APPENDICES

APPENDIX A – CALIBRATION TARGETS

Target Group Descriptions

Target Type	Target Group	Description
APT-Based K Estimates	apt_grp1	APT locations closest to UFA pumping center
	apt_grp2	APT locations between "apt_grp1" and "apt_grp3" wells
	apt_grp3	APT locations farthest from UFA pumping center
Baseflow	baseflow	Incremental Baseflows
Groundwater Heads	head_grp1	1942 - 1965
	head_grp2	1966 - 1990
	head_grp3	1991 - 2015
	head_grp4	Unused (All weights = 0)
	head_grp5	Pre-Development (Prior to 1942)
Horizontal Head Differences	hhd_grp1	1942 - 1965
	hhd_grp2	1966 - 1990
	hhd_grp3	1991 - 2015
Temporal Head Differences	thd_grp1	Outside SEAWAT subregion
	thd_grp2	Eastern SEAWAT subregion
	thd_grp3	Western SEAWAT subregion
Vertical Head Differences	vhd_grp1	1977 - 1990
	vhd_grp2	1991 - 2003
	vhd_grp3	2004 - 2015

Table A-1. Groundwater Target Locations.

NWF ID or SEAWAT Boundary Point (pd*)	Longitude (NAD83 UTM16N)	Latitude (NAD83 UTM16N)	Model Layer or APT Aquifer Designation
563	616666.375	3338058.25	3
566	630786.88	3338648.00	1
679	610695.63	3341832.00	3
697	626021.19	3343220.50	3
718	629225.88	3344617.75	3
760	630109.44	3345864.00	3
773	630045.25	3346329.50	3
842	625589.19	3349562.75	3
843	625224.06	3349554.75	3
1062	589700.00	3355384.50	3
1074	580217.63	3355633.50	3
1093	609867.81	3355995.50	3
1259	481751.91	3358305.50	1
1371	585054.38	3360412.50	2
1376	568404.44	3360355.75	3
1382	467894.22	3360352.00	1
1383	467893.44	3360354.50	1
1384	467892.13	3360357.00	1
1431	564493.31	3360874.50	3
1445	566301.38	3361063.50	3
1453	563160.88	3361099.00	3
1476	559398.88	3361397.00	3
1481	557746.19	3361419.75	3
1541	473420.47	3361540.50	1
1571	492348.91	3361730.00	1
1586	555609.69	3361663.50	3
1601	551423.69	3362020.75	3
1645	518961.59	3362204.00	3
1654	549973.94	3362373.50	3
1660	474884.25	3362340.25	1
1672	473185.00	3362402.50	1
1684	473682.63	3362546.00	1
1696	539794.63	3362735.50	3
1752	466235.88	3363006.00	1
1760	625171.38	3363774.00	3
1796	547164.38	3363299.50	3
1805	499625.25	3363254.75	1
1841	507407.84	3363492.00	3
1859	469583.22	3363526.25	1
1863	473683.44	3363556.50	1
1887	512415.19	3363673.25	3
1888	512412.00	3363672.50	3
1894	537742.75	3363848.00	3

Table A-1. Groundwater Target Locations.

NWF ID or SEAWAT Boundary Point (pd*)	Longitude (NAD83 UTM16N)	Latitude (NAD83 UTM16N)	Model Layer or APT Aquifer Designation
1940	530743.00	3364676.00	3
1999	473921.97	3364206.50	1
2023	532338.69	3364385.75	3
2031	533686.69	3364405.25	3
2034	575003.88	3364607.25	3
2035	532522.38	3364456.25	3
2040	520453.84	3364899.00	3
2048	522617.00	3364853.75	3
2051	518323.50	3364573.50	3
2053	517238.53	3364512.00	3
2073	528602.94	3364993.25	3
2085	538483.56	3365327.50	3
2093	537295.13	3365353.75	3
2099	534686.19	3365365.00	3
2108	534026.31	3365403.75	3
2113	528398.81	3365449.00	3
2134	529035.81	3365664.75	3
2139	533348.75	3365707.75	3
2146	531977.56	3365766.25	3
2168	531094.06	3366057.25	3
2236	533826.44	3366054.25	3
2275	482521.84	3366261.50	1
2276	482519.44	3366261.50	1
2277	482518.38	3366261.75	1
2295	509536.00	3366710.25	1
2318	509521.13	3366713.25	3
2320	513155.56	3366674.00	3
2394	535298.44	3367204.00	3
2397	508573.00	3367128.75	3
2404	538108.38	3367261.00	3
2463	533106.50	3367489.50	3
2506	537104.88	3367789.50	3
2508	535510.50	3367846.50	3
2534	604718.25	3368445.75	3
2554	534382.06	3368235.50	3
2570	475034.03	3368116.75	1
2581	541150.94	3367642.25	3
2584	540145.31	3368221.75	3
2627	512745.53	3368424.50	3
2639	469663.66	3368621.00	1
2696	555650.88	3369196.75	3
2738	579559.13	3369604.25	3
2758	537137.75	3369435.75	3

Table A-1. Groundwater Target Locations.

NWF ID or SEAWAT Boundary Point (pd*)	Longitude (NAD83 UTM16N)	Latitude (NAD83 UTM16N)	Model Layer or APT Aquifer Designation
2759	534468.69	3369351.25	3
2787	543834.31	3370273.25	3
2792	536363.44	3369790.00	3
2807	537137.38	3369910.50	3
2814	555214.75	3371706.50	3
2822	534660.44	3370184.00	3
2823	534671.06	3370181.25	1
2838	476770.34	3370245.25	1
2839	476769.56	3370249.00	1
2874	539707.06	3370695.25	3
2886	478958.19	3370766.75	1
2891	556017.50	3370947.00	3
2962	564165.94	3371878.75	3
2992	628213.31	3373004.25	3
2993	566284.75	3372358.75	3
2994	549735.94	3372387.50	3
2995	546015.94	3372053.25	3
3006	480649.31	3372388.25	1
3007	480645.47	3372367.25	1
3082	611183.31	3373717.50	3
3091	554860.13	3373420.25	3
3092	481611.56	3373341.50	1
3095	582776.50	3373619.50	3
3101	582863.69	3373083.75	3
3126	548170.69	3374124.25	3
3188	539565.38	3374701.75	2
3209	539552.81	3374941.00	3
3210	539573.50	3374915.00	5
3231	553880.00	3375665.00	3
3240	547844.88	3375381.75	3
3256	550072.69	3375580.00	3
3280	564416.38	3383054.75	3
3293	583358.00	3376222.75	2
3295	548071.06	3375988.50	3
3315	583555.25	3375677.50	3
3326	552924.25	3376455.50	3
3335	473784.03	3376366.25	1
3350	549138.25	3376591.75	3
3367	551254.13	3375939.25	3
3405	474137.19	3377249.50	1
3432	551411.81	3378101.75	3
3441	600544.63	3378212.25	3
3447	471123.34	3377949.50	1

Table A-1. Groundwater Target Locations.

NWF ID or SEAWAT Boundary Point (pd*)	Longitude (NAD83 UTM16N)	Latitude (NAD83 UTM16N)	Model Layer or APT Aquifer Designation
3448	471121.72	3377948.00	1
3449	471121.28	3377972.25	1
3457	550153.56	3378106.50	3
3471	478496.25	3378123.25	1
3473	461134.63	3378228.25	1
3482	548774.88	3378368.50	3
3502	601803.13	3378984.50	3
3540	585040.31	3379340.25	3
3555	509481.50	3379190.50	5
3588	595977.56	3379894.00	3
3642	523033.53	3380227.25	3
3680	619184.25	3381380.25	3
3711	588585.50	3381570.50	3
3718	593042.63	3381583.25	3
3760	618944.00	3382431.75	3
3771	489398.66	3381984.75	3
3780	599874.19	3382716.25	3
3783	477172.72	3382126.75	5
3797	575203.25	3382527.50	3
3806	586934.00	3382495.75	3
3815	553221.88	3382776.00	3
3859	495751.66	3383008.25	1
3867	608744.31	3383592.25	3
3877	602180.88	3383707.75	3
3916	469031.47	3383703.75	1
3921	596691.94	3383940.75	3
3923	535425.69	3383952.75	3
3928	476127.19	3383908.25	1
3943	489323.34	3384081.50	1
3983	463370.97	3384581.00	1
3984	463372.34	3384583.50	1
3985	463372.91	3384585.00	1
3990	476064.72	3384566.25	1
3998	476166.06	3384622.50	3
4006	476459.19	3384714.25	3
4015	476166.81	3384964.00	1
4043	475928.47	3385143.25	1
4052	475713.81	3385352.50	1
4070	476223.91	3385502.75	1
4081	468559.34	3385696.25	1
4085	476024.59	3385678.50	1
4173	474893.47	3387057.25	5
4262	525160.19	3388449.75	3

Table A-1. Groundwater Target Locations.

NWF ID or SEAWAT Boundary Point (pd*)	Longitude (NAD83 UTM16N)	Latitude (NAD83 UTM16N)	Model Layer or APT Aquifer Designation
4266	503075.69	3388995.00	1
4267	502933.81	3388515.50	1
4285	598450.88	3389510.75	3
4368	545270.00	3390637.75	3
4393	511783.66	3390836.25	3
4476	471989.28	3392496.00	1
4477	471989.81	3392497.50	1
4478	471989.81	3392499.25	1
4490	573167.00	3391883.75	3
4500	462412.97	3392719.50	1
4553	561854.31	3394245.25	3
4571	515975.81	3394543.75	1
4592	531307.50	3394982.00	1
4648	621407.56	3397294.25	2
4700	499426.22	3397961.00	5
4704	524574.00	3398155.25	3
4709	542089.38	3398116.25	3
4731	600344.56	3399309.00	3
4754	590233.81	3399727.75	3
4769	462930.66	3399403.00	1
4788	519196.47	3400426.00	3
4791	536321.38	3400405.25	3
4822	608553.81	3402292.00	3
4844	481393.91	3402223.00	1
4855	542030.19	3402566.25	3
4997	545380.00	3405471.00	3
5018	510920.31	3405687.75	1
5019	510921.13	3405680.50	1
5033	625790.94	3406627.50	3
5078	531036.75	3407506.75	3
5080	542879.88	3407662.25	3
5158	458350.13	3410092.50	1
5159	458350.22	3410098.25	1
5236	545330.81	3412330.25	3
5240	581474.38	3412887.50	3
5254	604497.00	3413523.00	3
5261	568881.44	3413561.00	3
5271	601504.56	3414086.25	3
5291	512511.69	3414183.75	1
5363	556757.75	3417016.25	3
5401	484973.69	3418087.75	1
5402	484972.63	3418081.50	1
5403	484972.06	3418076.50	1

Table A-1. Groundwater Target Locations.

NWF ID or SEAWAT Boundary Point (pd*)	Longitude (NAD83 UTM16N)	Latitude (NAD83 UTM16N)	Model Layer or APT Aquifer Designation
5417	575782.50	3418787.25	3
5418	575778.38	3418774.75	1
5419	575781.56	3418780.50	1
5479	457683.44	3420906.25	1
5480	457681.16	3420928.75	1
5481	457685.09	3420919.00	1
5499	543869.25	3421397.25	3
5543	549741.25	3422769.00	3
5547	613609.75	3423570.50	3
5596	530937.50	3424496.50	5
5597	530927.25	3424477.00	3
5598	530929.06	3424486.75	1
5599	530946.88	3424499.75	1
5656	566638.94	3426270.00	3
5691	596500.56	3427534.00	3
5732	629836.38	3429059.50	3
5733	629840.25	3429048.25	2
5746	503063.94	3428985.50	5
5801	539555.56	3374946.50	1
5802	573303.81	3397197.75	3
5885	502768.38	3389958.25	1
5886	592357.69	3373776.50	3
5912	610908.88	3365607.00	1
5915	631077.00	3354039.50	3
5942	527114.81	3364520.25	3
5953	629995.31	3368177.50	3
5954	626762.44	3370344.25	3
5962	622697.31	3374286.00	3
5963	624503.63	3369197.25	3
5976	603996.50	3359034.00	3
6016	545655.75	3361922.50	3
6036	582759.63	3373617.50	3
6043	630119.31	3346584.25	3
7171	539848.56	3397657.50	3
7174	549302.44	3363520.25	5
7176	587736.56	3383560.75	3
7180	587736.19	3383574.00	1
7183	557931.44	3362785.25	3
7187	475872.44	3384315.25	3
7208	509571.88	3387367.75	3
7209	538158.69	3370191.50	3
7232	481111.19	3392100.75	1
7233	583491.94	3371583.25	3

Table A-1. Groundwater Target Locations.

NWF ID or SEAWAT Boundary Point (pd*)	Longitude (NAD83 UTM16N)	Latitude (NAD83 UTM16N)	Model Layer or APT Aquifer Designation
7247	583558.06	3375665.25	1
7249	585093.50	3386501.25	1
7250	585096.63	3386497.50	3
7267	552834.38	3378086.75	3
7306	556344.63	3362751.75	3
7342	461214.03	3356885.50	1
7349	566388.75	3363614.25	3
7377	493576.00	3362172.25	1
7411	506270.91	3383695.25	1
7412	506246.50	3383643.75	1
7415	505076.44	3385909.50	1
7418	500927.41	3383603.25	1
7420	501010.44	3390780.25	1
7422	510316.22	3391147.25	1
7423	510297.94	3391142.75	1
7424	511615.03	3388320.75	1
7430	515518.19	3391441.75	1
7431	515512.78	3391442.25	1
7432	516306.25	3394639.25	1
7433	516300.69	3394634.00	1
7451	505029.06	3385849.50	1
7490	625676.38	3351555.00	3
7523	535014.00	3363825.00	3
7686	494546.72	3361711.25	3
7687	574751.69	3358183.75	3
7751	574765.81	3358183.50	3
7764	507416.72	3363503.00	1
7767	592097.13	3371780.50	3
7768	592522.06	3385328.75	3
7800	505201.44	3387764.50	1
7801	506395.16	3385359.00	1
7835	482887.91	3370201.25	1
7837	493619.81	3362607.50	1
7924	586266.81	3383808.50	3
7927	473605.69	3383049.00	1
7928	476408.94	3384871.00	1
7929	476628.25	3384076.50	1
7930	476358.97	3383941.50	1
7931	476772.94	3384336.75	1
7969	507418.06	3362804.75	1
8005	587938.69	3381939.00	3
8008	531729.44	3367409.50	3
8023	537213.44	3404942.50	3

Table A-1. Groundwater Target Locations.

NWF ID or SEAWAT Boundary Point (pd*)	Longitude (NAD83 UTM16N)	Latitude (NAD83 UTM16N)	Model Layer or APT Aquifer Designation
8122	474109.66	3364619.50	1
8124	474109.94	3364617.50	1
8127	541947.13	3369529.00	3
8139	525975.19	3402511.75	1
8140	525977.19	3402509.75	1
8145	485422.22	3382832.50	1
8146	485423.75	3382836.00	1
8194	584822.31	3378760.75	3
8213	631071.00	3354026.00	3
8225	547016.88	3376576.00	3
8231	589661.63	3381937.00	3
8283	584760.19	3378756.75	3
8289	506395.41	3385327.00	1
8290	505186.00	3387811.00	1
8291	505385.72	3387678.75	1
8292	507252.06	3387353.00	1
8294	508820.00	3388550.75	1
8295	507249.91	3387314.75	1
8314	556703.13	3372077.75	3
8350	533399.63	3413510.50	3
8353	555359.06	3405418.75	3
8361	585355.19	3390412.00	3
8422	487854.22	3382417.25	1
8423	487854.22	3382417.25	1
8424	486787.88	3381649.00	1
8425	486787.88	3381649.00	1
8433	626562.88	3353216.25	3
8435	542123.44	3400131.50	3
8505	599652.88	3371980.50	3
8579	577318.69	3376659.75	3
8643	598965.13	3378788.50	3
8657	563709.38	3361654.50	1
8660	565095.00	3362765.50	1
8661	564438.25	3360181.00	1
8711	582112.50	3355055.00	2
8712	582114.56	3355056.50	1
8721	584102.06	3355534.25	2
8722	584100.69	3355533.25	1
8758	552182.13	3397237.25	3
8759	532412.50	3400230.75	3
8762	574736.25	3375782.25	3
8780	625839.81	3392676.50	3
8781	625888.06	3392649.25	3

Table A-1. Groundwater Target Locations.

NWF ID or SEAWAT Boundary Point (pd*)	Longitude (NAD83 UTM16N)	Latitude (NAD83 UTM16N)	Model Layer or APT Aquifer Designation
8782	625841.88	3392497.75	3
8783	625868.13	3392529.00	3
8907	601906.81	3392675.75	3
8912	503136.88	3385837.00	1
8921	583594.31	3375351.50	3
8928	589628.56	3383626.00	3
8946	589664.06	3381920.75	1
8997	591190.25	3381989.50	3
9006	504948.50	3389926.75	1
9054	583172.56	3374177.00	3
9102	490317.78	3428797.75	5
9117	564543.88	3372755.25	3
9137	551685.31	3363774.75	3
9194	597568.88	3348702.25	3
9229	561534.00	3360950.75	3
9346	506488.22	3384192.00	1
9347	506517.00	3384212.25	1
9348	510651.63	3386838.25	1
9349	510684.47	3386844.50	1
9350	513201.38	3391366.50	1
9353	513248.81	3391326.50	1
9355	517515.09	3391445.00	1
9377	543976.81	3399540.50	3
9402	515304.09	3422915.75	3
9408	524410.63	3395733.25	3
9413	604618.75	3378334.75	3
9595	580834.50	3400668.75	3
9604	591122.69	3383655.50	3
9605	592721.75	3383364.75	3
9638	613533.50	3368122.25	3
9647	604618.81	3378331.00	1
9651	597110.69	3380872.50	3
9655	598491.88	3379534.00	3
9656	597159.00	3379353.25	3
9661	496669.28	3383934.75	1
9734	618759.56	3364600.25	3
9743	554068.94	3362146.75	3
9745	613547.63	3368048.50	2
9746	613548.88	3368047.25	1
9747	612926.25	3362743.50	2
9748	612958.13	3362754.75	3
9749	612914.81	3362737.50	1
9750	618733.00	3364596.00	2

Table A-1. Groundwater Target Locations.

NWF ID or SEAWAT Boundary Point (pd*)	Longitude (NAD83 UTM16N)	Latitude (NAD83 UTM16N)	Model Layer or APT Aquifer Designation
9789	629567.19	3344580.50	3
9812	631905.13	3354002.50	3
9813	631914.63	3353806.25	3
9814	628546.31	3354450.75	3
9843	503640.94	3387113.25	1
9852	549340.75	3363533.00	3
9897	598695.69	3378019.75	3
9898	600356.56	3378462.00	3
9940	618815.69	3364658.50	1
9941	618815.69	3364658.50	3
9942	618950.56	3364770.25	3
9969	592044.56	3374296.75	3
10217	625777.50	3368447.25	3
10231	537808.56	3391740.50	3
12000	632090.81	3340202.50	3
12039	628336.81	3337967.00	3
12335	515188.88	3422790.75	3
12519	632158.06	3351505.50	3
12678	538027.13	3406837.75	3
12718	600130.69	3379602.00	3
12840	555714.75	3373361.50	5
1360	585045.13	3360243.75	3
2746	580700.13	3369665.00	3
3381	548795.00	3376948.75	3
4635	619207.06	3396708.25	3
4733	601754.38	3399361.75	3
9045	584384.00	3398884.75	3
9047	564639.94	3401167.25	3
9048	555631.13	3369101.00	3
9049	535899.25	3363764.25	3
9050	535715.00	3363788.00	3
9051	537355.44	3363547.50	3
9052	537633.13	3362778.25	3
9053	571813.94	3372968.00	3
pd01	483800.00	3367500.00	3
pd02	483800.00	3370000.00	3
pd03	483800.00	3372499.75	3
pd04	483800.00	3374999.75	3
pd05	483800.00	3377500.25	3
pd06	483800.00	3380000.00	3
pd07	483800.00	3382500.00	3
pd08	483800.00	3385000.00	3
pd09	483800.00	3387500.00	3

Table A-1. Groundwater Target Locations.

NWF ID or SEAWAT Boundary Point (pd*)	Longitude (NAD83 UTM16N)	Latitude (NAD83 UTM16N)	Model Layer or APT Aquifer Designation
pd10	483800.00	3390000.00	3
pd11	483800.00	3392500.00	3
pd12	486300.00	3392500.00	3
pd13	488800.00	3392500.00	3
pd14	491300.00	3392500.00	3
pd15	493800.00	3392500.00	3
pd16	496300.00	3392500.00	3
pd17	498800.00	3392500.00	3
pd18	501300.00	3392500.00	3
pd19	503800.00	3392500.00	3
pd20	506300.00	3392500.00	3
pd21	508800.00	3392500.00	3
pd22	511300.00	3392500.00	3
pd23	513800.00	3392500.00	3
pd24	516300.00	3392500.00	3
pd25	518800.00	3392500.00	3
pd26	521300.00	3392500.00	3
pd27	523800.00	3392500.00	3
pd28	526300.00	3392500.00	3
pd29	528800.00	3392500.00	3
pd30	531300.00	3392500.00	3
pd31	533800.00	3392500.00	3
pd32	536300.00	3392500.00	3
pd33	538800.00	3392500.00	3
pd34	541300.00	3392500.00	3
pd35	543800.00	3392500.00	3
pd36	546300.00	3392500.00	3
pd37	548800.00	3392500.00	3
pd38	551300.00	3392500.00	3
pd39	553800.00	3392500.00	3
pd40	556300.00	3392500.00	3
pd41	558800.00	3392500.00	3
pd42	561300.00	3392500.00	3
pd43	563800.00	3392500.00	3
pd44	566300.00	3392500.00	3
pd45	568800.00	3392500.00	3
pd46	571300.00	3392500.00	3
pd47	573800.00	3392500.00	3
pd48	576300.00	3392500.00	3
pd49	578800.00	3392500.00	3
pd50	581300.00	3392500.00	3
pd51	583800.00	3392500.00	3
pd52	586300.00	3392500.00	3

Table A-1. Groundwater Target Locations.

NWF ID or SEAWAT Boundary Point (pd*)	Longitude (NAD83 UTM16N)	Latitude (NAD83 UTM16N)	Model Layer or APT Aquifer Designation
pd53	588800.00	3392500.00	3
pd54	591300.00	3392500.00	3
pd55	593800.00	3392500.00	3
pd56	596300.00	3392500.00	3
pd57	598800.00	3392500.00	3
pd58	601300.00	3392500.00	3
pd59	603800.00	3392500.00	3
pd60	606300.00	3392500.00	3
pd61	608800.00	3392500.00	3
pd62	611300.00	3392500.00	3
pd63	613800.00	3392500.00	3
pd64	615400.00	3391600.00	3
pd65	615400.00	3389100.00	3
pd66	615400.00	3386600.00	3
pd67	615400.00	3384100.00	3
pd68	615400.00	3381600.00	3
pd69	615400.00	3379100.00	3
pd70	615400.00	3376600.00	3
pd71	615400.00	3374100.00	3
pd72	615400.00	3371600.00	3
pd73	615400.00	3369100.25	3
pd74	615400.00	3366599.75	3
pd75	615400.00	3364099.75	3
pd76	615400.00	3361600.00	3
pd77	615400.00	3359100.00	3
pd78	615400.00	3356600.00	3
pd79	615400.00	3354100.00	3
pd80	615400.00	3351600.00	3
pd81	615400.00	3349100.00	3
pd82	615400.00	3346600.00	3
1472	513953.06	3361238.75	UFA
1476	559398.88	3361397.00	UFA
1675	539314.44	3362543.75	UFA
1688	540026.13	3362640.00	UFA
1894	537742.75	3363848.00	UFA
2792	536363.44	3369790.00	UFA
3841	553295.69	3383003.75	FAS
3923	535425.69	3383952.75	FAS
7174	549302.44	3363520.25	LFA
1124	579805.13	3356784.00	FAS
1413	578788.50	3360747.75	FAS
1453	563160.88	3361099.00	UFA
2318	509521.13	3366713.25	UFA

Table A-1. Groundwater Target Locations.

NWF ID or SEAWAT Boundary Point (pd*)	Longitude (NAD83 UTM16N)	Latitude (NAD83 UTM16N)	Model Layer or APT Aquifer Designation
2627	512745.53	3368424.50	UFA
3315	583555.25	3375677.50	FAS
4246	525290.31	3388165.75	FAS
4553	561854.31	3394245.25	FAS
7686	494546.72	3361711.25	UFA
7751	574765.81	3358183.50	UFA
8023	537213.44	3404942.50	FAS
8435	542123.44	3400131.50	FAS
12848	509404.34	3364724.00	UFA
3441	600544.63	3378212.25	FAS
3502	601803.13	3378984.50	FAS
3546	599272.50	3379580.50	FAS
3623	599406.31	3380450.75	FAS
4761	588952.69	3399653.25	FAS
7175	585096.56	3386497.75	FAS
7179	587680.25	3383543.00	FAS
7184	585250.00	3386496.75	FAS
7185	585086.69	3386420.00	FAS
7186	585117.56	3386488.75	FAS
9638	613533.50	3368122.25	UFA
9748	612958.13	3362754.75	UFA
9812	631905.13	3354002.50	FAS
9813	631914.63	3353806.25	FAS
9941	618815.69	3364658.50	UFA
9942	618950.56	3364770.25	UFA
12812	595086.06	3365760.75	FAS

Table A-2. Post-Development (1942-2015) Groundwater Head Targets.

Target Name	Target Group	NWF ID	Date	Measured GW Elevation (NAVD88, ft)	Modelled GW Elevation (NAVD88, ft)	Residual (ft)	Target Weight
head_1	head_grp2	563	6/30/1986	-73.44	-43.94	-29.50	0.33928
head_2	head_grp2	563	6/30/1987	-95.34	-49.74	-45.60	0.33928
head_3	head_grp2	563	6/30/1990	-80.41	-55.35	-25.06	0.33928
head_4	head_grp3	563	6/30/1991	-59.11	-55.94	-3.17	0.18248
head_5	head_grp3	563	6/30/1992	-59.39	-54.62	-4.77	0.10138
head_6	head_grp3	563	6/30/1994	-68.19	-43.28	-24.91	0.10138
head_7	head_grp3	563	6/30/1995	-58.42	-33.81	-24.61	0.18248
head_8	head_grp3	563	6/30/1996	-46.64	-23.01	-23.63	0.10138
head_9	head_grp3	563	6/30/1997	-58.67	-15.81	-42.86	0.10138
head_10	head_grp3	563	6/30/1998	-45.78	-12.22	-33.56	0.18248
head_11	head_grp3	563	6/30/1999	-41.15	-9.99	-31.16	0.10138
head_12	head_grp3	563	6/30/2000	-55.9	-9.00	-46.90	0.10138
head_13	head_grp3	563	6/30/2001	-43.57	-9.23	-34.34	0.18248
head_14	head_grp3	563	6/30/2002	-38.94	-8.74	-30.20	0.18248
head_15	head_grp3	563	6/30/2003	-29.45	-4.66	-24.79	0.10138
head_16	head_grp3	563	6/30/2007	-24.91	6.41	-31.32	0.10138
head_17	head_grp3	563	6/30/2008	-21.13	7.32	-28.45	0.18248
head_18	head_grp3	563	6/30/2010	-15.94	8.30	-24.24	0.18248
head_19	head_grp3	563	6/30/2011	-17.26	8.45	-25.71	0.18248
head_20	head_grp3	563	6/30/2012	-15.82	8.47	-24.29	0.18248
head_21	head_grp3	563	6/30/2013	-14.86	8.48	-23.34	0.18248
head_22	head_grp3	563	6/30/2014	-15.38	8.48	-23.86	0.18248
head_23	head_grp3	563	6/30/2015	-21.02	8.55	-29.57	0.18248
head_36	head_grp2	679	6/30/1990	-82.27	-86.89	4.62	0.61071
head_37	head_grp3	679	6/30/1991	-66.4	-83.28	16.88	0.18248
head_38	head_grp3	679	6/30/1992	-66.57	-81.44	14.87	0.18248
head_39	head_grp3	679	6/30/1993	-63.04	-81.85	18.81	0.18248
head_40	head_grp3	679	6/30/1994	-56.4	-73.61	17.21	0.10138
head_41	head_grp3	679	6/30/1995	-48.01	-58.29	10.28	0.18248
head_42	head_grp3	679	6/30/1996	-32.4	-42.73	10.33	0.10138
head_43	head_grp3	679	6/30/1997	-49.55	-43.97	-5.58	0.10138
head_44	head_grp3	679	6/30/1998	-43.26	-42.91	-0.35	0.18248
head_45	head_grp3	679	6/30/1999	-42.2	-43.30	1.10	0.10138
head_46	head_grp3	679	6/30/2000	-52.45	-50.56	-1.89	0.10138
head_47	head_grp3	679	6/30/2001	-50.02	-50.82	0.80	0.18248
head_48	head_grp3	679	6/30/2002	-18.64	-22.16	3.52	0.18248
head_49	head_grp3	679	6/30/2003	-5.75	-1.96	-3.79	0.10138
head_50	head_grp3	679	6/30/2007	-7.3	11.51	-18.81	0.10138
head_51	head_grp3	679	6/30/2008	-1.79	12.01	-13.80	0.18248
head_52	head_grp3	679	6/30/2010	-2.98	12.45	-15.43	0.18248
head_53	head_grp3	679	6/30/2011	-1.8	12.43	-14.23	0.18248
head_54	head_grp3	679	6/30/2012	-2.43	12.38	-14.81	0.18248
head_55	head_grp3	679	6/30/2013	-2.08	12.32	-14.40	0.18248
head_56	head_grp3	679	6/30/2014	0.62	12.32	-11.70	0.18248

Table A-2. Post-Development (1942-2015) Groundwater Head Targets.

Target Name	Target Group	NWF ID	Date	Measured GW Elevation (NAVD88, ft)	Modelled GW Elevation (NAVD88, ft)	Residual (ft)	Target Weight
head_57	head_grp3	679	6/30/2015	-2.32	12.33	-14.65	0.18248
head_58	head_grp1	697	6/30/1962	-4.39	8.06	-12.45	1.53329
head_59	head_grp1	697	6/30/1963	-4.46	8.02	-12.48	1.53329
head_60	head_grp1	697	6/30/1964	-2.39	7.99	-10.38	1.53329
head_61	head_grp1	697	6/30/1965	-1.9	7.96	-9.86	1.53329
head_62	head_grp2	697	6/30/1966	-2.58	7.93	-10.51	0.67856
head_63	head_grp2	697	6/30/1967	-0.13	7.90	-8.03	0.67856
head_64	head_grp2	697	6/30/1968	3.38	7.87	-4.49	0.67856
head_65	head_grp2	697	6/30/1969	4.02	7.85	-3.83	0.67856
head_66	head_grp2	697	6/30/1970	3.87	7.82	-3.95	0.33928
head_67	head_grp2	697	6/30/1971	3.72	7.80	-4.08	0.33928
head_68	head_grp2	697	6/30/1972	3.07	7.77	-4.70	0.67856
head_69	head_grp2	697	6/30/1973	3.36	7.74	-4.38	0.67856
head_70	head_grp2	697	6/30/1974	1.51	7.71	-6.20	0.67856
head_71	head_grp2	697	6/30/1975	3.05	7.67	-4.62	0.67856
head_72	head_grp2	697	6/30/1976	2.61	7.64	-5.03	0.67856
head_73	head_grp2	697	6/30/1977	1.55	7.60	-6.05	0.67856
head_74	head_grp2	697	6/30/1978	2	7.58	-5.58	0.67856
head_75	head_grp2	697	6/30/1979	2.08	7.52	-5.44	0.67856
head_76	head_grp2	697	6/30/1980	1.29	4.95	-3.66	0.67856
head_77	head_grp2	697	6/30/1981	-1.29	3.78	-5.07	0.67856
head_78	head_grp2	697	6/30/1982	0.8	3.31	-2.51	0.67856
head_79	head_grp2	697	6/30/1983	0.04	2.93	-2.89	0.67856
head_80	head_grp2	697	6/30/1984	-0.99	2.54	-3.53	0.67856
head_81	head_grp2	697	6/30/1985	-1.39	2.17	-3.56	0.67856
head_82	head_grp2	697	6/30/1986	-3.24	1.78	-5.02	0.67856
head_83	head_grp2	697	6/30/1987	-3.58	1.89	-5.47	0.67856
head_84	head_grp2	697	6/30/1988	-3.98	1.62	-5.60	0.67856
head_85	head_grp2	697	6/30/1989	-4.06	1.17	-5.23	0.67856
head_86	head_grp2	697	6/30/1990	-7.24	0.27	-7.51	0.67856
head_87	head_grp3	697	6/30/1991	-3.78	0.99	-4.77	0.20276
head_88	head_grp3	697	6/30/1992	-4.46	1.08	-5.54	0.20276
head_89	head_grp3	697	6/30/1993	-4.72	0.63	-5.35	0.20276
head_90	head_grp3	697	6/30/1994	-3.32	0.57	-3.89	0.10138
head_91	head_grp3	697	6/30/1995	-3.73	-3.63	-0.10	0.20276
head_92	head_grp3	697	6/30/1996	-5.16	-3.69	-1.47	0.10138
head_93	head_grp3	697	6/30/1997	-4.96	-2.84	-2.12	0.10138
head_94	head_grp3	697	6/30/1998	-5.4	-1.03	-4.37	0.20276
head_95	head_grp3	697	6/30/1999	-3.53	-0.25	-3.28	0.10138
head_96	head_grp3	697	6/30/2000	-6.85	-0.99	-5.86	0.10138
head_97	head_grp3	697	6/30/2001	-3.96	-1.36	-2.60	0.20276
head_98	head_grp3	697	6/30/2002	-3.76	-0.75	-3.01	0.20276
head_99	head_grp3	697	6/30/2003	-3.46	1.86	-5.32	0.10138
head_100	head_grp3	697	6/30/2006	-4.1	2.82	-6.92	0.20276

Table A-2. Post-Development (1942-2015) Groundwater Head Targets.

Target Name	Target Group	NWF ID	Date	Measured GW Elevation (NAVD88, ft)	Modelled GW Elevation (NAVD88, ft)	Residual (ft)	Target Weight
head_101	head_grp3	697	6/30/2007	-2.7	3.74	-6.44	0.20276
head_102	head_grp3	697	6/30/2008	-1.02	3.66	-4.68	0.20276
head_103	head_grp3	697	6/30/2010	-1.59	4.18	-5.77	0.20276
head_104	head_grp3	697	6/30/2011	-2.16	4.63	-6.79	0.20276
head_105	head_grp3	697	6/30/2012	-0.91	4.79	-5.70	0.20276
head_106	head_grp3	697	6/30/2013	-0.16	5.90	-6.06	0.20276
head_107	head_grp3	697	6/30/2014	-0.8	6.01	-6.81	0.20276
head_108	head_grp3	697	6/30/2015	-1.2	5.91	-7.11	0.20276
head_149	head_grp2	1062	6/30/1983	23.81	16.79	7.02	0.33928
head_150	head_grp3	1062	6/30/1995	20.14	11.68	8.46	0.10138
head_151	head_grp3	1062	6/30/1996	20.56	11.30	9.26	0.10138
head_152	head_grp3	1062	6/30/1997	19.59	11.03	8.56	0.10138
head_153	head_grp3	1062	6/30/1998	20.01	11.07	8.94	0.10138
head_154	head_grp3	1062	6/30/1999	20.15	11.40	8.75	0.10138
head_155	head_grp3	1062	6/30/2000	18.62	11.21	7.41	0.10138
head_156	head_grp3	1062	6/30/2001	17.92	11.05	6.87	0.10138
head_157	head_grp3	1062	6/30/2002	17.8	11.53	6.27	0.10138
head_158	head_grp3	1062	6/30/2003	19.27	12.06	7.21	0.10138
head_159	head_grp3	1062	6/30/2004	18.35	12.32	6.03	0.10138
head_160	head_grp3	1062	6/30/2006	17.2	11.67	5.53	0.10138
head_161	head_grp3	1062	6/30/2007	16.46	11.45	5.01	0.10138
head_162	head_grp3	1062	6/30/2008	17.72	11.54	6.18	0.10138
head_163	head_grp3	1062	6/30/2010	18.8	12.15	6.65	0.20276
head_164	head_grp3	1062	6/30/2011	17.4	12.26	5.14	0.20276
head_165	head_grp3	1062	6/30/2012	17.8	12.32	5.48	0.20276
head_166	head_grp3	1062	6/30/2013	18.89	12.51	6.38	0.10138
head_167	head_grp3	1062	6/30/2014	19.5	12.60	6.90	0.20276
head_168	head_grp3	1062	6/30/2015	18.29	12.42	5.87	0.20276
head_169	head_grp1	1074	6/30/1958	23.08	21.38	1.70	0.76665
head_170	head_grp1	1074	6/30/1961	20.12	20.44	-0.32	1.53329
head_171	head_grp1	1074	6/30/1962	19.91	20.10	-0.19	1.53329
head_172	head_grp1	1074	6/30/1963	19.25	19.78	-0.53	1.53329
head_173	head_grp1	1074	6/30/1964	20.78	19.44	1.34	1.53329
head_174	head_grp1	1074	6/30/1965	20.96	19.04	1.92	1.53329
head_175	head_grp2	1074	6/30/1966	20.18	18.69	1.49	0.67856
head_176	head_grp2	1074	6/30/1967	16.48	18.30	-1.82	0.33928
head_177	head_grp2	1074	6/30/1968	13.8	17.89	-4.09	0.67856
head_178	head_grp2	1074	6/30/1969	11.06	17.55	-6.49	0.67856
head_179	head_grp2	1074	6/30/1970	12.99	17.30	-4.31	0.67856
head_180	head_grp2	1074	6/30/1971	12.02	17.03	-5.01	0.67856
head_181	head_grp2	1074	6/30/1972	8.18	16.69	-8.51	0.67856
head_182	head_grp2	1074	6/30/1973	12.01	16.14	-4.13	0.67856
head_183	head_grp2	1074	6/30/1974	12.4	15.73	-3.33	0.67856
head_184	head_grp2	1074	6/30/1975	15.53	15.50	0.03	0.67856

Table A-2. Post-Development (1942-2015) Groundwater Head Targets.

Target Name	Target Group	NWF ID	Date	Measured GW Elevation (NAVD88, ft)	Modelled GW Elevation (NAVD88, ft)	Residual (ft)	Target Weight
head_185	head_grp2	1074	6/30/1976	14.78	15.28	-0.50	0.67856
head_186	head_grp2	1074	6/30/1977	12.58	14.94	-2.36	0.67856
head_187	head_grp2	1074	6/30/1978	14.29	14.55	-0.26	0.67856
head_188	head_grp2	1074	6/30/1979	14.05	14.23	-0.18	0.67856
head_189	head_grp2	1074	6/30/1980	14.28	13.86	0.42	0.67856
head_190	head_grp2	1074	6/30/1981	13.7	13.38	0.32	0.67856
head_191	head_grp2	1074	6/30/1982	13.55	12.79	0.76	0.67856
head_192	head_grp2	1074	6/30/1983	14.03	12.10	1.93	0.67856
head_193	head_grp2	1074	6/30/1984	12.45	11.37	1.08	0.67856
head_194	head_grp2	1074	6/30/1985	11.57	10.54	1.03	0.67856
head_195	head_grp2	1074	6/30/1986	11.29	9.88	1.41	0.67856
head_196	head_grp2	1074	6/30/1987	11.32	8.70	2.62	0.33928
head_197	head_grp2	1074	6/30/1988	10.84	7.79	3.05	0.33928
head_198	head_grp2	1074	6/30/1989	11.26	7.38	3.88	0.67856
head_199	head_grp2	1074	6/30/1990	9.82	6.37	3.45	0.33928
head_200	head_grp3	1074	6/30/1991	10.79	5.73	5.06	0.20276
head_201	head_grp3	1074	6/30/1992	9.76	5.03	4.73	0.20276
head_202	head_grp3	1074	6/30/1994	11.05	3.97	7.08	0.10138
head_203	head_grp3	1074	6/30/1995	10.52	3.95	6.57	0.10138
head_204	head_grp3	1074	6/30/1996	9.56	3.86	5.70	0.10138
head_205	head_grp3	1074	6/30/1997	10.58	3.55	7.03	0.10138
head_206	head_grp3	1074	6/30/1998	11.03	3.65	7.38	0.10138
head_207	head_grp3	1074	6/30/1999	10.57	4.26	6.31	0.10138
head_208	head_grp3	1074	6/30/2000	9.33	3.85	5.48	0.10138
head_209	head_grp3	1074	6/30/2001	8.57	3.69	4.88	0.10138
head_210	head_grp3	1074	6/30/2002	8.85	3.97	4.88	0.10138
head_211	head_grp3	1074	6/30/2003	9.64	4.18	5.46	0.10138
head_212	head_grp3	1074	6/30/2004	8.4	4.29	4.11	0.10138
head_213	head_grp3	1074	6/30/2008	8.35	3.61	4.74	0.10138
head_214	head_grp3	1074	6/30/2010	9.81	5.05	4.76	0.20276
head_215	head_grp3	1074	6/30/2011	8.39	5.27	3.12	0.20276
head_216	head_grp3	1074	6/30/2012	8.87	5.46	3.41	0.20276
head_217	head_grp3	1074	6/30/2013	9.82	5.84	3.98	0.20276
head_218	head_grp3	1074	6/30/2014	10.3	6.12	4.18	0.20276
head_219	head_grp3	1074	6/30/2015	10.02	6.05	3.97	0.10138
head_220	head_grp2	1093	6/30/1986	41.46	24.69	16.77	0.33928
head_221	head_grp2	1093	6/30/1990	43.1	24.24	18.86	0.33928
head_222	head_grp3	1093	6/30/1991	42.07	24.26	17.81	0.18248
head_223	head_grp3	1093	6/30/1992	42.04	24.32	17.72	0.10138
head_224	head_grp3	1093	6/30/1995	42.44	24.46	17.98	0.18248
head_225	head_grp3	1093	6/30/1996	41.89	24.60	17.29	0.10138
head_226	head_grp3	1093	6/30/1998	43.62	24.56	19.06	0.10138
head_227	head_grp3	1093	6/30/2000	40.76	24.39	16.37	0.10138
head_228	head_grp3	1093	6/30/2001	41.8	24.38	17.42	0.18248

Table A-2. Post-Development (1942-2015) Groundwater Head Targets.

Target Name	Target Group	NWF ID	Date	Measured GW Elevation (NAVD88, ft)	Modelled GW Elevation (NAVD88, ft)	Residual (ft)	Target Weight
head_229	head_grp3	1093	6/30/2002	42.3	25.05	17.25	0.18248
head_230	head_grp3	1093	6/30/2003	40.45	25.65	14.80	0.10138
head_231	head_grp3	1093	6/30/2007	40.98	25.81	15.17	0.10138
head_232	head_grp3	1093	6/30/2008	42.48	25.82	16.66	0.18248
head_233	head_grp3	1093	6/30/2010	43.3	25.83	17.47	0.18248
head_234	head_grp3	1093	6/30/2011	41.37	25.84	15.53	0.18248
head_235	head_grp3	1093	6/30/2012	41.78	25.84	15.94	0.18248
head_236	head_grp3	1093	6/30/2013	43.81	25.84	17.97	0.18248
head_237	head_grp3	1093	6/30/2014	44	25.84	18.16	0.18248
head_238	head_grp3	1093	6/30/2015	44.52	25.82	18.70	0.18248
head_255	head_grp1	1371	6/30/1958	24.75	14.28	10.47	0.76665
head_256	head_grp2	1371	6/30/1970	14.19	12.62	1.57	0.67856
head_257	head_grp2	1371	6/30/1971	12.64	12.51	0.13	0.67856
head_258	head_grp2	1371	6/30/1972	10.78	12.37	-1.59	0.67856
head_259	head_grp2	1371	6/30/1973	13.4	12.15	1.25	0.67856
head_260	head_grp2	1371	6/30/1974	13.64	11.97	1.67	0.67856
head_261	head_grp2	1371	6/30/1975	16.95	11.87	5.08	0.67856
head_262	head_grp2	1371	6/30/1976	16.65	11.78	4.87	0.67856
head_263	head_grp2	1371	6/30/1977	14.07	11.63	2.44	0.67856
head_264	head_grp2	1371	6/30/1978	15.98	11.48	4.50	0.67856
head_265	head_grp2	1371	6/30/1979	15.43	11.36	4.07	0.67856
head_266	head_grp2	1371	6/30/1980	15.65	11.22	4.43	0.67856
head_267	head_grp2	1371	6/30/1981	14.95	11.03	3.92	0.67856
head_268	head_grp2	1371	6/30/1982	15.09	10.79	4.30	0.67856
head_269	head_grp2	1371	6/30/1983	15.78	10.50	5.28	0.67856
head_270	head_grp2	1371	6/30/1984	16.05	10.19	5.86	0.33928
head_271	head_grp2	1371	6/30/1986	12.5	9.46	3.04	0.33928
head_272	head_grp2	1371	6/30/1987	13.05	9.04	4.01	0.67856
head_273	head_grp2	1371	6/30/1988	13.12	8.69	4.43	0.67856
head_274	head_grp2	1371	6/30/1989	12.54	8.47	4.07	0.67856
head_275	head_grp2	1371	6/30/1990	12.76	8.17	4.59	0.33928
head_276	head_grp3	1371	6/30/1991	12.02	7.90	4.12	0.10138
head_277	head_grp3	1371	6/30/1992	11.92	7.71	4.21	0.20276
head_278	head_grp3	1371	6/30/1994	11.35	7.30	4.05	0.20276
head_279	head_grp3	1371	6/30/1995	11.93	7.25	4.68	0.20276
head_280	head_grp3	1371	6/30/1996	11.68	7.16	4.52	0.10138
head_281	head_grp3	1371	6/30/1997	10.95	7.04	3.91	0.10138
head_282	head_grp3	1371	6/30/1998	11.33	6.97	4.36	0.10138
head_283	head_grp3	1371	6/30/1999	12.28	6.96	5.32	0.10138
head_284	head_grp3	1371	6/30/2000	10.85	6.77	4.08	0.10138
head_285	head_grp3	1371	6/30/2001	9.76	6.57	3.19	0.10138
head_286	head_grp3	1371	6/30/2002	9.47	6.52	2.95	0.10138
head_287	head_grp3	1371	6/30/2003	11.01	6.56	4.45	0.10138
head_288	head_grp3	1371	6/30/2004	9.6	6.60	3.00	0.10138

Table A-2. Post-Development (1942-2015) Groundwater Head Targets.

Target Name	Target Group	NWF ID	Date	Measured GW Elevation (NAVD88, ft)	Modelled GW Elevation (NAVD88, ft)	Residual (ft)	Target Weight
head_289	head_grp3	1371	6/30/2006	8.65	6.09	2.56	0.10138
head_290	head_grp3	1371	6/30/2007	8.16	5.89	2.27	0.10138
head_291	head_grp3	1371	6/30/2008	9.71	5.98	3.73	0.10138
head_292	head_grp3	1371	6/30/2010	9.97	6.51	3.46	0.20276
head_293	head_grp3	1371	6/30/2011	8.81	6.59	2.22	0.20276
head_294	head_grp3	1371	6/30/2012	9.31	6.65	2.66	0.20276
head_295	head_grp3	1371	6/30/2013	10.13	6.82	3.31	0.10138
head_296	head_grp3	1371	6/30/2014	10.64	6.92	3.72	0.20276
head_297	head_grp3	1371	6/30/2015	9.81	6.81	3.00	0.20276
head_298	head_grp2	1376	6/30/1983	2.19	3.35	-1.16	0.67856
head_299	head_grp3	1376	6/30/1995	-11.69	-10.43	-1.26	0.10138
head_300	head_grp3	1376	6/30/1996	-11.27	-10.65	-0.62	0.10138
head_301	head_grp3	1376	6/30/1997	-13.92	-11.18	-2.74	0.10138
head_302	head_grp3	1376	6/30/1998	-12.72	-11.63	-1.09	0.10138
head_303	head_grp3	1376	6/30/1999	-13.71	-11.92	-1.79	0.10138
head_304	head_grp3	1376	6/30/2000	-16.35	-12.87	-3.48	0.20276
head_305	head_grp3	1376	6/30/2001	-15.1	-13.20	-1.90	0.10138
head_306	head_grp3	1376	6/30/2003	-14.88	-12.11	-2.77	0.10138
head_307	head_grp3	1376	6/30/2004	-15.75	-12.45	-3.30	0.10138
head_308	head_grp3	1376	6/30/2006	-11.96	-12.02	0.06	0.20276
head_309	head_grp3	1376	6/30/2007	-11.55	-11.77	0.22	0.10138
head_310	head_grp3	1376	6/30/2008	-8.99	-11.14	2.15	0.10138
head_311	head_grp3	1376	6/30/2010	-5.98	-7.20	1.22	0.20276
head_312	head_grp3	1376	6/30/2011	-8.89	-7.49	-1.40	0.20276
head_313	head_grp3	1376	6/30/2012	-6.82	-6.43	-0.39	0.20276
head_314	head_grp3	1376	6/30/2013	-7.2	-5.92	-1.28	0.20276
head_315	head_grp3	1376	6/30/2014	-4.72	-5.37	0.65	0.20276
head_316	head_grp3	1376	6/30/2015	-6.07	-5.14	-0.93	0.20276
head_645	head_grp3	1696	6/30/1992	-90.28	-86.21	-4.07	0.20276
head_646	head_grp3	1696	6/30/1993	-81.64	-85.00	3.36	0.20276
head_647	head_grp3	1696	6/30/1994	-85.4	-85.68	0.28	0.20276
head_648	head_grp3	1696	6/30/1995	-85.33	-86.11	0.78	0.20276
head_649	head_grp3	1696	6/30/1996	-86.56	-84.99	-1.57	0.20276
head_650	head_grp3	1696	6/30/1997	-87.71	-84.26	-3.45	0.20276
head_651	head_grp3	1696	6/30/1998	-86.36	-81.30	-5.06	0.20276
head_652	head_grp3	1696	6/30/1999	-88.54	-81.36	-7.18	0.20276
head_653	head_grp3	1696	6/30/2000	-90.13	-84.58	-5.55	0.20276
head_654	head_grp3	1696	6/30/2001	-91.26	-84.26	-7.00	0.20276
head_655	head_grp3	1696	6/30/2002	-91.22	-80.31	-10.91	0.20276
head_656	head_grp3	1696	6/30/2003	-87.55	-77.43	-10.12	0.20276
head_657	head_grp3	1696	6/30/2004	-87.69	-79.72	-7.97	0.20276
head_658	head_grp3	1696	6/30/2005	-88.41	-79.14	-9.27	0.10138
head_659	head_grp3	1696	6/30/2006	-88.36	-79.64	-8.72	0.10138
head_660	head_grp3	1696	6/30/2007	-82.76	-73.79	-8.97	0.20276

Table A-2. Post-Development (1942-2015) Groundwater Head Targets.

Target Name	Target Group	NWF ID	Date	Measured GW Elevation (NAVD88, ft)	Modelled GW Elevation (NAVD88, ft)	Residual (ft)	Target Weight
head_661	head_grp3	1696	6/30/2008	-75.83	-67.63	-8.20	0.20276
head_662	head_grp3	1696	6/30/2010	-64.54	-58.49	-6.05	0.20276
head_663	head_grp3	1696	6/30/2011	-60.5	-56.67	-3.83	0.20276
head_664	head_grp3	1696	6/30/2012	-60.62	-54.30	-6.32	0.10138
head_665	head_grp3	1696	6/30/2013	-56.68	-53.01	-3.67	0.10138
head_666	head_grp3	1696	6/30/2014	-58.96	-53.17	-5.79	0.20276
head_667	head_grp3	1696	6/30/2015	-56.68	-52.67	-4.01	0.20276
head_688	head_grp2	1760	6/30/1986	41.71	41.40	0.31	0.33928
head_689	head_grp2	1760	6/30/1990	43.04	41.39	1.65	0.33928
head_690	head_grp3	1760	6/30/1991	44.36	41.38	2.98	0.18248
head_691	head_grp3	1760	6/30/1992	42.59	41.39	1.20	0.10138
head_692	head_grp3	1760	6/30/1994	44.6	41.38	3.22	0.10138
head_693	head_grp3	1760	6/30/1995	42.81	41.38	1.43	0.10138
head_694	head_grp3	1760	6/30/1996	41.84	41.38	0.46	0.10138
head_695	head_grp3	1760	6/30/1997	41.67	41.38	0.29	0.10138
head_696	head_grp3	1760	6/30/1998	43.85	41.38	2.47	0.10138
head_697	head_grp3	1760	6/30/2000	36.82	41.37	-4.55	0.10138
head_698	head_grp3	1760	6/30/2001	32.59	41.37	-8.78	0.18248
head_699	head_grp3	1760	6/30/2002	33.32	41.37	-8.05	0.18248
head_700	head_grp3	1760	6/30/2003	42.2	41.38	0.82	0.10138
head_701	head_grp3	1760	6/30/2007	31.19	41.38	-10.19	0.10138
head_702	head_grp3	1760	6/30/2008	32.47	41.38	-8.91	0.18248
head_703	head_grp3	1760	6/30/2010	38.91	41.37	-2.46	0.18248
head_704	head_grp3	1760	6/30/2011	34.33	41.37	-7.04	0.18248
head_705	head_grp3	1760	6/30/2012	31.25	41.37	-10.12	0.18248
head_706	head_grp3	1760	6/30/2013	37.44	41.37	-3.93	0.18248
head_707	head_grp3	1760	6/30/2014	44.65	41.37	3.28	0.18248
head_708	head_grp3	1760	6/30/2015	41.92	41.37	0.55	0.18248
head_795	head_grp2	1888	6/30/1979	-0.38	15.68	-16.06	0.33928
head_796	head_grp2	1888	6/30/1980	-0.35	13.19	-13.54	0.33928
head_797	head_grp3	1888	6/30/2001	-69.29	-62.85	-6.44	0.10138
head_798	head_grp3	1888	6/30/2002	-73.43	-66.87	-6.56	0.10138
head_799	head_grp3	1888	6/30/2003	-69.14	-66.29	-2.85	0.10138
head_800	head_grp3	1888	6/30/2006	-54.61	-47.69	-6.92	0.10138
head_801	head_grp3	1888	6/30/2008	-45.5	-39.28	-6.22	0.10138
head_802	head_grp3	1888	6/30/2010	-36.67	-31.57	-5.10	0.18248
head_803	head_grp3	1888	6/30/2011	-34.26	-27.77	-6.49	0.10138
head_804	head_grp3	1888	6/30/2012	-29.84	-23.94	-5.90	0.10138
head_806	head_grp1	1894	6/30/1946	34.45	40.38	-5.93	0.76665
head_807	head_grp1	1894	6/30/1947	31.55	38.03	-6.48	1.53329
head_808	head_grp1	1894	6/30/1948	31.67	35.78	-4.11	1.53329
head_809	head_grp1	1894	6/30/1949	34.56	33.63	0.93	1.53329
head_810	head_grp1	1894	6/30/1950	31.11	29.87	1.24	1.53329
head_811	head_grp1	1894	6/30/1951	23.16	26.90	-3.74	1.53329

Table A-2. Post-Development (1942-2015) Groundwater Head Targets.

Target Name	Target Group	NWF ID	Date	Measured GW Elevation (NAVD88, ft)	Modelled GW Elevation (NAVD88, ft)	Residual (ft)	Target Weight
head_812	head_grp1	1894	6/30/1952	13.41	24.34	-10.93	1.53329
head_813	head_grp1	1894	6/30/1953	12.94	21.90	-8.96	1.53329
head_814	head_grp1	1894	6/30/1954	-1.32	19.48	-20.80	1.53329
head_815	head_grp1	1894	6/30/1955	-7.19	12.24	-19.43	1.53329
head_816	head_grp1	1894	6/30/1956	-10.94	8.72	-19.66	1.53329
head_817	head_grp1	1894	6/30/1957	-19.51	4.06	-23.57	1.53329
head_818	head_grp1	1894	6/30/1958	-12.94	-3.36	-9.58	1.53329
head_819	head_grp1	1894	6/30/1959	-17.01	-10.06	-6.95	1.53329
head_820	head_grp1	1894	6/30/1960	-17.57	-17.28	-0.29	1.53329
head_821	head_grp1	1894	6/30/1961	-23.25	-24.02	0.77	1.53329
head_822	head_grp1	1894	6/30/1962	-36.95	-25.27	-11.68	1.53329
head_823	head_grp1	1894	6/30/1963	-44.69	-31.64	-13.05	1.53329
head_824	head_grp1	1894	6/30/1964	-45.09	-38.18	-6.91	1.53329
head_825	head_grp1	1894	6/30/1965	-48.84	-40.57	-8.27	1.53329
head_826	head_grp2	1894	6/30/1966	-49.85	-45.08	-4.77	0.67856
head_827	head_grp2	1894	6/30/1967	-53.73	-50.40	-3.33	0.67856
head_828	head_grp2	1894	6/30/1968	-56.75	-60.12	3.37	0.67856
head_829	head_grp2	1894	6/30/1969	-55.81	-57.30	1.49	0.33928
head_830	head_grp2	1894	6/30/1970	-41.3	-58.22	16.92	0.33928
head_831	head_grp2	1894	6/30/1971	-36.7	-62.59	25.89	0.33928
head_832	head_grp2	1894	6/30/1974	-98.88	-71.47	-27.41	0.33928
head_833	head_grp2	1894	6/30/1975	-81.65	-71.93	-9.72	0.67856
head_834	head_grp2	1894	6/30/1976	-80.73	-76.59	-4.14	0.67856
head_835	head_grp2	1894	6/30/1977	-79.71	-81.52	1.81	0.67856
head_836	head_grp2	1894	6/30/1978	-77.14	-82.42	5.28	0.67856
head_837	head_grp2	1894	6/30/1979	-79.6	-86.08	6.48	0.67856
head_838	head_grp2	1894	6/30/1980	-75.37	-85.70	10.33	0.67856
head_839	head_grp2	1894	6/30/1981	-91.63	-87.81	-3.82	0.67856
head_840	head_grp2	1894	6/30/1982	-91.37	-81.98	-9.39	0.67856
head_841	head_grp2	1894	6/30/1983	-79.68	-86.96	7.28	0.67856
head_842	head_grp2	1894	6/30/1984	-96.43	-95.69	-0.74	0.67856
head_843	head_grp2	1894	6/30/1985	-97.49	-101.10	3.61	0.67856
head_844	head_grp2	1894	6/30/1986	-102.25	-105.79	3.54	0.67856
head_845	head_grp2	1894	6/30/1987	-104.84	-109.85	5.01	0.67856
head_846	head_grp2	1894	6/30/1988	-103.86	-103.44	-0.42	0.67856
head_847	head_grp2	1894	6/30/1989	-98.46	-102.68	4.22	0.67856
head_848	head_grp2	1894	6/30/1990	-105.45	-100.14	-5.31	0.67856
head_849	head_grp3	1894	6/30/1991	-94.56	-97.22	2.66	0.20276
head_850	head_grp3	1894	6/30/1992	-95.94	-96.56	0.62	0.20276
head_851	head_grp3	1894	6/30/1993	-92.69	-98.57	5.88	0.20276
head_852	head_grp3	1894	6/30/1994	-96.63	-98.45	1.82	0.20276
head_853	head_grp3	1894	6/30/1995	-99.29	-100.68	1.39	0.10138
head_854	head_grp3	1894	6/30/1996	-97.86	-100.39	2.53	0.10138
head_855	head_grp3	1894	6/30/1997	-107.32	-98.74	-8.58	0.10138

Table A-2. Post-Development (1942-2015) Groundwater Head Targets.

Target Name	Target Group	NWF ID	Date	Measured GW Elevation (NAVD88, ft)	Modelled GW Elevation (NAVD88, ft)	Residual (ft)	Target Weight
head_856	head_grp3	1894	6/30/1998	-96.57	-95.08	-1.49	0.10138
head_857	head_grp3	1894	6/30/1999	-92.13	-95.28	3.15	0.10138
head_858	head_grp3	1894	6/30/2000	-105.14	-99.98	-5.16	0.10138
head_859	head_grp3	1894	6/30/2001	-101.48	-98.94	-2.54	0.10138
head_860	head_grp3	1894	6/30/2002	-100.16	-94.85	-5.31	0.10138
head_861	head_grp3	1894	6/30/2003	-97.08	-91.65	-5.43	0.10138
head_862	head_grp3	1894	6/30/2005	-96.81	-93.18	-3.63	0.10138
head_863	head_grp3	1894	6/30/2006	-103.17	-94.87	-8.30	0.20276
head_864	head_grp3	1894	6/30/2007	-91.54	-85.60	-5.94	0.20276
head_865	head_grp3	1894	6/30/2008	-82.69	-78.17	-4.52	0.20276
head_866	head_grp3	1894	6/30/2010	-71.68	-68.99	-2.69	0.20276
head_867	head_grp3	1894	6/30/2011	-70.39	-66.94	-3.45	0.20276
head_868	head_grp3	1894	6/30/2012	-66.99	-64.31	-2.68	0.20276
head_869	head_grp3	1894	6/30/2013	-64.87	-63.52	-1.35	0.20276
head_870	head_grp3	1894	6/30/2014	-65.21	-64.30	-0.91	0.20276
head_871	head_grp3	1894	6/30/2015	-65.25	-63.66	-1.59	0.20276
head_914	head_grp2	2034	6/30/1969	7.8	19.53	-11.73	0.33928
head_915	head_grp2	2034	6/30/1978	7.87	14.75	-6.88	0.33928
head_916	head_grp2	2034	6/30/1979	8.27	14.36	-6.09	0.61071
head_917	head_grp2	2034	6/30/1980	8.37	13.83	-5.46	0.61071
head_918	head_grp2	2034	6/30/1981	7.58	13.07	-5.49	0.61071
head_919	head_grp2	2034	6/30/1982	7.32	12.12	-4.80	0.61071
head_920	head_grp2	2034	6/30/1983	7.05	11.00	-3.95	0.61071
head_921	head_grp2	2034	6/30/1984	5.4	9.82	-4.42	0.61071
head_922	head_grp2	2034	6/30/1985	4.12	8.43	-4.31	0.61071
head_923	head_grp2	2034	6/30/1986	3.03	6.89	-3.86	0.61071
head_924	head_grp2	2034	6/30/1987	2.59	5.47	-2.88	0.61071
head_925	head_grp2	2034	6/30/1988	2.04	4.45	-2.41	0.61071
head_926	head_grp2	2034	6/30/1989	2.16	3.63	-1.47	0.61071
head_927	head_grp2	2034	6/30/1990	2.04	2.69	-0.65	0.33928
head_928	head_grp3	2034	6/30/1991	1.19	2.07	-0.88	0.10138
head_929	head_grp3	2034	6/30/1992	0.75	1.86	-1.11	0.10138
head_930	head_grp3	2034	6/30/1994	0.17	0.41	-0.24	0.18248
head_931	head_grp3	2034	6/30/1995	-0.02	0.07	-0.09	0.10138
head_932	head_grp3	2034	6/30/1996	-0.68	-0.21	-0.47	0.10138
head_933	head_grp3	2034	6/30/1997	-1.76	-0.54	-1.22	0.10138
head_934	head_grp3	2034	6/30/1998	-1.04	-0.91	-0.13	0.10138
head_935	head_grp3	2034	6/30/1999	-0.33	-1.19	0.86	0.10138
head_936	head_grp3	2034	6/30/2000	-2.26	-1.87	-0.39	0.10138
head_937	head_grp3	2034	6/30/2001	-3.06	-2.35	-0.71	0.10138
head_938	head_grp3	2034	6/30/2002	-3.26	-2.25	-1.01	0.10138
head_939	head_grp3	2034	6/30/2003	-2.49	-2.06	-0.43	0.10138
head_940	head_grp3	2034	6/30/2006	-3.22	-2.82	-0.40	0.10138
head_941	head_grp3	2034	6/30/2008	-1.8	-2.62	0.82	0.10138

Table A-2. Post-Development (1942-2015) Groundwater Head Targets.

Target Name	Target Group	NWF ID	Date	Measured GW Elevation (NAVD88, ft)	Modelled GW Elevation (NAVD88, ft)	Residual (ft)	Target Weight
head_942	head_grp3	2034	6/30/2010	0.35	-0.04	0.39	0.18248
head_943	head_grp3	2034	6/30/2011	-1.05	0.20	-1.25	0.18248
head_944	head_grp3	2034	6/30/2012	-0.07	0.66	-0.73	0.18248
head_945	head_grp3	2034	6/30/2013	0.27	1.28	-1.01	0.18248
head_946	head_grp3	2034	6/30/2014	1.37	1.71	-0.34	0.18248
head_947	head_grp3	2034	6/30/2015	0.84	1.69	-0.85	0.18248
head_1007	head_grp3	2051	6/30/2001	-81.36	-77.16	-4.20	0.10138
head_1008	head_grp3	2051	6/30/2002	-84.8	-80.34	-4.46	0.10138
head_1009	head_grp3	2051	6/30/2003	-81.27	-78.92	-2.35	0.10138
head_1010	head_grp3	2051	6/30/2006	-70.16	-60.43	-9.73	0.10138
head_1011	head_grp3	2051	6/30/2008	-58.92	-53.30	-5.62	0.10138
head_1012	head_grp3	2051	6/30/2010	-48	-40.03	-7.97	0.18248
head_1013	head_grp3	2051	6/30/2011	-45.58	-36.83	-8.75	0.18248
head_1014	head_grp3	2051	6/30/2012	-41.49	-32.07	-9.42	0.18248
head_1015	head_grp3	2051	6/30/2013	-38.29	-28.01	-10.28	0.18248
head_1016	head_grp3	2051	6/30/2014	-42.76	-32.02	-10.74	0.18248
head_1017	head_grp3	2051	6/30/2015	-39.92	-28.29	-11.63	0.18248
head_1465	head_grp1	2394	6/30/1961	22.4	2.08	20.32	0.76665
head_1466	head_grp2	2394	6/30/1975	-39.55	-53.14	13.59	0.61071
head_1467	head_grp2	2394	6/30/1976	-36.38	-57.40	21.02	0.61071
head_1468	head_grp2	2394	6/30/1977	-49.73	-62.01	12.28	0.61071
head_1469	head_grp2	2394	6/30/1978	-49.27	-62.55	13.28	0.61071
head_1470	head_grp2	2394	6/30/1979	-52.62	-66.73	14.11	0.61071
head_1471	head_grp2	2394	6/30/1980	-52.61	-67.84	15.23	0.61071
head_1472	head_grp2	2394	6/30/1981	-59.71	-70.94	11.23	0.61071
head_1473	head_grp2	2394	6/30/1982	-61.25	-73.37	12.12	0.61071
head_1474	head_grp2	2394	6/30/1983	-62	-78.94	16.94	0.61071
head_1475	head_grp2	2394	6/30/1984	-73.22	-86.43	13.21	0.61071
head_1476	head_grp2	2394	6/30/1985	-80.41	-94.45	14.04	0.61071
head_1477	head_grp2	2394	6/30/1986	-85.3	-100.65	15.35	0.61071
head_1478	head_grp2	2394	6/30/1987	-87.23	-105.03	17.80	0.61071
head_1479	head_grp2	2394	6/30/1988	-92.7	-105.24	12.54	0.61071
head_1480	head_grp2	2394	6/30/1989	-93.92	-107.69	13.77	0.61071
head_1481	head_grp2	2394	6/30/1990	-101.51	-110.64	9.13	0.33928
head_1482	head_grp3	2394	6/30/1991	-91.96	-104.32	12.36	0.10138
head_1483	head_grp3	2394	6/30/1992	-99.51	-106.49	6.98	0.18248
head_1484	head_grp3	2394	6/30/1993	-93.47	-113.73	20.26	0.10138
head_1485	head_grp3	2394	6/30/1994	-102.28	-110.02	7.74	0.18248
head_1486	head_grp3	2394	6/30/1995	-105.84	-112.76	6.92	0.10138
head_1487	head_grp3	2394	6/30/1996	-107.23	-115.27	8.04	0.10138
head_1488	head_grp3	2394	6/30/1997	-118.69	-113.73	-4.96	0.10138
head_1489	head_grp3	2394	6/30/1998	-114.18	-113.12	-1.06	0.10138
head_1490	head_grp3	2394	6/30/1999	-99.35	-109.43	10.08	0.10138
head_1491	head_grp3	2394	6/30/2000	-122.32	-117.21	-5.11	0.10138

Table A-2. Post-Development (1942-2015) Groundwater Head Targets.

Target Name	Target Group	NWF ID	Date	Measured GW Elevation (NAVD88, ft)	Modelled GW Elevation (NAVD88, ft)	Residual (ft)	Target Weight
head_1492	head_grp3	2394	6/30/2001	-118.86	-115.29	-3.57	0.10138
head_1493	head_grp3	2394	6/30/2002	-108.2	-112.87	4.67	0.10138
head_1494	head_grp3	2394	6/30/2003	-108.71	-107.98	-0.73	0.10138
head_1495	head_grp3	2394	6/30/2006	-109.94	-108.62	-1.32	0.10138
head_1496	head_grp3	2394	6/30/2007	-105.05	-96.50	-8.55	0.10138
head_1497	head_grp3	2394	6/30/2008	-86.89	-88.36	1.47	0.10138
head_1498	head_grp3	2394	6/30/2010	-75.21	-78.71	3.50	0.18248
head_1499	head_grp3	2394	6/30/2011	-74.97	-76.26	1.29	0.18248
head_1500	head_grp3	2394	6/30/2012	-69.76	-73.41	3.65	0.18248
head_1501	head_grp3	2394	6/30/2013	-69.73	-72.52	2.79	0.18248
head_1502	head_grp3	2394	6/30/2014	-68.59	-73.15	4.56	0.18248
head_1503	head_grp3	2394	6/30/2015	-69.19	-72.94	3.75	0.18248
head_1504	head_grp3	2397	6/30/1991	-33.14	-35.78	2.64	0.10138
head_1505	head_grp3	2397	6/30/2001	-61.11	-59.67	-1.44	0.18248
head_1506	head_grp3	2397	6/30/2002	-63.98	-61.03	-2.95	0.10138
head_1507	head_grp3	2397	6/30/2003	-59.4	-60.99	1.59	0.10138
head_1508	head_grp3	2397	6/30/2006	-48.37	-44.86	-3.51	0.10138
head_1509	head_grp3	2397	6/30/2008	-40.88	-37.85	-3.03	0.10138
head_1510	head_grp3	2397	6/30/2010	-33.9	-30.63	-3.27	0.10138
head_1511	head_grp3	2397	6/30/2012	-27.62	-23.00	-4.62	0.10138
head_1512	head_grp3	2397	6/30/2014	-30.28	-21.19	-9.09	0.10138
head_1513	head_grp3	2397	6/30/2015	-25.06	-19.30	-5.76	0.18248
head_1622	head_grp1	2534	6/30/1958	28.1	21.58	6.52	0.76665
head_1623	head_grp2	2534	6/30/1968	20.19	21.29	-1.10	0.61071
head_1624	head_grp2	2534	6/30/1969	20.25	21.26	-1.01	0.61071
head_1625	head_grp2	2534	6/30/1970	21.98	21.24	0.74	0.61071
head_1626	head_grp2	2534	6/30/1971	20.9	21.21	-0.31	0.61071
head_1627	head_grp2	2534	6/30/1972	18.61	21.19	-2.58	0.61071
head_1628	head_grp2	2534	6/30/1973	21.03	21.14	-0.11	0.61071
head_1629	head_grp2	2534	6/30/1974	20.43	21.11	-0.68	0.61071
head_1630	head_grp2	2534	6/30/1975	22.95	21.08	1.87	0.61071
head_1631	head_grp2	2534	6/30/1976	22.43	21.06	1.37	0.61071
head_1632	head_grp2	2534	6/30/1977	20.65	21.03	-0.38	0.61071
head_1633	head_grp2	2534	6/30/1978	21.5	21.00	0.50	0.61071
head_1634	head_grp2	2534	6/30/1979	21.08	20.97	0.11	0.61071
head_1635	head_grp2	2534	6/30/1980	21.07	20.93	0.14	0.61071
head_1636	head_grp2	2534	6/30/1981	20.17	20.89	-0.72	0.61071
head_1637	head_grp2	2534	6/30/1982	20.92	20.84	0.08	0.61071
head_1638	head_grp2	2534	6/30/1983	21.99	20.78	1.21	0.61071
head_1639	head_grp2	2534	6/30/1984	21.55	20.71	0.84	0.61071
head_1640	head_grp2	2534	6/30/1985	21.11	20.63	0.48	0.61071
head_1641	head_grp2	2534	6/30/1986	21.25	20.54	0.71	0.61071
head_1642	head_grp2	2534	6/30/1987	21.48	20.45	1.03	0.61071
head_1643	head_grp2	2534	6/30/1988	21.25	20.37	0.88	0.61071

Table A-2. Post-Development (1942-2015) Groundwater Head Targets.

Target Name	Target Group	NWF ID	Date	Measured GW Elevation (NAVD88, ft)	Modelled GW Elevation (NAVD88, ft)	Residual (ft)	Target Weight
head_1644	head_grp2	2534	6/30/1989	20.95	20.33	0.62	0.61071
head_1645	head_grp2	2534	6/30/1990	20.48	20.28	0.20	0.61071
head_1646	head_grp3	2534	6/30/1991	21.16	20.22	0.94	0.18248
head_1647	head_grp3	2534	6/30/1992	20.4	20.21	0.19	0.18248
head_1648	head_grp3	2534	6/30/1993	20.52	20.16	0.36	0.18248
head_1649	head_grp3	2534	6/30/1994	21.07	20.11	0.96	0.18248
head_1650	head_grp3	2534	6/30/1995	20.44	20.09	0.35	0.10138
head_1651	head_grp3	2534	6/30/1996	20.99	20.08	0.91	0.18248
head_1652	head_grp3	2534	6/30/1997	20.34	20.05	0.29	0.10138
head_1653	head_grp3	2534	6/30/1998	20.09	20.02	0.07	0.10138
head_1654	head_grp3	2534	6/30/1999	20.6	19.97	0.63	0.10138
head_1655	head_grp3	2534	6/30/2000	19	19.87	-0.87	0.10138
head_1656	head_grp3	2534	6/30/2001	17.73	19.78	-2.05	0.10138
head_1657	head_grp3	2534	6/30/2002	19.39	19.71	-0.32	0.10138
head_1658	head_grp3	2534	6/30/2003	20.14	19.74	0.40	0.10138
head_1659	head_grp3	2534	6/30/2004	19.41	19.74	-0.33	0.10138
head_1660	head_grp3	2534	6/30/2006	17.98	19.46	-1.48	0.18248
head_1661	head_grp3	2534	6/30/2007	16.96	19.38	-2.42	0.18248
head_1662	head_grp3	2534	6/30/2008	18.62	19.42	-0.80	0.18248
head_1663	head_grp3	2534	6/30/2010	19.06	19.38	-0.32	0.18248
head_1664	head_grp3	2534	6/30/2011	17.21	19.39	-2.18	0.18248
head_1665	head_grp3	2534	6/30/2012	17.86	19.37	-1.51	0.18248
head_1666	head_grp3	2534	6/30/2013	19.23	19.42	-0.19	0.18248
head_1667	head_grp3	2534	6/30/2014	19.98	19.39	0.59	0.18248
head_1668	head_grp3	2534	6/30/2015	18.73	19.28	-0.55	0.18248
head_1798	head_grp3	2696	6/30/1994	-42.85	-35.74	-7.11	0.10138
head_1799	head_grp3	2696	6/30/1995	-50.29	-36.78	-13.51	0.10138
head_1800	head_grp3	2696	6/30/2000	-61.74	-41.25	-20.49	0.10138
head_1801	head_grp3	2696	6/30/2001	-55.58	-41.20	-14.38	0.10138
head_1802	head_grp3	2696	6/30/2002	-49.37	-40.04	-9.33	0.10138
head_1803	head_grp3	2696	6/30/2003	-53.41	-38.43	-14.98	0.10138
head_1804	head_grp3	2696	6/30/2005	-47.83	-37.86	-9.97	0.10138
head_1805	head_grp3	2696	6/30/2006	-50.42	-39.12	-11.30	0.10138
head_1806	head_grp3	2696	6/30/2007	-47.18	-38.92	-8.26	0.10138
head_1807	head_grp3	2696	6/30/2008	-43.65	-36.34	-7.31	0.10138
head_1808	head_grp3	2696	6/30/2010	-34.72	-28.96	-5.76	0.18248
head_1809	head_grp3	2696	6/30/2011	-38.03	-29.26	-8.77	0.10138
head_1810	head_grp3	2696	6/30/2012	-34.41	-26.75	-7.66	0.18248
head_1811	head_grp3	2696	6/30/2013	-34.89	-25.78	-9.11	0.18248
head_1812	head_grp3	2696	6/30/2014	-29.24	-24.66	-4.58	0.18248
head_1813	head_grp3	2696	6/30/2015	-30.77	-23.98	-6.79	0.18248
head_1815	head_grp1	2738	6/30/1958	31.6	27.30	4.30	0.76665
head_1816	head_grp2	2738	6/30/1968	11.3	23.30	-12.00	0.61071
head_1817	head_grp2	2738	6/30/1969	10.85	22.91	-12.06	0.61071

Table A-2. Post-Development (1942-2015) Groundwater Head Targets.

Target Name	Target Group	NWF ID	Date	Measured GW Elevation (NAVD88, ft)	Modelled GW Elevation (NAVD88, ft)	Residual (ft)	Target Weight
head_1818	head_grp2	2738	6/30/1970	13.25	22.61	-9.36	0.61071
head_1819	head_grp2	2738	6/30/1971	9.1	22.31	-13.21	0.61071
head_1820	head_grp2	2738	6/30/1972	4.46	21.87	-17.41	0.61071
head_1821	head_grp2	2738	6/30/1973	9.82	21.20	-11.38	0.61071
head_1822	head_grp2	2738	6/30/1974	12.46	20.76	-8.30	0.61071
head_1823	head_grp2	2738	6/30/1975	17.75	20.49	-2.74	0.61071
head_1824	head_grp2	2738	6/30/1976	16.95	20.21	-3.26	0.61071
head_1825	head_grp2	2738	6/30/1977	13.61	19.79	-6.18	0.61071
head_1826	head_grp2	2738	6/30/1978	16.02	19.40	-3.38	0.61071
head_1827	head_grp2	2738	6/30/1979	15.65	19.09	-3.44	0.61071
head_1828	head_grp2	2738	6/30/1980	16.28	18.70	-2.42	0.61071
head_1829	head_grp2	2738	6/30/1981	15.62	18.17	-2.55	0.61071
head_1830	head_grp2	2738	6/30/1982	15.57	17.49	-1.92	0.61071
head_1831	head_grp2	2738	6/30/1983	16.3	16.69	-0.39	0.61071
head_1832	head_grp2	2738	6/30/1984	14.22	15.84	-1.62	0.61071
head_1833	head_grp2	2738	6/30/1985	13.85	14.85	-1.00	0.61071
head_1834	head_grp2	2738	6/30/1986	13.45	13.72	-0.27	0.61071
head_1835	head_grp2	2738	6/30/1987	13.38	12.68	0.70	0.61071
head_1836	head_grp2	2738	6/30/1988	12.98	11.86	1.12	0.61071
head_1837	head_grp2	2738	6/30/1989	12.67	11.25	1.42	0.61071
head_1838	head_grp2	2738	6/30/1990	11.81	10.58	1.23	0.61071
head_1839	head_grp3	2738	6/30/1991	12.14	10.01	2.13	0.18248
head_1840	head_grp3	2738	6/30/1992	12.08	9.81	2.27	0.18248
head_1841	head_grp3	2738	6/30/1993	10.97	9.26	1.71	0.18248
head_1842	head_grp3	2738	6/30/1994	10.55	8.73	1.82	0.18248
head_1843	head_grp3	2738	6/30/1995	10.35	8.46	1.89	0.10138
head_1844	head_grp3	2738	6/30/1996	11.5	8.23	3.27	0.10138
head_1845	head_grp3	2738	6/30/1997	10.21	7.89	2.32	0.10138
head_1846	head_grp3	2738	6/30/1998	9.31	7.46	1.85	0.10138
head_1847	head_grp3	2738	6/30/1999	10.35	7.04	3.31	0.10138
head_1848	head_grp3	2738	6/30/2000	8.1	6.39	1.71	0.10138
head_1849	head_grp3	2738	6/30/2001	7.65	5.90	1.75	0.10138
head_1850	head_grp3	2738	6/30/2003	7.47	5.59	1.88	0.10138
head_1851	head_grp3	2738	6/30/2004	8.4	5.44	2.96	0.10138
head_1852	head_grp3	2738	6/30/2005	6.05	4.53	1.52	0.10138
head_1853	head_grp3	2738	6/30/2006	4.65	4.14	0.51	0.18248
head_1854	head_grp3	2738	6/30/2007	3.44	3.66	-0.22	0.18248
head_1855	head_grp3	2738	6/30/2008	5.09	4.09	1.00	0.18248
head_1856	head_grp3	2738	6/30/2010	6.6	5.69	0.91	0.10138
head_1857	head_grp3	2738	6/30/2011	6.53	5.91	0.62	0.18248
head_1858	head_grp3	2738	6/30/2012	6.61	6.13	0.48	0.18248
head_1859	head_grp3	2738	6/30/2013	7.94	6.71	1.23	0.18248
head_1860	head_grp3	2738	6/30/2014	8.23	6.89	1.34	0.18248
head_1861	head_grp3	2738	6/30/2015	7.46	6.64	0.82	0.18248

Table A-2. Post-Development (1942-2015) Groundwater Head Targets.

