: 12S15E33R001M
Depth Zone: Unknown; Within CC
Subbasin: Delta-Mendota
GSE (ft, msl): 162

Total Depth (ft):
Perf Top (ft):
Perf Bottom (ft):
Top Model Layer: 5
Bottom Model Layer: 5



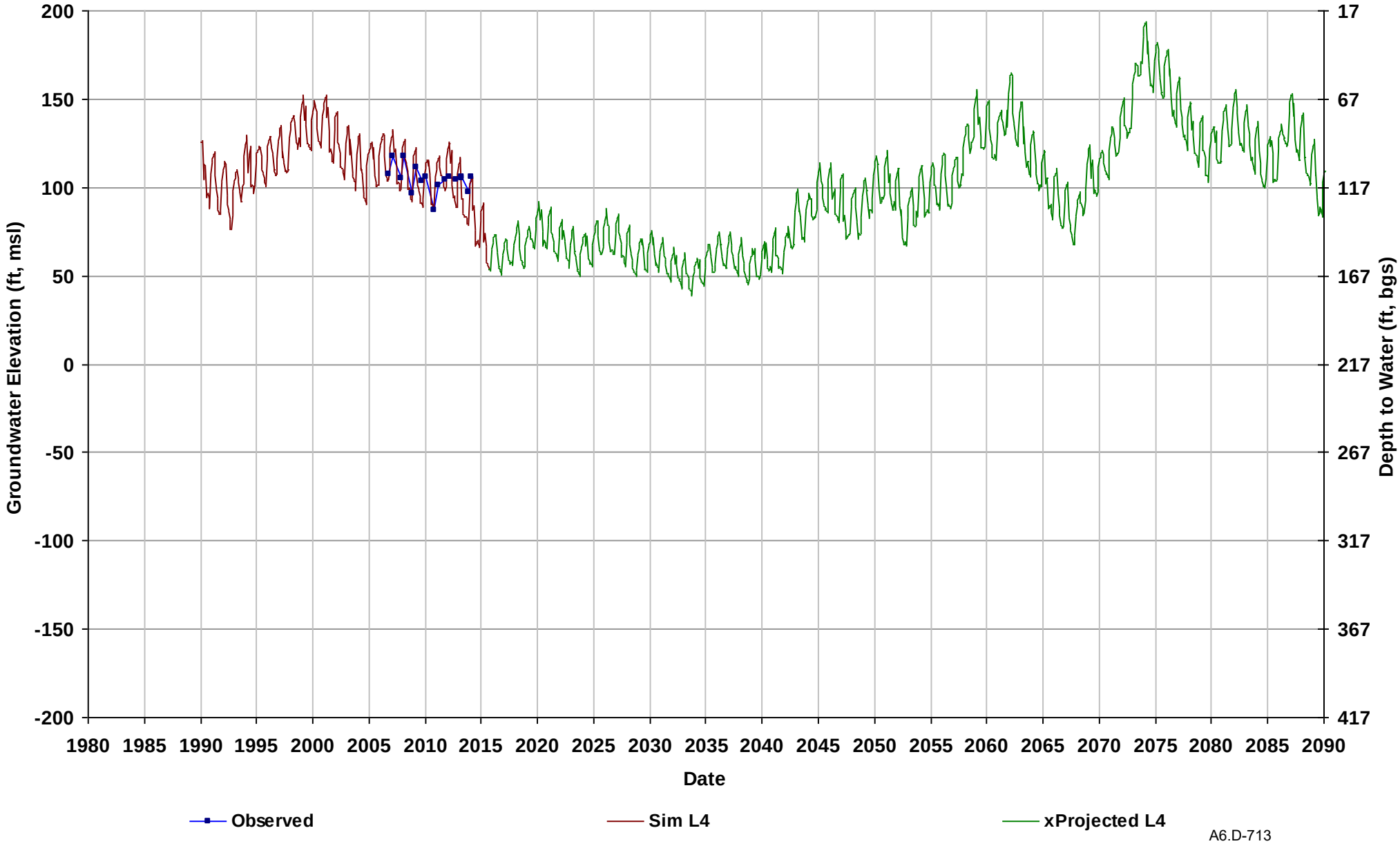
Well Name: 12S16E02N001M
Depth Zone: Upper; Within CC
Subbasin: Madera
GSE (ft, msl): 202

Total Depth (ft): 144
Perf Top (ft):
Perf Bottom (ft):
Top Model Layer: 3
Bottom Model Layer: 3



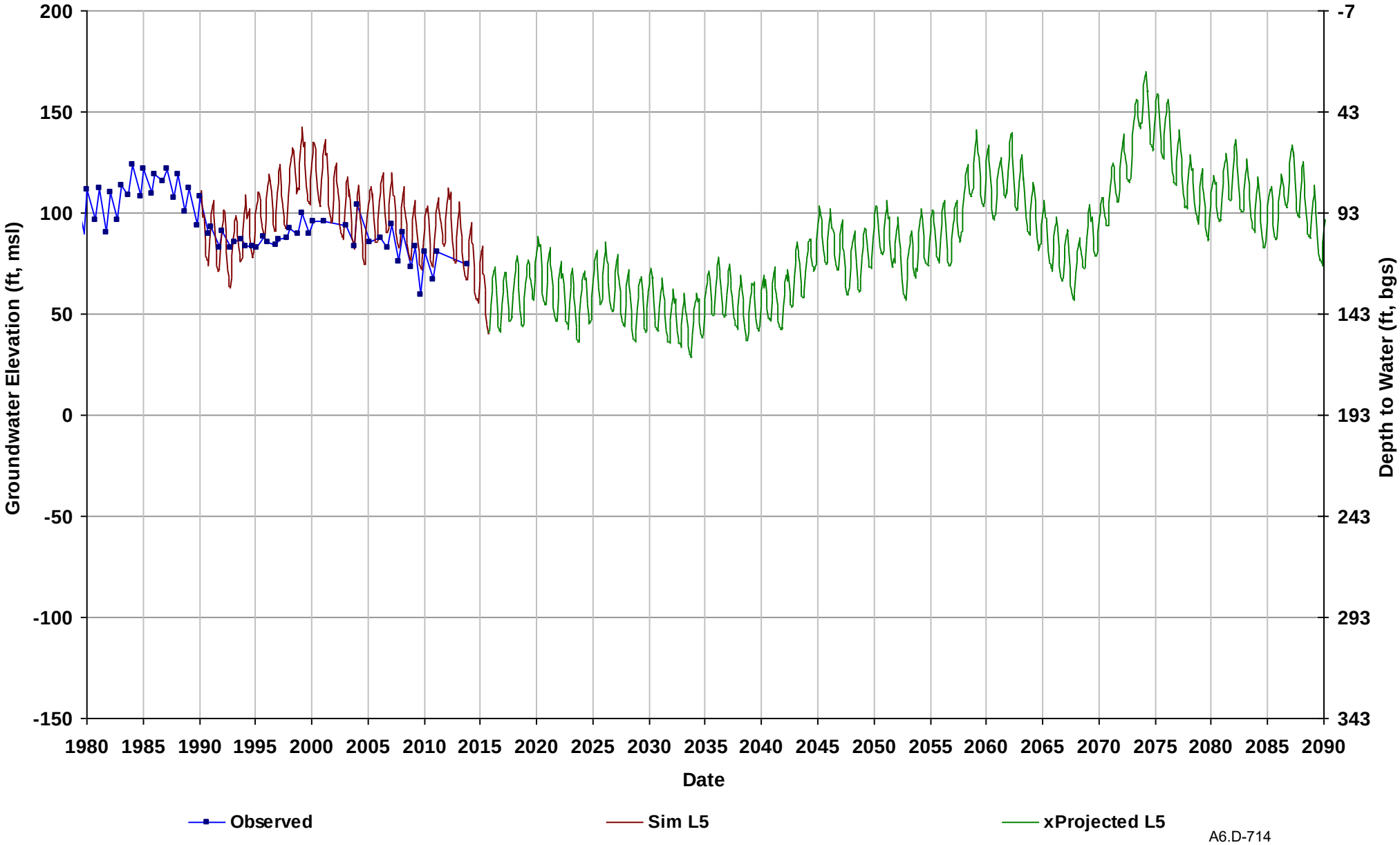
Well Name: 12S16E12H001M
Depth Zone: Unknown; Within CC
Subbasin: Madera
GSE (ft, msl): 217

Total Depth (ft):
Perf Top (ft):
Perf Bottom (ft):
Top Model Layer: 4
Bottom Model Layer: 4



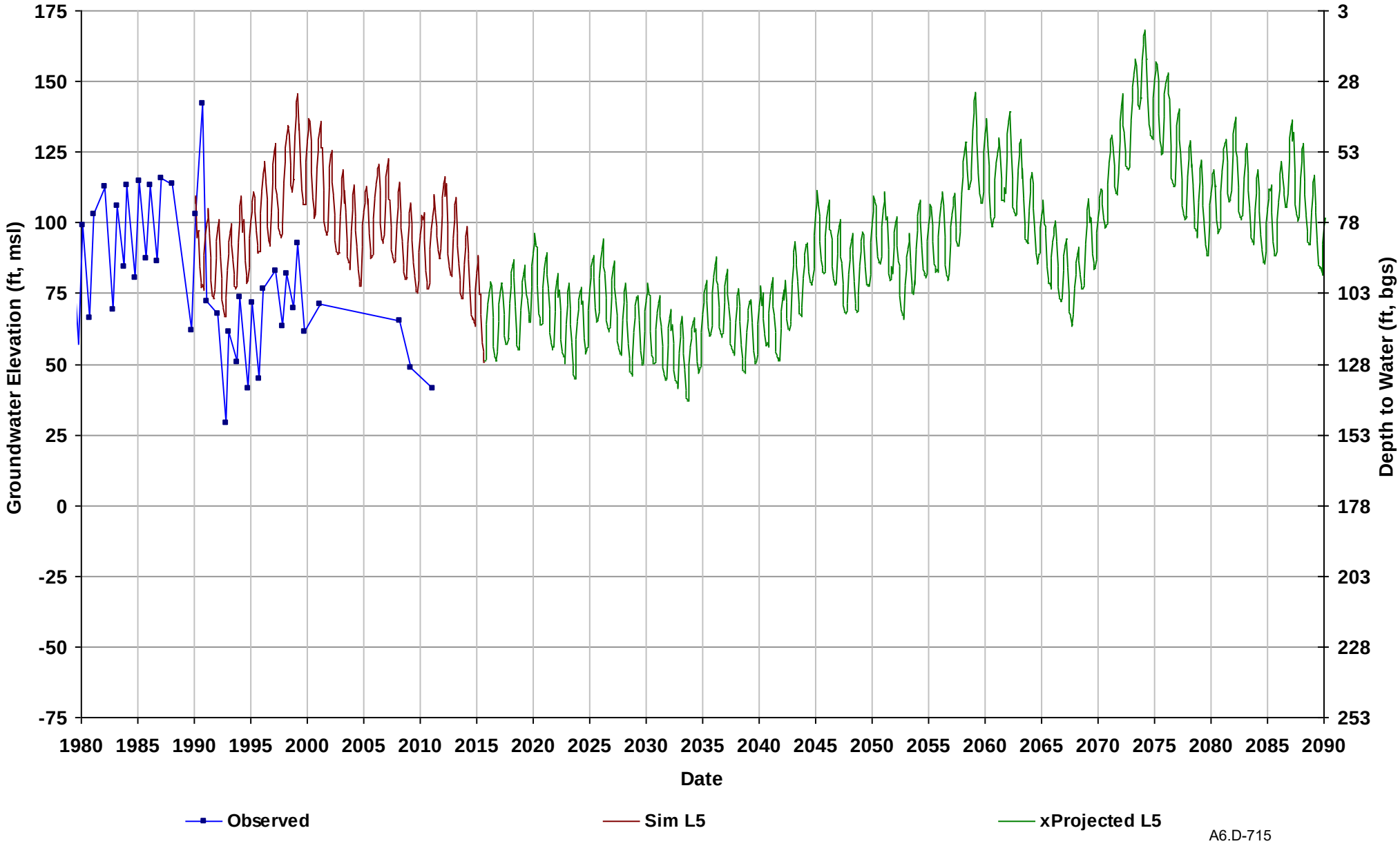
Well Name: 12S16E16R001M
Depth Zone: Unknown; Within CC
Subbasin: Madera
GSE (ft, msl): 193

Total Depth (ft):
Perf Top (ft):
Perf Bottom (ft):
Top Model Layer: 5
Bottom Model Layer: 5



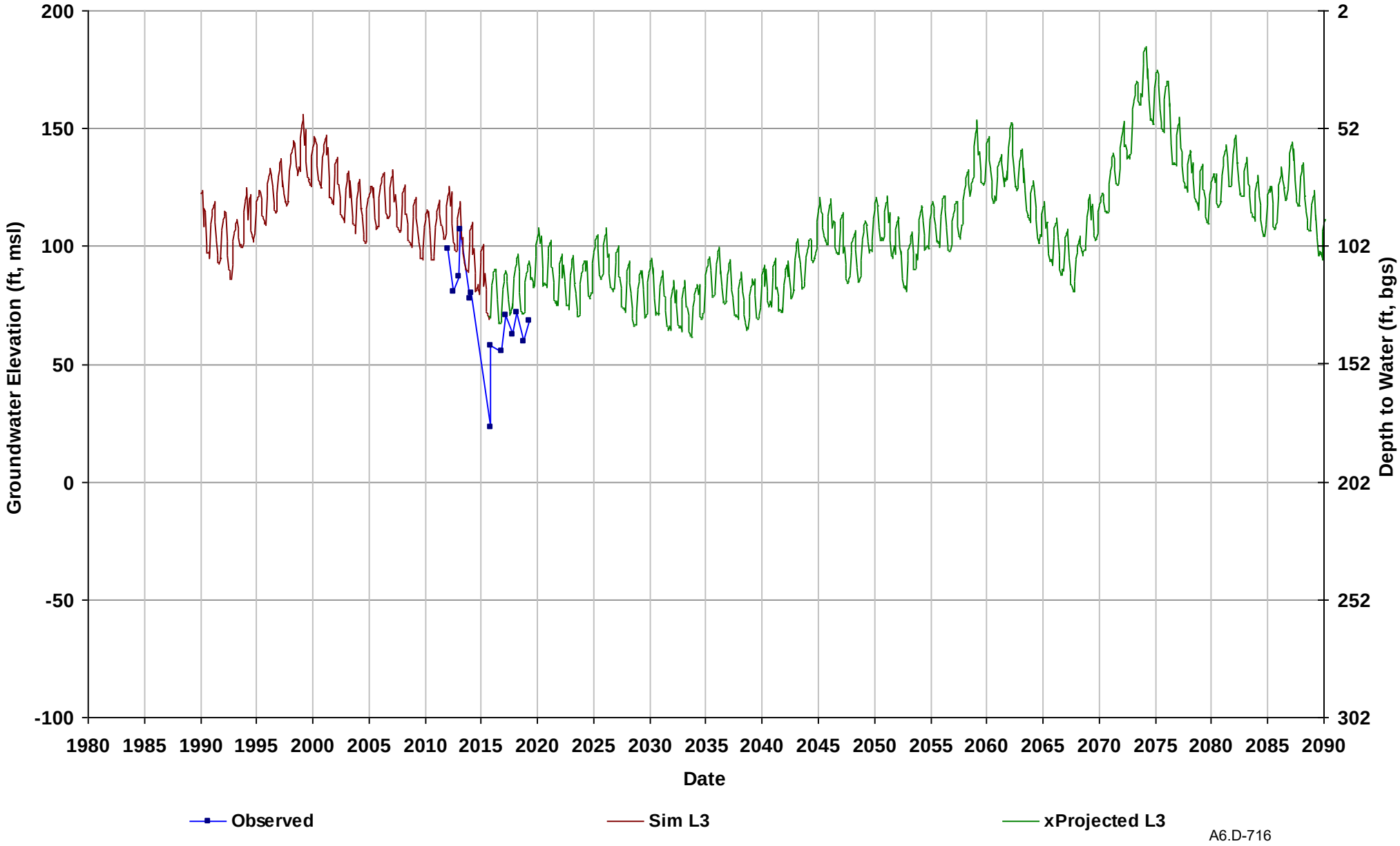
Well Name: 12S16E19P001M
Depth Zone: Unknown; Within CC
Subbasin: Madera
GSE (ft, msl): 177

Total Depth (ft):
Perf Top (ft):
Perf Bottom (ft):
Top Model Layer: 5
Bottom Model Layer: 5



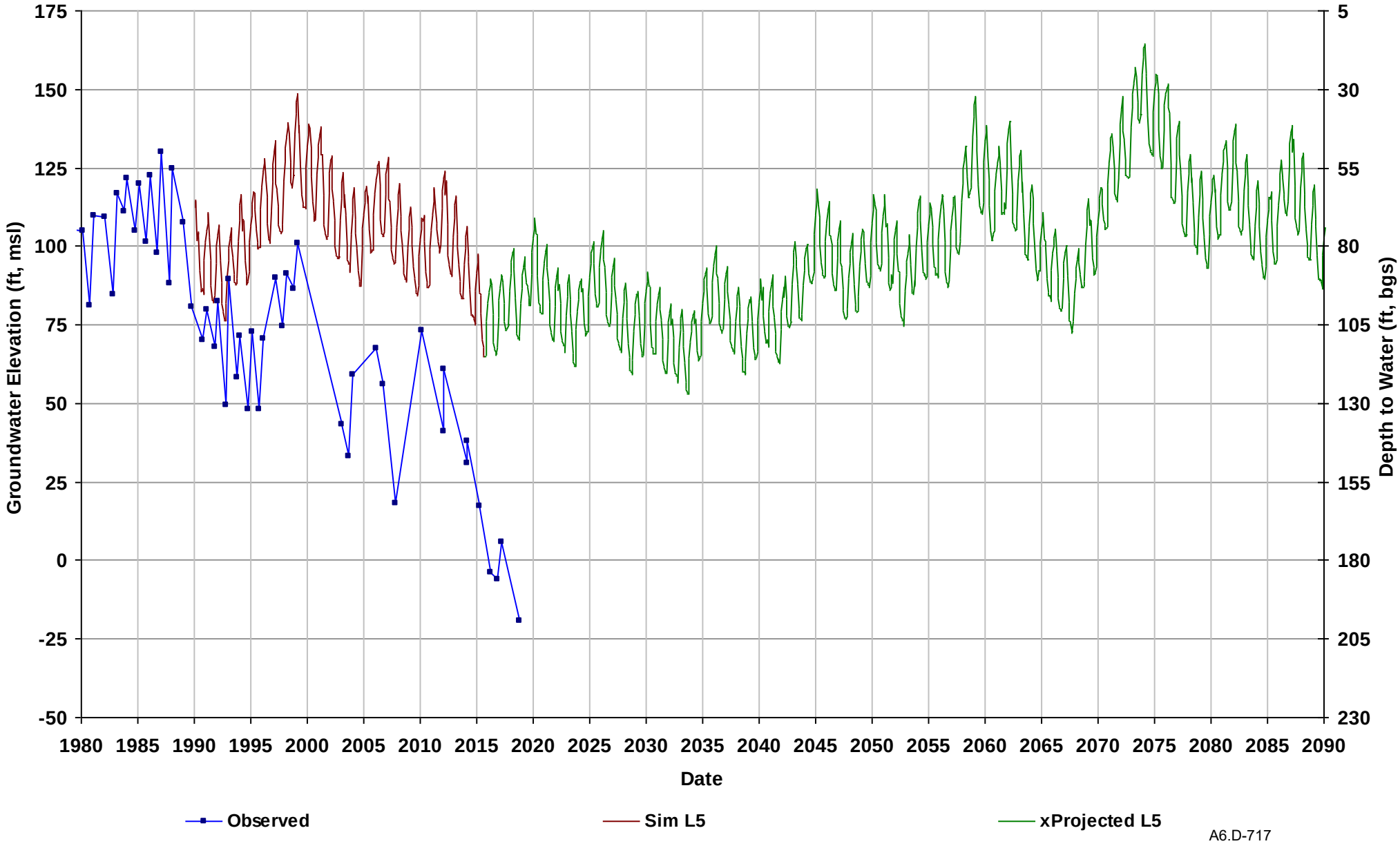
Well Name: 12S16E26H001M
Depth Zone: Upper; Within CC
Subbasin: Madera
GSE (ft, msl): 202

Total Depth (ft): 286
Perf Top (ft): 228
Perf Bottom (ft): 284
Top Model Layer: 3
Bottom Model Layer: 3



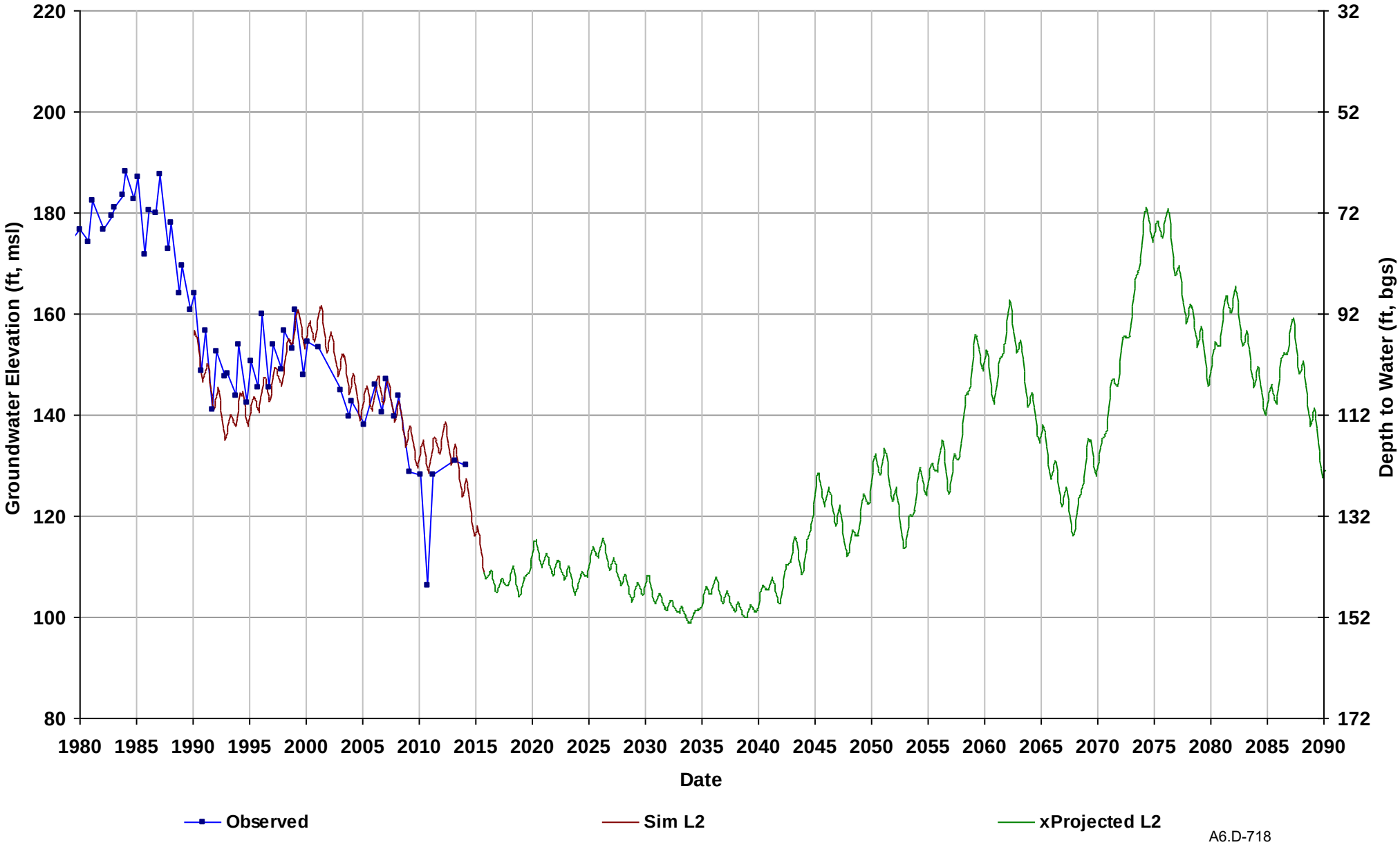
Well Name: 12S16E31G001M
Depth Zone: Unknown; Within CC
Subbasin: Delta-Mendota
GSE (ft, msl): 179

Total Depth (ft):
Perf Top (ft):
Perf Bottom (ft):
Top Model Layer: 5
Bottom Model Layer: 5



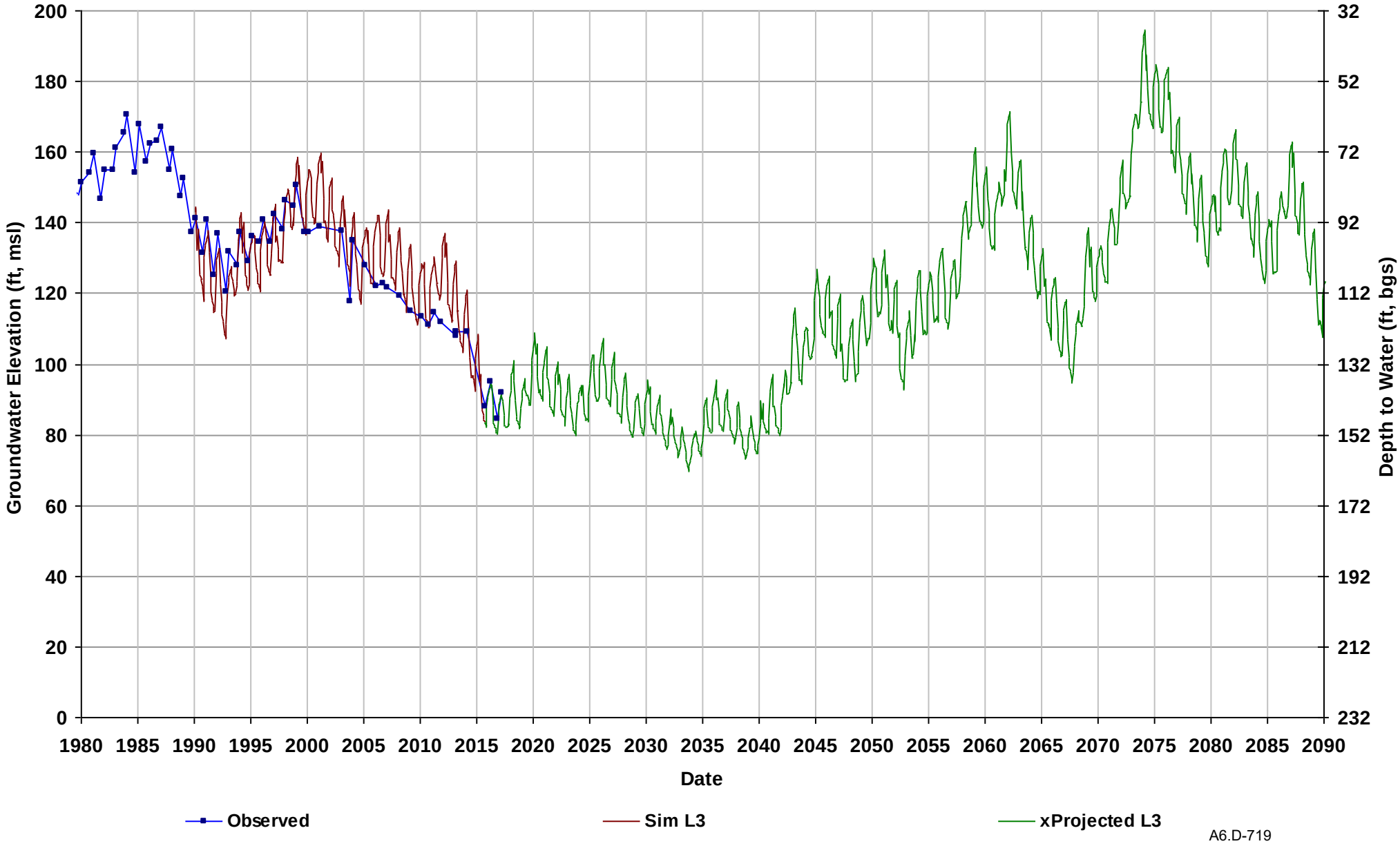
Well Name: 12S17E13J001M
Depth Zone: Unknown; Outside CC
Subbasin: Madera
GSE (ft, msl): 252