Target Name	Target Group	NWF ID	Date	Measured GW Elevation (NAVD88, ft)	Modelled GW Elevation (NAVD88, ft)	Residual (ft)	Target Weight
head_2041	head_grp2	2822	6/30/1969	-14	-9.98	-4.02	0.67856
head_2042	head_grp2	2822	6/30/1970	-12.45	-12.29	-0.16	0.67856
head_2043	head_grp2	2822	6/30/1971	-16.29	-15.20	-1.09	0.67856
head_2044	head_grp2	2822	6/30/1972	-21.59	-21.44	-0.15	0.67856
head_2045	head_grp2	2822	6/30/1973	-23.21	-23.85	0.64	0.67856
head_2046	head_grp2	2822	6/30/1974	-26.88	-26.04	-0.84	0.67856
head_2047	head_grp2	2822	6/30/1975	-27.85	-27.17	-0.68	0.67856
head_2048	head_grp2	2822	6/30/1976	-31.23	-30.18	-1.05	0.67856
head_2049	head_grp2	2822	6/30/1977	-35.33	-33.75	-1.58	0.67856
head_2050	head_grp2	2822	6/30/1978	-37.85	-34.32	-3.53	0.67856
head_2051	head_grp2	2822	6/30/1979	-39.85	-38.00	-1.85	0.67856
head_2052	head_grp2	2822	6/30/1980	-39.92	-39.27	-0.65	0.67856
head_2053	head_grp2	2822	6/30/1981	-37.97	-41.80	3.83	0.67856
head_2054	head_grp2	2822	6/30/1982	-49.31	-45.02	-4.29	0.67856
head_2055	head_grp2	2822	6/30/1983	-49.84	-51.11	1.27	0.67856
head_2056	head_grp2	2822	6/30/1984	-60.41	-57.25	-3.16	0.67856
head_2057	head_grp2	2822	6/30/1985	-67.27	-64.22	-3.05	0.67856
head_2058	head_grp2	2822	6/30/1986	-71.48	-69.92	-1.56	0.67856
head_2059	head_grp2	2822	6/30/1987	-76.77	-74.25	-2.52	0.67856
head_2060	head_grp2	2822	6/30/1988	-80.92	-79.21	-1.71	0.67856
head_2061	head_grp2	2822	6/30/1989	-83.66	-80.89	-2.77	0.67856
head_2062	head_grp2	2822	6/30/1990	-87.17	-84.73	-2.44	0.33928
head_2063	head_grp3	2822	6/30/1991	-82.19	-80.89	-1.30	0.10138
head_2064	head_grp3	2822	6/30/1992	-88.47	-84.15	-4.32	0.20276
head_2065	head_grp3	2822	6/30/1993	-82.19	-88.51	6.32	0.10138
head_2066	head_grp3	2822	6/30/1994	-90.39	-87.24	-3.15	0.20276
head_2067	head_grp3	2822	6/30/1995	-95.03	-86.36	-8.67	0.10138
head_2068	head_grp3	2822	6/30/1996	-93.99	-89.14	-4.85	0.10138
head_2069	head_grp3	2822	6/30/1997	-106.83	-90.20	-16.63	0.10138
head_2070	head_grp3	2822	6/30/1998	-103.07	-90.44	-12.63	0.10138
head_2071	head_grp3	2822	6/30/1999	-90.21	-87.54	-2.67	0.10138
head_2072	head_grp3	2822	6/30/2000	-109.82	-92.40	-17.42	0.10138
head_2073	head_grp3	2822	6/30/2001	-105.86	-91.00	-14.86	0.10138
head_2074	head_grp3	2822	6/30/2002	-96.3	-88.69	-7.61	0.10138
head_2075	head_grp3	2822	6/30/2003	-97.52	-85.09	-12.43	0.10138
head_2076	head_grp3	2822	6/30/2005	-93.4	-85.11	-8.29	0.10138
head_2077	head_grp3	2822	6/30/2006	-97.44	-84.78	-12.66	0.10138
head_2078	head_grp3	2822	6/30/2007	-88.12	-76.45	-11.67	0.10138
head_2079	head_grp3	2822	6/30/2008	-75.01	-70.16	-4.85	0.10138
head_2080	head_grp3	2822	6/30/2009	-73.2	-66.72	-6.48	0.10138
head_2081	head_grp3	2822	6/30/2010	-66.83	-62.48	-4.35	0.20276
head_2082	head_grp3	2822	6/30/2011	-66.75	-60.47	-6.28	0.20276
head_2083	head_grp3	2822	6/30/2012	-62	-58.03	-3.97	0.20276
head_2084	head_grp3	2822	6/30/2013	-61.46	-56.24	-5.22	0.20276

Table A-2. Post-Development (1942-2015) Groundwater Head Targets.

Target Name	Target Group	NWF ID	Date	Measured GW Elevation (NAVD88, ft)	Modelled GW Elevation (NAVD88, ft)	Residual (ft)	Target Weight
head_2085	head_grp3	2822	6/30/2014	-60.5	-56.23	-4.27	0.20276
head_2086	head_grp3	2822	6/30/2015	-60.38	-55.68	-4.70	0.20276
head_2220	head_grp2	2962	6/30/1969	9.2	16.05	-6.85	0.67856
head_2221	head_grp2	2962	6/30/1974	9.7	11.04	-1.34	0.67856
head_2222	head_grp2	2962	6/30/1975	12.9	10.62	2.28	0.67856
head_2223	head_grp2	2962	6/30/1976	12.7	9.79	2.91	0.67856
head_2224	head_grp2	2962	6/30/1977	9.62	8.77	0.85	0.67856
head_2225	head_grp2	2962	6/30/1978	10.51	7.90	2.61	0.67856
head_2226	head_grp2	2962	6/30/1979	9.62	7.23	2.39	0.67856
head_2227	head_grp2	2962	6/30/1980	9.04	6.32	2.72	0.67856
head_2228	head_grp2	2962	6/30/1981	7.86	5.08	2.78	0.67856
head_2229	head_grp2	2962	6/30/1982	7.17	3.43	3.74	0.67856
head_2230	head_grp2	2962	6/30/1983	6.36	1.61	4.75	0.67856
head_2231	head_grp2	2962	6/30/1984	3.24	-0.37	3.61	0.67856
head_2232	head_grp2	2962	6/30/1985	0.33	-2.78	3.11	0.67856
head_2233	head_grp2	2962	6/30/1986	-2.28	-5.34	3.06	0.67856
head_2234	head_grp2	2962	6/30/1987	-3.19	-7.55	4.36	0.67856
head_2235	head_grp2	2962	6/30/1988	-4.45	-9.10	4.65	0.67856
head_2236	head_grp2	2962	6/30/1989	-4.25	-10.40	6.15	0.67856
head_2237	head_grp2	2962	6/30/1990	-4.78	-11.92	7.14	0.67856
head_2238	head_grp3	2962	6/30/1991	-6.03	-12.63	6.60	0.18248
head_2239	head_grp3	2962	6/30/1992	-6.79	-13.06	6.27	0.18248
head_2240	head_grp3	2962	6/30/1994	-8.12	-15.05	6.93	0.18248
head_2241	head_grp3	2962	6/30/1995	-8.79	-15.66	6.87	0.18248
head_2242	head_grp3	2962	6/30/1996	-9.67	-16.23	6.56	0.18248
head_2243	head_grp3	2962	6/30/1997	-12.17	-16.62	4.45	0.18248
head_2244	head_grp3	2962	6/30/1998	-12.27	-17.10	4.83	0.18248
head_2245	head_grp3	2962	6/30/1999	-9.48	-17.62	8.14	0.18248
head_2246	head_grp3	2962	6/30/2000	-13.57	-18.54	4.97	0.18248
head_2247	head_grp3	2962	6/30/2001	-13.97	-19.00	5.03	0.18248
head_2248	head_grp3	2962	6/30/2003	-11.88	-17.81	5.93	0.18248
head_2249	head_grp3	2962	6/30/2004	-10.1	-19.02	8.92	0.18248
head_2250	head_grp3	2962	6/30/2012	-7.89	-11.47	3.58	0.10138
head_2251	head_grp3	2962	6/30/2013	-8.22	-10.56	2.34	0.18248
head_2252	head_grp3	2962	6/30/2014	-5.99	-9.76	3.77	0.18248
head_2253	head_grp3	2962	6/30/2015	-6.47	-9.43	2.96	0.18248
head_2254	head_grp3	2992	6/30/1994	49.93	42.72	7.21	0.10138
head_2255	head_grp3	2992	6/30/1995	50.88	42.72	8.16	0.10138
head_2256	head_grp3	2992	6/30/1996	48.11	42.72	5.39	0.10138
head_2257	head_grp3	2992	6/30/1997	47.78	42.72	5.06	0.10138
head_2258	head_grp3	2992	6/30/1998	50.86	42.72	8.14	0.10138
head_2259	head_grp3	2992	6/30/2000	45.72	42.72	3.00	0.10138
head_2260	head_grp3	2992	6/30/2001	38.67	42.71	-4.04	0.10138
head_2261	head_grp3	2992	6/30/2002	39.67	42.72	-3.05	0.20276

Table A-2. Post-Development (1942-2015) Groundwater Head Targets.

Target Name	Target Group	NWF ID	Date	Measured GW Elevation (NAVD88, ft)	Modelled GW Elevation (NAVD88, ft)	Residual (ft)	Target Weight
head_2262	head_grp3	2992	6/30/2003	47.76	42.72	5.04	0.10138
head_2263	head_grp3	2992	6/30/2008	38.59	42.70	-4.11	0.10138
head_2264	head_grp3	2992	6/30/2010	46.13	42.70	3.43	0.20276
head_2265	head_grp3	2992	6/30/2011	39.86	42.69	-2.83	0.20276
head_2266	head_grp3	2992	6/30/2012	36.93	42.70	-5.77	0.20276
head_2267	head_grp3	2992	6/30/2013	44.29	42.70	1.59	0.20276
head_2268	head_grp3	2992	6/30/2014	53.25	42.70	10.55	0.20276
head_2269	head_grp3	2992	6/30/2015	49.58	42.70	6.88	0.20276
head_2270	head_grp2	2993	6/30/1979	18.24	9.96	8.28	0.33928
head_2271	head_grp2	2993	6/30/1981	11.22	8.09	3.13	0.61071
head_2272	head_grp2	2993	6/30/1982	11.04	6.66	4.38	0.61071
head_2273	head_grp2	2993	6/30/1983	12.17	5.04	7.13	0.33928
head_2274	head_grp2	2993	6/30/1990	0.56	-7.04	7.60	0.33928
head_2275	head_grp3	2993	6/30/1991	-0.65	-7.79	7.14	0.10138
head_2276	head_grp3	2993	6/30/1992	-0.56	-8.13	7.57	0.10138
head_2277	head_grp3	2993	6/30/1995	-1.74	-10.49	8.75	0.10138
head_2278	head_grp3	2993	6/30/1996	-4.52	-10.97	6.45	0.10138
head_2279	head_grp3	2993	6/30/1998	-6.87	-11.82	4.95	0.10138
head_2280	head_grp3	2993	6/30/2000	-5.65	-13.10	7.45	0.10138
head_2281	head_grp3	2993	6/30/2001	-7.52	-13.63	6.11	0.10138
head_2282	head_grp3	2993	6/30/2002	-7.58	-13.28	5.70	0.10138
head_2283	head_grp3	2993	6/30/2003	-6.03	-12.78	6.75	0.10138
head_2284	head_grp3	2993	6/30/2004	-8.76	-13.60	4.84	0.10138
head_2285	head_grp3	2993	6/30/2005	-6.66	-13.45	6.79	0.10138
head_2286	head_grp3	2993	6/30/2006	-6.6	-13.55	6.95	0.10138
head_2287	head_grp3	2993	6/30/2007	-8.95	-13.84	4.89	0.10138
head_2288	head_grp3	2993	6/30/2008	-6.02	-12.87	6.85	0.10138
head_2289	head_grp3	2993	6/30/2010	-2.3	-8.77	6.47	0.18248
head_2290	head_grp3	2993	6/30/2011	-3.52	-8.40	4.88	0.18248
head_2291	head_grp3	2993	6/30/2012	-2.19	-7.58	5.39	0.18248
head_2292	head_grp3	2993	6/30/2013	-1.13	-6.72	5.59	0.18248
head_2293	head_grp3	2993	6/30/2014	0.15	-6.01	6.16	0.18248
head_2294	head_grp3	2993	6/30/2015	-0.7	-5.76	5.06	0.18248
head_2295	head_grp1	2994	6/30/1947	36.4	36.78	-0.38	0.76665
head_2296	head_grp1	2994	6/30/1948	33.71	35.08	-1.37	1.53329
head_2297	head_grp1	2994	6/30/1949	33.63	33.37	0.26	1.53329
head_2298	head_grp1	2994	6/30/1950	32.08	31.29	0.79	1.53329
head_2299	head_grp1	2994	6/30/1951	31.21	32.22	-1.01	1.53329
head_2300	head_grp1	2994	6/30/1952	28.98	30.58	-1.60	1.53329
head_2301	head_grp1	2994	6/30/1953	28.63	28.91	-0.28	1.53329
head_2302	head_grp1	2994	6/30/1954	22.95	27.25	-4.30	1.53329
head_2303	head_grp1	2994	6/30/1955	17.33	25.50	-8.17	1.53329
head_2304	head_grp1	2994	6/30/1956	15.89	23.61	-7.72	1.53329
head_2305	head_grp1	2994	6/30/1957	13.42	20.37	-6.95	1.53329

Table A-2. Post-Development (1942-2015) Groundwater Head Targets.

Target Name	Target Group	NWF ID	Date	Measured GW Elevation (NAVD88, ft)	Modelled GW Elevation (NAVD88, ft)	Residual (ft)	Target Weight
head_2306	head_grp1	2994	6/30/1958	14.5	19.05	-4.55	1.53329
head_2307	head_grp1	2994	6/30/1959	14.46	16.76	-2.30	1.53329
head_2308	head_grp1	2994	6/30/1960	13.18	14.39	-1.21	1.53329
head_2309	head_grp1	2994	6/30/1961	11.9	11.97	-0.07	1.53329
head_2310	head_grp1	2994	6/30/1962	5	9.38	-4.38	1.53329
head_2311	head_grp1	2994	6/30/1963	4.06	6.95	-2.89	1.53329
head_2312	head_grp1	2994	6/30/1964	5.55	4.02	1.53	1.53329
head_2313	head_grp1	2994	6/30/1965	4.97	3.05	1.92	0.76665
head_2314	head_grp2	2994	6/30/1966	-0.72	-0.99	0.27	0.33928
head_2315	head_grp2	2994	6/30/1967	-3.49	-4.92	1.43	0.33928
head_2316	head_grp2	2994	6/30/1968	-4.28	-4.68	0.40	0.33928
head_2317	head_grp2	2994	6/30/1969	-9.44	-5.61	-3.83	0.33928
head_2318	head_grp2	2994	6/30/1970	-11.54	-6.98	-4.56	0.33928
head_2319	head_grp2	2994	6/30/1971	-9.16	-8.65	-0.51	0.33928
head_2320	head_grp2	2994	6/30/1974	-35.65	-18.89	-16.76	0.33928
head_2321	head_grp2	2994	6/30/1975	-24.6	-19.72	-4.88	0.67856
head_2322	head_grp2	2994	6/30/1976	-24.95	-20.70	-4.25	0.67856
head_2323	head_grp2	2994	6/30/1977	-31.42	-22.19	-9.23	0.67856
head_2324	head_grp2	2994	6/30/1978	-27.41	-21.68	-5.73	0.67856
head_2325	head_grp2	2994	6/30/1979	-30.67	-23.86	-6.81	0.67856
head_2326	head_grp2	2994	6/30/1980	-30.82	-25.94	-4.88	0.67856
head_2327	head_grp2	2994	6/30/1981	-38.8	-28.98	-9.82	0.67856
head_2328	head_grp2	2994	6/30/1982	-37.18	-32.99	-4.19	0.67856
head_2329	head_grp2	2994	6/30/1983	-38.54	-37.12	-1.42	0.67856
head_2330	head_grp2	2994	6/30/1984	-48.71	-42.42	-6.29	0.67856
head_2331	head_grp2	2994	6/30/1985	-53.09	-47.04	-6.05	0.67856
head_2332	head_grp2	2994	6/30/1986	-62.42	-51.73	-10.69	0.67856
head_2333	head_grp2	2994	6/30/1987	-62.99	-55.64	-7.35	0.67856
head_2334	head_grp2	2994	6/30/1988	-64.62	-59.46	-5.16	0.67856
head_2335	head_grp2	2994	6/30/1989	-64.1	-61.85	-2.25	0.67856
head_2336	head_grp2	2994	6/30/1990	-67.92	-65.31	-2.61	0.33928
head_2337	head_grp3	2994	6/30/1991	-62.53	-64.39	1.86	0.10138
head_2338	head_grp3	2994	6/30/1992	-67.54	-64.48	-3.06	0.20276
head_2339	head_grp3	2994	6/30/1993	-57.62	-65.91	8.29	0.10138
head_2340	head_grp3	2994	6/30/1994	-67.71	-65.75	-1.96	0.20276
head_2341	head_grp3	2994	6/30/1995	-71.35	-66.09	-5.26	0.10138
head_2342	head_grp3	2994	6/30/1996	-69.05	-66.33	-2.72	0.10138
head_2343	head_grp3	2994	6/30/1997	-85.44	-65.76	-19.68	0.10138
head_2344	head_grp3	2994	6/30/1998	-79.89	-65.51	-14.38	0.10138
head_2345	head_grp3	2994	6/30/1999	-66.48	-66.68	0.20	0.10138
head_2346	head_grp3	2994	6/30/2000	-91.22	-66.40	-24.82	0.10138
head_2347	head_grp3	2994	6/30/2001	-81.64	-68.34	-13.30	0.10138
head_2348	head_grp3	2994	6/30/2002	-69.78	-61.92	-7.86	0.10138
head_2349	head_grp3	2994	6/30/2003	-70.06	-57.79	-12.27	0.10138

Table A-2. Post-Development (1942-2015) Groundwater Head Targets.

Target Name	Target Group	NWF ID	Date	Measured GW Elevation (NAVD88, ft)	Modelled GW Elevation (NAVD88, ft)	Residual (ft)	Target Weight
head_2350	head_grp3	2994	6/30/2005	-66.85	-59.51	-7.34	0.10138
head_2351	head_grp3	2994	6/30/2006	-70.61	-61.06	-9.55	0.10138
head_2352	head_grp3	2994	6/30/2007	-67.03	-58.94	-8.09	0.10138
head_2353	head_grp3	2994	6/30/2008	-60.2	-54.68	-5.52	0.10138
head_2354	head_grp3	2994	6/30/2010	-50.38	-46.05	-4.33	0.10138
head_2355	head_grp3	2994	6/30/2011	-54.46	-46.38	-8.08	0.20276
head_2356	head_grp3	2994	6/30/2012	-48.69	-42.79	-5.90	0.20276
head_2357	head_grp3	2994	6/30/2013	-46.76	-39.34	-7.42	0.20276
head_2358	head_grp3	2994	6/30/2014	-43.53	-38.39	-5.14	0.20276
head_2359	head_grp3	2994	6/30/2015	-45.64	-37.62	-8.02	0.20276
head_2360	head_grp1	2995	6/30/1958	22.6	18.38	4.22	0.76665
head_2361	head_grp2	2995	6/30/1978	-28.22	-27.56	-0.66	0.33928
head_2362	head_grp2	2995	6/30/1979	-32.06	-30.06	-2.00	0.61071
head_2363	head_grp2	2995	6/30/1980	-34.24	-32.72	-1.52	0.61071
head_2364	head_grp2	2995	6/30/1981	-38.48	-35.96	-2.52	0.61071
head_2365	head_grp2	2995	6/30/1982	-37.9	-40.33	2.43	0.61071
head_2366	head_grp2	2995	6/30/1983	-41.05	-44.94	3.89	0.61071
head_2367	head_grp2	2995	6/30/1984	-47.11	-50.79	3.68	0.61071
head_2368	head_grp2	2995	6/30/1985	-52.94	-56.48	3.54	0.61071
head_2369	head_grp2	2995	6/30/1986	-63.17	-61.23	-1.94	0.61071
head_2370	head_grp2	2995	6/30/1987	-66.19	-65.40	-0.79	0.61071
head_2371	head_grp2	2995	6/30/1988	-66.96	-69.73	2.77	0.61071
head_2372	head_grp2	2995	6/30/1989	-63.87	-72.14	8.27	0.61071
head_2373	head_grp2	2995	6/30/1990	-72.68	-75.34	2.66	0.33928
head_2374	head_grp3	2995	6/30/1991	-64.75	-74.74	9.99	0.10138
head_2375	head_grp3	2995	6/30/1992	-78.5	-74.25	-4.25	0.10138
head_2376	head_grp3	2995	6/30/1993	-58.96	-74.47	15.51	0.10138
head_2377	head_grp3	2995	6/30/1995	-86.3	-72.66	-13.64	0.10138
head_2378	head_grp3	2995	6/30/2000	-97.08	-72.04	-25.04	0.10138
head_2379	head_grp3	2995	6/30/2001	-89.17	-74.85	-14.32	0.10138
head_2380	head_grp3	2995	6/30/2002	-70.73	-67.42	-3.31	0.10138
head_2381	head_grp3	2995	6/30/2003	-70.67	-62.68	-7.99	0.10138
head_2382	head_grp3	2995	6/30/2005	-66.34	-62.37	-3.97	0.10138
head_2383	head_grp3	2995	6/30/2006	-70.16	-63.13	-7.03	0.10138
head_2384	head_grp3	2995	6/30/2007	-67.38	-62.32	-5.06	0.10138
head_2385	head_grp3	2995	6/30/2008	-60.53	-56.29	-4.24	0.10138
head_2386	head_grp3	2995	6/30/2009	-41.6	-50.88	9.28	0.10138
head_2387	head_grp3	2995	6/30/2010	-49.52	-47.11	-2.41	0.10138
head_2388	head_grp3	2995	6/30/2011	-53.34	-46.07	-7.27	0.18248
head_2389	head_grp3	2995	6/30/2012	-46.45	-42.66	-3.79	0.18248
head_2390	head_grp3	2995	6/30/2013	-41.94	-39.82	-2.12	0.10138
head_2391	head_grp3	2995	6/30/2014	-43.2	-38.79	-4.41	0.10138
head_2415	head_grp1	3082	6/30/1963	15.71	20.49	-4.78	0.76665
head_2416	head_grp3	3082	6/30/1996	21.75	20.39	1.36	0.10138

Table A-2. Post-Development (1942-2015) Groundwater Head Targets.

Target Name	Target Group	NWF ID	Date	Measured GW Elevation (NAVD88, ft)	Modelled GW Elevation (NAVD88, ft)	Residual (ft)	Target Weight
head_2417	head_grp3	3082	6/30/1998	20.35	20.38	-0.03	0.10138
head_2418	head_grp3	3082	6/30/2000	17.9	20.37	-2.47	0.10138
head_2419	head_grp3	3082	6/30/2008	29.5	20.35	9.15	0.10138
head_2420	head_grp3	3082	6/30/2010	23.63	20.35	3.28	0.18248
head_2421	head_grp3	3082	6/30/2011	20.84	20.35	0.49	0.18248
head_2422	head_grp3	3082	6/30/2012	22.38	20.35	2.03	0.18248
head_2423	head_grp3	3082	6/30/2013	26.35	20.35	6.00	0.18248
head_2424	head_grp3	3082	6/30/2014	28.14	20.35	7.79	0.18248
head_2425	head_grp3	3082	6/30/2015	26.85	20.34	6.51	0.18248
head_2460	head_grp1	3101	6/30/1947	35.42	31.22	4.20	0.76665
head_2461	head_grp1	3101	6/30/1948	33.02	31.04	1.98	1.53329
head_2462	head_grp1	3101	6/30/1949	33.32	30.87	2.45	1.53329
head_2463	head_grp1	3101	6/30/1950	32.03	30.70	1.33	1.53329
head_2464	head_grp1	3101	6/30/1951	31.52	30.52	1.00	1.53329
head_2465	head_grp1	3101	6/30/1952	31.05	30.35	0.70	1.53329
head_2466	head_grp1	3101	6/30/1953	31.12	30.17	0.95	1.53329
head_2467	head_grp1	3101	6/30/1954	30.9	30.00	0.90	1.53329
head_2468	head_grp1	3101	6/30/1955	28.9	29.83	-0.93	1.53329
head_2469	head_grp1	3101	6/30/1956	27.71	29.63	-1.92	1.53329
head_2470	head_grp1	3101	6/30/1957	27.72	29.43	-1.71	1.53329
head_2471	head_grp1	3101	6/30/1958	29.24	29.22	0.02	1.53329
head_2472	head_grp1	3101	6/30/1959	28.67	28.98	-0.31	1.53329
head_2473	head_grp1	3101	6/30/1960	28.77	28.72	0.05	1.53329
head_2474	head_grp1	3101	6/30/1961	28.35	28.46	-0.11	1.53329
head_2475	head_grp1	3101	6/30/1962	27.85	28.18	-0.33	1.53329
head_2476	head_grp1	3101	6/30/1963	26.66	27.90	-1.24	1.53329
head_2477	head_grp2	3101	6/30/1969	-1.98	26.01	-27.99	0.33928
head_2478	head_grp2	3101	6/30/1974	12.6	24.43	-11.83	0.33928
head_2479	head_grp2	3101	6/30/1975	19.34	24.20	-4.86	0.67856
head_2480	head_grp2	3101	6/30/1976	17.78	23.98	-6.20	0.67856
head_2481	head_grp2	3101	6/30/1977	14.22	23.66	-9.44	0.67856
head_2482	head_grp2	3101	6/30/1978	17.33	23.36	-6.03	0.67856
head_2483	head_grp2	3101	6/30/1979	16.79	23.10	-6.31	0.67856
head_2484	head_grp2	3101	6/30/1980	17.65	22.79	-5.14	0.67856
head_2485	head_grp2	3101	6/30/1981	17.25	22.41	-5.16	0.67856
head_2486	head_grp2	3101	6/30/1982	17.26	21.91	-4.65	0.67856
head_2487	head_grp2	3101	6/30/1983	18.32	21.32	-3.00	0.67856
head_2488	head_grp2	3101	6/30/1984	16.02	20.69	-4.67	0.67856
head_2489	head_grp2	3101	6/30/1985	16.3	19.98	-3.68	0.67856
head_2490	head_grp2	3101	6/30/1986	16.04	19.07	-3.03	0.67856
head_2491	head_grp2	3101	6/30/1987	15.94	18.33	-2.39	0.67856
head_2492	head_grp2	3101	6/30/1988	15.65	17.67	-2.02	0.67856
head_2493	head_grp2	3101	6/30/1989	15.72	17.24	-1.52	0.67856
head_2494	head_grp2	3101	6/30/1990	15.23	16.73	-1.50	0.67856

Table A-2. Post-Development (1942-2015) Groundwater Head Targets.

Target Name	Target Group	NWF ID	Date	Measured GW Elevation (NAVD88, ft)	Modelled GW Elevation (NAVD88, ft)	Residual (ft)	Target Weight
head_2495	head_grp3	3101	6/30/1991	15.17	16.22	-1.05	0.20276
head_2496	head_grp3	3101	6/30/1992	14.47	16.03	-1.56	0.20276
head_2497	head_grp3	3101	6/30/1993	13.42	15.72	-2.30	0.20276
head_2498	head_grp3	3101	6/30/1994	13.19	15.25	-2.06	0.20276
head_2499	head_grp3	3101	6/30/1995	14.2	15.02	-0.82	0.10138
head_2500	head_grp3	3101	6/30/1996	13.79	14.81	-1.02	0.10138
head_2501	head_grp3	3101	6/30/1997	12.83	14.37	-1.54	0.10138
head_2502	head_grp3	3101	6/30/1998	12.66	13.60	-0.94	0.10138
head_2503	head_grp3	3101	6/30/1999	13.13	12.80	0.33	0.10138
head_2504	head_grp3	3101	6/30/2000	10.47	12.10	-1.63	0.10138
head_2505	head_grp3	3101	6/30/2001	9.89	11.71	-1.82	0.10138
head_2506	head_grp3	3101	6/30/2002	8.96	10.89	-1.93	0.10138
head_2507	head_grp3	3101	6/30/2003	10.23	11.06	-0.83	0.10138
head_2508	head_grp3	3101	6/30/2004	8.62	10.81	-2.19	0.10138
head_2509	head_grp3	3101	6/30/2006	6.28	8.58	-2.30	0.20276
head_2510	head_grp3	3101	6/30/2007	4.9	8.01	-3.11	0.20276
head_2511	head_grp3	3101	6/30/2008	6.59	8.60	-2.01	0.20276
head_2512	head_grp3	3101	6/30/2010	7.03	9.44	-2.41	0.20276
head_2513	head_grp3	3101	6/30/2011	7.17	9.62	-2.45	0.10138
head_2514	head_grp3	3101	6/30/2012	6.26	9.73	-3.47	0.20276
head_2515	head_grp3	3101	6/30/2013	7.22	10.36	-3.14	0.20276
head_2516	head_grp3	3101	6/30/2014	7.62	10.24	-2.62	0.20276
head_2517	head_grp3	3101	6/30/2015	6.05	9.71	-3.66	0.10138
head_2533	head_grp2	3188	6/30/1988	39.75	12.95	26.80	0.33928
head_2534	head_grp3	3188	6/30/1994	40.9	5.01	35.89	0.10138
head_2535	head_grp3	3188	6/30/1995	40.04	4.63	35.41	0.10138
head_2536	head_grp3	3188	6/30/1996	39.44	4.32	35.12	0.18248
head_2537	head_grp3	3188	6/30/1997	39.9	4.02	35.88	0.10138
head_2538	head_grp3	3188	6/30/1998	40.82	3.79	37.03	0.10138
head_2539	head_grp3	3188	6/30/1999	42.16	3.58	38.58	0.10138
head_2540	head_grp3	3188	6/30/2000	33.38	3.35	30.03	0.10138
head_2541	head_grp3	3188	6/30/2001	33.97	2.95	31.02	0.10138
head_2542	head_grp3	3188	6/30/2002	32.83	2.84	29.99	0.10138
head_2543	head_grp3	3188	6/30/2003	37.59	3.28	34.31	0.10138
head_2544	head_grp3	3188	6/30/2005	40.21	4.08	36.13	0.10138
head_2545	head_grp3	3188	6/30/2006	36.87	4.36	32.51	0.10138
head_2546	head_grp3	3188	6/30/2007	33.65	4.56	29.09	0.10138
head_2547	head_grp3	3188	6/30/2008	35.06	5.26	29.80	0.10138
head_2548	head_grp3	3188	6/30/2010	37.53	7.60	29.93	0.18248
head_2549	head_grp3	3188	6/30/2011	33.36	8.86	24.50	0.18248
head_2550	head_grp3	3188	6/30/2012	32.41	9.92	22.49	0.18248
head_2551	head_grp3	3188	6/30/2013	35.79	11.18	24.61	0.18248
head_2552	head_grp3	3188	6/30/2014	42.5	12.33	30.17	0.18248
head_2553	head_grp3	3188	6/30/2015	38.15	13.17	24.98	0.10138

Table A-2. Post-Development (1942-2015) Groundwater Head Targets.

Target Name	Target Group	NWF ID	Date	Measured GW Elevation (NAVD88, ft)	Modelled GW Elevation (NAVD88, ft)	Residual (ft)	Target Weight
head_2554	head_grp1	3209	6/30/1948	60.52	59.30	1.22	1.53329
head_2555	head_grp1	3209	6/30/1949	60.62	57.79	2.83	1.53329
head_2556	head_grp1	3209	6/30/1950	58.53	56.21	2.32	0.76665
head_2557	head_grp1	3209	6/30/1951	60.45	54.33	6.12	1.53329
head_2558	head_grp1	3209	6/30/1952	57.78	52.71	5.07	1.53329
head_2559	head_grp1	3209	6/30/1953	56.37	51.13	5.24	1.53329
head_2560	head_grp1	3209	6/30/1954	52.27	49.58	2.69	1.53329
head_2561	head_grp1	3209	6/30/1955	44.62	47.83	-3.21	1.53329
head_2562	head_grp1	3209	6/30/1956	42.76	45.97	-3.21	1.53329
head_2563	head_grp1	3209	6/30/1957	36.9	44.04	-7.14	1.53329
head_2564	head_grp1	3209	6/30/1958	35.01	41.36	-6.35	1.53329
head_2565	head_grp1	3209	6/30/1959	33.65	38.70	-5.05	1.53329
head_2566	head_grp1	3209	6/30/1960	31.57	36.25	-4.68	1.53329
head_2567	head_grp1	3209	6/30/1961	28.67	33.63	-4.96	1.53329
head_2568	head_grp1	3209	6/30/1962	23.39	30.64	-7.25	1.53329
head_2569	head_grp1	3209	6/30/1963	24.48	27.77	-3.29	0.76665
head_2570	head_grp1	3209	6/30/1964	27.97	24.76	3.21	1.53329
head_2571	head_grp1	3209	6/30/1965	26.38	22.01	4.37	1.53329
head_2572	head_grp2	3209	6/30/1966	23.67	19.04	4.63	0.67856
head_2573	head_grp2	3209	6/30/1967	22.91	15.72	7.19	0.67856
head_2574	head_grp2	3209	6/30/1978	-2.48	-6.93	4.45	0.33928
head_2575	head_grp2	3209	6/30/1979	-10.72	-8.47	-2.25	0.67856
head_2576	head_grp2	3209	6/30/1980	-12.16	-9.99	-2.17	0.67856
head_2577	head_grp2	3209	6/30/1981	-13.85	-11.95	-1.90	0.67856
head_2578	head_grp2	3209	6/30/1982	-15.24	-15.05	-0.19	0.67856
head_2579	head_grp2	3209	6/30/1983	-18.01	-18.77	0.76	0.67856
head_2580	head_grp2	3209	6/30/1984	-24.52	-23.40	-1.12	0.67856
head_2581	head_grp2	3209	6/30/1985	-29.79	-28.65	-1.14	0.67856
head_2582	head_grp2	3209	6/30/1986	-36.84	-33.48	-3.36	0.67856
head_2583	head_grp2	3209	6/30/1987	-40.3	-37.55	-2.75	0.67856
head_2584	head_grp2	3209	6/30/1988	-44.16	-42.09	-2.07	0.67856
head_2585	head_grp2	3209	6/30/1989	-40.88	-44.54	3.66	0.67856
head_2586	head_grp2	3209	6/30/1990	-44.79	-47.43	2.64	0.33928
head_2587	head_grp3	3209	6/30/1991	-43.33	-48.01	4.68	0.10138
head_2588	head_grp3	3209	6/30/1992	-48.87	-48.81	-0.06	0.10138
head_2589	head_grp3	3209	6/30/1993	-42.52	-50.11	7.59	0.10138
head_2590	head_grp3	3209	6/30/1994	-53.44	-50.13	-3.31	0.10138
head_2591	head_grp3	3209	6/30/1995	-52.22	-49.83	-2.39	0.10138
head_2592	head_grp3	3209	6/30/1996	-48.93	-50.58	1.65	0.20276
head_2593	head_grp3	3209	6/30/1997	-55.27	-50.87	-4.40	0.10138
head_2594	head_grp3	3209	6/30/1998	-53.33	-51.14	-2.19	0.10138
head_2595	head_grp3	3209	6/30/1999	-47.88	-51.41	3.53	0.10138
head_2596	head_grp3	3209	6/30/2000	-60.48	-52.77	-7.71	0.10138
head_2597	head_grp3	3209	6/30/2001	-54.04	-53.34	-0.70	0.10138

Table A-2. Post-Development (1942-2015) Groundwater Head Targets.

Target Name	Target Group	NWF ID	Date	Measured GW Elevation (NAVD88, ft)	Modelled GW Elevation (NAVD88, ft)	Residual (ft)	Target Weight
head_2598	head_grp3	3209	6/30/2002	-60.48	-51.07	-9.41	0.10138
head_2599	head_grp3	3209	6/30/2003	-50.83	-48.15	-2.68	0.10138
head_2600	head_grp3	3209	6/30/2005	-49.67	-48.34	-1.33	0.10138
head_2601	head_grp3	3209	6/30/2006	-49.69	-48.41	-1.28	0.10138
head_2602	head_grp3	3209	6/30/2007	-49.69	-46.46	-3.23	0.10138
head_2603	head_grp3	3209	6/30/2008	-41.84	-42.93	1.09	0.10138
head_2604	head_grp3	3209	6/30/2009	-38.59	-39.64	1.05	0.10138
head_2605	head_grp3	3209	6/30/2010	-34.4	-36.50	2.10	0.20276
head_2606	head_grp3	3209	6/30/2011	-34.99	-35.04	0.05	0.20276
head_2607	head_grp3	3209	6/30/2012	-32.13	-32.83	0.70	0.10138
head_2608	head_grp3	3209	6/30/2013	-30.89	-29.89	-1.00	0.20276
head_2609	head_grp3	3209	6/30/2014	-27.8	-29.03	1.23	0.20276
head_2610	head_grp3	3209	6/30/2015	-30.76	-28.33	-2.43	0.10138
head_2611	head_grp2	3210	6/30/1980	-8.96	-10.46	1.50	0.61071
head_2612	head_grp2	3210	6/30/1981	-10.89	-12.40	1.51	0.61071
head_2613	head_grp2	3210	6/30/1982	-17.42	-15.49	-1.93	0.33928
head_2614	head_grp2	3210	6/30/1983	-16.81	-19.14	2.33	0.61071
head_2615	head_grp2	3210	6/30/1984	-23.08	-23.71	0.63	0.61071
head_2616	head_grp2	3210	6/30/1985	-28.08	-28.90	0.82	0.61071
head_2617	head_grp2	3210	6/30/1986	-33.7	-33.68	-0.02	0.61071
head_2618	head_grp2	3210	6/30/1987	-35.78	-37.72	1.94	0.61071
head_2619	head_grp2	3210	6/30/1988	-39.64	-42.18	2.54	0.61071
head_2620	head_grp2	3210	6/30/1989	-41.4	-44.62	3.22	0.61071
head_2621	head_grp2	3210	6/30/1990	-45.51	-47.44	1.93	0.33928
head_2622	head_grp3	3210	6/30/1991	-42.88	-48.15	5.27	0.10138
head_2623	head_grp3	3210	6/30/1992	-46.15	-48.84	2.69	0.18248
head_2624	head_grp3	3210	6/30/1993	-42.39	-50.03	7.64	0.10138
head_2625	head_grp3	3210	6/30/1994	-47.28	-50.07	2.79	0.10138
head_2626	head_grp3	3210	6/30/1996	-49.71	-50.40	0.69	0.18248
head_2627	head_grp3	3210	6/30/1997	-59.73	-50.63	-9.10	0.10138
head_2628	head_grp3	3210	6/30/1998	-53.06	-50.83	-2.23	0.10138
head_2629	head_grp3	3210	6/30/1999	-47.84	-51.10	3.26	0.10138
head_2630	head_grp3	3210	6/30/2000	-59.2	-52.36	-6.84	0.10138
head_2631	head_grp3	3210	6/30/2002	-54.95	-50.70	-4.25	0.10138
head_2632	head_grp3	3210	6/30/2003	-50.65	-47.78	-2.87	0.10138
head_2633	head_grp3	3210	6/30/2005	-49.64	-47.99	-1.65	0.10138
head_2634	head_grp3	3210	6/30/2006	-49.59	-48.00	-1.59	0.10138
head_2635	head_grp3	3210	6/30/2007	-46.9	-46.16	-0.74	0.10138
head_2636	head_grp3	3210	6/30/2008	-41.53	-42.67	1.14	0.10138
head_2637	head_grp3	3210	6/30/2009	-38.88	-39.38	0.50	0.10138
head_2638	head_grp3	3210	6/30/2010	-34.64	-36.23	1.59	0.18248
head_2639	head_grp3	3210	6/30/2011	-35.59	-34.72	-0.87	0.18248
head_2640	head_grp3	3210	6/30/2012	-31.72	-32.57	0.85	0.18248
head_2641	head_grp3	3210	6/30/2013	-29.33	-29.67	0.34	0.18248

Table A-2. Post-Development (1942-2015) Groundwater Head Targets.

Target Name	Target Group	NWF ID	Date	Measured GW Elevation (NAVD88, ft)	Modelled GW Elevation (NAVD88, ft)	Residual (ft)	Target Weight
head_2642	head_grp3	3210	6/30/2014	-27.93	-28.79	0.86	0.18248
head_2643	head_grp3	3210	6/30/2015	-27.92	-28.11	0.19	0.18248
head_2692	head_grp2	3280	6/30/1988	14.9	34.33	-19.43	0.33928
head_2693	head_grp3	3280	6/30/2006	7.2	22.01	-14.81	0.10138
head_2694	head_grp3	3280	6/30/2010	9.68	22.90	-13.22	0.18248
head_2695	head_grp3	3280	6/30/2011	9	23.84	-14.84	0.10138
head_2696	head_grp3	3280	6/30/2012	9.36	24.19	-14.83	0.10138
head_2697	head_grp3	3280	6/30/2013	11.51	25.21	-13.70	0.10138
head_2698	head_grp3	3280	6/30/2014	12.97	26.35	-13.38	0.10138
head_2699	head_grp3	3280	6/30/2015	12.93	27.20	-14.27	0.10138
head_2700	head_grp2	3293	6/30/1968	11.04	28.57	-17.53	0.67856
head_2701	head_grp2	3293	6/30/1969	11.65	28.34	-16.69	0.67856
head_2702	head_grp2	3293	6/30/1970	13.54	28.15	-14.61	0.67856
head_2703	head_grp2	3293	6/30/1976	18.63	26.83	-8.20	0.33928
head_2704	head_grp2	3293	6/30/1977	16.71	26.62	-9.91	0.33928
head_2705	head_grp2	3293	6/30/1978	17.96	26.40	-8.44	0.67856
head_2706	head_grp2	3293	6/30/1979	17.92	26.20	-8.28	0.67856
head_2707	head_grp2	3293	6/30/1980	19.77	25.99	-6.22	0.33928
head_2708	head_grp2	3293	6/30/1981	17.12	25.75	-8.63	0.33928
head_2709	head_grp2	3293	6/30/1982	18.79	25.42	-6.63	0.33928
head_2710	head_grp2	3293	6/30/1983	19.38	25.03	-5.65	0.33928
head_2711	head_grp2	3293	6/30/1984	15.66	24.59	-8.93	0.33928
head_2712	head_grp2	3293	6/30/1985	17.11	24.11	-7.00	0.33928
head_2713	head_grp2	3293	6/30/1986	17.07	23.53	-6.46	0.33928
head_2714	head_grp2	3293	6/30/1987	17.26	22.94	-5.68	0.33928
head_2715	head_grp2	3293	6/30/1988	17.31	22.42	-5.11	0.33928
head_2716	head_grp2	3293	6/30/1989	17.38	22.03	-4.65	0.33928
head_2717	head_grp2	3293	6/30/1990	16.89	21.71	-4.82	0.33928
head_2718	head_grp3	3293	6/30/1991	16.21	21.29	-5.08	0.10138
head_2719	head_grp3	3293	6/30/1992	16.03	21.09	-5.06	0.10138
head_2720	head_grp3	3293	6/30/1995	13.63	20.19	-6.56	0.10138
head_2721	head_grp3	3293	6/30/1996	13.88	20.01	-6.13	0.10138
head_2722	head_grp3	3293	6/30/1998	14.85	19.15	-4.30	0.10138
head_2723	head_grp3	3293	6/30/2000	10.85	17.71	-6.86	0.10138
head_2724	head_grp3	3293	6/30/2001	10.94	17.04	-6.10	0.10138
head_2725	head_grp3	3293	6/30/2003	9.55	15.53	-5.98	0.10138
head_2726	head_grp3	3293	6/30/2004	8.64	15.37	-6.73	0.20276
head_2727	head_grp3	3293	6/30/2005	8.04	14.23	-6.19	0.20276
head_2728	head_grp3	3293	6/30/2006	6	13.23	-7.23	0.20276
head_2729	head_grp3	3293	6/30/2007	3.86	12.50	-8.64	0.20276
head_2730	head_grp3	3293	6/30/2008	5.84	12.52	-6.68	0.20276
head_2731	head_grp3	3293	6/30/2010	7.86	13.21	-5.35	0.20276
head_2732	head_grp3	3293	6/30/2011	6.42	13.05	-6.63	0.20276
head_2733	head_grp3	3293	6/30/2012	8.08	13.26	-5.18	0.20276

Table A-2. Post-Development (1942-2015) Groundwater Head Targets.

Target Name	Target Group	NWF ID	Date	Measured GW Elevation (NAVD88, ft)	Modelled GW Elevation (NAVD88, ft)	Residual (ft)	Target Weight
head_2734	head_grp3	3293	6/30/2013	8.48	13.57	-5.09	0.20276
head_2735	head_grp3	3293	6/30/2014	8.55	13.66	-5.11	0.20276
head_2736	head_grp3	3293	6/30/2015	5.94	13.14	-7.20	0.20276
head_2896	head_grp2	3441	6/30/1968	17.47	21.62	-4.15	0.33928
head_2897	head_grp3	3441	6/30/2003	21.13	18.28	2.85	0.10138
head_2898	head_grp3	3441	6/30/2004	20.31	18.19	2.12	0.18248
head_2899	head_grp3	3441	6/30/2005	20.45	17.63	2.82	0.18248
head_2900	head_grp3	3441	6/30/2006	17.16	17.32	-0.16	0.18248
head_2901	head_grp3	3441	6/30/2007	15.64	17.07	-1.43	0.18248
head_2902	head_grp3	3441	6/30/2008	17.33	17.02	0.31	0.18248
head_2903	head_grp3	3441	6/30/2010	16.69	15.63	1.06	0.18248
head_3077	head_grp3	3502	6/30/2006	15.19	17.50	-2.31	0.18248
head_3078	head_grp3	3502	6/30/2007	14.88	17.34	-2.46	0.10138
head_3079	head_grp3	3502	6/30/2010	16.38	16.52	-0.14	0.10138
head_3080	head_grp3	3502	6/30/2011	13.3	16.51	-3.21	0.18248
head_3081	head_grp3	3502	6/30/2012	13.34	16.38	-3.04	0.18248
head_3082	head_grp3	3502	6/30/2013	15.76	16.33	-0.57	0.18248
head_3083	head_grp3	3502	6/30/2014	15.87	16.03	-0.16	0.18248
head_3084	head_grp3	3502	6/30/2015	14.17	15.55	-1.38	0.18248
head_3085	head_grp3	3540	6/30/2003	13.38	15.72	-2.34	0.10138
head_3086	head_grp3	3540	6/30/2004	12.4	15.60	-3.20	0.20276
head_3087	head_grp3	3540	6/30/2005	10.23	13.49	-3.26	0.10138
head_3088	head_grp3	3540	6/30/2006	7.82	12.23	-4.41	0.20276
head_3089	head_grp3	3540	6/30/2007	5.05	11.42	-6.37	0.20276
head_3090	head_grp3	3540	6/30/2008	7.17	11.67	-4.50	0.20276
head_3091	head_grp3	3540	6/30/2010	9.03	12.23	-3.20	0.20276
head_3092	head_grp3	3540	6/30/2011	9.9	12.88	-2.98	0.20276
head_3093	head_grp3	3540	6/30/2012	6.87	12.20	-5.33	0.20276
head_3094	head_grp3	3540	6/30/2013	10.8	13.26	-2.46	0.20276
head_3095	head_grp3	3540	6/30/2014	9.71	12.50	-2.79	0.20276
head_3096	head_grp3	3540	6/30/2015	8.57	11.85	-3.28	0.20276
head_3097	head_grp2	3555	6/30/1974	64.52	79.29	-14.77	0.33928
head_3098	head_grp2	3555	6/30/1983	67.81	79.71	-11.90	0.67856
head_3099	head_grp2	3555	6/30/1984	65.04	76.97	-11.93	0.67856
head_3100	head_grp2	3555	6/30/1985	62.58	74.50	-11.92	0.67856
head_3101	head_grp2	3555	6/30/1986	59	71.67	-12.67	0.67856
head_3102	head_grp2	3555	6/30/1987	55.96	68.50	-12.54	0.67856
head_3103	head_grp2	3555	6/30/1988	53.83	65.55	-11.72	0.33928
head_3104	head_grp2	3555	6/30/1990	50.8	61.71	-10.91	0.33928
head_3105	head_grp3	3555	6/30/1991	50.44	60.61	-10.17	0.20276
head_3106	head_grp3	3555	6/30/1992	49.76	59.84	-10.08	0.10138
head_3107	head_grp3	3555	6/30/1993	49.24	59.18	-9.94	0.10138
head_3108	head_grp3	3555	6/30/1994	48.78	58.89	-10.11	0.10138
head_3109	head_grp3	3555	6/30/1995	48.93	59.09	-10.16	0.10138

Table A-2. Post-Development (1942-2015) Groundwater Head Targets.

Target Name	Target Group	NWF ID	Date	Measured GW Elevation (NAVD88, ft)	Modelled GW Elevation (NAVD88, ft)	Residual (ft)	Target Weight
head_3110	head_grp3	3555	6/30/1996	48.75	59.39	-10.64	0.10138
head_3111	head_grp3	3555	6/30/1997	50.28	60.12	-9.84	0.10138
head_3112	head_grp3	3555	6/30/1998	50.96	61.43	-10.47	0.10138
head_3113	head_grp3	3555	6/30/1999	49.85	61.79	-11.94	0.10138
head_3114	head_grp3	3555	6/30/2000	47.7	61.04	-13.34	0.10138
head_3115	head_grp3	3555	6/30/2001	45.37	60.08	-14.71	0.10138
head_3116	head_grp3	3555	6/30/2002	44.09	58.85	-14.76	0.10138
head_3117	head_grp3	3555	6/30/2003	45.05	58.62	-13.57	0.10138
head_3118	head_grp3	3555	6/30/2007	45.21	58.90	-13.69	0.10138
head_3119	head_grp3	3555	6/30/2008	45.74	58.12	-12.38	0.10138
head_3120	head_grp3	3555	6/30/2010	47.67	57.01	-9.34	0.20276
head_3121	head_grp3	3555	6/30/2011	48.72	57.85	-9.13	0.20276
head_3122	head_grp3	3555	6/30/2012	49.67	58.56	-8.89	0.20276
head_3123	head_grp3	3555	6/30/2013	50.86	59.93	-9.07	0.20276
head_3124	head_grp3	3555	6/30/2014	53.65	61.29	-7.64	0.20276
head_3125	head_grp3	3555	6/30/2015	54.58	62.39	-7.81	0.20276
head_3126	head_grp2	3588	6/30/1968	4.08	27.87	-23.79	0.33928
head_3127	head_grp2	3588	6/30/1978	19.9	26.76	-6.86	0.33928
head_3128	head_grp3	3588	6/30/2004	21.6	20.29	1.31	0.18248
head_3129	head_grp3	3588	6/30/2005	21.09	18.84	2.25	0.18248
head_3130	head_grp3	3588	6/30/2006	16.16	18.05	-1.89	0.18248
head_3131	head_grp3	3588	6/30/2007	15.24	17.41	-2.17	0.18248
head_3132	head_grp3	3588	6/30/2008	16.33	17.26	-0.93	0.18248
head_3133	head_grp3	3588	6/30/2010	15.59	15.44	0.15	0.18248
head_3134	head_grp3	3588	6/30/2011	14.11	15.73	-1.62	0.18248
head_3135	head_grp3	3588	6/30/2012	12.44	15.03	-2.59	0.18248
head_3136	head_grp3	3588	6/30/2013	14.96	15.28	-0.32	0.18248
head_3137	head_grp3	3588	6/30/2014	13.36	14.31	-0.95	0.18248
head_3138	head_grp3	3588	6/30/2015	12.85	13.67	-0.82	0.18248
head_3139	head_grp2	3642	6/30/1978	30.83	28.37	2.46	0.33928
head_3140	head_grp2	3642	6/30/1979	29.52	27.33	2.19	0.61071
head_3141	head_grp2	3642	6/30/1980	28.18	26.23	1.95	0.61071
head_3142	head_grp2	3642	6/30/1981	26.62	24.90	1.72	0.61071
head_3143	head_grp2	3642	6/30/1982	24.87	22.47	2.40	0.61071
head_3144	head_grp2	3642	6/30/1983	23.42	19.50	3.92	0.61071
head_3145	head_grp2	3642	6/30/1984	20.29	15.98	4.31	0.61071
head_3146	head_grp2	3642	6/30/1985	16.05	11.83	4.22	0.61071
head_3147	head_grp2	3642	6/30/1986	12.88	7.37	5.51	0.61071
head_3148	head_grp2	3642	6/30/1987	7.75	3.27	4.48	0.61071
head_3149	head_grp2	3642	6/30/1988	5.64	-0.23	5.87	0.61071
head_3150	head_grp2	3642	6/30/1989	3.37	-3.07	6.44	0.61071
head_3151	head_grp2	3642	6/30/1990	2.35	-5.61	7.96	0.33928
head_3152	head_grp3	3642	6/30/1991	0.1	-7.30	7.40	0.10138
head_3153	head_grp3	3642	6/30/1992	-2.7	-8.17	5.47	0.18248

Table A-2. Post-Development (1942-2015) Groundwater Head Targets.

Target Name	Target Group	NWF ID	Date	Measured GW Elevation (NAVD88, ft)	Modelled GW Elevation (NAVD88, ft)	Residual (ft)	Target Weight
head_3154	head_grp3	3642	6/30/1993	-1.59	-10.00	8.41	0.10138
head_3155	head_grp3	3642	6/30/1994	-7.31	-11.70	4.39	0.18248
head_3156	head_grp3	3642	6/30/1995	-8.67	-12.47	3.80	0.10138
head_3157	head_grp3	3642	6/30/1996	-10.82	-13.84	3.02	0.10138
head_3158	head_grp3	3642	6/30/1997	-15.52	-15.14	-0.38	0.10138
head_3159	head_grp3	3642	6/30/1998	-15.39	-16.30	0.91	0.10138
head_3160	head_grp3	3642	6/30/1999	-13.73	-17.28	3.55	0.10138
head_3161	head_grp3	3642	6/30/2000	-20.09	-18.67	-1.42	0.10138
head_3162	head_grp3	3642	6/30/2001	-18.04	-19.78	1.74	0.10138
head_3163	head_grp3	3642	6/30/2002	-18.62	-19.52	0.90	0.10138
head_3164	head_grp3	3642	6/30/2003	-17.79	-18.41	0.62	0.10138
head_3165	head_grp3	3642	6/30/2005	-14.44	-17.37	2.93	0.10138
head_3166	head_grp3	3642	6/30/2006	-14.59	-17.39	2.80	0.10138
head_3167	head_grp3	3642	6/30/2008	-12.6	-16.10	3.50	0.10138
head_3168	head_grp3	3642	6/30/2010	-7.06	-11.65	4.59	0.18248
head_3169	head_grp3	3642	6/30/2011	-8.01	-10.55	2.54	0.18248
head_3170	head_grp3	3642	6/30/2012	-5.86	-9.01	3.15	0.18248
head_3171	head_grp3	3642	6/30/2013	-2.23	-5.93	3.70	0.18248
head_3172	head_grp3	3642	6/30/2014	-1.19	-4.64	3.45	0.18248
head_3173	head_grp3	3642	6/30/2015	-1.83	-3.85	2.02	0.18248
head_3174	head_grp2	3680	6/30/1989	45.27	26.75	18.52	0.33928
head_3175	head_grp2	3680	6/30/1990	40.47	26.75	13.72	0.33928
head_3176	head_grp3	3680	6/30/1991	36.17	26.75	9.42	0.10138
head_3177	head_grp3	3680	6/30/1992	39.96	26.75	13.21	0.10138
head_3178	head_grp3	3680	6/30/1993	36.68	26.75	9.93	0.10138
head_3179	head_grp3	3680	6/30/1994	45.57	26.74	18.83	0.10138
head_3180	head_grp3	3680	6/30/1995	44.26	26.74	17.52	0.18248
head_3181	head_grp3	3680	6/30/1996	40.26	26.74	13.52	0.10138
head_3182	head_grp3	3680	6/30/1997	42.38	26.74	15.64	0.10138
head_3183	head_grp3	3680	6/30/1998	46.52	26.74	19.78	0.10138
head_3184	head_grp3	3680	6/30/2000	32.32	26.74	5.58	0.10138
head_3185	head_grp3	3680	6/30/2001	33.84	26.73	7.11	0.10138
head_3186	head_grp3	3680	6/30/2002	33.82	26.74	7.08	0.18248
head_3187	head_grp3	3680	6/30/2003	41.36	26.74	14.62	0.10138
head_3188	head_grp3	3680	6/30/2008	33.45	26.73	6.72	0.18248
head_3189	head_grp3	3680	6/30/2010	39.79	26.73	13.06	0.18248
head_3190	head_grp3	3680	6/30/2011	32.4	26.73	5.67	0.18248
head_3191	head_grp3	3680	6/30/2012	32.34	26.73	5.61	0.18248
head_3192	head_grp3	3680	6/30/2013	40.77	26.73	14.04	0.10138
head_3193	head_grp3	3711	6/30/2001	24.2	23.19	1.01	0.20276
head_3194	head_grp3	3711	6/30/2002	20.5	20.37	0.13	0.20276
head_3195	head_grp3	3711	6/30/2003	22.37	20.48	1.89	0.20276
head_3196	head_grp3	3711	6/30/2004	20.05	19.80	0.25	0.20276
head_3197	head_grp3	3711	6/30/2005	17.16	16.11	1.05	0.20276

Table A-2. Post-Development (1942-2015) Groundwater Head Targets.

Target Name	Target Group	NWF ID	Date	Measured GW Elevation (NAVD88, ft)	Modelled GW Elevation (NAVD88, ft)	Residual (ft)	Target Weight
head_3198	head_grp3	3711	6/30/2006	11.87	14.39	-2.52	0.20276
head_3199	head_grp3	3711	6/30/2007	10.44	13.47	-3.03	0.20276
head_3200	head_grp3	3711	6/30/2008	11.08	13.75	-2.67	0.20276
head_3201	head_grp3	3711	6/30/2010	14.55	14.26	0.29	0.20276
head_3202	head_grp3	3711	6/30/2011	14.76	15.29	-0.53	0.20276
head_3203	head_grp3	3711	6/30/2012	11.51	13.90	-2.39	0.20276
head_3204	head_grp3	3711	6/30/2013	14.96	14.66	0.30	0.20276
head_3205	head_grp3	3711	6/30/2014	11.47	13.32	-1.85	0.20276
head_3206	head_grp3	3711	6/30/2015	11.32	12.46	-1.14	0.20276
head_3207	head_grp3	3718	6/30/2001	26.4	24.05	2.35	0.20276
head_3208	head_grp3	3718	6/30/2002	24.08	22.46	1.62	0.20276
head_3209	head_grp3	3718	6/30/2003	25.89	22.23	3.66	0.20276
head_3210	head_grp3	3718	6/30/2004	24.7	21.82	2.88	0.20276
head_3211	head_grp3	3718	6/30/2005	22.1	19.49	2.61	0.20276
head_3212	head_grp3	3718	6/30/2006	17.4	18.12	-0.72	0.20276
head_3213	head_grp3	3718	6/30/2007	15.38	16.97	-1.59	0.20276
head_3214	head_grp3	3718	6/30/2008	16.35	16.98	-0.63	0.20276
head_3215	head_grp3	3718	6/30/2010	16.39	14.93	1.46	0.20276
head_3216	head_grp3	3718	6/30/2011	15.3	15.92	-0.62	0.20276
head_3217	head_grp3	3718	6/30/2012	12.35	14.54	-2.19	0.20276
head_3218	head_grp3	3718	6/30/2013	16	15.36	0.64	0.20276
head_3219	head_grp3	3718	6/30/2014	14.29	13.96	0.33	0.20276
head_3220	head_grp3	3718	6/30/2015	13.1	13.21	-0.11	0.20276
head_3221	head_grp3	3760	6/30/2011	29.72	26.03	3.69	0.10138
head_3222	head_grp3	3760	6/30/2014	40.96	26.03	14.93	0.18248
head_3223	head_grp3	3760	6/30/2015	37.52	26.03	11.49	0.18248
head_3224	head_grp2	3771	6/30/1975	46.55	48.17	-1.62	0.67856
head_3225	head_grp2	3771	6/30/1976	44.75	46.93	-2.18	0.67856
head_3226	head_grp2	3771	6/30/1977	41.74	45.65	-3.91	0.67856
head_3227	head_grp2	3771	6/30/1978	41.4	44.34	-2.94	0.67856
head_3228	head_grp2	3771	6/30/1979	39.94	43.15	-3.21	0.67856
head_3229	head_grp2	3771	6/30/1980	38.55	41.92	-3.37	0.67856
head_3230	head_grp2	3771	6/30/1981	36.49	40.42	-3.93	0.67856
head_3231	head_grp2	3771	6/30/1982	34.27	37.89	-3.62	0.67856
head_3232	head_grp2	3771	6/30/1983	33.18	35.04	-1.86	0.67856
head_3233	head_grp2	3771	6/30/1984	30.59	31.98	-1.39	0.67856
head_3234	head_grp2	3771	6/30/1985	27.13	28.70	-1.57	0.67856
head_3235	head_grp2	3771	6/30/1986	23.68	25.10	-1.42	0.67856
head_3236	head_grp2	3771	6/30/1987	20.72	21.23	-0.51	0.67856
head_3237	head_grp2	3771	6/30/1988	17.72	17.76	-0.04	0.67856
head_3238	head_grp2	3771	6/30/1989	16.43	15.02	1.41	0.67856
head_3239	head_grp2	3771	6/30/1990	15.43	12.77	2.66	0.33928
head_3240	head_grp3	3771	6/30/1998	1.51	-1.87	3.38	0.10138
head_3241	head_grp3	3771	6/30/2000	-2.05	-6.20	4.15	0.10138

Table A-2. Post-Development (1942-2015) Groundwater Head Targets.

Target Name	Target Group	NWF ID	Date	Measured GW Elevation (NAVD88, ft)	Modelled GW Elevation (NAVD88, ft)	Residual (ft)	Target Weight
head_3242	head_grp3	3771	6/30/2001	-3.85	-7.82	3.97	0.10138
head_3243	head_grp3	3771	6/30/2003	-4.1	-9.69	5.59	0.10138
head_3244	head_grp3	3771	6/30/2004	-2.82	-9.80	6.98	0.10138
head_3245	head_grp3	3771	6/30/2005	-0.39	-7.87	7.48	0.10138
head_3246	head_grp3	3771	6/30/2006	0.25	-5.89	6.14	0.10138
head_3247	head_grp3	3771	6/30/2007	-1.1	-4.49	3.39	0.10138
head_3248	head_grp3	3771	6/30/2008	0.64	-2.91	3.55	0.10138
head_3249	head_grp3	3771	6/30/2009	2.34	-1.19	3.53	0.10138
head_3250	head_grp3	3771	6/30/2010	4.93	0.84	4.09	0.10138
head_3251	head_grp3	3771	6/30/2011	5.36	2.58	2.78	0.10138
head_3252	head_grp3	3771	6/30/2012	6.73	4.57	2.16	0.10138
head_3253	head_grp3	3771	6/30/2013	8.85	6.66	2.19	0.10138
head_3254	head_grp3	3771	6/30/2014	8.34	8.48	-0.14	0.10138
head_3255	head_grp3	3771	6/30/2015	7.1	8.93	-1.83	0.10138
head_3256	head_grp2	3780	6/30/1968	17.6	26.46	-8.86	0.61071
head_3257	head_grp2	3780	6/30/1969	12.48	26.41	-13.93	0.61071
head_3258	head_grp2	3780	6/30/1970	18.05	26.37	-8.32	0.61071
head_3260	head_grp3	3780	6/30/2004	23.94	23.11	0.83	0.18248
head_3261	head_grp3	3780	6/30/2005	23.86	22.47	1.39	0.18248
head_3262	head_grp3	3780	6/30/2006	19.42	22.09	-2.67	0.18248
head_3263	head_grp3	3780	6/30/2007	18.8	21.82	-3.02	0.18248
head_3264	head_grp3	3780	6/30/2008	20.51	21.68	-1.17	0.18248
head_3265	head_grp3	3780	6/30/2010	20.59	20.54	0.05	0.18248
head_3266	head_grp3	3780	6/30/2011	17.86	20.67	-2.81	0.18248
head_3267	head_grp3	3780	6/30/2012	17.24	20.33	-3.09	0.18248
head_3268	head_grp3	3780	6/30/2013	20.02	20.37	-0.35	0.18248
head_3269	head_grp3	3780	6/30/2014	19.58	19.86	-0.28	0.18248
head_3270	head_grp3	3780	6/30/2015	18.61	19.37	-0.76	0.18248
head_3271	head_grp3	3783	6/30/2008	260.8414	257.97	2.87	0.10138
head_3272	head_grp3	3783	6/30/2009	250.8314	245.60	5.23	0.10138
head_3273	head_grp3	3783	6/30/2010	263.5364	259.90	3.64	0.10138
head_3274	head_grp3	3783	6/30/2011	268.5414	268.52	0.02	0.10138
head_3275	head_grp3	3783	6/30/2012	273.9314	269.47	4.46	0.10138
head_3276	head_grp3	3783	6/30/2013	286.0589	269.54	16.52	0.10138
head_3277	head_grp3	3783	6/30/2014	292.4114	274.53	17.89	0.10138
head_3278	head_grp3	3783	6/30/2015	280.8614	273.04	7.82	0.10138
head_3279	head_grp3	3797	6/30/2003	23.92	28.47	-4.55	0.10138
head_3280	head_grp3	3797	6/30/2005	24.31	27.17	-2.86	0.10138
head_3281	head_grp3	3797	6/30/2006	22.75	26.23	-3.48	0.10138
head_3282	head_grp3	3797	6/30/2007	19.6	25.55	-5.95	0.10138
head_3283	head_grp3	3797	6/30/2008	21.66	25.51	-3.85	0.10138
head_3284	head_grp3	3797	6/30/2010	24.2	26.47	-2.27	0.18248
head_3285	head_grp3	3797	6/30/2011	23.32	26.82	-3.50	0.18248
head_3286	head_grp3	3797	6/30/2012	23.18	26.80	-3.62	0.10138

Table A-2. Post-Development (1942-2015) Groundwater Head Targets.

Target Name	Target Group	NWF ID	Date	Measured GW Elevation (NAVD88, ft)	Modelled GW Elevation (NAVD88, ft)	Residual (ft)	Target Weight
head_3287	head_grp3	3797	6/30/2013	24.98	27.29	-2.31	0.18248
head_3288	head_grp3	3797	6/30/2014	25.17	27.57	-2.40	0.18248
head_3289	head_grp3	3797	6/30/2015	24.49	27.36	-2.87	0.18248
head_3291	head_grp3	3806	6/30/2001	26.79	25.03	1.76	0.20276
head_3292	head_grp3	3806	6/30/2002	22.71	21.43	1.28	0.20276
head_3293	head_grp3	3806	6/30/2003	25.77	21.87	3.90	0.20276
head_3294	head_grp3	3806	6/30/2004	24.36	21.16	3.20	0.20276
head_3295	head_grp3	3806	6/30/2005	23.28	16.97	6.31	0.20276
head_3296	head_grp3	3806	6/30/2006	15.6	15.39	0.21	0.10138
head_3297	head_grp3	3806	6/30/2007	12.09	15.12	-3.03	0.20276
head_3298	head_grp3	3806	6/30/2008	13.67	15.33	-1.66	0.20276
head_3299	head_grp3	3806	6/30/2010	18.08	15.82	2.26	0.10138
head_3300	head_grp1	3815	6/30/1942	64	73.95	-9.95	0.76665
head_3301	head_grp2	3815	6/30/1978	10.22	19.63	-9.41	0.33928
head_3302	head_grp2	3815	6/30/1986	-22.5	0.39	-22.89	0.33928
head_3303	head_grp3	3815	6/30/1991	-23.08	-14.33	-8.75	0.10138
head_3304	head_grp3	3815	6/30/2001	-43.66	-23.91	-19.75	0.10138
head_3305	head_grp3	3815	6/30/2002	-44.95	-23.12	-21.83	0.10138
head_3306	head_grp3	3815	6/30/2003	-32.39	-21.29	-11.10	0.10138
head_3307	head_grp3	3815	6/30/2005	-31.68	-21.80	-9.88	0.10138
head_3308	head_grp3	3815	6/30/2006	-37.61	-22.28	-15.33	0.10138
head_3309	head_grp3	3815	6/30/2007	-33.33	-22.56	-10.77	0.10138
head_3310	head_grp3	3815	6/30/2008	-31.24	-21.11	-10.13	0.10138
head_3311	head_grp3	3815	6/30/2010	-27.06	-16.24	-10.82	0.10138
head_3312	head_grp3	3815	6/30/2011	-29.45	-14.80	-14.65	0.18248
head_3313	head_grp3	3815	6/30/2012	-24.4	-13.30	-11.10	0.18248
head_3314	head_grp3	3815	6/30/2013	-21.44	-10.77	-10.67	0.18248
head_3315	head_grp3	3815	6/30/2014	-19	-9.17	-9.83	0.18248
head_3316	head_grp3	3815	6/30/2015	-20.12	-8.30	-11.82	0.18248
head_3318	head_grp2	3867	6/30/1986	13.17	17.79	-4.62	0.33928
head_3319	head_grp2	3867	6/30/1989	14.2	17.79	-3.59	0.33928
head_3320	head_grp2	3867	6/30/1990	13.82	17.79	-3.97	0.33928
head_3321	head_grp3	3867	6/30/1991	15.62	17.79	-2.17	0.10138
head_3322	head_grp3	3867	6/30/1992	14.19	17.79	-3.60	0.10138
head_3323	head_grp3	3867	6/30/1993	12.85	17.79	-4.94	0.10138
head_3324	head_grp3	3867	6/30/1994	17.67	17.79	-0.12	0.10138
head_3325	head_grp3	3867	6/30/1995	15.11	17.79	-2.68	0.18248
head_3326	head_grp3	3867	6/30/1996	15.23	17.79	-2.56	0.10138
head_3327	head_grp3	3867	6/30/1997	13.05	17.79	-4.74	0.10138
head_3328	head_grp3	3867	6/30/1998	16.46	17.79	-1.33	0.10138
head_3329	head_grp3	3867	6/30/2000	9.91	17.78	-7.87	0.10138
head_3330	head_grp3	3867	6/30/2001	11.49	17.78	-6.29	0.10138
head_3331	head_grp3	3867	6/30/2002	10.82	17.78	-6.96	0.18248
head_3332	head_grp3	3867	6/30/2003	15.45	17.78	-2.33	0.10138

Table A-2. Post-Development (1942-2015) Groundwater Head Targets.

Target Name	Target Group	NWF ID	Date	Measured GW Elevation (NAVD88, ft)	Modelled GW Elevation (NAVD88, ft)	Residual (ft)	Target Weight
head_3333	head_grp3	3867	6/30/2006	10.08	17.78	-7.70	0.10138
head_3334	head_grp3	3867	6/30/2008	11.29	17.78	-6.49	0.18248
head_3335	head_grp3	3867	6/30/2010	14.56	17.78	-3.22	0.18248
head_3336	head_grp3	3867	6/30/2011	10.69	17.78	-7.09	0.18248
head_3337	head_grp3	3867	6/30/2012	13.16	17.78	-4.62	0.18248
head_3338	head_grp3	3867	6/30/2013	16.23	17.78	-1.55	0.18248
head_3339	head_grp3	3867	6/30/2014	16.46	17.78	-1.32	0.18248
head_3340	head_grp3	3867	6/30/2015	14.84	17.78	-2.94	0.18248
head_3341	head_grp2	3877	6/30/1968	19.79	23.58	-3.79	0.67856
head_3342	head_grp2	3877	6/30/1969	20.48	23.56	-3.08	0.67856
head_3343	head_grp2	3877	6/30/1970	22.43	23.54	-1.11	0.67856
head_3344	head_grp2	3877	6/30/1976	28.57	23.40	5.17	0.33928
head_3345	head_grp2	3877	6/30/1977	23.33	23.38	-0.05	0.33928
head_3346	head_grp2	3877	6/30/1978	24.94	23.36	1.58	0.67856
head_3347	head_grp2	3877	6/30/1979	24.69	23.34	1.35	0.67856
head_3348	head_grp2	3877	6/30/1980	22.53	23.32	-0.79	0.33928
head_3349	head_grp2	3877	6/30/1981	21.29	23.30	-2.01	0.33928
head_3350	head_grp2	3877	6/30/1982	23.77	23.26	0.51	0.33928
head_3351	head_grp2	3877	6/30/1984	21.97	23.18	-1.21	0.33928
head_3352	head_grp2	3877	6/30/1985	23.72	23.13	0.59	0.33928
head_3353	head_grp2	3877	6/30/1986	22.41	23.08	-0.67	0.33928
head_3354	head_grp2	3877	6/30/1987	23.31	23.02	0.29	0.33928
head_3355	head_grp2	3877	6/30/1988	23.47	22.97	0.50	0.33928
head_3356	head_grp2	3877	6/30/1989	24.51	22.93	1.58	0.33928
head_3357	head_grp2	3877	6/30/1990	26.09	22.90	3.19	0.33928
head_3358	head_grp3	3877	6/30/2001	21.61	22.41	-0.80	0.20276
head_3359	head_grp3	3877	6/30/2002	20.38	22.23	-1.85	0.10138
head_3360	head_grp3	3877	6/30/2003	24.08	22.19	1.89	0.10138
head_3361	head_grp3	3877	6/30/2004	23	22.15	0.85	0.20276
head_3362	head_grp3	3877	6/30/2005	23.89	21.88	2.01	0.20276
head_3363	head_grp3	3877	6/30/2006	20.79	21.72	-0.93	0.20276
head_3364	head_grp3	3877	6/30/2007	19.43	21.60	-2.17	0.20276
head_3365	head_grp3	3877	6/30/2008	21.45	21.55	-0.10	0.20276
head_3366	head_grp3	3877	6/30/2010	22.08	21.07	1.01	0.20276
head_3367	head_grp3	3877	6/30/2011	18.7	21.12	-2.42	0.20276
head_3368	head_grp3	3877	6/30/2012	19.19	20.98	-1.79	0.20276
head_3369	head_grp3	3877	6/30/2013	21.55	21.00	0.55	0.20276
head_3370	head_grp3	3877	6/30/2014	22.07	20.79	1.28	0.20276
head_3371	head_grp3	3877	6/30/2015	21.49	20.57	0.92	0.20276
head_3379	head_grp3	3921	6/30/2007	18.46	25.04	-6.58	0.10138
head_3380	head_grp3	3921	6/30/2010	20.41	22.99	-2.58	0.10138
head_3381	head_grp3	3921	6/30/2011	18.15	23.48	-5.33	0.18248
head_3382	head_grp3	3921	6/30/2012	17.08	22.69	-5.61	0.18248
head_3383	head_grp3	3921	6/30/2013	20.1	23.03	-2.93	0.18248

Table A-2. Post-Development (1942-2015) Groundwater Head Targets.

Target Name	Target Group	NWF ID	Date	Measured GW Elevation (NAVD88, ft)	Modelled GW Elevation (NAVD88, ft)	Residual (ft)	Target Weight
head_3384	head_grp3	3921	6/30/2014	19.18	22.13	-2.95	0.18248
head_3385	head_grp3	3921	6/30/2015	18.35	21.58	-3.23	0.18248
head_3386	head_grp1	3923	6/30/1942	77.66	86.31	-8.65	0.76665
head_3387	head_grp1	3923	6/30/1947	77.81	78.81	-1.00	0.76665
head_3388	head_grp1	3923	6/30/1948	74.9	77.46	-2.56	1.53329
head_3389	head_grp1	3923	6/30/1949	75.01	76.18	-1.17	1.53329
head_3390	head_grp1	3923	6/30/1950	74.83	74.92	-0.09	1.53329
head_3391	head_grp1	3923	6/30/1951	74.04	73.57	0.47	1.53329
head_3392	head_grp1	3923	6/30/1952	72.45	72.26	0.19	1.53329
head_3393	head_grp1	3923	6/30/1953	70.59	70.97	-0.38	1.53329
head_3394	head_grp1	3923	6/30/1954	69.37	69.72	-0.35	1.53329
head_3395	head_grp1	3923	6/30/1955	65.82	68.42	-2.60	1.53329
head_3396	head_grp1	3923	6/30/1956	63.16	66.94	-3.78	1.53329
head_3397	head_grp1	3923	6/30/1957	60.67	65.44	-4.77	1.53329
head_3398	head_grp1	3923	6/30/1958	59.75	63.55	-3.80	1.53329
head_3399	head_grp1	3923	6/30/1959	58.76	61.45	-2.69	1.53329
head_3400	head_grp1	3923	6/30/1960	57.37	59.37	-2.00	1.53329
head_3401	head_grp1	3923	6/30/1961	54.91	57.26	-2.35	1.53329
head_3402	head_grp1	3923	6/30/1962	52.59	54.94	-2.35	1.53329
head_3403	head_grp1	3923	6/30/1963	50.39	52.63	-2.24	1.53329
head_3404	head_grp1	3923	6/30/1964	49.24	50.19	-0.95	1.53329
head_3405	head_grp1	3923	6/30/1965	48.31	47.91	0.40	1.53329
head_3406	head_grp2	3923	6/30/1966	46.12	45.69	0.43	0.67856
head_3407	head_grp2	3923	6/30/1967	44.43	43.22	1.21	0.67856
head_3408	head_grp2	3923	6/30/1968	40.95	40.75	0.20	0.67856
head_3409	head_grp2	3923	6/30/1969	37.69	38.85	-1.16	0.67856
head_3410	head_grp2	3923	6/30/1970	35.55	37.61	-2.06	0.67856
head_3411	head_grp2	3923	6/30/1971	33.22	35.96	-2.74	0.67856
head_3412	head_grp2	3923	6/30/1972	29.27	33.02	-3.75	0.67856
head_3413	head_grp2	3923	6/30/1973	28.12	30.12	-2.00	0.67856
head_3414	head_grp2	3923	6/30/1974	27.16	28.39	-1.23	0.67856
head_3415	head_grp2	3923	6/30/1975	26.66	27.13	-0.47	0.67856
head_3416	head_grp2	3923	6/30/1976	26.12	25.73	0.39	0.67856
head_3417	head_grp2	3923	6/30/1977	22.67	23.76	-1.09	0.67856
head_3418	head_grp2	3923	6/30/1978	22.3	22.37	-0.07	0.67856
head_3419	head_grp2	3923	6/30/1979	20.55	21.36	-0.81	0.67856
head_3420	head_grp2	3923	6/30/1980	20.06	20.25	-0.19	0.67856
head_3421	head_grp2	3923	6/30/1981	17.29	18.95	-1.66	0.67856
head_3422	head_grp2	3923	6/30/1982	15.66	16.61	-0.95	0.67856
head_3423	head_grp2	3923	6/30/1983	14.53	13.67	0.86	0.67856
head_3424	head_grp2	3923	6/30/1984	10.39	10.08	0.31	0.67856
head_3425	head_grp2	3923	6/30/1985	5.67	5.89	-0.22	0.67856
head_3426	head_grp2	3923	6/30/1986	0.95	1.50	-0.55	0.67856
head_3427	head_grp2	3923	6/30/1987	-1.8	-2.43	0.63	0.67856

Table A-2. Post-Development (1942-2015) Groundwater Head Targets.

Target Name	Target Group	NWF ID	Date	Measured GW Elevation (NAVD88, ft)	Modelled GW Elevation (NAVD88, ft)	Residual (ft)	Target Weight
head_3428	head_grp2	3923	6/30/1988	-5.12	-6.14	1.02	0.67856
head_3429	head_grp2	3923	6/30/1989	-6.76	-8.99	2.23	0.67856
head_3430	head_grp2	3923	6/30/1990	-11.33	-11.64	0.31	0.67856
head_3431	head_grp3	3923	6/30/1991	-8.68	-13.21	4.53	0.20276
head_3432	head_grp3	3923	6/30/1992	-10.59	-13.93	3.34	0.20276
head_3433	head_grp3	3923	6/30/1993	-11.75	-15.58	3.83	0.20276
head_3434	head_grp3	3923	6/30/1994	-9.86	-16.82	6.96	0.10138
head_3435	head_grp3	3923	6/30/1995	-13.1	-17.19	4.09	0.10138
head_3436	head_grp3	3923	6/30/1996	-15.35	-18.23	2.88	0.20276
head_3437	head_grp3	3923	6/30/1997	-17.92	-19.21	1.29	0.10138
head_3438	head_grp3	3923	6/30/1998	-18.63	-20.04	1.41	0.10138
head_3439	head_grp3	3923	6/30/1999	-16.48	-20.65	4.17	0.10138
head_3440	head_grp3	3923	6/30/2000	-23.05	-21.89	-1.16	0.10138
head_3441	head_grp3	3923	6/30/2001	-21.53	-23.04	1.51	0.10138
head_3442	head_grp3	3923	6/30/2002	-21.98	-22.29	0.31	0.10138
head_3443	head_grp3	3923	6/30/2003	-20.99	-20.56	-0.43	0.10138
head_3444	head_grp3	3923	6/30/2005	-20.47	-20.52	0.05	0.10138
head_3445	head_grp3	3923	6/30/2006	-19.88	-20.87	0.99	0.10138
head_3446	head_grp3	3923	6/30/2007	-21.7	-21.11	-0.59	0.10138
head_3447	head_grp3	3923	6/30/2008	-17.46	-19.42	1.96	0.10138
head_3448	head_grp3	3923	6/30/2010	-12.35	-15.01	2.66	0.20276
head_3449	head_grp3	3923	6/30/2011	-13.66	-14.13	0.47	0.20276
head_3450	head_grp3	3923	6/30/2012	-11.14	-12.39	1.25	0.20276
head_3451	head_grp3	3923	6/30/2013	-8.3	-9.30	1.00	0.20276
head_3452	head_grp3	3923	6/30/2014	-6.04	-8.05	2.01	0.20276
head_3453	head_grp3	3923	6/30/2015	-6.38	-7.20	0.82	0.20276
head_3578	head_grp2	3998	6/30/1970	72.6	66.43	6.17	0.33928
head_3579	head_grp2	3998	6/30/1984	52.3	54.85	-2.55	0.33928
head_3580	head_grp2	3998	6/30/1985	51.3	53.20	-1.90	0.67856
head_3581	head_grp2	3998	6/30/1986	49.48	51.39	-1.91	0.67856
head_3582	head_grp2	3998	6/30/1987	47.58	49.37	-1.79	0.67856
head_3583	head_grp2	3998	6/30/1988	46.4	47.25	-0.85	0.33928
head_3584	head_grp2	3998	6/30/1990	43.44	43.42	0.02	0.33928
head_3585	head_grp3	3998	6/30/1998	34.39	32.49	1.90	0.10138
head_3586	head_grp3	3998	6/30/2000	31.42	29.81	1.61	0.10138
head_3587	head_grp3	3998	6/30/2007	31.08363	26.28	4.80	0.10138
head_3588	head_grp3	3998	6/30/2008	31.52029667	26.86	4.66	0.10138
head_3589	head_grp3	3998	6/30/2009	32.20363	27.55	4.65	0.10138
head_3590	head_grp3	3998	6/30/2010	33.28238	28.40	4.88	0.10138
head_3591	head_grp3	3998	6/30/2011	33.70863	29.34	4.37	0.10138
head_3592	head_grp3	3998	6/30/2012	34.38140778	30.36	4.02	0.10138
head_3593	head_grp3	3998	6/30/2013	35.36363	31.45	3.92	0.10138
head_3594	head_grp3	3998	6/30/2014	36.46140778	32.64	3.82	0.10138
head_3595	head_grp3	3998	6/30/2015	35.26446333	33.53	1.73	0.10138

Table A-2. Post-Development (1942-2015) Groundwater Head Targets.