Total Depth (ft):
Perf Top (ft):
Perf Bottom (ft):
Top Model Layer: 2
Bottom Model Layer: 2



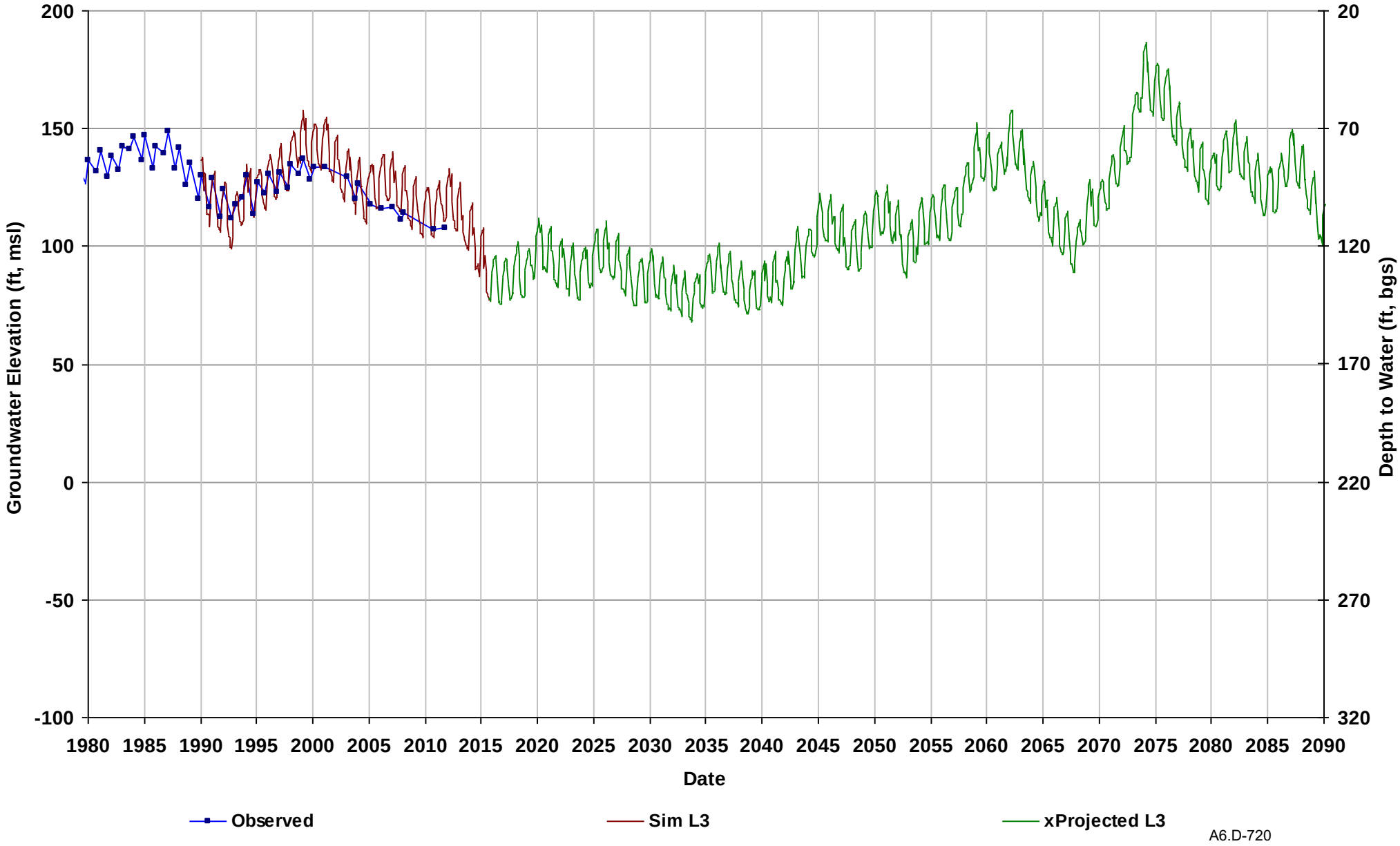
Well Name: 12S17E16A002M
Depth Zone: Unknown; Outside CC
Subbasin: Madera
GSE (ft, msl): 232

Total Depth (ft):
Perf Top (ft):
Perf Bottom (ft):
Top Model Layer: 3
Bottom Model Layer: 3



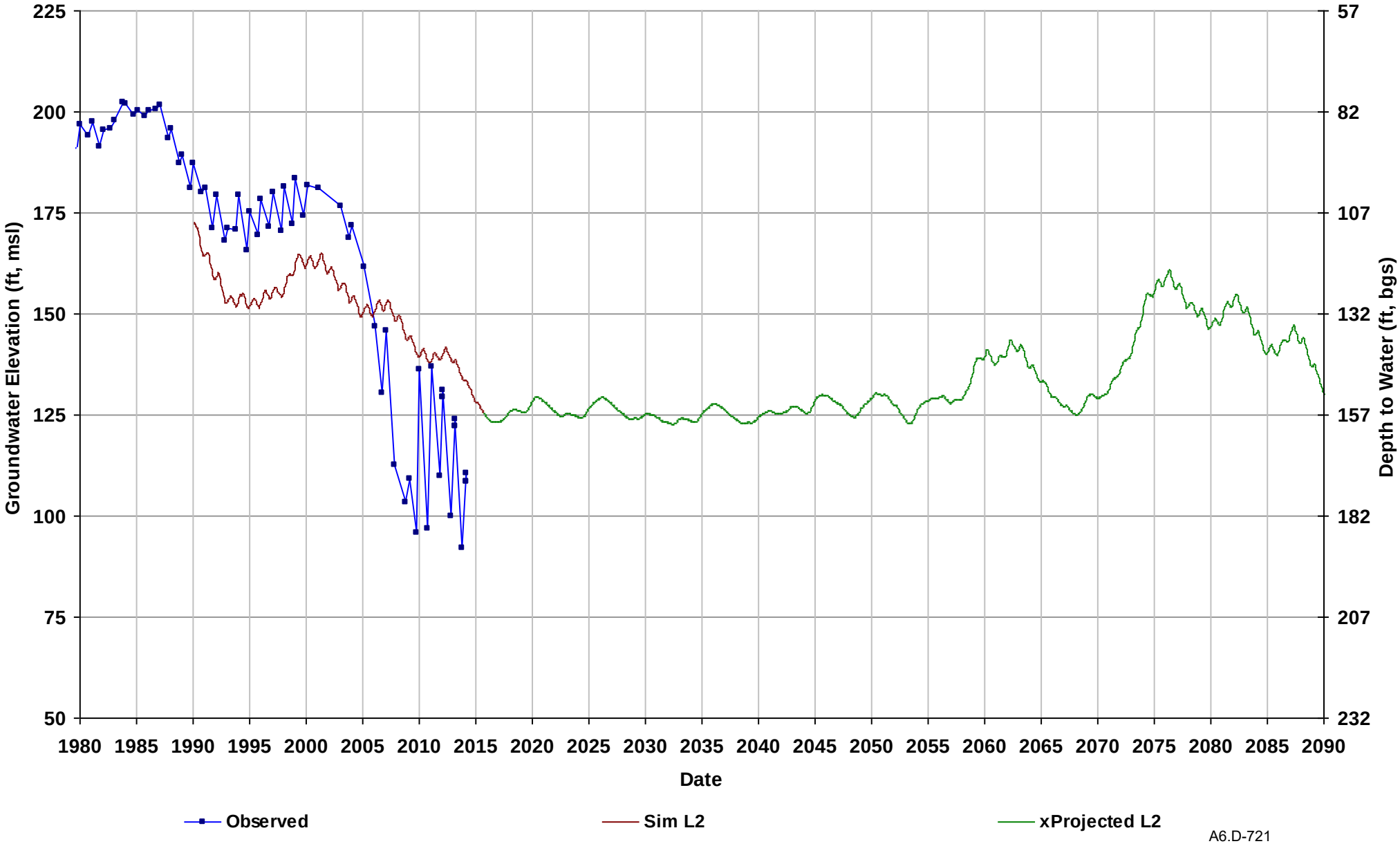
Well Name: 12S17E20P001M
Depth Zone: Upper; Within CC
Subbasin: Madera
GSE (ft, msl): 220

Total Depth (ft): 252
Perf Top (ft):
Perf Bottom (ft):
Top Model Layer: 3
Bottom Model Layer: 3



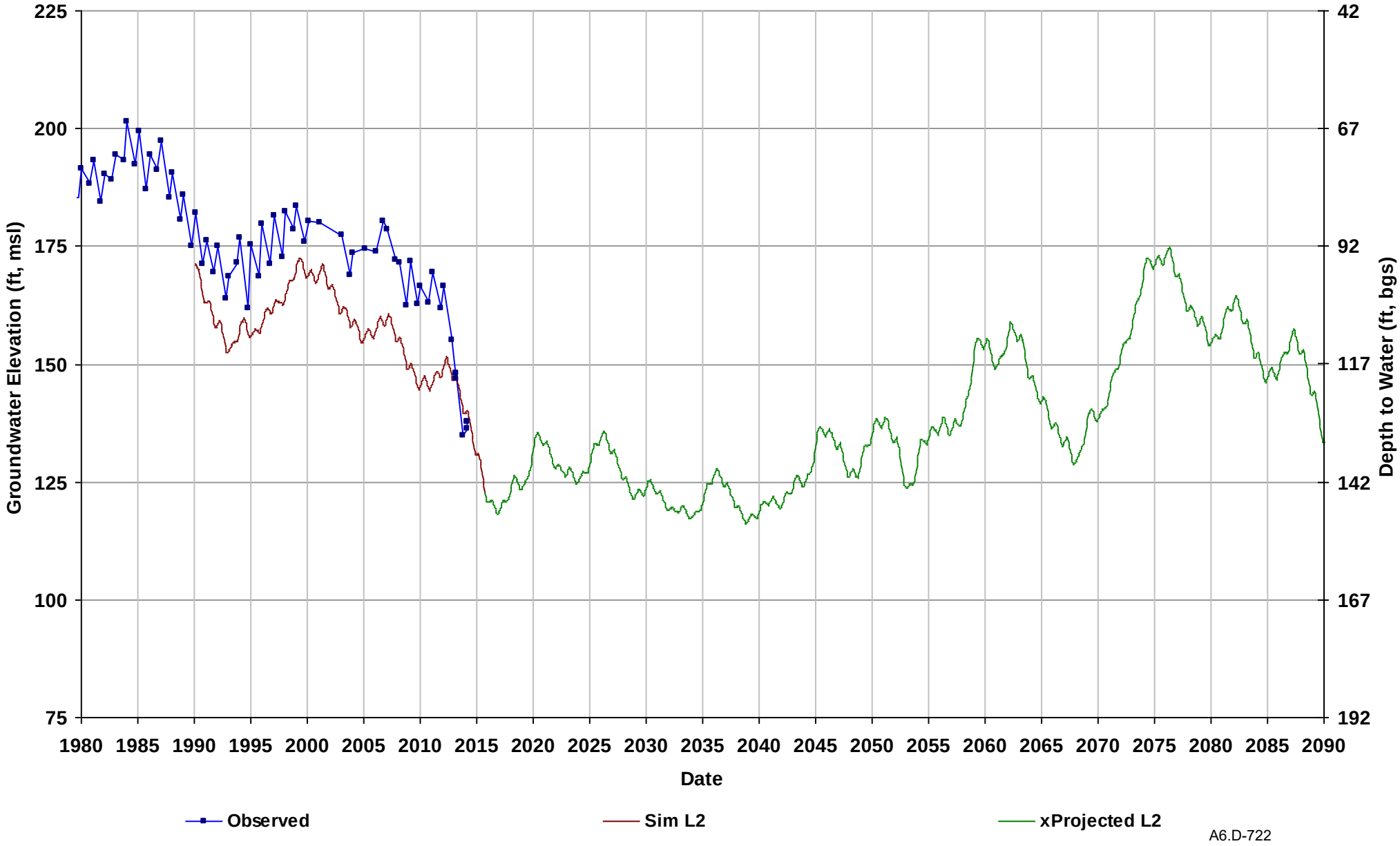
Well Name: 12S18E12N001M
Depth Zone: Unknown; Outside CC
Subbasin: Madera
GSE (ft, msl): 282