Target Name	Target Group	NWF ID	Date	Measured GW Elevation (NAVD88, ft)	Modelled GW Elevation (NAVD88, ft)	Residual (ft)	Target Weight
head_3596	head_grp2	4006	6/30/1984	52.29	54.69	-2.40	0.33928
head_3597	head_grp2	4006	6/30/1985	51.67	53.03	-1.36	0.67856
head_3598	head_grp2	4006	6/30/1986	49.68	51.20	-1.52	0.67856
head_3599	head_grp2	4006	6/30/1987	47.83	49.17	-1.34	0.67856
head_3600	head_grp2	4006	6/30/1988	46.59	47.03	-0.44	0.33928
head_3601	head_grp3	4006	6/30/2001	30.46	28.21	2.25	0.10138
head_3602	head_grp3	4006	6/30/2003	31.87	26.21	5.66	0.10138
head_3603	head_grp3	4006	6/30/2006	31.96	25.52	6.44	0.10138
head_3604	head_grp3	4006	6/30/2007	31.79467	26.01	5.79	0.10138
head_3605	head_grp3	4006	6/30/2008	32.73467	26.59	6.14	0.10138
head_3606	head_grp3	4006	6/30/2009	33.66800333	27.29	6.38	0.10138
head_3607	head_grp3	4006	6/30/2010	34.20092	28.15	6.06	0.10138
head_3608	head_grp3	4006	6/30/2011	34.43467	29.09	5.35	0.10138
head_3609	head_grp3	4006	6/30/2012	34.36133667	30.12	4.24	0.10138
head_3610	head_grp3	4006	6/30/2013	35.16648818	31.21	3.95	0.10138
head_3611	head_grp3	4006	6/30/2014	36.54467	32.41	4.13	0.10138
head_3612	head_grp3	4006	6/30/2015	35.67633667	33.31	2.37	0.10138
head_3674	head_grp3	4173	6/30/2008	252.5025	256.13	-3.63	0.10138
head_3675	head_grp3	4173	6/30/2009	236.3325	244.42	-8.09	0.10138
head_3676	head_grp3	4173	6/30/2010	249.0375	254.19	-5.16	0.10138
head_3677	head_grp3	4173	6/30/2011	256.3525	263.41	-7.05	0.10138
head_3678	head_grp3	4173	6/30/2012	260.0125	263.44	-3.43	0.10138
head_3679	head_grp3	4173	6/30/2013	270.41	262.87	7.54	0.10138
head_3680	head_grp3	4173	6/30/2014	270.9825	267.22	3.76	0.10138
head_3681	head_grp3	4173	6/30/2015	270.9825	266.69	4.29	0.10138
head_3682	head_grp1	4262	6/30/1942	84.73	94.66	-9.93	1.53329
head_3683	head_grp1	4262	6/30/1948	87.18	87.25	-0.07	1.53329
head_3684	head_grp1	4262	6/30/1949	86.61	86.13	0.48	1.53329
head_3685	head_grp1	4262	6/30/1950	86.47	85.06	1.41	1.53329
head_3686	head_grp1	4262	6/30/1951	85.64	83.95	1.69	1.53329
head_3687	head_grp1	4262	6/30/1952	83.73	82.83	0.90	1.53329
head_3688	head_grp1	4262	6/30/1953	83.09	81.73	1.36	1.53329
head_3689	head_grp1	4262	6/30/1954	82.25	80.67	1.58	1.53329
head_3690	head_grp1	4262	6/30/1955	79.09	79.58	-0.49	1.53329
head_3691	head_grp1	4262	6/30/1956	77.07	78.35	-1.28	1.53329
head_3692	head_grp1	4262	6/30/1957	75.21	77.12	-1.91	1.53329
head_3693	head_grp1	4262	6/30/1958	73.48	75.62	-2.14	1.53329
head_3694	head_grp1	4262	6/30/1959	72.52	73.90	-1.38	1.53329
head_3695	head_grp1	4262	6/30/1960	71.13	72.12	-0.99	1.53329
head_3696	head_grp1	4262	6/30/1961	69.64	70.34	-0.70	1.53329
head_3697	head_grp1	4262	6/30/1962	67.8	68.34	-0.54	1.53329
head_3698	head_grp1	4262	6/30/1963	65.87	66.37	-0.50	1.53329
head_3699	head_grp1	4262	6/30/1964	64.85	64.28	0.57	1.53329
head_3700	head_grp1	4262	6/30/1965	63.62	62.26	1.36	1.53329

Table A-2. Post-Development (1942-2015) Groundwater Head Targets.

Target Name	Target Group	NWF ID	Date	Measured GW Elevation (NAVD88, ft)	Modelled GW Elevation (NAVD88, ft)	Residual (ft)	Target Weight
head_3701	head_grp2	4262	6/30/1966	62.2	60.43	1.77	0.67856
head_3702	head_grp2	4262	6/30/1967	60.33	58.39	1.94	0.67856
head_3703	head_grp2	4262	6/30/1968	59.63	56.29	3.34	0.67856
head_3704	head_grp2	4262	6/30/1969	56.33	54.43	1.90	0.67856
head_3705	head_grp2	4262	6/30/1970	54.28	53.20	1.08	0.67856
head_3706	head_grp2	4262	6/30/1976	40.52	42.58	-2.06	0.67856
head_3707	head_grp2	4262	6/30/1977	36.75	40.78	-4.03	0.67856
head_3708	head_grp2	4262	6/30/1978	34.84	39.25	-4.41	0.67856
head_3709	head_grp2	4262	6/30/1979	35.49	38.44	-2.95	0.67856
head_3710	head_grp2	4262	6/30/1980	33.53	37.55	-4.02	0.67856
head_3711	head_grp2	4262	6/30/1981	31.55	36.50	-4.95	0.67856
head_3712	head_grp2	4262	6/30/1982	27.41	34.51	-7.10	0.67856
head_3713	head_grp2	4262	6/30/1983	26.71	32.00	-5.29	0.67856
head_3714	head_grp2	4262	6/30/1984	22.39	28.95	-6.56	0.67856
head_3715	head_grp2	4262	6/30/1985	21.43	25.28	-3.85	0.67856
head_3716	head_grp2	4262	6/30/1986	15.47	21.26	-5.79	0.67856
head_3717	head_grp2	4262	6/30/1987	13.2	17.47	-4.27	0.67856
head_3718	head_grp2	4262	6/30/1988	11.91	14.15	-2.24	0.67856
head_3719	head_grp2	4262	6/30/1989	10.04	11.28	-1.24	0.67856
head_3720	head_grp2	4262	6/30/1990	9.46	8.78	0.68	0.67856
head_3721	head_grp3	4262	6/30/1991	6.41	6.84	-0.43	0.20276
head_3722	head_grp3	4262	6/30/1992	5.07	5.96	-0.89	0.20276
head_3723	head_grp3	4262	6/30/1993	6.11	4.28	1.83	0.20276
head_3724	head_grp3	4262	6/30/1994	1.12	2.45	-1.33	0.20276
head_3725	head_grp3	4262	6/30/1995	-0.33	1.61	-1.94	0.20276
head_3726	head_grp3	4262	6/30/1996	-3.78	0.37	-4.15	0.20276
head_3727	head_grp3	4262	6/30/1997	-18	-0.89	-17.11	0.20276
head_3728	head_grp3	4262	6/30/1998	-12.21	-2.00	-10.21	0.20276
head_3729	head_grp3	4262	6/30/1999	-11.28	-2.90	-8.38	0.20276
head_3730	head_grp3	4262	6/30/2000	-18.59	-4.17	-14.42	0.20276
head_3731	head_grp3	4262	6/30/2001	-10.24	-5.41	-4.83	0.20276
head_3732	head_grp3	4262	6/30/2002	-10.56	-5.35	-5.21	0.20276
head_3733	head_grp3	4262	6/30/2003	-8.25	-4.39	-3.86	0.20276
head_3734	head_grp3	4262	6/30/2005	-6.69	-4.24	-2.45	0.20276
head_3735	head_grp3	4262	6/30/2006	-9.41	-4.90	-4.51	0.20276
head_3736	head_grp3	4262	6/30/2011	-4.39	-1.54	-2.85	0.10138
head_3737	head_grp3	4262	6/30/2012	-0.65	-0.01	-0.64	0.20276
head_3738	head_grp3	4262	6/30/2013	1.2	3.00	-1.80	0.10138
head_3739	head_grp3	4262	6/30/2014	3.5	4.42	-0.92	0.10138
head_3740	head_grp3	4262	6/30/2015	3.57	5.33	-1.76	0.20276
head_3751	head_grp1	4285	6/30/1950	50.3	51.26	-0.96	0.76665
head_3752	head_grp2	4285	6/30/1970	54.25	50.89	3.36	0.33928
head_3753	head_grp3	4285	6/30/2005	51.72	48.99	2.73	0.10138
head_3754	head_grp3	4285	6/30/2006	49.12	48.78	0.34	0.18248

Table A-2. Post-Development (1942-2015) Groundwater Head Targets.

Target Name	Target Group	NWF ID	Date	Measured GW Elevation (NAVD88, ft)	Modelled GW Elevation (NAVD88, ft)	Residual (ft)	Target Weight
head_3755	head_grp3	4285	6/30/2007	45.57	48.67	-3.10	0.18248
head_3756	head_grp3	4285	6/30/2008	50.49	48.63	1.86	0.18248
head_3757	head_grp3	4285	6/30/2010	52.58	48.24	4.34	0.18248
head_3758	head_grp3	4285	6/30/2011	48.3	48.36	-0.06	0.18248
head_3759	head_grp3	4285	6/30/2012	49.58	48.20	1.38	0.18248
head_3760	head_grp3	4285	6/30/2013	51.53	48.28	3.25	0.18248
head_3761	head_grp3	4285	6/30/2014	54.18	48.18	6.00	0.18248
head_3762	head_grp3	4285	6/30/2015	52.49	48.00	4.49	0.18248
head_3763	head_grp1	4368	6/30/1942	90.36	97.84	-7.48	0.76665
head_3764	head_grp1	4368	6/30/1947	97.86	91.61	6.25	0.76665
head_3765	head_grp1	4368	6/30/1948	91.31	90.43	0.88	0.76665
head_3766	head_grp1	4368	6/30/1949	89.3	89.39	-0.09	1.53329
head_3767	head_grp1	4368	6/30/1950	86.96	88.35	-1.39	0.76665
head_3768	head_grp1	4368	6/30/1951	86.54	87.30	-0.76	1.53329
head_3769	head_grp1	4368	6/30/1952	84.09	86.24	-2.15	1.53329
head_3770	head_grp1	4368	6/30/1953	82.85	85.22	-2.37	1.53329
head_3771	head_grp1	4368	6/30/1954	82.88	84.18	-1.30	1.53329
head_3772	head_grp1	4368	6/30/1955	80.04	83.19	-3.15	1.53329
head_3773	head_grp1	4368	6/30/1956	78.14	82.05	-3.91	1.53329
head_3774	head_grp1	4368	6/30/1957	77.01	80.90	-3.89	1.53329
head_3775	head_grp1	4368	6/30/1958	75.88	79.52	-3.64	1.53329
head_3776	head_grp1	4368	6/30/1959	74.96	78.00	-3.04	1.53329
head_3777	head_grp1	4368	6/30/1960	74.38	76.37	-1.99	1.53329
head_3778	head_grp1	4368	6/30/1961	73.03	74.74	-1.71	1.53329
head_3779	head_grp1	4368	6/30/1962	71.32	72.68	-1.36	1.53329
head_3780	head_grp1	4368	6/30/1963	69.3	70.57	-1.27	1.53329
head_3781	head_grp1	4368	6/30/1964	68.06	67.78	0.28	1.53329
head_3782	head_grp1	4368	6/30/1965	66.91	65.89	1.02	1.53329
head_3783	head_grp2	4368	6/30/1966	66.15	65.03	1.12	0.67856
head_3784	head_grp2	4368	6/30/1967	64.41	62.59	1.82	0.67856
head_3785	head_grp2	4368	6/30/1968	63.56	60.04	3.52	0.33928
head_3786	head_grp2	4368	6/30/1969	60.26	58.26	2.00	0.33928
head_3787	head_grp2	4368	6/30/1970	57.91	57.09	0.82	0.33928
head_3788	head_grp2	4368	6/30/1989	22.26	18.60	3.66	0.33928
head_3789	head_grp2	4368	6/30/1990	16.23	16.10	0.13	0.33928
head_3790	head_grp3	4368	6/30/1991	20.46	13.93	6.53	0.10138
head_3791	head_grp3	4368	6/30/1992	16.27	13.18	3.09	0.20276
head_3792	head_grp3	4368	6/30/1993	20.69	11.62	9.07	0.10138
head_3793	head_grp3	4368	6/30/1994	16.26	10.02	6.24	0.10138
head_3794	head_grp3	4368	6/30/1995	12.3	9.28	3.02	0.20276
head_3795	head_grp3	4368	6/30/1996	12.35	8.49	3.86	0.20276
head_3796	head_grp3	4368	6/30/1997	-10.58	7.31	-17.89	0.10138
head_3797	head_grp3	4368	6/30/1998	3.75	5.96	-2.21	0.10138
head_3798	head_grp3	4368	6/30/1999	2.66	5.58	-2.92	0.10138

Table A-2. Post-Development (1942-2015) Groundwater Head Targets.

Target Name	Target Group	NWF ID	Date	Measured GW Elevation (NAVD88, ft)	Modelled GW Elevation (NAVD88, ft)	Residual (ft)	Target Weight
head_3799	head_grp3	4368	6/30/2000	3.61	4.43	-0.82	0.10138
head_3800	head_grp3	4368	6/30/2001	6.46	3.39	3.07	0.10138
head_3801	head_grp3	4368	6/30/2002	7.16	3.36	3.80	0.10138
head_3802	head_grp3	4368	6/30/2003	7.23	4.36	2.87	0.20276
head_3803	head_grp3	4368	6/30/2005	7.08	2.76	4.32	0.10138
head_3804	head_grp3	4368	6/30/2006	5.86	2.68	3.18	0.10138
head_3805	head_grp3	4368	6/30/2007	1.85	0.84	1.01	0.10138
head_3806	head_grp3	4368	6/30/2008	4.87	0.62	4.25	0.10138
head_3807	head_grp3	4368	6/30/2010	8.86	3.30	5.56	0.10138
head_3808	head_grp3	4368	6/30/2011	4.4	2.78	1.62	0.20276
head_3809	head_grp3	4368	6/30/2012	6.82	5.10	1.72	0.20276
head_3810	head_grp3	4368	6/30/2013	10.99	8.65	2.34	0.20276
head_3811	head_grp3	4368	6/30/2014	12.85	9.59	3.26	0.20276
head_3812	head_grp3	4368	6/30/2015	12.58	12.09	0.49	0.20276
head_3813	head_grp3	4393	6/30/1992	1.78	10.65	-8.87	0.10138
head_3814	head_grp3	4393	6/30/1995	-0.93	-0.54	-0.39	0.10138
head_3815	head_grp3	4393	6/30/2001	-11.26	-11.28	0.02	0.10138
head_3816	head_grp3	4393	6/30/2002	-12.43	-12.16	-0.27	0.10138
head_3817	head_grp3	4393	6/30/2003	-9.57	-11.46	1.89	0.10138
head_3818	head_grp3	4393	6/30/2005	1.74	-10.40	12.14	0.10138
head_3819	head_grp3	4393	6/30/2006	-0.34	-11.09	10.75	0.18248
head_3820	head_grp3	4393	6/30/2007	-8.39	-11.02	2.63	0.10138
head_3821	head_grp3	4393	6/30/2008	-6.69	-9.56	2.87	0.18248
head_3822	head_grp3	4393	6/30/2010	-1.5	-5.77	4.27	0.18248
head_3823	head_grp3	4393	6/30/2011	-2.32	-4.57	2.25	0.18248
head_3824	head_grp3	4393	6/30/2012	-0.46	-1.56	1.10	0.18248
head_3825	head_grp3	4393	6/30/2013	2.76	1.13	1.63	0.18248
head_3826	head_grp3	4393	6/30/2014	4.55	2.51	2.04	0.18248
head_3827	head_grp3	4393	6/30/2015	3.31	3.31	0.00	0.18248
head_3890	head_grp2	4490	6/30/1968	82.05	87.73	-5.68	0.67856
head_3891	head_grp2	4490	6/30/1969	79.4	87.42	-8.02	0.67856
head_3892	head_grp2	4490	6/30/1970	83.32	87.14	-3.82	0.67856
head_3893	head_grp2	4490	6/30/1974	77.54	85.65	-8.11	0.33928
head_3894	head_grp2	4490	6/30/1976	84.22	84.80	-0.58	0.33928
head_3895	head_grp2	4490	6/30/1977	82.56	84.59	-2.03	0.33928
head_3896	head_grp2	4490	6/30/1978	82.64	84.29	-1.65	0.67856
head_3897	head_grp2	4490	6/30/1979	81.98	83.94	-1.96	0.33928
head_3898	head_grp2	4490	6/30/1980	83.86	83.59	0.27	0.33928
head_3899	head_grp2	4490	6/30/1984	78.95	82.13	-3.18	0.33928
head_3900	head_grp2	4490	6/30/1985	79.3	81.60	-2.30	0.33928
head_3901	head_grp2	4490	6/30/1986	78.92	80.93	-2.01	0.33928
head_3902	head_grp2	4490	6/30/1987	78.9	80.23	-1.33	0.33928
head_3903	head_grp2	4490	6/30/1990	78.65	78.30	0.35	0.33928
head_3904	head_grp3	4490	6/30/1991	78.34	77.80	0.54	0.10138

Table A-2. Post-Development (1942-2015) Groundwater Head Targets.

Target Name	Target Group	NWF ID	Date	Measured GW Elevation (NAVD88, ft)	Modelled GW Elevation (NAVD88, ft)	Residual (ft)	Target Weight
head_3905	head_grp3	4490	6/30/1992	76.57	77.29	-0.72	0.10138
head_3906	head_grp3	4490	6/30/1995	76.53	76.16	0.37	0.10138
head_3907	head_grp3	4490	6/30/1996	75.4	75.90	-0.50	0.10138
head_3908	head_grp3	4490	6/30/1998	77.7	75.66	2.04	0.10138
head_3909	head_grp3	4490	6/30/2000	73.57	74.77	-1.20	0.10138
head_3910	head_grp3	4490	6/30/2001	71.76	74.08	-2.32	0.10138
head_3911	head_grp3	4490	6/30/2003	72.76	72.82	-0.06	0.10138
head_3912	head_grp3	4490	6/30/2005	71.96	72.52	-0.56	0.10138
head_3913	head_grp3	4490	6/30/2006	70.62	71.71	-1.09	0.10138
head_3914	head_grp3	4490	6/30/2008	70	70.81	-0.81	0.10138
head_3915	head_grp3	4490	6/30/2010	71.88	71.13	0.75	0.10138
head_3916	head_grp3	4490	6/30/2011	68.53	71.16	-2.63	0.10138
head_3917	head_grp3	4490	6/30/2012	69.48	71.28	-1.80	0.10138
head_3918	head_grp3	4490	6/30/2013	71.49	71.71	-0.22	0.10138
head_3919	head_grp3	4490	6/30/2014	72.23	72.89	-0.66	0.10138
head_3920	head_grp3	4490	6/30/2015	71.56	72.66	-1.10	0.20276
head_3957	head_grp1	4553	6/30/1942	104.4	107.02	-2.62	0.76665
head_3958	head_grp1	4553	6/30/1947	101.8	104.51	-2.71	0.76665
head_3959	head_grp1	4553	6/30/1948	92.25	103.98	-11.73	1.53329
head_3960	head_grp1	4553	6/30/1949	84.24	103.49	-19.25	1.53329
head_3961	head_grp1	4553	6/30/1950	96.78	103.02	-6.24	1.53329
head_3962	head_grp1	4553	6/30/1951	99.64	102.54	-2.90	0.76665
head_3963	head_grp2	4553	6/30/1966	88.77	93.88	-5.11	0.33928
head_3964	head_grp2	4553	6/30/1967	92.1	93.15	-1.05	0.67856
head_3965	head_grp2	4553	6/30/1968	87.57	92.36	-4.79	0.67856
head_3966	head_grp2	4553	6/30/1969	87.49	91.62	-4.13	0.67856
head_3967	head_grp2	4553	6/30/1970	87.45	90.98	-3.53	0.67856
head_3968	head_grp2	4553	6/30/1976	88.54	86.31	2.23	0.33928
head_3969	head_grp2	4553	6/30/1977	81.08	85.65	-4.57	0.33928
head_3970	head_grp2	4553	6/30/1978	83.99	84.93	-0.94	0.67856
head_3971	head_grp2	4553	6/30/1979	84.21	84.31	-0.10	0.33928
head_3972	head_grp2	4553	6/30/1980	86.12	83.78	2.34	0.33928
head_3973	head_grp2	4553	6/30/1981	80.61	83.30	-2.69	0.33928
head_3974	head_grp2	4553	6/30/1982	83.37	82.61	0.76	0.33928
head_3975	head_grp2	4553	6/30/1983	81.5	81.76	-0.26	0.33928
head_3976	head_grp2	4553	6/30/1984	78	80.72	-2.72	0.33928
head_3977	head_grp2	4553	6/30/1985	78.51	79.48	-0.97	0.33928
head_3978	head_grp2	4553	6/30/1986	74.31	78.00	-3.69	0.33928
head_3979	head_grp2	4553	6/30/1990	75.62	72.20	3.42	0.33928
head_3980	head_grp3	4553	6/30/1991	64.97	70.98	-6.01	0.10138
head_3981	head_grp3	4553	6/30/1992	72.35	70.29	2.06	0.10138
head_3982	head_grp3	4553	6/30/1995	71.47	68.05	3.42	0.10138
head_3983	head_grp3	4553	6/30/1996	70.75	67.44	3.31	0.10138
head_3984	head_grp3	4553	6/30/1998	56.32	66.36	-10.04	0.10138

Table A-2. Post-Development (1942-2015) Groundwater Head Targets.

Target Name	Target Group	NWF ID	Date	Measured GW Elevation (NAVD88, ft)	Modelled GW Elevation (NAVD88, ft)	Residual (ft)	Target Weight
head_3985	head_grp3	4553	6/30/2000	57.72	65.49	-7.77	0.10138
head_3986	head_grp3	4553	6/30/2001	62.26	64.66	-2.40	0.10138
head_3987	head_grp3	4553	6/30/2003	69	63.62	5.38	0.10138
head_3988	head_grp3	4553	6/30/2005	66.98	63.34	3.64	0.10138
head_3989	head_grp3	4553	6/30/2006	65.31	62.69	2.62	0.10138
head_3990	head_grp3	4553	6/30/2007	58.78	61.65	-2.87	0.10138
head_3991	head_grp3	4553	6/30/2008	63.91	61.07	2.84	0.10138
head_3992	head_grp3	4553	6/30/2010	64.01	61.85	2.16	0.20276
head_3993	head_grp3	4553	6/30/2011	61.97	61.77	0.20	0.10138
head_3994	head_grp3	4553	6/30/2012	58.32	61.97	-3.65	0.20276
head_3995	head_grp3	4553	6/30/2013	65.93	63.28	2.65	0.10138
head_3996	head_grp3	4553	6/30/2014	66.66	64.41	2.25	0.10138
head_3997	head_grp3	4553	6/30/2015	66.81	65.16	1.65	0.20276
head_4054	head_grp3	4648	6/30/1995	66.62	65.03	1.59	0.10138
head_4055	head_grp3	4648	6/30/1996	67.73	65.02	2.71	0.10138
head_4056	head_grp3	4648	6/30/2010	71.84	65.03	6.81	0.10138
head_4057	head_grp2	4700	6/30/1974	130.01	128.98	1.03	0.33928
head_4058	head_grp2	4700	6/30/1978	128.84	138.28	-9.44	0.33928
head_4059	head_grp2	4700	6/30/1983	127.88	134.23	-6.35	0.67856
head_4060	head_grp2	4700	6/30/1984	126.07	131.74	-5.67	0.67856
head_4061	head_grp2	4700	6/30/1985	124.91	130.06	-5.15	0.67856
head_4062	head_grp2	4700	6/30/1986	123.33	127.99	-4.66	0.67856
head_4063	head_grp2	4700	6/30/1987	121.66	125.42	-3.76	0.67856
head_4064	head_grp2	4700	6/30/1988	120.4	123.05	-2.65	0.33928
head_4065	head_grp2	4700	6/30/1990	118.57	120.75	-2.18	0.67856
head_4066	head_grp3	4700	6/30/1991	118.52	120.35	-1.83	0.20276
head_4067	head_grp3	4700	6/30/1992	118.01	119.86	-1.85	0.20276
head_4068	head_grp3	4700	6/30/1993	117.67	119.45	-1.78	0.10138
head_4069	head_grp3	4700	6/30/1994	117.65	119.82	-2.17	0.10138
head_4070	head_grp3	4700	6/30/1995	118.51	120.58	-2.07	0.10138
head_4071	head_grp3	4700	6/30/1996	119.13	121.50	-2.37	0.10138
head_4072	head_grp3	4700	6/30/1997	119.63	123.07	-3.44	0.10138
head_4073	head_grp3	4700	6/30/1998	122.02	125.36	-3.34	0.10138
head_4074	head_grp3	4700	6/30/1999	122.3	126.15	-3.85	0.10138
head_4075	head_grp3	4700	6/30/2000	120.09	125.09	-5.00	0.10138
head_4076	head_grp3	4700	6/30/2001	119.18	124.23	-5.05	0.10138
head_4077	head_grp3	4700	6/30/2002	117.74	122.49	-4.75	0.10138
head_4078	head_grp3	4700	6/30/2003	118.15	121.60	-3.45	0.10138
head_4079	head_grp3	4700	6/30/2007	119.27	121.32	-2.05	0.10138
head_4080	head_grp3	4700	6/30/2008	116.45	119.72	-3.27	0.10138
head_4081	head_grp3	4700	6/30/2010	115.21	115.46	-0.25	0.20276
head_4082	head_grp3	4700	6/30/2011	115.29	115.65	-0.36	0.20276
head_4083	head_grp3	4700	6/30/2012	115.68	116.18	-0.50	0.20276
head_4084	head_grp3	4700	6/30/2013	116.7	116.88	-0.18	0.20276

Table A-2. Post-Development (1942-2015) Groundwater Head Targets.

Target Name	Target Group	NWF ID	Date	Measured GW Elevation (NAVD88, ft)	Modelled GW Elevation (NAVD88, ft)	Residual (ft)	Target Weight
head_4085	head_grp3	4700	6/30/2014	117.82	117.70	0.12	0.10138
head_4086	head_grp3	4700	6/30/2015	118.75	118.68	0.07	0.20276
head_4101	head_grp2	4731	6/30/1986	59.23	64.65	-5.42	0.33928
head_4102	head_grp2	4731	6/30/1989	61.87	64.56	-2.69	0.33928
head_4103	head_grp2	4731	6/30/1990	61.51	64.51	-3.00	0.33928
head_4104	head_grp3	4731	6/30/1991	61.42	64.47	-3.05	0.10138
head_4105	head_grp3	4731	6/30/1992	60.61	64.44	-3.83	0.10138
head_4106	head_grp3	4731	6/30/1993	60.74	64.43	-3.69	0.10138
head_4107	head_grp3	4731	6/30/1995	62.27	64.40	-2.13	0.10138
head_4108	head_grp3	4731	6/30/1996	62.57	64.39	-1.82	0.10138
head_4109	head_grp3	4731	6/30/1997	60.67	64.41	-3.74	0.10138
head_4110	head_grp3	4731	6/30/1998	62.11	64.46	-2.35	0.18248
head_4111	head_grp3	4731	6/30/1999	60.63	64.42	-3.79	0.10138
head_4112	head_grp3	4731	6/30/2000	57.97	64.29	-6.32	0.10138
head_4113	head_grp3	4731	6/30/2001	57.9	64.27	-6.37	0.18248
head_4114	head_grp3	4731	6/30/2002	58.19	64.19	-6.00	0.10138
head_4115	head_grp3	4731	6/30/2003	60.65	64.19	-3.54	0.10138
head_4116	head_grp3	4731	6/30/2007	54.53	64.26	-9.73	0.10138
head_4117	head_grp3	4731	6/30/2008	57.43	64.26	-6.83	0.10138
head_4118	head_grp3	4731	6/30/2010	60.27	64.23	-3.96	0.18248
head_4119	head_grp3	4731	6/30/2011	56.39	64.25	-7.86	0.18248
head_4120	head_grp3	4731	6/30/2012	57.7	64.27	-6.57	0.18248
head_4121	head_grp3	4731	6/30/2013	59.64	64.30	-4.66	0.18248
head_4122	head_grp3	4731	6/30/2014	60.72	64.50	-3.78	0.18248
head_4123	head_grp3	4731	6/30/2015	60.87	64.34	-3.47	0.18248
head_4124	head_grp2	4754	6/30/1968	77.65	84.60	-6.95	0.61071
head_4125	head_grp2	4754	6/30/1969	77.15	84.56	-7.41	0.61071
head_4126	head_grp2	4754	6/30/1970	79.49	84.50	-5.01	0.61071
head_4127	head_grp2	4754	6/30/1972	71.75	84.24	-12.49	0.33928
head_4128	head_grp2	4754	6/30/1976	81.95	83.19	-1.24	0.33928
head_4129	head_grp2	4754	6/30/1977	80.52	83.17	-2.65	0.33928
head_4130	head_grp2	4754	6/30/1978	81.47	83.04	-1.57	0.61071
head_4131	head_grp2	4754	6/30/1979	78.71	82.89	-4.18	0.33928
head_4132	head_grp2	4754	6/30/1980	78.28	82.74	-4.46	0.33928
head_4133	head_grp2	4754	6/30/1981	75.6	82.67	-7.07	0.33928
head_4134	head_grp2	4754	6/30/1982	77.02	82.57	-5.55	0.33928
head_4135	head_grp2	4754	6/30/1983	80.6	82.46	-1.86	0.33928
head_4136	head_grp2	4754	6/30/1984	78.01	82.34	-4.33	0.33928
head_4137	head_grp2	4754	6/30/1985	76.18	82.21	-6.03	0.33928
head_4138	head_grp2	4754	6/30/1986	75.69	81.94	-6.25	0.33928
head_4139	head_grp2	4754	6/30/1987	75.64	81.81	-6.17	0.33928
head_4140	head_grp2	4754	6/30/1988	75.98	81.61	-5.63	0.33928
head_4141	head_grp2	4754	6/30/1989	77.17	81.44	-4.27	0.33928
head_4142	head_grp2	4754	6/30/1990	75.37	81.19	-5.82	0.33928

Table A-2. Post-Development (1942-2015) Groundwater Head Targets.

Target Name	Target Group	NWF ID	Date	Measured GW Elevation (NAVD88, ft)	Modelled GW Elevation (NAVD88, ft)	Residual (ft)	Target Weight
head_4143	head_grp3	4754	6/30/1991	73.77	81.17	-7.40	0.10138
head_4144	head_grp3	4754	6/30/1992	75.14	80.87	-5.73	0.10138
head_4145	head_grp3	4754	6/30/1994	73.88	80.61	-6.73	0.18248
head_4146	head_grp3	4754	6/30/1995	76.23	80.68	-4.45	0.10138
head_4147	head_grp3	4754	6/30/1996	76.2	80.68	-4.48	0.10138
head_4148	head_grp3	4754	6/30/1997	77.04	80.86	-3.82	0.10138
head_4149	head_grp3	4754	6/30/1998	76.12	81.12	-5.00	0.10138
head_4150	head_grp3	4754	6/30/1999	76.55	80.85	-4.30	0.10138
head_4151	head_grp3	4754	6/30/2000	69.8	80.18	-10.38	0.10138
head_4152	head_grp3	4754	6/30/2001	72.48	80.11	-7.63	0.10138
head_4153	head_grp3	4754	6/30/2002	71.19	79.70	-8.51	0.10138
head_4154	head_grp3	4754	6/30/2003	74.31	79.88	-5.57	0.10138
head_4155	head_grp3	4754	6/30/2004	76.8	80.99	-4.19	0.10138
head_4156	head_grp3	4754	6/30/2006	77.44	81.06	-3.62	0.10138
head_4157	head_grp3	4754	6/30/2007	74.67	80.99	-6.32	0.10138
head_4158	head_grp3	4754	6/30/2008	77.85	80.98	-3.13	0.10138
head_4159	head_grp3	4754	6/30/2010	78.88	80.92	-2.04	0.18248
head_4160	head_grp3	4754	6/30/2011	74.93	80.97	-6.04	0.18248
head_4161	head_grp3	4754	6/30/2012	75.62	81.06	-5.44	0.18248
head_4162	head_grp3	4754	6/30/2013	78.79	81.27	-2.48	0.18248
head_4163	head_grp3	4754	6/30/2014	80.02	82.35	-2.33	0.18248
head_4164	head_grp3	4754	6/30/2015	78.79	81.40	-2.61	0.18248
head_4170	head_grp3	4788	6/30/2001	4.67	16.00	-11.33	0.10138
head_4171	head_grp3	4788	6/30/2002	4.19	15.68	-11.49	0.10138
head_4172	head_grp3	4788	6/30/2003	9.42	16.15	-6.73	0.10138
head_4173	head_grp3	4788	6/30/2006	8.82	5.81	3.01	0.10138
head_4174	head_grp3	4788	6/30/2007	8.78	10.43	-1.65	0.10138
head_4175	head_grp3	4788	6/30/2008	9.86	4.60	5.26	0.10138
head_4176	head_grp3	4788	6/30/2010	12.95	-2.45	15.40	0.18248
head_4177	head_grp3	4788	6/30/2011	9.17	-4.33	13.50	0.18248
head_4178	head_grp3	4788	6/30/2012	10.15	-3.84	13.99	0.18248
head_4179	head_grp3	4788	6/30/2013	14.86	1.10	13.76	0.10138
head_4180	head_grp3	4788	6/30/2014	15.89	7.59	8.30	0.18248
head_4181	head_grp3	4788	6/30/2015	14.58	8.53	6.05	0.18248
head_4197	head_grp2	4822	6/30/1986	56.03	55.27	0.76	0.33928
head_4198	head_grp2	4822	6/30/1987	53.1	55.26	-2.16	0.33928
head_4199	head_grp3	4822	6/30/1991	56.57	55.19	1.38	0.10138
head_4200	head_grp3	4822	6/30/1995	54.56	55.16	-0.60	0.10138
head_4201	head_grp3	4822	6/30/1996	53.59	55.16	-1.57	0.10138
head_4202	head_grp3	4822	6/30/2001	53.48	55.10	-1.62	0.10138
head_4203	head_grp3	4822	6/30/2002	54.28	55.07	-0.79	0.10138
head_4204	head_grp3	4822	6/30/2003	55.83	55.07	0.76	0.10138
head_4205	head_grp3	4822	6/30/2005	55.6	55.14	0.46	0.10138
head_4206	head_grp3	4822	6/30/2006	54.02	55.11	-1.09	0.10138

Table A-2. Post-Development (1942-2015) Groundwater Head Targets.

Target Name	Target Group	NWF ID	Date	Measured GW Elevation (NAVD88, ft)	Modelled GW Elevation (NAVD88, ft)	Residual (ft)	Target Weight
head_4207	head_grp3	4822	6/30/2007	51.05	55.10	-4.05	0.10138
head_4208	head_grp3	4822	6/30/2008	54.72	55.10	-0.38	0.10138
head_4209	head_grp3	4822	6/30/2010	54.41	55.08	-0.67	0.18248
head_4210	head_grp3	4822	6/30/2011	51.48	55.09	-3.61	0.18248
head_4211	head_grp3	4822	6/30/2012	54.15	55.10	-0.95	0.18248
head_4212	head_grp3	4822	6/30/2013	55.66	55.12	0.54	0.18248
head_4213	head_grp3	4822	6/30/2014	55.62	55.20	0.42	0.18248
head_4214	head_grp3	4822	6/30/2015	55.27	55.13	0.14	0.18248
head_4348	head_grp3	5080	6/30/2001	70.63	52.61	18.02	0.10138
head_4349	head_grp3	5080	6/30/2003	76.23	54.96	21.27	0.10138
head_4350	head_grp3	5080	6/30/2006	74.25	49.41	24.84	0.10138
head_4351	head_grp3	5080	6/30/2009	75.38	47.20	28.18	0.10138
head_4352	head_grp3	5080	6/30/2010	74.47	45.76	28.71	0.18248
head_4407	head_grp2	5240	6/30/1968	183.22	184.20	-0.98	0.61071
head_4408	head_grp2	5240	6/30/1969	182.74	184.17	-1.43	0.61071
head_4409	head_grp2	5240	6/30/1970	184.21	184.14	0.07	0.61071
head_4410	head_grp2	5240	6/30/1974	182.75	183.90	-1.15	0.33928
head_4411	head_grp2	5240	6/30/1976	185.85	183.71	2.14	0.33928
head_4412	head_grp2	5240	6/30/1977	185.56	183.70	1.86	0.33928
head_4413	head_grp2	5240	6/30/1978	187.56	183.65	3.91	0.61071
head_4414	head_grp2	5240	6/30/1979	185.81	183.59	2.22	0.33928
head_4415	head_grp2	5240	6/30/1980	185.34	183.52	1.82	0.33928
head_4416	head_grp2	5240	6/30/1981	183.56	183.47	0.09	0.33928
head_4417	head_grp2	5240	6/30/1982	183.04	183.43	-0.39	0.33928
head_4418	head_grp2	5240	6/30/1983	183.96	183.38	0.58	0.33928
head_4419	head_grp2	5240	6/30/1984	184.8	183.33	1.47	0.33928
head_4420	head_grp2	5240	6/30/1985	182.88	183.27	-0.39	0.33928
head_4421	head_grp2	5240	6/30/1986	182.92	183.16	-0.24	0.33928
head_4422	head_grp2	5240	6/30/1987	182.96	183.08	-0.12	0.33928
head_4423	head_grp2	5240	6/30/1988	183.67	182.99	0.68	0.33928
head_4424	head_grp2	5240	6/30/1989	185.88	182.90	2.98	0.33928
head_4425	head_grp2	5240	6/30/1990	185.96	182.80	3.16	0.33928
head_4426	head_grp3	5240	6/30/1991	184.73	182.76	1.97	0.10138
head_4427	head_grp3	5240	6/30/1992	184.44	182.63	1.81	0.10138
head_4428	head_grp3	5240	6/30/1995	185.54	182.49	3.05	0.10138
head_4429	head_grp3	5240	6/30/1996	184.12	182.44	1.68	0.10138
head_4430	head_grp3	5240	6/30/1998	186.12	182.51	3.61	0.10138
head_4431	head_grp3	5240	6/30/2000	182.13	182.18	-0.05	0.10138
head_4432	head_grp3	5240	6/30/2001	181.65	182.12	-0.47	0.10138
head_4433	head_grp3	5240	6/30/2002	180.93	181.98	-1.05	0.10138
head_4434	head_grp3	5240	6/30/2003	183.92	181.95	1.97	0.10138
head_4435	head_grp3	5240	6/30/2004	184.34	182.09	2.25	0.10138
head_4436	head_grp3	5240	6/30/2006	183.41	181.83	1.58	0.10138
head_4437	head_grp3	5240	6/30/2007	181.24	181.73	-0.49	0.10138

Table A-2. Post-Development (1942-2015) Groundwater Head Targets.

Target Name	Target Group	NWF ID	Date	Measured GW Elevation (NAVD88, ft)	Modelled GW Elevation (NAVD88, ft)	Residual (ft)	Target Weight
head_4438	head_grp3	5240	6/30/2008	183.81	181.70	2.11	0.10138
head_4439	head_grp3	5240	6/30/2010	184.47	181.65	2.82	0.18248
head_4440	head_grp3	5240	6/30/2011	180.21	181.66	-1.45	0.18248
head_4441	head_grp3	5240	6/30/2012	180.38	181.70	-1.32	0.18248
head_4442	head_grp3	5240	6/30/2013	178.88	181.83	-2.95	0.18248
head_4443	head_grp3	5240	6/30/2014	185.55	182.44	3.11	0.18248
head_4444	head_grp3	5240	6/30/2015	184.56	182.02	2.54	0.18248
head_4445	head_grp2	5254	6/30/1986	67.69	63.96	3.73	0.33928
head_4446	head_grp2	5254	6/30/1987	63.87	63.95	-0.08	0.33928
head_4447	head_grp3	5254	6/30/2001	63.76	63.87	-0.11	0.10138
head_4448	head_grp3	5254	6/30/2002	63.59	63.86	-0.27	0.10138
head_4449	head_grp3	5254	6/30/2003	64.95	63.85	1.10	0.10138
head_4450	head_grp3	5254	6/30/2006	64.39	63.88	0.51	0.10138
head_4451	head_grp3	5254	6/30/2007	61.2	63.87	-2.67	0.10138
head_4452	head_grp3	5254	6/30/2008	64.77	63.87	0.90	0.10138
head_4453	head_grp3	5254	6/30/2010	67.69	63.87	3.82	0.10138
head_4454	head_grp3	5254	6/30/2011	61.81	63.87	-2.06	0.18248
head_4455	head_grp3	5254	6/30/2012	62.88	63.88	-1.00	0.18248
head_4456	head_grp3	5254	6/30/2013	66.65	63.88	2.77	0.18248
head_4457	head_grp3	5254	6/30/2014	68.02	63.93	4.09	0.18248
head_4458	head_grp3	5254	6/30/2015	66.09	63.90	2.19	0.18248
head_4459	head_grp2	5261	6/30/1978	176.88	171.44	5.44	0.33928
head_4460	head_grp2	5261	6/30/1979	177.3	171.26	6.04	0.33928
head_4461	head_grp2	5261	6/30/1980	176.32	171.12	5.20	0.33928
head_4462	head_grp2	5261	6/30/1981	175.19	170.99	4.20	0.33928
head_4463	head_grp2	5261	6/30/1982	175.75	170.82	4.93	0.33928
head_4464	head_grp2	5261	6/30/1983	176.41	170.65	5.76	0.33928
head_4465	head_grp2	5261	6/30/1984	176.53	170.44	6.09	0.33928
head_4466	head_grp2	5261	6/30/1988	176.35	168.82	7.53	0.33928
head_4467	head_grp2	5261	6/30/1989	175.96	168.49	7.47	0.33928
head_4468	head_grp2	5261	6/30/1990	178.02	168.25	9.77	0.33928
head_4469	head_grp3	5261	6/30/1991	175.48	167.99	7.49	0.10138
head_4470	head_grp3	5261	6/30/1992	175.39	167.84	7.55	0.10138
head_4471	head_grp3	5261	6/30/1995	175.24	166.93	8.31	0.10138
head_4472	head_grp3	5261	6/30/1996	174.74	166.75	7.99	0.10138
head_4473	head_grp3	5261	6/30/1998	175.91	166.54	9.37	0.10138
head_4474	head_grp3	5261	6/30/2000	172.48	165.94	6.54	0.10138
head_4475	head_grp3	5261	6/30/2001	171.67	165.94	5.73	0.10138
head_4476	head_grp3	5261	6/30/2002	171.61	165.48	6.13	0.10138
head_4477	head_grp3	5261	6/30/2003	173.89	165.78	8.11	0.10138
head_4478	head_grp3	5261	6/30/2004	173.97	165.78	8.19	0.10138
head_4479	head_grp3	5261	6/30/2006	172.94	165.35	7.59	0.10138
head_4480	head_grp3	5261	6/30/2007	171.19	164.80	6.39	0.10138
head_4481	head_grp3	5261	6/30/2008	172.99	164.44	8.55	0.10138

Table A-2. Post-Development (1942-2015) Groundwater Head Targets.

Target Name	Target Group	NWF ID	Date	Measured GW Elevation (NAVD88, ft)	Modelled GW Elevation (NAVD88, ft)	Residual (ft)	Target Weight
head_4482	head_grp3	5261	6/30/2010	174.11	164.31	9.80	0.18248
head_4483	head_grp3	5261	6/30/2011	172.41	164.37	8.04	0.10138
head_4484	head_grp1	5271	6/30/1961	77.52	78.23	-0.71	1.53329
head_4485	head_grp1	5271	6/30/1962	78.84	78.22	0.62	1.53329
head_4486	head_grp1	5271	6/30/1963	76.18	78.22	-2.04	0.76665
head_4487	head_grp1	5271	6/30/1964	79.09	78.21	0.88	1.53329
head_4488	head_grp1	5271	6/30/1965	81.09	78.21	2.88	0.76665
head_4489	head_grp2	5271	6/30/1966	80.57	78.20	2.37	0.33928
head_4490	head_grp2	5271	6/30/1967	78.46	78.20	0.26	0.33928
head_4491	head_grp2	5271	6/30/1968	77.85	78.19	-0.34	0.33928
head_4492	head_grp2	5271	6/30/1969	75.59	78.18	-2.59	0.67856
head_4493	head_grp2	5271	6/30/1970	77.19	78.18	-0.99	0.33928
head_4494	head_grp2	5271	6/30/1971	78.86	78.17	0.69	0.33928
head_4495	head_grp2	5271	6/30/1972	77.6	78.14	-0.54	0.33928
head_4496	head_grp2	5271	6/30/1973	77.21	78.14	-0.93	0.33928
head_4497	head_grp2	5271	6/30/1974	78.12	78.13	-0.01	0.33928
head_4498	head_grp2	5271	6/30/1975	77.79	78.05	-0.26	0.33928
head_4499	head_grp2	5271	6/30/1976	79.4	78.04	1.36	0.33928
head_4500	head_grp2	5271	6/30/1977	83.52	78.04	5.48	0.33928
head_4501	head_grp2	5271	6/30/1978	82.02	78.02	4.00	0.33928
head_4502	head_grp2	5271	6/30/1979	80.2	78.01	2.19	0.33928
head_4503	head_grp2	5271	6/30/1980	79.34	77.99	1.35	0.33928
head_4504	head_grp2	5271	6/30/1981	76.21	77.98	-1.77	0.33928
head_4505	head_grp2	5271	6/30/1982	75.62	77.96	-2.34	0.33928
head_4506	head_grp2	5271	6/30/1983	78.52	77.95	0.57	0.33928
head_4507	head_grp2	5271	6/30/1984	76.7	77.94	-1.24	0.33928
head_4508	head_grp2	5271	6/30/1985	74.86	77.92	-3.06	0.33928
head_4509	head_grp2	5271	6/30/1986	76.42	77.89	-1.47	0.33928
head_4510	head_grp2	5271	6/30/1987	76.04	77.87	-1.83	0.33928
head_4511	head_grp2	5271	6/30/1988	76.99	77.85	-0.86	0.33928
head_4512	head_grp2	5271	6/30/1989	77.24	77.83	-0.59	0.33928
head_4513	head_grp2	5271	6/30/1990	77.11	77.80	-0.69	0.33928
head_4514	head_grp3	5271	6/30/1991	79.76	77.78	1.98	0.10138
head_4515	head_grp3	5271	6/30/2003	75.44	77.59	-2.15	0.10138
head_4516	head_grp3	5271	6/30/2006	76.99	77.66	-0.67	0.10138
head_4517	head_grp3	5271	6/30/2007	72.91	77.64	-4.73	0.10138
head_4518	head_grp3	5271	6/30/2008	75.6	77.64	-2.04	0.10138
head_4519	head_grp3	5271	6/30/2010	79.42	77.63	1.79	0.20276
head_4520	head_grp3	5271	6/30/2011	74.5	77.63	-3.13	0.20276
head_4521	head_grp3	5271	6/30/2012	72.5	77.65	-5.15	0.20276
head_4522	head_grp3	5271	6/30/2013	76.12	77.67	-1.55	0.20276
head_4523	head_grp3	5271	6/30/2014	79.97	77.81	2.16	0.20276
head_4524	head_grp3	5271	6/30/2015	77.86	77.71	0.15	0.20276
head_4550	head_grp2	5363	6/30/1986	157.7	169.66	-11.96	0.33928

Table A-2. Post-Development (1942-2015) Groundwater Head Targets.

Target Name	Target Group	NWF ID	Date	Measured GW Elevation (NAVD88, ft)	Modelled GW Elevation (NAVD88, ft)	Residual (ft)	Target Weight
head_4551	head_grp2	5363	6/30/1987	156.9	169.21	-12.31	0.33928
head_4552	head_grp3	5363	6/30/1991	157.21	167.86	-10.65	0.10138
head_4553	head_grp3	5363	6/30/2001	152.19	165.75	-13.56	0.10138
head_4554	head_grp3	5363	6/30/2002	152.22	165.65	-13.43	0.10138
head_4555	head_grp3	5363	6/30/2003	153.92	165.61	-11.69	0.18248
head_4556	head_grp3	5363	6/30/2005	163.33	165.31	-1.98	0.10138
head_4557	head_grp3	5363	6/30/2006	153.41	164.84	-11.43	0.10138
head_4558	head_grp3	5363	6/30/2007	150.71	164.31	-13.60	0.10138
head_4559	head_grp3	5363	6/30/2008	152.29	164.16	-11.87	0.10138
head_4560	head_grp3	5363	6/30/2010	153.74	164.13	-10.39	0.18248
head_4561	head_grp3	5363	6/30/2011	149.61	163.87	-14.26	0.18248
head_4562	head_grp3	5363	6/30/2012	149.66	164.11	-14.45	0.18248
head_4563	head_grp3	5363	6/30/2013	152.78	164.65	-11.87	0.18248
head_4564	head_grp3	5363	6/30/2014	154.18	164.65	-10.47	0.10138
head_4565	head_grp3	5363	6/30/2015	153.6	164.77	-11.17	0.18248
head_4620	head_grp2	5417	6/30/1986	195.38	199.49	-4.11	0.33928
head_4621	head_grp2	5417	6/30/1987	192.58	199.38	-6.80	0.33928
head_4622	head_grp2	5417	6/30/1988	194.26	199.27	-5.01	0.33928
head_4623	head_grp2	5417	6/30/1989	195.61	199.18	-3.57	0.33928
head_4624	head_grp2	5417	6/30/1990	195.49	199.10	-3.61	0.61071
head_4625	head_grp3	5417	6/30/1991	194.43	199.04	-4.61	0.18248
head_4626	head_grp3	5417	6/30/1992	194.29	198.99	-4.70	0.18248
head_4627	head_grp3	5417	6/30/1993	194.37	198.90	-4.53	0.10138
head_4628	head_grp3	5417	6/30/1994	194.07	198.82	-4.75	0.18248
head_4629	head_grp3	5417	6/30/1995	195.07	198.75	-3.68	0.10138
head_4630	head_grp3	5417	6/30/1996	193.98	198.71	-4.73	0.18248
head_4631	head_grp3	5417	6/30/1997	194.59	198.67	-4.08	0.10138
head_4632	head_grp3	5417	6/30/1998	195.73	198.66	-2.93	0.10138
head_4633	head_grp3	5417	6/30/1999	194.87	198.62	-3.75	0.10138
head_4634	head_grp3	5417	6/30/2000	192.22	198.50	-6.28	0.10138
head_4635	head_grp3	5417	6/30/2001	192.63	198.44	-5.81	0.10138
head_4636	head_grp3	5417	6/30/2002	191.55	198.37	-6.82	0.10138
head_4637	head_grp3	5417	6/30/2003	194.14	198.34	-4.20	0.10138
head_4638	head_grp3	5417	6/30/2004	193.74	198.39	-4.65	0.10138
head_4639	head_grp3	5417	6/30/2006	193.47	198.25	-4.78	0.10138
head_4640	head_grp3	5417	6/30/2007	191.91	198.10	-6.19	0.10138
head_4641	head_grp3	5417	6/30/2008	193.71	198.03	-4.32	0.18248
head_4642	head_grp3	5417	6/30/2009	194.43	198.02	-3.59	0.18248
head_4643	head_grp3	5417	6/30/2010	194.11	198.00	-3.89	0.18248
head_4644	head_grp3	5417	6/30/2011	190.89	197.99	-7.10	0.18248
head_4645	head_grp3	5417	6/30/2012	191.23	198.00	-6.77	0.18248
head_4646	head_grp3	5417	6/30/2013	193.89	198.13	-4.24	0.18248
head_4647	head_grp3	5417	6/30/2014	195.59	198.29	-2.70	0.18248
head_4648	head_grp3	5417	6/30/2015	194.74	198.31	-3.57	0.18248

Table A-2. Post-Development (1942-2015) Groundwater Head Targets.

Target Name	Target Group	NWF ID	Date	Measured GW Elevation (NAVD88, ft)	Modelled GW Elevation (NAVD88, ft)	Residual (ft)	Target Weight
head_4768	head_grp2	5499	6/30/1967	157.97	161.64	-3.67	0.33928
head_4769	head_grp2	5499	6/30/1968	155.53	161.35	-5.82	0.33928
head_4770	head_grp2	5499	6/30/1976	158.71	158.76	-0.05	0.33928
head_4771	head_grp2	5499	6/30/1977	156.61	158.40	-1.79	0.33928
head_4772	head_grp2	5499	6/30/1978	156.94	158.11	-1.17	0.33928
head_4773	head_grp2	5499	6/30/1979	156.8	157.92	-1.12	0.33928
head_4774	head_grp2	5499	6/30/1980	156.69	157.81	-1.12	0.33928
head_4775	head_grp2	5499	6/30/1981	153.27	157.60	-4.33	0.33928
head_4776	head_grp2	5499	6/30/1982	154.36	157.28	-2.92	0.33928
head_4777	head_grp2	5499	6/30/1983	154.66	157.01	-2.35	0.33928
head_4778	head_grp2	5499	6/30/1984	155.51	156.58	-1.07	0.33928
head_4779	head_grp2	5499	6/30/1985	154.81	156.04	-1.23	0.33928
head_4780	head_grp2	5499	6/30/1986	154.3	155.28	-0.98	0.33928
head_4781	head_grp2	5499	6/30/1987	153.28	154.63	-1.35	0.33928
head_4782	head_grp2	5499	6/30/1988	153.09	154.06	-0.97	0.33928
head_4783	head_grp2	5499	6/30/1989	152.7	153.74	-1.04	0.33928
head_4784	head_grp2	5499	6/30/1990	155.34	153.09	2.25	0.33928
head_4785	head_grp3	5499	6/30/1991	152.99	152.68	0.31	0.20276
head_4786	head_grp3	5499	6/30/1992	153.45	152.48	0.97	0.20276
head_4787	head_grp3	5499	6/30/1993	154.15	152.15	2.00	0.20276
head_4788	head_grp3	5499	6/30/1994	152.13	151.78	0.35	0.20276
head_4789	head_grp3	5499	6/30/1995	152.73	151.37	1.36	0.20276
head_4790	head_grp3	5499	6/30/1996	152.61	151.01	1.60	0.20276
head_4791	head_grp3	5499	6/30/1997	150.41	150.74	-0.33	0.20276
head_4792	head_grp3	5499	6/30/1998	151.63	150.53	1.10	0.20276
head_4793	head_grp3	5499	6/30/1999	152.25	150.25	2.00	0.20276
head_4794	head_grp3	5499	6/30/2000	147.51	150.01	-2.50	0.20276
head_4795	head_grp3	5499	6/30/2001	147.24	149.74	-2.50	0.20276
head_4796	head_grp3	5499	6/30/2002	147.47	149.72	-2.25	0.20276
head_4797	head_grp3	5499	6/30/2003	149.7	149.76	-0.06	0.20276
head_4798	head_grp3	5499	6/30/2006	149.81	148.78	1.03	0.20276
head_4799	head_grp3	5499	6/30/2013	147.17	148.38	-1.21	0.20276
head_4800	head_grp3	5499	6/30/2014	149.35	148.43	0.92	0.20276
head_4801	head_grp3	5499	6/30/2015	148.57	148.46	0.11	0.20276
head_4802	head_grp2	5543	6/30/1967	186.4	183.66	2.74	0.33928
head_4803	head_grp2	5543	6/30/1968	182.61	183.55	-0.94	0.33928
head_4804	head_grp2	5543	6/30/1976	184.6	182.40	2.20	0.33928
head_4805	head_grp2	5543	6/30/1977	182.53	182.21	0.32	0.33928
head_4806	head_grp2	5543	6/30/1978	183.9	182.09	1.81	0.61071
head_4807	head_grp2	5543	6/30/1979	183.05	181.99	1.06	0.33928
head_4808	head_grp2	5543	6/30/1980	182.28	181.92	0.36	0.33928
head_4809	head_grp2	5543	6/30/1981	179.07	181.81	-2.74	0.33928
head_4810	head_grp2	5543	6/30/1982	179.85	181.66	-1.81	0.33928
head_4811	head_grp2	5543	6/30/1983	182.28	181.54	0.74	0.33928

Table A-2. Post-Development (1942-2015) Groundwater Head Targets.

Target Name	Target Group	NWF ID	Date	Measured GW Elevation (NAVD88, ft)	Modelled GW Elevation (NAVD88, ft)	Residual (ft)	Target Weight
head_4812	head_grp2	5543	6/30/1984	182.25	181.35	0.90	0.33928
head_4813	head_grp2	5543	6/30/1985	181.06	181.11	-0.05	0.33928
head_4814	head_grp2	5543	6/30/1986	180.73	180.65	0.08	0.33928
head_4815	head_grp2	5543	6/30/1987	180.5	180.34	0.16	0.33928
head_4816	head_grp2	5543	6/30/1988	180.51	180.08	0.43	0.33928
head_4817	head_grp2	5543	6/30/1989	179.92	180.19	-0.27	0.33928
head_4818	head_grp2	5543	6/30/1990	184.63	179.96	4.67	0.33928
head_4819	head_grp3	5543	6/30/1991	180.9	179.77	1.13	0.10138
head_4820	head_grp3	5543	6/30/1992	181.85	179.74	2.11	0.18248
head_4821	head_grp3	5543	6/30/1993	182.62	179.73	2.89	0.10138
head_4822	head_grp3	5543	6/30/1995	181.26	179.41	1.85	0.10138
head_4823	head_grp3	5543	6/30/1998	180.61	179.07	1.54	0.10138
head_4824	head_grp3	5543	6/30/2000	175.74	178.85	-3.11	0.10138
head_4825	head_grp3	5543	6/30/2001	175.13	178.77	-3.64	0.10138
head_4826	head_grp3	5543	6/30/2002	175.4	178.76	-3.36	0.10138
head_4827	head_grp3	5543	6/30/2003	178.73	178.77	-0.04	0.10138
head_4828	head_grp3	5543	6/30/2005	181.94	178.62	3.32	0.10138
head_4829	head_grp3	5543	6/30/2006	179.12	178.31	0.81	0.10138
head_4830	head_grp3	5543	6/30/2007	174.22	178.00	-3.78	0.10138
head_4831	head_grp3	5543	6/30/2008	176.61	177.94	-1.33	0.10138
head_4832	head_grp3	5543	6/30/2010	179.78	177.88	1.90	0.10138
head_4833	head_grp2	5547	6/30/1986	88.17	82.94	5.23	0.33928
head_4834	head_grp2	5547	6/30/1989	90.09	82.94	7.15	0.33928
head_4835	head_grp2	5547	6/30/1990	91.06	82.94	8.12	0.33928
head_4836	head_grp3	5547	6/30/1991	89.71	82.94	6.77	0.10138
head_4837	head_grp3	5547	6/30/1992	89.64	82.93	6.71	0.10138
head_4838	head_grp3	5547	6/30/1993	89.34	82.93	6.41	0.10138
head_4839	head_grp3	5547	6/30/1994	89.63	82.93	6.70	0.10138
head_4840	head_grp3	5547	6/30/1995	90.02	82.93	7.09	0.10138
head_4841	head_grp3	5547	6/30/1996	87.56	82.93	4.63	0.10138
head_4842	head_grp3	5547	6/30/1997	88.82	82.94	5.88	0.10138
head_4843	head_grp3	5547	6/30/1998	89.5	82.94	6.56	0.10138
head_4844	head_grp3	5547	6/30/2000	86.39	82.93	3.46	0.10138
head_4845	head_grp3	5547	6/30/2001	86.53	82.94	3.59	0.10138
head_4846	head_grp3	5547	6/30/2002	87.22	82.94	4.28	0.10138
head_4847	head_grp3	5547	6/30/2003	87.86	82.94	4.92	0.10138
head_4848	head_grp3	5547	6/30/2007	85.27	82.93	2.34	0.10138
head_4849	head_grp3	5547	6/30/2008	86.82	82.93	3.89	0.10138
head_4850	head_grp3	5547	6/30/2010	87.69	82.94	4.75	0.18248
head_4851	head_grp3	5547	6/30/2011	84.87	82.94	1.93	0.18248
head_4852	head_grp3	5547	6/30/2012	85.66	82.94	2.72	0.18248
head_4853	head_grp3	5547	6/30/2013	88.02	82.94	5.08	0.18248
head_4854	head_grp3	5547	6/30/2014	88.57	82.94	5.63	0.18248
head_4855	head_grp3	5547	6/30/2015	87.92	82.94	4.98	0.18248

Table A-2. Post-Development (1942-2015) Groundwater Head Targets.

Target Name	Target Group	NWF ID	Date	Measured GW Elevation (NAVD88, ft)	Modelled GW Elevation (NAVD88, ft)	Residual (ft)	Target Weight
head_4856	head_grp2	5596	6/30/1986	135.37	136.32	-0.95	0.33928
head_4857	head_grp2	5596	6/30/1987	132.35	135.18	-2.83	0.33928
head_4858	head_grp2	5596	6/30/1989	131.65	133.12	-1.47	0.33928
head_4859	head_grp2	5596	6/30/1990	131.12	132.19	-1.07	0.33928
head_4860	head_grp3	5596	6/30/1991	130.61	131.28	-0.67	0.10138
head_4861	head_grp3	5596	6/30/1992	130.42	130.65	-0.23	0.18248
head_4862	head_grp3	5596	6/30/1993	130.05	130.03	0.02	0.10138
head_4863	head_grp3	5596	6/30/1995	128.78	128.67	0.11	0.10138
head_4864	head_grp3	5596	6/30/1996	128.52	128.07	0.45	0.18248
head_4865	head_grp3	5596	6/30/1997	127.17	127.52	-0.35	0.10138
head_4866	head_grp3	5596	6/30/1998	127.28	127.00	0.28	0.10138
head_4867	head_grp3	5596	6/30/1999	127.68	126.53	1.15	0.10138
head_4868	head_grp3	5596	6/30/2000	124.75	126.10	-1.35	0.10138
head_4869	head_grp3	5596	6/30/2001	124.17	125.56	-1.39	0.10138
head_4870	head_grp3	5596	6/30/2002	124.34	125.26	-0.92	0.10138
head_4871	head_grp3	5596	6/30/2003	124.24	125.15	-0.91	0.10138
head_4872	head_grp3	5596	6/30/2005	125.22	124.91	0.31	0.10138
head_4873	head_grp3	5596	6/30/2006	125.66	124.46	1.20	0.10138
head_4874	head_grp3	5596	6/30/2007	122.35	123.57	-1.22	0.10138
head_4875	head_grp3	5596	6/30/2008	123.05	122.98	0.07	0.10138
head_4876	head_grp3	5596	6/30/2010	123.35	122.72	0.63	0.18248
head_4877	head_grp3	5596	6/30/2011	121.43	122.53	-1.10	0.18248
head_4878	head_grp3	5596	6/30/2012	120.88	122.44	-1.56	0.18248
head_4879	head_grp3	5596	6/30/2013	121.8	123.20	-1.40	0.18248
head_4880	head_grp3	5596	6/30/2014	122.91	123.60	-0.69	0.18248
head_4881	head_grp3	5596	6/30/2015	123.28	123.90	-0.62	0.18248
head_4882	head_grp2	5597	6/30/1986	132.55	136.13	-3.58	0.33928
head_4883	head_grp2	5597	6/30/1987	130.45	134.99	-4.54	0.33928
head_4884	head_grp2	5597	6/30/1990	130.54	132.00	-1.46	0.33928
head_4885	head_grp3	5597	6/30/1991	130.13	131.08	-0.95	0.10138
head_4886	head_grp3	5597	6/30/1992	130.02	130.45	-0.43	0.18248
head_4887	head_grp3	5597	6/30/1993	129.53	129.82	-0.29	0.10138
head_4888	head_grp3	5597	6/30/1995	128.98	128.46	0.52	0.10138
head_4889	head_grp3	5597	6/30/1996	128.7	127.86	0.84	0.18248
head_4890	head_grp3	5597	6/30/1997	127.39	127.31	0.08	0.10138
head_4891	head_grp3	5597	6/30/1998	128.08	126.79	1.29	0.10138
head_4892	head_grp3	5597	6/30/1999	127.81	126.32	1.49	0.10138
head_4893	head_grp3	5597	6/30/2000	125.44	125.89	-0.45	0.10138
head_4894	head_grp3	5597	6/30/2001	124.4	125.35	-0.95	0.10138
head_4895	head_grp3	5597	6/30/2002	124.94	125.05	-0.11	0.10138
head_4896	head_grp3	5597	6/30/2003	125.6	124.93	0.67	0.10138
head_4897	head_grp3	5597	6/30/2006	127.55	124.24	3.31	0.10138
head_4898	head_grp3	5597	6/30/2007	123.92	123.35	0.57	0.10138
head_4899	head_grp3	5597	6/30/2008	125.24	122.76	2.48	0.10138

Table A-2. Post-Development (1942-2015) Groundwater Head Targets.

Target Name	Target Group	NWF ID	Date	Measured GW Elevation (NAVD88, ft)	Modelled GW Elevation (NAVD88, ft)	Residual (ft)	Target Weight
head_4900	head_grp3	5597	6/30/2009	125.53	122.56	2.97	0.18248
head_4901	head_grp3	5597	6/30/2010	126.34	122.50	3.84	0.18248
head_4902	head_grp3	5597	6/30/2011	123.87	122.31	1.56	0.18248
head_4903	head_grp3	5597	6/30/2012	123.64	122.22	1.42	0.18248
head_4904	head_grp3	5597	6/30/2013	125.23	122.98	2.25	0.18248
head_4905	head_grp3	5597	6/30/2014	126.37	123.38	2.99	0.18248
head_4906	head_grp3	5597	6/30/2015	125.29	123.69	1.60	0.18248
head_4959	head_grp2	5656	6/30/1968	213.11	217.34	-4.23	0.61071
head_4960	head_grp2	5656	6/30/1969	212.83	217.29	-4.46	0.61071
head_4961	head_grp2	5656	6/30/1970	215.95	217.24	-1.29	0.61071
head_4962	head_grp2	5656	6/30/1974	214.75	216.61	-1.86	0.33928
head_4963	head_grp2	5656	6/30/1976	216.02	216.41	-0.39	0.33928
head_4964	head_grp2	5656	6/30/1977	215.72	216.30	-0.58	0.33928
head_4965	head_grp2	5656	6/30/1978	217.51	216.11	1.40	0.61071
head_4966	head_grp2	5656	6/30/1979	215.94	215.94	0.00	0.33928
head_4967	head_grp2	5656	6/30/1980	215.71	215.78	-0.07	0.33928
head_4968	head_grp2	5656	6/30/1981	211.78	215.69	-3.91	0.33928
head_4969	head_grp2	5656	6/30/1982	214.07	215.58	-1.51	0.33928
head_4970	head_grp2	5656	6/30/1983	215.87	215.48	0.39	0.33928
head_4971	head_grp2	5656	6/30/1984	215.38	215.37	0.01	0.33928
head_4972	head_grp2	5656	6/30/1985	213.12	215.23	-2.11	0.33928
head_4973	head_grp2	5656	6/30/1986	212.76	215.06	-2.30	0.33928
head_4974	head_grp2	5656	6/30/1987	212.95	214.95	-2.00	0.33928
head_4975	head_grp2	5656	6/30/1988	214.2	214.66	-0.46	0.33928
head_4976	head_grp2	5656	6/30/1989	216.27	214.67	1.60	0.33928
head_4977	head_grp2	5656	6/30/1990	216.94	214.56	2.38	0.61071
head_4978	head_grp3	5656	6/30/1991	215.87	214.70	1.17	0.10138
head_4979	head_grp3	5656	6/30/1992	216.11	214.66	1.45	0.10138
head_4980	head_grp3	5656	6/30/1994	215.35	214.41	0.94	0.18248
head_4981	head_grp3	5656	6/30/1995	216.01	214.18	1.83	0.10138
head_4982	head_grp3	5656	6/30/1996	215.18	214.35	0.83	0.10138
head_4983	head_grp3	5656	6/30/1997	214.58	214.11	0.47	0.10138
head_4984	head_grp3	5656	6/30/1998	216.34	214.04	2.30	0.10138
head_4985	head_grp3	5656	6/30/1999	216.55	214.14	2.41	0.10138
head_4986	head_grp3	5656	6/30/2000	212.81	213.92	-1.11	0.10138
head_4987	head_grp3	5656	6/30/2001	213.71	213.94	-0.23	0.10138
head_4988	head_grp3	5656	6/30/2002	211.39	213.78	-2.39	0.10138
head_4989	head_grp3	5656	6/30/2003	214.31	213.66	0.65	0.10138
head_4990	head_grp3	5656	6/30/2004	214.06	213.81	0.25	0.10138
head_4991	head_grp3	5656	6/30/2006	211.95	213.53	-1.58	0.10138
head_4992	head_grp3	5656	6/30/2007	210.15	213.36	-3.21	0.10138
head_4993	head_grp3	5656	6/30/2008	212.88	213.41	-0.53	0.10138
head_4994	head_grp3	5656	6/30/2010	212	213.27	-1.27	0.18248
head_4995	head_grp3	5656	6/30/2011	208.02	213.35	-5.33	0.18248

Table A-2. Post-Development (1942-2015) Groundwater Head Targets.

Target Name	Target Group	NWF ID	Date	Measured GW Elevation (NAVD88, ft)	Modelled GW Elevation (NAVD88, ft)	Residual (ft)	Target Weight
head_4996	head_grp3	5656	6/30/2012	209.3	213.46	-4.16	0.18248
head_4997	head_grp3	5656	6/30/2013	214.27	213.55	0.72	0.18248
head_4998	head_grp3	5656	6/30/2014	213.66	213.17	0.49	0.18248
head_4999	head_grp3	5656	6/30/2015	213.07	213.55	-0.48	0.18248
head_5000	head_grp2	5691	6/30/1986	120.78	121.97	-1.19	0.33928
head_5001	head_grp2	5691	6/30/1989	124.78	121.95	2.83	0.33928
head_5002	head_grp2	5691	6/30/1990	125.73	121.94	3.79	0.33928
head_5003	head_grp3	5691	6/30/1991	125.08	121.94	3.14	0.10138
head_5004	head_grp3	5691	6/30/1996	120.54	121.91	-1.37	0.10138
head_5005	head_grp3	5691	6/30/1997	121.88	121.91	-0.03	0.10138
head_5006	head_grp3	5691	6/30/2001	120.09	121.88	-1.79	0.10138
head_5007	head_grp3	5691	6/30/2003	122.84	121.87	0.97	0.10138
head_5008	head_grp3	5691	6/30/2006	121.63	121.89	-0.26	0.10138
head_5009	head_grp3	5691	6/30/2007	117.58	121.88	-4.30	0.10138
head_5010	head_grp3	5691	6/30/2008	121.75	121.88	-0.13	0.10138
head_5011	head_grp3	5691	6/30/2010	121.63	121.88	-0.25	0.18248
head_5012	head_grp3	5691	6/30/2011	116.33	121.88	-5.55	0.18248
head_5013	head_grp3	5691	6/30/2012	117.93	121.88	-3.95	0.18248
head_5014	head_grp3	5691	6/30/2013	122.54	121.89	0.65	0.18248
head_5015	head_grp3	5691	6/30/2014	123.44	121.93	1.51	0.18248
head_5016	head_grp2	5732	6/30/1986	168.62	127.37	41.25	0.33928
head_5017	head_grp2	5732	6/30/1989	171.57	127.37	44.20	0.33928
head_5018	head_grp2	5732	6/30/1990	169.8	127.37	42.43	0.67856
head_5019	head_grp3	5732	6/30/1991	169.43	127.37	42.06	0.20276
head_5020	head_grp3	5732	6/30/1992	170.38	127.37	43.01	0.20276
head_5021	head_grp3	5732	6/30/1993	170.13	127.37	42.76	0.20276
head_5022	head_grp3	5732	6/30/1994	169.57	127.37	42.20	0.20276
head_5023	head_grp3	5732	6/30/1995	167.94	127.37	40.57	0.10138
head_5024	head_grp3	5732	6/30/1996	166.86	127.37	39.49	0.10138
head_5025	head_grp3	5732	6/30/1997	165.18	127.38	37.80	0.10138
head_5026	head_grp3	5732	6/30/1998	160.74	127.37	33.37	0.20276
head_5027	head_grp3	5732	6/30/1999	159.54	127.37	32.17	0.10138
head_5028	head_grp3	5732	6/30/2000	156.67	127.37	29.30	0.10138
head_5029	head_grp3	5732	6/30/2001	156.98	127.38	29.60	0.10138
head_5030	head_grp3	5732	6/30/2002	157.27	127.38	29.89	0.10138
head_5031	head_grp3	5732	6/30/2003	160.09	127.38	32.71	0.10138
head_5032	head_grp3	5732	6/30/2007	154.71	127.37	27.34	0.10138
head_5033	head_grp3	5732	6/30/2008	157.62	127.37	30.25	0.10138
head_5034	head_grp3	5732	6/30/2010	159.01	127.38	31.63	0.20276
head_5035	head_grp3	5732	6/30/2011	154.97	127.38	27.59	0.20276
head_5036	head_grp3	5732	6/30/2012	155.61	127.38	28.23	0.20276
head_5037	head_grp3	5732	6/30/2013	159.24	127.38	31.86	0.20276
head_5038	head_grp3	5732	6/30/2014	161.41	127.38	34.03	0.20276
head_5039	head_grp3	5732	6/30/2015	160.93	127.38	33.55	0.20276

Table A-2. Post-Development (1942-2015) Groundwater Head Targets.

Target Name	Target Group	NWF ID	Date	Measured GW Elevation (NAVD88, ft)	Modelled GW Elevation (NAVD88, ft)	Residual (ft)	Target Weight
head_5040	head_grp2	5733	6/30/1986	209.9	163.69	46.21	0.33928
head_5041	head_grp2	5733	6/30/1988	213.67	163.69	49.98	0.33928
head_5042	head_grp2	5733	6/30/1989	215.29	163.69	51.60	0.61071
head_5043	head_grp2	5733	6/30/1990	213.22	163.69	49.53	0.61071
head_5044	head_grp3	5733	6/30/1991	213.9	163.69	50.21	0.18248
head_5045	head_grp3	5733	6/30/1992	214.86	163.69	51.17	0.18248
head_5046	head_grp3	5733	6/30/1993	213.78	163.69	50.09	0.18248
head_5047	head_grp3	5733	6/30/1994	214.63	163.69	50.94	0.18248
head_5048	head_grp3	5733	6/30/1995	214.49	163.69	50.80	0.10138
head_5049	head_grp3	5733	6/30/1996	214.5	163.69	50.81	0.10138
head_5050	head_grp3	5733	6/30/1997	212.11	163.69	48.42	0.10138
head_5051	head_grp3	5733	6/30/1998	214.96	163.69	51.27	0.18248
head_5052	head_grp3	5733	6/30/1999	213.46	163.69	49.77	0.10138
head_5053	head_grp3	5733	6/30/2000	210.26	163.69	46.57	0.10138
head_5054	head_grp3	5733	6/30/2001	213.69	163.69	50.00	0.10138
head_5055	head_grp3	5733	6/30/2002	213.57	163.69	49.88	0.10138
head_5056	head_grp3	5733	6/30/2003	216.29	163.69	52.60	0.10138
head_5057	head_grp3	5733	6/30/2007	210.05	163.69	46.36	0.10138
head_5058	head_grp3	5733	6/30/2008	213.44	163.69	49.75	0.10138
head_5059	head_grp3	5733	6/30/2010	212.82	163.70	49.13	0.18248
head_5060	head_grp3	5733	6/30/2011	210.16	163.69	46.47	0.18248
head_5061	head_grp3	5733	6/30/2012	212.47	163.70	48.77	0.18248
head_5062	head_grp3	5733	6/30/2013	215.21	163.69	51.52	0.18248
head_5063	head_grp3	5733	6/30/2014	215.53	163.69	51.84	0.18248
head_5064	head_grp3	5733	6/30/2015	215.42	163.70	51.72	0.18248
head_5065	head_grp1	5746	6/30/1957	137.06	134.61	2.45	0.76665
head_5066	head_grp1	5746	6/30/1961	135.06	132.69	2.37	0.76665
head_5067	head_grp2	5746	6/30/1966	131.22	129.87	1.35	0.33928
head_5068	head_grp2	5746	6/30/1967	130.94	129.47	1.47	0.61071
head_5069	head_grp2	5746	6/30/1968	129.57	129.11	0.46	0.33928
head_5070	head_grp2	5746	6/30/1969	128.96	128.75	0.21	0.33928
head_5071	head_grp2	5746	6/30/1974	122.67	127.12	-4.45	0.61071
head_5072	head_grp2	5746	6/30/1975	122.55	126.73	-4.18	0.61071
head_5073	head_grp2	5746	6/30/1976	122.22	126.35	-4.13	0.33928
head_5074	head_grp2	5746	6/30/1977	122.16	125.95	-3.79	0.33928
head_5075	head_grp2	5746	6/30/1978	121.63	125.57	-3.94	0.61071
head_5076	head_grp2	5746	6/30/1979	121.33	125.29	-3.96	0.33928
head_5077	head_grp2	5746	6/30/1980	121.02	125.14	-4.12	0.33928
head_5078	head_grp2	5746	6/30/1981	120.16	124.94	-4.78	0.61071
head_5079	head_grp2	5746	6/30/1982	119.69	124.52	-4.83	0.61071
head_5080	head_grp2	5746	6/30/1983	119.31	123.93	-4.62	0.61071
head_5081	head_grp2	5746	6/30/1984	118.99	123.15	-4.16	0.61071
head_5082	head_grp2	5746	6/30/1985	118.46	122.24	-3.78	0.61071
head_5083	head_grp2	5746	6/30/1986	117.83	121.16	-3.33	0.61071

Table A-2. Post-Development (1942-2015) Groundwater Head Targets.

Target Name	Target Group	NWF ID	Date	Measured GW Elevation (NAVD88, ft)	Modelled GW Elevation (NAVD88, ft)	Residual (ft)	Target Weight
head_5084	head_grp2	5746	6/30/1987	117.58	119.94	-2.36	0.61071
head_5085	head_grp2	5746	6/30/1988	117.25	118.72	-1.47	0.61071
head_5086	head_grp2	5746	6/30/1989	117.13	117.52	-0.39	0.61071
head_5087	head_grp2	5746	6/30/1990	116.21	116.40	-0.19	0.61071
head_5088	head_grp3	5746	6/30/1991	115.81	115.35	0.46	0.10138
head_5089	head_grp3	5746	6/30/1992	115	114.50	0.50	0.18248
head_5090	head_grp3	5746	6/30/1993	114.71	113.71	1.00	0.10138
head_5091	head_grp3	5746	6/30/1994	113.99	112.88	1.11	0.10138
head_5092	head_grp3	5746	6/30/1995	113.85	112.18	1.67	0.10138
head_5093	head_grp3	5746	6/30/1996	113.29	111.54	1.75	0.10138
head_5094	head_grp3	5746	6/30/1997	112.08	110.94	1.14	0.10138
head_5095	head_grp3	5746	6/30/1998	111.78	110.40	1.38	0.10138
head_5096	head_grp3	5746	6/30/1999	111.49	109.90	1.59	0.10138
head_5097	head_grp3	5746	6/30/2000	110.24	109.43	0.81	0.10138
head_5098	head_grp3	5746	6/30/2001	109.74	108.84	0.90	0.10138
head_5099	head_grp3	5746	6/30/2002	109.51	108.37	1.14	0.10138
head_5100	head_grp3	5746	6/30/2003	109.22	108.04	1.18	0.10138
head_5101	head_grp3	5746	6/30/2006	108.93	106.52	2.41	0.10138
head_5102	head_grp3	5746	6/30/2007	107.46	105.53	1.93	0.10138
head_5103	head_grp3	5746	6/30/2008	107.64	105.03	2.61	0.10138
head_5104	head_grp3	5746	6/30/2010	107.9	104.47	3.43	0.18248
head_5105	head_grp3	5746	6/30/2011	107.45	104.36	3.09	0.18248
head_5106	head_grp3	5746	6/30/2012	107.1	104.06	3.04	0.18248
head_5107	head_grp3	5746	6/30/2013	107.19	104.36	2.83	0.18248
head_5108	head_grp3	5746	6/30/2014	106.96	104.45	2.51	0.18248
head_5109	head_grp3	5746	6/30/2015	107.05	104.63	2.42	0.18248
head_5130	head_grp2	5802	6/30/1968	101.9	103.68	-1.78	0.33928
head_5131	head_grp2	5802	6/30/1969	103.3	103.44	-0.14	0.33928
head_5132	head_grp3	5802	6/30/1995	98.92	94.03	4.89	0.10138
head_5133	head_grp3	5802	6/30/1996	97.4	93.75	3.65	0.10138
head_5134	head_grp3	5802	6/30/1998	98.49	93.73	4.76	0.10138
head_5135	head_grp3	5802	6/30/2000	95.61	92.73	2.88	0.10138
head_5136	head_grp3	5802	6/30/2001	93.74	92.29	1.45	0.10138
head_5137	head_grp3	5802	6/30/2002	93.49	91.73	1.76	0.10138
head_5138	head_grp3	5802	6/30/2003	94.94	91.38	3.56	0.10138
head_5139	head_grp3	5802	6/30/2004	94.76	91.56	3.20	0.10138
head_5140	head_grp3	5802	6/30/2005	95.18	91.31	3.87	0.10138
head_5141	head_grp3	5802	6/30/2006	92.75	90.59	2.16	0.10138
head_5142	head_grp3	5802	6/30/2007	90.73	90.06	0.67	0.10138
head_5143	head_grp3	5802	6/30/2008	92.94	89.80	3.14	0.10138
head_5144	head_grp3	5802	6/30/2010	94.53	89.90	4.63	0.18248
head_5145	head_grp3	5802	6/30/2011	91.88	89.80	2.08	0.10138
head_5190	head_grp3	5953	6/30/1996	40.05	41.96	-1.91	0.10138
head_5191	head_grp3	5953	6/30/2002	34.8	41.96	-7.16	0.10138

Table A-2. Post-Development (1942-2015) Groundwater Head Targets.