Total Depth (ft):
Perf Top (ft):
Perf Bottom (ft):
Top Model Layer: 2
Bottom Model Layer: 2



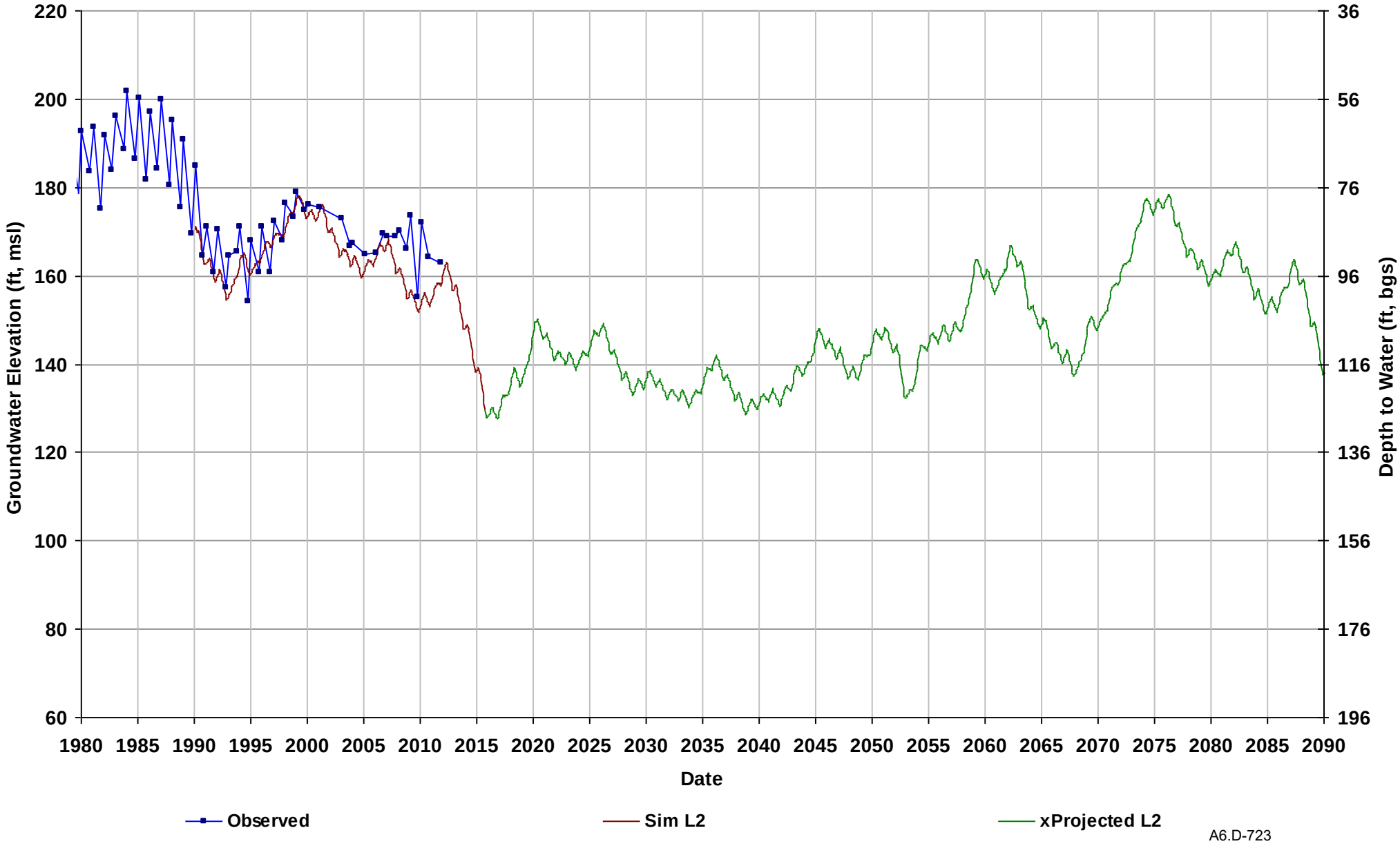
Well Name: 12S18E21G001M
Depth Zone: Unknown; Outside CC
Subbasin: Madera
GSE (ft, msl): 267

Total Depth (ft):
Perf Top (ft):
Perf Bottom (ft):
Top Model Layer: 2
Bottom Model Layer: 2



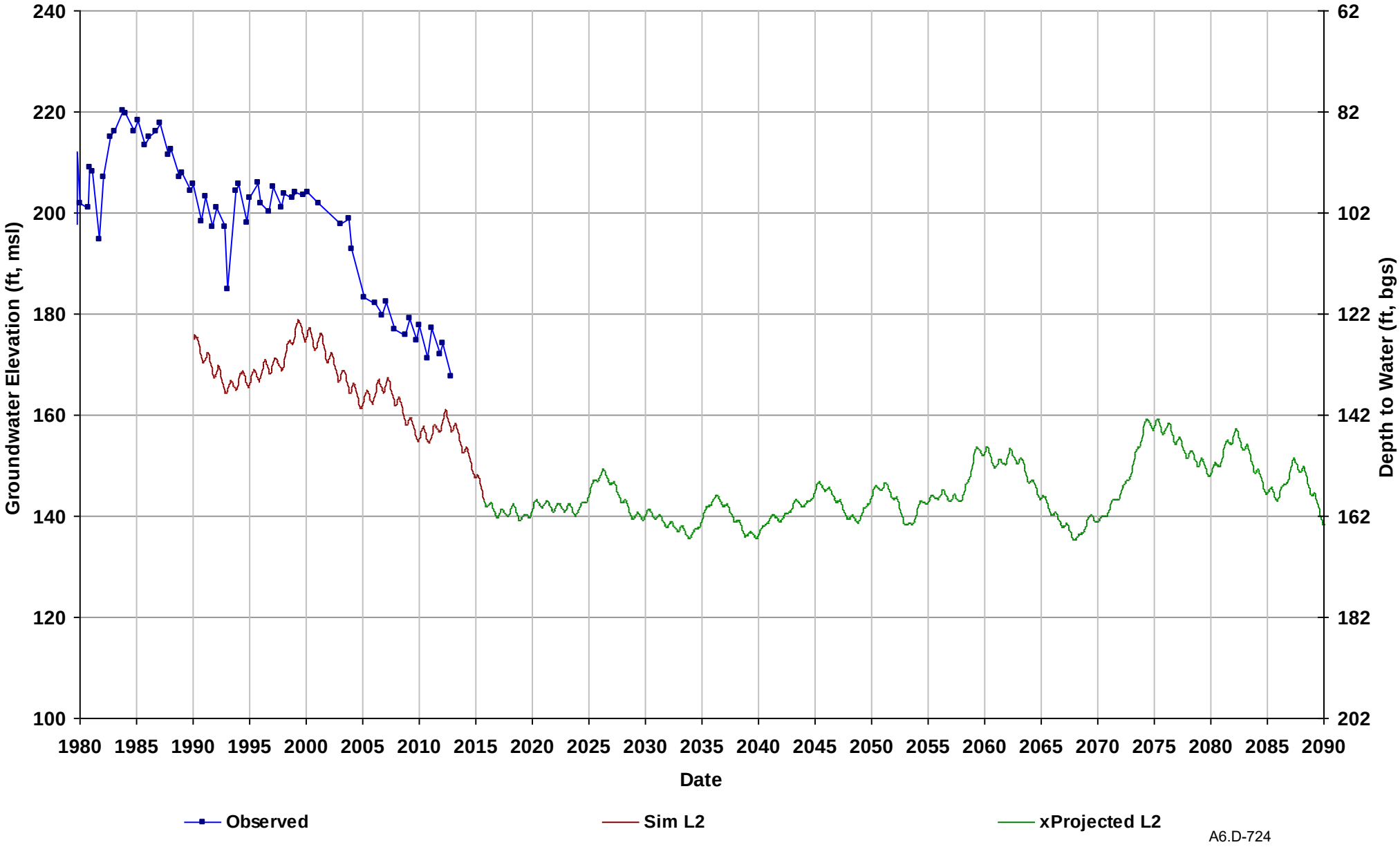
Well Name: 12S18E31J001M
Depth Zone: Unknown; Outside CC
Subbasin: Madera
GSE (ft, msl): 256

Total Depth (ft):
Perf Top (ft):
Perf Bottom (ft):
Top Model Layer: 2
Bottom Model Layer: 2



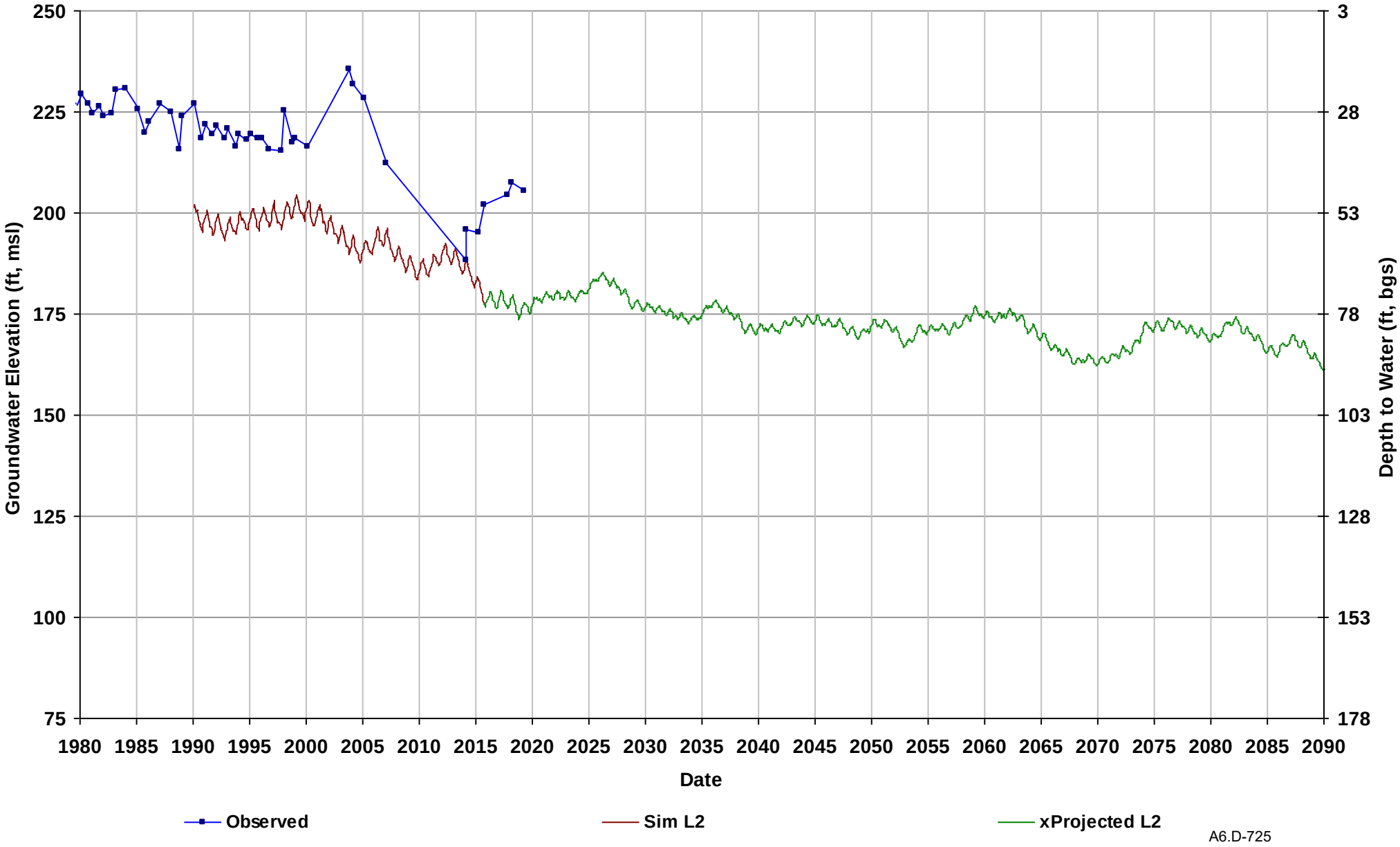
Well Name: 12S19E21B001M
Depth Zone: Unknown; Outside CC
Subbasin: Madera
GSE (ft, msl): 302

Total Depth (ft):
Perf Top (ft):
Perf Bottom (ft):
Top Model Layer: 2
Bottom Model Layer: 2



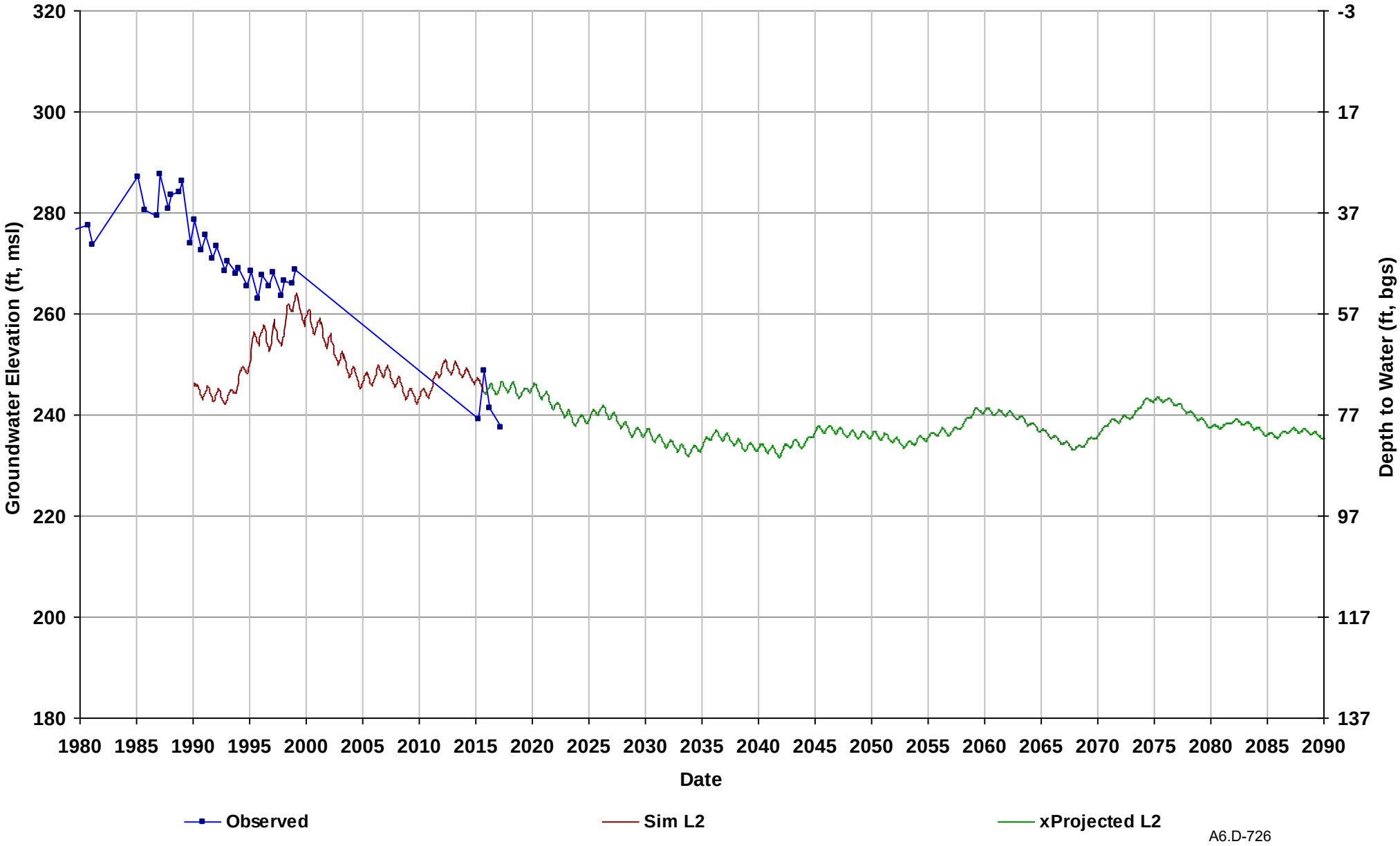
Well Name: 12S19E35A001M
Depth Zone: Unknown; Outside CC
Subbasin: Kings
GSE (ft, msl): 252

Total Depth (ft):
Perf Top (ft):
Perf Bottom (ft):
Top Model Layer: 2
Bottom Model Layer: 2



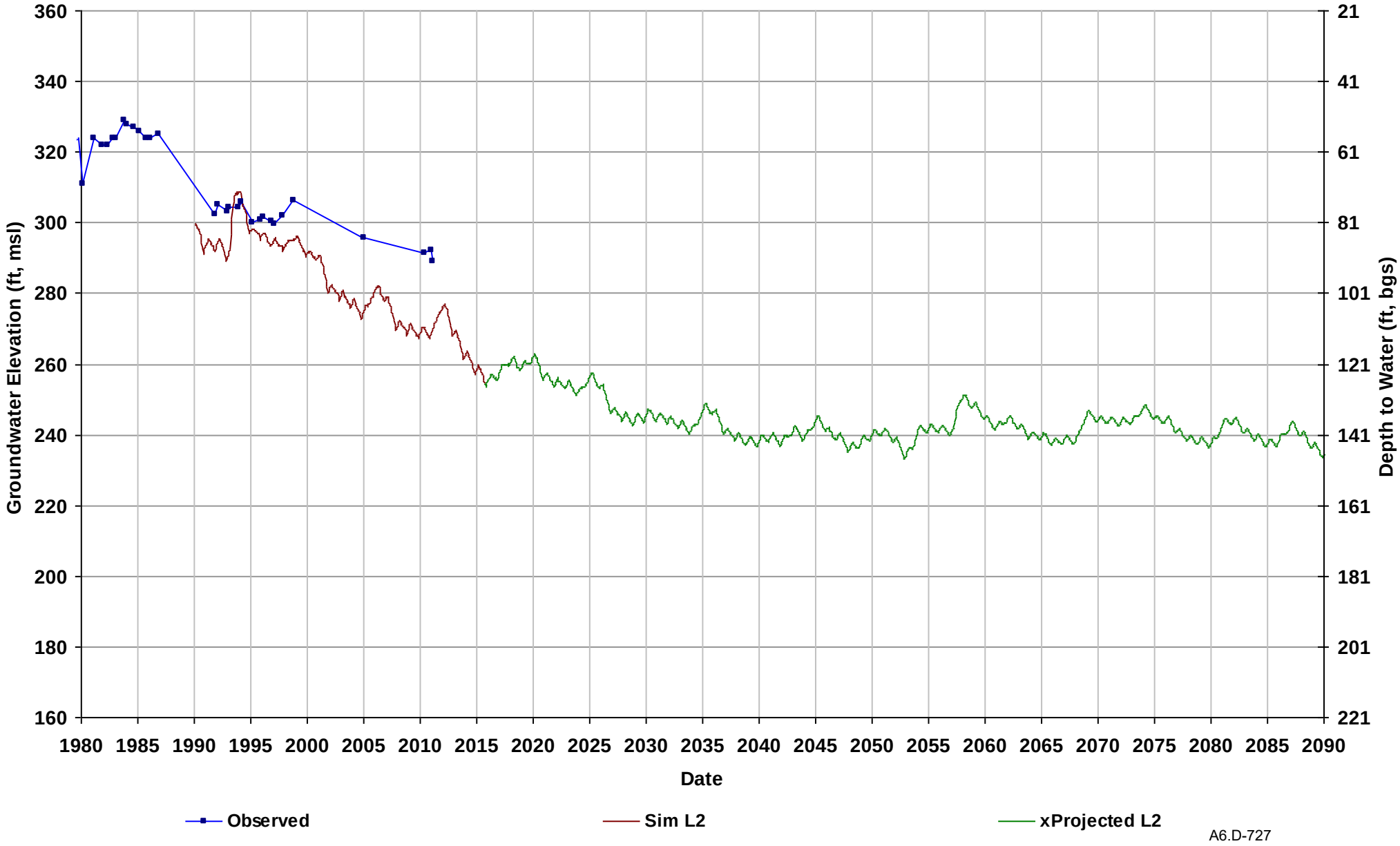
Well Name: 12S20E01H001M
Depth Zone: Unknown; Outside CC
Subbasin: Kings
GSE (ft, msl): 317

Total Depth (ft):
Perf Top (ft):
Perf Bottom (ft):
Top Model Layer: 2
Bottom Model Layer: 2



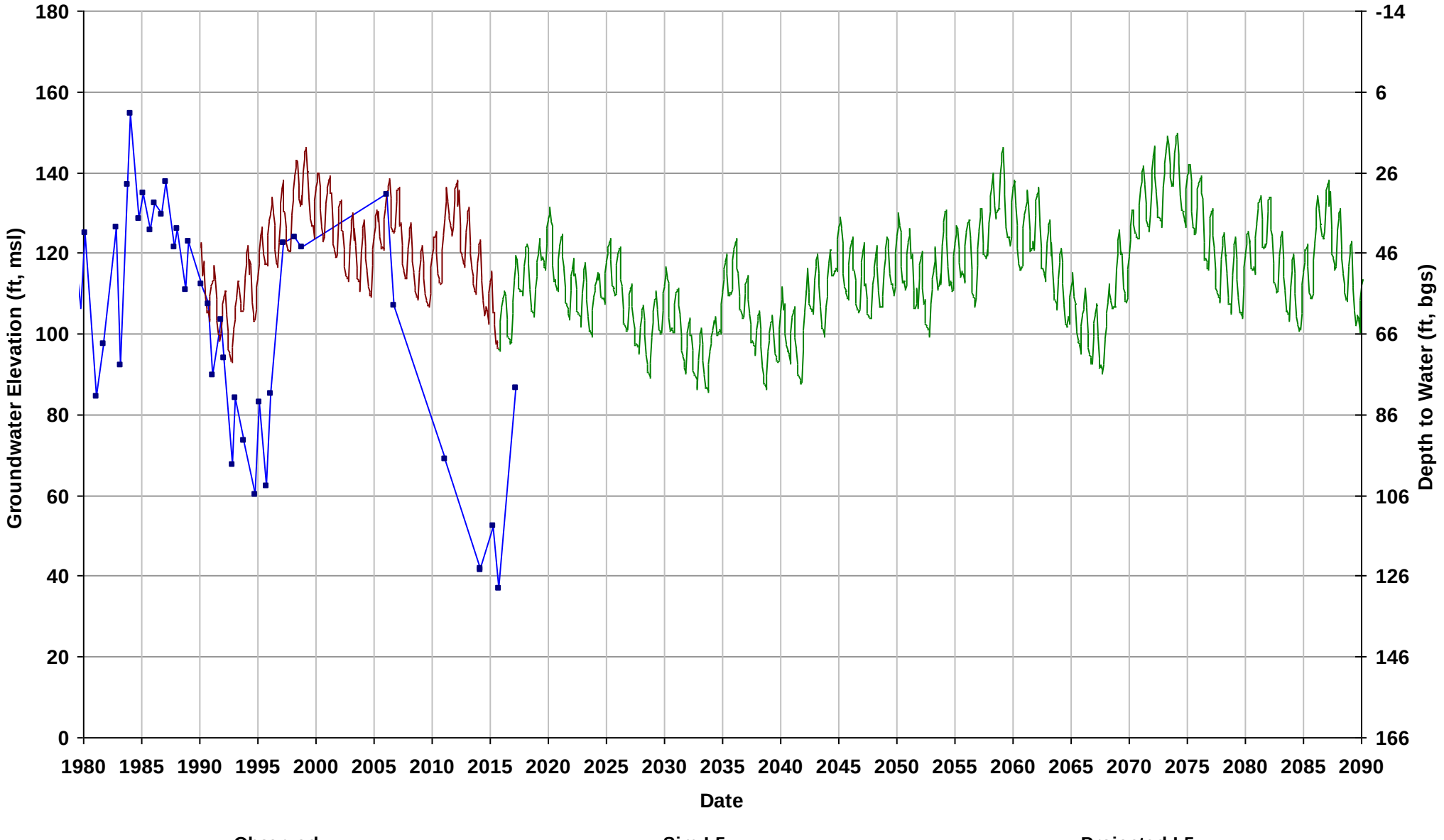
Well Name: 12S21E19J001M
Depth Zone: Unknown; Outside CC
Subbasin: Kings
GSE (ft, msl): 380

Total Depth (ft):
Perf Top (ft):
Perf Bottom (ft):
Top Model Layer: 2
Bottom Model Layer: 2