Target Name	Target Group	NWF ID	Date	Measured GW Elevation (NAVD88, ft)	Modelled GW Elevation (NAVD88, ft)	Residual (ft)	Target Weight
head_5192	head_grp3	5953	6/30/2010	38.36	41.95	-3.59	0.20276
head_5193	head_grp3	5953	6/30/2011	33.43	41.95	-8.52	0.20276
head_5194	head_grp3	5953	6/30/2012	30.48	41.95	-11.47	0.20276
head_5195	head_grp3	5953	6/30/2013	36.36	41.95	-5.59	0.20276
head_5196	head_grp3	5953	6/30/2014	44.15	41.95	2.20	0.20276
head_5197	head_grp3	5953	6/30/2015	41.31	41.95	-0.64	0.20276
head_5198	head_grp3	5954	6/30/1996	43.6	41.64	1.96	0.10138
head_5199	head_grp3	5954	6/30/1998	46.43	41.64	4.79	0.10138
head_5200	head_grp3	5954	6/30/2000	38.26	41.64	-3.38	0.10138
head_5201	head_grp3	5954	6/30/2002	36.43	41.64	-5.21	0.10138
head_5202	head_grp3	5954	6/30/2008	35.37	41.63	-6.26	0.10138
head_5203	head_grp3	5954	6/30/2010	44.38	41.63	2.75	0.10138
head_5204	head_grp3	5954	6/30/2012	33.69	41.62	-7.93	0.10138
head_5205	head_grp3	5954	6/30/2014	52.19	41.63	10.56	0.10138
head_5206	head_grp3	5954	6/30/2015	45.41	41.62	3.79	0.10138
head_5207	head_grp3	5962	6/30/1996	44.36	35.75	8.61	0.10138
head_5208	head_grp3	5962	6/30/2008	35.5	35.73	-0.23	0.10138
head_5209	head_grp3	5962	6/30/2010	42.42	35.73	6.69	0.10138
head_5210	head_grp3	5962	6/30/2011	36.03	35.73	0.30	0.18248
head_5211	head_grp3	5962	6/30/2012	34.65	35.73	-1.08	0.18248
head_5212	head_grp3	5962	6/30/2013	41.9	35.73	6.17	0.18248
head_5213	head_grp3	5962	6/30/2014	48.63	35.73	12.90	0.18248
head_5214	head_grp3	5962	6/30/2015	45.43	35.72	9.71	0.18248
head_5215	head_grp3	5963	6/30/1996	43.33	40.37	2.96	0.10138
head_5216	head_grp3	5963	6/30/2010	41.23	40.36	0.87	0.18248
head_5217	head_grp3	5963	6/30/2011	35.93	40.36	-4.43	0.18248
head_5218	head_grp3	5963	6/30/2012	32.69	40.36	-7.67	0.18248
head_5219	head_grp3	5963	6/30/2013	38.83	40.36	-1.53	0.18248
head_5220	head_grp3	5963	6/30/2014	47.6	40.36	7.24	0.18248
head_5221	head_grp3	5963	6/30/2015	44.85	40.36	4.49	0.18248
head_5222	head_grp3	5976	6/30/1996	45.35	24.60	20.75	0.10138
head_5223	head_grp3	5976	6/30/1998	32.9	24.52	8.38	0.10138
head_5224	head_grp3	5976	6/30/2008	34.34	24.70	9.64	0.10138
head_5225	head_grp3	5976	6/30/2010	38.91	24.74	14.17	0.18248
head_5226	head_grp3	5976	6/30/2011	39.25	24.74	14.51	0.18248
head_5227	head_grp3	5976	6/30/2012	42.42	24.74	17.68	0.18248
head_5228	head_grp3	5976	6/30/2013	44.03	24.78	19.25	0.18248
head_5229	head_grp3	5976	6/30/2014	45	24.77	20.23	0.18248
head_5230	head_grp3	5976	6/30/2015	43.78	24.69	19.09	0.18248
head_5231	head_grp3	6016	6/30/2006	-63.43	-57.04	-6.39	0.10138
head_5232	head_grp3	6016	6/30/2007	-63.11	-56.91	-6.20	0.10138
head_5233	head_grp3	6016	6/30/2008	-49.66	-52.65	2.99	0.10138
head_5234	head_grp3	6016	6/30/2010	-47.94	-39.64	-8.30	0.18248
head_5235	head_grp3	6016	6/30/2011	-54.09	-41.46	-12.63	0.10138

Table A-2. Post-Development (1942-2015) Groundwater Head Targets.

Target Name	Target Group	NWF ID	Date	Measured GW Elevation (NAVD88, ft)	Modelled GW Elevation (NAVD88, ft)	Residual (ft)	Target Weight
head_5236	head_grp3	6016	6/30/2012	-52.12	-38.33	-13.79	0.10138
head_5237	head_grp3	6016	6/30/2013	-47.86	-37.02	-10.84	0.10138
head_5238	head_grp3	6016	6/30/2014	-49.86	-35.85	-14.01	0.10138
head_5239	head_grp3	6016	6/30/2015	-51.81	-35.57	-16.24	0.10138
head_5240	head_grp3	6036	6/30/2003	10.3	11.30	-1.00	0.10138
head_5241	head_grp3	6036	6/30/2004	8.83	11.01	-2.18	0.20276
head_5242	head_grp3	6036	6/30/2005	7.21	9.08	-1.87	0.20276
head_5243	head_grp3	6036	6/30/2006	6.2	8.56	-2.36	0.20276
head_5244	head_grp3	6036	6/30/2007	4.12	8.02	-3.90	0.20276
head_5245	head_grp3	6036	6/30/2008	6.5	8.71	-2.21	0.20276
head_5246	head_grp3	6036	6/30/2010	8.42	9.53	-1.11	0.20276
head_5247	head_grp3	6036	6/30/2011	6.5	9.72	-3.22	0.20276
head_5248	head_grp3	6036	6/30/2012	8.21	9.84	-1.63	0.10138
head_5249	head_grp3	6036	6/30/2013	8.79	10.51	-1.72	0.20276
head_5250	head_grp3	6036	6/30/2014	9.07	10.36	-1.29	0.20276
head_5251	head_grp3	6036	6/30/2015	8.37	9.79	-1.42	0.20276
head_5265	head_grp3	7174	6/30/1997	-30.5	-29.81	-0.69	0.10138
head_5266	head_grp3	7174	6/30/2007	-32.2	-28.40	-3.80	0.10138
head_5267	head_grp3	7174	6/30/2008	-29.55	-26.53	-3.02	0.10138
head_5268	head_grp3	7174	6/30/2009	-26.11	-23.82	-2.29	0.10138
head_5269	head_grp3	7174	6/30/2010	-22.18	-21.27	-0.91	0.18248
head_5270	head_grp3	7174	6/30/2011	-21.88	-20.07	-1.81	0.18248
head_5271	head_grp3	7174	6/30/2012	-20.72	-18.86	-1.86	0.18248
head_5272	head_grp3	7174	6/30/2013	-18.54	-17.15	-1.39	0.18248
head_5273	head_grp3	7174	6/30/2014	-16.52	-16.23	-0.29	0.18248
head_5274	head_grp3	7174	6/30/2015	-16.89	-15.77	-1.12	0.18248
head_5299	head_grp3	7183	6/30/1998	-47.2	-32.94	-14.26	0.10138
head_5300	head_grp3	7183	6/30/1999	-57.89	-34.57	-23.32	0.20276
head_5301	head_grp3	7183	6/30/2000	-55.1	-36.16	-18.94	0.20276
head_5302	head_grp3	7183	6/30/2001	-53.31	-35.93	-17.38	0.20276
head_5303	head_grp3	7183	6/30/2002	-52.28	-35.37	-16.91	0.20276
head_5304	head_grp3	7183	6/30/2003	-52.2	-34.59	-17.61	0.20276
head_5305	head_grp3	7183	6/30/2004	-51.83	-36.36	-15.47	0.20276
head_5306	head_grp3	7183	6/30/2005	-47.64	-32.26	-15.38	0.20276
head_5307	head_grp3	7183	6/30/2006	-50.16	-34.54	-15.62	0.20276
head_5308	head_grp3	7183	6/30/2007	-57.09	-34.68	-22.41	0.20276
head_5309	head_grp3	7183	6/30/2008	-44.37	-31.80	-12.57	0.20276
head_5310	head_grp3	7183	6/30/2010	-31.54	-22.59	-8.95	0.20276
head_5311	head_grp3	7183	6/30/2011	-30.1	-24.71	-5.39	0.20276
head_5312	head_grp3	7183	6/30/2012	-33.12	-21.72	-11.40	0.20276
head_5313	head_grp3	7183	6/30/2013	-34.22	-21.97	-12.25	0.20276
head_5314	head_grp3	7183	6/30/2014	-29.03	-20.37	-8.66	0.20276
head_5315	head_grp3	7183	6/30/2015	-30.27	-19.88	-10.39	0.20276
head_5316	head_grp3	7187	6/30/2007	30.74523	26.28	4.46	0.10138

Table A-2. Post-Development (1942-2015) Groundwater Head Targets.

Target Name	Target Group	NWF ID	Date	Measured GW Elevation (NAVD88, ft)	Modelled GW Elevation (NAVD88, ft)	Residual (ft)	Target Weight
head_5317	head_grp3	7187	6/30/2008	32.06634111	26.86	5.20	0.10138
head_5318	head_grp3	7187	6/30/2009	32.76189667	27.56	5.20	0.10138
head_5319	head_grp3	7187	6/30/2010	33.41773	28.41	5.01	0.10138
head_5320	head_grp3	7187	6/30/2011	33.83523	29.34	4.49	0.10138
head_5321	head_grp3	7187	6/30/2012	33.56189667	30.37	3.19	0.10138
head_5322	head_grp3	7187	6/30/2013	35.03886636	31.45	3.58	0.10138
head_5323	head_grp3	7187	6/30/2014	36.48189667	32.64	3.84	0.10138
head_5324	head_grp3	7187	6/30/2015	36.10439667	33.54	2.57	0.10138
head_5325	head_grp3	7208	6/30/2001	-13.82	-10.10	-3.72	0.10138
head_5326	head_grp3	7208	6/30/2002	-14.73	-10.67	-4.06	0.10138
head_5327	head_grp3	7208	6/30/2003	-12.12	-10.68	-1.44	0.10138
head_5328	head_grp3	7208	6/30/2006	-9.78	-8.67	-1.11	0.10138
head_5329	head_grp3	7208	6/30/2007	-11.32	-8.67	-2.65	0.10138
head_5330	head_grp3	7208	6/30/2008	-8.24	-7.56	-0.68	0.10138
head_5331	head_grp3	7208	6/30/2010	-3.01	-4.05	1.04	0.18248
head_5332	head_grp3	7208	6/30/2011	-4.12	-2.69	-1.43	0.18248
head_5333	head_grp3	7208	6/30/2012	-2.01	-0.86	-1.15	0.18248
head_5334	head_grp3	7208	6/30/2013	1.53	1.87	-0.34	0.18248
head_5335	head_grp3	7208	6/30/2014	2.58	3.66	-1.08	0.18248
head_5336	head_grp3	7208	6/30/2015	2.05	4.37	-2.32	0.18248
head_5356	head_grp3	7233	6/30/1999	13	12.55	0.45	0.10138
head_5357	head_grp3	7233	6/30/2000	10.41	11.87	-1.46	0.10138
head_5358	head_grp3	7233	6/30/2001	10.22	11.39	-1.17	0.10138
head_5359	head_grp3	7233	6/30/2003	9.93	10.69	-0.76	0.10138
head_5360	head_grp3	7233	6/30/2004	8.97	10.51	-1.54	0.20276
head_5361	head_grp3	7233	6/30/2005	8.87	9.13	-0.26	0.20276
head_5362	head_grp3	7233	6/30/2006	5.92	8.60	-2.68	0.20276
head_5363	head_grp3	7233	6/30/2007	5.01	8.04	-3.03	0.20276
head_5364	head_grp3	7233	6/30/2008	5.73	8.50	-2.77	0.20276
head_5365	head_grp3	7233	6/30/2010	8.74	9.38	-0.64	0.20276
head_5366	head_grp3	7233	6/30/2011	7.37	9.55	-2.18	0.20276
head_5367	head_grp3	7233	6/30/2012	7.47	9.63	-2.16	0.20276
head_5368	head_grp3	7233	6/30/2013	8.56	10.19	-1.63	0.20276
head_5369	head_grp3	7233	6/30/2014	9.21	10.14	-0.93	0.20276
head_5370	head_grp3	7233	6/30/2015	8.48	9.68	-1.20	0.20276
head_5388	head_grp3	7250	6/30/1998	56.58	42.40	14.18	0.10138
head_5389	head_grp3	7250	6/30/2000	50.87	41.00	9.87	0.10138
head_5390	head_grp3	7250	6/30/2001	49.06	39.53	9.53	0.10138
head_5391	head_grp3	7250	6/30/2002	46.19	36.75	9.44	0.10138
head_5392	head_grp3	7250	6/30/2003	47.39	36.80	10.59	0.10138
head_5393	head_grp3	7250	6/30/2004	47.06	36.40	10.66	0.20276
head_5394	head_grp3	7250	6/30/2005	45.14	33.33	11.81	0.20276
head_5395	head_grp3	7250	6/30/2006	40.81	31.91	8.90	0.20276
head_5396	head_grp3	7250	6/30/2007	40.38	31.80	8.58	0.20276

Table A-2. Post-Development (1942-2015) Groundwater Head Targets.

Target Name	Target Group	NWF ID	Date	Measured GW Elevation (NAVD88, ft)	Modelled GW Elevation (NAVD88, ft)	Residual (ft)	Target Weight
head_5397	head_grp3	7250	6/30/2008	41.33	31.86	9.47	0.20276
head_5398	head_grp3	7250	6/30/2010	43.54	31.87	11.67	0.20276
head_5399	head_grp3	7250	6/30/2011	42.36	32.81	9.55	0.20276
head_5400	head_grp3	7250	6/30/2012	40.74	31.73	9.01	0.20276
head_5401	head_grp3	7250	6/30/2013	45.2	32.40	12.80	0.20276
head_5402	head_grp3	7250	6/30/2014	43.36	31.70	11.66	0.20276
head_5403	head_grp3	7250	6/30/2015	41.67	30.75	10.92	0.20276
head_5440	head_grp3	7349	6/30/1999	-28.42	-15.90	-12.52	0.20276
head_5441	head_grp3	7349	6/30/2000	-27.9	-16.97	-10.93	0.20276
head_5442	head_grp3	7349	6/30/2001	-26.21	-17.29	-8.92	0.20276
head_5443	head_grp3	7349	6/30/2002	-25.12	-16.21	-8.91	0.20276
head_5444	head_grp3	7349	6/30/2003	-24.27	-16.07	-8.20	0.20276
head_5445	head_grp3	7349	6/30/2004	-25.48	-16.60	-8.88	0.20276
head_5446	head_grp3	7349	6/30/2005	-24.08	-15.91	-8.17	0.20276
head_5447	head_grp3	7349	6/30/2006	-24.63	-15.99	-8.64	0.20276
head_5448	head_grp3	7349	6/30/2007	-27.45	-15.74	-11.71	0.20276
head_5449	head_grp3	7349	6/30/2008	-21.59	-14.85	-6.74	0.20276
head_5450	head_grp3	7349	6/30/2010	-14.97	-10.18	-4.79	0.20276
head_5451	head_grp3	7349	6/30/2011	-16.98	-10.56	-6.42	0.20276
head_5452	head_grp3	7349	6/30/2012	-15.55	-9.25	-6.30	0.20276
head_5453	head_grp3	7349	6/30/2013	-15.76	-8.69	-7.07	0.20276
head_5454	head_grp3	7349	6/30/2014	-13.17	-8.01	-5.16	0.20276
head_5455	head_grp3	7349	6/30/2015	-13.57	-7.72	-5.85	0.20276
head_5590	head_grp3	7523	6/30/2000	-109.19	-112.03	2.84	0.20276
head_5591	head_grp3	7523	6/30/2001	-108.96	-110.49	1.53	0.10138
head_5592	head_grp3	7523	6/30/2002	-105.27	-107.01	1.74	0.10138
head_5593	head_grp3	7523	6/30/2003	-101.56	-102.74	1.18	0.20276
head_5594	head_grp3	7523	6/30/2005	-102.46	-103.27	0.81	0.10138
head_5595	head_grp3	7523	6/30/2006	-99.98	-105.00	5.02	0.10138
head_5596	head_grp3	7523	6/30/2007	-89.18	-95.22	6.04	0.10138
head_5597	head_grp3	7523	6/30/2008	-84.11	-86.44	2.33	0.10138
head_5598	head_grp3	7523	6/30/2010	-72.31	-75.08	2.77	0.10138
head_5599	head_grp3	7523	6/30/2011	-71.16	-72.45	1.29	0.20276
head_5600	head_grp3	7523	6/30/2012	-66.97	-69.87	2.90	0.20276
head_5601	head_grp3	7523	6/30/2013	-65.53	-69.02	3.49	0.20276
head_5602	head_grp3	7523	6/30/2014	-65.92	-70.03	4.11	0.20276
head_5603	head_grp3	7523	6/30/2015	-65.98	-69.77	3.79	0.20276
head_5604	head_grp3	7686	6/30/2000	-34.71	-49.23	14.52	0.20276
head_5605	head_grp3	7686	6/30/2001	-34.82	-49.55	14.73	0.10138
head_5606	head_grp3	7686	6/30/2002	-37	-50.27	13.27	0.10138
head_5607	head_grp3	7686	6/30/2003	-36.13	-50.98	14.85	0.10138
head_5608	head_grp3	7686	6/30/2006	-27.75	-37.70	9.95	0.10138
head_5609	head_grp3	7686	6/30/2007	-26.5	-34.82	8.32	0.10138
head_5610	head_grp3	7686	6/30/2008	-24.12	-31.42	7.30	0.10138

Table A-2. Post-Development (1942-2015) Groundwater Head Targets.

Target Name	Target Group	NWF ID	Date	Measured GW Elevation (NAVD88, ft)	Modelled GW Elevation (NAVD88, ft)	Residual (ft)	Target Weight
head_5611	head_grp3	7686	6/30/2010	-17.66	-24.65	6.99	0.20276
head_5612	head_grp3	7686	6/30/2011	-15.89	-21.71	5.82	0.20276
head_5613	head_grp3	7686	6/30/2012	-13.77	-18.30	4.53	0.20276
head_5614	head_grp3	7686	6/30/2013	-11.36	-15.04	3.68	0.20276
head_5615	head_grp3	7686	6/30/2014	-11.68	-15.22	3.54	0.20276
head_5616	head_grp3	7686	6/30/2015	-12.57	-14.79	2.22	0.20276
head_5617	head_grp3	7687	6/30/2000	9.44	-2.67	12.11	0.20276
head_5618	head_grp3	7687	6/30/2001	9.04	-2.90	11.94	0.20276
head_5619	head_grp3	7687	6/30/2002	9.81	-2.46	12.27	0.10138
head_5620	head_grp3	7687	6/30/2003	11.58	-2.26	13.84	0.10138
head_5621	head_grp3	7687	6/30/2006	9.04	-2.69	11.73	0.20276
head_5622	head_grp3	7687	6/30/2008	11.71	-2.50	14.21	0.10138
head_5623	head_grp3	7687	6/30/2010	12.83	-0.10	12.93	0.20276
head_5624	head_grp3	7687	6/30/2011	11.39	0.10	11.29	0.20276
head_5625	head_grp3	7687	6/30/2012	12.49	0.52	11.97	0.20276
head_5626	head_grp3	7687	6/30/2013	12.97	1.06	11.91	0.10138
head_5627	head_grp3	7687	6/30/2014	13.58	1.47	12.11	0.20276
head_5628	head_grp3	7687	6/30/2015	12.96	1.51	11.45	0.20276
head_5629	head_grp3	7751	6/30/2000	2.14	-2.66	4.80	0.20276
head_5630	head_grp3	7751	6/30/2001	3.66	-2.89	6.55	0.20276
head_5631	head_grp3	7751	6/30/2002	3.61	-2.44	6.05	0.10138
head_5632	head_grp3	7751	6/30/2003	4.56	-2.24	6.80	0.10138
head_5633	head_grp3	7751	6/30/2006	3.22	-2.67	5.89	0.10138
head_5634	head_grp3	7751	6/30/2008	4.18	-2.49	6.67	0.10138
head_5635	head_grp3	7751	6/30/2010	5.14	-0.09	5.23	0.20276
head_5636	head_grp3	7751	6/30/2011	3.96	0.12	3.84	0.20276
head_5637	head_grp3	7751	6/30/2012	4.74	0.54	4.20	0.20276
head_5638	head_grp3	7751	6/30/2013	5.15	1.07	4.08	0.10138
head_5639	head_grp3	7751	6/30/2014	6.27	1.48	4.79	0.20276
head_5640	head_grp3	7751	6/30/2015	5.44	1.53	3.91	0.20276
head_5653	head_grp3	7767	6/30/2000	15.22	17.18	-1.96	0.10138
head_5654	head_grp3	7767	6/30/2001	15.33	16.63	-1.30	0.20276
head_5655	head_grp3	7767	6/30/2002	14.35	15.85	-1.50	0.20276
head_5656	head_grp3	7767	6/30/2003	15.82	15.72	0.10	0.20276
head_5657	head_grp3	7767	6/30/2004	14.56	15.55	-0.99	0.20276
head_5658	head_grp3	7767	6/30/2005	14.43	14.27	0.16	0.20276
head_5659	head_grp3	7767	6/30/2006	10.69	13.70	-3.01	0.20276
head_5660	head_grp3	7767	6/30/2007	10.42	13.21	-2.79	0.20276
head_5661	head_grp3	7767	6/30/2008	11.72	13.62	-1.90	0.20276
head_5662	head_grp3	7767	6/30/2010	13.61	13.65	-0.04	0.20276
head_5663	head_grp3	7767	6/30/2011	11.35	13.74	-2.39	0.20276
head_5664	head_grp3	7767	6/30/2012	11.28	13.59	-2.31	0.20276
head_5665	head_grp3	7767	6/30/2013	14.03	14.06	-0.03	0.20276
head_5666	head_grp3	7767	6/30/2014	13.74	13.86	-0.12	0.20276

Table A-2. Post-Development (1942-2015) Groundwater Head Targets.

Target Name	Target Group	NWF ID	Date	Measured GW Elevation (NAVD88, ft)	Modelled GW Elevation (NAVD88, ft)	Residual (ft)	Target Weight
head_5667	head_grp3	7767	6/30/2015	11.37	13.27	-1.90	0.20276
head_5668	head_grp3	7768	6/30/2000	38.6	34.60	4.00	0.10138
head_5669	head_grp3	7768	6/30/2001	38.2	33.57	4.63	0.20276
head_5670	head_grp3	7768	6/30/2002	35.42	31.80	3.62	0.20276
head_5671	head_grp3	7768	6/30/2003	37.16	31.73	5.43	0.20276
head_5672	head_grp3	7768	6/30/2004	36.51	31.35	5.16	0.20276
head_5673	head_grp3	7768	6/30/2005	34.39	28.74	5.65	0.20276
head_5674	head_grp3	7768	6/30/2006	29.98	27.41	2.57	0.20276
head_5675	head_grp3	7768	6/30/2007	28.85	26.77	2.08	0.20276
head_5676	head_grp3	7768	6/30/2008	28.82	26.60	2.22	0.20276
head_5677	head_grp3	7768	6/30/2010	27.52	23.55	3.97	0.20276
head_5678	head_grp3	7768	6/30/2011	27.04	24.89	2.15	0.20276
head_5679	head_grp3	7768	6/30/2012	24.87	23.22	1.65	0.20276
head_5680	head_grp3	7768	6/30/2013	24.63	24.13	0.50	0.20276
head_5681	head_grp3	7768	6/30/2014	23.95	22.62	1.33	0.20276
head_5682	head_grp3	7768	6/30/2015	22.22	21.87	0.35	0.20276
head_5862	head_grp3	8194	6/30/2001	15	19.82	-4.82	0.10138
head_5863	head_grp3	8194	6/30/2002	10.7	17.48	-6.78	0.10138
head_5864	head_grp3	8194	6/30/2004	5.9	14.25	-8.35	0.10138
head_5865	head_grp3	8194	6/30/2005	5.15	12.43	-7.28	0.10138
head_5866	head_grp3	8194	6/30/2006	2.21	11.14	-8.93	0.18248
head_5867	head_grp3	8194	6/30/2007	0.44	10.25	-9.81	0.18248
head_5868	head_grp3	8194	6/30/2008	1.27	10.50	-9.23	0.18248
head_5869	head_grp3	8194	6/30/2009	1.47	11.21	-9.74	0.18248
head_5870	head_grp3	8194	6/30/2010	4.37	11.09	-6.72	0.18248
head_5871	head_grp3	8194	6/30/2011	6.77	11.69	-4.92	0.18248
head_5872	head_grp3	8194	6/30/2012	6.61	11.10	-4.49	0.18248
head_5873	head_grp3	8194	6/30/2013	7.16	12.27	-5.11	0.18248
head_5874	head_grp3	8194	6/30/2014	9.24	11.57	-2.33	0.18248
head_5875	head_grp3	8194	6/30/2015	7.8	10.97	-3.17	0.18248
head_5941	head_grp3	8314	6/30/2002	-43.5	-42.45	-1.05	0.10138
head_5942	head_grp3	8314	6/30/2010	-28.37	-32.99	4.62	0.15207
head_5943	head_grp3	8314	6/30/2011	-28.65	-32.03	3.38	0.15207
head_5944	head_grp3	8314	6/30/2012	-27.6	-29.68	2.08	0.15207
head_5945	head_grp3	8314	6/30/2013	-26.1	-28.31	2.21	0.15207
head_5946	head_grp3	8314	6/30/2014	-23.58	-27.23	3.65	0.15207
head_5947	head_grp3	8314	6/30/2015	-22.72	-26.64	3.92	0.15207
head_5948	head_grp3	8350	6/30/2002	80.35	77.71	2.64	0.10138
head_5949	head_grp3	8350	6/30/2003	80.99	77.96	3.03	0.20276
head_5950	head_grp3	8350	6/30/2004	82.79	77.88	4.91	0.20276
head_5951	head_grp3	8350	6/30/2005	83.53	77.24	6.29	0.10138
head_5952	head_grp3	8350	6/30/2006	80.72	75.78	4.94	0.20276
head_5953	head_grp3	8350	6/30/2007	78.3	74.00	4.30	0.20276
head_5954	head_grp3	8350	6/30/2008	78.62	73.28	5.34	0.20276

Table A-2. Post-Development (1942-2015) Groundwater Head Targets.

Target Name	Target Group	NWF ID	Date	Measured GW Elevation (NAVD88, ft)	Modelled GW Elevation (NAVD88, ft)	Residual (ft)	Target Weight
head_5955	head_grp3	8350	6/30/2010	79.54	73.21	6.33	0.20276
head_5956	head_grp3	8350	6/30/2011	76.97	72.82	4.15	0.20276
head_5957	head_grp3	8350	6/30/2012	75.28	73.63	1.65	0.20276
head_5958	head_grp3	8350	6/30/2013	75.6	75.32	0.28	0.20276
head_5959	head_grp3	8350	6/30/2014	77.76	75.84	1.92	0.20276
head_5960	head_grp3	8350	6/30/2015	81.06	76.49	4.57	0.20276
head_5961	head_grp3	8353	6/30/2002	109.7	99.67	10.03	0.10138
head_5962	head_grp3	8353	6/30/2003	110.51	99.28	11.23	0.20276
head_5963	head_grp3	8353	6/30/2004	111.99	98.94	13.05	0.20276
head_5964	head_grp3	8353	6/30/2005	112.24	98.04	14.20	0.10138
head_5965	head_grp3	8353	6/30/2006	109.36	96.27	13.09	0.20276
head_5966	head_grp3	8353	6/30/2007	108.79	94.98	13.81	0.20276
head_5967	head_grp3	8353	6/30/2008	109.26	94.60	14.66	0.20276
head_5968	head_grp3	8353	6/30/2010	109.74	94.62	15.12	0.20276
head_5969	head_grp3	8353	6/30/2011	107.28	93.51	13.77	0.20276
head_5970	head_grp3	8353	6/30/2012	106.06	94.86	11.20	0.20276
head_5971	head_grp3	8353	6/30/2013	106.85	96.30	10.55	0.20276
head_5972	head_grp3	8353	6/30/2014	108.61	96.28	12.33	0.20276
head_5973	head_grp3	8353	6/30/2015	109.39	96.66	12.73	0.20276
head_5974	head_grp3	8361	6/30/2003	66.83	57.36	9.47	0.10138
head_5975	head_grp3	8361	6/30/2004	66.65	57.36	9.29	0.20276
head_5976	head_grp3	8361	6/30/2005	66.21	55.81	10.40	0.20276
head_5977	head_grp3	8361	6/30/2006	63.01	54.74	8.27	0.20276
head_5978	head_grp3	8361	6/30/2007	61.7	54.52	7.18	0.20276
head_5979	head_grp3	8361	6/30/2008	62.84	54.47	8.37	0.20276
head_5980	head_grp3	8361	6/30/2010	64.73	54.36	10.37	0.20276
head_5981	head_grp3	8361	6/30/2011	62.82	54.85	7.97	0.20276
head_5982	head_grp3	8361	6/30/2012	61.74	54.39	7.35	0.20276
head_5983	head_grp3	8361	6/30/2013	64.41	54.82	9.59	0.20276
head_5984	head_grp3	8361	6/30/2014	64.98	55.14	9.84	0.20276
head_5985	head_grp3	8361	6/30/2015	63.98	54.04	9.94	0.20276
head_6035	head_grp3	8505	6/30/2004	19.78	17.43	2.35	0.20276
head_6036	head_grp3	8505	6/30/2005	19.6	16.86	2.74	0.20276
head_6037	head_grp3	8505	6/30/2006	16.92	16.57	0.35	0.20276
head_6038	head_grp3	8505	6/30/2007	15.57	16.33	-0.76	0.20276
head_6039	head_grp3	8505	6/30/2008	17.83	16.44	1.39	0.20276
head_6040	head_grp3	8505	6/30/2010	18.89	16.23	2.66	0.20276
head_6041	head_grp3	8505	6/30/2011	16.9	16.26	0.64	0.20276
head_6042	head_grp3	8505	6/30/2012	16.79	16.17	0.62	0.20276
head_6043	head_grp3	8505	6/30/2013	18.28	16.31	1.97	0.20276
head_6044	head_grp3	8505	6/30/2014	19.41	16.17	3.24	0.20276
head_6045	head_grp3	8505	6/30/2015	17.98	15.85	2.13	0.20276
head_6056	head_grp3	8643	6/30/2003	21.56	19.17	2.39	0.10138
head_6057	head_grp3	8643	6/30/2004	20.68	19.04	1.64	0.18248

Table A-2. Post-Development (1942-2015) Groundwater Head Targets.

Target Name	Target Group	NWF ID	Date	Measured GW Elevation (NAVD88, ft)	Modelled GW Elevation (NAVD88, ft)	Residual (ft)	Target Weight
head_6058	head_grp3	8643	6/30/2005	21.21	18.20	3.01	0.18248
head_6059	head_grp3	8643	6/30/2006	15.87	17.75	-1.88	0.18248
head_6060	head_grp3	8643	6/30/2010	13.22	15.39	-2.17	0.10138
head_6061	head_grp3	8643	6/30/2011	9.21	15.37	-6.16	0.18248
head_6062	head_grp3	8643	6/30/2012	9.13	15.07	-5.94	0.18248
head_6063	head_grp3	8643	6/30/2013	8.43	14.95	-6.52	0.18248
head_6064	head_grp3	8643	6/30/2014	8.18	14.26	-6.08	0.18248
head_6065	head_grp3	8643	6/30/2015	6.16	13.49	-7.33	0.18248
head_6090	head_grp3	8711	6/30/2003	4.68	6.60	-1.92	0.20276
head_6091	head_grp3	8711	6/30/2004	3.28	6.68	-3.40	0.20276
head_6092	head_grp3	8711	6/30/2005	4.11	6.50	-2.39	0.20276
head_6093	head_grp3	8711	6/30/2006	3.42	6.38	-2.96	0.20276
head_6094	head_grp3	8711	6/30/2007	3.72	6.24	-2.52	0.20276
head_6095	head_grp3	8711	6/30/2008	3.63	6.30	-2.67	0.20276
head_6096	head_grp3	8711	6/30/2010	3.92	6.91	-2.99	0.20276
head_6097	head_grp3	8711	6/30/2011	3.81	7.02	-3.21	0.20276
head_6098	head_grp3	8711	6/30/2012	4.47	7.09	-2.62	0.20276
head_6099	head_grp3	8711	6/30/2013	4.42	7.26	-2.84	0.20276
head_6100	head_grp3	8711	6/30/2014	3.95	7.39	-3.44	0.20276
head_6101	head_grp3	8711	6/30/2015	3.92	7.34	-3.42	0.20276
head_6107	head_grp3	8721	6/30/2003	27.4	16.07	11.33	0.20276
head_6108	head_grp3	8721	6/30/2004	26.46	16.17	10.29	0.20276
head_6109	head_grp3	8721	6/30/2006	24.11	15.83	8.28	0.20276
head_6110	head_grp3	8721	6/30/2007	25.3	15.69	9.61	0.20276
head_6111	head_grp3	8721	6/30/2008	24.47	15.74	8.73	0.20276
head_6112	head_grp3	8721	6/30/2010	28.04	16.27	11.77	0.20276
head_6113	head_grp3	8721	6/30/2011	27.57	16.37	11.20	0.20276
head_6114	head_grp3	8721	6/30/2012	27.84	16.43	11.41	0.20276
head_6115	head_grp3	8721	6/30/2013	28.09	16.57	11.52	0.20276
head_6116	head_grp3	8721	6/30/2014	28.38	16.69	11.69	0.20276
head_6117	head_grp3	8721	6/30/2015	27.82	16.63	11.19	0.20276
head_6123	head_grp3	8758	6/30/2006	44.89	47.20	-2.31	0.20276
head_6124	head_grp3	8758	6/30/2007	45.3	45.15	0.15	0.20276
head_6125	head_grp3	8758	6/30/2008	46.54	44.45	2.09	0.20276
head_6126	head_grp3	8758	6/30/2010	48.53	45.08	3.45	0.20276
head_6127	head_grp3	8758	6/30/2011	45.22	44.36	0.86	0.20276
head_6128	head_grp3	8758	6/30/2012	46.07	45.94	0.13	0.20276
head_6129	head_grp3	8758	6/30/2013	49.34	48.24	1.10	0.20276
head_6130	head_grp3	8758	6/30/2014	51.12	48.81	2.31	0.20276
head_6131	head_grp3	8758	6/30/2015	50.78	49.79	0.99	0.20276
head_6132	head_grp3	8759	6/30/2006	7.1	21.19	-14.09	0.20276
head_6133	head_grp3	8759	6/30/2007	7.35	19.11	-11.76	0.20276
head_6134	head_grp3	8759	6/30/2008	9.21	18.86	-9.65	0.20276
head_6135	head_grp3	8759	6/30/2010	11.95	19.91	-7.96	0.20276

Table A-2. Post-Development (1942-2015) Groundwater Head Targets.

Target Name	Target Group	NWF ID	Date	Measured GW Elevation (NAVD88, ft)	Modelled GW Elevation (NAVD88, ft)	Residual (ft)	Target Weight
head_6136	head_grp3	8759	6/30/2011	8.05	19.48	-11.43	0.20276
head_6137	head_grp3	8759	6/30/2012	9.81	22.38	-12.57	0.20276
head_6138	head_grp3	8759	6/30/2013	13.74	24.43	-10.69	0.20276
head_6139	head_grp3	8759	6/30/2014	14.15	25.35	-11.20	0.20276
head_6140	head_grp3	8759	6/30/2015	15.88	26.64	-10.76	0.20276
head_6141	head_grp3	8762	6/30/2005	5.61	5.90	-0.29	0.10138
head_6142	head_grp3	8762	6/30/2006	4.57	5.42	-0.85	0.18248
head_6143	head_grp3	8762	6/30/2007	3.03	4.75	-1.72	0.18248
head_6144	head_grp3	8762	6/30/2008	4.29	5.10	-0.81	0.18248
head_6145	head_grp3	8762	6/30/2010	7.07	6.87	0.20	0.18248
head_6146	head_grp3	8762	6/30/2011	6.12	7.23	-1.11	0.18248
head_6147	head_grp3	8762	6/30/2012	6.05	7.42	-1.37	0.18248
head_6148	head_grp3	8762	6/30/2013	7.25	8.16	-0.91	0.18248
head_6149	head_grp3	8762	6/30/2014	8.42	8.39	0.03	0.18248
head_6150	head_grp3	8762	6/30/2015	7.93	8.19	-0.26	0.18248
head_6151	head_grp3	8780	6/30/2006	19.81	29.35	-9.54	0.20276
head_6152	head_grp3	8780	6/30/2007	20.53	29.35	-8.82	0.20276
head_6153	head_grp3	8780	6/30/2008	19.18	29.35	-10.17	0.20276
head_6154	head_grp3	8780	6/30/2010	18.96	29.35	-10.39	0.20276
head_6155	head_grp3	8780	6/30/2011	21.43	29.35	-7.92	0.20276
head_6156	head_grp3	8780	6/30/2012	24.74	29.35	-4.61	0.20276
head_6157	head_grp3	8780	6/30/2013	25.75	29.35	-3.60	0.20276
head_6158	head_grp3	8780	6/30/2014	26.31	29.35	-3.04	0.20276
head_6159	head_grp3	8780	6/30/2015	26.28	29.35	-3.07	0.20276
head_6160	head_grp3	8781	6/30/2006	21.37	29.26	-7.89	0.10138
head_6161	head_grp3	8781	6/30/2007	22.59	29.26	-6.67	0.20276
head_6162	head_grp3	8781	6/30/2008	21.03	29.26	-8.23	0.20276
head_6163	head_grp3	8781	6/30/2010	19.51	29.26	-9.75	0.20276
head_6164	head_grp3	8781	6/30/2011	22.85	29.26	-6.41	0.20276
head_6165	head_grp3	8781	6/30/2012	25.12	29.26	-4.14	0.20276
head_6166	head_grp3	8781	6/30/2013	26.22	29.26	-3.04	0.20276
head_6167	head_grp3	8781	6/30/2014	26.83	29.26	-2.43	0.20276
head_6168	head_grp3	8781	6/30/2015	26.95	29.26	-2.31	0.20276
head_6169	head_grp3	8782	6/30/2006	25.76	28.88	-3.12	0.20276
head_6170	head_grp3	8782	6/30/2007	26.42	28.88	-2.46	0.20276
head_6171	head_grp3	8782	6/30/2008	25.65	28.88	-3.23	0.20276
head_6172	head_grp3	8782	6/30/2010	25.17	28.88	-3.71	0.20276
head_6173	head_grp3	8782	6/30/2011	24.71	28.88	-4.17	0.20276
head_6174	head_grp3	8782	6/30/2012	24.88	28.88	-4.00	0.20276
head_6175	head_grp3	8782	6/30/2013	25.95	28.88	-2.93	0.20276
head_6176	head_grp3	8782	6/30/2014	26.47	28.88	-2.41	0.20276
head_6177	head_grp3	8782	6/30/2015	26.48	28.88	-2.40	0.20276
head_6178	head_grp3	8783	6/30/2006	21.82	28.96	-7.14	0.20276
head_6179	head_grp3	8783	6/30/2007	22.46	28.96	-6.50	0.20276

Table A-2. Post-Development (1942-2015) Groundwater Head Targets.

Target Name	Target Group	NWF ID	Date	Measured GW Elevation (NAVD88, ft)	Modelled GW Elevation (NAVD88, ft)	Residual (ft)	Target Weight
head_6180	head_grp3	8783	6/30/2008	21.12	28.96	-7.84	0.20276
head_6181	head_grp3	8783	6/30/2010	20.39	28.96	-8.57	0.20276
head_6182	head_grp3	8783	6/30/2011	22.29	28.96	-6.67	0.20276
head_6183	head_grp3	8783	6/30/2012	24.71	28.96	-4.25	0.20276
head_6184	head_grp3	8783	6/30/2013	25.67	28.96	-3.29	0.20276
head_6185	head_grp3	8783	6/30/2014	24.79	28.96	-4.17	0.20276
head_6186	head_grp3	8783	6/30/2015	26.09	28.96	-2.87	0.20276
head_6187	head_grp3	8907	6/30/2000	29.97	51.14	-21.17	0.10138
head_6188	head_grp3	8907	6/30/2005	33.57	51.09	-17.52	0.10138
head_6189	head_grp3	8907	6/30/2006	30.81	51.04	-20.23	0.18248
head_6190	head_grp3	8907	6/30/2007	28.94	51.02	-22.08	0.18248
head_6191	head_grp3	8907	6/30/2008	31.2	51.01	-19.81	0.18248
head_6192	head_grp3	8907	6/30/2010	32.82	50.96	-18.14	0.18248
head_6193	head_grp3	8907	6/30/2011	29.39	50.98	-21.59	0.18248
head_6194	head_grp3	8907	6/30/2012	29.71	50.97	-21.26	0.18248
head_6195	head_grp3	8907	6/30/2013	32.11	50.99	-18.88	0.18248
head_6196	head_grp3	8907	6/30/2014	33.96	51.07	-17.11	0.18248
head_6197	head_grp3	8907	6/30/2015	32.67	50.98	-18.31	0.10138
head_6203	head_grp3	8921	6/30/2004	9.58	12.85	-3.27	0.20276
head_6204	head_grp3	8921	6/30/2005	9.74	10.62	-0.88	0.20276
head_6205	head_grp3	8921	6/30/2006	6.01	10.18	-4.17	0.20276
head_6206	head_grp3	8921	6/30/2007	5.87	9.17	-3.30	0.20276
head_6207	head_grp3	8921	6/30/2008	6.68	9.94	-3.26	0.20276
head_6208	head_grp3	8921	6/30/2010	8.87	10.17	-1.30	0.20276
head_6209	head_grp3	8921	6/30/2011	7.42	9.74	-2.32	0.20276
head_6210	head_grp3	8921	6/30/2012	7.58	10.50	-2.92	0.20276
head_6211	head_grp3	8921	6/30/2013	9.74	11.01	-1.27	0.20276
head_6212	head_grp3	8921	6/30/2014	9.37	10.69	-1.32	0.20276
head_6213	head_grp3	8921	6/30/2015	8.98	9.82	-0.84	0.20276
head_6246	head_grp3	9054	6/30/2006	5.89	9.19	-3.30	0.18248
head_6247	head_grp3	9054	6/30/2007	4.41	8.56	-4.15	0.18248
head_6248	head_grp3	9054	6/30/2008	6.67	9.27	-2.60	0.18248
head_6249	head_grp3	9054	6/30/2010	8.84	9.94	-1.10	0.18248
head_6250	head_grp3	9054	6/30/2011	7.27	10.04	-2.77	0.18248
head_6251	head_grp3	9054	6/30/2012	7.34	10.23	-2.89	0.18248
head_6261	head_grp3	9117	6/30/2004	-12.2	-18.48	6.28	0.10138
head_6262	head_grp3	9117	6/30/2006	-18.57	-18.19	-0.38	0.18248
head_6263	head_grp3	9117	6/30/2007	-17.94	-18.48	0.54	0.18248
head_6264	head_grp3	9117	6/30/2008	-17.7	-17.18	-0.52	0.18248
head_6265	head_grp3	9117	6/30/2010	-9.97	-12.63	2.66	0.18248
head_6266	head_grp3	9117	6/30/2011	-11.42	-12.19	0.77	0.18248
head_6267	head_grp3	9117	6/30/2012	-9.41	-11.22	1.81	0.18248
head_6268	head_grp3	9117	6/30/2013	-9.87	-10.30	0.43	0.18248
head_6269	head_grp3	9117	6/30/2014	-7.49	-9.53	2.04	0.18248

Table A-2. Post-Development (1942-2015) Groundwater Head Targets.

Target Name	Target Group	NWF ID	Date	Measured GW Elevation (NAVD88, ft)	Modelled GW Elevation (NAVD88, ft)	Residual (ft)	Target Weight
head_6270	head_grp3	9117	6/30/2015	-7.78	-9.23	1.45	0.18248
head_6271	head_grp3	9137	6/30/2005	-57.02	-47.97	-9.05	0.18248
head_6272	head_grp3	9137	6/30/2006	-64.69	-49.95	-14.74	0.18248
head_6273	head_grp3	9137	6/30/2007	-61.06	-49.69	-11.37	0.18248
head_6274	head_grp3	9137	6/30/2008	-56.03	-46.03	-10.00	0.18248
head_6275	head_grp3	9137	6/30/2010	-38.74	-32.09	-6.65	0.18248
head_6276	head_grp3	9137	6/30/2011	-44.36	-36.53	-7.83	0.18248
head_6277	head_grp3	9137	6/30/2012	-40.1	-32.59	-7.51	0.18248
head_6278	head_grp3	9137	6/30/2013	-41.56	-32.61	-8.95	0.18248
head_6279	head_grp3	9137	6/30/2014	-36.65	-31.34	-5.31	0.18248
head_6280	head_grp3	9137	6/30/2015	-36.69	-29.64	-7.05	0.18248
head_6329	head_grp3	9402	6/30/1996	111.27	119.58	-8.31	0.10138
head_6330	head_grp3	9402	6/30/2001	103.16	116.79	-13.63	0.10138
head_6331	head_grp3	9402	6/30/2002	103.04	116.37	-13.33	0.10138
head_6332	head_grp3	9402	6/30/2003	103.33	116.11	-12.78	0.10138
head_6333	head_grp3	9402	6/30/2006	106.47	115.39	-8.92	0.10138
head_6334	head_grp3	9402	6/30/2012	104.95	113.27	-8.32	0.10138
head_6336	head_grp3	9413	6/30/2006	17.97	16.54	1.43	0.20276
head_6337	head_grp3	9413	6/30/2007	17.39	16.49	0.90	0.20276
head_6338	head_grp3	9413	6/30/2008	18.3	16.49	1.81	0.20276
head_6339	head_grp3	9413	6/30/2010	19.12	16.29	2.83	0.20276
head_6340	head_grp3	9413	6/30/2011	16	16.29	-0.29	0.20276
head_6341	head_grp3	9413	6/30/2012	16.59	16.25	0.34	0.20276
head_6342	head_grp3	9413	6/30/2013	18.86	16.25	2.61	0.20276
head_6343	head_grp3	9413	6/30/2014	17.41	16.17	1.24	0.20276
head_6344	head_grp3	9413	6/30/2015	18.23	16.05	2.18	0.20276
head_6345	head_grp3	9595	6/30/2007	111.66	95.38	16.28	0.10138
head_6346	head_grp3	9595	6/30/2010	119.58	95.23	24.35	0.10138
head_6347	head_grp3	9595	6/30/2012	115.18	95.55	19.63	0.10138
head_6348	head_grp3	9595	6/30/2014	120.65	98.41	22.24	0.10138
head_6349	head_grp3	9595	6/30/2015	120.89	96.37	24.52	0.18248
head_6365	head_grp3	9638	6/30/2008	36.26	26.83	9.43	0.10138
head_6366	head_grp3	9638	6/30/2009	37.51	26.83	10.68	0.18248
head_6367	head_grp3	9638	6/30/2010	38.97	26.82	12.15	0.18248
head_6368	head_grp3	9638	6/30/2011	36.26	26.82	9.44	0.18248
head_6369	head_grp3	9638	6/30/2012	35.79	26.82	8.97	0.18248
head_6370	head_grp3	9638	6/30/2013	38.8	26.82	11.98	0.18248
head_6371	head_grp3	9638	6/30/2014	41.66	26.82	14.84	0.18248
head_6372	head_grp3	9638	6/30/2015	39.85	26.81	13.04	0.18248
head_6397	head_grp3	9734	6/30/2008	39.13	35.09	4.04	0.10138
head_6398	head_grp3	9734	6/30/2010	42.14	35.09	7.05	0.10138
head_6406	head_grp3	9745	6/30/2007	68.8	49.18	19.62	0.10138
head_6407	head_grp3	9745	6/30/2008	72	49.18	22.82	0.10138
head_6408	head_grp3	9745	6/30/2009	71.75	49.18	22.57	0.18248

Table A-2. Post-Development (1942-2015) Groundwater Head Targets.

Target Name	Target Group	NWF ID	Date	Measured GW Elevation (NAVD88, ft)	Modelled GW Elevation (NAVD88, ft)	Residual (ft)	Target Weight
head_6409	head_grp3	9745	6/30/2010	72.27	49.18	23.09	0.18248
head_6410	head_grp3	9745	6/30/2011	70.19	49.18	21.01	0.18248
head_6411	head_grp3	9745	6/30/2012	71.33	49.18	22.15	0.18248
head_6412	head_grp3	9745	6/30/2013	73.13	49.18	23.95	0.18248
head_6413	head_grp3	9745	6/30/2014	73.2	49.18	24.02	0.18248
head_6414	head_grp3	9745	6/30/2015	71.52	49.17	22.35	0.18248
head_6424	head_grp3	9747	6/30/2008	69.09	51.66	17.43	0.10138
head_6425	head_grp3	9747	6/30/2009	69.57	51.66	17.91	0.20276
head_6426	head_grp3	9747	6/30/2010	69.68	51.66	18.02	0.20276
head_6427	head_grp3	9747	6/30/2011	68.24	51.66	16.58	0.20276
head_6428	head_grp3	9747	6/30/2012	69.19	51.66	17.53	0.20276
head_6429	head_grp3	9747	6/30/2013	69.83	51.66	18.17	0.10138
head_6430	head_grp3	9747	6/30/2014	70.59	51.66	18.93	0.10138
head_6431	head_grp3	9748	6/30/2008	35.66	29.88	5.78	0.10138
head_6432	head_grp3	9748	6/30/2009	37.07	29.88	7.19	0.20276
head_6433	head_grp3	9748	6/30/2010	38.42	29.88	8.54	0.20276
head_6434	head_grp3	9748	6/30/2011	35.87	29.88	5.99	0.20276
head_6435	head_grp3	9748	6/30/2012	35.37	29.88	5.49	0.20276
head_6436	head_grp3	9748	6/30/2013	36.61	29.89	6.72	0.10138
head_6437	head_grp3	9748	6/30/2014	42.22	29.88	12.34	0.10138
head_6438	head_grp3	9748	6/30/2015	38.44	29.86	8.58	0.10138
head_6446	head_grp3	9750	6/30/2009	84.67	61.69	22.98	0.18248
head_6447	head_grp3	9750	6/30/2010	82.13	61.69	20.44	0.18248
head_6448	head_grp3	9750	6/30/2011	82.57	61.69	20.88	0.18248
head_6449	head_grp3	9750	6/30/2012	83.69	61.69	22.00	0.18248
head_6450	head_grp3	9750	6/30/2013	84.64	61.69	22.95	0.18248
head_6451	head_grp3	9750	6/30/2014	84.36	61.69	22.67	0.18248
head_6452	head_grp3	9750	6/30/2015	83.86	61.68	22.18	0.18248
head_6511	head_grp3	9941	6/30/2009	39.78	35.15	4.63	0.18248
head_6512	head_grp3	9941	6/30/2010	41.25	35.14	6.11	0.18248
head_6513	head_grp3	9941	6/30/2011	38.67	35.14	3.53	0.18248
head_6514	head_grp3	9941	6/30/2012	37.97	35.14	2.83	0.18248
head_6515	head_grp3	9941	6/30/2013	41.66	35.14	6.52	0.18248
head_6516	head_grp3	9941	6/30/2014	44.55	35.14	9.41	0.18248
head_6517	head_grp3	9941	6/30/2015	42.62	35.13	7.49	0.18248
head_6518	head_grp3	9942	6/30/2010	42.3	35.28	7.02	0.10138
head_6528	head_grp3	12335	6/30/2012	105.39	113.15	-7.76	0.10138
head_6529	head_grp3	12335	6/30/2013	106.12	113.56	-7.44	0.18248
head_6530	head_grp3	12335	6/30/2014	106.99	113.93	-6.94	0.18248
head_6531	head_grp3	12335	6/30/2015	107	114.24	-7.24	0.18248
head_6539	head_grp3	12840	6/30/2015	-13.78	-19.75	5.97	0.18248

Table A-3. Vertical Head Difference (VHD) Targets.

Target Name	Target Group	Well 1 NWF ID	Well 2 NWF ID	Date	Measured Groundwater Elevation Difference (ft)	Modelled Groundwater Elevation Difference (ft)	Residual (ft)	Target Weight
vhd_111	vhd_grp3	9745	9638	6/30/2008	35.74	22.36	13.38	0.430716
vhd_112	vhd_grp3	9745	9638	6/30/2009	34.24	22.36	11.88	0.430716
vhd_113	vhd_grp3	9745	9638	6/30/2010	33.3	22.36	10.94	0.430716
vhd_114	vhd_grp3	9745	9638	6/30/2011	33.93	22.36	11.57	0.430716
vhd_115	vhd_grp3	9745	9638	6/30/2012	35.54	22.36	13.18	0.430716
vhd_116	vhd_grp3	9745	9638	6/30/2013	34.33	22.36	11.97	0.430716
vhd_117	vhd_grp3	9745	9638	6/30/2014	31.54	22.36	9.18	0.430716
vhd_118	vhd_grp3	9745	9638	6/30/2015	31.67	22.37	9.30	0.430716
vhd_126	vhd_grp3	9747	9748	6/30/2008	33.43	21.78	11.65	0.430716
vhd_127	vhd_grp3	9747	9748	6/30/2009	32.5	21.78	10.72	0.430716
vhd_128	vhd_grp3	9747	9748	6/30/2010	31.26	21.78	9.48	0.430716
vhd_129	vhd_grp3	9747	9748	6/30/2011	32.37	21.78	10.59	0.430716
vhd_130	vhd_grp3	9747	9748	6/30/2012	33.82	21.78	12.04	0.430716
vhd_131	vhd_grp3	9747	9748	6/30/2013	33.22	21.78	11.44	0.430716
vhd_132	vhd_grp3	9747	9748	6/30/2014	28.37	21.78	6.59	0.430716
vhd_140	vhd_grp3	9750	9941	6/30/2009	44.89	26.54	18.35	0.430716
vhd_141	vhd_grp3	9750	9941	6/30/2010	40.88	26.54	14.34	0.430716
vhd_142	vhd_grp3	9750	9941	6/30/2011	43.9	26.54	17.36	0.430716
vhd_143	vhd_grp3	9750	9941	6/30/2012	45.72	26.54	19.18	0.430716
vhd_144	vhd_grp3	9750	9941	6/30/2013	42.98	26.54	16.44	0.430716
vhd_145	vhd_grp3	9750	9941	6/30/2014	39.81	26.54	13.27	0.430716
vhd_146	vhd_grp3	9750	9941	6/30/2015	41.24	26.55	14.69	0.430716
vhd_181	vhd_grp1	3209	3210	6/30/1980	-3.2	0.47	-3.67	1.98835
vhd_182	vhd_grp1	3209	3210	6/30/1981	-2.96	0.45	-3.41	1.98835
vhd_183	vhd_grp1	3209	3210	6/30/1982	2.18	0.44	1.74	1.98835
vhd_184	vhd_grp1	3209	3210	6/30/1983	-1.2	0.37	-1.57	1.98835
vhd_185	vhd_grp1	3209	3210	6/30/1984	-1.44	0.31	-1.75	1.98835
vhd_186	vhd_grp1	3209	3210	6/30/1985	-1.71	0.26	-1.97	1.98835
vhd_187	vhd_grp1	3209	3210	6/30/1986	-3.14	0.20	-3.34	1.98835
vhd_188	vhd_grp1	3209	3210	6/30/1987	-4.52	0.17	-4.69	1.98835
vhd_189	vhd_grp1	3209	3210	6/30/1988	-4.52	0.09	-4.61	1.98835

Table A-3. Vertical Head Difference (VHD) Targets.

Target Name	Target Group	Well 1 NWF ID	Well 2 NWF ID	Date	Measured Groundwater Elevation Difference (ft)	Modelled Groundwater Elevation Difference (ft)	Residual (ft)	Target Weight
vhd_190	vhd_grp1	3209	3210	6/30/1989	0.52	0.08	0.44	1.98835
vhd_191	vhd_grp1	3209	3210	6/30/1990	0.72	0.01	0.71	1.98835
vhd_192	vhd_grp2	3209	3210	6/30/1991	-0.45	0.13	-0.58	0.665339
vhd_193	vhd_grp2	3209	3210	6/30/1992	-2.72	0.04	-2.76	0.665339
vhd_194	vhd_grp2	3209	3210	6/30/1993	-0.13	-0.08	-0.05	0.665339
vhd_195	vhd_grp2	3209	3210	6/30/1994	-6.16	-0.06	-6.10	0.665339
vhd_196	vhd_grp2	3209	3210	6/30/1996	0.78	-0.18	0.96	0.665339
vhd_197	vhd_grp2	3209	3210	6/30/1997	4.46	-0.25	4.71	0.665339
vhd_198	vhd_grp2	3209	3210	6/30/1998	-0.27	-0.31	0.04	0.665339
vhd_199	vhd_grp2	3209	3210	6/30/1999	-4.00E-02	-0.31	0.27	0.665339
vhd_200	vhd_grp2	3209	3210	6/30/2000	-1.28	-0.41	-0.87	0.665339
vhd_201	vhd_grp2	3209	3210	6/30/2002	-5.53	-0.37	-5.16	0.665339
vhd_202	vhd_grp2	3209	3210	6/30/2003	-0.18	-0.37	0.19	0.665339
vhd_203	vhd_grp3	3209	3210	6/30/2005	-3.00E-02	-0.34	0.31	0.430716
vhd_204	vhd_grp3	3209	3210	6/30/2006	-0.1	-0.41	0.31	0.430716
vhd_205	vhd_grp3	3209	3210	6/30/2007	-2.79	-0.30	-2.49	0.430716
vhd_206	vhd_grp3	3209	3210	6/30/2008	-0.31	-0.26	-0.05	0.430716
vhd_207	vhd_grp3	3209	3210	6/30/2009	0.29	-0.26	0.55	0.430716
vhd_208	vhd_grp3	3209	3210	6/30/2010	0.24	-0.27	0.51	0.430716
vhd_209	vhd_grp3	3209	3210	6/30/2011	0.6	-0.32	0.92	0.430716
vhd_210	vhd_grp3	3209	3210	6/30/2012	-0.41	-0.25	-0.16	0.430716
vhd_211	vhd_grp3	3209	3210	6/30/2013	-1.56	-0.22	-1.34	0.430716
vhd_212	vhd_grp3	3209	3210	6/30/2014	0.13	-0.24	0.37	0.430716
vhd_213	vhd_grp3	3209	3210	6/30/2015	-2.84	-0.22	-2.62	0.430716
vhd_214	vhd_grp1	5597	5596	6/30/1986	-2.82	-0.19	-2.63	1.98835
vhd_215	vhd_grp1	5597	5596	6/30/1987	-1.9	-0.19	-1.71	1.98835
vhd_216	vhd_grp1	5597	5596	6/30/1990	-0.58	-0.20	-0.38	1.98835
vhd_217	vhd_grp2	5597	5596	6/30/1991	-0.48	-0.20	-0.28	0.665339
vhd_218	vhd_grp2	5597	5596	6/30/1992	-0.4	-0.20	-0.20	0.665339
vhd_219	vhd_grp2	5597	5596	6/30/1993	-0.52	-0.20	-0.32	0.665339
vhd_220	vhd_grp2	5597	5596	6/30/1995	0.2	-0.21	0.41	0.665339

Table A-3. Vertical Head Difference (VHD) Targets.

Target Name	Target Group	Well 1 NWF ID	Well 2 NWF ID	Date	Measured Groundwater Elevation Difference (ft)	Modelled Groundwater Elevation Difference (ft)	Residual (ft)	Target Weight
vhd_221	vhd_grp2	5597	5596	6/30/1996	0.18	-0.21	0.39	0.665339
vhd_222	vhd_grp2	5597	5596	6/30/1997	0.22	-0.21	0.43	0.665339
vhd_223	vhd_grp2	5597	5596	6/30/1998	0.8	-0.21	1.01	0.665339
vhd_224	vhd_grp2	5597	5596	6/30/1999	0.13	-0.21	0.34	0.665339
vhd_225	vhd_grp2	5597	5596	6/30/2000	0.69	-0.21	0.90	0.665339
vhd_226	vhd_grp2	5597	5596	6/30/2001	0.23	-0.22	0.45	0.665339
vhd_227	vhd_grp2	5597	5596	6/30/2002	0.6	-0.22	0.82	0.665339
vhd_228	vhd_grp2	5597	5596	6/30/2003	1.36	-0.22	1.58	0.665339
vhd_229	vhd_grp3	5597	5596	6/30/2006	1.89	-0.22	2.11	0.430716
vhd_230	vhd_grp3	5597	5596	6/30/2007	1.57	-0.22	1.79	0.430716
vhd_231	vhd_grp3	5597	5596	6/30/2008	2.19	-0.22	2.41	0.430716
vhd_232	vhd_grp3	5597	5596	6/30/2010	2.99	-0.22	3.21	0.430716
vhd_233	vhd_grp3	5597	5596	6/30/2011	2.44	-0.22	2.66	0.430716
vhd_234	vhd_grp3	5597	5596	6/30/2012	2.76	-0.22	2.98	0.430716
vhd_235	vhd_grp3	5597	5596	6/30/2013	3.43	-0.22	3.65	0.430716
vhd_236	vhd_grp3	5597	5596	6/30/2014	3.46	-0.22	3.68	0.430716
vhd_237	vhd_grp3	5597	5596	6/30/2015	2.01	-0.22	2.23	0.430716
vhd_279	vhd_grp1	5733	5732	6/30/1986	41.28	36.32	4.96	1.98835
vhd_280	vhd_grp1	5733	5732	6/30/1989	43.72	36.32	7.40	1.98835
vhd_281	vhd_grp1	5733	5732	6/30/1990	43.42	36.32	7.10	1.98835
vhd_282	vhd_grp2	5733	5732	6/30/1991	44.47	36.32	8.15	0.665339
vhd_283	vhd_grp2	5733	5732	6/30/1992	44.48	36.32	8.16	0.665339
vhd_284	vhd_grp2	5733	5732	6/30/1993	43.65	36.32	7.33	0.665339
vhd_285	vhd_grp2	5733	5732	6/30/1994	45.06	36.32	8.74	0.665339
vhd_286	vhd_grp2	5733	5732	6/30/1995	46.55	36.32	10.23	0.665339
vhd_287	vhd_grp2	5733	5732	6/30/1996	47.64	36.32	11.32	0.665339
vhd_288	vhd_grp2	5733	5732	6/30/1997	46.93	36.32	10.61	0.665339
vhd_289	vhd_grp2	5733	5732	6/30/1998	54.22	36.32	17.90	0.665339
vhd_290	vhd_grp2	5733	5732	6/30/1999	53.92	36.32	17.60	0.665339
vhd_291	vhd_grp2	5733	5732	6/30/2000	53.59	36.32	17.27	0.665339
vhd_292	vhd_grp2	5733	5732	6/30/2001	56.71	36.32	20.39	0.665339

Table A-3. Vertical Head Difference (VHD) Targets.

Target Name	Target Group	Well 1 NWF ID	Well 2 NWF ID	Date	Measured Groundwater Elevation Difference (ft)	Modelled Groundwater Elevation Difference (ft)	Residual (ft)	Target Weight
vhd_293	vhd_grp2	5733	5732	6/30/2002	56.3	36.32	19.98	0.665339
vhd_294	vhd_grp2	5733	5732	6/30/2003	56.2	36.32	19.88	0.665339
vhd_295	vhd_grp3	5733	5732	6/30/2007	55.34	36.32	19.02	0.430716
vhd_296	vhd_grp3	5733	5732	6/30/2008	55.82	36.32	19.50	0.430716
vhd_297	vhd_grp3	5733	5732	6/30/2010	53.81	36.32	17.49	0.430716
vhd_298	vhd_grp3	5733	5732	6/30/2011	55.19	36.32	18.87	0.430716
vhd_299	vhd_grp3	5733	5732	6/30/2012	56.86	36.32	20.54	0.430716
vhd_300	vhd_grp3	5733	5732	6/30/2013	55.97	36.32	19.65	0.430716
vhd_301	vhd_grp3	5733	5732	6/30/2014	54.12	36.32	17.80	0.430716
vhd_302	vhd_grp3	5733	5732	6/30/2015	54.49	36.32	18.17	0.430716
vhd_303	vhd_grp3	9852	7174	6/30/2008	-48.36	-38.58	-9.78	0.430716
vhd_304	vhd_grp3	9852	7174	6/30/2010	-33.23	-19.50	-13.73	0.430716
vhd_305	vhd_grp3	9852	7174	6/30/2011	-39.53	-32.61	-6.92	0.430716
vhd_306	vhd_grp3	9852	7174	6/30/2012	-35.77	-30.92	-4.85	0.430716
vhd_307	vhd_grp3	9852	7174	6/30/2013	-39.12	-26.12	-13.00	0.430716
vhd_308	vhd_grp3	9852	7174	6/30/2014	-36.56	-28.87	-7.69	0.430716
vhd_309	vhd_grp3	9852	7174	6/30/2015	-31.22	-23.78	-7.44	0.430716

Table A-4. Horizontal Head Difference (HHD) Targets.

Target Name	Target Group	Well 1 NWF ID	Well 2 NWF ID	Date	Measured Groundwater Elevation Difference (ft)	Modelled Groundwater Elevation Difference (ft)	Residual (ft)	Target Weight
hhd_1	hhd_grp1	1894	3209	6/30/1948	-28.85	-23.52	-5.33	0.418333
hhd_2	hhd_grp1	1894	3209	6/30/1949	-26.06	-24.16	-1.90	0.418333
hhd_3	hhd_grp1	1894	3209	6/30/1950	-27.42	-26.34	-1.08	0.418333
hhd_4	hhd_grp1	1894	3209	6/30/1951	-37.29	-27.43	-9.86	0.418333
hhd_5	hhd_grp1	1894	3209	6/30/1952	-44.37	-28.37	-16.00	0.418333
hhd_6	hhd_grp1	1894	3209	6/30/1953	-43.43	-29.24	-14.19	0.418333
hhd_7	hhd_grp1	1894	3209	6/30/1954	-53.59	-30.09	-23.50	0.418333
hhd_8	hhd_grp1	1894	3209	6/30/1955	-51.81	-35.59	-16.22	0.418333
hhd_9	hhd_grp1	1894	3209	6/30/1956	-53.7	-37.25	-16.45	0.418333
hhd_10	hhd_grp1	1894	3209	6/30/1957	-56.41	-39.98	-16.43	0.418333
hhd_11	hhd_grp1	1894	3209	6/30/1958	-47.95	-44.72	-3.23	0.418333
hhd_12	hhd_grp1	1894	3209	6/30/1959	-50.66	-48.76	-1.90	0.418333
hhd_13	hhd_grp1	1894	3209	6/30/1960	-49.14	-53.53	4.39	0.418333
hhd_14	hhd_grp1	1894	3209	6/30/1961	-51.92	-57.65	5.73	0.418333
hhd_15	hhd_grp1	1894	3209	6/30/1962	-60.34	-55.92	-4.42	0.418333
hhd_16	hhd_grp1	1894	3209	6/30/1963	-69.17	-59.41	-9.76	0.418333
hhd_17	hhd_grp1	1894	3209	6/30/1964	-73.06	-62.95	-10.11	0.418333
hhd_18	hhd_grp1	1894	3209	6/30/1965	-75.22	-62.58	-12.64	0.418333
hhd_19	hhd_grp2	1894	3209	6/30/1966	-73.52	-64.12	-9.40	0.293452
hhd_20	hhd_grp2	1894	3209	6/30/1967	-76.64	-66.12	-10.52	0.293452
hhd_21	hhd_grp2	1894	3209	6/30/1978	-74.66	-75.49	0.83	0.293452
hhd_22	hhd_grp2	1894	3209	6/30/1979	-68.88	-77.60	8.72	0.293452
hhd_23	hhd_grp2	1894	3209	6/30/1980	-63.21	-75.71	12.50	0.293452
hhd_24	hhd_grp2	1894	3209	6/30/1981	-77.78	-75.86	-1.92	0.293452
hhd_25	hhd_grp2	1894	3209	6/30/1982	-76.13	-66.93	-9.20	0.293452
hhd_26	hhd_grp2	1894	3209	6/30/1983	-61.67	-68.19	6.52	0.293452
hhd_27	hhd_grp2	1894	3209	6/30/1984	-71.91	-72.29	0.38	0.293452
hhd_28	hhd_grp2	1894	3209	6/30/1985	-67.7	-72.45	4.75	0.293452
hhd_29	hhd_grp2	1894	3209	6/30/1986	-65.41	-72.31	6.90	0.293452
hhd_30	hhd_grp2	1894	3209	6/30/1987	-64.54	-72.29	7.75	0.293452
hhd_31	hhd_grp2	1894	3209	6/30/1988	-59.7	-61.35	1.65	0.293452

Table A-4. Horizontal Head Difference (HHD) Targets.

Target Name	Target Group	Well 1 NWF ID	Well 2 NWF ID	Date	Measured Groundwater Elevation Difference (ft)	Modelled Groundwater Elevation Difference (ft)	Residual (ft)	Target Weight
hhd_32	hhd_grp2	1894	3209	6/30/1989	-57.58	-58.14	0.56	0.293452
hhd_33	hhd_grp2	1894	3209	6/30/1990	-60.66	-52.71	-7.95	0.293452
hhd_34	hhd_grp3	1894	3209	6/30/1991	-51.23	-49.20	-2.03	0.405721
hhd_35	hhd_grp3	1894	3209	6/30/1992	-47.07	-47.76	0.69	0.405721
hhd_36	hhd_grp3	1894	3209	6/30/1993	-50.17	-48.46	-1.71	0.405721
hhd_37	hhd_grp3	1894	3209	6/30/1994	-43.19	-48.32	5.13	0.405721
hhd_38	hhd_grp3	1894	3209	6/30/1995	-47.07	-50.86	3.79	0.405721
hhd_39	hhd_grp3	1894	3209	6/30/1996	-48.93	-49.81	0.88	0.405721
hhd_40	hhd_grp3	1894	3209	6/30/1997	-52.05	-47.87	-4.18	0.405721
hhd_41	hhd_grp3	1894	3209	6/30/1998	-43.24	-43.94	0.70	0.405721
hhd_42	hhd_grp3	1894	3209	6/30/1999	-44.25	-43.87	-0.38	0.405721
hhd_43	hhd_grp3	1894	3209	6/30/2000	-44.66	-47.20	2.54	0.405721
hhd_44	hhd_grp3	1894	3209	6/30/2001	-47.44	-45.59	-1.85	0.405721
hhd_45	hhd_grp3	1894	3209	6/30/2002	-39.68	-43.78	4.10	0.405721
hhd_46	hhd_grp3	1894	3209	6/30/2003	-46.25	-43.51	-2.74	0.405721
hhd_47	hhd_grp3	1894	3209	6/30/2005	-47.14	-44.84	-2.30	0.405721
hhd_48	hhd_grp3	1894	3209	6/30/2006	-53.48	-46.46	-7.02	0.405721
hhd_49	hhd_grp3	1894	3209	6/30/2007	-41.85	-39.15	-2.70	0.405721
hhd_50	hhd_grp3	1894	3209	6/30/2008	-40.85	-35.24	-5.61	0.405721
hhd_51	hhd_grp3	1894	3209	6/30/2010	-37.28	-32.49	-4.79	0.405721
hhd_52	hhd_grp3	1894	3209	6/30/2011	-35.4	-31.90	-3.50	0.405721
hhd_53	hhd_grp3	1894	3209	6/30/2012	-34.86	-31.49	-3.37	0.405721
hhd_54	hhd_grp3	1894	3209	6/30/2013	-33.98	-33.63	-0.35	0.405721
hhd_55	hhd_grp3	1894	3209	6/30/2014	-37.41	-35.27	-2.14	0.405721
hhd_56	hhd_grp3	1894	3209	6/30/2015	-34.49	-35.33	0.84	0.405721
hhd_57	hhd_grp1	1894	2994	6/30/1947	-4.85	1.24	-6.09	0.418333
hhd_58	hhd_grp1	1894	2994	6/30/1948	-2.04	0.70	-2.74	0.418333
hhd_59	hhd_grp1	1894	2994	6/30/1949	0.93	0.27	0.66	0.418333
hhd_60	hhd_grp1	1894	2994	6/30/1950	-0.97	-1.42	0.45	0.418333
hhd_61	hhd_grp1	1894	2994	6/30/1951	-8.05	-5.32	-2.73	0.418333
hhd_62	hhd_grp1	1894	2994	6/30/1952	-15.57	-6.24	-9.33	0.418333

Table A-4. Horizontal Head Difference (HHD) Targets.

Target Name	Target Group	Well 1 NWF ID	Well 2 NWF ID	Date	Measured Groundwater Elevation Difference (ft)	Modelled Groundwater Elevation Difference (ft)	Residual (ft)	Target Weight
hhd_63	hhd_grp1	1894	2994	6/30/1953	-15.69	-7.02	-8.67	0.418333
hhd_64	hhd_grp1	1894	2994	6/30/1954	-24.27	-7.76	-16.51	0.418333
hhd_65	hhd_grp1	1894	2994	6/30/1955	-24.52	-13.26	-11.26	0.418333
hhd_66	hhd_grp1	1894	2994	6/30/1956	-26.83	-14.89	-11.94	0.418333
hhd_67	hhd_grp1	1894	2994	6/30/1957	-32.93	-16.30	-16.63	0.418333
hhd_68	hhd_grp1	1894	2994	6/30/1958	-27.44	-22.41	-5.03	0.418333
hhd_69	hhd_grp1	1894	2994	6/30/1959	-31.47	-26.81	-4.66	0.418333
hhd_70	hhd_grp1	1894	2994	6/30/1960	-30.75	-31.67	0.92	0.418333
hhd_71	hhd_grp1	1894	2994	6/30/1961	-35.15	-35.99	0.84	0.418333
hhd_72	hhd_grp1	1894	2994	6/30/1962	-41.95	-34.66	-7.29	0.418333
hhd_73	hhd_grp1	1894	2994	6/30/1963	-48.75	-38.59	-10.16	0.418333
hhd_74	hhd_grp1	1894	2994	6/30/1964	-50.64	-42.20	-8.44	0.418333
hhd_75	hhd_grp1	1894	2994	6/30/1965	-53.81	-43.62	-10.19	0.418333
hhd_76	hhd_grp2	1894	2994	6/30/1966	-49.13	-44.10	-5.03	0.293452
hhd_77	hhd_grp2	1894	2994	6/30/1967	-50.24	-45.49	-4.75	0.293452
hhd_78	hhd_grp2	1894	2994	6/30/1968	-52.47	-55.44	2.97	0.293452
hhd_79	hhd_grp2	1894	2994	6/30/1969	-46.37	-51.69	5.32	0.293452
hhd_80	hhd_grp2	1894	2994	6/30/1970	-29.76	-51.24	21.48	0.293452
hhd_81	hhd_grp2	1894	2994	6/30/1971	-27.54	-53.95	26.41	0.293452
hhd_82	hhd_grp2	1894	2994	6/30/1974	-63.23	-52.57	-10.66	0.293452
hhd_83	hhd_grp2	1894	2994	6/30/1975	-57.05	-52.21	-4.84	0.293452
hhd_84	hhd_grp2	1894	2994	6/30/1976	-55.78	-55.89	0.11	0.293452
hhd_85	hhd_grp2	1894	2994	6/30/1977	-48.29	-59.33	11.04	0.293452
hhd_86	hhd_grp2	1894	2994	6/30/1978	-49.73	-60.73	11.00	0.293452
hhd_87	hhd_grp2	1894	2994	6/30/1979	-48.93	-62.22	13.29	0.293452
hhd_88	hhd_grp2	1894	2994	6/30/1980	-44.55	-59.76	15.21	0.293452
hhd_89	hhd_grp2	1894	2994	6/30/1981	-52.83	-58.82	5.99	0.293452
hhd_90	hhd_grp2	1894	2994	6/30/1982	-54.19	-48.99	-5.20	0.293452
hhd_91	hhd_grp2	1894	2994	6/30/1983	-41.14	-49.85	8.71	0.293452
hhd_92	hhd_grp2	1894	2994	6/30/1984	-47.72	-53.27	5.55	0.293452
hhd_93	hhd_grp2	1894	2994	6/30/1985	-44.4	-54.06	9.66	0.293452

Table A-4. Horizontal Head Difference (HHD) Targets.

Target Name	Target Group	Well 1 NWF ID	Well 2 NWF ID	Date	Measured Groundwater Elevation Difference (ft)	Modelled Groundwater Elevation Difference (ft)	Residual (ft)	Target Weight
hhd_94	hhd_grp2	1894	2994	6/30/1986	-39.83	-54.06	14.23	0.293452
hhd_95	hhd_grp2	1894	2994	6/30/1987	-41.85	-54.21	12.36	0.293452
hhd_96	hhd_grp2	1894	2994	6/30/1988	-39.24	-43.99	4.75	0.293452
hhd_97	hhd_grp2	1894	2994	6/30/1989	-34.36	-40.83	6.47	0.293452
hhd_98	hhd_grp2	1894	2994	6/30/1990	-37.53	-34.84	-2.69	0.293452
hhd_99	hhd_grp3	1894	2994	6/30/1991	-32.03	-32.83	0.80	0.405721
hhd_100	hhd_grp3	1894	2994	6/30/1992	-28.4	-32.08	3.68	0.405721
hhd_101	hhd_grp3	1894	2994	6/30/1993	-35.07	-32.66	-2.41	0.405721
hhd_102	hhd_grp3	1894	2994	6/30/1994	-28.92	-32.70	3.78	0.405721
hhd_103	hhd_grp3	1894	2994	6/30/1995	-27.94	-34.59	6.65	0.405721
hhd_104	hhd_grp3	1894	2994	6/30/1996	-28.81	-34.06	5.25	0.405721
hhd_105	hhd_grp3	1894	2994	6/30/1997	-21.88	-32.98	11.10	0.405721
hhd_106	hhd_grp3	1894	2994	6/30/1998	-16.68	-29.57	12.89	0.405721
hhd_107	hhd_grp3	1894	2994	6/30/1999	-25.65	-28.60	2.95	0.405721
hhd_108	hhd_grp3	1894	2994	6/30/2000	-13.92	-33.57	19.65	0.405721
hhd_109	hhd_grp3	1894	2994	6/30/2001	-19.84	-30.60	10.76	0.405721
hhd_110	hhd_grp3	1894	2994	6/30/2002	-30.38	-32.93	2.55	0.405721
hhd_111	hhd_grp3	1894	2994	6/30/2003	-27.02	-33.87	6.85	0.405721
hhd_112	hhd_grp3	1894	2994	6/30/2005	-29.96	-33.67	3.71	0.405721
hhd_113	hhd_grp3	1894	2994	6/30/2006	-32.56	-33.81	1.25	0.405721
hhd_114	hhd_grp3	1894	2994	6/30/2007	-24.51	-26.66	2.15	0.405721
hhd_115	hhd_grp3	1894	2994	6/30/2008	-22.49	-23.49	1.00	0.405721
hhd_116	hhd_grp3	1894	2994	6/30/2010	-21.3	-22.94	1.64	0.405721
hhd_117	hhd_grp3	1894	2994	6/30/2011	-15.93	-20.56	4.63	0.405721
hhd_118	hhd_grp3	1894	2994	6/30/2012	-18.3	-21.53	3.23	0.405721
hhd_119	hhd_grp3	1894	2994	6/30/2013	-18.11	-24.18	6.07	0.405721
hhd_120	hhd_grp3	1894	2994	6/30/2014	-21.68	-25.91	4.23	0.405721
hhd_121	hhd_grp3	1894	2994	6/30/2015	-19.61	-26.04	6.43	0.405721
hhd_122	hhd_grp1	1894	3923	6/30/1947	-46.26	-40.78	-5.48	0.418333
hhd_123	hhd_grp1	1894	3923	6/30/1948	-43.23	-41.68	-1.55	0.418333
hhd_124	hhd_grp1	1894	3923	6/30/1949	-40.45	-42.55	2.10	0.418333

Table A-4. Horizontal Head Difference (HHD) Targets.

Target Name	Target Group	Well 1 NWF ID	Well 2 NWF ID	Date	Measured Groundwater Elevation Difference (ft)	Modelled Groundwater Elevation Difference (ft)	Residual (ft)	Target Weight
hhd_125	hhd_grp1	1894	3923	6/30/1950	-43.72	-45.05	1.33	0.418333
hhd_126	hhd_grp1	1894	3923	6/30/1951	-50.88	-46.67	-4.21	0.418333
hhd_127	hhd_grp1	1894	3923	6/30/1952	-59.04	-47.92	-11.12	0.418333
hhd_128	hhd_grp1	1894	3923	6/30/1953	-57.65	-49.08	-8.57	0.418333
hhd_129	hhd_grp1	1894	3923	6/30/1954	-70.69	-50.24	-20.45	0.418333
hhd_130	hhd_grp1	1894	3923	6/30/1955	-73.01	-56.18	-16.83	0.418333
hhd_131	hhd_grp1	1894	3923	6/30/1956	-74.1	-58.22	-15.88	0.418333
hhd_132	hhd_grp1	1894	3923	6/30/1957	-80.18	-61.38	-18.80	0.418333
hhd_133	hhd_grp1	1894	3923	6/30/1958	-72.69	-66.91	-5.78	0.418333
hhd_134	hhd_grp1	1894	3923	6/30/1959	-75.77	-71.51	-4.26	0.418333
hhd_135	hhd_grp1	1894	3923	6/30/1960	-74.94	-76.65	1.71	0.418333
hhd_136	hhd_grp1	1894	3923	6/30/1961	-78.16	-81.28	3.12	0.418333
hhd_137	hhd_grp1	1894	3923	6/30/1962	-89.54	-80.21	-9.33	0.418333
hhd_138	hhd_grp1	1894	3923	6/30/1963	-95.08	-84.27	-10.81	0.418333
hhd_139	hhd_grp1	1894	3923	6/30/1964	-94.33	-88.37	-5.96	0.418333
hhd_140	hhd_grp1	1894	3923	6/30/1965	-97.15	-88.48	-8.67	0.418333
hhd_141	hhd_grp2	1894	3923	6/30/1966	-95.97	-90.78	-5.19	0.293452
hhd_142	hhd_grp2	1894	3923	6/30/1967	-98.16	-93.62	-4.54	0.293452
hhd_143	hhd_grp2	1894	3923	6/30/1968	-97.7	-100.87	3.17	0.293452
hhd_144	hhd_grp2	1894	3923	6/30/1969	-93.5	-96.14	2.64	0.293452
hhd_145	hhd_grp2	1894	3923	6/30/1970	-76.85	-95.84	18.99	0.293452
hhd_146	hhd_grp2	1894	3923	6/30/1971	-69.92	-98.55	28.63	0.293452
hhd_147	hhd_grp2	1894	3923	6/30/1974	-126.04	-99.86	-26.18	0.293452
hhd_148	hhd_grp2	1894	3923	6/30/1975	-108.31	-99.06	-9.25	0.293452
hhd_149	hhd_grp2	1894	3923	6/30/1976	-106.85	-102.32	-4.53	0.293452
hhd_150	hhd_grp2	1894	3923	6/30/1977	-102.38	-105.28	2.90	0.293452
hhd_151	hhd_grp2	1894	3923	6/30/1978	-99.44	-104.78	5.34	0.293452
hhd_152	hhd_grp2	1894	3923	6/30/1979	-100.15	-107.44	7.29	0.293452
hhd_153	hhd_grp2	1894	3923	6/30/1980	-95.43	-105.95	10.52	0.293452
hhd_154	hhd_grp2	1894	3923	6/30/1981	-108.92	-106.76	-2.16	0.293452
hhd_155	hhd_grp2	1894	3923	6/30/1982	-107.03	-98.59	-8.44	0.293452

Table A-4. Horizontal Head Difference (HHD) Targets.

Target Name	Target Group	Well 1 NWF ID	Well 2 NWF ID	Date	Measured Groundwater Elevation Difference (ft)	Modelled Groundwater Elevation Difference (ft)	Residual (ft)	Target Weight
hhd_156	hhd_grp2	1894	3923	6/30/1983	-94.21	-100.63	6.42	0.293452
hhd_157	hhd_grp2	1894	3923	6/30/1984	-106.82	-105.77	-1.05	0.293452
hhd_158	hhd_grp2	1894	3923	6/30/1985	-103.16	-106.98	3.82	0.293452
hhd_159	hhd_grp2	1894	3923	6/30/1986	-103.2	-107.29	4.09	0.293452
hhd_160	hhd_grp2	1894	3923	6/30/1987	-103.04	-107.41	4.37	0.293452
hhd_161	hhd_grp2	1894	3923	6/30/1988	-98.74	-97.31	-1.43	0.293452
hhd_162	hhd_grp2	1894	3923	6/30/1989	-91.7	-93.69	1.99	0.293452
hhd_163	hhd_grp2	1894	3923	6/30/1990	-94.12	-88.50	-5.62	0.293452
hhd_164	hhd_grp3	1894	3923	6/30/1991	-85.88	-84.01	-1.87	0.405721
hhd_165	hhd_grp3	1894	3923	6/30/1992	-85.35	-82.63	-2.72	0.405721
hhd_166	hhd_grp3	1894	3923	6/30/1993	-80.94	-82.99	2.05	0.405721
hhd_167	hhd_grp3	1894	3923	6/30/1994	-86.77	-81.63	-5.14	0.405721
hhd_168	hhd_grp3	1894	3923	6/30/1995	-86.19	-83.50	-2.69	0.405721
hhd_169	hhd_grp3	1894	3923	6/30/1996	-82.51	-82.15	-0.36	0.405721
hhd_170	hhd_grp3	1894	3923	6/30/1997	-89.4	-79.53	-9.87	0.405721
hhd_171	hhd_grp3	1894	3923	6/30/1998	-77.94	-75.04	-2.90	0.405721
hhd_172	hhd_grp3	1894	3923	6/30/1999	-75.65	-74.63	-1.02	0.405721
hhd_173	hhd_grp3	1894	3923	6/30/2000	-82.09	-78.08	-4.01	0.405721
hhd_174	hhd_grp3	1894	3923	6/30/2001	-79.95	-75.89	-4.06	0.405721
hhd_175	hhd_grp3	1894	3923	6/30/2002	-78.18	-72.56	-5.62	0.405721
hhd_176	hhd_grp3	1894	3923	6/30/2003	-76.09	-71.09	-5.00	0.405721
hhd_177	hhd_grp3	1894	3923	6/30/2005	-76.34	-72.65	-3.69	0.405721
hhd_178	hhd_grp3	1894	3923	6/30/2006	-83.29	-74.00	-9.29	0.405721
hhd_179	hhd_grp3	1894	3923	6/30/2007	-69.84	-64.49	-5.35	0.405721
hhd_180	hhd_grp3	1894	3923	6/30/2008	-65.23	-58.75	-6.48	0.405721
hhd_181	hhd_grp3	1894	3923	6/30/2010	-59.33	-53.98	-5.35	0.405721
hhd_182	hhd_grp3	1894	3923	6/30/2011	-56.73	-52.81	-3.92	0.405721
hhd_183	hhd_grp3	1894	3923	6/30/2012	-55.85	-51.92	-3.93	0.405721
hhd_184	hhd_grp3	1894	3923	6/30/2013	-56.57	-54.22	-2.35	0.405721
hhd_185	hhd_grp3	1894	3923	6/30/2014	-59.17	-56.25	-2.92	0.405721
hhd_186	hhd_grp3	1894	3923	6/30/2015	-58.87	-56.45	-2.42	0.405721

Table A-4. Horizontal Head Difference (HHD) Targets.

Target Name	Target Group	Well 1 NWF ID	Well 2 NWF ID	Date	Measured Groundwater Elevation Difference (ft)	Modelled Groundwater Elevation Difference (ft)	Residual (ft)	Target Weight
hhd_187	hhd_grp1	1894	1074	6/30/1958	-36.02	-24.74	-11.28	0.418333
hhd_188	hhd_grp1	1894	1074	6/30/1961	-43.37	-44.46	1.09	0.418333
hhd_189	hhd_grp1	1894	1074	6/30/1962	-56.86	-45.37	-11.49	0.418333
hhd_190	hhd_grp1	1894	1074	6/30/1963	-63.94	-51.42	-12.52	0.418333
hhd_191	hhd_grp1	1894	1074	6/30/1964	-65.87	-57.62	-8.25	0.418333
hhd_192	hhd_grp1	1894	1074	6/30/1965	-69.8	-59.61	-10.19	0.418333
hhd_193	hhd_grp2	1894	1074	6/30/1966	-70.03	-63.77	-6.26	0.293452
hhd_194	hhd_grp2	1894	1074	6/30/1967	-70.21	-68.70	-1.51	0.293452
hhd_195	hhd_grp2	1894	1074	6/30/1968	-70.55	-78.01	7.46	0.293452
hhd_196	hhd_grp2	1894	1074	6/30/1969	-66.87	-74.85	7.98	0.293452
hhd_197	hhd_grp2	1894	1074	6/30/1970	-54.29	-75.52	21.23	0.293452
hhd_198	hhd_grp2	1894	1074	6/30/1971	-48.72	-79.63	30.91	0.293452
hhd_199	hhd_grp2	1894	1074	6/30/1974	-111.28	-87.19	-24.09	0.293452
hhd_200	hhd_grp2	1894	1074	6/30/1975	-97.18	-87.44	-9.74	0.293452
hhd_201	hhd_grp2	1894	1074	6/30/1976	-95.51	-91.87	-3.64	0.293452
hhd_202	hhd_grp2	1894	1074	6/30/1977	-92.29	-96.46	4.17	0.293452
hhd_203	hhd_grp2	1894	1074	6/30/1978	-91.43	-96.97	5.54	0.293452
hhd_204	hhd_grp2	1894	1074	6/30/1979	-93.65	-100.31	6.66	0.293452
hhd_205	hhd_grp2	1894	1074	6/30/1980	-89.65	-99.56	9.91	0.293452
hhd_206	hhd_grp2	1894	1074	6/30/1981	-105.33	-101.19	-4.14	0.293452
hhd_207	hhd_grp2	1894	1074	6/30/1982	-104.92	-94.77	-10.15	0.293452
hhd_208	hhd_grp2	1894	1074	6/30/1983	-93.71	-99.07	5.36	0.293452
hhd_209	hhd_grp2	1894	1074	6/30/1984	-108.88	-107.05	-1.83	0.293452
hhd_210	hhd_grp2	1894	1074	6/30/1985	-109.06	-111.63	2.57	0.293452
hhd_211	hhd_grp2	1894	1074	6/30/1986	-113.54	-115.66	2.12	0.293452
hhd_212	hhd_grp2	1894	1074	6/30/1987	-116.16	-118.55	2.39	0.293452
hhd_213	hhd_grp2	1894	1074	6/30/1988	-114.7	-111.24	-3.46	0.293452
hhd_214	hhd_grp2	1894	1074	6/30/1989	-109.72	-110.06	0.34	0.293452
hhd_215	hhd_grp2	1894	1074	6/30/1990	-115.27	-106.51	-8.76	0.293452
hhd_216	hhd_grp3	1894	1074	6/30/1991	-105.35	-102.95	-2.40	0.405721
hhd_217	hhd_grp3	1894	1074	6/30/1992	-105.7	-101.59	-4.11	0.405721

Table A-4. Horizontal Head Difference (HHD) Targets.

Target Name	Target Group	Well 1 NWF ID	Well 2 NWF ID	Date	Measured Groundwater Elevation Difference (ft)	Modelled Groundwater Elevation Difference (ft)	Residual (ft)	Target Weight
hhd_218	hhd_grp3	1894	1074	6/30/1994	-107.68	-102.42	-5.26	0.405721
hhd_219	hhd_grp3	1894	1074	6/30/1995	-109.81	-104.63	-5.18	0.405721
hhd_220	hhd_grp3	1894	1074	6/30/1996	-107.42	-104.24	-3.18	0.405721
hhd_221	hhd_grp3	1894	1074	6/30/1997	-117.9	-102.29	-15.61	0.405721
hhd_222	hhd_grp3	1894	1074	6/30/1998	-107.6	-98.73	-8.87	0.405721
hhd_223	hhd_grp3	1894	1074	6/30/1999	-102.7	-99.53	-3.17	0.405721
hhd_224	hhd_grp3	1894	1074	6/30/2000	-114.47	-103.83	-10.64	0.405721
hhd_225	hhd_grp3	1894	1074	6/30/2001	-110.05	-102.63	-7.42	0.405721
hhd_226	hhd_grp3	1894	1074	6/30/2002	-109.01	-98.82	-10.19	0.405721
hhd_227	hhd_grp3	1894	1074	6/30/2003	-106.72	-95.84	-10.88	0.405721
hhd_228	hhd_grp3	1894	1074	6/30/2008	-91.04	-81.78	-9.26	0.405721
hhd_229	hhd_grp3	1894	1074	6/30/2010	-81.49	-74.04	-7.45	0.405721
hhd_230	hhd_grp3	1894	1074	6/30/2011	-78.78	-72.21	-6.57	0.405721
hhd_231	hhd_grp3	1894	1074	6/30/2012	-75.86	-69.77	-6.09	0.405721
hhd_232	hhd_grp3	1894	1074	6/30/2013	-74.69	-69.36	-5.33	0.405721
hhd_233	hhd_grp3	1894	1074	6/30/2014	-75.51	-70.42	-5.09	0.405721
hhd_234	hhd_grp3	1894	1074	6/30/2015	-75.27	-69.70	-5.57	0.405721
hhd_235	hhd_grp1	1894	4368	6/30/1947	-66.31	-53.58	-12.73	0.418333
hhd_236	hhd_grp1	1894	4368	6/30/1948	-59.64	-54.65	-4.99	0.418333
hhd_237	hhd_grp1	1894	4368	6/30/1949	-54.74	-55.76	1.02	0.418333
hhd_238	hhd_grp1	1894	4368	6/30/1950	-55.85	-58.48	2.63	0.418333
hhd_239	hhd_grp1	1894	4368	6/30/1951	-63.38	-60.40	-2.98	0.418333
hhd_240	hhd_grp1	1894	4368	6/30/1952	-70.68	-61.90	-8.78	0.418333
hhd_241	hhd_grp1	1894	4368	6/30/1953	-69.91	-63.32	-6.59	0.418333
hhd_242	hhd_grp1	1894	4368	6/30/1954	-84.2	-64.70	-19.50	0.418333
hhd_243	hhd_grp1	1894	4368	6/30/1955	-87.23	-70.95	-16.28	0.418333
hhd_244	hhd_grp1	1894	4368	6/30/1956	-89.08	-73.33	-15.75	0.418333
hhd_245	hhd_grp1	1894	4368	6/30/1957	-96.52	-76.83	-19.69	0.418333
hhd_246	hhd_grp1	1894	4368	6/30/1958	-88.82	-82.88	-5.94	0.418333
hhd_247	hhd_grp1	1894	4368	6/30/1959	-91.97	-88.05	-3.92	0.418333
hhd_248	hhd_grp1	1894	4368	6/30/1960	-91.95	-93.65	1.70	0.418333

Table A-4. Horizontal Head Difference (HHD) Targets.

Target Name	Target Group	Well 1 NWF ID	Well 2 NWF ID	Date	Measured Groundwater Elevation Difference (ft)	Modelled Groundwater Elevation Difference (ft)	Residual (ft)	Target Weight
hhd_249	hhd_grp1	1894	4368	6/30/1961	-96.28	-98.75	2.47	0.418333
hhd_250	hhd_grp1	1894	4368	6/30/1962	-108.27	-97.95	-10.32	0.418333
hhd_251	hhd_grp1	1894	4368	6/30/1963	-113.99	-102.21	-11.78	0.418333
hhd_252	hhd_grp1	1894	4368	6/30/1964	-113.15	-105.97	-7.18	0.418333
hhd_253	hhd_grp1	1894	4368	6/30/1965	-115.75	-106.46	-9.29	0.418333
hhd_254	hhd_grp2	1894	4368	6/30/1966	-116	-110.11	-5.89	0.293452
hhd_255	hhd_grp2	1894	4368	6/30/1967	-118.14	-112.99	-5.15	0.293452
hhd_256	hhd_grp2	1894	4368	6/30/1968	-120.31	-120.16	-0.15	0.293452
hhd_257	hhd_grp2	1894	4368	6/30/1969	-116.07	-115.55	-0.52	0.293452
hhd_258	hhd_grp2	1894	4368	6/30/1970	-99.21	-115.31	16.10	0.293452
hhd_259	hhd_grp2	1894	4368	6/30/1989	-120.72	-121.28	0.56	0.293452
hhd_260	hhd_grp2	1894	4368	6/30/1990	-121.68	-116.24	-5.44	0.293452
hhd_261	hhd_grp3	1894	4368	6/30/1991	-115.02	-111.15	-3.87	0.405721
hhd_262	hhd_grp3	1894	4368	6/30/1992	-112.21	-109.74	-2.47	0.405721
hhd_263	hhd_grp3	1894	4368	6/30/1993	-113.38	-110.19	-3.19	0.405721
hhd_264	hhd_grp3	1894	4368	6/30/1994	-112.89	-108.48	-4.41	0.405721
hhd_265	hhd_grp3	1894	4368	6/30/1995	-111.59	-109.96	-1.63	0.405721
hhd_266	hhd_grp3	1894	4368	6/30/1996	-110.21	-108.88	-1.33	0.405721
hhd_267	hhd_grp3	1894	4368	6/30/1997	-96.74	-106.05	9.31	0.405721
hhd_268	hhd_grp3	1894	4368	6/30/1998	-100.32	-101.05	0.73	0.405721
hhd_269	hhd_grp3	1894	4368	6/30/1999	-94.79	-100.86	6.07	0.405721
hhd_270	hhd_grp3	1894	4368	6/30/2000	-108.75	-104.40	-4.35	0.405721
hhd_271	hhd_grp3	1894	4368	6/30/2001	-107.94	-102.33	-5.61	0.405721
hhd_272	hhd_grp3	1894	4368	6/30/2002	-107.32	-98.21	-9.11	0.405721
hhd_273	hhd_grp3	1894	4368	6/30/2003	-104.31	-96.01	-8.30	0.405721
hhd_274	hhd_grp3	1894	4368	6/30/2005	-103.89	-95.93	-7.96	0.405721
hhd_275	hhd_grp3	1894	4368	6/30/2006	-109.03	-97.54	-11.49	0.405721
hhd_276	hhd_grp3	1894	4368	6/30/2007	-93.39	-86.44	-6.95	0.405721
hhd_277	hhd_grp3	1894	4368	6/30/2008	-87.56	-78.79	-8.77	0.405721
hhd_278	hhd_grp3	1894	4368	6/30/2010	-80.54	-72.29	-8.25	0.405721
hhd_279	hhd_grp3	1894	4368	6/30/2011	-74.79	-69.72	-5.07	0.405721

Table A-4. Horizontal Head Difference (HHD) Targets.

Target Name	Target Group	Well 1 NWF ID	Well 2 NWF ID	Date	Measured Groundwater Elevation Difference (ft)	Modelled Groundwater Elevation Difference (ft)	Residual (ft)	Target Weight
hhd_280	hhd_grp3	1894	4368	6/30/2012	-73.81	-69.41	-4.40	0.405721
hhd_281	hhd_grp3	1894	4368	6/30/2013	-75.86	-72.18	-3.68	0.405721
hhd_282	hhd_grp3	1894	4368	6/30/2014	-78.06	-73.89	-4.17	0.405721
hhd_283	hhd_grp3	1894	4368	6/30/2015	-77.83	-75.74	-2.09	0.405721
hhd_284	hhd_grp1	1894	3101	6/30/1947	-3.87	6.81	-10.68	0.418333
hhd_285	hhd_grp1	1894	3101	6/30/1948	-1.35	4.74	-6.09	0.418333
hhd_286	hhd_grp1	1894	3101	6/30/1949	1.24	2.77	-1.53	0.418333
hhd_287	hhd_grp1	1894	3101	6/30/1950	-0.92	-0.83	-0.09	0.418333
hhd_288	hhd_grp1	1894	3101	6/30/1951	-8.36	-3.62	-4.74	0.418333
hhd_289	hhd_grp1	1894	3101	6/30/1952	-17.64	-6.01	-11.63	0.418333
hhd_290	hhd_grp1	1894	3101	6/30/1953	-18.18	-8.28	-9.90	0.418333
hhd_291	hhd_grp1	1894	3101	6/30/1954	-32.22	-10.52	-21.70	0.418333
hhd_292	hhd_grp1	1894	3101	6/30/1955	-36.09	-17.59	-18.50	0.418333
hhd_293	hhd_grp1	1894	3101	6/30/1956	-38.65	-20.91	-17.74	0.418333
hhd_294	hhd_grp1	1894	3101	6/30/1957	-47.23	-25.37	-21.86	0.418333
hhd_295	hhd_grp1	1894	3101	6/30/1958	-42.18	-32.58	-9.60	0.418333
hhd_296	hhd_grp1	1894	3101	6/30/1959	-45.68	-39.04	-6.64	0.418333
hhd_297	hhd_grp1	1894	3101	6/30/1960	-46.34	-46.00	-0.34	0.418333
hhd_298	hhd_grp1	1894	3101	6/30/1961	-51.6	-52.48	0.88	0.418333
hhd_299	hhd_grp1	1894	3101	6/30/1962	-64.8	-53.46	-11.34	0.418333
hhd_300	hhd_grp1	1894	3101	6/30/1963	-71.35	-59.54	-11.81	0.418333
hhd_301	hhd_grp2	1894	3101	6/30/1969	-53.83	-83.31	29.48	0.293452
hhd_302	hhd_grp2	1894	3101	6/30/1974	-111.48	-95.89	-15.59	0.293452
hhd_303	hhd_grp2	1894	3101	6/30/1975	-100.99	-96.14	-4.85	0.293452
hhd_304	hhd_grp2	1894	3101	6/30/1976	-98.51	-100.56	2.05	0.293452
hhd_305	hhd_grp2	1894	3101	6/30/1977	-93.93	-105.18	11.25	0.293452
hhd_306	hhd_grp2	1894	3101	6/30/1978	-94.47	-105.77	11.30	0.293452
hhd_307	hhd_grp2	1894	3101	6/30/1979	-96.39	-109.18	12.79	0.293452
hhd_308	hhd_grp2	1894	3101	6/30/1980	-93.02	-108.49	15.47	0.293452
hhd_309	hhd_grp2	1894	3101	6/30/1981	-108.88	-110.22	1.34	0.293452
hhd_310	hhd_grp2	1894	3101	6/30/1982	-108.63	-103.88	-4.75	0.293452

Table A-4. Horizontal Head Difference (HHD) Targets.

Target Name	Target Group	Well 1 NWF ID	Well 2 NWF ID	Date	Measured Groundwater Elevation Difference (ft)	Modelled Groundwater Elevation Difference (ft)	Residual (ft)	Target Weight
hhd_311	hhd_grp2	1894	3101	6/30/1983	-98	-108.28	10.28	0.293452
hhd_312	hhd_grp2	1894	3101	6/30/1984	-112.45	-116.38	3.93	0.293452
hhd_313	hhd_grp2	1894	3101	6/30/1985	-113.79	-121.07	7.28	0.293452
hhd_314	hhd_grp2	1894	3101	6/30/1986	-118.29	-124.85	6.56	0.293452
hhd_315	hhd_grp2	1894	3101	6/30/1987	-120.78	-128.18	7.40	0.293452
hhd_316	hhd_grp2	1894	3101	6/30/1988	-119.51	-121.11	1.60	0.293452
hhd_317	hhd_grp2	1894	3101	6/30/1989	-114.18	-119.92	5.74	0.293452
hhd_318	hhd_grp2	1894	3101	6/30/1990	-120.68	-116.87	-3.81	0.293452
hhd_319	hhd_grp3	1894	3101	6/30/1991	-109.73	-113.44	3.71	0.405721
hhd_320	hhd_grp3	1894	3101	6/30/1992	-110.41	-112.59	2.18	0.405721
hhd_321	hhd_grp3	1894	3101	6/30/1993	-106.11	-114.29	8.18	0.405721
hhd_322	hhd_grp3	1894	3101	6/30/1994	-109.82	-113.70	3.88	0.405721
hhd_323	hhd_grp3	1894	3101	6/30/1995	-113.49	-115.70	2.21	0.405721
hhd_324	hhd_grp3	1894	3101	6/30/1996	-111.65	-115.20	3.55	0.405721
hhd_325	hhd_grp3	1894	3101	6/30/1997	-120.15	-113.11	-7.04	0.405721
hhd_326	hhd_grp3	1894	3101	6/30/1998	-109.23	-108.68	-0.55	0.405721
hhd_327	hhd_grp3	1894	3101	6/30/1999	-105.26	-108.08	2.82	0.405721
hhd_328	hhd_grp3	1894	3101	6/30/2000	-115.61	-112.08	-3.53	0.405721
hhd_329	hhd_grp3	1894	3101	6/30/2001	-111.37	-110.65	-0.72	0.405721
hhd_330	hhd_grp3	1894	3101	6/30/2002	-109.12	-105.74	-3.38	0.405721
hhd_331	hhd_grp3	1894	3101	6/30/2003	-107.31	-102.71	-4.60	0.405721
hhd_332	hhd_grp3	1894	3101	6/30/2006	-109.45	-103.45	-6.00	0.405721
hhd_333	hhd_grp3	1894	3101	6/30/2007	-96.44	-93.61	-2.83	0.405721
hhd_334	hhd_grp3	1894	3101	6/30/2008	-89.28	-86.77	-2.51	0.405721
hhd_335	hhd_grp3	1894	3101	6/30/2010	-78.71	-78.43	-0.28	0.405721
hhd_336	hhd_grp3	1894	3101	6/30/2011	-77.56	-76.55	-1.01	0.405721
hhd_337	hhd_grp3	1894	3101	6/30/2012	-73.25	-74.04	0.79	0.405721
hhd_338	hhd_grp3	1894	3101	6/30/2013	-72.09	-73.88	1.79	0.405721
hhd_339	hhd_grp3	1894	3101	6/30/2014	-72.83	-74.55	1.72	0.405721
hhd_340	hhd_grp3	1894	3101	6/30/2015	-71.3	-73.36	2.06	0.405721
hhd_341	hhd_grp2	1894	3771	6/30/1975	-128.2	-120.10	-8.10	0.293452

Table A-4. Horizontal Head Difference (HHD) Targets.

Target Name	Target Group	Well 1 NWF ID	Well 2 NWF ID	Date	Measured Groundwater Elevation Difference (ft)	Modelled Groundwater Elevation Difference (ft)	Residual (ft)	Target Weight
hhd_342	hhd_grp2	1894	3771	6/30/1976	-125.48	-123.51	-1.97	0.293452
hhd_343	hhd_grp2	1894	3771	6/30/1977	-121.45	-127.17	5.72	0.293452
hhd_344	hhd_grp2	1894	3771	6/30/1978	-118.54	-126.76	8.22	0.293452
hhd_345	hhd_grp2	1894	3771	6/30/1979	-119.54	-129.23	9.69	0.293452
hhd_346	hhd_grp2	1894	3771	6/30/1980	-113.92	-127.62	13.70	0.293452
hhd_347	hhd_grp2	1894	3771	6/30/1981	-128.12	-128.23	0.11	0.293452
hhd_348	hhd_grp2	1894	3771	6/30/1982	-125.64	-119.86	-5.78	0.293452
hhd_349	hhd_grp2	1894	3771	6/30/1983	-112.86	-122.00	9.14	0.293452
hhd_350	hhd_grp2	1894	3771	6/30/1984	-127.02	-127.67	0.65	0.293452
hhd_351	hhd_grp2	1894	3771	6/30/1985	-124.62	-129.80	5.18	0.293452
hhd_352	hhd_grp2	1894	3771	6/30/1986	-125.93	-130.88	4.95	0.293452
hhd_353	hhd_grp2	1894	3771	6/30/1987	-125.56	-131.07	5.51	0.293452
hhd_354	hhd_grp2	1894	3771	6/30/1988	-121.58	-121.21	-0.37	0.293452
hhd_355	hhd_grp2	1894	3771	6/30/1989	-114.89	-117.70	2.81	0.293452
hhd_356	hhd_grp2	1894	3771	6/30/1990	-120.88	-112.91	-7.97	0.293452
hhd_357	hhd_grp3	1894	3771	6/30/1998	-98.08	-93.21	-4.87	0.405721
hhd_358	hhd_grp3	1894	3771	6/30/2000	-103.09	-93.78	-9.31	0.405721
hhd_359	hhd_grp3	1894	3771	6/30/2001	-97.63	-91.12	-6.51	0.405721
hhd_360	hhd_grp3	1894	3771	6/30/2003	-92.98	-81.96	-11.02	0.405721
hhd_361	hhd_grp3	1894	3771	6/30/2006	-103.42	-88.98	-14.44	0.405721
hhd_362	hhd_grp3	1894	3771	6/30/2008	-83.33	-75.26	-8.07	0.405721
hhd_363	hhd_grp3	1894	3771	6/30/2010	-76.61	-69.83	-6.78	0.405721
hhd_364	hhd_grp3	1894	3771	6/30/2012	-73.72	-68.88	-4.84	0.405721
hhd_365	hhd_grp3	1894	3771	6/30/2015	-72.35	-72.59	0.24	0.405721
hhd_366	hhd_grp2	1894	3642	6/30/1978	-107.97	-110.78	2.81	0.293452
hhd_367	hhd_grp2	1894	3642	6/30/1979	-109.12	-113.41	4.29	0.293452
hhd_368	hhd_grp2	1894	3642	6/30/1980	-103.55	-111.93	8.38	0.293452
hhd_369	hhd_grp2	1894	3642	6/30/1981	-118.25	-112.71	-5.54	0.293452
hhd_370	hhd_grp2	1894	3642	6/30/1982	-116.24	-104.44	-11.80	0.293452
hhd_371	hhd_grp2	1894	3642	6/30/1983	-103.1	-106.46	3.36	0.293452
hhd_372	hhd_grp2	1894	3642	6/30/1984	-116.72	-111.67	-5.05	0.293452

Table A-4. Horizontal Head Difference (HHD) Targets.

Target Name	Target Group	Well 1 NWF ID	Well 2 NWF ID	Date	Measured Groundwater Elevation Difference (ft)	Modelled Groundwater Elevation Difference (ft)	Residual (ft)	Target Weight
hhd_373	hhd_grp2	1894	3642	6/30/1985	-113.54	-112.93	-0.61	0.293452
hhd_374	hhd_grp2	1894	3642	6/30/1986	-115.13	-113.16	-1.97	0.293452
hhd_375	hhd_grp2	1894	3642	6/30/1987	-112.59	-113.12	0.53	0.293452
hhd_376	hhd_grp2	1894	3642	6/30/1988	-109.5	-103.21	-6.29	0.293452
hhd_377	hhd_grp2	1894	3642	6/30/1989	-101.83	-99.62	-2.21	0.293452
hhd_378	hhd_grp2	1894	3642	6/30/1990	-107.8	-94.53	-13.27	0.293452
hhd_379	hhd_grp3	1894	3642	6/30/1991	-94.66	-89.91	-4.75	0.405721
hhd_380	hhd_grp3	1894	3642	6/30/1992	-93.24	-88.39	-4.85	0.405721
hhd_381	hhd_grp3	1894	3642	6/30/1993	-91.1	-88.57	-2.53	0.405721
hhd_382	hhd_grp3	1894	3642	6/30/1994	-89.32	-86.75	-2.57	0.405721
hhd_383	hhd_grp3	1894	3642	6/30/1995	-90.62	-88.21	-2.41	0.405721
hhd_384	hhd_grp3	1894	3642	6/30/1996	-87.04	-86.55	-0.49	0.405721
hhd_385	hhd_grp3	1894	3642	6/30/1997	-91.8	-83.60	-8.20	0.405721
hhd_386	hhd_grp3	1894	3642	6/30/1998	-81.18	-78.78	-2.40	0.405721
hhd_387	hhd_grp3	1894	3642	6/30/1999	-78.4	-78.00	-0.40	0.405721
hhd_388	hhd_grp3	1894	3642	6/30/2000	-85.05	-81.31	-3.74	0.405721
hhd_389	hhd_grp3	1894	3642	6/30/2001	-83.44	-79.15	-4.29	0.405721
hhd_390	hhd_grp3	1894	3642	6/30/2002	-81.54	-75.33	-6.21	0.405721
hhd_391	hhd_grp3	1894	3642	6/30/2003	-79.29	-73.24	-6.05	0.405721
hhd_392	hhd_grp3	1894	3642	6/30/2005	-82.37	-75.80	-6.57	0.405721
hhd_393	hhd_grp3	1894	3642	6/30/2006	-88.58	-77.48	-11.10	0.405721
hhd_394	hhd_grp3	1894	3642	6/30/2008	-70.09	-62.07	-8.02	0.405721
hhd_395	hhd_grp3	1894	3642	6/30/2010	-64.62	-57.34	-7.28	0.405721
hhd_396	hhd_grp3	1894	3642	6/30/2011	-62.38	-56.38	-6.00	0.405721
hhd_397	hhd_grp3	1894	3642	6/30/2012	-61.13	-55.30	-5.83	0.405721
hhd_398	hhd_grp3	1894	3642	6/30/2013	-62.64	-57.59	-5.05	0.405721
hhd_399	hhd_grp3	1894	3642	6/30/2014	-64.02	-59.67	-4.35	0.405721
hhd_400	hhd_grp3	1894	3642	6/30/2015	-63.42	-59.81	-3.61	0.405721
hhd_401	hhd_grp2	3210	3555	6/30/1983	-84.62	-98.85	14.23	0.293452
hhd_402	hhd_grp2	3210	3555	6/30/1984	-88.12	-100.68	12.56	0.293452
hhd_403	hhd_grp2	3210	3555	6/30/1985	-90.66	-103.41	12.75	0.293452

Table A-4. Horizontal Head Difference (HHD) Targets.

Target Name	Target Group	Well 1 NWF ID	Well 2 NWF ID	Date	Measured Groundwater Elevation Difference (ft)	Modelled Groundwater Elevation Difference (ft)	Residual (ft)	Target Weight
hhd_404	hhd_grp2	3210	3555	6/30/1986	-92.7	-105.35	12.65	0.293452
hhd_405	hhd_grp2	3210	3555	6/30/1987	-91.74	-106.22	14.48	0.293452
hhd_406	hhd_grp2	3210	3555	6/30/1988	-93.47	-107.73	14.26	0.293452
hhd_407	hhd_grp2	3210	3555	6/30/1990	-96.31	-109.15	12.84	0.293452
hhd_408	hhd_grp3	3210	3555	6/30/1991	-93.32	-108.76	15.44	0.405721
hhd_409	hhd_grp3	3210	3555	6/30/1992	-95.91	-108.68	12.77	0.405721
hhd_410	hhd_grp3	3210	3555	6/30/1993	-91.63	-109.21	17.58	0.405721
hhd_411	hhd_grp3	3210	3555	6/30/1994	-96.06	-108.96	12.90	0.405721
hhd_412	hhd_grp3	3210	3555	6/30/1996	-98.46	-109.79	11.33	0.405721
hhd_413	hhd_grp3	3210	3555	6/30/1997	-110.01	-110.74	0.73	0.405721
hhd_414	hhd_grp3	3210	3555	6/30/1998	-104.02	-112.27	8.25	0.405721
hhd_415	hhd_grp3	3210	3555	6/30/1999	-97.69	-112.89	15.20	0.405721
hhd_416	hhd_grp3	3210	3555	6/30/2000	-106.9	-113.40	6.50	0.405721
hhd_417	hhd_grp3	3210	3555	6/30/2002	-99.04	-109.55	10.51	0.405721
hhd_418	hhd_grp3	3210	3555	6/30/2003	-95.7	-106.40	10.70	0.405721
hhd_419	hhd_grp3	3210	3555	6/30/2007	-92.11	-105.06	12.95	0.405721
hhd_420	hhd_grp3	3210	3555	6/30/2008	-87.27	-100.80	13.53	0.405721
hhd_421	hhd_grp3	3210	3555	6/30/2010	-82.31	-93.24	10.93	0.405721
hhd_422	hhd_grp3	3210	3555	6/30/2011	-84.31	-92.56	8.25	0.405721
hhd_423	hhd_grp3	3210	3555	6/30/2012	-81.39	-91.14	9.75	0.405721
hhd_424	hhd_grp3	3210	3555	6/30/2013	-80.19	-89.60	9.41	0.405721
hhd_425	hhd_grp3	3210	3555	6/30/2014	-81.58	-90.08	8.50	0.405721
hhd_426	hhd_grp3	3210	3555	6/30/2015	-82.5	-90.50	8.00	0.405721
hhd_427	hhd_grp2	3210	4700	6/30/1983	-144.69	-153.37	8.68	0.293452
hhd_428	hhd_grp2	3210	4700	6/30/1984	-149.15	-155.45	6.30	0.293452
hhd_429	hhd_grp2	3210	4700	6/30/1985	-152.99	-158.96	5.97	0.293452
hhd_430	hhd_grp2	3210	4700	6/30/1986	-157.03	-161.67	4.64	0.293452
hhd_431	hhd_grp2	3210	4700	6/30/1987	-157.44	-163.14	5.70	0.293452
hhd_432	hhd_grp2	3210	4700	6/30/1988	-160.04	-165.24	5.20	0.293452
hhd_433	hhd_grp2	3210	4700	6/30/1990	-164.08	-168.20	4.12	0.293452
hhd_434	hhd_grp3	3210	4700	6/30/1991	-161.4	-168.50	7.10	0.405721

Table A-4. Horizontal Head Difference (HHD) Targets.

Target Name	Target Group	Well 1 NWF ID	Well 2 NWF ID	Date	Measured Groundwater Elevation Difference (ft)	Modelled Groundwater Elevation Difference (ft)	Residual (ft)	Target Weight
hhd_435	hhd_grp3	3210	4700	6/30/1992	-164.16	-168.70	4.54	0.405721
hhd_436	hhd_grp3	3210	4700	6/30/1993	-160.06	-169.49	9.43	0.405721
hhd_437	hhd_grp3	3210	4700	6/30/1994	-164.93	-169.89	4.96	0.405721
hhd_438	hhd_grp3	3210	4700	6/30/1996	-168.84	-171.90	3.06	0.405721
hhd_439	hhd_grp3	3210	4700	6/30/1997	-179.36	-173.69	-5.67	0.405721
hhd_440	hhd_grp3	3210	4700	6/30/1998	-175.08	-176.20	1.12	0.405721
hhd_441	hhd_grp3	3210	4700	6/30/1999	-170.14	-177.25	7.11	0.405721
hhd_442	hhd_grp3	3210	4700	6/30/2000	-179.29	-177.45	-1.84	0.405721
hhd_443	hhd_grp3	3210	4700	6/30/2002	-172.69	-173.18	0.49	0.405721
hhd_444	hhd_grp3	3210	4700	6/30/2003	-168.8	-169.38	0.58	0.405721
hhd_445	hhd_grp3	3210	4700	6/30/2007	-166.17	-167.48	1.31	0.405721
hhd_446	hhd_grp3	3210	4700	6/30/2008	-157.98	-162.39	4.41	0.405721
hhd_447	hhd_grp3	3210	4700	6/30/2010	-149.85	-151.69	1.84	0.405721
hhd_448	hhd_grp3	3210	4700	6/30/2011	-150.88	-150.37	-0.51	0.405721
hhd_449	hhd_grp3	3210	4700	6/30/2012	-147.4	-148.75	1.35	0.405721
hhd_450	hhd_grp3	3210	4700	6/30/2013	-146.03	-146.56	0.53	0.405721
hhd_451	hhd_grp3	3210	4700	6/30/2014	-145.75	-146.49	0.74	0.405721
hhd_452	hhd_grp3	3210	4700	6/30/2015	-146.67	-146.79	0.12	0.405721
hhd_453	hhd_grp2	3210	5746	6/30/1980	-129.98	-135.59	5.61	0.293452
hhd_454	hhd_grp2	3210	5746	6/30/1981	-131.05	-137.34	6.29	0.293452
hhd_455	hhd_grp2	3210	5746	6/30/1982	-137.11	-140.01	2.90	0.293452
hhd_456	hhd_grp2	3210	5746	6/30/1983	-136.12	-143.08	6.96	0.293452
hhd_457	hhd_grp2	3210	5746	6/30/1984	-142.07	-146.86	4.79	0.293452
hhd_458	hhd_grp2	3210	5746	6/30/1985	-146.54	-151.14	4.60	0.293452
hhd_459	hhd_grp2	3210	5746	6/30/1986	-151.53	-154.83	3.30	0.293452
hhd_460	hhd_grp2	3210	5746	6/30/1987	-153.36	-157.66	4.30	0.293452
hhd_461	hhd_grp2	3210	5746	6/30/1988	-156.89	-160.90	4.01	0.293452
hhd_462	hhd_grp2	3210	5746	6/30/1989	-158.53	-162.14	3.61	0.293452
hhd_463	hhd_grp2	3210	5746	6/30/1990	-161.72	-163.85	2.13	0.293452
hhd_464	hhd_grp3	3210	5746	6/30/1991	-158.69	-163.50	4.81	0.405721
hhd_465	hhd_grp3	3210	5746	6/30/1992	-161.15	-163.35	2.20	0.405721

Table A-4. Horizontal Head Difference (HHD) Targets.

Target Name	Target Group	Well 1 NWF ID	Well 2 NWF ID	Date	Measured Groundwater Elevation Difference (ft)	Modelled Groundwater Elevation Difference (ft)	Residual (ft)	Target Weight
hhd_466	hhd_grp3	3210	5746	6/30/1993	-157.1	-163.75	6.65	0.405721
hhd_467	hhd_grp3	3210	5746	6/30/1994	-161.27	-162.94	1.67	0.405721
hhd_468	hhd_grp3	3210	5746	6/30/1996	-163	-161.94	-1.06	0.405721
hhd_469	hhd_grp3	3210	5746	6/30/1997	-171.81	-161.56	-10.25	0.405721
hhd_470	hhd_grp3	3210	5746	6/30/1998	-164.84	-161.23	-3.61	0.405721
hhd_471	hhd_grp3	3210	5746	6/30/1999	-159.33	-161.00	1.67	0.405721
hhd_472	hhd_grp3	3210	5746	6/30/2000	-169.44	-161.79	-7.65	0.405721
hhd_473	hhd_grp3	3210	5746	6/30/2002	-164.46	-159.07	-5.39	0.405721
hhd_474	hhd_grp3	3210	5746	6/30/2003	-159.87	-155.82	-4.05	0.405721
hhd_475	hhd_grp3	3210	5746	6/30/2006	-158.52	-154.52	-4.00	0.405721
hhd_476	hhd_grp3	3210	5746	6/30/2007	-154.36	-151.69	-2.67	0.405721
hhd_477	hhd_grp3	3210	5746	6/30/2008	-149.17	-147.70	-1.47	0.405721
hhd_478	hhd_grp3	3210	5746	6/30/2010	-142.54	-140.69	-1.85	0.405721
hhd_479	hhd_grp3	3210	5746	6/30/2011	-143.04	-139.08	-3.96	0.405721
hhd_480	hhd_grp3	3210	5746	6/30/2012	-138.82	-136.63	-2.19	0.405721
hhd_481	hhd_grp3	3210	5746	6/30/2013	-136.52	-134.04	-2.48	0.405721
hhd_482	hhd_grp3	3210	5746	6/30/2014	-134.89	-133.24	-1.65	0.405721
hhd_483	hhd_grp3	3210	5746	6/30/2015	-134.97	-132.74	-2.23	0.405721
hhd_484	hhd_grp2	3210	5596	6/30/1986	-169.07	-170.00	0.93	0.293452
hhd_485	hhd_grp2	3210	5596	6/30/1987	-168.13	-172.90	4.77	0.293452
hhd_486	hhd_grp2	3210	5596	6/30/1989	-173.05	-177.75	4.70	0.293452
hhd_487	hhd_grp2	3210	5596	6/30/1990	-176.63	-179.64	3.01	0.293452
hhd_488	hhd_grp3	3210	5596	6/30/1991	-173.49	-179.42	5.93	0.405721
hhd_489	hhd_grp3	3210	5596	6/30/1992	-176.57	-179.49	2.92	0.405721
hhd_490	hhd_grp3	3210	5596	6/30/1993	-172.44	-180.06	7.62	0.405721
hhd_491	hhd_grp3	3210	5596	6/30/1996	-178.23	-178.47	0.24	0.405721
hhd_492	hhd_grp3	3210	5596	6/30/1997	-186.9	-178.15	-8.75	0.405721
hhd_493	hhd_grp3	3210	5596	6/30/1998	-180.34	-177.84	-2.50	0.405721
hhd_494	hhd_grp3	3210	5596	6/30/1999	-175.52	-177.63	2.11	0.405721
hhd_495	hhd_grp3	3210	5596	6/30/2000	-183.95	-178.46	-5.49	0.405721
hhd_496	hhd_grp3	3210	5596	6/30/2002	-179.29	-175.96	-3.33	0.405721

Table A-4. Horizontal Head Difference (HHD) Targets.

Target Name	Target Group	Well 1 NWF ID	Well 2 NWF ID	Date	Measured Groundwater Elevation Difference (ft)	Modelled Groundwater Elevation Difference (ft)	Residual (ft)	Target Weight
hhd_497	hhd_grp3	3210	5596	6/30/2003	-174.89	-172.93	-1.96	0.405721
hhd_498	hhd_grp3	3210	5596	6/30/2005	-174.86	-172.90	-1.96	0.405721
hhd_499	hhd_grp3	3210	5596	6/30/2006	-175.25	-172.45	-2.80	0.405721
hhd_500	hhd_grp3	3210	5596	6/30/2007	-169.25	-169.72	0.47	0.405721
hhd_501	hhd_grp3	3210	5596	6/30/2008	-164.58	-165.66	1.08	0.405721
hhd_502	hhd_grp3	3210	5596	6/30/2010	-157.99	-158.95	0.96	0.405721
hhd_503	hhd_grp3	3210	5596	6/30/2011	-157.02	-157.25	0.23	0.405721
hhd_504	hhd_grp3	3210	5596	6/30/2012	-152.6	-155.02	2.42	0.405721
hhd_505	hhd_grp3	3210	5596	6/30/2013	-151.13	-152.88	1.75	0.405721
hhd_506	hhd_grp3	3210	5596	6/30/2014	-150.84	-152.39	1.55	0.405721
hhd_507	hhd_grp3	3210	5596	6/30/2015	-151.2	-152.01	0.81	0.405721

Table A-5. Temporal Head Difference (THD) Targets.

Target Name	Target Group	NWF ID	Date 1	Date 2	Measured Groundwater Elevation Difference (ft)	Modelled Groundwater Elevation Difference (ft)	Residual (ft)	Target Weight
thd_1	thd_grp1	697	6/30/1962	6/30/2015	-3.19	2.15	-5.34	0.498831
thd_2	thd_grp1	697	6/30/1963	6/30/2015	-3.26	2.11	-5.37	0.498831
thd_3	thd_grp1	697	6/30/1964	6/30/2015	-1.19	2.07	-3.26	0.498831
thd_4	thd_grp1	697	6/30/1965	6/30/2015	-0.7	2.04	-2.74	0.498831
thd_5	thd_grp1	697	6/30/1966	6/30/2015	-1.38	2.02	-3.40	0.498831
thd_6	thd_grp1	697	6/30/1967	6/30/2015	1.07	1.99	-0.92	0.498831
thd_7	thd_grp1	697	6/30/1968	6/30/2015	4.58	1.96	2.62	0.498831
thd_8	thd_grp1	697	6/30/1969	6/30/2015	5.22	1.93	3.29	0.498831
thd_9	thd_grp1	697	6/30/1970	6/30/2015	5.07	1.91	3.16	0.498831
thd_10	thd_grp1	697	6/30/1971	6/30/2015	4.92	1.88	3.04	0.498831
thd_11	thd_grp1	697	6/30/1972	6/30/2015	4.27	1.86	2.41	0.498831
thd_12	thd_grp1	697	6/30/1973	6/30/2015	4.56	1.83	2.73	0.498831
thd_13	thd_grp1	697	6/30/1974	6/30/2015	2.71	1.79	0.92	0.498831
thd_14	thd_grp1	697	6/30/1975	6/30/2015	4.25	1.76	2.49	0.498831
thd_15	thd_grp1	697	6/30/1976	6/30/2015	3.81	1.72	2.09	0.498831
thd_16	thd_grp1	697	6/30/1977	6/30/2015	2.75	1.69	1.06	0.498831
thd_17	thd_grp1	697	6/30/1978	6/30/2015	3.2	1.66	1.54	0.498831
thd_18	thd_grp1	697	6/30/1979	6/30/2015	3.28	1.60	1.68	0.498831
thd_19	thd_grp1	697	6/30/1980	6/30/2015	2.49	-0.96	3.45	0.498831
thd_20	thd_grp1	697	6/30/1981	6/30/2015	-9.00E-02	-2.14	2.05	0.498831
thd_21	thd_grp1	697	6/30/1982	6/30/2015	2	-2.60	4.60	0.498831
thd_22	thd_grp1	697	6/30/1983	6/30/2015	1.24	-2.99	4.23	0.498831
thd_23	thd_grp1	697	6/30/1984	6/30/2015	0.21	-3.37	3.58	0.498831
thd_24	thd_grp1	697	6/30/1985	6/30/2015	-0.19	-3.75	3.56	0.498831
thd_25	thd_grp1	697	6/30/1986	6/30/2015	-2.04	-4.13	2.09	0.498831
thd_26	thd_grp1	697	6/30/1987	6/30/2015	-2.38	-4.03	1.65	0.498831
thd_27	thd_grp1	697	6/30/1988	6/30/2015	-2.78	-4.30	1.52	0.498831
thd_28	thd_grp1	697	6/30/1989	6/30/2015	-2.86	-4.74	1.88	0.498831
thd_29	thd_grp1	697	6/30/1990	6/30/2015	-6.04	-5.64	-0.40	0.498831
thd_30	thd_grp1	697	6/30/1991	6/30/2015	-2.58	-4.92	2.34	0.498831
thd_31	thd_grp1	697	6/30/1992	6/30/2015	-3.26	-4.84	1.58	0.498831

Table A-5. Temporal Head Difference (THD) Targets.

Target Name	Target Group	NWF ID	Date 1	Date 2	Measured Groundwater Elevation Difference (ft)	Modelled Groundwater Elevation Difference (ft)	Residual (ft)	Target Weight
thd_32	thd_grp1	697	6/30/1993	6/30/2015	-3.52	-5.28	1.76	0.498831
thd_33	thd_grp1	697	6/30/1994	6/30/2015	-2.12	-5.34	3.22	0.498831
thd_34	thd_grp1	697	6/30/1995	6/30/2015	-2.53	-9.55	7.02	0.498831
thd_35	thd_grp1	697	6/30/1996	6/30/2015	-3.96	-9.61	5.65	0.498831
thd_36	thd_grp1	697	6/30/1997	6/30/2015	-3.76	-8.76	5.00	0.498831
thd_37	thd_grp1	697	6/30/1998	6/30/2015	-4.2	-6.94	2.74	0.498831
thd_38	thd_grp1	697	6/30/1999	6/30/2015	-2.33	-6.17	3.84	0.498831
thd_39	thd_grp1	697	6/30/2000	6/30/2015	-5.65	-6.90	1.25	0.498831
thd_40	thd_grp1	697	6/30/2001	6/30/2015	-2.76	-7.28	4.52	0.498831
thd_41	thd_grp1	697	6/30/2002	6/30/2015	-2.56	-6.66	4.10	0.498831
thd_42	thd_grp1	697	6/30/2003	6/30/2015	-2.26	-4.05	1.79	0.498831
thd_43	thd_grp1	697	6/30/2006	6/30/2015	-2.9	-3.09	0.19	0.498831
thd_44	thd_grp1	697	6/30/2007	6/30/2015	-1.5	-2.18	0.68	0.498831
thd_45	thd_grp1	697	6/30/2008	6/30/2015	0.18	-2.25	2.43	0.498831
thd_46	thd_grp1	697	6/30/2010	6/30/2015	-0.39	-1.74	1.35	0.498831
thd_47	thd_grp1	697	6/30/2011	6/30/2015	-0.96	-1.28	0.32	0.498831
thd_48	thd_grp1	697	6/30/2012	6/30/2015	0.29	-1.13	1.42	0.498831
thd_49	thd_grp1	697	6/30/2013	6/30/2015	1.04	-0.02	1.06	0.498831
thd_50	thd_grp1	697	6/30/2014	6/30/2015	0.4	0.10	0.30	0.498831
thd_51	thd_grp1	697	6/30/2015	6/30/2015	0	0.00	0.00	0.498831
thd_83	thd_grp2	1074	6/30/1958	6/30/2015	13.06	15.33	-2.27	0.227329
thd_84	thd_grp2	1074	6/30/1961	6/30/2015	10.1	14.39	-4.29	0.227329
thd_85	thd_grp2	1074	6/30/1962	6/30/2015	9.89	14.05	-4.16	0.227329
thd_86	thd_grp2	1074	6/30/1963	6/30/2015	9.23	13.73	-4.50	0.227329
thd_87	thd_grp2	1074	6/30/1964	6/30/2015	10.76	13.39	-2.63	0.227329
thd_88	thd_grp2	1074	6/30/1965	6/30/2015	10.94	12.99	-2.05	0.227329
thd_89	thd_grp2	1074	6/30/1966	6/30/2015	10.16	12.64	-2.48	0.227329
thd_90	thd_grp2	1074	6/30/1967	6/30/2015	6.46	12.25	-5.79	0.227329
thd_91	thd_grp2	1074	6/30/1968	6/30/2015	3.78	11.84	-8.06	0.227329
thd_92	thd_grp2	1074	6/30/1969	6/30/2015	1.04	11.50	-10.46	0.227329
thd_93	thd_grp2	1074	6/30/1970	6/30/2015	2.97	11.25	-8.28	0.227329

Table A-5. Temporal Head Difference (THD) Targets.

Target Name	Target Group	NWF ID	Date 1	Date 2	Measured Groundwater Elevation Difference (ft)	Modelled Groundwater Elevation Difference (ft)	Residual (ft)	Target Weight
thd_94	thd_grp2	1074	6/30/1971	6/30/2015	2	10.99	-8.99	0.227329
thd_95	thd_grp2	1074	6/30/1972	6/30/2015	-1.84	10.64	-12.48	0.227329
thd_96	thd_grp2	1074	6/30/1973	6/30/2015	1.99	10.10	-8.11	0.227329
thd_97	thd_grp2	1074	6/30/1974	6/30/2015	2.38	9.68	-7.30	0.227329
thd_98	thd_grp2	1074	6/30/1975	6/30/2015	5.51	9.45	-3.94	0.227329
thd_99	thd_grp2	1074	6/30/1976	6/30/2015	4.76	9.23	-4.47	0.227329
thd_100	thd_grp2	1074	6/30/1977	6/30/2015	2.56	8.89	-6.33	0.227329
thd_101	thd_grp2	1074	6/30/1978	6/30/2015	4.27	8.50	-4.23	0.227329
thd_102	thd_grp2	1074	6/30/1979	6/30/2015	4.03	8.18	-4.15	0.227329
thd_103	thd_grp2	1074	6/30/1980	6/30/2015	4.26	7.82	-3.56	0.227329
thd_104	thd_grp2	1074	6/30/1981	6/30/2015	3.68	7.33	-3.65	0.227329
thd_105	thd_grp2	1074	6/30/1982	6/30/2015	3.53	6.74	-3.21	0.227329
thd_106	thd_grp2	1074	6/30/1983	6/30/2015	4.01	6.06	-2.05	0.227329
thd_107	thd_grp2	1074	6/30/1984	6/30/2015	2.43	5.32	-2.89	0.227329
thd_108	thd_grp2	1074	6/30/1985	6/30/2015	1.55	4.49	-2.94	0.227329
thd_109	thd_grp2	1074	6/30/1986	6/30/2015	1.27	3.83	-2.56	0.227329
thd_110	thd_grp2	1074	6/30/1987	6/30/2015	1.3	2.66	-1.36	0.227329
thd_111	thd_grp2	1074	6/30/1988	6/30/2015	0.82	1.75	-0.93	0.227329
thd_112	thd_grp2	1074	6/30/1989	6/30/2015	1.24	1.34	-0.10	0.227329
thd_113	thd_grp2	1074	6/30/1990	6/30/2015	-0.2	0.32	-0.52	0.227329
thd_114	thd_grp2	1074	6/30/1991	6/30/2015	0.77	-0.32	1.09	0.227329
thd_115	thd_grp2	1074	6/30/1992	6/30/2015	-0.26	-1.02	0.76	0.227329
thd_116	thd_grp2	1074	6/30/1994	6/30/2015	1.03	-2.08	3.11	0.227329
thd_117	thd_grp2	1074	6/30/1995	6/30/2015	0.5	-2.10	2.60	0.227329
thd_118	thd_grp2	1074	6/30/1996	6/30/2015	-0.46	-2.19	1.73	0.227329
thd_119	thd_grp2	1074	6/30/1997	6/30/2015	0.56	-2.50	3.06	0.227329
thd_120	thd_grp2	1074	6/30/1998	6/30/2015	1.01	-2.40	3.41	0.227329
thd_121	thd_grp2	1074	6/30/1999	6/30/2015	0.55	-1.79	2.34	0.227329
thd_122	thd_grp2	1074	6/30/2000	6/30/2015	-0.69	-2.20	1.51	0.227329
thd_123	thd_grp2	1074	6/30/2001	6/30/2015	-1.45	-2.36	0.91	0.227329
thd_124	thd_grp2	1074	6/30/2002	6/30/2015	-1.17	-2.08	0.91	0.227329

Table A-5. Temporal Head Difference (THD) Targets.

Target Name	Target Group	NWF ID	Date 1	Date 2	Measured Groundwater Elevation Difference (ft)	Modelled Groundwater Elevation Difference (ft)	Residual (ft)	Target Weight
thd_125	thd_grp2	1074	6/30/2003	6/30/2015	-0.38	-1.87	1.49	0.227329
thd_126	thd_grp2	1074	6/30/2004	6/30/2015	-1.62	-1.76	0.14	0.227329
thd_127	thd_grp2	1074	6/30/2008	6/30/2015	-1.67	-2.44	0.77	0.227329
thd_128	thd_grp2	1074	6/30/2010	6/30/2015	-0.21	-1.00	0.79	0.227329
thd_129	thd_grp2	1074	6/30/2011	6/30/2015	-1.63	-0.78	-0.85	0.227329
thd_130	thd_grp2	1074	6/30/2012	6/30/2015	-1.15	-0.59	-0.56	0.227329
thd_131	thd_grp2	1074	6/30/2013	6/30/2015	-0.2	-0.21	0.01	0.227329
thd_132	thd_grp2	1074	6/30/2014	6/30/2015	0.28	0.07	0.21	0.227329
thd_133	thd_grp2	1074	6/30/2015	6/30/2015	0	0.00	0.00	0.227329
thd_134	thd_grp2	1371	6/30/1958	6/30/2015	14.94	7.47	7.47	0.227329
thd_135	thd_grp2	1371	6/30/1970	6/30/2015	4.38	5.81	-1.43	0.227329
thd_136	thd_grp2	1371	6/30/1971	6/30/2015	2.83	5.70	-2.87	0.227329
thd_137	thd_grp2	1371	6/30/1972	6/30/2015	0.97	5.56	-4.59	0.227329
thd_138	thd_grp2	1371	6/30/1973	6/30/2015	3.59	5.34	-1.75	0.227329
thd_139	thd_grp2	1371	6/30/1974	6/30/2015	3.83	5.16	-1.33	0.227329
thd_140	thd_grp2	1371	6/30/1975	6/30/2015	7.14	5.06	2.08	0.227329
thd_141	thd_grp2	1371	6/30/1976	6/30/2015	6.84	4.97	1.87	0.227329
thd_142	thd_grp2	1371	6/30/1977	6/30/2015	4.26	4.82	-0.56	0.227329
thd_143	thd_grp2	1371	6/30/1978	6/30/2015	6.17	4.67	1.50	0.227329
thd_144	thd_grp2	1371	6/30/1979	6/30/2015	5.62	4.55	1.07	0.227329
thd_145	thd_grp2	1371	6/30/1980	6/30/2015	5.84	4.41	1.43	0.227329
thd_146	thd_grp2	1371	6/30/1981	6/30/2015	5.14	4.22	0.92	0.227329
thd_147	thd_grp2	1371	6/30/1982	6/30/2015	5.28	3.98	1.30	0.227329
thd_148	thd_grp2	1371	6/30/1983	6/30/2015	5.97	3.69	2.28	0.227329
thd_149	thd_grp2	1371	6/30/1984	6/30/2015	6.24	3.38	2.86	0.227329
thd_150	thd_grp2	1371	6/30/1986	6/30/2015	2.69	2.65	0.04	0.227329
thd_151	thd_grp2	1371	6/30/1987	6/30/2015	3.24	2.23	1.01	0.227329
thd_152	thd_grp2	1371	6/30/1988	6/30/2015	3.31	1.88	1.43	0.227329
thd_153	thd_grp2	1371	6/30/1989	6/30/2015	2.73	1.67	1.06	0.227329
thd_154	thd_grp2	1371	6/30/1990	6/30/2015	2.95	1.36	1.59	0.227329
thd_155	thd_grp2	1371	6/30/1991	6/30/2015	2.21	1.09	1.12	0.227329

Table A-5. Temporal Head Difference (THD) Targets.

Target Name	Target Group	NWF ID	Date 1	Date 2	Measured Groundwater Elevation Difference (ft)	Modelled Groundwater Elevation Difference (ft)	Residual (ft)	Target Weight
thd_156	thd_grp2	1371	6/30/1992	6/30/2015	2.11	0.90	1.21	0.227329
thd_157	thd_grp2	1371	6/30/1994	6/30/2015	1.54	0.50	1.04	0.227329
thd_158	thd_grp2	1371	6/30/1995	6/30/2015	2.12	0.44	1.68	0.227329
thd_159	thd_grp2	1371	6/30/1996	6/30/2015	1.87	0.35	1.52	0.227329
thd_160	thd_grp2	1371	6/30/1997	6/30/2015	1.14	0.23	0.91	0.227329
thd_161	thd_grp2	1371	6/30/1998	6/30/2015	1.52	0.16	1.36	0.227329
thd_162	thd_grp2	1371	6/30/1999	6/30/2015	2.47	0.15	2.32	0.227329
thd_163	thd_grp2	1371	6/30/2000	6/30/2015	1.04	-0.04	1.08	0.227329
thd_164	thd_grp2	1371	6/30/2001	6/30/2015	-5.00E-02	-0.24	0.19	0.227329
thd_165	thd_grp2	1371	6/30/2002	6/30/2015	-0.34	-0.29	-0.05	0.227329
thd_166	thd_grp2	1371	6/30/2003	6/30/2015	1.2	-0.25	1.45	0.227329
thd_167	thd_grp2	1371	6/30/2004	6/30/2015	-0.21	-0.21	0.00	0.227329
thd_168	thd_grp2	1371	6/30/2006	6/30/2015	-1.16	-0.72	-0.44	0.227329
thd_169	thd_grp2	1371	6/30/2007	6/30/2015	-1.65	-0.91	-0.74	0.227329
thd_170	thd_grp2	1371	6/30/2008	6/30/2015	-0.1	-0.83	0.73	0.227329
thd_171	thd_grp2	1371	6/30/2010	6/30/2015	0.16	-0.30	0.46	0.227329
thd_172	thd_grp2	1371	6/30/2011	6/30/2015	-1	-0.22	-0.78	0.227329
thd_173	thd_grp2	1371	6/30/2012	6/30/2015	-0.5	-0.16	-0.34	0.227329
thd_174	thd_grp2	1371	6/30/2013	6/30/2015	0.32	0.01	0.31	0.227329
thd_175	thd_grp2	1371	6/30/2014	6/30/2015	0.83	0.11	0.72	0.227329
thd_176	thd_grp2	1371	6/30/2015	6/30/2015	0	0.00	0.00	0.227329
thd_243	thd_grp3	1894	6/30/1946	6/30/2015	99.7	104.03	-4.33	0.193161
thd_244	thd_grp3	1894	6/30/1947	6/30/2015	96.8	101.68	-4.88	0.193161
thd_245	thd_grp3	1894	6/30/1948	6/30/2015	96.92	99.44	-2.52	0.193161
thd_246	thd_grp3	1894	6/30/1949	6/30/2015	99.81	97.29	2.52	0.193161
thd_247	thd_grp3	1894	6/30/1950	6/30/2015	96.36	93.53	2.83	0.193161
thd_248	thd_grp3	1894	6/30/1951	6/30/2015	88.41	90.56	-2.15	0.193161
thd_249	thd_grp3	1894	6/30/1952	6/30/2015	78.66	87.99	-9.33	0.193161
thd_250	thd_grp3	1894	6/30/1953	6/30/2015	78.19	85.55	-7.36	0.193161
thd_251	thd_grp3	1894	6/30/1954	6/30/2015	63.93	83.14	-19.21	0.193161
thd_252	thd_grp3	1894	6/30/1955	6/30/2015	58.06	75.89	-17.83	0.193161

Table A-5. Temporal Head Difference (THD) Targets.

Target Name	Target Group	NWF ID	Date 1	Date 2	Measured Groundwater Elevation Difference (ft)	Modelled Groundwater Elevation Difference (ft)	Residual (ft)	Target Weight
thd_253	thd_grp3	1894	6/30/1956	6/30/2015	54.31	72.38	-18.07	0.193161
thd_254	thd_grp3	1894	6/30/1957	6/30/2015	45.74	67.72	-21.98	0.193161
thd_255	thd_grp3	1894	6/30/1958	6/30/2015	52.31	60.29	-7.98	0.193161
thd_256	thd_grp3	1894	6/30/1959	6/30/2015	48.24	53.60	-5.36	0.193161
thd_257	thd_grp3	1894	6/30/1960	6/30/2015	47.68	46.38	1.30	0.193161
thd_258	thd_grp3	1894	6/30/1961	6/30/2015	42	39.64	2.36	0.193161
thd_259	thd_grp3	1894	6/30/1962	6/30/2015	28.3	38.38	-10.08	0.193161
thd_260	thd_grp3	1894	6/30/1963	6/30/2015	20.56	32.01	-11.45	0.193161
thd_261	thd_grp3	1894	6/30/1964	6/30/2015	20.16	25.47	-5.31	0.193161
thd_262	thd_grp3	1894	6/30/1965	6/30/2015	16.41	23.08	-6.67	0.193161
thd_263	thd_grp3	1894	6/30/1966	6/30/2015	15.4	18.57	-3.17	0.193161
thd_264	thd_grp3	1894	6/30/1967	6/30/2015	11.52	13.25	-1.73	0.193161
thd_265	thd_grp3	1894	6/30/1968	6/30/2015	8.5	3.54	4.96	0.193161
thd_266	thd_grp3	1894	6/30/1969	6/30/2015	9.44	6.36	3.08	0.193161
thd_267	thd_grp3	1894	6/30/1970	6/30/2015	23.95	5.43	18.52	0.193161
thd_268	thd_grp3	1894	6/30/1971	6/30/2015	28.55	1.06	27.49	0.193161
thd_269	thd_grp3	1894	6/30/1974	6/30/2015	-33.63	-7.81	-25.82	0.193161
thd_270	thd_grp3	1894	6/30/1975	6/30/2015	-16.4	-8.28	-8.12	0.193161
thd_271	thd_grp3	1894	6/30/1976	6/30/2015	-15.48	-12.93	-2.55	0.193161
thd_272	thd_grp3	1894	6/30/1977	6/30/2015	-14.46	-17.87	3.41	0.193161
thd_273	thd_grp3	1894	6/30/1978	6/30/2015	-11.89	-18.76	6.87	0.193161
thd_274	thd_grp3	1894	6/30/1979	6/30/2015	-14.35	-22.42	8.07	0.193161
thd_275	thd_grp3	1894	6/30/1980	6/30/2015	-10.12	-22.04	11.92	0.193161
thd_276	thd_grp3	1894	6/30/1981	6/30/2015	-26.38	-24.15	-2.23	0.193161
thd_277	thd_grp3	1894	6/30/1982	6/30/2015	-26.12	-18.32	-7.80	0.193161
thd_278	thd_grp3	1894	6/30/1983	6/30/2015	-14.43	-23.31	8.88	0.193161
thd_279	thd_grp3	1894	6/30/1984	6/30/2015	-31.18	-32.03	0.85	0.193161
thd_280	thd_grp3	1894	6/30/1985	6/30/2015	-32.24	-37.44	5.20	0.193161
thd_281	thd_grp3	1894	6/30/1986	6/30/2015	-37	-42.13	5.13	0.193161
thd_282	thd_grp3	1894	6/30/1987	6/30/2015	-39.59	-46.19	6.60	0.193161
thd_283	thd_grp3	1894	6/30/1988	6/30/2015	-38.61	-39.79	1.18	0.193161

Table A-5. Temporal Head Difference (THD) Targets.

Target Name	Target Group	NWF ID	Date 1	Date 2	Measured Groundwater Elevation Difference (ft)	Modelled Groundwater Elevation Difference (ft)	Residual (ft)	Target Weight
thd_284	thd_grp3	1894	6/30/1989	6/30/2015	-33.21	-39.03	5.82	0.193161
thd_285	thd_grp3	1894	6/30/1990	6/30/2015	-40.2	-36.49	-3.71	0.193161
thd_286	thd_grp3	1894	6/30/1991	6/30/2015	-29.31	-33.56	4.25	0.193161
thd_287	thd_grp3	1894	6/30/1992	6/30/2015	-30.69	-32.91	2.22	0.193161
thd_288	thd_grp3	1894	6/30/1993	6/30/2015	-27.44	-34.91	7.47	0.193161
thd_289	thd_grp3	1894	6/30/1994	6/30/2015	-31.38	-34.80	3.42	0.193161
thd_290	thd_grp3	1894	6/30/1995	6/30/2015	-34.04	-37.03	2.99	0.193161
thd_291	thd_grp3	1894	6/30/1996	6/30/2015	-32.61	-36.73	4.12	0.193161
thd_292	thd_grp3	1894	6/30/1997	6/30/2015	-42.07	-35.08	-6.99	0.193161
thd_293	thd_grp3	1894	6/30/1998	6/30/2015	-31.32	-31.43	0.11	0.193161
thd_294	thd_grp3	1894	6/30/1999	6/30/2015	-26.88	-31.62	4.74	0.193161
thd_295	thd_grp3	1894	6/30/2000	6/30/2015	-39.89	-36.32	-3.57	0.193161
thd_296	thd_grp3	1894	6/30/2001	6/30/2015	-36.23	-35.28	-0.95	0.193161
thd_297	thd_grp3	1894	6/30/2002	6/30/2015	-34.91	-31.19	-3.72	0.193161
thd_298	thd_grp3	1894	6/30/2003	6/30/2015	-31.83	-28.00	-3.83	0.193161
thd_299	thd_grp3	1894	6/30/2005	6/30/2015	-31.56	-29.52	-2.04	0.193161
thd_300	thd_grp3	1894	6/30/2006	6/30/2015	-37.92	-31.21	-6.71	0.193161
thd_301	thd_grp3	1894	6/30/2007	6/30/2015	-26.29	-21.95	-4.34	0.193161
thd_302	thd_grp3	1894	6/30/2008	6/30/2015	-17.44	-14.52	-2.92	0.193161
thd_303	thd_grp3	1894	6/30/2010	6/30/2015	-6.43	-5.34	-1.09	0.193161
thd_304	thd_grp3	1894	6/30/2011	6/30/2015	-5.14	-3.28	-1.86	0.193161
thd_305	thd_grp3	1894	6/30/2012	6/30/2015	-1.74	-0.66	-1.08	0.193161
thd_306	thd_grp3	1894	6/30/2013	6/30/2015	0.38	0.13	0.25	0.193161
thd_307	thd_grp3	1894	6/30/2014	6/30/2015	4.00E-02	-0.65	0.69	0.193161
thd_308	thd_grp3	1894	6/30/2015	6/30/2015	0	0.00	0.00	0.193161
thd_309	thd_grp2	2034	6/30/1969	6/30/2015	6.96	17.83	-10.87	0.227329
thd_310	thd_grp2	2034	6/30/1978	6/30/2015	7.03	13.06	-6.03	0.227329
thd_311	thd_grp2	2034	6/30/1979	6/30/2015	7.43	12.66	-5.23	0.227329
thd_312	thd_grp2	2034	6/30/1980	6/30/2015	7.53	12.13	-4.60	0.227329
thd_313	thd_grp2	2034	6/30/1981	6/30/2015	6.74	11.37	-4.63	0.227329
thd_314	thd_grp2	2034	6/30/1982	6/30/2015	6.48	10.42	-3.94	0.227329

Table A-5. Temporal Head Difference (THD) Targets.

Target Name	Target Group	NWF ID	Date 1	Date 2	Measured Groundwater Elevation Difference (ft)	Modelled Groundwater Elevation Difference (ft)	Residual (ft)	Target Weight
thd_315	thd_grp2	2034	6/30/1983	6/30/2015	6.21	9.31	-3.10	0.227329
thd_316	thd_grp2	2034	6/30/1984	6/30/2015	4.56	8.12	-3.56	0.227329
thd_317	thd_grp2	2034	6/30/1985	6/30/2015	3.28	6.74	-3.46	0.227329
thd_318	thd_grp2	2034	6/30/1986	6/30/2015	2.19	5.20	-3.01	0.227329
thd_319	thd_grp2	2034	6/30/1987	6/30/2015	1.75	3.78	-2.03	0.227329
thd_320	thd_grp2	2034	6/30/1988	6/30/2015	1.2	2.75	-1.55	0.227329
thd_321	thd_grp2	2034	6/30/1989	6/30/2015	1.32	1.94	-0.62	0.227329
thd_322	thd_grp2	2034	6/30/1990	6/30/2015	1.2	1.00	0.20	0.227329
thd_323	thd_grp2	2034	6/30/1991	6/30/2015	0.35	0.37	-0.02	0.227329
thd_324	thd_grp2	2034	6/30/1992	6/30/2015	-9.00E-02	0.17	-0.26	0.227329
thd_325	thd_grp2	2034	6/30/1994	6/30/2015	-0.67	-1.28	0.61	0.227329
thd_326	thd_grp2	2034	6/30/1995	6/30/2015	-0.86	-1.63	0.77	0.227329
thd_327	thd_grp2	2034	6/30/1996	6/30/2015	-1.52	-1.90	0.38	0.227329
thd_328	thd_grp2	2034	6/30/1997	6/30/2015	-2.6	-2.24	-0.36	0.227329
thd_329	thd_grp2	2034	6/30/1998	6/30/2015	-1.88	-2.60	0.72	0.227329
thd_330	thd_grp2	2034	6/30/1999	6/30/2015	-1.17	-2.89	1.72	0.227329
thd_331	thd_grp2	2034	6/30/2000	6/30/2015	-3.1	-3.56	0.46	0.227329
thd_332	thd_grp2	2034	6/30/2001	6/30/2015	-3.9	-4.04	0.14	0.227329
thd_333	thd_grp2	2034	6/30/2002	6/30/2015	-4.1	-3.95	-0.15	0.227329
thd_334	thd_grp2	2034	6/30/2003	6/30/2015	-3.33	-3.75	0.42	0.227329
thd_335	thd_grp2	2034	6/30/2006	6/30/2015	-4.06	-4.51	0.45	0.227329
thd_336	thd_grp2	2034	6/30/2008	6/30/2015	-2.64	-4.31	1.67	0.227329
thd_337	thd_grp2	2034	6/30/2010	6/30/2015	-0.49	-1.73	1.24	0.227329
thd_338	thd_grp2	2034	6/30/2011	6/30/2015	-1.89	-1.49	-0.40	0.227329
thd_339	thd_grp2	2034	6/30/2012	6/30/2015	-0.91	-1.04	0.13	0.227329
thd_340	thd_grp2	2034	6/30/2013	6/30/2015	-0.57	-0.41	-0.16	0.227329
thd_341	thd_grp2	2034	6/30/2014	6/30/2015	0.53	0.01	0.52	0.227329
thd_342	thd_grp2	2034	6/30/2015	6/30/2015	0	0.00	0.00	0.227329
thd_625	thd_grp3	2394	6/30/1961	6/30/2015	91.59	75.01	16.58	0.193161
thd_626	thd_grp3	2394	6/30/1975	6/30/2015	29.64	19.80	9.84	0.193161
thd_627	thd_grp3	2394	6/30/1976	6/30/2015	32.81	15.54	17.27	0.193161

Table A-5. Temporal Head Difference (THD) Targets.

Target Name	Target Group	NWF ID	Date 1	Date 2	Measured Groundwater Elevation Difference (ft)	Modelled Groundwater Elevation Difference (ft)	Residual (ft)	Target Weight
thd_628	thd_grp3	2394	6/30/1977	6/30/2015	19.46	10.93	8.53	0.193161
thd_629	thd_grp3	2394	6/30/1978	6/30/2015	19.92	10.38	9.54	0.193161
thd_630	thd_grp3	2394	6/30/1979	6/30/2015	16.57	6.21	10.36	0.193161
thd_631	thd_grp3	2394	6/30/1980	6/30/2015	16.58	5.10	11.48	0.193161
thd_632	thd_grp3	2394	6/30/1981	6/30/2015	9.48	2.00	7.48	0.193161
thd_633	thd_grp3	2394	6/30/1982	6/30/2015	7.94	-0.44	8.38	0.193161
thd_634	thd_grp3	2394	6/30/1983	6/30/2015	7.19	-6.01	13.20	0.193161
thd_635	thd_grp3	2394	6/30/1984	6/30/2015	-4.03	-13.49	9.46	0.193161
thd_636	thd_grp3	2394	6/30/1985	6/30/2015	-11.22	-21.52	10.30	0.193161
thd_637	thd_grp3	2394	6/30/1986	6/30/2015	-16.11	-27.71	11.60	0.193161
thd_638	thd_grp3	2394	6/30/1987	6/30/2015	-18.04	-32.10	14.06	0.193161
thd_639	thd_grp3	2394	6/30/1988	6/30/2015	-23.51	-32.30	8.79	0.193161
thd_640	thd_grp3	2394	6/30/1989	6/30/2015	-24.73	-34.75	10.02	0.193161
thd_641	thd_grp3	2394	6/30/1990	6/30/2015	-32.32	-37.70	5.38	0.193161
thd_642	thd_grp3	2394	6/30/1991	6/30/2015	-22.77	-31.38	8.61	0.193161
thd_643	thd_grp3	2394	6/30/1992	6/30/2015	-30.32	-33.56	3.24	0.193161
thd_644	thd_grp3	2394	6/30/1993	6/30/2015	-24.28	-40.80	16.52	0.193161
thd_645	thd_grp3	2394	6/30/1994	6/30/2015	-33.09	-37.09	4.00	0.193161
thd_646	thd_grp3	2394	6/30/1995	6/30/2015	-36.65	-39.82	3.17	0.193161
thd_647	thd_grp3	2394	6/30/1996	6/30/2015	-38.04	-42.34	4.30	0.193161
thd_648	thd_grp3	2394	6/30/1997	6/30/2015	-49.5	-40.79	-8.71	0.193161
thd_649	thd_grp3	2394	6/30/1998	6/30/2015	-44.99	-40.18	-4.81	0.193161
thd_650	thd_grp3	2394	6/30/1999	6/30/2015	-30.16	-36.50	6.34	0.193161
thd_651	thd_grp3	2394	6/30/2000	6/30/2015	-53.13	-44.28	-8.85	0.193161
thd_652	thd_grp3	2394	6/30/2001	6/30/2015	-49.67	-42.36	-7.31	0.193161
thd_653	thd_grp3	2394	6/30/2002	6/30/2015	-39.01	-39.93	0.92	0.193161
thd_654	thd_grp3	2394	6/30/2003	6/30/2015	-39.52	-35.04	-4.48	0.193161
thd_655	thd_grp3	2394	6/30/2006	6/30/2015	-40.75	-35.68	-5.07	0.193161
thd_656	thd_grp3	2394	6/30/2007	6/30/2015	-35.86	-23.57	-12.29	0.193161
thd_657	thd_grp3	2394	6/30/2008	6/30/2015	-17.7	-15.43	-2.27	0.193161
thd_658	thd_grp3	2394	6/30/2010	6/30/2015	-6.02	-5.77	-0.25	0.193161

Table A-5. Temporal Head Difference (THD) Targets.

Target Name	Target Group	NWF ID	Date 1	Date 2	Measured Groundwater Elevation Difference (ft)	Modelled Groundwater Elevation Difference (ft)	Residual (ft)	Target Weight
thd_659	thd_grp3	2394	6/30/2011	6/30/2015	-5.78	-3.33	-2.45	0.193161
thd_660	thd_grp3	2394	6/30/2012	6/30/2015	-0.57	-0.47	-0.10	0.193161
thd_661	thd_grp3	2394	6/30/2013	6/30/2015	-0.54	0.42	-0.96	0.193161
thd_662	thd_grp3	2394	6/30/2014	6/30/2015	0.6	-0.21	0.81	0.193161
thd_663	thd_grp3	2394	6/30/2015	6/30/2015	0	0.00	0.00	0.193161
thd_719	thd_grp2	2534	6/30/1958	6/30/2015	9.37	2.30	7.07	0.227329
thd_720	thd_grp2	2534	6/30/1968	6/30/2015	1.46	2.01	-0.55	0.227329
thd_721	thd_grp2	2534	6/30/1969	6/30/2015	1.52	1.98	-0.46	0.227329
thd_722	thd_grp2	2534	6/30/1970	6/30/2015	3.25	1.95	1.30	0.227329
thd_723	thd_grp2	2534	6/30/1971	6/30/2015	2.17	1.93	0.24	0.227329
thd_724	thd_grp2	2534	6/30/1972	6/30/2015	-0.12	1.90	-2.02	0.227329
thd_725	thd_grp2	2534	6/30/1973	6/30/2015	2.3	1.86	0.44	0.227329
thd_726	thd_grp2	2534	6/30/1974	6/30/2015	1.7	1.82	-0.12	0.227329
thd_727	thd_grp2	2534	6/30/1975	6/30/2015	4.22	1.80	2.42	0.227329
thd_728	thd_grp2	2534	6/30/1976	6/30/2015	3.7	1.77	1.93	0.227329
thd_729	thd_grp2	2534	6/30/1977	6/30/2015	1.92	1.74	0.18	0.227329
thd_730	thd_grp2	2534	6/30/1978	6/30/2015	2.77	1.71	1.06	0.227329
thd_731	thd_grp2	2534	6/30/1979	6/30/2015	2.35	1.68	0.67	0.227329
thd_732	thd_grp2	2534	6/30/1980	6/30/2015	2.34	1.65	0.69	0.227329
thd_733	thd_grp2	2534	6/30/1981	6/30/2015	1.44	1.61	-0.17	0.227329
thd_734	thd_grp2	2534	6/30/1982	6/30/2015	2.19	1.55	0.64	0.227329
thd_735	thd_grp2	2534	6/30/1983	6/30/2015	3.26	1.49	1.77	0.227329
thd_736	thd_grp2	2534	6/30/1984	6/30/2015	2.82	1.42	1.40	0.227329
thd_737	thd_grp2	2534	6/30/1985	6/30/2015	2.38	1.35	1.03	0.227329
thd_738	thd_grp2	2534	6/30/1986	6/30/2015	2.52	1.26	1.26	0.227329
thd_739	thd_grp2	2534	6/30/1987	6/30/2015	2.75	1.16	1.59	0.227329
thd_740	thd_grp2	2534	6/30/1988	6/30/2015	2.52	1.08	1.44	0.227329
thd_741	thd_grp2	2534	6/30/1989	6/30/2015	2.22	1.04	1.18	0.227329
thd_742	thd_grp2	2534	6/30/1990	6/30/2015	1.75	0.99	0.76	0.227329
thd_743	thd_grp2	2534	6/30/1991	6/30/2015	2.43	0.94	1.49	0.227329
thd_744	thd_grp2	2534	6/30/1992	6/30/2015	1.67	0.92	0.75	0.227329

Table A-5. Temporal Head Difference (THD) Targets.