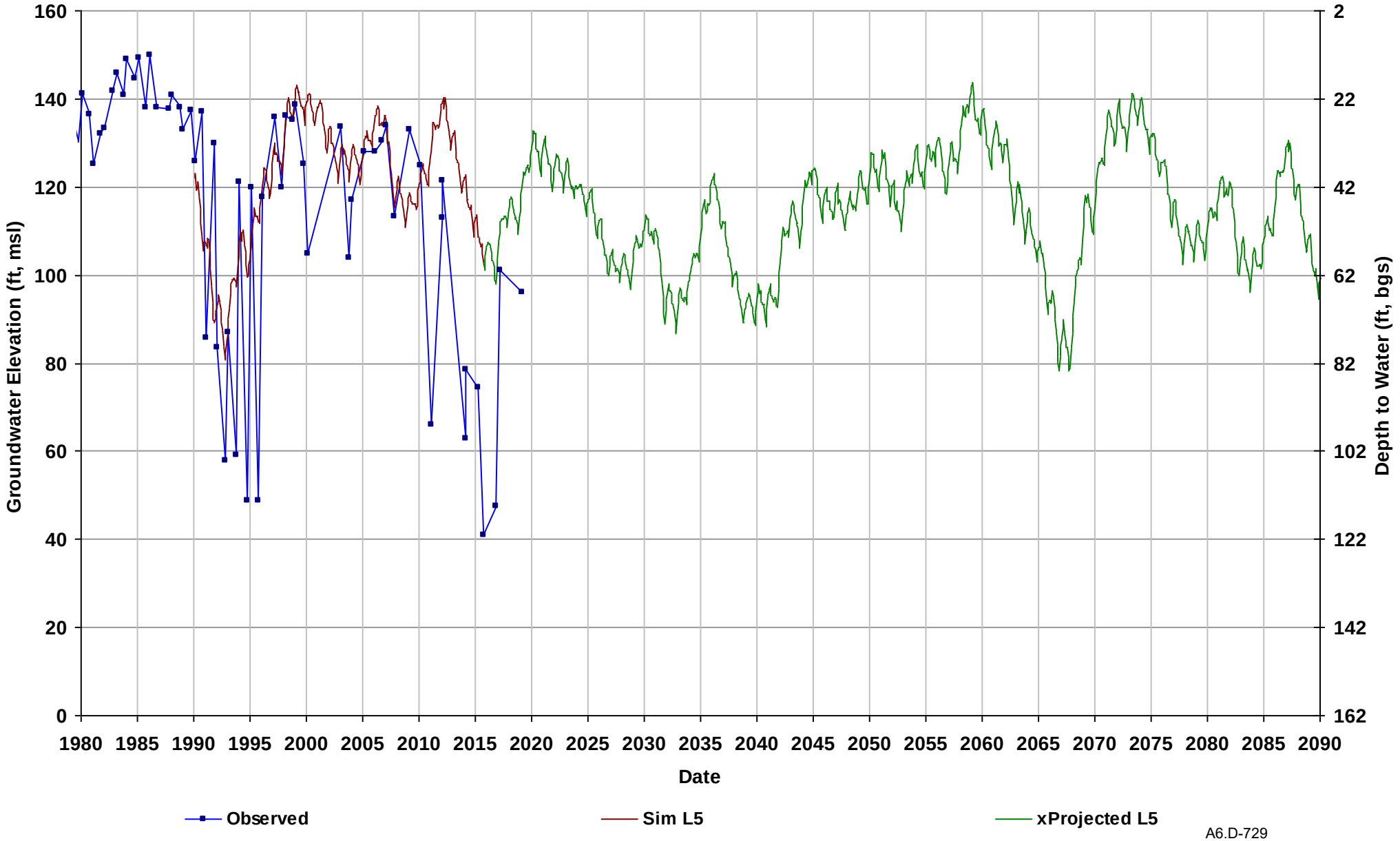
Well Name: 13S15E14M001M
Depth Zone: Unknown; Within CC
Subbasin: Delta-Mendota
GSE (ft, msl): 166

Total Depth (ft):
Perf Top (ft):
Perf Bottom (ft):
Top Model Layer: 5
Bottom Model Layer: 5



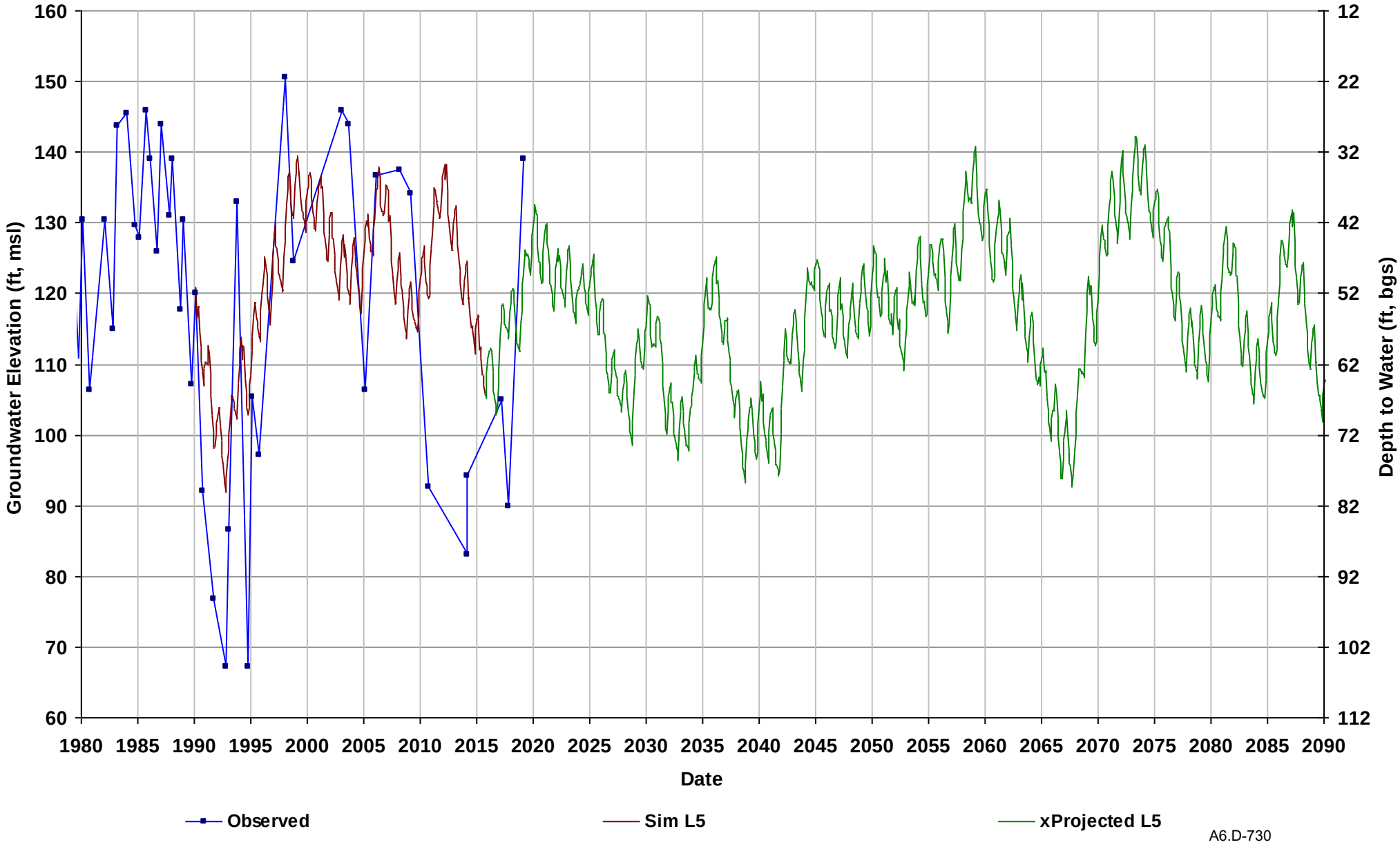
Well Name: 13S15E20G001M
Depth Zone: Unknown; Within CC
Subbasin: Delta-Mendota
GSE (ft, msl): 162

Total Depth (ft):
Perf Top (ft):
Perf Bottom (ft):
Top Model Layer: 5
Bottom Model Layer: 5



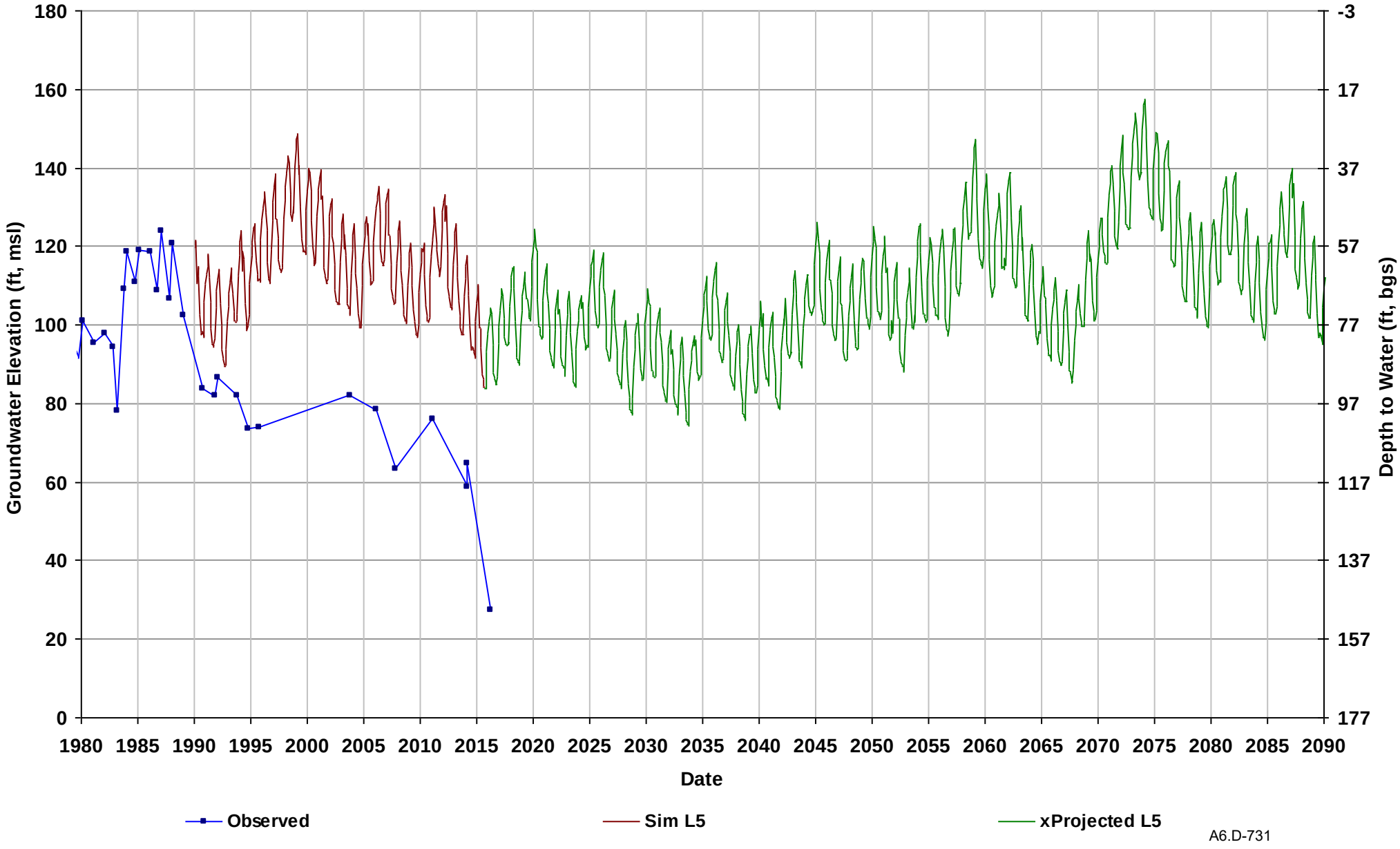
Well Name: 13S15E25N002M
Depth Zone: Unknown; Within CC
Subbasin: Delta-Mendota
GSE (ft, msl): 172

Total Depth (ft):
Perf Top (ft):
Perf Bottom (ft):
Top Model Layer: 5
Bottom Model Layer: 5



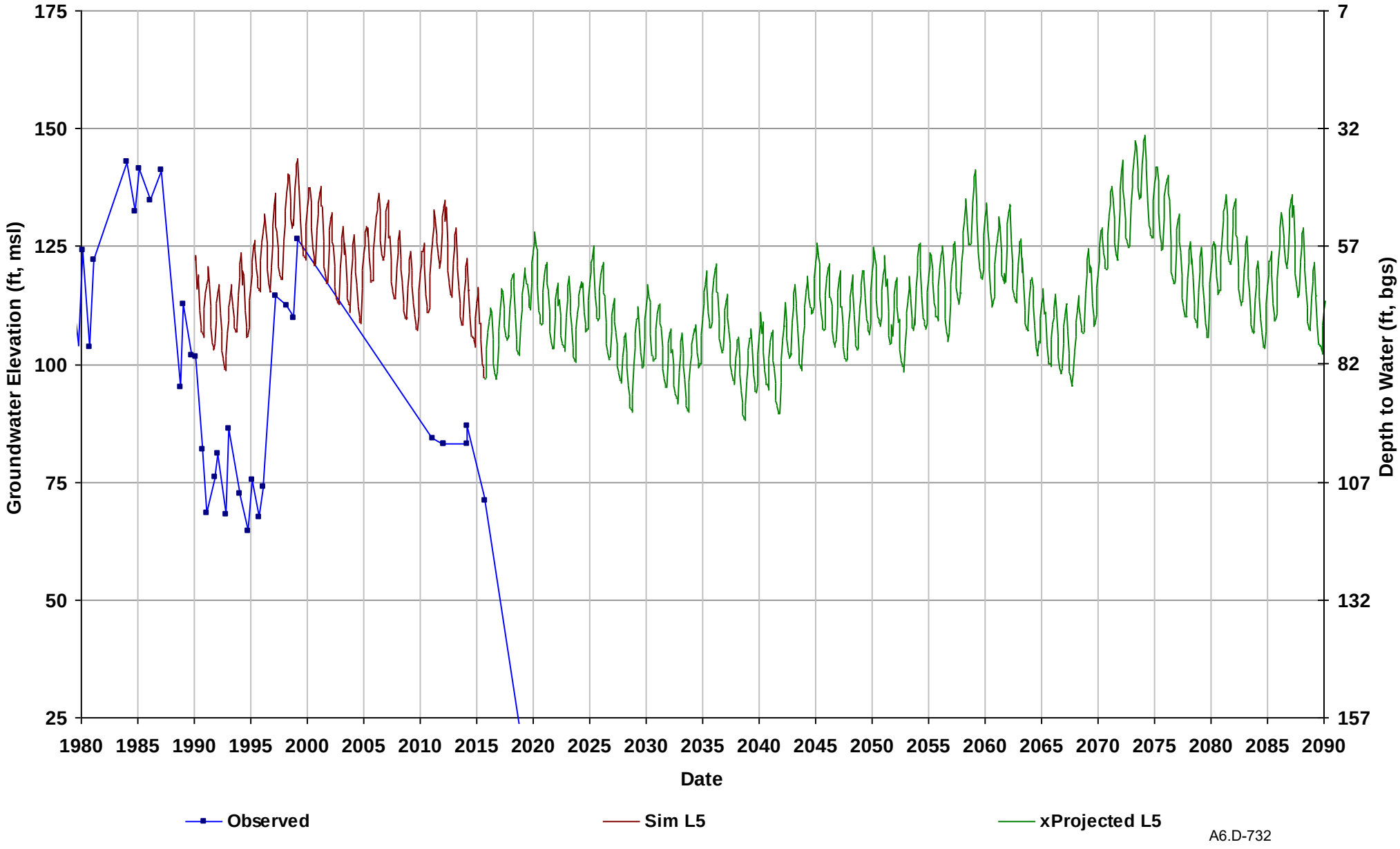
Well Name: 13S16E07R001M
Depth Zone: Unknown; Within CC
Subbasin: Delta-Mendota
GSE (ft, msl): 177