Target Name	Target Group	NWF ID	Date 1	Date 2	Measured Groundwater Elevation Difference (ft)	Modelled Groundwater Elevation Difference (ft)	Residual (ft)	Target Weight
thd_745	thd_grp2	2534	6/30/1993	6/30/2015	1.79	0.87	0.92	0.227329
thd_746	thd_grp2	2534	6/30/1994	6/30/2015	2.34	0.82	1.52	0.227329
thd_747	thd_grp2	2534	6/30/1995	6/30/2015	1.71	0.81	0.90	0.227329
thd_748	thd_grp2	2534	6/30/1996	6/30/2015	2.26	0.79	1.47	0.227329
thd_749	thd_grp2	2534	6/30/1997	6/30/2015	1.61	0.76	0.85	0.227329
thd_750	thd_grp2	2534	6/30/1998	6/30/2015	1.36	0.74	0.62	0.227329
thd_751	thd_grp2	2534	6/30/1999	6/30/2015	1.87	0.68	1.19	0.227329
thd_752	thd_grp2	2534	6/30/2000	6/30/2015	0.27	0.59	-0.32	0.227329
thd_753	thd_grp2	2534	6/30/2001	6/30/2015	-1	0.50	-1.50	0.227329
thd_754	thd_grp2	2534	6/30/2002	6/30/2015	0.66	0.43	0.23	0.227329
thd_755	thd_grp2	2534	6/30/2003	6/30/2015	1.41	0.46	0.95	0.227329
thd_756	thd_grp2	2534	6/30/2004	6/30/2015	0.68	0.46	0.22	0.227329
thd_757	thd_grp2	2534	6/30/2006	6/30/2015	-0.75	0.18	-0.93	0.227329
thd_758	thd_grp2	2534	6/30/2007	6/30/2015	-1.77	0.10	-1.87	0.227329
thd_759	thd_grp2	2534	6/30/2008	6/30/2015	-0.11	0.13	-0.24	0.227329
thd_760	thd_grp2	2534	6/30/2010	6/30/2015	0.33	0.10	0.23	0.227329
thd_761	thd_grp2	2534	6/30/2011	6/30/2015	-1.52	0.11	-1.63	0.227329
thd_762	thd_grp2	2534	6/30/2012	6/30/2015	-0.87	0.09	-0.96	0.227329
thd_763	thd_grp2	2534	6/30/2013	6/30/2015	0.5	0.13	0.37	0.227329
thd_764	thd_grp2	2534	6/30/2014	6/30/2015	1.25	0.10	1.15	0.227329
thd_765	thd_grp2	2534	6/30/2015	6/30/2015	0	0.00	0.00	0.227329
thd_819	thd_grp2	2738	6/30/1958	6/30/2015	24.14	20.66	3.48	0.227329
thd_820	thd_grp2	2738	6/30/1968	6/30/2015	3.84	16.66	-12.82	0.227329
thd_821	thd_grp2	2738	6/30/1969	6/30/2015	3.39	16.27	-12.88	0.227329
thd_822	thd_grp2	2738	6/30/1970	6/30/2015	5.79	15.97	-10.18	0.227329
thd_823	thd_grp2	2738	6/30/1971	6/30/2015	1.64	15.67	-14.03	0.227329
thd_824	thd_grp2	2738	6/30/1972	6/30/2015	-3	15.23	-18.23	0.227329
thd_825	thd_grp2	2738	6/30/1973	6/30/2015	2.36	14.56	-12.20	0.227329
thd_826	thd_grp2	2738	6/30/1974	6/30/2015	5	14.12	-9.12	0.227329
thd_827	thd_grp2	2738	6/30/1975	6/30/2015	10.29	13.85	-3.56	0.227329
thd_828	thd_grp2	2738	6/30/1976	6/30/2015	9.49	13.57	-4.08	0.227329

Table A-5. Temporal Head Difference (THD) Targets.

Target Name	Target Group	NWF ID	Date 1	Date 2	Measured Groundwater Elevation Difference (ft)	Modelled Groundwater Elevation Difference (ft)	Residual (ft)	Target Weight
thd_829	thd_grp2	2738	6/30/1977	6/30/2015	6.15	13.15	-7.00	0.227329
thd_830	thd_grp2	2738	6/30/1978	6/30/2015	8.56	12.76	-4.20	0.227329
thd_831	thd_grp2	2738	6/30/1979	6/30/2015	8.19	12.45	-4.26	0.227329
thd_832	thd_grp2	2738	6/30/1980	6/30/2015	8.82	12.06	-3.24	0.227329
thd_833	thd_grp2	2738	6/30/1981	6/30/2015	8.16	11.53	-3.37	0.227329
thd_834	thd_grp2	2738	6/30/1982	6/30/2015	8.11	10.85	-2.74	0.227329
thd_835	thd_grp2	2738	6/30/1983	6/30/2015	8.84	10.05	-1.21	0.227329
thd_836	thd_grp2	2738	6/30/1984	6/30/2015	6.76	9.20	-2.44	0.227329
thd_837	thd_grp2	2738	6/30/1985	6/30/2015	6.39	8.21	-1.82	0.227329
thd_838	thd_grp2	2738	6/30/1986	6/30/2015	5.99	7.08	-1.09	0.227329
thd_839	thd_grp2	2738	6/30/1987	6/30/2015	5.92	6.04	-0.12	0.227329
thd_840	thd_grp2	2738	6/30/1988	6/30/2015	5.52	5.22	0.30	0.227329
thd_841	thd_grp2	2738	6/30/1989	6/30/2015	5.21	4.61	0.60	0.227329
thd_842	thd_grp2	2738	6/30/1990	6/30/2015	4.35	3.94	0.41	0.227329
thd_843	thd_grp2	2738	6/30/1991	6/30/2015	4.68	3.37	1.31	0.227329
thd_844	thd_grp2	2738	6/30/1992	6/30/2015	4.62	3.17	1.45	0.227329
thd_845	thd_grp2	2738	6/30/1993	6/30/2015	3.51	2.62	0.89	0.227329
thd_846	thd_grp2	2738	6/30/1994	6/30/2015	3.09	2.09	1.00	0.227329
thd_847	thd_grp2	2738	6/30/1995	6/30/2015	2.89	1.82	1.07	0.227329
thd_848	thd_grp2	2738	6/30/1996	6/30/2015	4.04	1.59	2.45	0.227329
thd_849	thd_grp2	2738	6/30/1997	6/30/2015	2.75	1.25	1.50	0.227329
thd_850	thd_grp2	2738	6/30/1998	6/30/2015	1.85	0.83	1.02	0.227329
thd_851	thd_grp2	2738	6/30/1999	6/30/2015	2.89	0.40	2.49	0.227329
thd_852	thd_grp2	2738	6/30/2000	6/30/2015	0.64	-0.24	0.88	0.227329
thd_853	thd_grp2	2738	6/30/2001	6/30/2015	0.19	-0.74	0.93	0.227329
thd_854	thd_grp2	2738	6/30/2003	6/30/2015	1.00E-02	-1.05	1.06	0.227329
thd_855	thd_grp2	2738	6/30/2004	6/30/2015	0.94	-1.20	2.14	0.227329
thd_856	thd_grp2	2738	6/30/2005	6/30/2015	-1.41	-2.11	0.70	0.227329
thd_857	thd_grp2	2738	6/30/2006	6/30/2015	-2.81	-2.50	-0.31	0.227329
thd_858	thd_grp2	2738	6/30/2007	6/30/2015	-4.02	-2.98	-1.04	0.227329
thd_859	thd_grp2	2738	6/30/2008	6/30/2015	-2.37	-2.55	0.18	0.227329

Table A-5. Temporal Head Difference (THD) Targets.

Target Name	Target Group	NWF ID	Date 1	Date 2	Measured Groundwater Elevation Difference (ft)	Modelled Groundwater Elevation Difference (ft)	Residual (ft)	Target Weight
thd_860	thd_grp2	2738	6/30/2010	6/30/2015	-0.86	-0.95	0.09	0.227329
thd_861	thd_grp2	2738	6/30/2011	6/30/2015	-0.93	-0.73	-0.20	0.227329
thd_862	thd_grp2	2738	6/30/2012	6/30/2015	-0.85	-0.51	-0.34	0.227329
thd_863	thd_grp2	2738	6/30/2013	6/30/2015	0.48	0.07	0.41	0.227329
thd_864	thd_grp2	2738	6/30/2014	6/30/2015	0.77	0.25	0.52	0.227329
thd_865	thd_grp2	2738	6/30/2015	6/30/2015	0	0.00	0.00	0.227329
thd_994	thd_grp3	2822	6/30/1969	6/30/2015	46.38	45.71	0.67	0.193161
thd_995	thd_grp3	2822	6/30/1970	6/30/2015	47.93	43.39	4.54	0.193161
thd_996	thd_grp3	2822	6/30/1971	6/30/2015	44.09	40.48	3.61	0.193161
thd_997	thd_grp3	2822	6/30/1972	6/30/2015	38.79	34.24	4.55	0.193161
thd_998	thd_grp3	2822	6/30/1973	6/30/2015	37.17	31.83	5.34	0.193161
thd_999	thd_grp3	2822	6/30/1974	6/30/2015	33.5	29.64	3.86	0.193161
thd_1000	thd_grp3	2822	6/30/1975	6/30/2015	32.53	28.51	4.02	0.193161
thd_1001	thd_grp3	2822	6/30/1976	6/30/2015	29.15	25.50	3.65	0.193161
thd_1002	thd_grp3	2822	6/30/1977	6/30/2015	25.05	21.93	3.12	0.193161
thd_1003	thd_grp3	2822	6/30/1978	6/30/2015	22.53	21.36	1.17	0.193161
thd_1004	thd_grp3	2822	6/30/1979	6/30/2015	20.53	17.69	2.84	0.193161
thd_1005	thd_grp3	2822	6/30/1980	6/30/2015	20.46	16.42	4.04	0.193161
thd_1006	thd_grp3	2822	6/30/1981	6/30/2015	22.41	13.89	8.52	0.193161
thd_1007	thd_grp3	2822	6/30/1982	6/30/2015	11.07	10.66	0.41	0.193161
thd_1008	thd_grp3	2822	6/30/1983	6/30/2015	10.54	4.57	5.97	0.193161
thd_1009	thd_grp3	2822	6/30/1984	6/30/2015	-3.00E-02	-1.56	1.53	0.193161
thd_1010	thd_grp3	2822	6/30/1985	6/30/2015	-6.89	-8.54	1.65	0.193161
thd_1011	thd_grp3	2822	6/30/1986	6/30/2015	-11.1	-14.24	3.14	0.193161
thd_1012	thd_grp3	2822	6/30/1987	6/30/2015	-16.39	-18.57	2.18	0.193161
thd_1013	thd_grp3	2822	6/30/1988	6/30/2015	-20.54	-23.53	2.99	0.193161
thd_1014	thd_grp3	2822	6/30/1989	6/30/2015	-23.28	-25.21	1.93	0.193161
thd_1015	thd_grp3	2822	6/30/1990	6/30/2015	-26.79	-29.04	2.25	0.193161
thd_1016	thd_grp3	2822	6/30/1991	6/30/2015	-21.81	-25.21	3.40	0.193161
thd_1017	thd_grp3	2822	6/30/1992	6/30/2015	-28.09	-28.46	0.37	0.193161
thd_1018	thd_grp3	2822	6/30/1993	6/30/2015	-21.81	-32.83	11.02	0.193161

Table A-5. Temporal Head Difference (THD) Targets.

Target Name	Target Group	NWF ID	Date 1	Date 2	Measured Groundwater Elevation Difference (ft)	Modelled Groundwater Elevation Difference (ft)	Residual (ft)	Target Weight
thd_1019	thd_grp3	2822	6/30/1994	6/30/2015	-30.01	-31.55	1.54	0.193161
thd_1020	thd_grp3	2822	6/30/1995	6/30/2015	-34.65	-30.68	-3.97	0.193161
thd_1021	thd_grp3	2822	6/30/1996	6/30/2015	-33.61	-33.46	-0.15	0.193161
thd_1022	thd_grp3	2822	6/30/1997	6/30/2015	-46.45	-34.52	-11.93	0.193161
thd_1023	thd_grp3	2822	6/30/1998	6/30/2015	-42.69	-34.76	-7.93	0.193161
thd_1024	thd_grp3	2822	6/30/1999	6/30/2015	-29.83	-31.86	2.03	0.193161
thd_1025	thd_grp3	2822	6/30/2000	6/30/2015	-49.44	-36.72	-12.72	0.193161
thd_1026	thd_grp3	2822	6/30/2001	6/30/2015	-45.48	-35.32	-10.16	0.193161
thd_1027	thd_grp3	2822	6/30/2002	6/30/2015	-35.92	-33.01	-2.91	0.193161
thd_1028	thd_grp3	2822	6/30/2003	6/30/2015	-37.14	-29.41	-7.73	0.193161
thd_1029	thd_grp3	2822	6/30/2005	6/30/2015	-33.02	-29.43	-3.59	0.193161
thd_1030	thd_grp3	2822	6/30/2006	6/30/2015	-37.06	-29.09	-7.97	0.193161
thd_1031	thd_grp3	2822	6/30/2007	6/30/2015	-27.74	-20.77	-6.97	0.193161
thd_1032	thd_grp3	2822	6/30/2008	6/30/2015	-14.63	-14.48	-0.15	0.193161
thd_1033	thd_grp3	2822	6/30/2009	6/30/2015	-12.82	-11.04	-1.78	0.193161
thd_1034	thd_grp3	2822	6/30/2010	6/30/2015	-6.45	-6.79	0.34	0.193161
thd_1035	thd_grp3	2822	6/30/2011	6/30/2015	-6.37	-4.79	-1.58	0.193161
thd_1036	thd_grp3	2822	6/30/2012	6/30/2015	-1.62	-2.35	0.73	0.193161
thd_1037	thd_grp3	2822	6/30/2013	6/30/2015	-1.08	-0.56	-0.52	0.193161
thd_1038	thd_grp3	2822	6/30/2014	6/30/2015	-0.12	-0.55	0.43	0.193161
thd_1039	thd_grp3	2822	6/30/2015	6/30/2015	0	0.00	0.00	0.193161
thd_1040	thd_grp2	2993	6/30/1979	6/30/2015	18.94	15.72	3.22	0.227329
thd_1041	thd_grp2	2993	6/30/1981	6/30/2015	11.92	13.85	-1.93	0.227329
thd_1042	thd_grp2	2993	6/30/1982	6/30/2015	11.74	12.41	-0.67	0.227329
thd_1043	thd_grp2	2993	6/30/1983	6/30/2015	12.87	10.79	2.08	0.227329
thd_1044	thd_grp2	2993	6/30/1990	6/30/2015	1.26	-1.28	2.54	0.227329
thd_1045	thd_grp2	2993	6/30/1991	6/30/2015	5.00E-02	-2.04	2.09	0.227329
thd_1046	thd_grp2	2993	6/30/1992	6/30/2015	0.14	-2.38	2.52	0.227329
thd_1047	thd_grp2	2993	6/30/1995	6/30/2015	-1.04	-4.73	3.69	0.227329
thd_1048	thd_grp2	2993	6/30/1996	6/30/2015	-3.82	-5.22	1.40	0.227329
thd_1049	thd_grp2	2993	6/30/1998	6/30/2015	-6.17	-6.06	-0.11	0.227329

Table A-5. Temporal Head Difference (THD) Targets.

Target Name	Target Group	NWF ID	Date 1	Date 2	Measured Groundwater Elevation Difference (ft)	Modelled Groundwater Elevation Difference (ft)	Residual (ft)	Target Weight
thd_1050	thd_grp2	2993	6/30/2000	6/30/2015	-4.95	-7.34	2.39	0.227329
thd_1051	thd_grp2	2993	6/30/2001	6/30/2015	-6.82	-7.88	1.06	0.227329
thd_1052	thd_grp2	2993	6/30/2002	6/30/2015	-6.88	-7.52	0.64	0.227329
thd_1053	thd_grp2	2993	6/30/2003	6/30/2015	-5.33	-7.02	1.69	0.227329
thd_1054	thd_grp2	2993	6/30/2004	6/30/2015	-8.06	-7.84	-0.22	0.227329
thd_1055	thd_grp2	2993	6/30/2005	6/30/2015	-5.96	-7.70	1.74	0.227329
thd_1056	thd_grp2	2993	6/30/2006	6/30/2015	-5.9	-7.80	1.90	0.227329
thd_1057	thd_grp2	2993	6/30/2007	6/30/2015	-8.25	-8.09	-0.16	0.227329
thd_1058	thd_grp2	2993	6/30/2008	6/30/2015	-5.32	-7.12	1.80	0.227329
thd_1059	thd_grp2	2993	6/30/2010	6/30/2015	-1.6	-3.02	1.42	0.227329
thd_1060	thd_grp2	2993	6/30/2011	6/30/2015	-2.82	-2.64	-0.18	0.227329
thd_1061	thd_grp2	2993	6/30/2012	6/30/2015	-1.49	-1.82	0.33	0.227329
thd_1062	thd_grp2	2993	6/30/2013	6/30/2015	-0.43	-0.96	0.53	0.227329
thd_1063	thd_grp2	2993	6/30/2014	6/30/2015	0.85	-0.25	1.10	0.227329
thd_1064	thd_grp2	2993	6/30/2015	6/30/2015	0	0.00	0.00	0.227329
thd_1065	thd_grp2	2994	6/30/1947	6/30/2015	82.04	74.40	7.64	0.227329
thd_1066	thd_grp2	2994	6/30/1948	6/30/2015	79.35	72.70	6.65	0.227329
thd_1067	thd_grp2	2994	6/30/1949	6/30/2015	79.27	70.98	8.29	0.227329
thd_1068	thd_grp2	2994	6/30/1950	6/30/2015	77.72	68.90	8.82	0.227329
thd_1069	thd_grp2	2994	6/30/1951	6/30/2015	76.85	69.84	7.01	0.227329
thd_1070	thd_grp2	2994	6/30/1952	6/30/2015	74.62	68.20	6.42	0.227329
thd_1071	thd_grp2	2994	6/30/1953	6/30/2015	74.27	66.53	7.74	0.227329
thd_1072	thd_grp2	2994	6/30/1954	6/30/2015	68.59	64.86	3.73	0.227329
thd_1073	thd_grp2	2994	6/30/1955	6/30/2015	62.97	63.11	-0.14	0.227329
thd_1074	thd_grp2	2994	6/30/1956	6/30/2015	61.53	61.22	0.31	0.227329
thd_1075	thd_grp2	2994	6/30/1957	6/30/2015	59.06	57.99	1.07	0.227329
thd_1076	thd_grp2	2994	6/30/1958	6/30/2015	60.14	56.67	3.47	0.227329
thd_1077	thd_grp2	2994	6/30/1959	6/30/2015	60.1	54.37	5.73	0.227329
thd_1078	thd_grp2	2994	6/30/1960	6/30/2015	58.82	52.01	6.81	0.227329
thd_1079	thd_grp2	2994	6/30/1961	6/30/2015	57.54	49.59	7.95	0.227329
thd_1080	thd_grp2	2994	6/30/1962	6/30/2015	50.64	47.00	3.64	0.227329

Table A-5. Temporal Head Difference (THD) Targets.

Target Name	Target Group	NWF ID	Date 1	Date 2	Measured Groundwater Elevation Difference (ft)	Modelled Groundwater Elevation Difference (ft)	Residual (ft)	Target Weight
thd_1081	thd_grp2	2994	6/30/1963	6/30/2015	49.7	44.56	5.14	0.227329
thd_1082	thd_grp2	2994	6/30/1964	6/30/2015	51.19	41.64	9.55	0.227329
thd_1083	thd_grp2	2994	6/30/1965	6/30/2015	50.61	40.66	9.95	0.227329
thd_1084	thd_grp2	2994	6/30/1966	6/30/2015	44.92	36.63	8.29	0.227329
thd_1085	thd_grp2	2994	6/30/1967	6/30/2015	42.15	32.70	9.45	0.227329
thd_1086	thd_grp2	2994	6/30/1968	6/30/2015	41.36	32.94	8.42	0.227329
thd_1087	thd_grp2	2994	6/30/1969	6/30/2015	36.2	32.01	4.19	0.227329
thd_1088	thd_grp2	2994	6/30/1970	6/30/2015	34.1	30.64	3.46	0.227329
thd_1089	thd_grp2	2994	6/30/1971	6/30/2015	36.48	28.97	7.51	0.227329
thd_1090	thd_grp2	2994	6/30/1974	6/30/2015	9.99	18.72	-8.73	0.227329
thd_1091	thd_grp2	2994	6/30/1975	6/30/2015	21.04	17.90	3.14	0.227329
thd_1092	thd_grp2	2994	6/30/1976	6/30/2015	20.69	16.92	3.77	0.227329
thd_1093	thd_grp2	2994	6/30/1977	6/30/2015	14.22	15.42	-1.20	0.227329
thd_1094	thd_grp2	2994	6/30/1978	6/30/2015	18.23	15.94	2.29	0.227329
thd_1095	thd_grp2	2994	6/30/1979	6/30/2015	14.97	13.76	1.21	0.227329
thd_1096	thd_grp2	2994	6/30/1980	6/30/2015	14.82	11.68	3.14	0.227329
thd_1097	thd_grp2	2994	6/30/1981	6/30/2015	6.84	8.63	-1.79	0.227329
thd_1098	thd_grp2	2994	6/30/1982	6/30/2015	8.46	4.63	3.83	0.227329
thd_1099	thd_grp2	2994	6/30/1983	6/30/2015	7.1	0.50	6.60	0.227329
thd_1100	thd_grp2	2994	6/30/1984	6/30/2015	-3.07	-4.81	1.74	0.227329
thd_1101	thd_grp2	2994	6/30/1985	6/30/2015	-7.45	-9.42	1.97	0.227329
thd_1102	thd_grp2	2994	6/30/1986	6/30/2015	-16.78	-14.11	-2.67	0.227329
thd_1103	thd_grp2	2994	6/30/1987	6/30/2015	-17.35	-18.02	0.67	0.227329
thd_1104	thd_grp2	2994	6/30/1988	6/30/2015	-18.98	-21.84	2.86	0.227329
thd_1105	thd_grp2	2994	6/30/1989	6/30/2015	-18.46	-24.24	5.78	0.227329
thd_1106	thd_grp2	2994	6/30/1990	6/30/2015	-22.28	-27.69	5.41	0.227329
thd_1107	thd_grp2	2994	6/30/1991	6/30/2015	-16.89	-26.78	9.89	0.227329
thd_1108	thd_grp2	2994	6/30/1992	6/30/2015	-21.9	-26.87	4.97	0.227329
thd_1109	thd_grp2	2994	6/30/1993	6/30/2015	-11.98	-28.29	16.31	0.227329
thd_1110	thd_grp2	2994	6/30/1994	6/30/2015	-22.07	-28.13	6.06	0.227329
thd_1111	thd_grp2	2994	6/30/1995	6/30/2015	-25.71	-28.48	2.77	0.227329

Table A-5. Temporal Head Difference (THD) Targets.

Target Name	Target Group	NWF ID	Date 1	Date 2	Measured Groundwater Elevation Difference (ft)	Modelled Groundwater Elevation Difference (ft)	Residual (ft)	Target Weight
thd_1112	thd_grp2	2994	6/30/1996	6/30/2015	-23.41	-28.71	5.30	0.227329
thd_1113	thd_grp2	2994	6/30/1997	6/30/2015	-39.8	-28.14	-11.66	0.227329
thd_1114	thd_grp2	2994	6/30/1998	6/30/2015	-34.25	-27.90	-6.35	0.227329
thd_1115	thd_grp2	2994	6/30/1999	6/30/2015	-20.84	-29.06	8.22	0.227329
thd_1116	thd_grp2	2994	6/30/2000	6/30/2015	-45.58	-28.79	-16.79	0.227329
thd_1117	thd_grp2	2994	6/30/2001	6/30/2015	-36	-30.72	-5.28	0.227329
thd_1118	thd_grp2	2994	6/30/2002	6/30/2015	-24.14	-24.30	0.16	0.227329
thd_1119	thd_grp2	2994	6/30/2003	6/30/2015	-24.42	-20.17	-4.25	0.227329
thd_1120	thd_grp2	2994	6/30/2005	6/30/2015	-21.21	-21.89	0.68	0.227329
thd_1121	thd_grp2	2994	6/30/2006	6/30/2015	-24.97	-23.44	-1.53	0.227329
thd_1122	thd_grp2	2994	6/30/2007	6/30/2015	-21.39	-21.33	-0.06	0.227329
thd_1123	thd_grp2	2994	6/30/2008	6/30/2015	-14.56	-17.07	2.51	0.227329
thd_1124	thd_grp2	2994	6/30/2010	6/30/2015	-4.74	-8.43	3.69	0.227329
thd_1125	thd_grp2	2994	6/30/2011	6/30/2015	-8.82	-8.76	-0.06	0.227329
thd_1126	thd_grp2	2994	6/30/2012	6/30/2015	-3.05	-5.17	2.12	0.227329
thd_1127	thd_grp2	2994	6/30/2013	6/30/2015	-1.12	-1.72	0.60	0.227329
thd_1128	thd_grp2	2994	6/30/2014	6/30/2015	2.11	-0.78	2.89	0.227329
thd_1129	thd_grp2	2994	6/30/2015	6/30/2015	0	0.00	0.00	0.227329
thd_1130	thd_grp2	2995	6/30/1958	6/30/2015	65.8	56.48	9.32	0.227329
thd_1131	thd_grp2	2995	6/30/1978	6/30/2015	14.98	10.54	4.44	0.227329
thd_1132	thd_grp2	2995	6/30/1979	6/30/2015	11.14	8.04	3.10	0.227329
thd_1133	thd_grp2	2995	6/30/1980	6/30/2015	8.96	5.38	3.58	0.227329
thd_1134	thd_grp2	2995	6/30/1981	6/30/2015	4.72	2.14	2.58	0.227329
thd_1135	thd_grp2	2995	6/30/1982	6/30/2015	5.3	-2.23	7.53	0.227329
thd_1136	thd_grp2	2995	6/30/1983	6/30/2015	2.15	-6.84	8.99	0.227329
thd_1137	thd_grp2	2995	6/30/1984	6/30/2015	-3.91	-12.69	8.78	0.227329
thd_1138	thd_grp2	2995	6/30/1985	6/30/2015	-9.74	-18.37	8.63	0.227329
thd_1139	thd_grp2	2995	6/30/1986	6/30/2015	-19.97	-23.13	3.16	0.227329
thd_1140	thd_grp2	2995	6/30/1987	6/30/2015	-22.99	-27.30	4.31	0.227329
thd_1141	thd_grp2	2995	6/30/1988	6/30/2015	-23.76	-31.63	7.87	0.227329
thd_1142	thd_grp2	2995	6/30/1989	6/30/2015	-20.67	-34.03	13.36	0.227329

Table A-5. Temporal Head Difference (THD) Targets.

Target Name	Target Group	NWF ID	Date 1	Date 2	Measured Groundwater Elevation Difference (ft)	Modelled Groundwater Elevation Difference (ft)	Residual (ft)	Target Weight
thd_1143	thd_grp2	2995	6/30/1990	6/30/2015	-29.48	-37.24	7.76	0.227329
thd_1144	thd_grp2	2995	6/30/1991	6/30/2015	-21.55	-36.64	15.09	0.227329
thd_1145	thd_grp2	2995	6/30/1992	6/30/2015	-35.3	-36.15	0.85	0.227329
thd_1146	thd_grp2	2995	6/30/1993	6/30/2015	-15.76	-36.37	20.61	0.227329
thd_1147	thd_grp2	2995	6/30/1995	6/30/2015	-43.1	-34.56	-8.54	0.227329
thd_1148	thd_grp2	2995	6/30/2000	6/30/2015	-53.88	-33.93	-19.95	0.227329
thd_1149	thd_grp2	2995	6/30/2001	6/30/2015	-45.97	-36.75	-9.22	0.227329
thd_1150	thd_grp2	2995	6/30/2002	6/30/2015	-27.53	-29.32	1.79	0.227329
thd_1151	thd_grp2	2995	6/30/2003	6/30/2015	-27.47	-24.58	-2.89	0.227329
thd_1152	thd_grp2	2995	6/30/2005	6/30/2015	-23.14	-24.27	1.13	0.227329
thd_1153	thd_grp2	2995	6/30/2006	6/30/2015	-26.96	-25.02	-1.94	0.227329
thd_1154	thd_grp2	2995	6/30/2007	6/30/2015	-24.18	-24.21	0.03	0.227329
thd_1155	thd_grp2	2995	6/30/2008	6/30/2015	-17.33	-18.19	0.86	0.227329
thd_1156	thd_grp2	2995	6/30/2009	6/30/2015	-1.6	-12.78	11.18	0.227329
thd_1157	thd_grp2	2995	6/30/2010	6/30/2015	-6.32	-9.00	2.68	0.227329
thd_1158	thd_grp2	2995	6/30/2011	6/30/2015	-10.14	-7.97	-2.17	0.227329
thd_1159	thd_grp2	2995	6/30/2012	6/30/2015	-3.25	-4.55	1.30	0.227329
thd_1160	thd_grp2	2995	6/30/2013	6/30/2015	1.26	-1.72	2.98	0.227329
thd_1161	thd_grp2	2995	6/30/2014	6/30/2015	0	-0.69	0.69	0.227329
thd_1163	thd_grp2	3101	6/30/1947	6/30/2015	29.37	21.51	7.86	0.227329
thd_1164	thd_grp2	3101	6/30/1948	6/30/2015	26.97	21.33	5.64	0.227329
thd_1165	thd_grp2	3101	6/30/1949	6/30/2015	27.27	21.16	6.11	0.227329
thd_1166	thd_grp2	3101	6/30/1950	6/30/2015	25.98	20.99	4.99	0.227329
thd_1167	thd_grp2	3101	6/30/1951	6/30/2015	25.47	20.81	4.66	0.227329
thd_1168	thd_grp2	3101	6/30/1952	6/30/2015	25	20.64	4.36	0.227329
thd_1169	thd_grp2	3101	6/30/1953	6/30/2015	25.07	20.46	4.61	0.227329
thd_1170	thd_grp2	3101	6/30/1954	6/30/2015	24.85	20.29	4.56	0.227329
thd_1171	thd_grp2	3101	6/30/1955	6/30/2015	22.85	20.12	2.73	0.227329
thd_1172	thd_grp2	3101	6/30/1956	6/30/2015	21.66	19.92	1.74	0.227329
thd_1173	thd_grp2	3101	6/30/1957	6/30/2015	21.67	19.72	1.95	0.227329
thd_1174	thd_grp2	3101	6/30/1958	6/30/2015	23.19	19.51	3.68	0.227329

Table A-5. Temporal Head Difference (THD) Targets.

Target Name	Target Group	NWF ID	Date 1	Date 2	Measured Groundwater Elevation Difference (ft)	Modelled Groundwater Elevation Difference (ft)	Residual (ft)	Target Weight
thd_1175	thd_grp2	3101	6/30/1959	6/30/2015	22.62	19.27	3.35	0.227329
thd_1176	thd_grp2	3101	6/30/1960	6/30/2015	22.72	19.02	3.70	0.227329
thd_1177	thd_grp2	3101	6/30/1961	6/30/2015	22.3	18.75	3.55	0.227329
thd_1178	thd_grp2	3101	6/30/1962	6/30/2015	21.8	18.48	3.32	0.227329
thd_1179	thd_grp2	3101	6/30/1963	6/30/2015	20.61	18.19	2.42	0.227329
thd_1180	thd_grp2	3101	6/30/1969	6/30/2015	-8.03	16.30	-24.33	0.227329
thd_1181	thd_grp2	3101	6/30/1974	6/30/2015	6.55	14.72	-8.17	0.227329
thd_1182	thd_grp2	3101	6/30/1975	6/30/2015	13.29	14.49	-1.20	0.227329
thd_1183	thd_grp2	3101	6/30/1976	6/30/2015	11.73	14.27	-2.54	0.227329
thd_1184	thd_grp2	3101	6/30/1977	6/30/2015	8.17	13.95	-5.78	0.227329
thd_1185	thd_grp2	3101	6/30/1978	6/30/2015	11.28	13.65	-2.37	0.227329
thd_1186	thd_grp2	3101	6/30/1979	6/30/2015	10.74	13.39	-2.65	0.227329
thd_1187	thd_grp2	3101	6/30/1980	6/30/2015	11.6	13.09	-1.49	0.227329
thd_1188	thd_grp2	3101	6/30/1981	6/30/2015	11.2	12.70	-1.50	0.227329
thd_1189	thd_grp2	3101	6/30/1982	6/30/2015	11.21	12.20	-0.99	0.227329
thd_1190	thd_grp2	3101	6/30/1983	6/30/2015	12.27	11.62	0.65	0.227329
thd_1191	thd_grp2	3101	6/30/1984	6/30/2015	9.97	10.98	-1.01	0.227329
thd_1192	thd_grp2	3101	6/30/1985	6/30/2015	10.25	10.27	-0.02	0.227329
thd_1193	thd_grp2	3101	6/30/1986	6/30/2015	9.99	9.36	0.63	0.227329
thd_1194	thd_grp2	3101	6/30/1987	6/30/2015	9.89	8.62	1.27	0.227329
thd_1195	thd_grp2	3101	6/30/1988	6/30/2015	9.6	7.96	1.64	0.227329
thd_1196	thd_grp2	3101	6/30/1989	6/30/2015	9.67	7.53	2.14	0.227329
thd_1197	thd_grp2	3101	6/30/1990	6/30/2015	9.18	7.02	2.16	0.227329
thd_1198	thd_grp2	3101	6/30/1991	6/30/2015	9.12	6.51	2.61	0.227329
thd_1199	thd_grp2	3101	6/30/1992	6/30/2015	8.42	6.32	2.10	0.227329
thd_1200	thd_grp2	3101	6/30/1993	6/30/2015	7.37	6.01	1.36	0.227329
thd_1201	thd_grp2	3101	6/30/1994	6/30/2015	7.14	5.54	1.60	0.227329
thd_1202	thd_grp2	3101	6/30/1995	6/30/2015	8.15	5.31	2.84	0.227329
thd_1203	thd_grp2	3101	6/30/1996	6/30/2015	7.74	5.10	2.64	0.227329
thd_1204	thd_grp2	3101	6/30/1997	6/30/2015	6.78	4.66	2.12	0.227329
thd_1205	thd_grp2	3101	6/30/1998	6/30/2015	6.61	3.89	2.72	0.227329

Table A-5. Temporal Head Difference (THD) Targets.

Target Name	Target Group	NWF ID	Date 1	Date 2	Measured Groundwater Elevation Difference (ft)	Modelled Groundwater Elevation Difference (ft)	Residual (ft)	Target Weight
thd_1206	thd_grp2	3101	6/30/1999	6/30/2015	7.08	3.09	3.99	0.227329
thd_1207	thd_grp2	3101	6/30/2000	6/30/2015	4.42	2.39	2.03	0.227329
thd_1208	thd_grp2	3101	6/30/2001	6/30/2015	3.84	2.01	1.83	0.227329
thd_1209	thd_grp2	3101	6/30/2002	6/30/2015	2.91	1.19	1.72	0.227329
thd_1210	thd_grp2	3101	6/30/2003	6/30/2015	4.18	1.35	2.83	0.227329
thd_1211	thd_grp2	3101	6/30/2004	6/30/2015	2.57	1.10	1.47	0.227329
thd_1212	thd_grp2	3101	6/30/2006	6/30/2015	0.23	-1.13	1.36	0.227329
thd_1213	thd_grp2	3101	6/30/2007	6/30/2015	-1.15	-1.70	0.55	0.227329
thd_1214	thd_grp2	3101	6/30/2008	6/30/2015	0.54	-1.11	1.65	0.227329
thd_1215	thd_grp2	3101	6/30/2010	6/30/2015	0.98	-0.26	1.24	0.227329
thd_1216	thd_grp2	3101	6/30/2011	6/30/2015	1.12	-0.09	1.21	0.227329
thd_1217	thd_grp2	3101	6/30/2012	6/30/2015	0.21	0.02	0.19	0.227329
thd_1218	thd_grp2	3101	6/30/2013	6/30/2015	1.17	0.65	0.52	0.227329
thd_1219	thd_grp2	3101	6/30/2014	6/30/2015	1.57	0.54	1.03	0.227329
thd_1220	thd_grp2	3101	6/30/2015	6/30/2015	0	0.00	0.00	0.227329
thd_1221	thd_grp3	3188	6/30/1988	6/30/2015	1.6	-0.22	1.82	0.193161
thd_1222	thd_grp3	3188	6/30/1994	6/30/2015	2.75	-8.16	10.91	0.193161
thd_1223	thd_grp3	3188	6/30/1995	6/30/2015	1.89	-8.54	10.43	0.193161
thd_1224	thd_grp3	3188	6/30/1996	6/30/2015	1.29	-8.85	10.14	0.193161
thd_1225	thd_grp3	3188	6/30/1997	6/30/2015	1.75	-9.15	10.90	0.193161
thd_1226	thd_grp3	3188	6/30/1998	6/30/2015	2.67	-9.39	12.06	0.193161
thd_1227	thd_grp3	3188	6/30/1999	6/30/2015	4.01	-9.59	13.60	0.193161
thd_1228	thd_grp3	3188	6/30/2000	6/30/2015	-4.77	-9.82	5.05	0.193161
thd_1229	thd_grp3	3188	6/30/2001	6/30/2015	-4.18	-10.23	6.05	0.193161
thd_1230	thd_grp3	3188	6/30/2002	6/30/2015	-5.32	-10.33	5.01	0.193161
thd_1231	thd_grp3	3188	6/30/2003	6/30/2015	-0.56	-9.89	9.33	0.193161
thd_1232	thd_grp3	3188	6/30/2005	6/30/2015	2.06	-9.10	11.16	0.193161
thd_1233	thd_grp3	3188	6/30/2006	6/30/2015	-1.28	-8.81	7.53	0.193161
thd_1234	thd_grp3	3188	6/30/2007	6/30/2015	-4.5	-8.61	4.11	0.193161
thd_1235	thd_grp3	3188	6/30/2008	6/30/2015	-3.09	-7.91	4.82	0.193161
thd_1236	thd_grp3	3188	6/30/2010	6/30/2015	-0.62	-5.57	4.95	0.193161

Table A-5. Temporal Head Difference (THD) Targets.

Target Name	Target Group	NWF ID	Date 1	Date 2	Measured Groundwater Elevation Difference (ft)	Modelled Groundwater Elevation Difference (ft)	Residual (ft)	Target Weight
thd_1237	thd_grp3	3188	6/30/2011	6/30/2015	-4.79	-4.31	-0.48	0.193161
thd_1238	thd_grp3	3188	6/30/2012	6/30/2015	-5.74	-3.25	-2.49	0.193161
thd_1239	thd_grp3	3188	6/30/2013	6/30/2015	-2.36	-2.00	-0.36	0.193161
thd_1240	thd_grp3	3188	6/30/2014	6/30/2015	4.35	-0.84	5.19	0.193161
thd_1241	thd_grp3	3188	6/30/2015	6/30/2015	0	0.00	0.00	0.193161
thd_1242	thd_grp3	3209	6/30/1948	6/30/2015	91.28	87.63	3.65	0.193161
thd_1243	thd_grp3	3209	6/30/1949	6/30/2015	91.38	86.12	5.26	0.193161
thd_1244	thd_grp3	3209	6/30/1950	6/30/2015	89.29	84.54	4.75	0.193161
thd_1245	thd_grp3	3209	6/30/1951	6/30/2015	91.21	82.66	8.55	0.193161
thd_1246	thd_grp3	3209	6/30/1952	6/30/2015	88.54	81.04	7.50	0.193161
thd_1247	thd_grp3	3209	6/30/1953	6/30/2015	87.13	79.46	7.67	0.193161
thd_1248	thd_grp3	3209	6/30/1954	6/30/2015	83.03	77.91	5.12	0.193161
thd_1249	thd_grp3	3209	6/30/1955	6/30/2015	75.38	76.16	-0.78	0.193161
thd_1250	thd_grp3	3209	6/30/1956	6/30/2015	73.52	74.30	-0.78	0.193161
thd_1251	thd_grp3	3209	6/30/1957	6/30/2015	67.66	72.37	-4.71	0.193161
thd_1252	thd_grp3	3209	6/30/1958	6/30/2015	65.77	69.69	-3.92	0.193161
thd_1253	thd_grp3	3209	6/30/1959	6/30/2015	64.41	67.03	-2.62	0.193161
thd_1254	thd_grp3	3209	6/30/1960	6/30/2015	62.33	64.58	-2.25	0.193161
thd_1255	thd_grp3	3209	6/30/1961	6/30/2015	59.43	61.96	-2.53	0.193161
thd_1256	thd_grp3	3209	6/30/1962	6/30/2015	54.15	58.97	-4.82	0.193161
thd_1257	thd_grp3	3209	6/30/1963	6/30/2015	55.24	56.10	-0.86	0.193161
thd_1258	thd_grp3	3209	6/30/1964	6/30/2015	58.73	53.09	5.64	0.193161
thd_1259	thd_grp3	3209	6/30/1965	6/30/2015	57.14	50.34	6.80	0.193161
thd_1260	thd_grp3	3209	6/30/1966	6/30/2015	54.43	47.37	7.06	0.193161
thd_1261	thd_grp3	3209	6/30/1967	6/30/2015	53.67	44.05	9.62	0.193161
thd_1262	thd_grp3	3209	6/30/1978	6/30/2015	28.28	21.40	6.88	0.193161
thd_1263	thd_grp3	3209	6/30/1979	6/30/2015	20.04	19.85	0.19	0.193161
thd_1264	thd_grp3	3209	6/30/1980	6/30/2015	18.6	18.34	0.26	0.193161
thd_1265	thd_grp3	3209	6/30/1981	6/30/2015	16.91	16.38	0.53	0.193161
thd_1266	thd_grp3	3209	6/30/1982	6/30/2015	15.52	13.28	2.24	0.193161
thd_1267	thd_grp3	3209	6/30/1983	6/30/2015	12.75	9.56	3.19	0.193161

Table A-5. Temporal Head Difference (THD) Targets.

Target Name	Target Group	NWF ID	Date 1	Date 2	Measured Groundwater Elevation Difference (ft)	Modelled Groundwater Elevation Difference (ft)	Residual (ft)	Target Weight
thd_1268	thd_grp3	3209	6/30/1984	6/30/2015	6.24	4.93	1.31	0.193161
thd_1269	thd_grp3	3209	6/30/1985	6/30/2015	0.97	-0.32	1.29	0.193161
thd_1270	thd_grp3	3209	6/30/1986	6/30/2015	-6.08	-5.15	-0.93	0.193161
thd_1271	thd_grp3	3209	6/30/1987	6/30/2015	-9.54	-9.22	-0.32	0.193161
thd_1272	thd_grp3	3209	6/30/1988	6/30/2015	-13.4	-13.76	0.36	0.193161
thd_1273	thd_grp3	3209	6/30/1989	6/30/2015	-10.12	-16.21	6.09	0.193161
thd_1274	thd_grp3	3209	6/30/1990	6/30/2015	-14.03	-19.10	5.07	0.193161
thd_1275	thd_grp3	3209	6/30/1991	6/30/2015	-12.57	-19.68	7.11	0.193161
thd_1276	thd_grp3	3209	6/30/1992	6/30/2015	-18.11	-20.48	2.37	0.193161
thd_1277	thd_grp3	3209	6/30/1993	6/30/2015	-11.76	-21.78	10.02	0.193161
thd_1278	thd_grp3	3209	6/30/1994	6/30/2015	-22.68	-21.80	-0.88	0.193161
thd_1279	thd_grp3	3209	6/30/1995	6/30/2015	-21.46	-21.50	0.04	0.193161
thd_1280	thd_grp3	3209	6/30/1996	6/30/2015	-18.17	-22.25	4.08	0.193161
thd_1281	thd_grp3	3209	6/30/1997	6/30/2015	-24.51	-22.54	-1.97	0.193161
thd_1282	thd_grp3	3209	6/30/1998	6/30/2015	-22.57	-22.81	0.24	0.193161
thd_1283	thd_grp3	3209	6/30/1999	6/30/2015	-17.12	-23.08	5.96	0.193161
thd_1284	thd_grp3	3209	6/30/2000	6/30/2015	-29.72	-24.44	-5.28	0.193161
thd_1285	thd_grp3	3209	6/30/2001	6/30/2015	-23.28	-25.01	1.73	0.193161
thd_1286	thd_grp3	3209	6/30/2002	6/30/2015	-29.72	-22.74	-6.98	0.193161
thd_1287	thd_grp3	3209	6/30/2003	6/30/2015	-20.07	-19.82	-0.25	0.193161
thd_1288	thd_grp3	3209	6/30/2005	6/30/2015	-18.91	-20.01	1.10	0.193161
thd_1289	thd_grp3	3209	6/30/2006	6/30/2015	-18.93	-20.08	1.15	0.193161
thd_1290	thd_grp3	3209	6/30/2007	6/30/2015	-18.93	-18.13	-0.80	0.193161
thd_1291	thd_grp3	3209	6/30/2008	6/30/2015	-11.08	-14.60	3.52	0.193161
thd_1292	thd_grp3	3209	6/30/2009	6/30/2015	-7.83	-11.31	3.48	0.193161
thd_1293	thd_grp3	3209	6/30/2010	6/30/2015	-3.64	-8.17	4.53	0.193161
thd_1294	thd_grp3	3209	6/30/2011	6/30/2015	-4.23	-6.71	2.48	0.193161
thd_1295	thd_grp3	3209	6/30/2012	6/30/2015	-1.37	-4.50	3.13	0.193161
thd_1296	thd_grp3	3209	6/30/2013	6/30/2015	-0.13	-1.56	1.43	0.193161
thd_1297	thd_grp3	3209	6/30/2014	6/30/2015	2.96	-0.70	3.66	0.193161
thd_1298	thd_grp3	3209	6/30/2015	6/30/2015	0	0.00	0.00	0.193161

Table A-5. Temporal Head Difference (THD) Targets.

Target Name	Target Group	NWF ID	Date 1	Date 2	Measured Groundwater Elevation Difference (ft)	Modelled Groundwater Elevation Difference (ft)	Residual (ft)	Target Weight
thd_1299	thd_grp3	3210	6/30/1980	6/30/2015	18.96	17.65	1.31	0.193161
thd_1300	thd_grp3	3210	6/30/1981	6/30/2015	17.03	15.71	1.32	0.193161
thd_1301	thd_grp3	3210	6/30/1982	6/30/2015	10.5	12.62	-2.12	0.193161
thd_1302	thd_grp3	3210	6/30/1983	6/30/2015	11.11	8.97	2.14	0.193161
thd_1303	thd_grp3	3210	6/30/1984	6/30/2015	4.84	4.40	0.44	0.193161
thd_1304	thd_grp3	3210	6/30/1985	6/30/2015	-0.16	-0.79	0.63	0.193161
thd_1305	thd_grp3	3210	6/30/1986	6/30/2015	-5.78	-5.57	-0.21	0.193161
thd_1306	thd_grp3	3210	6/30/1987	6/30/2015	-7.86	-9.61	1.75	0.193161
thd_1307	thd_grp3	3210	6/30/1988	6/30/2015	-11.72	-14.07	2.35	0.193161
thd_1308	thd_grp3	3210	6/30/1989	6/30/2015	-13.48	-16.51	3.03	0.193161
thd_1309	thd_grp3	3210	6/30/1990	6/30/2015	-17.59	-19.33	1.74	0.193161
thd_1310	thd_grp3	3210	6/30/1991	6/30/2015	-14.96	-20.04	5.08	0.193161
thd_1311	thd_grp3	3210	6/30/1992	6/30/2015	-18.23	-20.73	2.50	0.193161
thd_1312	thd_grp3	3210	6/30/1993	6/30/2015	-14.47	-21.92	7.45	0.193161
thd_1313	thd_grp3	3210	6/30/1994	6/30/2015	-19.36	-21.95	2.59	0.193161
thd_1314	thd_grp3	3210	6/30/1996	6/30/2015	-21.79	-22.29	0.50	0.193161
thd_1315	thd_grp3	3210	6/30/1997	6/30/2015	-31.81	-22.52	-9.29	0.193161
thd_1316	thd_grp3	3210	6/30/1998	6/30/2015	-25.14	-22.72	-2.42	0.193161
thd_1317	thd_grp3	3210	6/30/1999	6/30/2015	-19.92	-22.99	3.07	0.193161
thd_1318	thd_grp3	3210	6/30/2000	6/30/2015	-31.28	-24.25	-7.03	0.193161
thd_1319	thd_grp3	3210	6/30/2002	6/30/2015	-27.03	-22.59	-4.44	0.193161
thd_1320	thd_grp3	3210	6/30/2003	6/30/2015	-22.73	-19.67	-3.06	0.193161
thd_1321	thd_grp3	3210	6/30/2005	6/30/2015	-21.72	-19.88	-1.84	0.193161
thd_1322	thd_grp3	3210	6/30/2006	6/30/2015	-21.67	-19.89	-1.78	0.193161
thd_1323	thd_grp3	3210	6/30/2007	6/30/2015	-18.98	-18.05	-0.93	0.193161
thd_1324	thd_grp3	3210	6/30/2008	6/30/2015	-13.61	-14.56	0.95	0.193161
thd_1325	thd_grp3	3210	6/30/2009	6/30/2015	-10.96	-11.27	0.31	0.193161
thd_1326	thd_grp3	3210	6/30/2010	6/30/2015	-6.72	-8.12	1.40	0.193161
thd_1327	thd_grp3	3210	6/30/2011	6/30/2015	-7.67	-6.61	-1.06	0.193161
thd_1328	thd_grp3	3210	6/30/2012	6/30/2015	-3.8	-4.46	0.66	0.193161
thd_1329	thd_grp3	3210	6/30/2013	6/30/2015	-1.41	-1.56	0.15	0.193161

Table A-5. Temporal Head Difference (THD) Targets.

Target Name	Target Group	NWF ID	Date 1	Date 2	Measured Groundwater Elevation Difference (ft)	Modelled Groundwater Elevation Difference (ft)	Residual (ft)	Target Weight
thd_1330	thd_grp3	3210	6/30/2014	6/30/2015	-1.00E-02	-0.68	0.67	0.193161
thd_1331	thd_grp3	3210	6/30/2015	6/30/2015	0	0.00	0.00	0.193161
thd_1348	thd_grp2	3293	6/30/1968	6/30/2015	5.1	15.42	-10.32	0.227329
thd_1349	thd_grp2	3293	6/30/1969	6/30/2015	5.71	15.20	-9.49	0.227329
thd_1350	thd_grp2	3293	6/30/1970	6/30/2015	7.6	15.01	-7.41	0.227329
thd_1351	thd_grp2	3293	6/30/1976	6/30/2015	12.69	13.69	-1.00	0.227329
thd_1352	thd_grp2	3293	6/30/1977	6/30/2015	10.77	13.48	-2.71	0.227329
thd_1353	thd_grp2	3293	6/30/1978	6/30/2015	12.02	13.26	-1.24	0.227329
thd_1354	thd_grp2	3293	6/30/1979	6/30/2015	11.98	13.06	-1.08	0.227329
thd_1355	thd_grp2	3293	6/30/1980	6/30/2015	13.83	12.85	0.98	0.227329
thd_1356	thd_grp2	3293	6/30/1981	6/30/2015	11.18	12.61	-1.43	0.227329
thd_1357	thd_grp2	3293	6/30/1982	6/30/2015	12.85	12.28	0.57	0.227329
thd_1358	thd_grp2	3293	6/30/1983	6/30/2015	13.44	11.89	1.55	0.227329
thd_1359	thd_grp2	3293	6/30/1984	6/30/2015	9.72	11.45	-1.73	0.227329
thd_1360	thd_grp2	3293	6/30/1985	6/30/2015	11.17	10.97	0.20	0.227329
thd_1361	thd_grp2	3293	6/30/1986	6/30/2015	11.13	10.39	0.74	0.227329
thd_1362	thd_grp2	3293	6/30/1987	6/30/2015	11.32	9.80	1.52	0.227329
thd_1363	thd_grp2	3293	6/30/1988	6/30/2015	11.37	9.28	2.09	0.227329
thd_1364	thd_grp2	3293	6/30/1989	6/30/2015	11.44	8.89	2.55	0.227329
thd_1365	thd_grp2	3293	6/30/1990	6/30/2015	10.95	8.56	2.39	0.227329
thd_1366	thd_grp2	3293	6/30/1991	6/30/2015	10.27	8.15	2.12	0.227329
thd_1367	thd_grp2	3293	6/30/1992	6/30/2015	10.09	7.95	2.14	0.227329
thd_1368	thd_grp2	3293	6/30/1995	6/30/2015	7.69	7.05	0.64	0.227329
thd_1369	thd_grp2	3293	6/30/1996	6/30/2015	7.94	6.87	1.07	0.227329
thd_1370	thd_grp2	3293	6/30/1998	6/30/2015	8.91	6.01	2.90	0.227329
thd_1371	thd_grp2	3293	6/30/2000	6/30/2015	4.91	4.57	0.34	0.227329
thd_1372	thd_grp2	3293	6/30/2001	6/30/2015	5	3.90	1.10	0.227329
thd_1373	thd_grp2	3293	6/30/2003	6/30/2015	3.61	2.39	1.22	0.227329
thd_1374	thd_grp2	3293	6/30/2004	6/30/2015	2.7	2.23	0.47	0.227329
thd_1375	thd_grp2	3293	6/30/2005	6/30/2015	2.1	1.08	1.02	0.227329
thd_1376	thd_grp2	3293	6/30/2006	6/30/2015	6.00E-02	0.09	-0.03	0.227329

Table A-5. Temporal Head Difference (THD) Targets.

Target Name	Target Group	NWF ID	Date 1	Date 2	Measured Groundwater Elevation Difference (ft)	Modelled Groundwater Elevation Difference (ft)	Residual (ft)	Target Weight
thd_1377	thd_grp2	3293	6/30/2007	6/30/2015	-2.08	-0.65	-1.43	0.227329
thd_1378	thd_grp2	3293	6/30/2008	6/30/2015	-0.1	-0.62	0.52	0.227329
thd_1379	thd_grp2	3293	6/30/2010	6/30/2015	1.92	0.07	1.85	0.227329
thd_1380	thd_grp2	3293	6/30/2011	6/30/2015	0.48	-0.09	0.57	0.227329
thd_1381	thd_grp2	3293	6/30/2012	6/30/2015	2.14	0.12	2.02	0.227329
thd_1382	thd_grp2	3293	6/30/2013	6/30/2015	2.54	0.43	2.11	0.227329
thd_1383	thd_grp2	3293	6/30/2014	6/30/2015	2.61	0.51	2.10	0.227329
thd_1384	thd_grp2	3293	6/30/2015	6/30/2015	0	0.00	0.00	0.227329
thd_1434	thd_grp3	3555	6/30/1974	6/30/2015	9.94	16.90	-6.96	0.193161
thd_1435	thd_grp3	3555	6/30/1983	6/30/2015	13.23	17.31	-4.08	0.193161
thd_1436	thd_grp3	3555	6/30/1984	6/30/2015	10.46	14.58	-4.12	0.193161
thd_1437	thd_grp3	3555	6/30/1985	6/30/2015	8	12.11	-4.11	0.193161
thd_1438	thd_grp3	3555	6/30/1986	6/30/2015	4.42	9.28	-4.86	0.193161
thd_1439	thd_grp3	3555	6/30/1987	6/30/2015	1.38	6.10	-4.72	0.193161
thd_1440	thd_grp3	3555	6/30/1988	6/30/2015	-0.75	3.15	-3.90	0.193161
thd_1441	thd_grp3	3555	6/30/1990	6/30/2015	-3.78	-0.69	-3.09	0.193161
thd_1442	thd_grp3	3555	6/30/1991	6/30/2015	-4.14	-1.78	-2.36	0.193161
thd_1443	thd_grp3	3555	6/30/1992	6/30/2015	-4.82	-2.56	-2.26	0.193161
thd_1444	thd_grp3	3555	6/30/1993	6/30/2015	-5.34	-3.21	-2.13	0.193161
thd_1445	thd_grp3	3555	6/30/1994	6/30/2015	-5.8	-3.50	-2.30	0.193161
thd_1446	thd_grp3	3555	6/30/1995	6/30/2015	-5.65	-3.31	-2.34	0.193161
thd_1447	thd_grp3	3555	6/30/1996	6/30/2015	-5.83	-3.00	-2.83	0.193161
thd_1448	thd_grp3	3555	6/30/1997	6/30/2015	-4.3	-2.28	-2.02	0.193161
thd_1449	thd_grp3	3555	6/30/1998	6/30/2015	-3.62	-0.96	-2.66	0.193161
thd_1450	thd_grp3	3555	6/30/1999	6/30/2015	-4.73	-0.60	-4.13	0.193161
thd_1451	thd_grp3	3555	6/30/2000	6/30/2015	-6.88	-1.35	-5.53	0.193161
thd_1452	thd_grp3	3555	6/30/2001	6/30/2015	-9.21	-2.31	-6.90	0.193161
thd_1453	thd_grp3	3555	6/30/2002	6/30/2015	-10.49	-3.54	-6.95	0.193161
thd_1454	thd_grp3	3555	6/30/2003	6/30/2015	-9.53	-3.77	-5.76	0.193161
thd_1455	thd_grp3	3555	6/30/2007	6/30/2015	-9.37	-3.49	-5.88	0.193161
thd_1456	thd_grp3	3555	6/30/2008	6/30/2015	-8.84	-4.27	-4.57	0.193161

Table A-5. Temporal Head Difference (THD) Targets.

Target Name	Target Group	NWF ID	Date 1	Date 2	Measured Groundwater Elevation Difference (ft)	Modelled Groundwater Elevation Difference (ft)	Residual (ft)	Target Weight
thd_1457	thd_grp3	3555	6/30/2010	6/30/2015	-6.91	-5.38	-1.53	0.193161
thd_1458	thd_grp3	3555	6/30/2011	6/30/2015	-5.86	-4.55	-1.31	0.193161
thd_1459	thd_grp3	3555	6/30/2012	6/30/2015	-4.91	-3.83	-1.08	0.193161
thd_1460	thd_grp3	3555	6/30/2013	6/30/2015	-3.72	-2.46	-1.26	0.193161
thd_1461	thd_grp3	3555	6/30/2014	6/30/2015	-0.93	-1.10	0.17	0.193161
thd_1462	thd_grp3	3555	6/30/2015	6/30/2015	0	0.00	0.00	0.193161
thd_1463	thd_grp3	3642	6/30/1978	6/30/2015	32.66	32.22	0.44	0.193161
thd_1464	thd_grp3	3642	6/30/1979	6/30/2015	31.35	31.18	0.17	0.193161
thd_1465	thd_grp3	3642	6/30/1980	6/30/2015	30.01	30.08	-0.07	0.193161
thd_1466	thd_grp3	3642	6/30/1981	6/30/2015	28.45	28.75	-0.30	0.193161
thd_1467	thd_grp3	3642	6/30/1982	6/30/2015	26.7	26.32	0.38	0.193161
thd_1468	thd_grp3	3642	6/30/1983	6/30/2015	25.25	23.35	1.90	0.193161
thd_1469	thd_grp3	3642	6/30/1984	6/30/2015	22.12	19.83	2.29	0.193161
thd_1470	thd_grp3	3642	6/30/1985	6/30/2015	17.88	15.68	2.20	0.193161
thd_1471	thd_grp3	3642	6/30/1986	6/30/2015	14.71	11.22	3.49	0.193161
thd_1472	thd_grp3	3642	6/30/1987	6/30/2015	9.58	7.12	2.46	0.193161
thd_1473	thd_grp3	3642	6/30/1988	6/30/2015	7.47	3.62	3.85	0.193161
thd_1474	thd_grp3	3642	6/30/1989	6/30/2015	5.2	0.78	4.42	0.193161
thd_1475	thd_grp3	3642	6/30/1990	6/30/2015	4.18	-1.76	5.94	0.193161
thd_1476	thd_grp3	3642	6/30/1991	6/30/2015	1.93	-3.46	5.39	0.193161
thd_1477	thd_grp3	3642	6/30/1992	6/30/2015	-0.87	-4.32	3.45	0.193161
thd_1478	thd_grp3	3642	6/30/1993	6/30/2015	0.24	-6.15	6.39	0.193161
thd_1479	thd_grp3	3642	6/30/1994	6/30/2015	-5.48	-7.85	2.37	0.193161
thd_1480	thd_grp3	3642	6/30/1995	6/30/2015	-6.84	-8.62	1.78	0.193161
thd_1481	thd_grp3	3642	6/30/1996	6/30/2015	-8.99	-9.99	1.00	0.193161
thd_1482	thd_grp3	3642	6/30/1997	6/30/2015	-13.69	-11.29	-2.40	0.193161
thd_1483	thd_grp3	3642	6/30/1998	6/30/2015	-13.56	-12.46	-1.10	0.193161
thd_1484	thd_grp3	3642	6/30/1999	6/30/2015	-11.9	-13.43	1.53	0.193161
thd_1485	thd_grp3	3642	6/30/2000	6/30/2015	-18.26	-14.82	-3.44	0.193161
thd_1486	thd_grp3	3642	6/30/2001	6/30/2015	-16.21	-15.93	-0.28	0.193161
thd_1487	thd_grp3	3642	6/30/2002	6/30/2015	-16.79	-15.67	-1.12	0.193161

Table A-5. Temporal Head Difference (THD) Targets.

Target Name	Target Group	NWF ID	Date 1	Date 2	Measured Groundwater Elevation Difference (ft)	Modelled Groundwater Elevation Difference (ft)	Residual (ft)	Target Weight
thd_1488	thd_grp3	3642	6/30/2003	6/30/2015	-15.96	-14.56	-1.40	0.193161
thd_1489	thd_grp3	3642	6/30/2005	6/30/2015	-12.61	-13.52	0.91	0.193161
thd_1490	thd_grp3	3642	6/30/2006	6/30/2015	-12.76	-13.54	0.78	0.193161
thd_1491	thd_grp3	3642	6/30/2008	6/30/2015	-10.77	-12.25	1.48	0.193161
thd_1492	thd_grp3	3642	6/30/2010	6/30/2015	-5.23	-7.80	2.57	0.193161
thd_1493	thd_grp3	3642	6/30/2011	6/30/2015	-6.18	-6.71	0.53	0.193161
thd_1494	thd_grp3	3642	6/30/2012	6/30/2015	-4.03	-5.16	1.13	0.193161
thd_1495	thd_grp3	3642	6/30/2013	6/30/2015	-0.4	-2.08	1.68	0.193161
thd_1496	thd_grp3	3642	6/30/2014	6/30/2015	0.64	-0.79	1.43	0.193161
thd_1497	thd_grp3	3642	6/30/2015	6/30/2015	0	0.00	0.00	0.193161
thd_1498	thd_grp3	3771	6/30/1975	6/30/2015	39.45	39.23	0.22	0.193161
thd_1499	thd_grp3	3771	6/30/1976	6/30/2015	37.65	37.99	-0.34	0.193161
thd_1500	thd_grp3	3771	6/30/1977	6/30/2015	34.64	36.72	-2.08	0.193161
thd_1501	thd_grp3	3771	6/30/1978	6/30/2015	34.3	35.41	-1.11	0.193161
thd_1502	thd_grp3	3771	6/30/1979	6/30/2015	32.84	34.22	-1.38	0.193161
thd_1503	thd_grp3	3771	6/30/1980	6/30/2015	31.45	32.99	-1.54	0.193161
thd_1504	thd_grp3	3771	6/30/1981	6/30/2015	29.39	31.49	-2.10	0.193161
thd_1505	thd_grp3	3771	6/30/1982	6/30/2015	27.17	28.96	-1.79	0.193161
thd_1506	thd_grp3	3771	6/30/1983	6/30/2015	26.08	26.11	-0.03	0.193161
thd_1507	thd_grp3	3771	6/30/1984	6/30/2015	23.49	23.05	0.44	0.193161
thd_1508	thd_grp3	3771	6/30/1985	6/30/2015	20.03	19.77	0.26	0.193161
thd_1509	thd_grp3	3771	6/30/1986	6/30/2015	16.58	16.17	0.41	0.193161
thd_1510	thd_grp3	3771	6/30/1987	6/30/2015	13.62	12.29	1.33	0.193161
thd_1511	thd_grp3	3771	6/30/1988	6/30/2015	10.62	8.83	1.79	0.193161
thd_1512	thd_grp3	3771	6/30/1989	6/30/2015	9.33	6.09	3.24	0.193161
thd_1513	thd_grp3	3771	6/30/1990	6/30/2015	8.33	3.84	4.49	0.193161
thd_1514	thd_grp3	3771	6/30/1998	6/30/2015	-5.59	-10.81	5.22	0.193161
thd_1515	thd_grp3	3771	6/30/2000	6/30/2015	-9.15	-15.13	5.98	0.193161
thd_1516	thd_grp3	3771	6/30/2001	6/30/2015	-10.95	-16.75	5.80	0.193161
thd_1517	thd_grp3	3771	6/30/2003	6/30/2015	-11.2	-18.62	7.42	0.193161
thd_1518	thd_grp3	3771	6/30/2004	6/30/2015	-9.92	-18.73	8.81	0.193161

Table A-5. Temporal Head Difference (THD) Targets.

Target Name	Target Group	NWF ID	Date 1	Date 2	Measured Groundwater Elevation Difference (ft)	Modelled Groundwater Elevation Difference (ft)	Residual (ft)	Target Weight
thd_1519	thd_grp3	3771	6/30/2005	6/30/2015	-7.49	-16.80	9.31	0.193161
thd_1520	thd_grp3	3771	6/30/2006	6/30/2015	-6.85	-14.82	7.97	0.193161
thd_1521	thd_grp3	3771	6/30/2007	6/30/2015	-8.2	-13.43	5.23	0.193161
thd_1522	thd_grp3	3771	6/30/2008	6/30/2015	-6.46	-11.84	5.38	0.193161
thd_1523	thd_grp3	3771	6/30/2009	6/30/2015	-4.76	-10.12	5.36	0.193161
thd_1524	thd_grp3	3771	6/30/2010	6/30/2015	-2.17	-8.09	5.92	0.193161
thd_1525	thd_grp3	3771	6/30/2011	6/30/2015	-1.74	-6.35	4.61	0.193161
thd_1526	thd_grp3	3771	6/30/2012	6/30/2015	-0.37	-4.36	3.99	0.193161
thd_1527	thd_grp3	3771	6/30/2013	6/30/2015	1.75	-2.27	4.02	0.193161
thd_1528	thd_grp3	3771	6/30/2014	6/30/2015	1.24	-0.45	1.69	0.193161
thd_1529	thd_grp3	3771	6/30/2015	6/30/2015	0	0.00	0.00	0.193161
thd_1530	thd_grp2	3815	6/30/1942	6/30/2015	84.12	82.26	1.86	0.227329
thd_1531	thd_grp2	3815	6/30/1978	6/30/2015	30.34	27.93	2.41	0.227329
thd_1532	thd_grp2	3815	6/30/1986	6/30/2015	-2.38	8.69	-11.07	0.227329
thd_1533	thd_grp2	3815	6/30/1991	6/30/2015	-2.96	-6.03	3.07	0.227329
thd_1534	thd_grp2	3815	6/30/2001	6/30/2015	-23.54	-15.60	-7.94	0.227329
thd_1535	thd_grp2	3815	6/30/2002	6/30/2015	-24.83	-14.82	-10.01	0.227329
thd_1536	thd_grp2	3815	6/30/2003	6/30/2015	-12.27	-12.99	0.72	0.227329
thd_1537	thd_grp2	3815	6/30/2005	6/30/2015	-11.56	-13.49	1.93	0.227329
thd_1538	thd_grp2	3815	6/30/2006	6/30/2015	-17.49	-13.98	-3.51	0.227329
thd_1539	thd_grp2	3815	6/30/2007	6/30/2015	-13.21	-14.26	1.05	0.227329
thd_1540	thd_grp2	3815	6/30/2008	6/30/2015	-11.12	-12.81	1.69	0.227329
thd_1541	thd_grp2	3815	6/30/2010	6/30/2015	-6.94	-7.94	1.00	0.227329
thd_1542	thd_grp2	3815	6/30/2011	6/30/2015	-9.33	-6.50	-2.83	0.227329
thd_1543	thd_grp2	3815	6/30/2012	6/30/2015	-4.28	-5.00	0.72	0.227329
thd_1544	thd_grp2	3815	6/30/2013	6/30/2015	-1.32	-2.46	1.14	0.227329
thd_1545	thd_grp2	3815	6/30/2014	6/30/2015	1.12	-0.87	1.99	0.227329
thd_1546	thd_grp2	3815	6/30/2015	6/30/2015	0	0.00	0.00	0.227329
thd_1547	thd_grp2	3877	6/30/1968	6/30/2015	-1.7	3.00	-4.70	0.227329
thd_1548	thd_grp2	3877	6/30/1969	6/30/2015	-1.01	2.98	-3.99	0.227329
thd_1549	thd_grp2	3877	6/30/1970	6/30/2015	0.94	2.96	-2.02	0.227329

Table A-5. Temporal Head Difference (THD) Targets.

Target Name	Target Group	NWF ID	Date 1	Date 2	Measured Groundwater Elevation Difference (ft)	Modelled Groundwater Elevation Difference (ft)	Residual (ft)	Target Weight
thd_1550	thd_grp2	3877	6/30/1976	6/30/2015	7.08	2.83	4.25	0.227329
thd_1551	thd_grp2	3877	6/30/1977	6/30/2015	1.84	2.81	-0.97	0.227329
thd_1552	thd_grp2	3877	6/30/1978	6/30/2015	3.45	2.79	0.66	0.227329
thd_1553	thd_grp2	3877	6/30/1979	6/30/2015	3.2	2.77	0.43	0.227329
thd_1554	thd_grp2	3877	6/30/1980	6/30/2015	1.04	2.75	-1.71	0.227329
thd_1555	thd_grp2	3877	6/30/1981	6/30/2015	-0.2	2.72	-2.92	0.227329
thd_1556	thd_grp2	3877	6/30/1982	6/30/2015	2.28	2.69	-0.41	0.227329
thd_1557	thd_grp2	3877	6/30/1984	6/30/2015	0.48	2.61	-2.13	0.227329
thd_1558	thd_grp2	3877	6/30/1985	6/30/2015	2.23	2.56	-0.33	0.227329
thd_1559	thd_grp2	3877	6/30/1986	6/30/2015	0.92	2.50	-1.58	0.227329
thd_1560	thd_grp2	3877	6/30/1987	6/30/2015	1.82	2.44	-0.62	0.227329
thd_1561	thd_grp2	3877	6/30/1988	6/30/2015	1.98	2.39	-0.41	0.227329
thd_1562	thd_grp2	3877	6/30/1989	6/30/2015	3.02	2.36	0.66	0.227329
thd_1563	thd_grp2	3877	6/30/1990	6/30/2015	4.6	2.33	2.27	0.227329
thd_1564	thd_grp2	3877	6/30/2001	6/30/2015	0.12	1.84	-1.72	0.227329
thd_1565	thd_grp2	3877	6/30/2002	6/30/2015	-1.11	1.65	-2.76	0.227329
thd_1566	thd_grp2	3877	6/30/2003	6/30/2015	2.59	1.61	0.98	0.227329
thd_1567	thd_grp2	3877	6/30/2004	6/30/2015	1.51	1.57	-0.06	0.227329
thd_1568	thd_grp2	3877	6/30/2005	6/30/2015	2.4	1.30	1.10	0.227329
thd_1569	thd_grp2	3877	6/30/2006	6/30/2015	-0.7	1.14	-1.84	0.227329
thd_1570	thd_grp2	3877	6/30/2007	6/30/2015	-2.06	1.03	-3.09	0.227329
thd_1571	thd_grp2	3877	6/30/2008	6/30/2015	-4.00E-02	0.97	-1.01	0.227329
thd_1572	thd_grp2	3877	6/30/2010	6/30/2015	0.59	0.50	0.09	0.227329
thd_1573	thd_grp2	3877	6/30/2011	6/30/2015	-2.79	0.55	-3.34	0.227329
thd_1574	thd_grp2	3877	6/30/2012	6/30/2015	-2.3	0.41	-2.71	0.227329
thd_1575	thd_grp2	3877	6/30/2013	6/30/2015	6.00E-02	0.43	-0.37	0.227329
thd_1576	thd_grp2	3877	6/30/2014	6/30/2015	0.58	0.22	0.36	0.227329
thd_1577	thd_grp2	3877	6/30/2015	6/30/2015	0	0.00	0.00	0.227329
thd_1578	thd_grp3	3923	6/30/1942	6/30/2015	84.04	93.51	-9.47	0.193161
thd_1579	thd_grp3	3923	6/30/1947	6/30/2015	84.19	86.01	-1.82	0.193161
thd_1580	thd_grp3	3923	6/30/1948	6/30/2015	81.28	84.66	-3.38	0.193161

Table A-5. Temporal Head Difference (THD) Targets.

Target Name	Target Group	NWF ID	Date 1	Date 2	Measured Groundwater Elevation Difference (ft)	Modelled Groundwater Elevation Difference (ft)	Residual (ft)	Target Weight
thd_1581	thd_grp3	3923	6/30/1949	6/30/2015	81.39	83.39	-2.00	0.193161
thd_1582	thd_grp3	3923	6/30/1950	6/30/2015	81.21	82.12	-0.91	0.193161
thd_1583	thd_grp3	3923	6/30/1951	6/30/2015	80.42	80.77	-0.35	0.193161
thd_1584	thd_grp3	3923	6/30/1952	6/30/2015	78.83	79.46	-0.63	0.193161
thd_1585	thd_grp3	3923	6/30/1953	6/30/2015	76.97	78.18	-1.21	0.193161
thd_1586	thd_grp3	3923	6/30/1954	6/30/2015	75.75	76.92	-1.17	0.193161
thd_1587	thd_grp3	3923	6/30/1955	6/30/2015	72.2	75.62	-3.42	0.193161
thd_1588	thd_grp3	3923	6/30/1956	6/30/2015	69.54	74.14	-4.60	0.193161
thd_1589	thd_grp3	3923	6/30/1957	6/30/2015	67.05	72.64	-5.59	0.193161
thd_1590	thd_grp3	3923	6/30/1958	6/30/2015	66.13	70.75	-4.62	0.193161
thd_1591	thd_grp3	3923	6/30/1959	6/30/2015	65.14	68.65	-3.51	0.193161
thd_1592	thd_grp3	3923	6/30/1960	6/30/2015	63.75	66.57	-2.82	0.193161
thd_1593	thd_grp3	3923	6/30/1961	6/30/2015	61.29	64.46	-3.17	0.193161
thd_1594	thd_grp3	3923	6/30/1962	6/30/2015	58.97	62.14	-3.17	0.193161
thd_1595	thd_grp3	3923	6/30/1963	6/30/2015	56.77	59.83	-3.06	0.193161
thd_1596	thd_grp3	3923	6/30/1964	6/30/2015	55.62	57.39	-1.77	0.193161
thd_1597	thd_grp3	3923	6/30/1965	6/30/2015	54.69	55.11	-0.42	0.193161
thd_1598	thd_grp3	3923	6/30/1966	6/30/2015	52.5	52.89	-0.39	0.193161
thd_1599	thd_grp3	3923	6/30/1967	6/30/2015	50.81	50.42	0.39	0.193161
thd_1600	thd_grp3	3923	6/30/1968	6/30/2015	47.33	47.95	-0.62	0.193161
thd_1601	thd_grp3	3923	6/30/1969	6/30/2015	44.07	46.05	-1.98	0.193161
thd_1602	thd_grp3	3923	6/30/1970	6/30/2015	41.93	44.82	-2.89	0.193161
thd_1603	thd_grp3	3923	6/30/1971	6/30/2015	39.6	43.16	-3.56	0.193161
thd_1604	thd_grp3	3923	6/30/1972	6/30/2015	35.65	40.22	-4.57	0.193161
thd_1605	thd_grp3	3923	6/30/1973	6/30/2015	34.5	37.32	-2.82	0.193161
thd_1606	thd_grp3	3923	6/30/1974	6/30/2015	33.54	35.59	-2.05	0.193161
thd_1607	thd_grp3	3923	6/30/1975	6/30/2015	33.04	34.33	-1.29	0.193161
thd_1608	thd_grp3	3923	6/30/1976	6/30/2015	32.5	32.93	-0.43	0.193161
thd_1609	thd_grp3	3923	6/30/1977	6/30/2015	29.05	30.96	-1.91	0.193161
thd_1610	thd_grp3	3923	6/30/1978	6/30/2015	28.68	29.57	-0.89	0.193161
thd_1611	thd_grp3	3923	6/30/1979	6/30/2015	26.93	28.56	-1.63	0.193161

Table A-5. Temporal Head Difference (THD) Targets.

Target Name	Target Group	NWF ID	Date 1	Date 2	Measured Groundwater Elevation Difference (ft)	Modelled Groundwater Elevation Difference (ft)	Residual (ft)	Target Weight
thd_1612	thd_grp3	3923	6/30/1980	6/30/2015	26.44	27.45	-1.01	0.193161
thd_1613	thd_grp3	3923	6/30/1981	6/30/2015	23.67	26.15	-2.48	0.193161
thd_1614	thd_grp3	3923	6/30/1982	6/30/2015	22.04	23.81	-1.77	0.193161
thd_1615	thd_grp3	3923	6/30/1983	6/30/2015	20.91	20.87	0.04	0.193161
thd_1616	thd_grp3	3923	6/30/1984	6/30/2015	16.77	17.28	-0.51	0.193161
thd_1617	thd_grp3	3923	6/30/1985	6/30/2015	12.05	13.09	-1.04	0.193161
thd_1618	thd_grp3	3923	6/30/1986	6/30/2015	7.33	8.70	-1.37	0.193161
thd_1619	thd_grp3	3923	6/30/1987	6/30/2015	4.58	4.77	-0.19	0.193161
thd_1620	thd_grp3	3923	6/30/1988	6/30/2015	1.26	1.06	0.20	0.193161
thd_1621	thd_grp3	3923	6/30/1989	6/30/2015	-0.38	-1.79	1.41	0.193161
thd_1622	thd_grp3	3923	6/30/1990	6/30/2015	-4.95	-4.44	-0.51	0.193161
thd_1623	thd_grp3	3923	6/30/1991	6/30/2015	-2.3	-6.01	3.71	0.193161
thd_1624	thd_grp3	3923	6/30/1992	6/30/2015	-4.21	-6.73	2.52	0.193161
thd_1625	thd_grp3	3923	6/30/1993	6/30/2015	-5.37	-8.38	3.01	0.193161
thd_1626	thd_grp3	3923	6/30/1994	6/30/2015	-3.48	-9.62	6.14	0.193161
thd_1627	thd_grp3	3923	6/30/1995	6/30/2015	-6.72	-9.98	3.26	0.193161
thd_1628	thd_grp3	3923	6/30/1996	6/30/2015	-8.97	-11.03	2.06	0.193161
thd_1629	thd_grp3	3923	6/30/1997	6/30/2015	-11.54	-12.01	0.47	0.193161
thd_1630	thd_grp3	3923	6/30/1998	6/30/2015	-12.25	-12.84	0.59	0.193161
thd_1631	thd_grp3	3923	6/30/1999	6/30/2015	-10.1	-13.45	3.35	0.193161
thd_1632	thd_grp3	3923	6/30/2000	6/30/2015	-16.67	-14.69	-1.98	0.193161
thd_1633	thd_grp3	3923	6/30/2001	6/30/2015	-15.15	-15.84	0.69	0.193161
thd_1634	thd_grp3	3923	6/30/2002	6/30/2015	-15.6	-15.09	-0.51	0.193161
thd_1635	thd_grp3	3923	6/30/2003	6/30/2015	-14.61	-13.36	-1.25	0.193161
thd_1636	thd_grp3	3923	6/30/2005	6/30/2015	-14.09	-13.32	-0.77	0.193161
thd_1637	thd_grp3	3923	6/30/2006	6/30/2015	-13.5	-13.67	0.17	0.193161
thd_1638	thd_grp3	3923	6/30/2007	6/30/2015	-15.32	-13.91	-1.41	0.193161
thd_1639	thd_grp3	3923	6/30/2008	6/30/2015	-11.08	-12.22	1.14	0.193161
thd_1640	thd_grp3	3923	6/30/2010	6/30/2015	-5.97	-7.81	1.84	0.193161
thd_1641	thd_grp3	3923	6/30/2011	6/30/2015	-7.28	-6.92	-0.36	0.193161
thd_1642	thd_grp3	3923	6/30/2012	6/30/2015	-4.76	-5.19	0.43	0.193161

Table A-5. Temporal Head Difference (THD) Targets.

Target Name	Target Group	NWF ID	Date 1	Date 2	Measured Groundwater Elevation Difference (ft)	Modelled Groundwater Elevation Difference (ft)	Residual (ft)	Target Weight
thd_1643	thd_grp3	3923	6/30/2013	6/30/2015	-1.92	-2.10	0.18	0.193161
thd_1644	thd_grp3	3923	6/30/2014	6/30/2015	0.34	-0.85	1.19	0.193161
thd_1645	thd_grp3	3923	6/30/2015	6/30/2015	0	0.00	0.00	0.193161
thd_1646	thd_grp2	4368	6/30/1942	6/30/2015	77.78	85.76	-7.98	0.227329
thd_1647	thd_grp2	4368	6/30/1947	6/30/2015	85.28	79.53	5.75	0.227329
thd_1648	thd_grp2	4368	6/30/1948	6/30/2015	78.73	78.34	0.39	0.227329
thd_1649	thd_grp2	4368	6/30/1949	6/30/2015	76.72	77.31	-0.59	0.227329
thd_1650	thd_grp2	4368	6/30/1950	6/30/2015	74.38	76.26	-1.88	0.227329
thd_1651	thd_grp2	4368	6/30/1951	6/30/2015	73.96	75.21	-1.25	0.227329
thd_1652	thd_grp2	4368	6/30/1952	6/30/2015	71.51	74.15	-2.64	0.227329
thd_1653	thd_grp2	4368	6/30/1953	6/30/2015	70.27	73.13	-2.86	0.227329
thd_1654	thd_grp2	4368	6/30/1954	6/30/2015	70.3	72.10	-1.80	0.227329
thd_1655	thd_grp2	4368	6/30/1955	6/30/2015	67.46	71.10	-3.64	0.227329
thd_1656	thd_grp2	4368	6/30/1956	6/30/2015	65.56	69.96	-4.40	0.227329
thd_1657	thd_grp2	4368	6/30/1957	6/30/2015	64.43	68.81	-4.38	0.227329
thd_1658	thd_grp2	4368	6/30/1958	6/30/2015	63.3	67.44	-4.14	0.227329
thd_1659	thd_grp2	4368	6/30/1959	6/30/2015	62.38	65.91	-3.53	0.227329
thd_1660	thd_grp2	4368	6/30/1960	6/30/2015	61.8	64.28	-2.48	0.227329
thd_1661	thd_grp2	4368	6/30/1961	6/30/2015	60.45	62.65	-2.20	0.227329
thd_1662	thd_grp2	4368	6/30/1962	6/30/2015	58.74	60.59	-1.85	0.227329
thd_1663	thd_grp2	4368	6/30/1963	6/30/2015	56.72	58.49	-1.77	0.227329
thd_1664	thd_grp2	4368	6/30/1964	6/30/2015	55.48	55.70	-0.22	0.227329
thd_1665	thd_grp2	4368	6/30/1965	6/30/2015	54.33	53.80	0.53	0.227329
thd_1666	thd_grp2	4368	6/30/1966	6/30/2015	53.57	52.94	0.63	0.227329
thd_1667	thd_grp2	4368	6/30/1967	6/30/2015	51.83	50.50	1.33	0.227329
thd_1668	thd_grp2	4368	6/30/1968	6/30/2015	50.98	47.95	3.03	0.227329
thd_1669	thd_grp2	4368	6/30/1969	6/30/2015	47.68	46.17	1.51	0.227329
thd_1670	thd_grp2	4368	6/30/1970	6/30/2015	45.33	45.00	0.33	0.227329
thd_1671	thd_grp2	4368	6/30/1989	6/30/2015	9.68	6.51	3.17	0.227329
thd_1672	thd_grp2	4368	6/30/1990	6/30/2015	3.65	4.02	-0.37	0.227329
thd_1673	thd_grp2	4368	6/30/1991	6/30/2015	7.88	1.85	6.03	0.227329

Table A-5. Temporal Head Difference (THD) Targets.

Target Name	Target Group	NWF ID	Date 1	Date 2	Measured Groundwater Elevation Difference (ft)	Modelled Groundwater Elevation Difference (ft)	Residual (ft)	Target Weight
thd_1674	thd_grp2	4368	6/30/1992	6/30/2015	3.69	1.10	2.59	0.227329
thd_1675	thd_grp2	4368	6/30/1993	6/30/2015	8.11	-0.46	8.57	0.227329
thd_1676	thd_grp2	4368	6/30/1994	6/30/2015	3.68	-2.06	5.74	0.227329
thd_1677	thd_grp2	4368	6/30/1995	6/30/2015	-0.28	-2.80	2.52	0.227329
thd_1678	thd_grp2	4368	6/30/1996	6/30/2015	-0.23	-3.59	3.36	0.227329
thd_1679	thd_grp2	4368	6/30/1997	6/30/2015	-23.16	-4.77	-18.39	0.227329
thd_1680	thd_grp2	4368	6/30/1998	6/30/2015	-8.83	-6.12	-2.71	0.227329
thd_1681	thd_grp2	4368	6/30/1999	6/30/2015	-9.92	-6.50	-3.42	0.227329
thd_1682	thd_grp2	4368	6/30/2000	6/30/2015	-8.97	-7.66	-1.31	0.227329
thd_1683	thd_grp2	4368	6/30/2001	6/30/2015	-6.12	-8.70	2.58	0.227329
thd_1684	thd_grp2	4368	6/30/2002	6/30/2015	-5.42	-8.73	3.31	0.227329
thd_1685	thd_grp2	4368	6/30/2003	6/30/2015	-5.35	-7.73	2.38	0.227329
thd_1686	thd_grp2	4368	6/30/2005	6/30/2015	-5.5	-9.33	3.83	0.227329
thd_1687	thd_grp2	4368	6/30/2006	6/30/2015	-6.72	-9.41	2.69	0.227329
thd_1688	thd_grp2	4368	6/30/2007	6/30/2015	-10.73	-11.25	0.52	0.227329
thd_1689	thd_grp2	4368	6/30/2008	6/30/2015	-7.71	-11.47	3.76	0.227329
thd_1690	thd_grp2	4368	6/30/2010	6/30/2015	-3.72	-8.79	5.07	0.227329
thd_1691	thd_grp2	4368	6/30/2011	6/30/2015	-8.18	-9.31	1.13	0.227329
thd_1692	thd_grp2	4368	6/30/2012	6/30/2015	-5.76	-6.99	1.23	0.227329
thd_1693	thd_grp2	4368	6/30/2013	6/30/2015	-1.59	-3.43	1.84	0.227329
thd_1694	thd_grp2	4368	6/30/2014	6/30/2015	0.27	-2.50	2.77	0.227329
thd_1695	thd_grp2	4368	6/30/2015	6/30/2015	0	0.00	0.00	0.227329
thd_1696	thd_grp2	4490	6/30/1968	6/30/2015	10.49	15.07	-4.58	0.227329
thd_1697	thd_grp2	4490	6/30/1969	6/30/2015	7.84	14.76	-6.92	0.227329
thd_1698	thd_grp2	4490	6/30/1970	6/30/2015	11.76	14.48	-2.72	0.227329
thd_1699	thd_grp2	4490	6/30/1974	6/30/2015	5.98	12.99	-7.01	0.227329
thd_1700	thd_grp2	4490	6/30/1976	6/30/2015	12.66	12.14	0.52	0.227329
thd_1701	thd_grp2	4490	6/30/1977	6/30/2015	11	11.92	-0.92	0.227329
thd_1702	thd_grp2	4490	6/30/1978	6/30/2015	11.08	11.63	-0.55	0.227329
thd_1703	thd_grp2	4490	6/30/1979	6/30/2015	10.42	11.28	-0.86	0.227329
thd_1704	thd_grp2	4490	6/30/1980	6/30/2015	12.3	10.93	1.37	0.227329

Table A-5. Temporal Head Difference (THD) Targets.

Target Name	Target Group	NWF ID	Date 1	Date 2	Measured Groundwater Elevation Difference (ft)	Modelled Groundwater Elevation Difference (ft)	Residual (ft)	Target Weight
thd_1705	thd_grp2	4490	6/30/1984	6/30/2015	7.39	9.46	-2.07	0.227329
thd_1706	thd_grp2	4490	6/30/1985	6/30/2015	7.74	8.94	-1.20	0.227329
thd_1707	thd_grp2	4490	6/30/1986	6/30/2015	7.36	8.27	-0.91	0.227329
thd_1708	thd_grp2	4490	6/30/1987	6/30/2015	7.34	7.57	-0.23	0.227329
thd_1709	thd_grp2	4490	6/30/1990	6/30/2015	7.09	5.64	1.45	0.227329
thd_1710	thd_grp2	4490	6/30/1991	6/30/2015	6.78	5.14	1.64	0.227329
thd_1711	thd_grp2	4490	6/30/1992	6/30/2015	5.01	4.63	0.38	0.227329
thd_1712	thd_grp2	4490	6/30/1995	6/30/2015	4.97	3.50	1.47	0.227329
thd_1713	thd_grp2	4490	6/30/1996	6/30/2015	3.84	3.24	0.60	0.227329
thd_1714	thd_grp2	4490	6/30/1998	6/30/2015	6.14	3.00	3.14	0.227329
thd_1715	thd_grp2	4490	6/30/2000	6/30/2015	2.01	2.11	-0.10	0.227329
thd_1716	thd_grp2	4490	6/30/2001	6/30/2015	0.2	1.42	-1.22	0.227329
thd_1717	thd_grp2	4490	6/30/2003	6/30/2015	1.2	0.15	1.05	0.227329
thd_1718	thd_grp2	4490	6/30/2005	6/30/2015	0.4	-0.14	0.54	0.227329
thd_1719	thd_grp2	4490	6/30/2006	6/30/2015	-0.94	-0.95	0.01	0.227329
thd_1720	thd_grp2	4490	6/30/2008	6/30/2015	-1.56	-1.86	0.30	0.227329
thd_1721	thd_grp2	4490	6/30/2010	6/30/2015	0.32	-1.54	1.86	0.227329
thd_1722	thd_grp2	4490	6/30/2011	6/30/2015	-3.03	-1.50	-1.53	0.227329
thd_1723	thd_grp2	4490	6/30/2012	6/30/2015	-2.08	-1.38	-0.70	0.227329
thd_1724	thd_grp2	4490	6/30/2013	6/30/2015	-7.00E-02	-0.95	0.88	0.227329
thd_1725	thd_grp2	4490	6/30/2014	6/30/2015	0.67	0.23	0.44	0.227329
thd_1726	thd_grp2	4490	6/30/2015	6/30/2015	0	0.00	0.00	0.227329
thd_1727	thd_grp1	4553	6/30/1942	6/30/2015	37.59	41.86	-4.27	0.498831
thd_1728	thd_grp1	4553	6/30/1947	6/30/2015	34.99	39.35	-4.36	0.498831
thd_1729	thd_grp1	4553	6/30/1948	6/30/2015	25.44	38.82	-13.38	0.498831
thd_1730	thd_grp1	4553	6/30/1949	6/30/2015	17.43	38.33	-20.90	0.498831
thd_1731	thd_grp1	4553	6/30/1950	6/30/2015	29.97	37.86	-7.89	0.498831
thd_1732	thd_grp1	4553	6/30/1951	6/30/2015	32.83	37.38	-4.55	0.498831
thd_1733	thd_grp1	4553	6/30/1966	6/30/2015	21.96	28.72	-6.76	0.498831
thd_1734	thd_grp1	4553	6/30/1967	6/30/2015	25.29	27.99	-2.70	0.498831
thd_1735	thd_grp1	4553	6/30/1968	6/30/2015	20.76	27.20	-6.44	0.498831

Table A-5. Temporal Head Difference (THD) Targets.

Target Name	Target Group	NWF ID	Date 1	Date 2	Measured Groundwater Elevation Difference (ft)	Modelled Groundwater Elevation Difference (ft)	Residual (ft)	Target Weight
thd_1736	thd_grp1	4553	6/30/1969	6/30/2015	20.68	26.46	-5.78	0.498831
thd_1737	thd_grp1	4553	6/30/1970	6/30/2015	20.64	25.82	-5.18	0.498831
thd_1738	thd_grp1	4553	6/30/1976	6/30/2015	21.73	21.15	0.58	0.498831
thd_1739	thd_grp1	4553	6/30/1977	6/30/2015	14.27	20.49	-6.22	0.498831
thd_1740	thd_grp1	4553	6/30/1978	6/30/2015	17.18	19.77	-2.59	0.498831
thd_1741	thd_grp1	4553	6/30/1979	6/30/2015	17.4	19.14	-1.74	0.498831
thd_1742	thd_grp1	4553	6/30/1980	6/30/2015	19.31	18.62	0.69	0.498831
thd_1743	thd_grp1	4553	6/30/1981	6/30/2015	13.8	18.14	-4.34	0.498831
thd_1744	thd_grp1	4553	6/30/1982	6/30/2015	16.56	17.44	-0.88	0.498831
thd_1745	thd_grp1	4553	6/30/1983	6/30/2015	14.69	16.60	-1.91	0.498831
thd_1746	thd_grp1	4553	6/30/1984	6/30/2015	11.19	15.56	-4.37	0.498831
thd_1747	thd_grp1	4553	6/30/1985	6/30/2015	11.7	14.32	-2.62	0.498831
thd_1748	thd_grp1	4553	6/30/1986	6/30/2015	7.5	12.84	-5.34	0.498831
thd_1749	thd_grp1	4553	6/30/1990	6/30/2015	8.81	7.04	1.77	0.498831
thd_1750	thd_grp1	4553	6/30/1991	6/30/2015	-1.84	5.81	-7.65	0.498831
thd_1751	thd_grp1	4553	6/30/1992	6/30/2015	5.54	5.13	0.41	0.498831
thd_1752	thd_grp1	4553	6/30/1995	6/30/2015	4.66	2.89	1.77	0.498831
thd_1753	thd_grp1	4553	6/30/1996	6/30/2015	3.94	2.28	1.66	0.498831
thd_1754	thd_grp1	4553	6/30/1998	6/30/2015	-10.49	1.20	-11.69	0.498831
thd_1755	thd_grp1	4553	6/30/2000	6/30/2015	-9.09	0.32	-9.41	0.498831
thd_1756	thd_grp1	4553	6/30/2001	6/30/2015	-4.55	-0.50	-4.05	0.498831
thd_1757	thd_grp1	4553	6/30/2003	6/30/2015	2.19	-1.54	3.73	0.498831
thd_1758	thd_grp1	4553	6/30/2005	6/30/2015	0.17	-1.82	1.99	0.498831
thd_1759	thd_grp1	4553	6/30/2006	6/30/2015	-1.5	-2.47	0.97	0.498831
thd_1760	thd_grp1	4553	6/30/2007	6/30/2015	-8.03	-3.52	-4.51	0.498831
thd_1761	thd_grp1	4553	6/30/2008	6/30/2015	-2.9	-4.09	1.19	0.498831
thd_1762	thd_grp1	4553	6/30/2010	6/30/2015	-2.8	-3.31	0.51	0.498831
thd_1763	thd_grp1	4553	6/30/2011	6/30/2015	-4.84	-3.39	-1.45	0.498831
thd_1764	thd_grp1	4553	6/30/2012	6/30/2015	-8.49	-3.20	-5.29	0.498831
thd_1765	thd_grp1	4553	6/30/2013	6/30/2015	-0.88	-1.88	1.00	0.498831
thd_1766	thd_grp1	4553	6/30/2014	6/30/2015	-0.15	-0.75	0.60	0.498831

Table A-5. Temporal Head Difference (THD) Targets.

Target Name	Target Group	NWF ID	Date 1	Date 2	Measured Groundwater Elevation Difference (ft)	Modelled Groundwater Elevation Difference (ft)	Residual (ft)	Target Weight
thd_1767	thd_grp1	4553	6/30/2015	6/30/2015	0	0.00	0.00	0.498831
thd_1768	thd_grp1	4648	6/30/1995	6/30/2015	-5.22	-0.01	-5.21	0.498831
thd_1769	thd_grp1	4648	6/30/1996	6/30/2010	-4.11	-0.01	-4.10	0.498831
thd_1770	thd_grp1	4648	6/30/2010	6/30/2010	0	0.00	0.00	0.498831
thd_1771	thd_grp1	4700	6/30/1974	6/30/2010	11.26	10.31	0.95	0.498831
thd_1772	thd_grp1	4700	6/30/1978	6/30/2015	10.09	19.60	-9.51	0.498831
thd_1773	thd_grp1	4700	6/30/1983	6/30/2015	9.13	15.56	-6.43	0.498831
thd_1774	thd_grp1	4700	6/30/1984	6/30/2015	7.32	13.06	-5.74	0.498831
thd_1775	thd_grp1	4700	6/30/1985	6/30/2015	6.16	11.38	-5.22	0.498831
thd_1776	thd_grp1	4700	6/30/1986	6/30/2015	4.58	9.32	-4.74	0.498831
thd_1777	thd_grp1	4700	6/30/1987	6/30/2015	2.91	6.75	-3.84	0.498831
thd_1778	thd_grp1	4700	6/30/1988	6/30/2015	1.65	4.38	-2.73	0.498831
thd_1779	thd_grp1	4700	6/30/1990	6/30/2015	-0.18	2.08	-2.26	0.498831
thd_1780	thd_grp1	4700	6/30/1991	6/30/2015	-0.23	1.68	-1.91	0.498831
thd_1781	thd_grp1	4700	6/30/1992	6/30/2015	-0.74	1.18	-1.92	0.498831
thd_1782	thd_grp1	4700	6/30/1993	6/30/2015	-1.08	0.78	-1.86	0.498831
thd_1783	thd_grp1	4700	6/30/1994	6/30/2015	-1.1	1.14	-2.24	0.498831
thd_1784	thd_grp1	4700	6/30/1995	6/30/2015	-0.24	1.90	-2.14	0.498831
thd_1785	thd_grp1	4700	6/30/1996	6/30/2015	0.38	2.82	-2.44	0.498831
thd_1786	thd_grp1	4700	6/30/1997	6/30/2015	0.88	4.39	-3.51	0.498831
thd_1787	thd_grp1	4700	6/30/1998	6/30/2015	3.27	6.69	-3.42	0.498831
thd_1788	thd_grp1	4700	6/30/1999	6/30/2015	3.55	7.48	-3.93	0.498831
thd_1789	thd_grp1	4700	6/30/2000	6/30/2015	1.34	6.41	-5.07	0.498831
thd_1790	thd_grp1	4700	6/30/2001	6/30/2015	0.43	5.55	-5.12	0.498831
thd_1791	thd_grp1	4700	6/30/2002	6/30/2015	-1.01	3.81	-4.82	0.498831
thd_1792	thd_grp1	4700	6/30/2003	6/30/2015	-0.6	2.93	-3.53	0.498831
thd_1793	thd_grp1	4700	6/30/2007	6/30/2015	0.52	2.65	-2.13	0.498831
thd_1794	thd_grp1	4700	6/30/2008	6/30/2015	-2.3	1.04	-3.34	0.498831
thd_1795	thd_grp1	4700	6/30/2010	6/30/2015	-3.54	-3.21	-0.33	0.498831
thd_1796	thd_grp1	4700	6/30/2011	6/30/2015	-3.46	-3.03	-0.43	0.498831
thd_1797	thd_grp1	4700	6/30/2012	6/30/2015	-3.07	-2.50	-0.57	0.498831

Table A-5. Temporal Head Difference (THD) Targets.

Target Name	Target Group	NWF ID	Date 1	Date 2	Measured Groundwater Elevation Difference (ft)	Modelled Groundwater Elevation Difference (ft)	Residual (ft)	Target Weight
thd_1798	thd_grp1	4700	6/30/2013	6/30/2015	-2.05	-1.79	-0.26	0.498831
thd_1799	thd_grp1	4700	6/30/2014	6/30/2015	-0.93	-0.98	0.05	0.498831
thd_1800	thd_grp1	4700	6/30/2015	6/30/2015	0	0.00	0.00	0.498831
thd_1801	thd_grp1	4754	6/30/1968	6/30/2015	-1.14	3.20	-4.34	0.498831
thd_1802	thd_grp1	4754	6/30/1969	6/30/2015	-1.64	3.16	-4.80	0.498831
thd_1803	thd_grp1	4754	6/30/1970	6/30/2015	0.7	3.10	-2.40	0.498831
thd_1804	thd_grp1	4754	6/30/1972	6/30/2015	-7.04	2.85	-9.89	0.498831
thd_1805	thd_grp1	4754	6/30/1976	6/30/2015	3.16	1.79	1.37	0.498831
thd_1806	thd_grp1	4754	6/30/1977	6/30/2015	1.73	1.78	-0.05	0.498831
thd_1807	thd_grp1	4754	6/30/1978	6/30/2015	2.68	1.65	1.03	0.498831
thd_1808	thd_grp1	4754	6/30/1979	6/30/2015	-8.00E-02	1.50	-1.58	0.498831
thd_1809	thd_grp1	4754	6/30/1980	6/30/2015	-0.51	1.34	-1.85	0.498831
thd_1810	thd_grp1	4754	6/30/1981	6/30/2015	-3.19	1.27	-4.46	0.498831
thd_1811	thd_grp1	4754	6/30/1982	6/30/2015	-1.77	1.17	-2.94	0.498831
thd_1812	thd_grp1	4754	6/30/1983	6/30/2015	1.81	1.06	0.75	0.498831
thd_1813	thd_grp1	4754	6/30/1984	6/30/2015	-0.78	0.94	-1.72	0.498831
thd_1814	thd_grp1	4754	6/30/1985	6/30/2015	-2.61	0.81	-3.42	0.498831
thd_1815	thd_grp1	4754	6/30/1986	6/30/2015	-3.1	0.55	-3.65	0.498831
thd_1816	thd_grp1	4754	6/30/1987	6/30/2015	-3.15	0.42	-3.57	0.498831
thd_1817	thd_grp1	4754	6/30/1988	6/30/2015	-2.81	0.21	-3.02	0.498831
thd_1818	thd_grp1	4754	6/30/1989	6/30/2015	-1.62	0.05	-1.67	0.498831
thd_1819	thd_grp1	4754	6/30/1990	6/30/2015	-3.42	-0.20	-3.22	0.498831
thd_1820	thd_grp1	4754	6/30/1991	6/30/2015	-5.02	-0.22	-4.80	0.498831
thd_1821	thd_grp1	4754	6/30/1992	6/30/2015	-3.65	-0.53	-3.12	0.498831
thd_1822	thd_grp1	4754	6/30/1994	6/30/2015	-4.91	-0.79	-4.12	0.498831
thd_1823	thd_grp1	4754	6/30/1995	6/30/2015	-2.56	-0.72	-1.84	0.498831
thd_1824	thd_grp1	4754	6/30/1996	6/30/2015	-2.59	-0.72	-1.87	0.498831
thd_1825	thd_grp1	4754	6/30/1997	6/30/2015	-1.75	-0.54	-1.21	0.498831
thd_1826	thd_grp1	4754	6/30/1998	6/30/2015	-2.67	-0.27	-2.40	0.498831
thd_1827	thd_grp1	4754	6/30/1999	6/30/2015	-2.24	-0.55	-1.69	0.498831
thd_1828	thd_grp1	4754	6/30/2000	6/30/2015	-8.99	-1.22	-7.77	0.498831

Table A-5. Temporal Head Difference (THD) Targets.

Target Name	Target Group	NWF ID	Date 1	Date 2	Measured Groundwater Elevation Difference (ft)	Modelled Groundwater Elevation Difference (ft)	Residual (ft)	Target Weight
thd_1829	thd_grp1	4754	6/30/2001	6/30/2015	-6.31	-1.29	-5.02	0.498831
thd_1830	thd_grp1	4754	6/30/2002	6/30/2015	-7.6	-1.70	-5.90	0.498831
thd_1831	thd_grp1	4754	6/30/2003	6/30/2015	-4.48	-1.52	-2.96	0.498831
thd_1832	thd_grp1	4754	6/30/2004	6/30/2015	-1.99	-0.40	-1.59	0.498831
thd_1833	thd_grp1	4754	6/30/2006	6/30/2015	-1.35	-0.33	-1.02	0.498831
thd_1834	thd_grp1	4754	6/30/2007	6/30/2015	-4.12	-0.41	-3.71	0.498831
thd_1835	thd_grp1	4754	6/30/2008	6/30/2015	-0.94	-0.41	-0.53	0.498831
thd_1836	thd_grp1	4754	6/30/2010	6/30/2015	9.00E-02	-0.48	0.57	0.498831
thd_1837	thd_grp1	4754	6/30/2011	6/30/2015	-3.86	-0.42	-3.44	0.498831
thd_1838	thd_grp1	4754	6/30/2012	6/30/2015	-3.17	-0.33	-2.84	0.498831
thd_1839	thd_grp1	4754	6/30/2013	6/30/2015	0	-0.12	0.12	0.498831
thd_1840	thd_grp1	4754	6/30/2014	6/30/2015	1.23	0.96	0.27	0.498831
thd_1841	thd_grp1	4754	6/30/2015	6/30/2015	0	0.00	0.00	0.498831
thd_1875	thd_grp1	5240	6/30/1968	6/30/2015	-1.34	2.19	-3.53	0.498831
thd_1876	thd_grp1	5240	6/30/1969	6/30/2015	-1.82	2.15	-3.97	0.498831
thd_1877	thd_grp1	5240	6/30/1970	6/30/2015	-0.35	2.12	-2.47	0.498831
thd_1878	thd_grp1	5240	6/30/1974	6/30/2015	-1.81	1.88	-3.69	0.498831
thd_1879	thd_grp1	5240	6/30/1976	6/30/2015	1.29	1.69	-0.40	0.498831
thd_1880	thd_grp1	5240	6/30/1977	6/30/2015	1	1.68	-0.68	0.498831
thd_1881	thd_grp1	5240	6/30/1978	6/30/2015	3	1.64	1.36	0.498831
thd_1882	thd_grp1	5240	6/30/1979	6/30/2015	1.25	1.57	-0.32	0.498831
thd_1883	thd_grp1	5240	6/30/1980	6/30/2015	0.78	1.50	-0.72	0.498831
thd_1884	thd_grp1	5240	6/30/1981	6/30/2015	-1	1.46	-2.46	0.498831
thd_1885	thd_grp1	5240	6/30/1982	6/30/2015	-1.52	1.41	-2.93	0.498831
thd_1886	thd_grp1	5240	6/30/1983	6/30/2015	-0.6	1.37	-1.97	0.498831
thd_1887	thd_grp1	5240	6/30/1984	6/30/2015	0.24	1.31	-1.07	0.498831
thd_1888	thd_grp1	5240	6/30/1985	6/30/2015	-1.68	1.25	-2.93	0.498831
thd_1889	thd_grp1	5240	6/30/1986	6/30/2015	-1.64	1.15	-2.79	0.498831
thd_1890	thd_grp1	5240	6/30/1987	6/30/2015	-1.6	1.07	-2.67	0.498831
thd_1891	thd_grp1	5240	6/30/1988	6/30/2015	-0.89	0.97	-1.86	0.498831
thd_1892	thd_grp1	5240	6/30/1989	6/30/2015	1.32	0.89	0.43	0.498831

Table A-5. Temporal Head Difference (THD) Targets.

Target Name	Target Group	NWF ID	Date 1	Date 2	Measured Groundwater Elevation Difference (ft)	Modelled Groundwater Elevation Difference (ft)	Residual (ft)	Target Weight
thd_1893	thd_grp1	5240	6/30/1990	6/30/2015	1.4	0.78	0.62	0.498831
thd_1894	thd_grp1	5240	6/30/1991	6/30/2015	0.17	0.74	-0.57	0.498831
thd_1895	thd_grp1	5240	6/30/1992	6/30/2015	-0.12	0.61	-0.73	0.498831
thd_1896	thd_grp1	5240	6/30/1995	6/30/2015	0.98	0.47	0.51	0.498831
thd_1897	thd_grp1	5240	6/30/1996	6/30/2015	-0.44	0.42	-0.86	0.498831
thd_1898	thd_grp1	5240	6/30/1998	6/30/2015	1.56	0.49	1.07	0.498831
thd_1899	thd_grp1	5240	6/30/2000	6/30/2015	-2.43	0.16	-2.59	0.498831
thd_1900	thd_grp1	5240	6/30/2001	6/30/2015	-2.91	0.11	-3.02	0.498831
thd_1901	thd_grp1	5240	6/30/2002	6/30/2015	-3.63	-0.04	-3.59	0.498831
thd_1902	thd_grp1	5240	6/30/2003	6/30/2015	-0.64	-0.07	-0.57	0.498831
thd_1903	thd_grp1	5240	6/30/2004	6/30/2015	-0.22	0.08	-0.30	0.498831
thd_1904	thd_grp1	5240	6/30/2006	6/30/2015	-1.15	-0.18	-0.97	0.498831
thd_1905	thd_grp1	5240	6/30/2007	6/30/2015	-3.32	-0.29	-3.03	0.498831
thd_1906	thd_grp1	5240	6/30/2008	6/30/2015	-0.75	-0.32	-0.43	0.498831
thd_1907	thd_grp1	5240	6/30/2010	6/30/2015	-9.00E-02	-0.37	0.28	0.498831
thd_1908	thd_grp1	5240	6/30/2011	6/30/2015	-4.35	-0.36	-3.99	0.498831
thd_1909	thd_grp1	5240	6/30/2012	6/30/2015	-4.18	-0.32	-3.86	0.498831
thd_1910	thd_grp1	5240	6/30/2013	6/30/2015	-5.68	-0.18	-5.50	0.498831
thd_1911	thd_grp1	5240	6/30/2014	6/30/2015	0.99	0.42	0.57	0.498831
thd_1912	thd_grp1	5240	6/30/2015	6/30/2015	0	0.00	0.00	0.498831
thd_1913	thd_grp1	5261	6/30/1978	6/30/2015	4.47	7.07	-2.60	0.498831
thd_1914	thd_grp1	5261	6/30/1979	6/30/2011	4.89	6.89	-2.00	0.498831
thd_1915	thd_grp1	5261	6/30/1980	6/30/2011	3.91	6.75	-2.84	0.498831
thd_1916	thd_grp1	5261	6/30/1981	6/30/2011	2.78	6.62	-3.84	0.498831
thd_1917	thd_grp1	5261	6/30/1982	6/30/2011	3.34	6.45	-3.11	0.498831
thd_1918	thd_grp1	5261	6/30/1983	6/30/2011	4	6.28	-2.28	0.498831
thd_1919	thd_grp1	5261	6/30/1984	6/30/2011	4.12	6.07	-1.95	0.498831
thd_1920	thd_grp1	5261	6/30/1988	6/30/2011	3.94	4.45	-0.51	0.498831
thd_1921	thd_grp1	5261	6/30/1989	6/30/2011	3.55	4.12	-0.57	0.498831
thd_1922	thd_grp1	5261	6/30/1990	6/30/2011	5.61	3.88	1.73	0.498831
thd_1923	thd_grp1	5261	6/30/1991	6/30/2011	3.07	3.62	-0.55	0.498831

Table A-5. Temporal Head Difference (THD) Targets.

Target Name	Target Group	NWF ID	Date 1	Date 2	Measured Groundwater Elevation Difference (ft)	Modelled Groundwater Elevation Difference (ft)	Residual (ft)	Target Weight
thd_1924	thd_grp1	5261	6/30/1992	6/30/2011	2.98	3.47	-0.49	0.498831
thd_1925	thd_grp1	5261	6/30/1995	6/30/2011	2.83	2.57	0.26	0.498831
thd_1926	thd_grp1	5261	6/30/1996	6/30/2011	2.33	2.38	-0.05	0.498831
thd_1927	thd_grp1	5261	6/30/1998	6/30/2011	3.5	2.17	1.33	0.498831
thd_1928	thd_grp1	5261	6/30/2000	6/30/2011	7.00E-02	1.57	-1.50	0.498831
thd_1929	thd_grp1	5261	6/30/2001	6/30/2011	-0.74	1.58	-2.32	0.498831
thd_1930	thd_grp1	5261	6/30/2002	6/30/2011	-0.8	1.12	-1.92	0.498831
thd_1931	thd_grp1	5261	6/30/2003	6/30/2011	1.48	1.42	0.06	0.498831
thd_1932	thd_grp1	5261	6/30/2004	6/30/2011	1.56	1.42	0.14	0.498831
thd_1933	thd_grp1	5261	6/30/2006	6/30/2011	0.53	0.98	-0.45	0.498831
thd_1934	thd_grp1	5261	6/30/2007	6/30/2011	-1.22	0.43	-1.65	0.498831
thd_1935	thd_grp1	5261	6/30/2008	6/30/2011	0.58	0.08	0.50	0.498831
thd_1936	thd_grp1	5261	6/30/2010	6/30/2011	1.7	-0.06	1.76	0.498831
thd_1937	thd_grp1	5261	6/30/2011	6/30/2011	0	0.00	0.00	0.498831
thd_1938	thd_grp1	5271	6/30/1961	6/30/2011	-0.34	0.52	-0.86	0.498831
thd_1939	thd_grp1	5271	6/30/1962	6/30/2015	0.98	0.52	0.46	0.498831
thd_1940	thd_grp1	5271	6/30/1963	6/30/2015	-1.68	0.51	-2.19	0.498831
thd_1941	thd_grp1	5271	6/30/1964	6/30/2015	1.23	0.50	0.73	0.498831
thd_1942	thd_grp1	5271	6/30/1965	6/30/2015	3.23	0.50	2.73	0.498831
thd_1943	thd_grp1	5271	6/30/1966	6/30/2015	2.71	0.49	2.22	0.498831
thd_1944	thd_grp1	5271	6/30/1967	6/30/2015	0.6	0.49	0.11	0.498831
thd_1945	thd_grp1	5271	6/30/1968	6/30/2015	-1.00E-02	0.48	-0.49	0.498831
thd_1946	thd_grp1	5271	6/30/1969	6/30/2015	-2.27	0.48	-2.75	0.498831
thd_1947	thd_grp1	5271	6/30/1970	6/30/2015	-0.67	0.47	-1.14	0.498831
thd_1948	thd_grp1	5271	6/30/1971	6/30/2015	1	0.46	0.54	0.498831
thd_1949	thd_grp1	5271	6/30/1972	6/30/2015	-0.26	0.44	-0.70	0.498831
thd_1950	thd_grp1	5271	6/30/1973	6/30/2015	-0.65	0.43	-1.08	0.498831
thd_1951	thd_grp1	5271	6/30/1974	6/30/2015	0.26	0.42	-0.16	0.498831
thd_1952	thd_grp1	5271	6/30/1975	6/30/2015	-7.00E-02	0.35	-0.42	0.498831
thd_1953	thd_grp1	5271	6/30/1976	6/30/2015	1.54	0.33	1.21	0.498831
thd_1954	thd_grp1	5271	6/30/1977	6/30/2015	5.66	0.33	5.33	0.498831

Table A-5. Temporal Head Difference (THD) Targets.

Target Name	Target Group	NWF ID	Date 1	Date 2	Measured Groundwater Elevation Difference (ft)	Modelled Groundwater Elevation Difference (ft)	Residual (ft)	Target Weight
thd_1955	thd_grp1	5271	6/30/1978	6/30/2015	4.16	0.32	3.84	0.498831
thd_1956	thd_grp1	5271	6/30/1979	6/30/2015	2.34	0.30	2.04	0.498831
thd_1957	thd_grp1	5271	6/30/1980	6/30/2015	1.48	0.28	1.20	0.498831
thd_1958	thd_grp1	5271	6/30/1981	6/30/2015	-1.65	0.27	-1.92	0.498831
thd_1959	thd_grp1	5271	6/30/1982	6/30/2015	-2.24	0.26	-2.50	0.498831
thd_1960	thd_grp1	5271	6/30/1983	6/30/2015	0.66	0.24	0.42	0.498831
thd_1961	thd_grp1	5271	6/30/1984	6/30/2015	-1.16	0.23	-1.39	0.498831
thd_1962	thd_grp1	5271	6/30/1985	6/30/2015	-3	0.21	-3.21	0.498831
thd_1963	thd_grp1	5271	6/30/1986	6/30/2015	-1.44	0.18	-1.62	0.498831
thd_1964	thd_grp1	5271	6/30/1987	6/30/2015	-1.82	0.17	-1.99	0.498831
thd_1965	thd_grp1	5271	6/30/1988	6/30/2015	-0.87	0.14	-1.01	0.498831
thd_1966	thd_grp1	5271	6/30/1989	6/30/2015	-0.62	0.12	-0.74	0.498831
thd_1967	thd_grp1	5271	6/30/1990	6/30/2015	-0.75	0.09	-0.84	0.498831
thd_1968	thd_grp1	5271	6/30/1991	6/30/2015	1.9	0.08	1.82	0.498831
thd_1969	thd_grp1	5271	6/30/2003	6/30/2015	-2.42	-0.12	-2.30	0.498831
thd_1970	thd_grp1	5271	6/30/2006	6/30/2015	-0.87	-0.05	-0.82	0.498831
thd_1971	thd_grp1	5271	6/30/2007	6/30/2015	-4.95	-0.06	-4.89	0.498831
thd_1972	thd_grp1	5271	6/30/2008	6/30/2015	-2.26	-0.07	-2.19	0.498831
thd_1973	thd_grp1	5271	6/30/2010	6/30/2015	1.56	-0.08	1.64	0.498831
thd_1974	thd_grp1	5271	6/30/2011	6/30/2015	-3.36	-0.08	-3.28	0.498831
thd_1975	thd_grp1	5271	6/30/2012	6/30/2015	-5.36	-0.06	-5.30	0.498831
thd_1976	thd_grp1	5271	6/30/2013	6/30/2015	-1.74	-0.04	-1.70	0.498831
thd_1977	thd_grp1	5271	6/30/2014	6/30/2015	2.11	0.10	2.01	0.498831
thd_1978	thd_grp1	5271	6/30/2015	6/30/2015	0	0.00	0.00	0.498831
thd_1979	thd_grp1	5543	6/30/1967	6/30/2015	6.62	5.79	0.83	0.498831
thd_1980	thd_grp1	5543	6/30/1968	6/30/2010	2.83	5.67	-2.84	0.498831
thd_1981	thd_grp1	5543	6/30/1976	6/30/2010	4.82	4.52	0.30	0.498831
thd_1982	thd_grp1	5543	6/30/1977	6/30/2010	2.75	4.33	-1.58	0.498831
thd_1983	thd_grp1	5543	6/30/1978	6/30/2010	4.12	4.21	-0.09	0.498831
thd_1984	thd_grp1	5543	6/30/1979	6/30/2010	3.27	4.12	-0.85	0.498831
thd_1985	thd_grp1	5543	6/30/1980	6/30/2010	2.5	4.04	-1.54	0.498831

Table A-5. Temporal Head Difference (THD) Targets.

Target Name	Target Group	NWF ID	Date 1	Date 2	Measured Groundwater Elevation Difference (ft)	Modelled Groundwater Elevation Difference (ft)	Residual (ft)	Target Weight
thd_1986	thd_grp1	5543	6/30/1981	6/30/2010	-0.71	3.93	-4.64	0.498831
thd_1987	thd_grp1	5543	6/30/1982	6/30/2010	7.00E-02	3.79	-3.72	0.498831
thd_1988	thd_grp1	5543	6/30/1983	6/30/2010	2.5	3.66	-1.16	0.498831
thd_1989	thd_grp1	5543	6/30/1984	6/30/2010	2.47	3.48	-1.01	0.498831
thd_1990	thd_grp1	5543	6/30/1985	6/30/2010	1.28	3.24	-1.96	0.498831
thd_1991	thd_grp1	5543	6/30/1986	6/30/2010	0.95	2.77	-1.82	0.498831
thd_1992	thd_grp1	5543	6/30/1987	6/30/2010	0.72	2.46	-1.74	0.498831
thd_1993	thd_grp1	5543	6/30/1988	6/30/2010	0.73	2.20	-1.47	0.498831
thd_1994	thd_grp1	5543	6/30/1989	6/30/2010	0.14	2.31	-2.17	0.498831
thd_1995	thd_grp1	5543	6/30/1990	6/30/2010	4.85	2.08	2.77	0.498831
thd_1996	thd_grp1	5543	6/30/1991	6/30/2010	1.12	1.89	-0.77	0.498831
thd_1997	thd_grp1	5543	6/30/1992	6/30/2010	2.07	1.86	0.21	0.498831
thd_1998	thd_grp1	5543	6/30/1993	6/30/2010	2.84	1.85	0.99	0.498831
thd_1999	thd_grp1	5543	6/30/1995	6/30/2010	1.48	1.53	-0.05	0.498831
thd_2000	thd_grp1	5543	6/30/1998	6/30/2010	0.83	1.20	-0.37	0.498831
thd_2001	thd_grp1	5543	6/30/2000	6/30/2010	-4.04	0.98	-5.02	0.498831
thd_2002	thd_grp1	5543	6/30/2001	6/30/2010	-4.65	0.89	-5.54	0.498831
thd_2003	thd_grp1	5543	6/30/2002	6/30/2010	-4.38	0.88	-5.26	0.498831
thd_2004	thd_grp1	5543	6/30/2003	6/30/2010	-1.05	0.89	-1.94	0.498831
thd_2005	thd_grp1	5543	6/30/2005	6/30/2010	2.16	0.74	1.42	0.498831
thd_2006	thd_grp1	5543	6/30/2006	6/30/2010	-0.66	0.43	-1.09	0.498831
thd_2007	thd_grp1	5543	6/30/2007	6/30/2010	-5.56	0.13	-5.69	0.498831
thd_2008	thd_grp1	5543	6/30/2008	6/30/2010	-3.17	0.06	-3.23	0.498831
thd_2009	thd_grp1	5543	6/30/2010	6/30/2010	0	0.00	0.00	0.498831
thd_2010	thd_grp1	5596	6/30/1986	6/30/2010	12.09	12.42	-0.33	0.498831
thd_2011	thd_grp1	5596	6/30/1987	6/30/2015	9.07	11.28	-2.21	0.498831
thd_2012	thd_grp1	5596	6/30/1989	6/30/2015	8.37	9.22	-0.85	0.498831
thd_2013	thd_grp1	5596	6/30/1990	6/30/2015	7.84	8.29	-0.45	0.498831
thd_2014	thd_grp1	5596	6/30/1991	6/30/2015	7.33	7.37	-0.04	0.498831
thd_2015	thd_grp1	5596	6/30/1992	6/30/2015	7.14	6.74	0.40	0.498831
thd_2016	thd_grp1	5596	6/30/1993	6/30/2015	6.77	6.12	0.65	0.498831

Table A-5. Temporal Head Difference (THD) Targets.

Target Name	Target Group	NWF ID	Date 1	Date 2	Measured Groundwater Elevation Difference (ft)	Modelled Groundwater Elevation Difference (ft)	Residual (ft)	Target Weight
thd_2017	thd_grp1	5596	6/30/1995	6/30/2015	5.5	4.76	0.74	0.498831
thd_2018	thd_grp1	5596	6/30/1996	6/30/2015	5.24	4.17	1.07	0.498831
thd_2019	thd_grp1	5596	6/30/1997	6/30/2015	3.89	3.62	0.27	0.498831
thd_2020	thd_grp1	5596	6/30/1998	6/30/2015	4	3.10	0.90	0.498831
thd_2021	thd_grp1	5596	6/30/1999	6/30/2015	4.4	2.63	1.77	0.498831
thd_2022	thd_grp1	5596	6/30/2000	6/30/2015	1.47	2.20	-0.73	0.498831
thd_2023	thd_grp1	5596	6/30/2001	6/30/2015	0.89	1.66	-0.77	0.498831
thd_2024	thd_grp1	5596	6/30/2002	6/30/2015	1.06	1.36	-0.30	0.498831
thd_2025	thd_grp1	5596	6/30/2003	6/30/2015	0.96	1.25	-0.29	0.498831
thd_2026	thd_grp1	5596	6/30/2005	6/30/2015	1.94	1.01	0.93	0.498831
thd_2027	thd_grp1	5596	6/30/2006	6/30/2015	2.38	0.55	1.83	0.498831
thd_2028	thd_grp1	5596	6/30/2007	6/30/2015	-0.93	-0.34	-0.59	0.498831
thd_2029	thd_grp1	5596	6/30/2008	6/30/2015	-0.23	-0.92	0.69	0.498831
thd_2030	thd_grp1	5596	6/30/2010	6/30/2015	7.00E-02	-1.18	1.25	0.498831
thd_2031	thd_grp1	5596	6/30/2011	6/30/2015	-1.85	-1.38	-0.47	0.498831
thd_2032	thd_grp1	5596	6/30/2012	6/30/2015	-2.4	-1.46	-0.94	0.498831
thd_2033	thd_grp1	5596	6/30/2013	6/30/2015	-1.48	-0.70	-0.78	0.498831
thd_2034	thd_grp1	5596	6/30/2014	6/30/2015	-0.37	-0.30	-0.07	0.498831
thd_2035	thd_grp1	5596	6/30/2015	6/30/2015	0	0.00	0.00	0.498831
thd_2036	thd_grp1	5656	6/30/1968	6/30/2015	4.00E-02	3.79	-3.75	0.498831
thd_2037	thd_grp1	5656	6/30/1969	6/30/2015	-0.24	3.74	-3.98	0.498831
thd_2038	thd_grp1	5656	6/30/1970	6/30/2015	2.88	3.69	-0.81	0.498831
thd_2039	thd_grp1	5656	6/30/1974	6/30/2015	1.68	3.06	-1.38	0.498831
thd_2040	thd_grp1	5656	6/30/1976	6/30/2015	2.95	2.86	0.09	0.498831
thd_2041	thd_grp1	5656	6/30/1977	6/30/2015	2.65	2.75	-0.10	0.498831
thd_2042	thd_grp1	5656	6/30/1978	6/30/2015	4.44	2.56	1.88	0.498831
thd_2043	thd_grp1	5656	6/30/1979	6/30/2015	2.87	2.39	0.48	0.498831
thd_2044	thd_grp1	5656	6/30/1980	6/30/2015	2.64	2.23	0.41	0.498831
thd_2045	thd_grp1	5656	6/30/1981	6/30/2015	-1.29	2.14	-3.43	0.498831
thd_2046	thd_grp1	5656	6/30/1982	6/30/2015	1	2.04	-1.04	0.498831
thd_2047	thd_grp1	5656	6/30/1983	6/30/2015	2.8	1.94	0.86	0.498831

Table A-5. Temporal Head Difference (THD) Targets.

Target Name	Target Group	NWF ID	Date 1	Date 2	Measured Groundwater Elevation Difference (ft)	Modelled Groundwater Elevation Difference (ft)	Residual (ft)	Target Weight
thd_2048	thd_grp1	5656	6/30/1984	6/30/2015	2.31	1.82	0.49	0.498831
thd_2049	thd_grp1	5656	6/30/1985	6/30/2015	5.00E-02	1.68	-1.63	0.498831
thd_2050	thd_grp1	5656	6/30/1986	6/30/2015	-0.31	1.51	-1.82	0.498831
thd_2051	thd_grp1	5656	6/30/1987	6/30/2015	-0.12	1.41	-1.53	0.498831
thd_2052	thd_grp1	5656	6/30/1988	6/30/2015	1.13	1.12	0.01	0.498831
thd_2053	thd_grp1	5656	6/30/1989	6/30/2015	3.2	1.12	2.08	0.498831
thd_2054	thd_grp1	5656	6/30/1990	6/30/2015	3.87	1.02	2.85	0.498831
thd_2055	thd_grp1	5656	6/30/1991	6/30/2015	2.8	1.16	1.64	0.498831
thd_2056	thd_grp1	5656	6/30/1992	6/30/2015	3.04	1.12	1.92	0.498831
thd_2057	thd_grp1	5656	6/30/1994	6/30/2015	2.28	0.86	1.42	0.498831
thd_2058	thd_grp1	5656	6/30/1995	6/30/2015	2.94	0.64	2.30	0.498831
thd_2059	thd_grp1	5656	6/30/1996	6/30/2015	2.11	0.81	1.30	0.498831
thd_2060	thd_grp1	5656	6/30/1997	6/30/2015	1.51	0.56	0.95	0.498831
thd_2061	thd_grp1	5656	6/30/1998	6/30/2015	3.27	0.49	2.78	0.498831
thd_2062	thd_grp1	5656	6/30/1999	6/30/2015	3.48	0.60	2.88	0.498831
thd_2063	thd_grp1	5656	6/30/2000	6/30/2015	-0.26	0.37	-0.63	0.498831
thd_2064	thd_grp1	5656	6/30/2001	6/30/2015	0.64	0.39	0.25	0.498831
thd_2065	thd_grp1	5656	6/30/2002	6/30/2015	-1.68	0.23	-1.91	0.498831
thd_2066	thd_grp1	5656	6/30/2003	6/30/2015	1.24	0.11	1.13	0.498831
thd_2067	thd_grp1	5656	6/30/2004	6/30/2015	0.99	0.27	0.72	0.498831
thd_2068	thd_grp1	5656	6/30/2006	6/30/2015	-1.12	-0.02	-1.10	0.498831
thd_2069	thd_grp1	5656	6/30/2007	6/30/2015	-2.92	-0.18	-2.74	0.498831
thd_2070	thd_grp1	5656	6/30/2008	6/30/2015	-0.19	-0.14	-0.05	0.498831
thd_2071	thd_grp1	5656	6/30/2010	6/30/2015	-1.07	-0.28	-0.79	0.498831
thd_2072	thd_grp1	5656	6/30/2011	6/30/2015	-5.05	-0.20	-4.85	0.498831
thd_2073	thd_grp1	5656	6/30/2012	6/30/2015	-3.77	-0.09	-3.68	0.498831
thd_2074	thd_grp1	5656	6/30/2013	6/30/2015	1.2	0.00	1.20	0.498831
thd_2075	thd_grp1	5656	6/30/2014	6/30/2015	0.59	-0.38	0.97	0.498831
thd_2076	thd_grp1	5656	6/30/2015	6/30/2015	0	0.00	0.00	0.498831
thd_2077	thd_grp1	5733	6/30/1986	6/30/2015	-5.52	0.00	-5.52	0.498831
thd_2078	thd_grp1	5733	6/30/1988	6/30/2015	-1.75	0.00	-1.75	0.498831

Table A-5. Temporal Head Difference (THD) Targets.

Target Name	Target Group	NWF ID	Date 1	Date 2	Measured Groundwater Elevation Difference (ft)	Modelled Groundwater Elevation Difference (ft)	Residual (ft)	Target Weight
thd_2079	thd_grp1	5733	6/30/1989	6/30/2015	-0.13	0.00	-0.13	0.498831
thd_2080	thd_grp1	5733	6/30/1990	6/30/2015	-2.2	0.00	-2.20	0.498831
thd_2081	thd_grp1	5733	6/30/1991	6/30/2015	-1.52	0.00	-1.52	0.498831
thd_2082	thd_grp1	5733	6/30/1992	6/30/2015	-0.56	0.00	-0.56	0.498831
thd_2083	thd_grp1	5733	6/30/1993	6/30/2015	-1.64	0.00	-1.64	0.498831
thd_2084	thd_grp1	5733	6/30/1994	6/30/2015	-0.79	0.00	-0.79	0.498831
thd_2085	thd_grp1	5733	6/30/1995	6/30/2015	-0.93	0.00	-0.93	0.498831
thd_2086	thd_grp1	5733	6/30/1996	6/30/2015	-0.92	0.00	-0.92	0.498831
thd_2087	thd_grp1	5733	6/30/1997	6/30/2015	-3.31	0.00	-3.31	0.498831
thd_2088	thd_grp1	5733	6/30/1998	6/30/2015	-0.46	0.00	-0.46	0.498831
thd_2089	thd_grp1	5733	6/30/1999	6/30/2015	-1.96	0.00	-1.96	0.498831
thd_2090	thd_grp1	5733	6/30/2000	6/30/2015	-5.16	0.00	-5.16	0.498831
thd_2091	thd_grp1	5733	6/30/2001	6/30/2015	-1.73	0.00	-1.73	0.498831
thd_2092	thd_grp1	5733	6/30/2002	6/30/2015	-1.85	0.00	-1.85	0.498831
thd_2093	thd_grp1	5733	6/30/2003	6/30/2015	0.87	0.00	0.87	0.498831
thd_2094	thd_grp1	5733	6/30/2007	6/30/2015	-5.37	0.00	-5.37	0.498831
thd_2095	thd_grp1	5733	6/30/2008	6/30/2015	-1.98	0.00	-1.98	0.498831
thd_2096	thd_grp1	5733	6/30/2010	6/30/2015	-2.6	0.00	-2.60	0.498831
thd_2097	thd_grp1	5733	6/30/2011	6/30/2015	-5.26	0.00	-5.26	0.498831
thd_2098	thd_grp1	5733	6/30/2012	6/30/2015	-2.95	0.00	-2.95	0.498831
thd_2099	thd_grp1	5733	6/30/2013	6/30/2015	-0.21	0.00	-0.21	0.498831
thd_2100	thd_grp1	5733	6/30/2014	6/30/2015	0.11	0.00	0.11	0.498831
thd_2101	thd_grp1	5733	6/30/2015	6/30/2015	0	0.00	0.00	0.498831
thd_2102	thd_grp1	5746	6/30/1957	6/30/2015	30.01	29.97	0.04	0.498831
thd_2103	thd_grp1	5746	6/30/1961	6/30/2015	28.01	28.06	-0.05	0.498831
thd_2104	thd_grp1	5746	6/30/1966	6/30/2015	24.17	25.24	-1.07	0.498831
thd_2105	thd_grp1	5746	6/30/1967	6/30/2015	23.89	24.84	-0.95	0.498831
thd_2106	thd_grp1	5746	6/30/1968	6/30/2015	22.52	24.48	-1.96	0.498831
thd_2107	thd_grp1	5746	6/30/1969	6/30/2015	21.91	24.12	-2.21	0.498831
thd_2108	thd_grp1	5746	6/30/1974	6/30/2015	15.62	22.49	-6.87	0.498831
thd_2109	thd_grp1	5746	6/30/1975	6/30/2015	15.5	22.10	-6.60	0.498831

Table A-5. Temporal Head Difference (THD) Targets.

Target Name	Target Group	NWF ID	Date 1	Date 2	Measured Groundwater Elevation Difference (ft)	Modelled Groundwater Elevation Difference (ft)	Residual (ft)	Target Weight
thd_2110	thd_grp1	5746	6/30/1976	6/30/2015	15.17	21.71	-6.54	0.498831
thd_2111	thd_grp1	5746	6/30/1977	6/30/2015	15.11	21.31	-6.20	0.498831
thd_2112	thd_grp1	5746	6/30/1978	6/30/2015	14.58	20.94	-6.36	0.498831
thd_2113	thd_grp1	5746	6/30/1979	6/30/2015	14.28	20.66	-6.38	0.498831
thd_2114	thd_grp1	5746	6/30/1980	6/30/2015	13.97	20.50	-6.53	0.498831
thd_2115	thd_grp1	5746	6/30/1981	6/30/2015	13.11	20.30	-7.19	0.498831
thd_2116	thd_grp1	5746	6/30/1982	6/30/2015	12.64	19.89	-7.25	0.498831
thd_2117	thd_grp1	5746	6/30/1983	6/30/2015	12.26	19.30	-7.04	0.498831
thd_2118	thd_grp1	5746	6/30/1984	6/30/2015	11.94	18.52	-6.58	0.498831
thd_2119	thd_grp1	5746	6/30/1985	6/30/2015	11.41	17.60	-6.19	0.498831
thd_2120	thd_grp1	5746	6/30/1986	6/30/2015	10.78	16.52	-5.74	0.498831
thd_2121	thd_grp1	5746	6/30/1987	6/30/2015	10.53	15.30	-4.77	0.498831
thd_2122	thd_grp1	5746	6/30/1988	6/30/2015	10.2	14.09	-3.89	0.498831
thd_2123	thd_grp1	5746	6/30/1989	6/30/2015	10.08	12.89	-2.81	0.498831
thd_2124	thd_grp1	5746	6/30/1990	6/30/2015	9.16	11.77	-2.61	0.498831
thd_2125	thd_grp1	5746	6/30/1991	6/30/2015	8.76	10.72	-1.96	0.498831
thd_2126	thd_grp1	5746	6/30/1992	6/30/2015	7.95	9.87	-1.92	0.498831
thd_2127	thd_grp1	5746	6/30/1993	6/30/2015	7.66	9.08	-1.42	0.498831
thd_2128	thd_grp1	5746	6/30/1994	6/30/2015	6.94	8.25	-1.31	0.498831
thd_2129	thd_grp1	5746	6/30/1995	6/30/2015	6.8	7.55	-0.75	0.498831
thd_2130	thd_grp1	5746	6/30/1996	6/30/2015	6.24	6.90	-0.66	0.498831
thd_2131	thd_grp1	5746	6/30/1997	6/30/2015	5.03	6.31	-1.28	0.498831
thd_2132	thd_grp1	5746	6/30/1998	6/30/2015	4.73	5.76	-1.03	0.498831
thd_2133	thd_grp1	5746	6/30/1999	6/30/2015	4.44	5.27	-0.83	0.498831
thd_2134	thd_grp1	5746	6/30/2000	6/30/2015	3.19	4.80	-1.61	0.498831
thd_2135	thd_grp1	5746	6/30/2001	6/30/2015	2.69	4.20	-1.51	0.498831
thd_2136	thd_grp1	5746	6/30/2002	6/30/2015	2.46	3.74	-1.28	0.498831
thd_2137	thd_grp1	5746	6/30/2003	6/30/2015	2.17	3.41	-1.24	0.498831
thd_2138	thd_grp1	5746	6/30/2006	6/30/2015	1.88	1.89	-0.01	0.498831
thd_2139	thd_grp1	5746	6/30/2007	6/30/2015	0.41	0.90	-0.49	0.498831
thd_2140	thd_grp1	5746	6/30/2008	6/30/2015	0.59	0.40	0.19	0.498831

Table A-5. Temporal Head Difference (THD) Targets.

Target Name	Target Group	NWF ID	Date 1	Date 2	Measured Groundwater Elevation Difference (ft)	Modelled Groundwater Elevation Difference (ft)	Residual (ft)	Target Weight
thd_2141	thd_grp1	5746	6/30/2010	6/30/2015	0.85	-0.17	1.02	0.498831
thd_2142	thd_grp1	5746	6/30/2011	6/30/2015	0.4	-0.28	0.68	0.498831
thd_2143	thd_grp1	5746	6/30/2012	6/30/2015	5.00E-02	-0.58	0.63	0.498831
thd_2144	thd_grp1	5746	6/30/2013	6/30/2015	0.14	-0.27	0.41	0.498831
thd_2145	thd_grp1	5746	6/30/2014	6/30/2015	-9.00E-02	-0.18	0.09	0.498831
thd_2146	thd_grp1	5746	6/30/2015	6/30/2015	0	0.00	0.00	0.498831
thd_2147	thd_grp1	5802	6/30/1968	6/30/2015	10.02	13.88	-3.86	0.498831
thd_2148	thd_grp1	5802	6/30/1969	6/30/2011	11.42	13.64	-2.22	0.498831
thd_2149	thd_grp1	5802	6/30/1995	6/30/2011	7.04	4.23	2.81	0.498831
thd_2150	thd_grp1	5802	6/30/1996	6/30/2011	5.52	3.96	1.56	0.498831
thd_2151	thd_grp1	5802	6/30/1998	6/30/2011	6.61	3.94	2.67	0.498831
thd_2152	thd_grp1	5802	6/30/2000	6/30/2011	3.73	2.94	0.79	0.498831
thd_2153	thd_grp1	5802	6/30/2001	6/30/2011	1.86	2.50	-0.64	0.498831
thd_2154	thd_grp1	5802	6/30/2002	6/30/2011	1.61	1.93	-0.32	0.498831
thd_2155	thd_grp1	5802	6/30/2003	6/30/2011	3.06	1.58	1.48	0.498831
thd_2156	thd_grp1	5802	6/30/2004	6/30/2011	2.88	1.76	1.12	0.498831
thd_2157	thd_grp1	5802	6/30/2005	6/30/2011	3.3	1.51	1.79	0.498831
thd_2158	thd_grp1	5802	6/30/2006	6/30/2011	0.87	0.79	0.08	0.498831
thd_2159	thd_grp1	5802	6/30/2007	6/30/2011	-1.15	0.26	-1.41	0.498831
thd_2160	thd_grp1	5802	6/30/2008	6/30/2011	1.06	0.00	1.06	0.498831
thd_2161	thd_grp1	5802	6/30/2010	6/30/2011	2.65	0.10	2.55	0.498831
thd_2162	thd_grp1	5802	6/30/2011	6/30/2011	0	0.00	0.00	0.498831
thd_2163	thd_grp2	7174	6/30/1997	6/30/2011	-13.61	-14.04	0.43	0.227329
thd_2164	thd_grp2	7174	6/30/2007	6/30/2015	-15.31	-12.64	-2.67	0.227329
thd_2165	thd_grp2	7174	6/30/2008	6/30/2015	-12.66	-10.76	-1.90	0.227329
thd_2166	thd_grp2	7174	6/30/2009	6/30/2015	-9.22	-8.05	-1.17	0.227329
thd_2167	thd_grp2	7174	6/30/2010	6/30/2015	-5.29	-5.50	0.21	0.227329
thd_2168	thd_grp2	7174	6/30/2011	6/30/2015	-4.99	-4.30	-0.69	0.227329
thd_2169	thd_grp2	7174	6/30/2012	6/30/2015	-3.83	-3.10	-0.73	0.227329
thd_2170	thd_grp2	7174	6/30/2013	6/30/2015	-1.65	-1.38	-0.27	0.227329
thd_2171	thd_grp2	7174	6/30/2014	6/30/2015	0.37	-0.47	0.84	0.227329

Table A-5. Temporal Head Difference (THD) Targets.

Target Name	Target Group	NWF ID	Date 1	Date 2	Measured Groundwater Elevation Difference (ft)	Modelled Groundwater Elevation Difference (ft)	Residual (ft)	Target Weight
thd_2172	thd_grp2	7174	6/30/2015	6/30/2015	0	0.00	0.00	0.227329
thd_2173	thd_grp2	8711	6/30/2003	6/30/2015	0.76	-0.75	1.51	0.227329
thd_2174	thd_grp2	8711	6/30/2004	6/30/2015	-0.64	-0.66	0.02	0.227329
thd_2175	thd_grp2	8711	6/30/2005	6/30/2015	0.19	-0.84	1.03	0.227329
thd_2176	thd_grp2	8711	6/30/2006	6/30/2015	-0.5	-0.96	0.46	0.227329
thd_2177	thd_grp2	8711	6/30/2007	6/30/2015	-0.2	-1.10	0.90	0.227329
thd_2178	thd_grp2	8711	6/30/2008	6/30/2015	-0.29	-1.04	0.75	0.227329
thd_2179	thd_grp2	8711	6/30/2010	6/30/2015	0	-0.43	0.43	0.227329
thd_2180	thd_grp2	8711	6/30/2011	6/30/2015	-0.11	-0.32	0.21	0.227329
thd_2181	thd_grp2	8711	6/30/2012	6/30/2015	0.55	-0.25	0.80	0.227329
thd_2182	thd_grp2	8711	6/30/2013	6/30/2015	0.5	-0.09	0.59	0.227329
thd_2183	thd_grp2	8711	6/30/2014	6/30/2015	3.00E-02	0.04	-0.01	0.227329
thd_2184	thd_grp2	8711	6/30/2015	6/30/2015	0	0.00	0.00	0.227329
thd_2185	thd_grp2	8721	6/30/2003	6/30/2015	-0.42	-0.56	0.14	0.227329
thd_2186	thd_grp2	8721	6/30/2004	6/30/2015	-1.36	-0.46	-0.90	0.227329
thd_2187	thd_grp2	8721	6/30/2006	6/30/2015	-3.71	-0.79	-2.92	0.227329
thd_2188	thd_grp2	8721	6/30/2007	6/30/2015	-2.52	-0.94	-1.58	0.227329
thd_2189	thd_grp2	8721	6/30/2008	6/30/2015	-3.35	-0.89	-2.46	0.227329
thd_2190	thd_grp2	8721	6/30/2010	6/30/2015	0.22	-0.36	0.58	0.227329
thd_2191	thd_grp2	8721	6/30/2011	6/30/2015	-0.25	-0.26	0.01	0.227329
thd_2192	thd_grp2	8721	6/30/2012	6/30/2015	2.00E-02	-0.20	0.22	0.227329
thd_2193	thd_grp2	8721	6/30/2013	6/30/2015	0.27	-0.05	0.32	0.227329
thd_2194	thd_grp2	8721	6/30/2014	6/30/2015	0.56	0.06	0.50	0.227329
thd_2195	thd_grp2	8721	6/30/2015	6/30/2015	0	0.00	0.00	0.227329
thd_2205	thd_grp2	9745	6/30/2007	6/30/2015	-2.72	0.01	-2.73	0.227329
thd_2206	thd_grp2	9745	6/30/2008	6/30/2015	0.48	0.01	0.47	0.227329
thd_2207	thd_grp2	9745	6/30/2009	6/30/2015	0.23	0.01	0.22	0.227329
thd_2208	thd_grp2	9745	6/30/2010	6/30/2015	0.75	0.01	0.74	0.227329
thd_2209	thd_grp2	9745	6/30/2011	6/30/2015	-1.33	0.01	-1.34	0.227329
thd_2210	thd_grp2	9745	6/30/2012	6/30/2015	-0.19	0.01	-0.20	0.227329
thd_2211	thd_grp2	9745	6/30/2013	6/30/2015	1.61	0.01	1.60	0.227329

Table A-5. Temporal Head Difference (THD) Targets.

Target Name	Target Group	NWF ID	Date 1	Date 2	Measured Groundwater Elevation Difference (ft)	Modelled Groundwater Elevation Difference (ft)	Residual (ft)	Target Weight
thd_2212	thd_grp2	9745	6/30/2014	6/30/2015	1.68	0.01	1.67	0.227329
thd_2213	thd_grp2	9745	6/30/2015	6/30/2015	0	0.00	0.00	0.227329
thd_2214	thd_grp2	9747	6/30/2008	6/30/2014	-1.5	0.00	-1.50	0.227329
thd_2215	thd_grp2	9747	6/30/2009	6/30/2014	-1.02	0.00	-1.02	0.227329
thd_2216	thd_grp2	9747	6/30/2010	6/30/2014	-0.91	0.00	-0.91	0.227329
thd_2217	thd_grp2	9747	6/30/2011	6/30/2014	-2.35	0.00	-2.35	0.227329
thd_2218	thd_grp2	9747	6/30/2012	6/30/2014	-1.4	0.00	-1.40	0.227329
thd_2219	thd_grp2	9747	6/30/2013	6/30/2014	-0.76	0.00	-0.76	0.227329
thd_2220	thd_grp2	9747	6/30/2014	6/30/2014	0	0.00	0.00	0.227329
thd_2221	thd_grp1	9750	6/30/2009	6/30/2015	0.81	0.01	0.80	0.498831
thd_2222	thd_grp1	9750	6/30/2010	6/30/2015	-1.73	0.00	-1.73	0.498831
thd_2223	thd_grp1	9750	6/30/2011	6/30/2015	-1.29	0.00	-1.29	0.498831
thd_2224	thd_grp1	9750	6/30/2012	6/30/2015	-0.17	0.00	-0.17	0.498831
thd_2225	thd_grp1	9750	6/30/2013	6/30/2015	0.78	0.00	0.78	0.498831
thd_2226	thd_grp1	9750	6/30/2014	6/30/2015	0.5	0.00	0.50	0.498831
thd_2227	thd_grp1	9750	6/30/2015	6/30/2015	0	0.00	0.00	0.498831

Table A-6. Incremetal Baseflow Targets.

Target Name	Target Group	Downstream Gage (Choctawhatchee River near Bruce, FL) Annual Average Baseflow (ft^3/sec)	Upstream Gage 1 (Choctawhatchee River at Caryville, FL) Annual Average Baseflow (ft^3/sec)	Upstream Gage 2 (Holmes Creek at Vernon, FL) Annual Average Baseflow (ft^3/sec)	Date	Measured Baseflow Gain (ft^3/sec)	Modelled Baseflow Gain (ft^3/sec)	Residual (ft^3/sec)	Target Weight
baseflow_01	baseflow	3311.10	2237.01	346.00	6/30/1950	728.08	752.76	-24.68	0
baseflow_02	baseflow	2739.71	1747.84	338.76	6/30/1951	653.11	752.65	-99.54	0
baseflow_03	baseflow	3427.84	2280.01	361.38	6/30/1952	786.45	752.54	33.91	0
baseflow_04	baseflow	4148.10	2862.76	402.10	6/30/1953	883.25	752.44	130.81	0
baseflow_05	baseflow	3223.59	2167.67	374.68	6/30/1954	681.25	752.33	-71.08	0
baseflow_06	baseflow	2078.19	1278.31	262.83	6/30/1955	537.05	752.22	-215.17	0
baseflow_07	baseflow	2529.96	1676.88	299.36	6/30/1956	553.71	752.11	-198.40	0
baseflow_08	baseflow	3442.56	2423.38	362.24	6/30/1957	656.94	752.01	-95.07	0
baseflow_09	baseflow	3926.79	2536.72	466.18	6/30/1958	923.90	751.91	171.99	0
baseflow_10	baseflow	4405.20	2802.21	463.21	6/30/1959	1139.78	751.81	387.97	0
baseflow_11	baseflow	4428.42	2930.05	463.43	6/30/1960	1034.94	751.68	283.26	0
baseflow_12	baseflow	3980.19	2723.51	378.40	6/30/1961	878.28	751.55	126.73	0
baseflow_13	baseflow	3506.77	2384.40	379.15	6/30/1962	743.23	751.41	-8.18	0
baseflow_14	baseflow	3323.94	2105.40	371.32	6/30/1963	847.21	751.28	95.93	0
baseflow_15	baseflow	6468.72	4394.54	614.49	6/30/1964	1459.70	751.14	708.56	0
baseflow_16	baseflow	4720.49	3249.01	522.88	6/30/1965	948.60	751.00	197.60	0
baseflow_17	baseflow	4020.82	2627.90	426.93	6/30/1966	965.99	750.85	215.14	0
baseflow_18	baseflow	3249.79	2059.12	386.33	6/30/1967	804.35	750.70	53.65	0
baseflow_19	baseflow	2523.73	1604.58	318.89	6/30/1968	600.25	750.54	-150.29	0
baseflow_20	baseflow	2801.82	1779.24	331.69	6/30/1969	690.88	750.40	-59.52	0
baseflow_21	baseflow	4231.41	2743.77	430.46	6/30/1970	1057.18	750.27	306.91	0
baseflow_22	baseflow	4970.81	3384.96	398.02	6/30/1971	1187.83	750.14	437.69	0
baseflow_23	baseflow	3487.02	2296.44	383.63	6/30/1972	806.95	749.93	57.02	0
baseflow_24	baseflow	5952.42	3733.70	454.50	6/30/1973	1764.22	749.72	1014.50	0
baseflow_25	baseflow	3799.93	2753.31	373.71	6/30/1974	672.91	749.55	-76.64	0
baseflow_26	baseflow	6359.81	4473.92	486.51	6/30/1975	1399.38	749.12	650.26	0
baseflow_27	baseflow	5049.75	3814.52	470.30	6/30/1976	764.94	748.93	16.01	0
baseflow_28	baseflow	4364.71	3131.83	459.34	6/30/1977	773.54	748.81	24.73	0

Table A-6. Incremetal Baseflow Targets.

Target Name	Target Group	Downstream Gage (Choctawhatchee River near Bruce, FL) Annual Average Baseflow (ft^3/sec)	Upstream Gage 1 (Choctawhatchee River at Caryville, FL) Annual Average Baseflow (ft^3/sec)	Upstream Gage 2 (Holmes Creek at Vernon, FL) Annual Average Baseflow (ft^3/sec)	Date	Measured Baseflow Gain (ft^3/sec)	Modelled Baseflow Gain (ft^3/sec)	Residual (ft^3/sec)	Target Weight
baseflow_29	baseflow	4796.40	3366.15	482.62	6/30/1978	947.63	748.63	199.00	0
baseflow_30	baseflow	2539.42	1755.47	323.74	6/30/2006	460.21	740.30	-280.09	0
baseflow_31	baseflow	2169.42	1532.77	298.89	6/30/2007	337.76	739.82	-402.06	0
baseflow_32	baseflow	3323.19	2159.38	340.79	6/30/2008	823.02	739.80	83.22	0
baseflow_33	baseflow	4690.76	3146.79	374.62	6/30/2009	1169.34	739.33	430.01	0
baseflow_34	baseflow	4195.93	2854.29	409.08	6/30/2010	932.56	738.76	193.80	0
baseflow_35	baseflow	1791.83	1032.96	268.63	6/30/2011	490.24	738.84	-248.60	0
baseflow_36	baseflow	2102.09	1194.18	279.23	6/30/2012	628.68	738.77	-110.09	0
baseflow_37	baseflow	4380.09	3000.93	440.95	6/30/2013	938.22	738.97	199.25	0
baseflow_38	baseflow	4680.60	3088.82	498.15	6/30/2014	1093.63	739.19	354.44	0
baseflow_39	baseflow	3359.91	2120.44	409.17	6/30/2015	830.30	738.15	92.15	0

Table A-7. Transmissivity Targets.

Target Name	Target Group	NWF ID	Measured Transmissivity (ft^2/day)	Modelled Transmissivity (ft^2/day)	Residual (ft^2/day)	Target Weight
apt_1472	apt_grp1	1472	899.99	1461.49	-561.50	53.65
apt_1476	apt_grp1	1476	10999.93	5125.22	5874.72	53.65
apt_1675	apt_grp1	1675	1299.99	600.14	699.85	107.3
apt_1688	apt_grp1	1688	642.01	904.97	-262.96	107.3
apt_1894	apt_grp1	1894	1799.99	771.16	1028.83	107.3
apt_2792	apt_grp1	2792	11700.11	5306.31	6393.80	107.3
apt_3841	apt_grp1	3841	1899.98	1677.67	222.31	107.3
apt_3923	apt_grp1	3923	11200.05	9735.71	1464.34	107.3
apt_7174	apt_grp1	7174	8300.04	9887.95	-1587.92	53.65
apt_1124	apt_grp2	1124	7263.07	2617.10	4645.97	40.5
apt_1413	apt_grp2	1413	20399.99	11292.11	9107.88	40.5
apt_1453	apt_grp2	1453	6900.01	5509.34	1390.68	40.5
apt_2318	apt_grp2	2318	18999.84	21055.63	-2055.79	40.5
apt_2627	apt_grp2	2627	7799.92	8040.33	-240.41	40.5
apt_3315	apt_grp2	3315	14878.87	12409.39	2469.48	81
apt_4246	apt_grp2	4246	25699.82	23273.46	2426.36	81
apt_4553	apt_grp2	4553	3500.02	3604.44	-104.42	81
apt_7686	apt_grp2	7686	7353.94	7464.84	-110.90	40.5
apt_7751	apt_grp2	7751	347.00	1559.18	-1212.18	40.5
apt_8023	apt_grp2	8023	14180.12	13373.90	806.22	81
apt_8435	apt_grp2	8435	9870.06	10204.47	-334.40	81
apt_12848	apt_grp2	12848	15547.84	9066.17	6481.67	40.5
apt_3441	apt_grp3	3441	14000.06	13792.12	207.95	58.6
apt_3502	apt_grp3	3502	14999.96	13745.93	1254.02	58.6
apt_3546	apt_grp3	3546	16000.00	13624.77	2375.23	58.6
apt_3623	apt_grp3	3623	12999.90	15412.49	-2412.59	58.6
apt_4761	apt_grp3	4761	6917.99	6550.15	367.84	58.6
apt_7175	apt_grp3	7175	6900.01	7135.50	-235.49	58.6
apt_7179	apt_grp3	7179	13399.85	14379.12	-979.26	58.6
apt_7184	apt_grp3	7184	7499.98	7525.85	-25.87	58.6
apt_7185	apt_grp3	7185	8000.00	7525.85	474.15	58.6

Table A-7. Transmissivity Targets.

Target Name	Target Group	NWF ID	Measured Transmissivity (ft^2/day)	Modelled Transmissivity (ft^2/day)	Residual (ft^2/day)	Target Weight
apt_7186	apt_grp3	7186	9800.09	6505.83	3294.26	58.6
apt_9638	apt_grp3	9638	40949.63	40170.72	778.91	58.6
apt_9748	apt_grp3	9748	42794.70	22708.11	20086.60	58.6
apt_9812	apt_grp3	9812	12247.01	12379.79	-132.79	58.6
apt_9813	apt_grp3	9813	11760.88	8943.16	2817.73	58.6
apt_9941	apt_grp3	9941	47999.86	57934.75	-9934.88	58.6
apt_9942	apt_grp3	9942	47999.86	57934.75	-9934.88	58.6
apt_12812	apt_grp3	12812	90999.71	23453.55	67546.16	58.6

Table A-8. Pre-Development Head Targets.

Target Name	Target Group	NWF ID or SEAWAT Boundary Point (pd*)	Date	Measured Groundwater Elevation (NAVD88, ft)	Modelled Groundwater Elevation (NAVD88, ft)	Residual (ft)	Target Weight
head_805	head_grp5	1894	1/1/1942	62.32	54.064721	8.255279	2.5
head_1814	head_grp5	2738	1/1/1942	32.5	31.535319	0.964681	2.5
head_6245	head_grp5	9054	1/1/1942	34.3	33.025607	1.274393	2.5
head_6540	head_grp5	1360	1/1/1942	29.95	27.419834	2.530166	2.5
head_6541	head_grp5	2746	1/1/1942	36.54	31.281796	5.258204	2.5
head_6542	head_grp5	3381	1/1/1942	60.99	65.917735	-4.927735	2.5
head_6543	head_grp5	4635	1/1/1942	49.9	51.15133	-1.25133	2.5
head_6544	head_grp5	4733	1/1/1942	64.78	64.192545	0.587455	2.5
head_6545	head_grp5	9045	1/1/1942	99.92	98.943364	0.976636	2.5
head_6546	head_grp5	9047	1/1/1942	118.7	123.1797	-4.4797	2.5
head_6547	head_grp5	9048	1/1/1942	37.89	37.357943	0.532057	2.5
head_6548	head_grp5	9049	1/1/1942	46.88	54.73231	-7.85231	2.5
head_6549	head_grp5	9050	1/1/1942	64.38	54.855032	9.524968	2.5
head_6550	head_grp5	9051	1/1/1942	63.08	53.423549	9.656451	2.5
head_6551	head_grp5	9052	1/1/1942	52.38	50.743165	1.636835	2.5
head_6552	head_grp5	9053	1/1/1942	33.88	34.520053	-0.640053	2.5
head_6553	head_grp5	pd01	1/1/1942	60.4	60.572285	-0.172285	1.25
head_6554	head_grp5	pd02	1/1/1942	62.4	62.406661	-0.006661	1.25
head_6555	head_grp5	pd03	1/1/1942	64.2	64.167655	0.032345	1.25
head_6556	head_grp5	pd04	1/1/1942	66.49	66.00805	0.48195	1.25
head_6557	head_grp5	pd05	1/1/1942	68.55	67.846689	0.703311	1.25
head_6558	head_grp5	pd06	1/1/1942	70.28	69.632518	0.647482	1.25
head_6559	head_grp5	pd07	1/1/1942	72.32	71.477914	0.842086	1.25
head_6560	head_grp5	pd08	1/1/1942	74.55	73.456829	1.093171	1.25
head_6561	head_grp5	pd09	1/1/1942	77.15	75.530244	1.619756	1.25
head_6562	head_grp5	pd10	1/1/1942	79.06	77.714734	1.345266	1.25
head_6563	head_grp5	pd11	1/1/1942	80.31	80.009614	0.300386	1.25
head_6564	head_grp5	pd12	1/1/1942	80.34	80.02369	0.31631	1.25
head_6565	head_grp5	pd13	1/1/1942	80.74	79.95138	0.78862	1.25
head_6566	head_grp5	pd14	1/1/1942	81.11	80.062715	1.047285	1.25
head_6567	head_grp5	pd15	1/1/1942	81.44	80.449705	0.990295	1.25

Table A-8. Pre-Development Head Targets.

Target Name	Target Group	NWF ID or SEAWAT Boundary Point (pd*)	Date	Measured Groundwater Elevation (NAVD88, ft)	Modelled Groundwater Elevation (NAVD88, ft)	Residual (ft)	Target Weight
head_6568	head_grp5	pd16	1/1/1942	82.23	81.075584	1.154416	1.25
head_6569	head_grp5	pd17	1/1/1942	83.12	81.912234	1.207766	1.25
head_6570	head_grp5	pd18	1/1/1942	84.17	83.141589	1.028411	1.25
head_6571	head_grp5	pd19	1/1/1942	85.17	84.711691	0.458309	1.25
head_6572	head_grp5	pd20	1/1/1942	86.94	86.666343	0.273657	1.25
head_6573	head_grp5	pd21	1/1/1942	88.45	89.076803	-0.626803	1.25
head_6574	head_grp5	pd22	1/1/1942	89.47	91.807558	-2.337558	1.25
head_6575	head_grp5	pd23	1/1/1942	90.09	93.85371	-3.76371	1.25
head_6576	head_grp5	pd24	1/1/1942	92.27	95.110155	-2.840155	1.25
head_6577	head_grp5	pd25	1/1/1942	96.47	95.756368	0.713632	1.25
head_6578	head_grp5	pd26	1/1/1942	99.57	96.096828	3.473172	1.25
head_6579	head_grp5	pd27	1/1/1942	100.45	96.471676	3.978324	1.25
head_6580	head_grp5	pd28	1/1/1942	101.38	97.172397	4.207603	1.25
head_6581	head_grp5	pd29	1/1/1942	102.11	98.244277	3.865723	1.25
head_6582	head_grp5	pd30	1/1/1942	103.98	99.354227	4.625773	1.25
head_6583	head_grp5	pd31	1/1/1942	105.42	100.19159	5.22841	1.25
head_6584	head_grp5	pd32	1/1/1942	105.86	101.04284	4.81716	1.25
head_6585	head_grp5	pd33	1/1/1942	105	102.13845	2.86155	1.25
head_6586	head_grp5	pd34	1/1/1942	105.2	103.41265	1.78735	1.25
head_6587	head_grp5	pd35	1/1/1942	106.11	104.6156	1.4944	1.25
head_6588	head_grp5	pd36	1/1/1942	106.36	105.38621	0.97379	1.25
head_6589	head_grp5	pd37	1/1/1942	107.4	105.28745	2.11255	1.25
head_6590	head_grp5	pd38	1/1/1942	109.75	104.38285	5.36715	1.25
head_6591	head_grp5	pd39	1/1/1942	110.94	103.33155	7.60845	1.25
head_6592	head_grp5	pd40	1/1/1942	113.34	102.67405	10.66595	1.25
head_6593	head_grp5	pd41	1/1/1942	114.72	102.4939	12.2261	1.25
head_6594	head_grp5	pd42	1/1/1942	115.08	102.74075	12.33925	1.25
head_6595	head_grp5	pd43	1/1/1942	114.32	102.88725	11.43275	1.25
head_6596	head_grp5	pd44	1/1/1942	113.47	102.32245	11.14755	1.25
head_6597	head_grp5	pd45	1/1/1942	110.2	100.90175	9.29825	1.25
head_6598	head_grp5	pd46	1/1/1942	104.38	98.631304	5.748696	1.25

Table A-8. Pre-Development Head Targets.