Total Depth (ft):
Perf Top (ft):
Perf Bottom (ft):
Top Model Layer: 5
Bottom Model Layer: 5



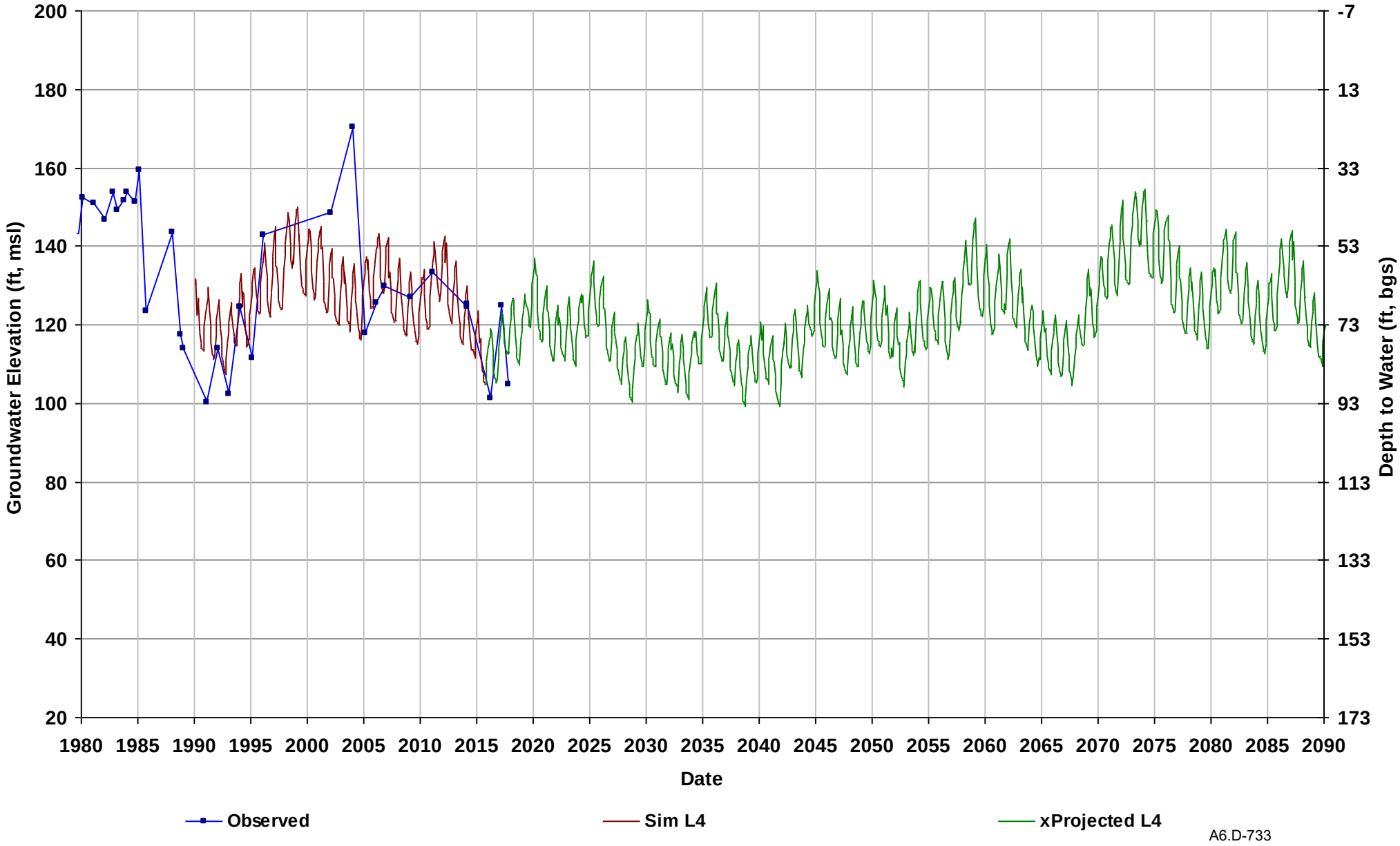
Well Name: 13S16E20J001M
Depth Zone: Unknown; Within CC
Subbasin: Delta-Mendota
GSE (ft, msl): 182

Total Depth (ft):
Perf Top (ft):
Perf Bottom (ft):
Top Model Layer: 5
Bottom Model Layer: 5



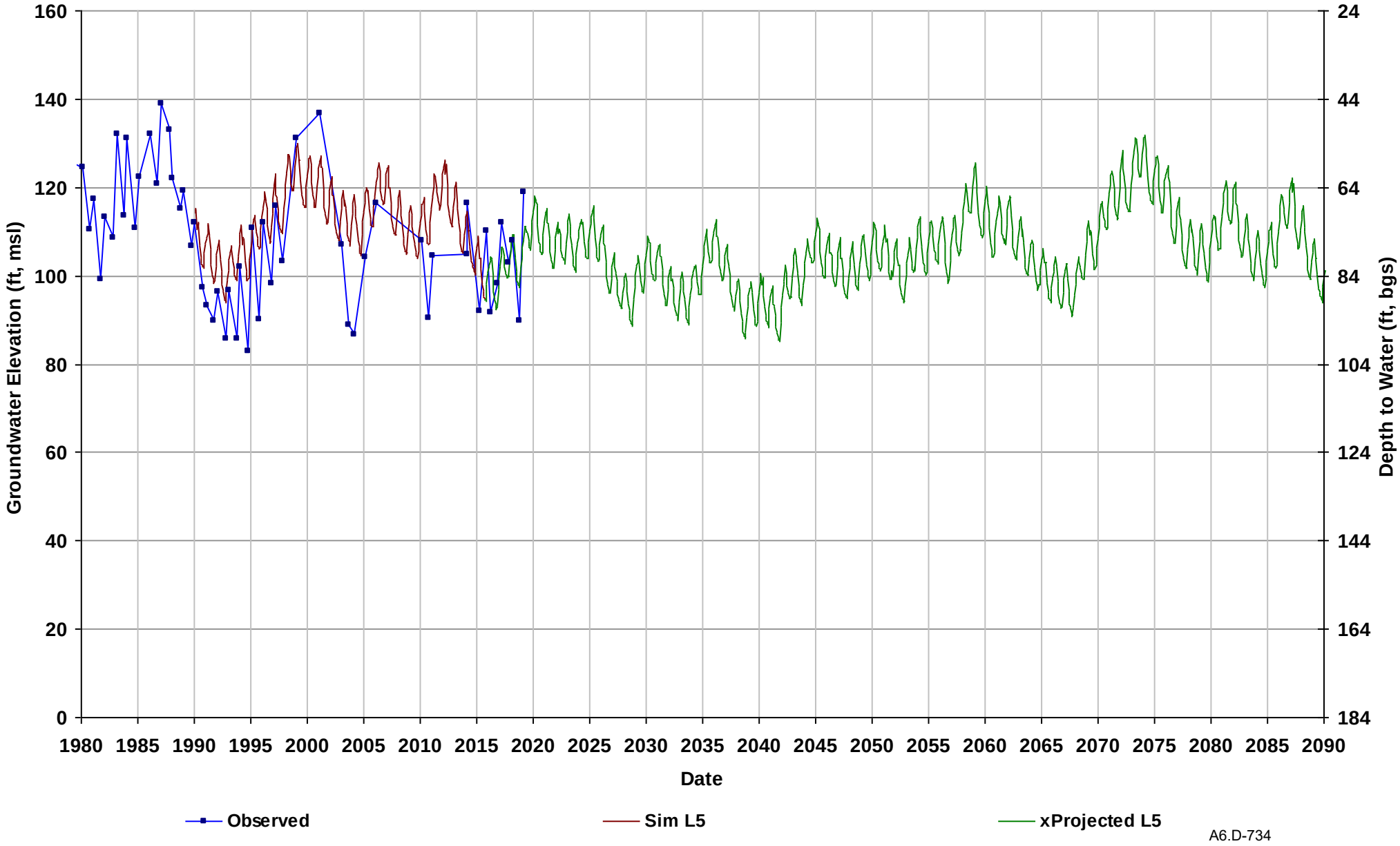
Well Name: 13S16E23N001M
Depth Zone: Unknown; Within CC
Subbasin: Kings
GSE (ft, msl): 192

Total Depth (ft):
Perf Top (ft):
Perf Bottom (ft):
Top Model Layer: 4
Bottom Model Layer: 4



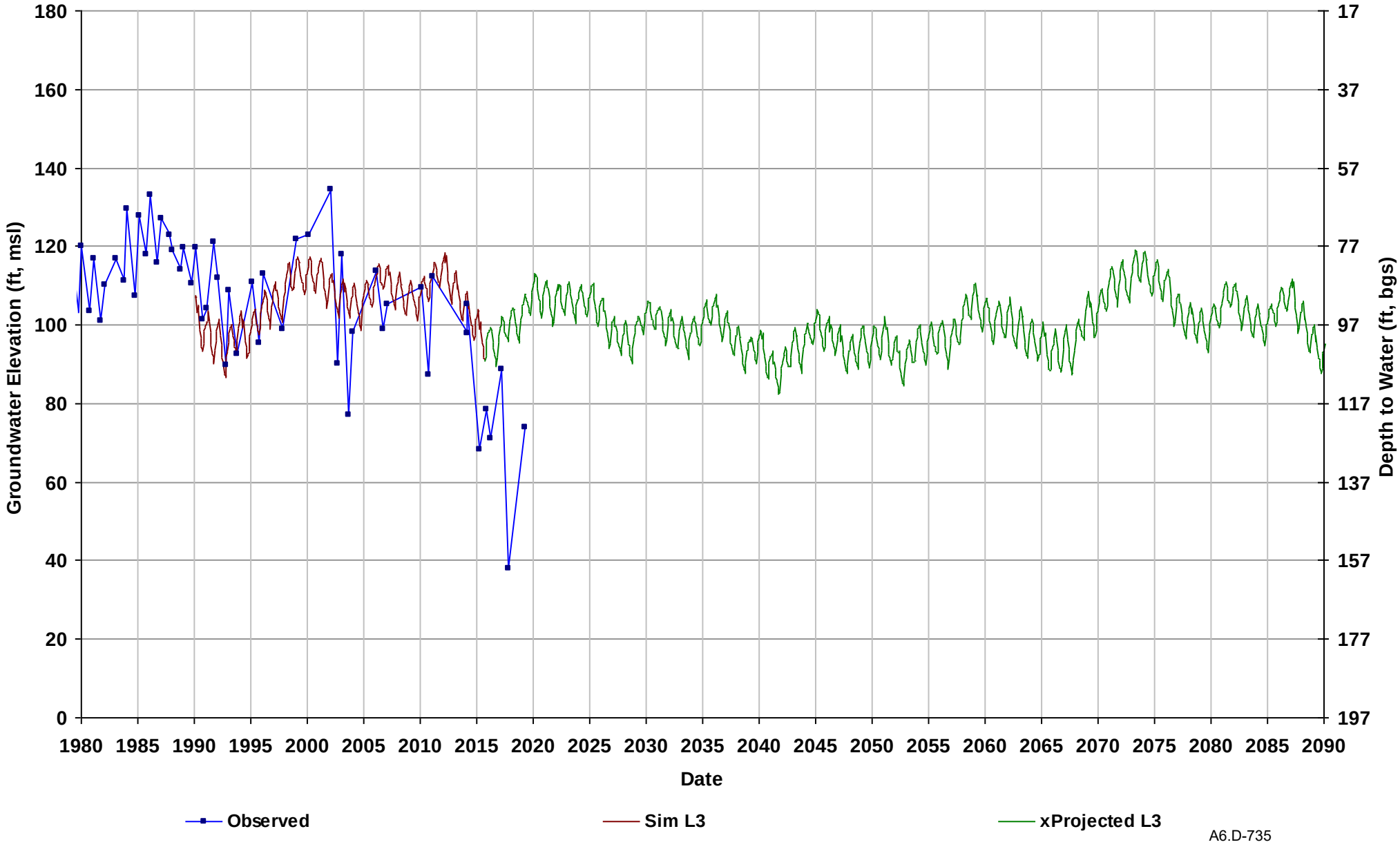
Well Name: 13S16E34C001M
Depth Zone: Unknown; Within CC
Subbasin: Kings
GSE (ft, msl): 184

Total Depth (ft):
Perf Top (ft):
Perf Bottom (ft):
Top Model Layer: 5
Bottom Model Layer: 5



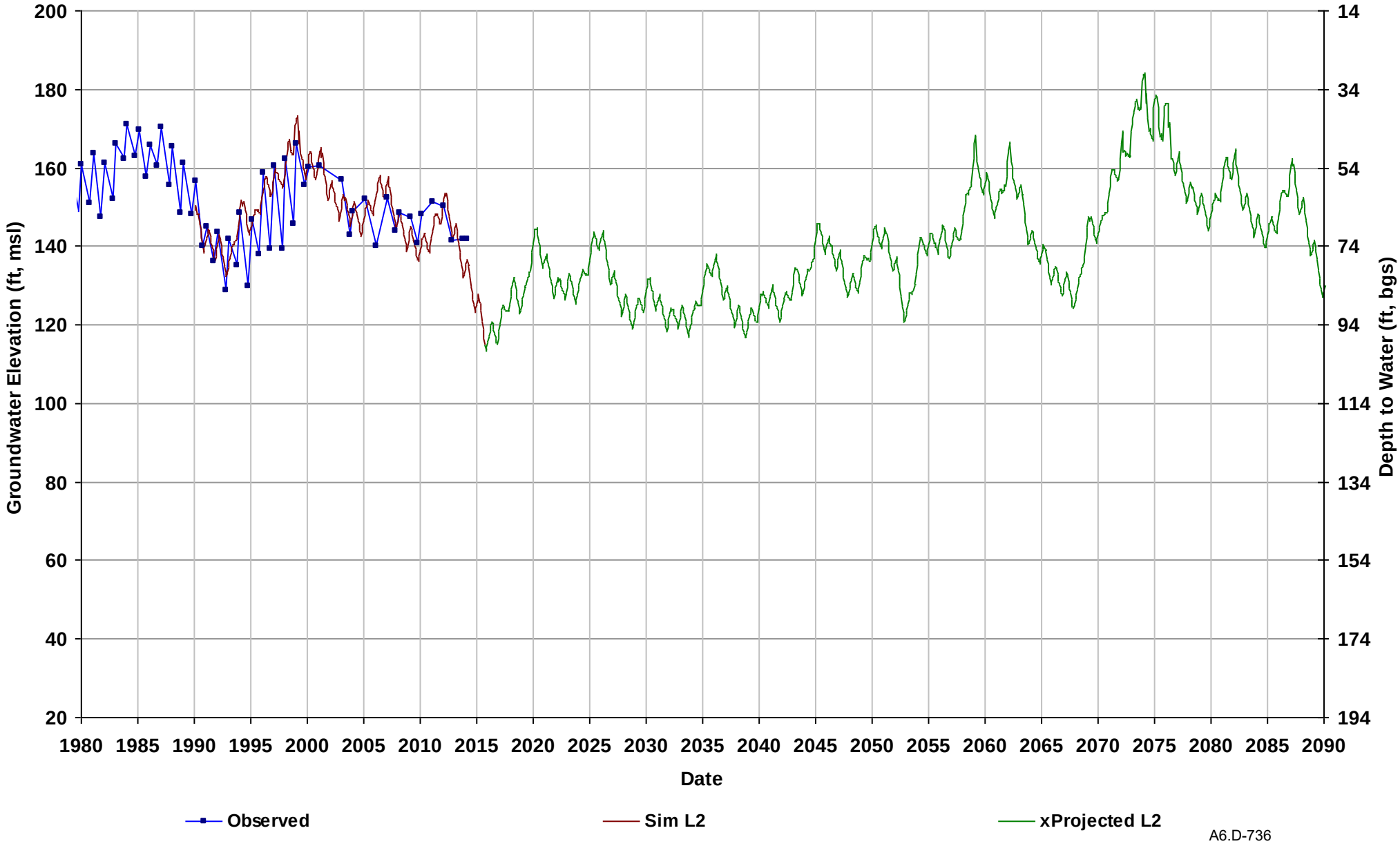
Well Name: 13S16E36R004M
Depth Zone: Unknown; Outside CC
Subbasin: Kings
GSE (ft, msl): 197

Total Depth (ft):
Perf Top (ft):
Perf Bottom (ft):
Top Model Layer: 3
Bottom Model Layer: 3



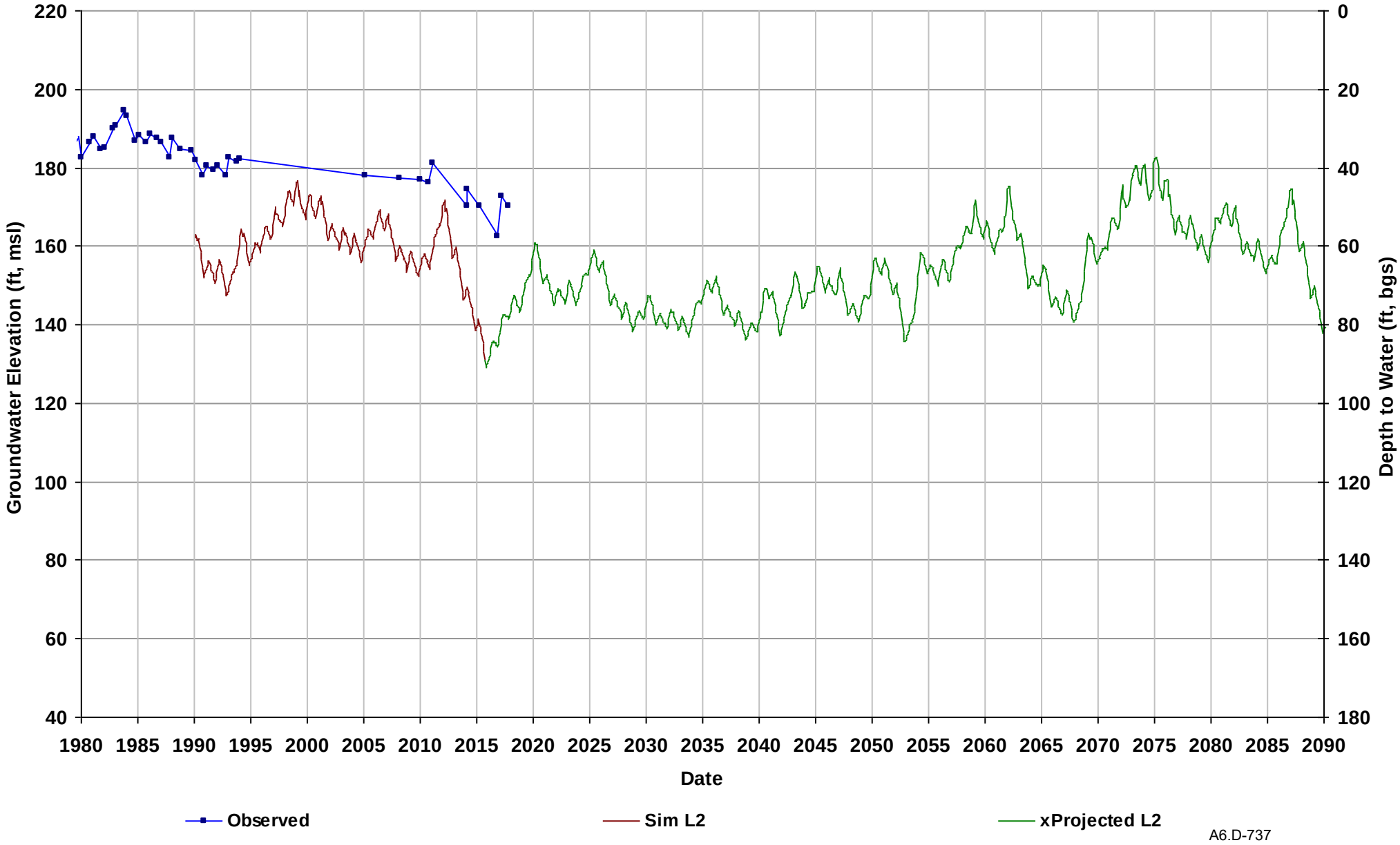
Well Name: 13S17E05P002M
Depth Zone: Unknown; Outside CC
Subbasin: Madera
GSE (ft, msl): 214

Total Depth (ft):
Perf Top (ft):
Perf Bottom (ft):
Top Model Layer: 2
Bottom Model Layer: 2



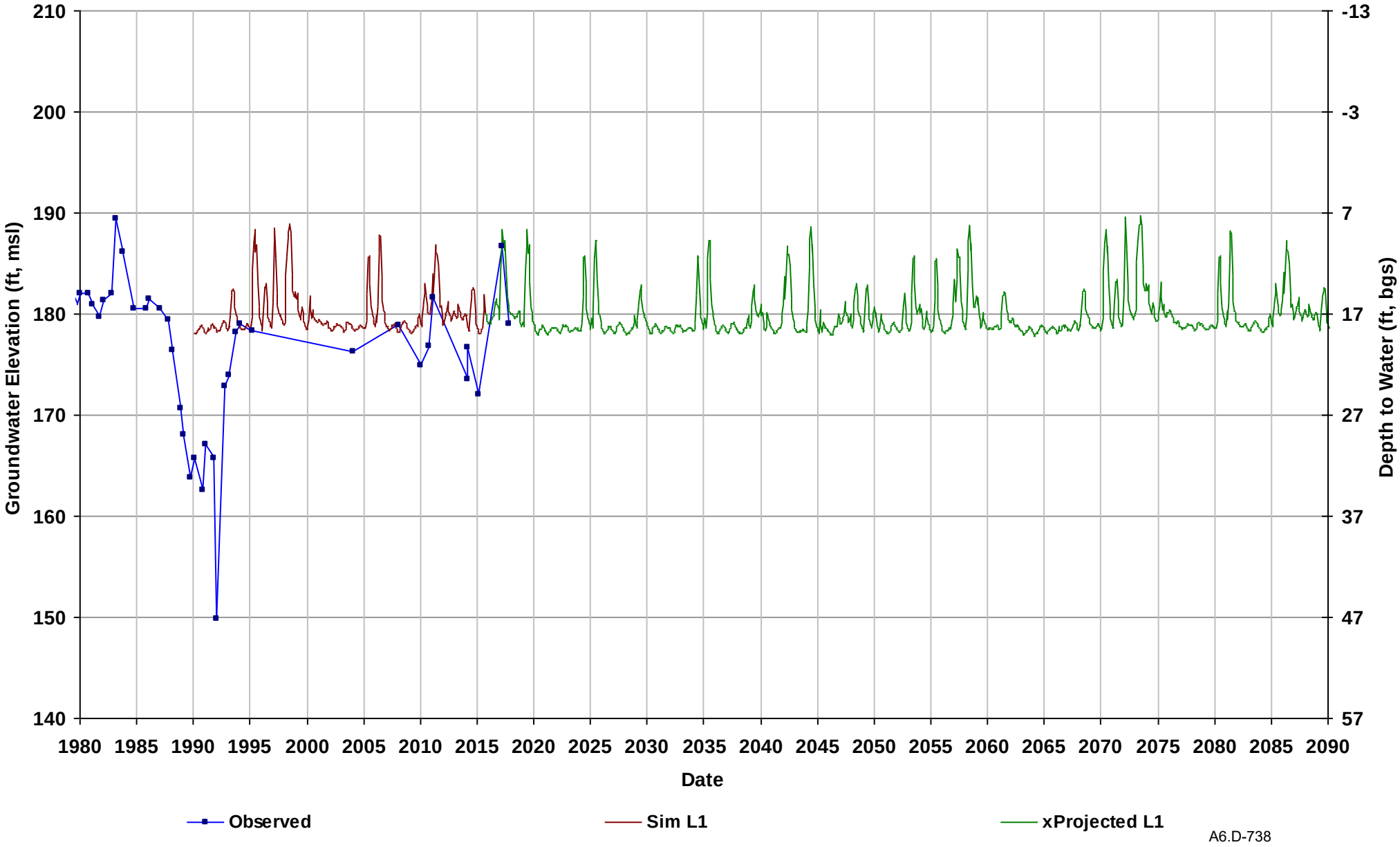
Well Name: 13S17E09R001M
Depth Zone: Unknown; Outside CC
Subbasin: Kings
GSE (ft, msl): 220

Total Depth (ft):
Perf Top (ft):
Perf Bottom (ft):
Top Model Layer: 2
Bottom Model Layer: 2



Well Name: 13S17E18M001M
Depth Zone: Unknown; Outside CC
Subbasin: Kings
GSE (ft, msl): 197

Total Depth (ft):
Perf Top (ft):
Perf Bottom (ft):
Top Model Layer: 1
Bottom Model Layer: 1



Well Name: 13S17E24A001M
Depth Zone: Unknown; Outside CC
Subbasin: Kings
GSE (ft, msl): 242

Total Depth (ft):
Perf Top (ft):
Perf Bottom (ft):
Top Model Layer: 2
Bottom Model Layer: 2