Target Name	Target Group	NWF ID or SEAWAT Boundary Point (pd*)	Date	Measured Groundwater Elevation (NAVD88, ft)	Modelled Groundwater Elevation (NAVD88, ft)	Residual (ft)	Target Weight
head_6599	head_grp5	pd47	1/1/1942	100	95.719669	4.280331	1.25
head_6600	head_grp5	pd48	1/1/1942	96.11	92.593339	3.516661	1.25
head_6601	head_grp5	pd49	1/1/1942	92.4	89.398374	3.001626	1.25
head_6602	head_grp5	pd50	1/1/1942	88.78	86.192119	2.587881	1.25
head_6603	head_grp5	pd51	1/1/1942	82.12	82.965259	-0.845259	1.25
head_6604	head_grp5	pd52	1/1/1942	79.69	79.648124	0.041876	1.25
head_6605	head_grp5	pd53	1/1/1942	77.73	76.775439	0.954561	1.25
head_6606	head_grp5	pd54	1/1/1942	75.71	74.844595	0.865405	1.25
head_6607	head_grp5	pd55	1/1/1942	72.94	73.070915	-0.130915	1.25
head_6608	head_grp5	pd56	1/1/1942	70.47	69.54208	0.92792	1.25
head_6609	head_grp5	pd57	1/1/1942	64.77	62.90385	1.86615	1.25
head_6610	head_grp5	pd58	1/1/1942	59.01	54.22538	4.78462	1.25
head_6611	head_grp5	pd59	1/1/1942	50.58	41.6742	8.9058	1.25
head_6612	head_grp5	pd60	1/1/1942	43.23	32.05667	11.17333	1.25
head_6613	head_grp5	pd61	1/1/1942	39.72	28.50744	11.21256	1.25
head_6614	head_grp5	pd62	1/1/1942	39.11	37.17699	1.93301	1.25
head_6615	head_grp5	pd63	1/1/1942	39.04	40.1201	-1.0801	1.25
head_6616	head_grp5	pd64	1/1/1942	37.42	36.43537	0.98463	1.25
head_6617	head_grp5	pd65	1/1/1942	30.73	25.20804	5.52196	1.25
head_6618	head_grp5	pd66	1/1/1942	28.86	17.39851	11.46149	1.25
head_6619	head_grp5	pd67	1/1/1942	27.83	21.45376	6.37624	1.25
head_6620	head_grp5	pd68	1/1/1942	27.21	22.84613	4.36387	1.25
head_6621	head_grp5	pd69	1/1/1942	26.6	23.495665	3.104335	1.25
head_6622	head_grp5	pd70	1/1/1942	25.78	24.12173	1.65827	1.25
head_6623	head_grp5	pd71	1/1/1942	25.18	25.098095	0.081905	1.25
head_6624	head_grp5	pd72	1/1/1942	24.57	26.59127	-2.02127	1.25
head_6625	head_grp5	pd73	1/1/1942	24.33	28.474455	-4.144455	1.25
head_6626	head_grp5	pd74	1/1/1942	23.94	30.416645	-6.476645	1.25
head_6627	head_grp5	pd75	1/1/1942	23.71	31.935095	-8.225095	1.25
head_6628	head_grp5	pd76	1/1/1942	23.13	32.326	-9.196	1.25
head_6629	head_grp5	pd77	1/1/1942	21.94	30.848055	-8.908055	1.25

Table A-8. Pre-Development Head Targets.

Target Name	Target Group	NWF ID or SEAWAT Boundary Point (pd*)	Date	Measured Groundwater Elevation (NAVD88, ft)	Modelled Groundwater Elevation (NAVD88, ft)	Residual (ft)	Target Weight
head_6630	head_grp5	pd78	1/1/1942	20.95	26.9513	-6.0013	1.25
head_6631	head_grp5	pd79	1/1/1942	20.07	22.30219	-2.23219	1.25
head_6632	head_grp5	pd80	1/1/1942	18.95	17.8586	1.0914	1.25
head_6633	head_grp5	pd81	1/1/1942	15.52	14.14582	1.37418	1.25
head_6634	head_grp5	pd82	1/1/1942	11.55	11.67152	-0.12152	1.25

APPENDIX B – CALIBRATION PLAN



TETRA TECH

Transient Region II Model Calibration Plan

November 21, 2019

Overview

- Calibration Parameters
- Parameter Treatment
- Calibration Targets
- Model Dataset Workflow
  - Pre-processing
  - Post-processing
- Calibration Approach

TETRA TECH

Calibration Parameters

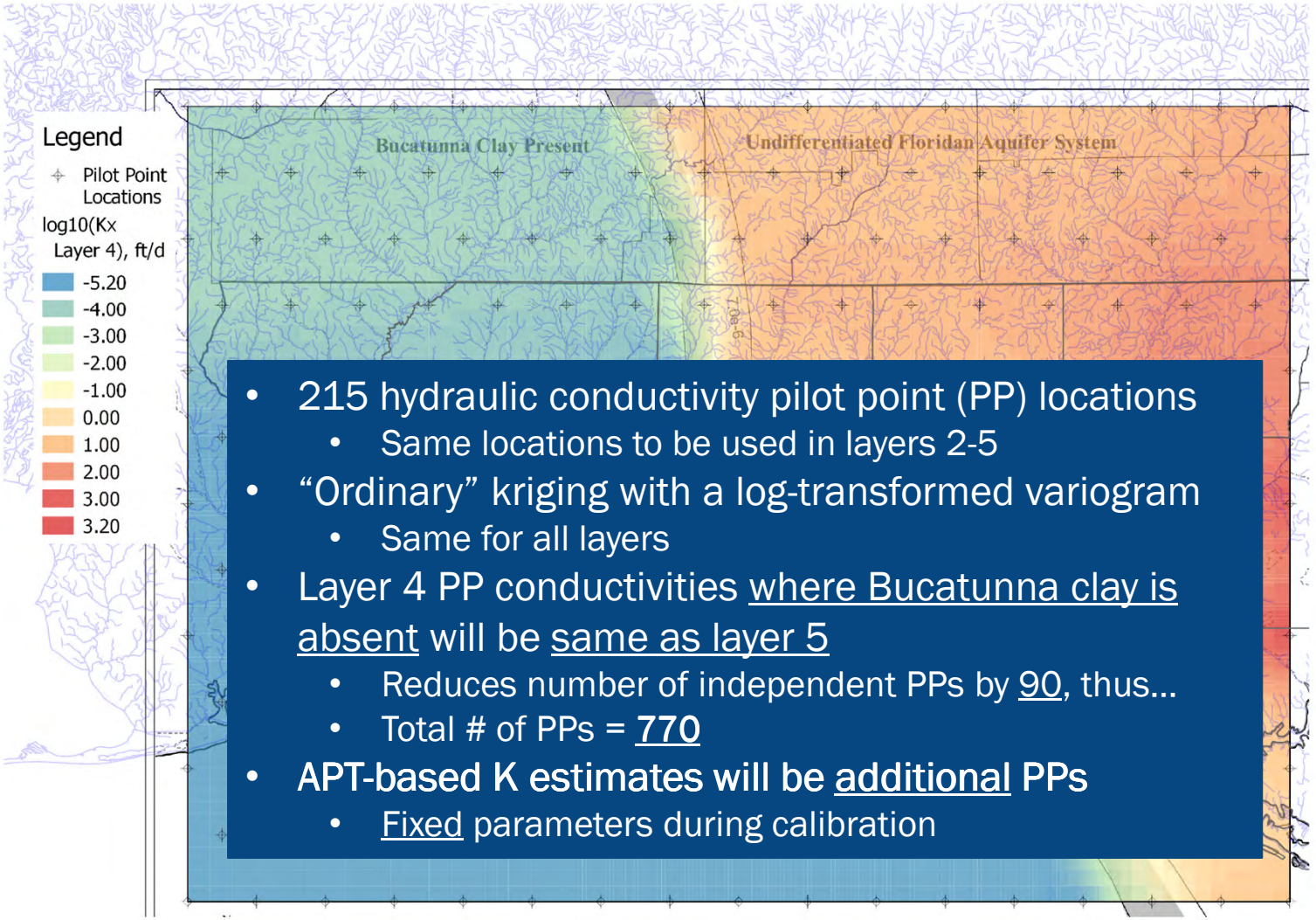
Parameters – Pilot Points

TETRA TECH

- Use pilot points to define layer 2-5 hydraulic conductivities
  - Vertical hydraulic conductivities (K_v) in confining units:
    - Intermediate Unit (Layer 2)
    - Bucatunna Clay (western portion of Layer 4)
  - Horizontal hydraulic conductivities (K_h) in aquifers:
    - Upper Floridan Aquifer (Layer 3)
    - Lower Floridan Aquifer (Layer 5)

- Locations & initial estimates ("preferred values") will be based on current model

Parameters – Pilot Points



- 215 hydraulic conductivity pilot point (PP) locations
  - Same locations to be used in layers 2-5
- "Ordinary" kriging with a log-transformed variogram
  - Same for all layers
- Layer 4 PP conductivities where Bucatunna clay is absent will be same as layer 5
  - Reduces number of independent PPs by 90, thus…
  - Total # of PPs = 770
- APT-based K estimates will be additional PPs
  - Fixed parameters during calibration

Parameters – Other

- Layer 1 Properties (*n=3*)
  - Homogeneous (domain-wide values of K_h, K_v, and S)
  - Anisotropic ($K_h \neq K_v$)
- Horizontal-to-vertical anisotropy ratios (K_h/K_v) and storage coefficients (S) for Layers 2-5
  - Layer-specific in layers 2, 3, & 5 (*n=6*)
  - K_h/K_v & S in layer 4 will be interpolated using pilot points (*n=2*)
    - Where Bucatunna clay is present, pilot points will have a single value
    - Where Bucatunna clay is absent, pilot points will have same value as all of layer 5
- Riverbed conductance multiplier (*n=1*)
  - Single multiplier value applied to all river cells

Parameters – Notable Exclusions

- Recharge rates & GHB heads/conductances
  - Excluded per Scope of Work
- DRN Package parameters
  - Heads
  - Conductances

Parameters – Summary

TETRA TECH

- Total of 782 calibration parameters
  - 770 pilot points (K_h *or* K_v in layers 2-5)
  - 1 RIV boundary conductance multiplier
  - 3 Layer 1 properties:
    - K_h
    - K_h/K_v
    - S
  - 4 K_h/K_v:
    - Layer 2
    - Layer 3
    - Bucatunna clay
    - Layer 5 (and non-Bucatunna clay portion of Layer 4)
  - 4 Storage coefficients:
    - Layer 2
    - Layer 3
    - Bucatunna clay
    - Layer 5 (and non-Bucatunna clay portion of Layer 4)

TETRA TECH

Parameter Treatment

Parameter Treatment

TETRA TECH

- Initial parameter values will be based on current calibrated values
  - Pilot point values will be assigned current values at the PP location
    - Resulting K distribution will differ from current distribution
- Parameters will be grouped by parameter type
  - All K_h values (*n=431*; 430 PPs + Layer 1 K_h)
  - All K_v values (*n=340* PPs)
  - All anisotropies (*n=5*; Layers 1-3, 5, and Bucatunna clay)
  - All storage coefficients (*n=5*; Layers 1-3, 5, and Bucatunna clay)
  - RIV conductance multiplier (*n=1*)
- Parameter bounds (initial)
  - +/- 1 order of magnitude for K_h , K_v , S, and RIV cond. multiplier
  - +/- 50% for K_h/K_v

TETRA TECH

Calibration Targets

Target Types

TETRA TECH

Quantitative

- Groundwater heads
- Vertical head differences (VHDs)
- Horizontal head differences (HHDs)
- Temporal head differences (THDs)

Qualitative

- Incremental Baseflows

Targets – Groundwater Heads

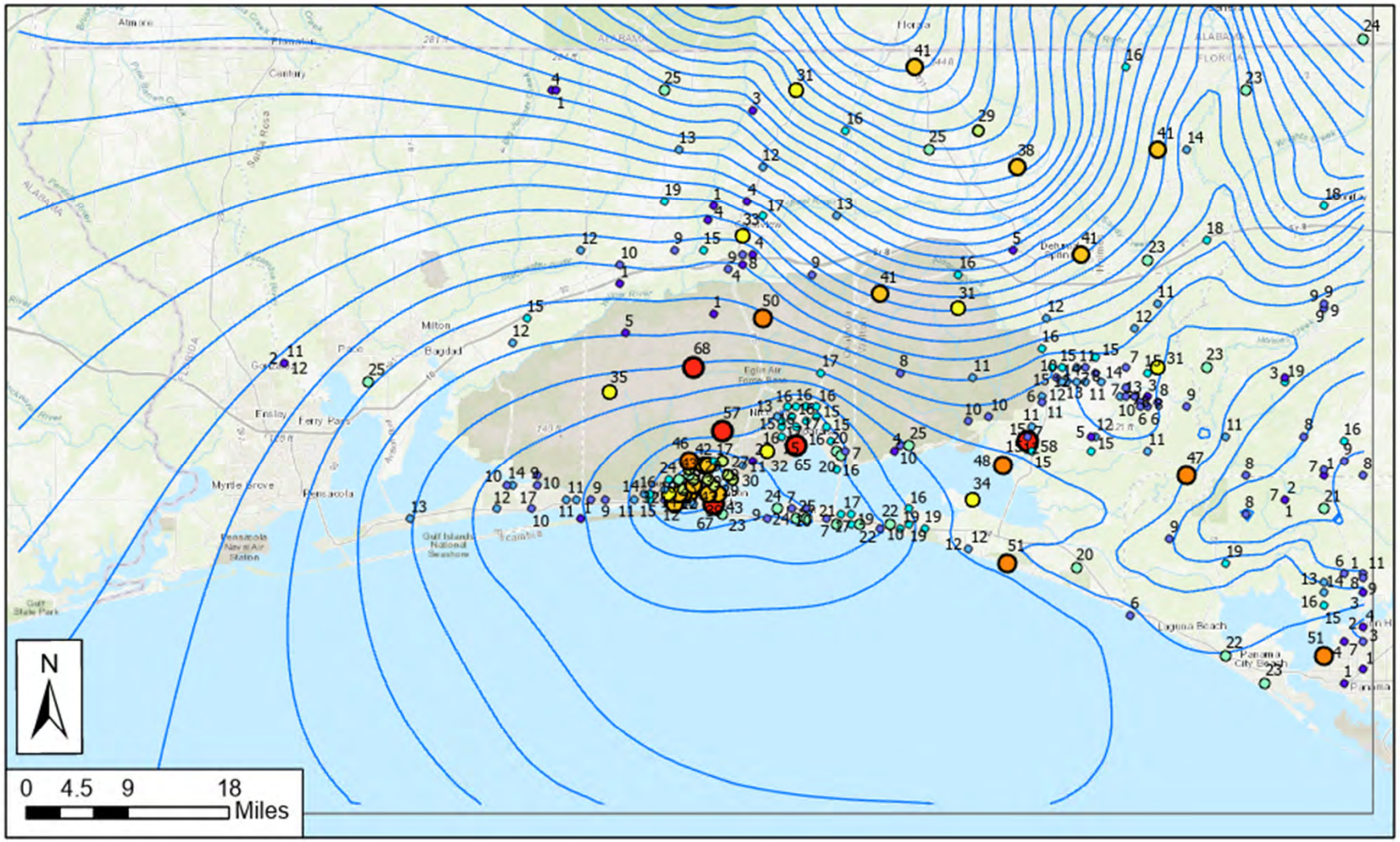
- All provided head targets not in Layer 1 will be used
- Annual average targets provided will be assigned to the midpoint of each stress period (year)

Targets – Vertical Head Diff. (VHDs)

TETRA TECH

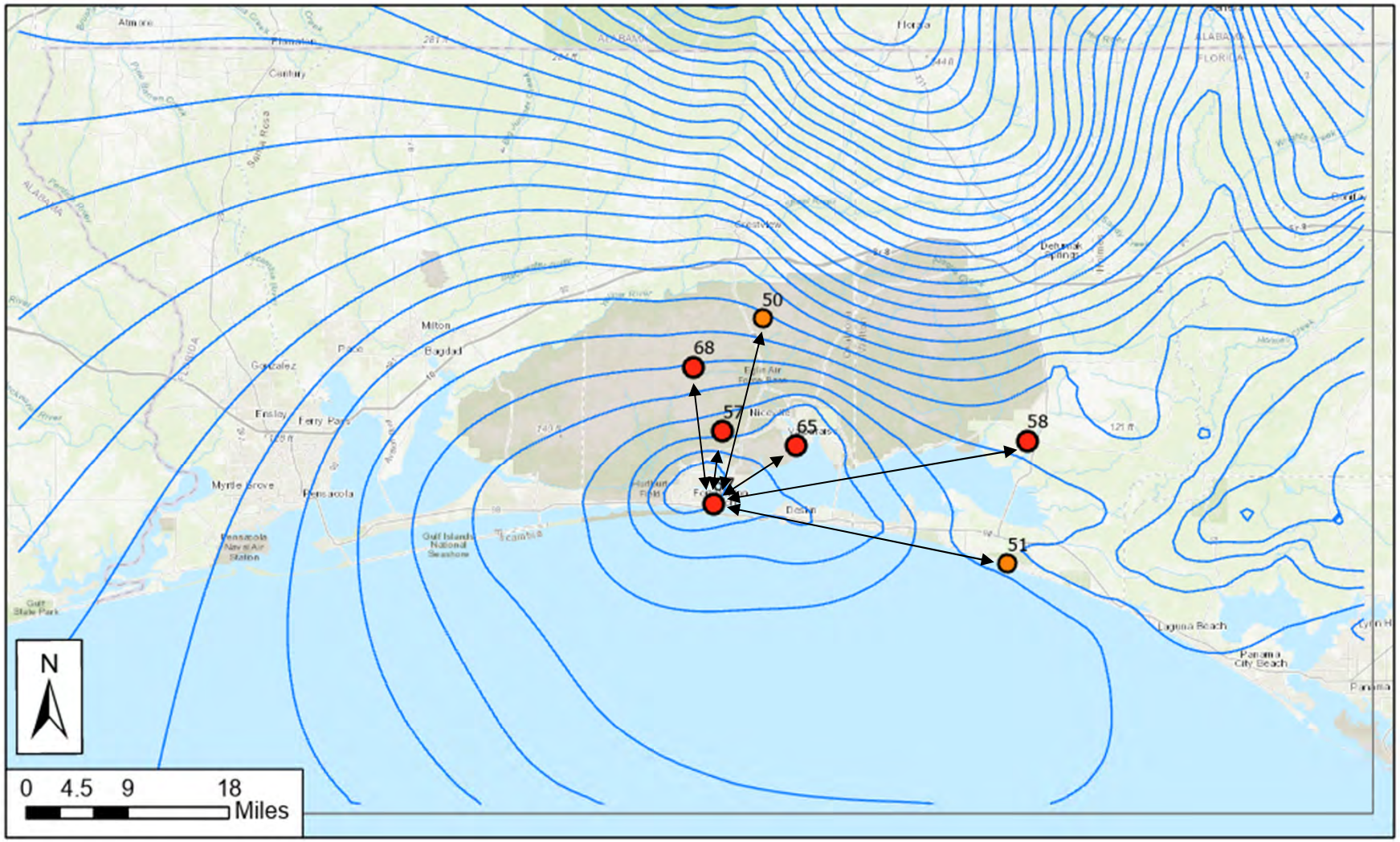
- List of District-approved VHD targets will be used
- Tentatively…
  - 26 well pairs
    - 14 from District, 12 from MMA (pending District approval)
  - 319 total targets
    - 213 from District, 106 from MMA well pairs

Targets – Layer 3 Horizontal Head Diff. (HHDs)



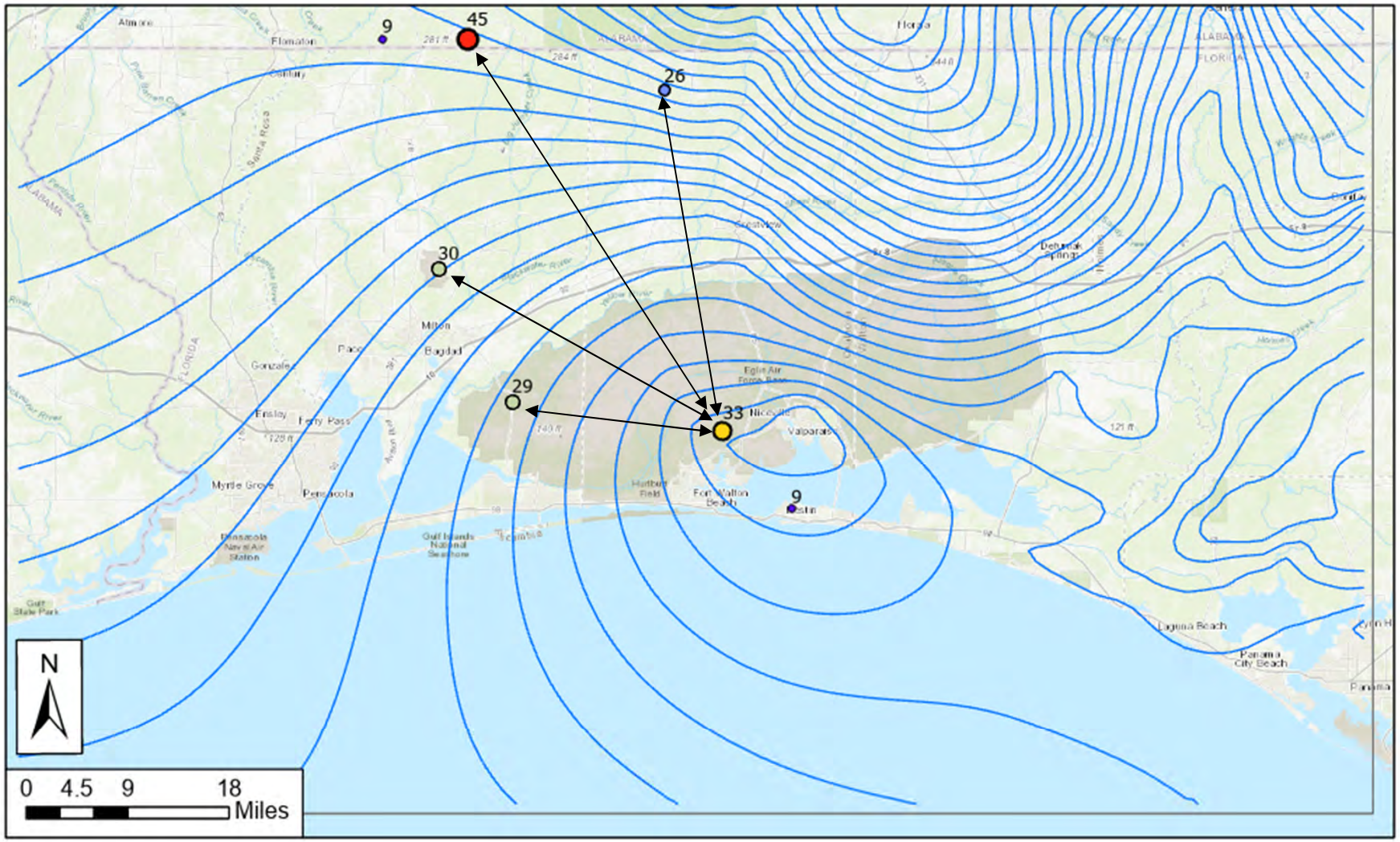
Layer 3 wells and modeled 10-ft groundwater head contours (2015)

Targets – Layer 3 HHDs



Layer 3 horizontal head difference pairs (6 pairs, 340 targets)

Targets – Layer 5 HHDs



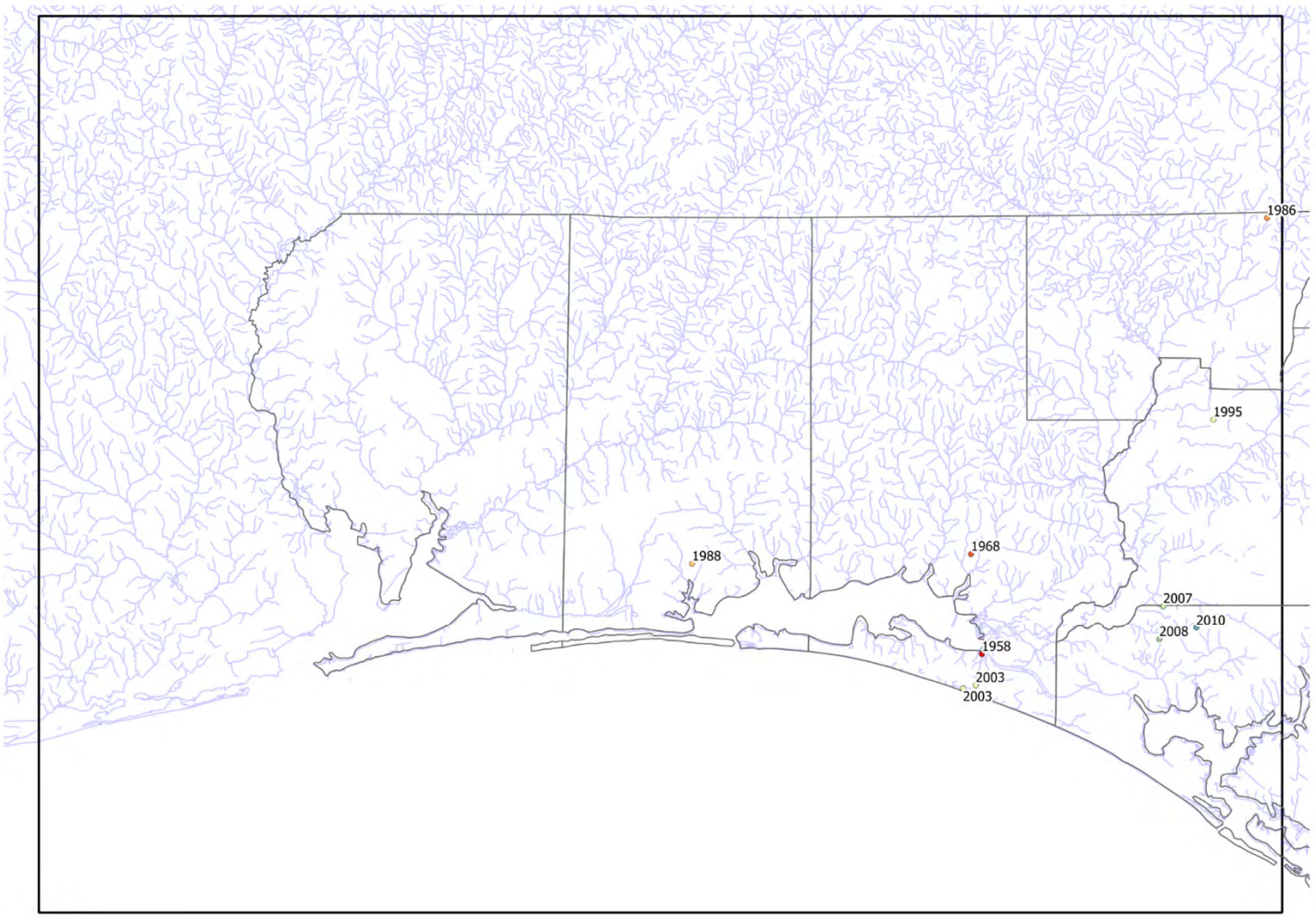
Layer 5 horizontal head difference pairs (4 pairs, 107 targets)

Targets – Temporal Head Diff. (THDs)

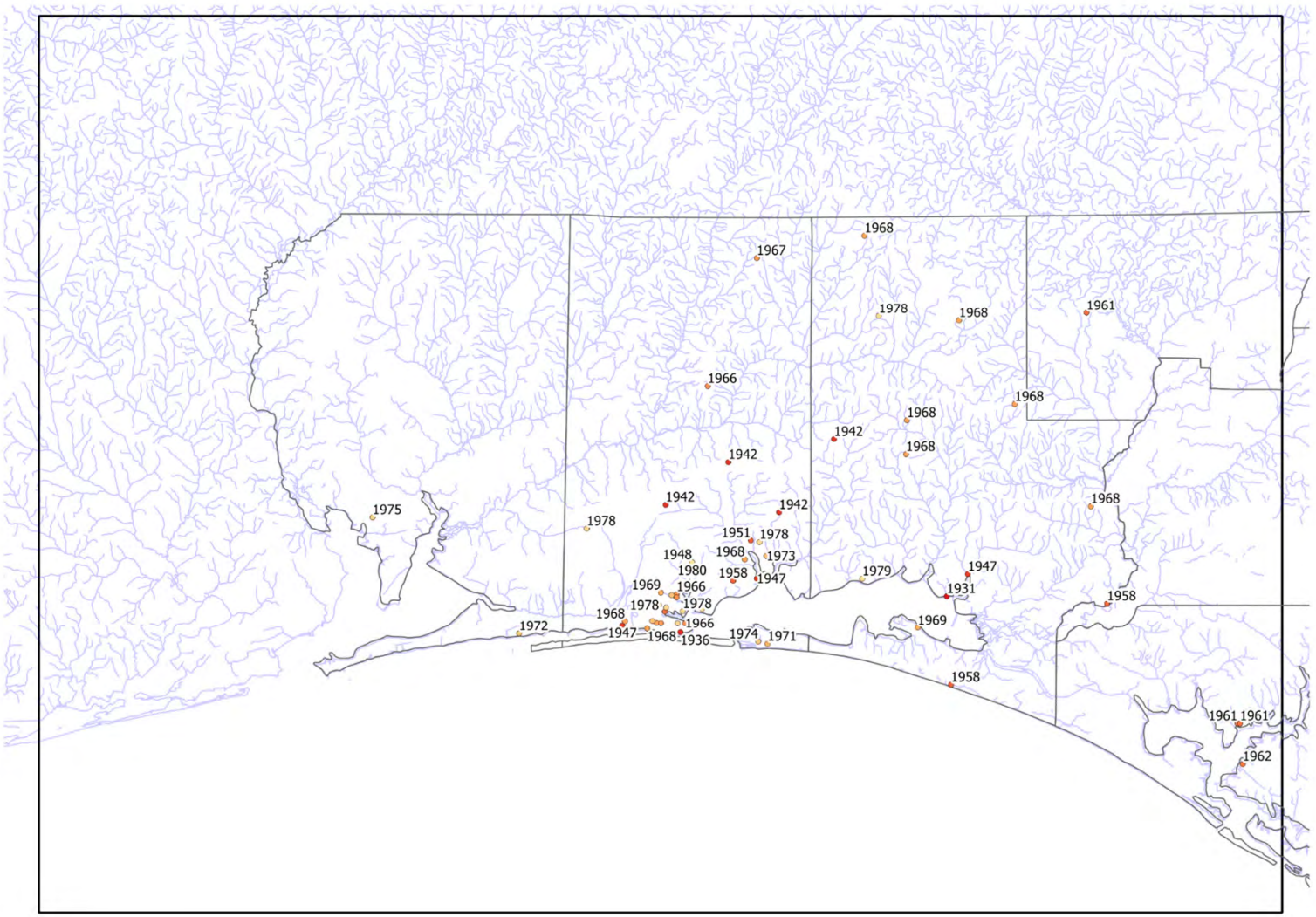
TETRA TECH

- Locations by layer
  - Layer 2: 10 locations
  - Layer 3: 245 locations
    - 54 locations have data prior to 1981
    - We propose using only these wells to develop THDs
  - Layer 5: 6 locations
- "Reference point" for all THDs will be most recent target
  - If most recent target is from 2011, all earlier target heads at the well will be subtracted from 2011 target value

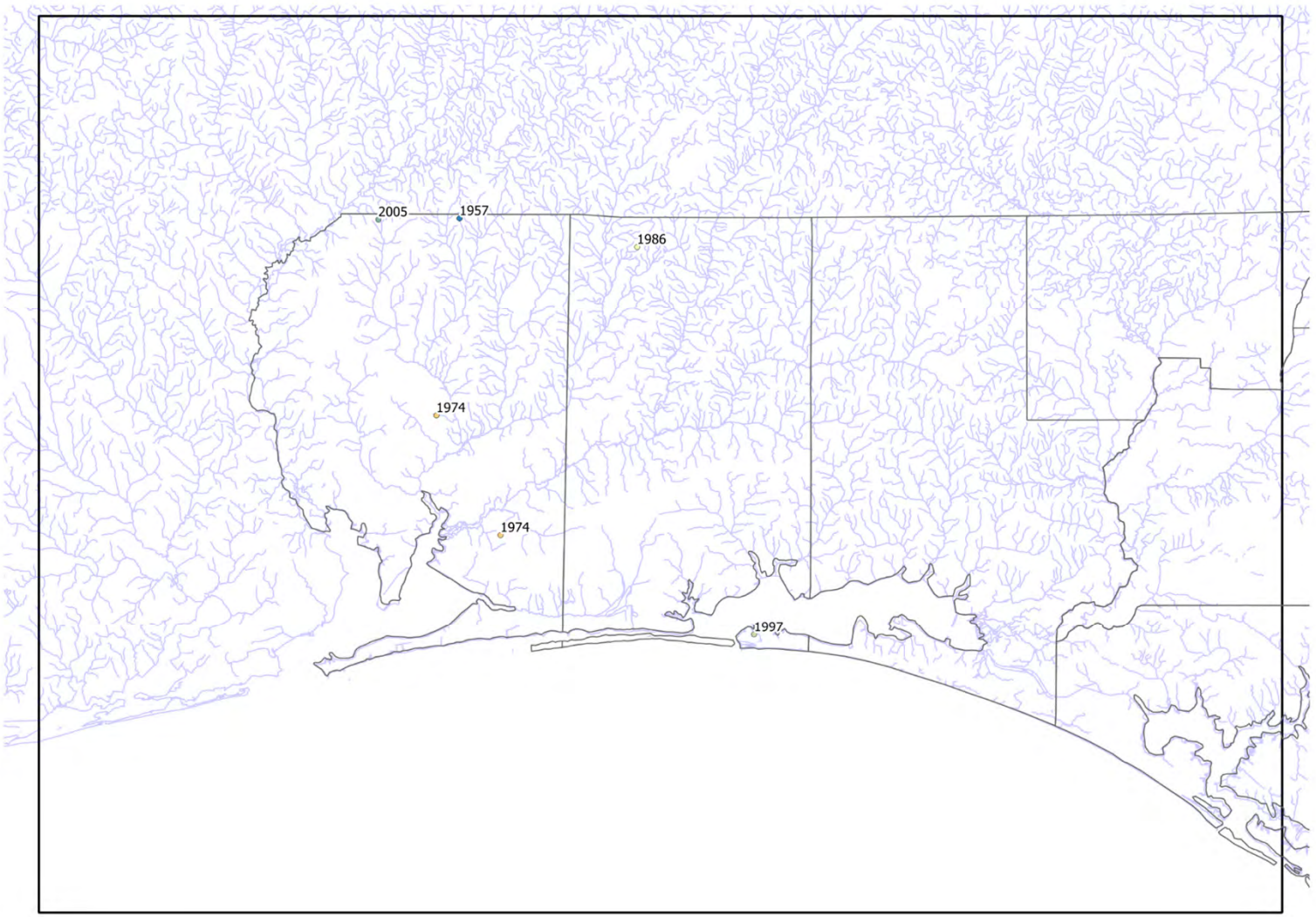
Targets – Layer 2 THDs



Targets – Layer 3 THDs



Targets – Layer 5 THDs



Targets – Incremental Baseflows

TETRA TECH

- Change in baseflow between upstream gauges & downstream
  - Upstream: Choctawhatchee River at Caryville & Holmes Creek
  - Downstream: Choctawhatchee River near Bruce
  - Target = Downstream – Σ (Upstream)
    - River Package flows only
- Qualitative comparison during calibration
  - Zero weights applied initially
  - If simulated values do not meet metric target (described later), weights can be increased later in calibration process

Target Weighting & Groups

TETRA TECH

- Will use District's initial weights for groundwater head targets
- Weights of 1.0 will be used for all others (initially)

- The District expressed a desire to match targets equally well throughout 1942-2015 simulation period
  - More recent targets than early in simulation period
- To address these considerations, we propose dividing each target type into 3 target groups (as defined by PEST)

Target Groups

- "Point-in-time" targets (heads, VHD, HHD) will be divided into three time periods depending on periods of record

Period	Heads	HHDs
1942-1965	149	98
1966-1990	910	138
1991-2015	3448	211
TOTAL	**4507**	**447**

Period	VHDs
1977-1990	36
1991-2003	85
2004-2015	185
TOTAL	**319**

Target Groups

TETRA TECH

- Time-varying targets (THDs) will be divided into three groups based on location
  - Proposed THD target groups
    1. THDs outside SEAWAT domain
    2. Eastern half (by well count) of targets in SEAWAT domain
    3. Western half (by well count) of targets in SEAWAT domain

Area	THDs
Outside SEAWAT Domain	515
Eastern Half of SEAWAT Domain	706
Western Half of SEAWAT Domain	929
TOTAL	**2150**

  - Rationale: **PWTADJ1** (a PEST preprocessor) be used to adjust initial weights such that each group is cumulatively weighted the same
    - i.e., ($\Phi_{Heads} = \Phi_{HHD} = \Phi_{VHD} = \Phi_{THD}$) at outset of calibration
- End Result: 12 target groups (3 groups per target type) with non-zero weights, each making the same contribution to Φ prior to calibration

TETRA TECH

Calibration Metric Targets

Calibration Metric Targets

TETRA TECH

Calibration Target Type	Calibration Metric	Domain-Wide Metric Target	Subregion Metric Target
Groundwater Heads	ME	**+/- 5 ft** (-12.9 ft currently)	**+/- 2 ft** (-14.7 ft currently)
	MAE	**10 ft** (15.8 ft currently)	**5 ft** (16.6 ft currently)
HHDs & VHDs	MAE ÷ Range	**10%**	**10%**
THDs	MAE ÷ Range	**20%**	**20%**
Incremental Baseflows	MAE ÷ Range	**(40%)**	n.a.

TETRA TECH

Model Dataset Workflow: Pre-Processing

Pre-Processing Overview

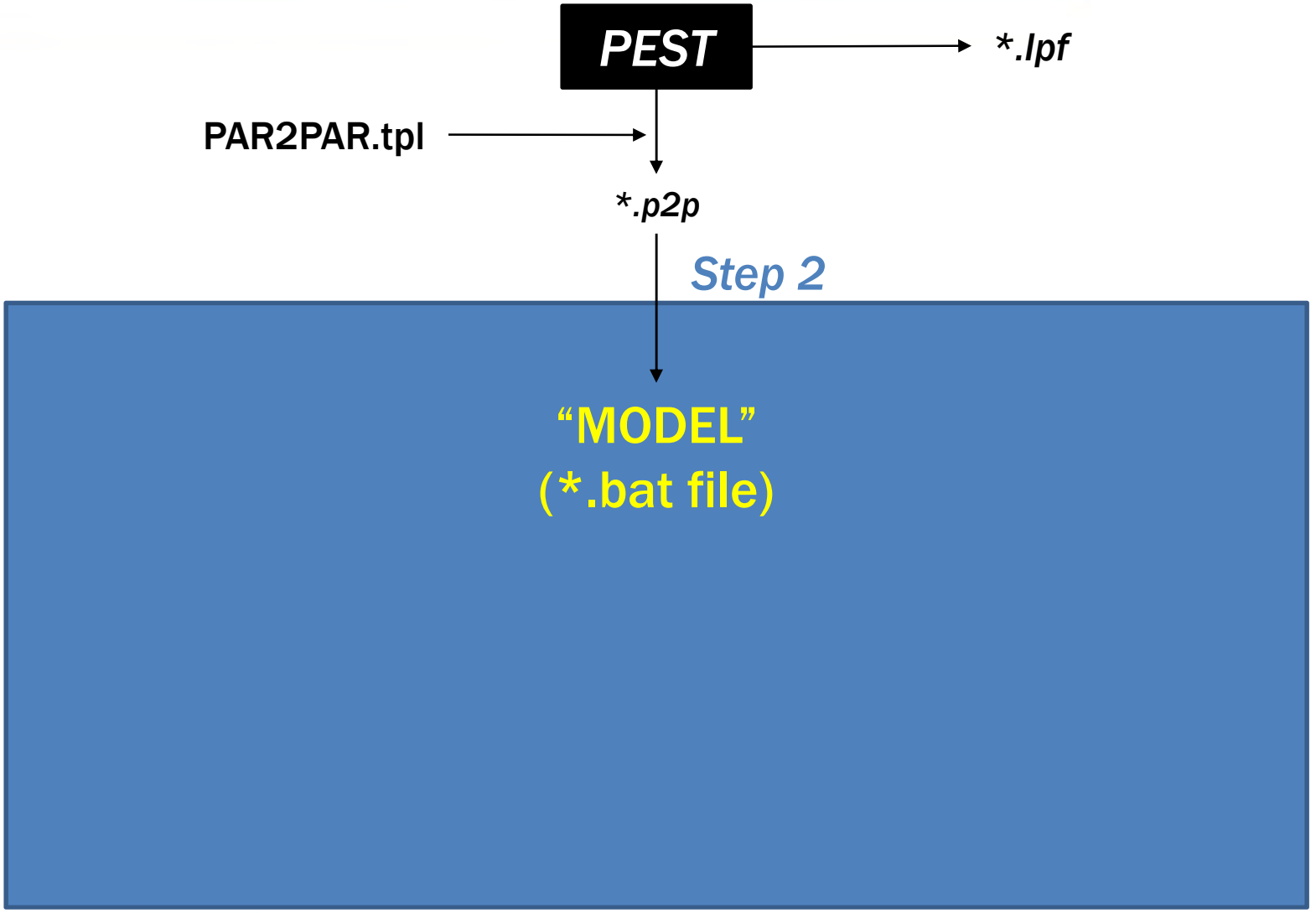


Step 1 – Files Written Directly by PEST

TETRA TECH

- PEST control file will instruct PEST to write a PAR2PAR input file (*.p2p) based on a template file (*.tpl) containing:
  - Lines for PEST to insert current calibration parameter values
    - E.g. Pilot point K values, riverbed conductance multiplier, etc.
  - Lines instructing PAR2PAR how to calculate model parameters from (current) calibration parameters
    - E.g. RIV boundary conductances
- PEST will also write layer-specific values to LPF Package
  - K_h, K_v, and/or S (as appropriate)

Pre-Processing Overview



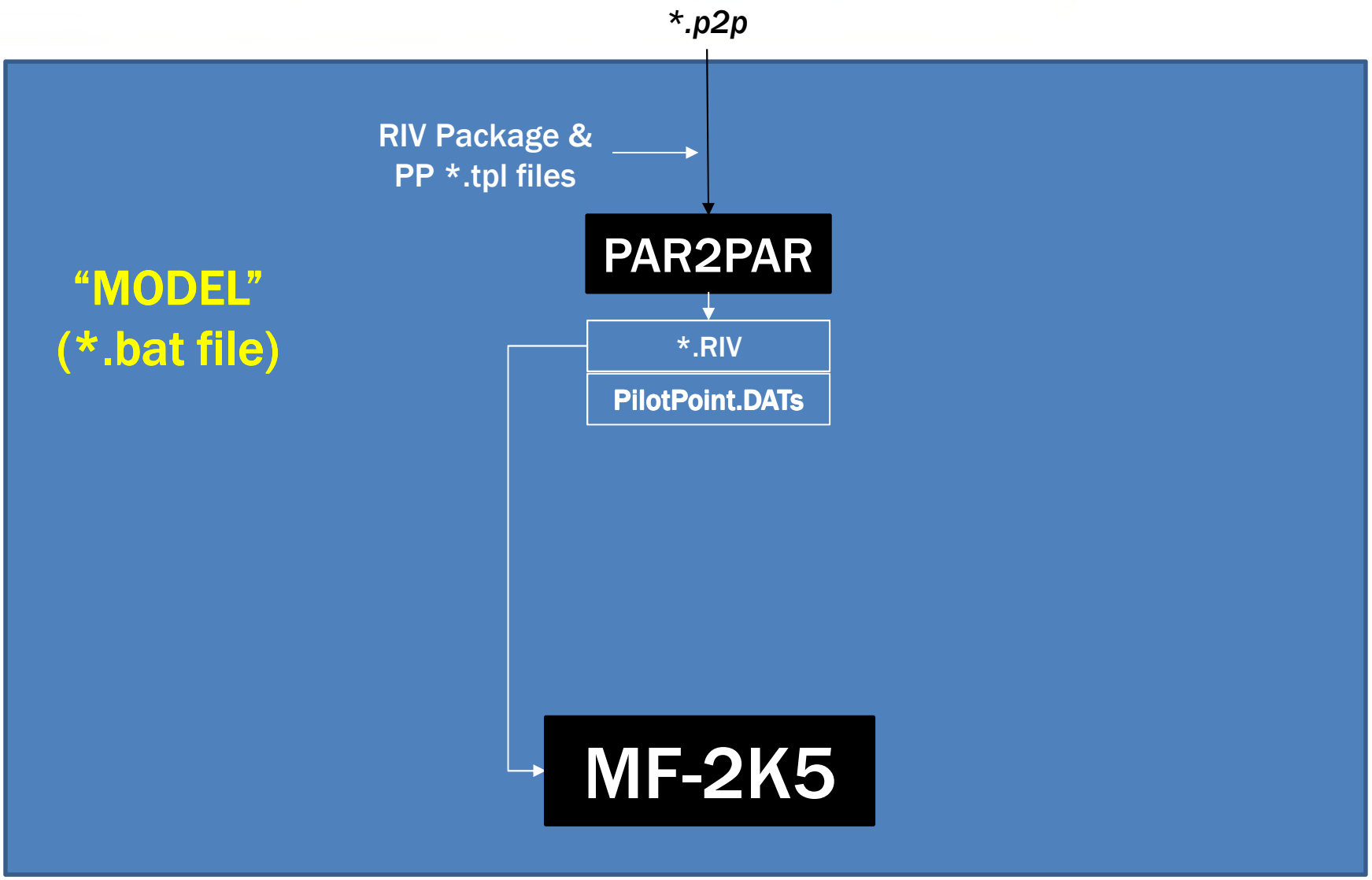
Step 2 – Model Batch File

TETRA TECH

"Model" batch file called by PEST will begin with PAR2PAR execution

- PAR2PAR will use input file written by PEST (*.p2p)
- Model parameter values will be calculated & inserted into separate template files of:
  - RIV Package
    - Existing riverbed conductances will be scaled using a multiplier
  - Pilot Point Files
    - K_v (layers 2, 4)
    - K_h (layers 3, 5)
    - S (layer 4)
    - K_h/K_v (layer 4)

Pre-Processing Overview

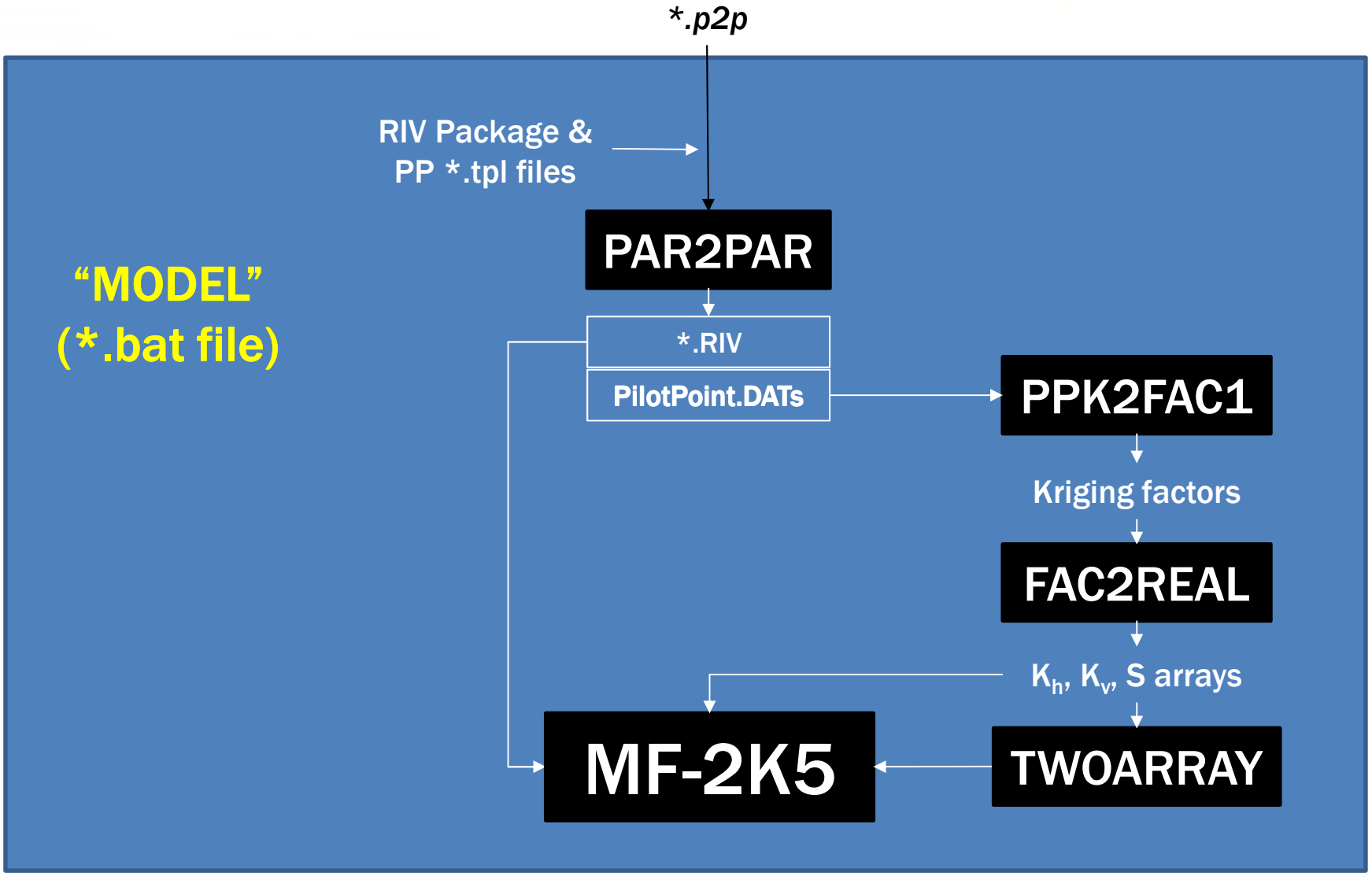


Kriging, Interpolation & Translations

TETRA TECH

- Existing PEST preprocessors will be used to generate all distributions of properties for layers
  - PPK2FAC1: Calculate kriging factors from pilot points
    - Log-transformed variograms for K
    - Non-transformed variogram for S, K_h/K_v of layer 4
  - FAC2REAL: Spatially interpolates to grid cells using kriging factors
    - Writes MODFLOW-compatible arrays
  - TWOARRAY: Calculate K_v (or K_h) from K_h (or K_v) and K_h/K_v
    - Can add, subtract, multiply, or divide two arrays
    - Writes MODFLOW-compatible arrays

Pre-Processing Overview



TETRA TECH

Model Dataset Workflow: Post-Processing

1) MOD2SMP

TETRA TECH

- Writes simulated heads at target locations based on MODFLOW head-save (*.hds) file and “borehole listing” input file
  - Borehole listing file contains x-y coordinates & layer of head targets
  - Performs horizontal interpolation between model nodes
- Will be used to identify simulated values at groundwater head target locations

2) SMP2SMP

TETRA TECH

- Performs temporal (linear) interpolation between values in MOD2SMP output file to specific target times

3) MOD2SMPDIFF

TETRA TECH

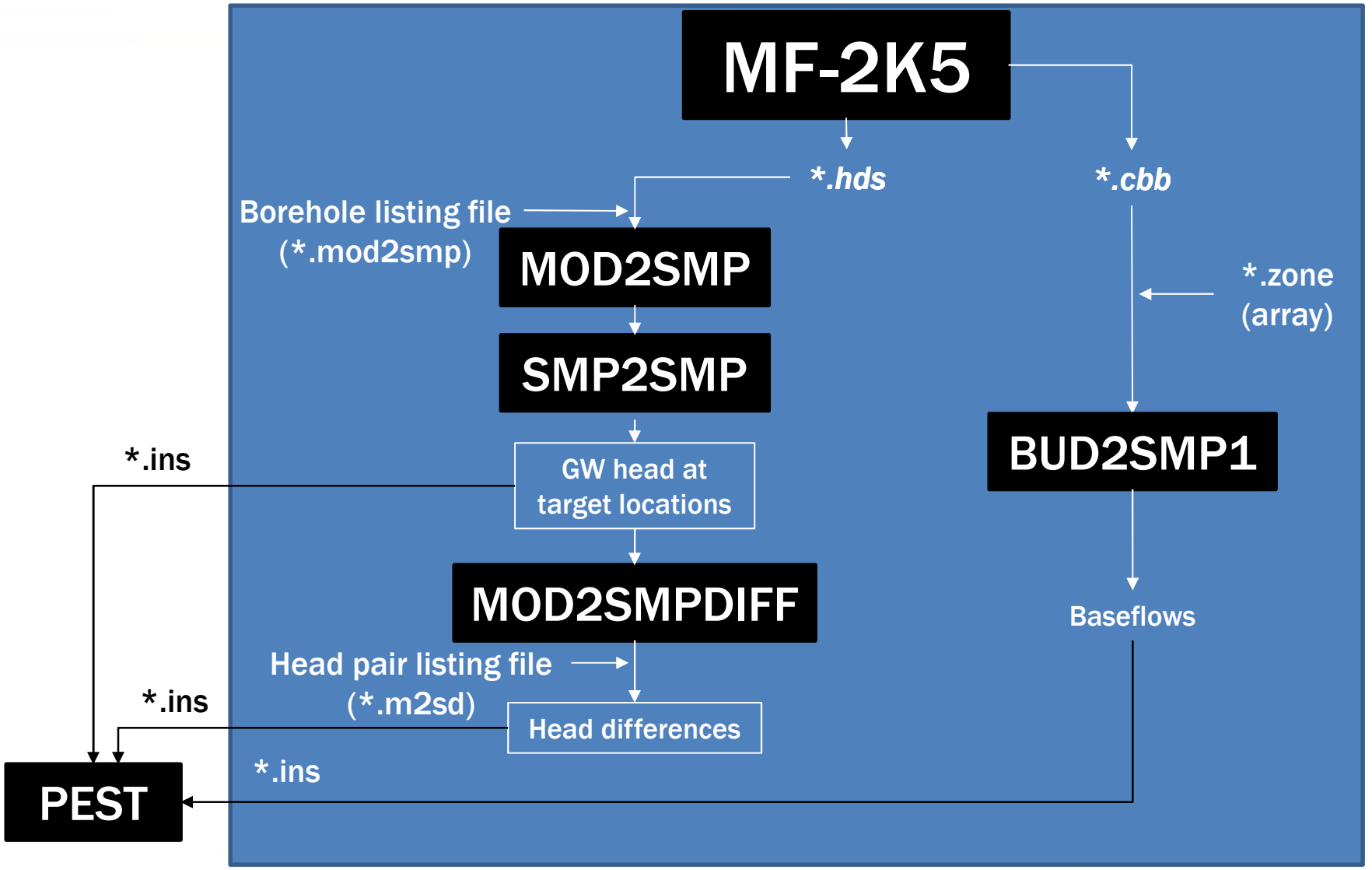
- Calculates simulated head differences based on output from SMP2SMP and “well pair” input file
  - Well pair file contains IDs for the two times (or well locations) to be compared
- Will be used to calculate spatial head difference targets
  - Horizontal
  - Vertical

4) BUD2SMP1

TETRA TECH

- Similar to ZONEBUDGET
- Reads in cell-by-cell budget (*.cbb) file and a zone file
- Summarizes net flows to/from each package by zone
  - Outputs are more “PEST-friendly” than ZONEBUDGET’s
- Will be used to determine RIV Package fluxes for comparison to baseflow targets

Post-Processing Overview



Post-Processing – Residuals

TETRA TECH

- PEST will be relied on to perform all residual calculations
- Only input files required are PEST “instruction” files (*.ins)
- Target values, simulated values, and residuals of each PEST iteration are written to fixed-width, plain-text intermediate residuals files (*.rei)
  - Easily imported into a spreadsheet for interim assessments of calibration results

Evaluating Interim Calibration Results

TETRA TECH

- PEST's *.rei file and MOD2SMP outputs will be copied into a spreadsheet for easy updating
  - "45° line" plots of simulated vs. observed values
    - Groundwater heads (grouped by layer & time period)
    - Horizontal head differences (grouped by layer & time period)
    - Vertical head differences (grouped by layer pairing & time period)
    - Temporal head differences (grouped by layer & time period)
- Target residual maps
- Time-series of simulated heads/differences at key wells/pairs

TETRA TECH

Calibration Approach

Calibration Approach

TETRA TECH

Most calibration parameters will be pilot points

- 770 (≈98%) of 782 calibration parameters

> If a modeller is unsure of the hydrogeological structure prevailing within a certain area, an alternative calibration methodology is to "let PEST find the structure" by calibrating the model on the basis of a superfluity of pilot points scattered liberally throughout the model domain. Such parameter redundancy on its own will probably result in very poor PEST performance because, as is explained in the PEST manual, over-parameterisation leads to high parameter correlation, parameter insensitivity and a singular normal matrix. The result is normally a spectacular failure to lower the objective function much at all.
>
> However if the superfluity of pilot points is combined with regularisation information, and if PEST is asked to optimise parameters while working in regularisation mode, then its performance in optimising these parameters can often be quite spectacular.

1. PPKREG1 will be used to add regularization information to PEST control file before calibration
   - Option to base regularization equations on "preferred values" of parameters will be used
   - Preferred value = Conductivity from current model

Calibration Approach

TETRA TECH

2. Perform initial model run after workflow steps are implemented
   - QA model results & workflow processes
   - Assess initial parameter set (from existing model)
3. Run **PWTADJ1** to adjust target group weights
4. Assign initial weights of 1.0 to all regularization "observations"
   - Use PEST's "PHIMLIM" variable to dynamically adjust regularization weighting

4.16 Regularization Section

The regularization section of a PEST control file is optional. If PESTMODE is not set to "regularization", it is redundant. If it is set to "regularization" and a "regularization" section is not provided, the PESTPP-GLM program (the only program of the PEST++ suite which uses this section) provides default values for the control variables that are featured in it. These variables are now described. To clarify the meanings of some of the terms that appear in the following explanation, see the description of PESTPP-GLM in chapter 6 of this manual. For more general information on regularization, see Doherty (2015).

PHIMLIM

PHILIM is the target measurement objective function; it is the measurement objective function that PESTPP-GLM "aims for" while keeping the regularization objective function as low as possible. During every iteration of the inversion process, PESTPP-GLM calculates a regularization weight factor that attempts to achieves this balance.

Calibration Approach

TETRA TECH

5. PEST++ ("PESTPP-GLM") will be run in regularization mode

   PEST++ is preferred to PEST because it offers:

   - **Seamless alternation between "base" parameter iterations and "superparameter" iterations** (which expedite calibration)
   - **More user-friendly interface for distributed simulations (TCP/IP)**
   - **Greater control & efficiency during the "Marquardt lambda" step of PEST iterations**
   - Increased transparency in optimization process (more detailed outputs)
   - Automatic use of singular value decomposition (SVD)

Computing Environment

TETRA TECH

- 35-95 available computing nodes
  - Dependent on office work hours, etc.

- 782 parameters
- Simulation time ≈ 2 minutes
- 15–45 minutes per Jacobian calculation (First PEST step)
  - Depends on number of nodes used
- 2–5 minutes per Marquardt lambda trial (Second PEST step)
  - Depends on number of:
    - Nodes used
    - "Lambda" & "lambda scale factor" combinations tried; usually 20-40 is sufficient

Summary

TETRA TECH

- Existing PEST suite processors will be used for all model dataset pre- and post-processing
  - Pre-processors
    - PAR2PAR
    - PPK2FAC1, FAC2REAL, and TWOARRAY (layer 2-5 properties)
  - Post-processors
    - MOD2SMP/SMP2SMP (heads) and MOD2SMPDIFF (head differences)
    - BUD2SMP1 (baseflows)
- PEST++ will be the primary algorithm used during calibration
  - Tikhonov “preferred value” regularization
  - “Base” parameter and “superparameter” iterations

TETRA TECH

"The best laid plans... often go awry."
- Robert Burns

Questions?

APPENDIX C – CALIBRATION RUN LOG

Calibration Run Log – Region II MODFLOW (Tetra Tech Contract 18-078, Task Order #5)

Run ID	Analyst Initials	Initiation Date and Time	Completion Date and Time	Notes on Purpose(s) of Run	Link to Manager Directory
1	DWS	12/6/19 12:00	12/6/19 15:00	**PEST++** Preliminary Calibration Utility Testing (does not include APT inform	\\mma-server\Data\1_Projects\TetraTech_NWF_RegII_GW\6_Models\5_Manager\Run_ID_1_2019-12-06
2	DWS	12/11/19 12:00	12/11/19 22:00	**PEST++** Calibration Run (using APT information as additional pp)	\\mma-server\Data\1_Projects\TetraTech_NWF_RegII_GW\6_Models\5_Manager\Run_ID_2_2019-12-11
3	DWS	12/17/19 17:00	12/18/19 7:00	**PEST++** Calibration Run (using APT information as targets)	\\mma-server\Data\1_Projects\TetraTech_NWF_RegII_GW\6_Models\5_Manager\Run_ID_3_2019-12-17
4	DWS	12/23/19 16:00	12/23/19 22:30	**PEST++** Calibration Run (reference time changed for NWF_2995 THDs from 2015 to 2014, additional erroneous measurements de-weighted, prior information weights increased, parameter bounds modified, initial parameter values based on CMAES Loop 332)	\\mma-server\Data\1_Projects\TetraTech_NWF_RegII_GW\6_Models\5_Manager\Run_ID_4_2019-12-23
5	DWS	12/31/19 12:14	12/31/19 20:06	**PEST++** Calibration Run (starting from parameter set from CMA-ES Loop 466) with revised targets and parameter bounds	\\mma-server\Data\1_Projects\TetraTech_NWF_RegII_GW\6_Models\5_Manager\Run_ID_5_2019-12-31
6	DWS	1/7/20 10:30	1/7/20 15:00	**PEST++** Calibration Run (starting from parameter set from CMA-ES Loop 471) with doubled weights for head targets located within the SEAWAT domain (target NWF_1894's weight was not increased)	\\mma-server\Data\1_Projects\TetraTech_NWF_RegII_GW\6_Models\5_Manager\Run_ID_6_2020-01-07
7	DWS	1/15/20 10:30	1/16/20 9:30	**PEST++** Calibration Run (starting from parameter set from CMA-ES Loop 471) with doubled weights for head targets located within the SEAWAT domain (target NWF_1894's weight was not increased)	\\mma-server\Data\1_Projects\TetraTech_NWF_RegII_GW\6_Models\5_Manager\Run_ID_7_2020-01-15
8	DWS	1/22/20 11:30	1/23/20 9:30	**PEST++** Calibration run with updated pumping (starting from parameter set from CMA-ES Loop 471) with origional weights for head targets located within the SEAWAT domain)	\\mma-server\Data\1_Projects\TetraTech_NWF_RegII_GW\6_Models\5_Manager\Run_ID_8_2020-01-22
9	DWS	1/23/20 12:00	1/27/20 11:45	**CMEAS** Calibration run with updated pumping (starting from parameter set from CMA-ES Loop 471) with original weights for head targets located within the SEAWAT domain)	\\mma-server\Data\1_Projects\TetraTech_NWF_RegII_GW\6_Models\5_Manager\Run_ID_9_2020-01-23
10	DWS	2/19/20 15:00	2/24/20 9:25	**CMEAS** Calibration run with updated head targets (provided by NWFWMD on 2020-02-15) and additional Bucatunna pilot points	\\mma-server\Data\1_Projects\TetraTech_NWF_RegII_GW\6_Models\5_Manager\Run_ID_10_2020-02-19
11	DWS	3/2/20 11:00	3/9/20 13:20	**CMEAS** Calibration run with 2015 head target at 12840, added back VHD pair 9852 & 7174, and added 5 L4 pilot points near Bucatunna pinch out with updated bounds for all new ppt (n=13)	\\mma-server\Data\1_Projects\TetraTech_NWF_RegII_GW\6_Models\5_Manager\Run_ID_11_2020-03-02
12	DWS	3/18/20 14:00	3/27/20 8:45	**CMEAS** Calibration run with pre-development head targets added.	\\mma-server\Data\1_Projects\TetraTech_NWF_RegII_GW\6_Models\5_Manager\Run_ID_11_2020-03-18
13	SCS	3/27/20 9:46	3/27/20 13:05	**PEST++** Calibration run following manual regularization of layer 4 Kv pilot point values identified by 3/18/20 CMA-ES run	\\tts043fs2.tt.local\GEOROSVOL1\NWFWMD\Region2_MODFLOW (1305037)\Task 2\06-ManualRegul_2020-03-27

APPENDIX D – PILOT POINT PARAMETERS

Table D-1. Layer 3 Horizontal Hydraulic Conductivity (Kh) Pilot Points.

Pilot Point Name	Type	Model Layer	Longitude (NAD83 UTM16N)	Latitude (NAD83 UTM16N)	Calibrated Value	Minimum Bound	Maximum Bound
Kh3_pp001	Kh	3	437000.625	3320000.75	45.25603	5.94E-01	5.95E+01
Kh3_pp002	Kh	3	449200.00	3320000.75	0.6739081	5.36E-01	5.36E+01
Kh3_pp003	Kh	3	461400.00	3320000.75	3.415393	5.20E-01	5.20E+01
Kh3_pp004	Kh	3	473600.00	3320000.75	12.26466	5.45E-01	5.45E+01
Kh3_pp005	Kh	3	485800.00	3320000.75	0.6214018	5.35E-01	5.35E+01
Kh3_pp006	Kh	3	498000.00	3320000.75	5.524913	4.79E-01	4.79E+01
Kh3_pp007	Kh	3	510200.00	3320000.75	16.21006	4.51E-01	4.51E+01
Kh3_pp008	Kh	3	522400.00	3320000.75	1.934811	4.59E-01	4.59E+01
Kh3_pp009	Kh	3	534600.00	3320000.75	0.9089903	4.57E-01	4.57E+01
Kh3_pp010	Kh	3	546800.00	3320000.75	42.68516	4.62E-01	4.62E+01
Kh3_pp011	Kh	3	559000.00	3320000.75	1.555325	3.24E-01	3.24E+01
Kh3_pp012	Kh	3	571200.00	3320000.75	17.83935	2.22E-01	2.22E+01
Kh3_pp013	Kh	3	583400.00	3320000.75	4.457952	2.36E-01	2.36E+01
Kh3_pp014	Kh	3	595600.00	3320000.75	22.465432	2.24E-01	2.25E+01
Kh3_pp015	Kh	3	607800.00	3320000.75	0.2026044	2.00E-01	2.00E+01
Kh3_pp016	Kh	3	620000.00	3320000.75	1.070184	1.68E-01	1.68E+01
Kh3_pp017	Kh	3	632200.00	3320000.75	0.2561744	2.06E-01	2.06E+01
Kh3_pp018	Kh	3	443100.00	3331724.75	19.31957	4.86E-01	4.86E+01
Kh3_pp019	Kh	3	455300.00	3331724.75	0.7436357	4.76E-01	4.76E+01
Kh3_pp020	Kh	3	467500.00	3331724.75	7.847552	5.08E-01	5.08E+01
Kh3_pp021	Kh	3	479700.00	3331724.75	4.192982	5.12E-01	5.12E+01
Kh3_pp022	Kh	3	491900.00	3331724.75	6.331033	4.43E-01	4.43E+01
Kh3_pp023	Kh	3	504100.00	3331724.75	13.82323	4.26E-01	4.26E+01
Kh3_pp024	Kh	3	516300.00	3331724.75	0.4665426	4.67E-01	4.67E+01
Kh3_pp025	Kh	3	528500.00	3331724.75	0.5840321	4.67E-01	4.67E+01
Kh3_pp026	Kh	3	540700.00	3331724.75	2.044716	4.32E-01	4.32E+01
Kh3_pp027	Kh	3	552900.00	3331724.75	26.82175	3.88E-01	3.88E+01
Kh3_pp028	Kh	3	565100.00	3331724.75	14.54545	2.96E-01	2.96E+01
Kh3_pp029	Kh	3	577300.00	3331724.75	0.8622468	2.14E-01	2.14E+01
Kh3_pp030	Kh	3	589500.00	3331724.75	0.5381611	2.16E-01	2.16E+01
Kh3_pp031	Kh	3	601700.00	3331724.75	4.159896	2.09E-01	2.09E+01
Kh3_pp032	Kh	3	613900.00	3331724.75	0.2397638	2.40E-01	2.40E+01
Kh3_pp033	Kh	3	626100.00	3331724.75	0.306064	3.06E-01	3.06E+01
Kh3_pp034	Kh	3	437000.63	3343450.00	13.91042	4.77E-01	4.77E+01
Kh3_pp035	Kh	3	449200.00	3343450.00	3.003617	5.12E-01	5.12E+01
Kh3_pp036	Kh	3	461400.00	3343450.00	0.9845392	5.80E-01	5.80E+01
Kh3_pp037	Kh	3	473600.00	3343450.00	12.0259	6.56E-01	6.56E+01
Kh3_pp038	Kh	3	485800.00	3343450.00	1.438948	7.56E-01	7.56E+01
Kh3_pp039	Kh	3	498000.00	3343450.00	13.99937	6.56E-01	6.56E+01
Kh3_pp040	Kh	3	510200.00	3343450.00	4.631467	5.34E-01	5.34E+01
Kh3_pp041	Kh	3	522400.00	3343450.00	4.06775	4.68E-01	4.68E+01
Kh3_pp042	Kh	3	534600.00	3343450.00	2.204747	4.11E-01	4.11E+01
Kh3_pp043	Kh	3	546800.00	3343450.00	3.702672	3.87E-01	3.87E+01
Kh3_pp044	Kh	3	559000.00	3343450.00	1.6329	4.00E-01	4.00E+01

Table D-1. Layer 3 Horizontal Hydraulic Conductivity (Kh) Pilot Points.

Pilot Point Name	Type	Model Layer	Longitude (NAD83 UTM16N)	Latitude (NAD83 UTM16N)	Calibrated Value	Minimum Bound	Maximum Bound
Kh3_pp045	Kh	3	571200.00	3343450.00	0.2978549	2.23E-01	2.23E+01
Kh3_pp046	Kh	3	583400.00	3343450.00	1.492275	2.19E-01	2.19E+01
Kh3_pp047	Kh	3	595600.00	3343450.00	7.306927	2.16E-01	2.16E+01
Kh3_pp048	Kh	3	607800.00	3343450.00	0.3114078	2.87E-01	2.87E+01
Kh3_pp049	Kh	3	620000.00	3343450.00	0.3758519	3.76E-01	3.76E+01
Kh3_pp050	Kh	3	632200.00	3343450.00	0.7494074	5.71E-01	5.71E+01
Kh3_pp051	Kh	3	443100.00	3355175.00	1.479865	5.25E-01	5.25E+01
Kh3_pp052	Kh	3	455300.00	3355175.00	14.86411	5.51E-01	5.51E+01
Kh3_pp053	Kh	3	467500.00	3355175.00	18.03793	7.48E-01	7.48E+01
Kh3_pp054	Kh	3	479700.00	3355175.00	2.763591	1.05E+00	1.05E+02
Kh3_pp055	Kh	3	491900.00	3355175.00	40.14694	8.16E-01	8.16E+01
Kh3_pp056	Kh	3	504100.00	3355175.00	96.52417	9.65E-01	9.65E+01
Kh3_pp057	Kh	3	516300.00	3355175.00	0.4864977	4.86E-01	4.86E+01
Kh3_pp058	Kh	3	528500.00	3355175.00	0.4250053	4.25E-01	4.25E+01
Kh3_pp059	Kh	3	540700.00	3355175.00	0.4886666	4.20E-01	4.20E+01
Kh3_pp060	Kh	3	552900.00	3355175.00	45.11282	7.57E-01	7.57E+01
Kh3_pp061	Kh	3	565100.00	3355175.00	7.934093	4.72E-01	4.72E+01
Kh3_pp062	Kh	3	577300.00	3355175.00	9.355924	2.20E-01	2.20E+01
Kh3_pp063	Kh	3	589500.00	3355175.00	18.24714	1.82E-01	1.82E+01
Kh3_pp064	Kh	3	601700.00	3355175.00	13.05742	4.80E-01	4.80E+01
Kh3_pp065	Kh	3	613900.00	3355175.00	84.07701	8.41E-01	8.41E+01
Kh3_pp066	Kh	3	626100.00	3355175.00	64.89909	1.32E+00	1.32E+02
Kh3_pp067	Kh	3	437000.63	3366900.00	2.771528	4.57E-01	4.57E+02
Kh3_pp068	Kh	3	449200.00	3366900.00	0.7045223	5.77E-01	5.77E+01
Kh3_pp069	Kh	3	461400.00	3366900.00	7.012589	6.11E-01	6.11E+01
Kh3_pp070	Kh	3	473600.00	3366900.00	1.935397	6.67E-01	6.67E+01
Kh3_pp071	Kh	3	485800.00	3366900.00	1.291775	6.28E-01	6.28E+01
Kh3_pp072	Kh	3	498000.00	3366900.00	120.2479	1.42E+00	1.42E+02
Kh3_pp073	Kh	3	510200.00	3366900.00	136.9406	3.14E+00	3.14E+02
Kh3_pp074	Kh	3	522400.00	3366900.00	2.086231	2.09E+00	2.09E+02
Kh3_pp075	Kh	3	534600.00	3366900.00	14.96063	2.10E+00	2.10E+02
Kh3_pp076	Kh	3	546800.00	3366900.00	2.1226102	2.12E+00	2.12E+02
Kh3_pp077	Kh	3	559000.00	3366900.00	62.97888	1.12E+00	1.12E+02
Kh3_pp078	Kh	3	571200.00	3366900.00	79.21563	8.36E-01	8.36E+01
Kh3_pp079	Kh	3	583400.00	3366900.00	72.7951	7.28E-01	7.28E+01
Kh3_pp080	Kh	3	595600.00	3366900.00	172.64819	1.73E+00	1.73E+02
Kh3_pp081	Kh	3	607800.00	3366900.00	190.06504	1.90E+00	1.90E+02
Kh3_pp082	Kh	3	620000.00	3366900.00	313.6788	7.03E+01	7.03E+03
Kh3_pp083	Kh	3	632200.00	3366900.00	14104.38	2.36E+02	2.36E+04
Kh3_pp084	Kh	3	443100.00	3378625.25	0.5000013	4.23E-01	4.23E+01
Kh3_pp085	Kh	3	455300.00	3378625.25	8.144769	9.37E-01	9.37E+01
Kh3_pp086	Kh	3	467500.00	3378625.25	3.474602	6.96E-01	6.96E+01
Kh3_pp087	Kh	3	479700.00	3378625.25	5.43589	5.89E-01	5.89E+01
Kh3_pp088	Kh	3	491900.00	3378625.25	4.921591	1.44E+00	1.44E+02

Table D-1. Layer 3 Horizontal Hydraulic Conductivity (Kh) Pilot Points.

Pilot Point Name	Type	Model Layer	Longitude (NAD83 UTM16N)	Latitude (NAD83 UTM16N)	Calibrated Value	Minimum Bound	Maximum Bound
Kh3_pp089	Kh	3	504100.00	3378625.25	1.803866	1.80E+00	1.80E+02
Kh3_pp090	Kh	3	516300.00	3378625.25	2.2123992	2.21E+00	2.21E+02
Kh3_pp091	Kh	3	528500.00	3378625.25	18.02958	2.89E+00	2.89E+02
Kh3_pp092	Kh	3	540700.00	3378625.25	94.71504	1.73E+00	1.73E+02
Kh3_pp093	Kh	3	552900.00	3378625.25	9.097014	8.10E-01	8.10E+01
Kh3_pp094	Kh	3	565100.00	3378625.25	0.8331403	8.28E-01	8.28E+01
Kh3_pp095	Kh	3	577300.00	3378625.25	20.33535	9.30E-01	9.30E+01
Kh3_pp096	Kh	3	589500.00	3378625.25	187.4052	2.18E+00	2.18E+02
Kh3_pp097	Kh	3	601700.00	3378625.25	61.07167	7.91E+00	7.91E+02
Kh3_pp098	Kh	3	613900.00	3378625.25	4916.03	4.92E+01	4.92E+03
Kh3_pp099	Kh	3	626100.00	3378625.25	304.2986	1.18E+01	1.18E+03
Kh3_pp100	Kh	3	437000.63	3390350.00	6.76358	4.16E-01	4.16E+01
Kh3_pp101	Kh	3	449200.00	3390350.00	4.062219	8.61E-01	8.61E+01
Kh3_pp102	Kh	3	461400.00	3390350.00	9.028872	1.44E+00	1.44E+02
Kh3_pp103	Kh	3	473600.00	3390350.00	14.76991	1.31E+00	1.31E+02
Kh3_pp104	Kh	3	485800.00	3390350.00	2.760733	1.07E+00	1.07E+02
Kh3_pp105	Kh	3	498000.00	3390350.00	7.782573	1.08E+00	1.08E+02
Kh3_pp106	Kh	3	510200.00	3390350.00	4.646905	1.79E+00	1.79E+02
Kh3_pp107	Kh	3	522400.00	3390350.00	346.90879	3.47E+00	3.47E+02
Kh3_pp108	Kh	3	534600.00	3390350.00	76.71088	2.28E+00	2.28E+02
Kh3_pp109	Kh	3	546800.00	3390350.00	1.444978	1.44E+00	1.44E+02
Kh3_pp110	Kh	3	559000.00	3390350.00	16.55094	9.47E-01	9.47E+01
Kh3_pp111	Kh	3	571200.00	3390350.00	9.280406	9.35E-01	9.35E+01
Kh3_pp112	Kh	3	583400.00	3390350.00	23.09997	1.04E+00	1.04E+02
Kh3_pp113	Kh	3	595600.00	3390350.00	6.985835	6.99E+00	6.99E+02
Kh3_pp114	Kh	3	607800.00	3390350.00	33.14514	3.31E+01	3.31E+03
Kh3_pp115	Kh	3	620000.00	3390350.00	64.48721	3.74E+01	3.74E+03
Kh3_pp116	Kh	3	632200.00	3390350.00	1129.247	1.63E+02	1.63E+04
Kh3_pp117	Kh	3	443100.00	3402075.00	3.741026	7.70E-01	7.70E+01
Kh3_pp118	Kh	3	455300.00	3402075.00	7.156563	1.41E+00	1.41E+02
Kh3_pp119	Kh	3	467500.00	3402075.00	2.054193	2.04E+00	2.04E+02
Kh3_pp120	Kh	3	479700.00	3402075.00	4.663328	3.07E+00	3.07E+02
Kh3_pp121	Kh	3	491900.00	3402075.00	1.923419	1.62E+00	1.62E+02
Kh3_pp122	Kh	3	504100.00	3402075.00	4.384771	1.78E+00	1.78E+02
Kh3_pp123	Kh	3	516300.00	3402075.00	3.26817	3.10E+00	3.10E+02
Kh3_pp124	Kh	3	528500.00	3402075.00	13.55491	4.12E+00	4.12E+02
Kh3_pp125	Kh	3	540700.00	3402075.00	26.13821	2.26E+00	2.26E+02
Kh3_pp126	Kh	3	552900.00	3402075.00	3.051404	1.30E+00	1.30E+02
Kh3_pp127	Kh	3	565100.00	3402075.00	25.96087	1.35E+00	1.35E+02
Kh3_pp128	Kh	3	577300.00	3402075.00	149.10245	1.49E+00	1.49E+02
Kh3_pp129	Kh	3	589500.00	3402075.00	132.2442	2.77E+00	2.77E+02
Kh3_pp130	Kh	3	601700.00	3402075.00	653.7207	8.02E+00	8.02E+02
Kh3_pp131	Kh	3	613900.00	3402075.00	169.7239	1.21E+01	1.21E+03
Kh3_pp132	Kh	3	626100.00	3402075.00	1375.463	1.66E+01	1.66E+03

Table D-1. Layer 3 Horizontal Hydraulic Conductivity (Kh) Pilot Points.

Pilot Point Name	Type	Model Layer	Longitude (NAD83 UTM16N)	Latitude (NAD83 UTM16N)	Calibrated Value	Minimum Bound	Maximum Bound
Kh3_pp133	Kh	3	437000.63	3413800.00	26.53179	7.69E-01	7.69E+01
Kh3_pp134	Kh	3	449200.00	3413800.00	74.40141	1.39E+00	1.39E+02
Kh3_pp135	Kh	3	461400.00	3413800.00	20.17878	2.79E+00	2.79E+02
Kh3_pp136	Kh	3	473600.00	3413800.00	3.382164	2.11E+00	2.11E+02
Kh3_pp137	Kh	3	485800.00	3413800.00	2.098142	1.32E+00	1.32E+02
Kh3_pp138	Kh	3	498000.00	3413800.00	4.027654	2.07E+00	2.07E+02
Kh3_pp139	Kh	3	510200.00	3413800.00	3.273548	2.53E+00	2.53E+02
Kh3_pp140	Kh	3	522400.00	3413800.00	97.72957	4.15E+00	4.15E+02
Kh3_pp141	Kh	3	534600.00	3413800.00	6.043475	1.45E+00	1.45E+02
Kh3_pp142	Kh	3	546800.00	3413800.00	5.998735	1.26E+00	1.26E+02
Kh3_pp143	Kh	3	559000.00	3413800.00	1.702286	1.63E+00	1.63E+02
Kh3_pp144	Kh	3	571200.00	3413800.00	1.9663705	1.97E+00	1.97E+02
Kh3_pp145	Kh	3	583400.00	3413800.00	5.395777	2.32E+00	2.32E+02
Kh3_pp146	Kh	3	595600.00	3413800.00	444.52698	4.45E+00	4.45E+02
Kh3_pp147	Kh	3	607800.00	3413800.00	55.29235	1.28E+01	1.28E+03
Kh3_pp148	Kh	3	620000.00	3413800.00	22.29036	1.63E+01	1.63E+03
Kh3_pp149	Kh	3	632200.00	3413800.00	99.97631	1.64E+01	1.64E+03
Kh3_pp150	Kh	3	443100.00	3425525.00	10.58113	1.07E+00	1.07E+02
Kh3_pp151	Kh	3	455300.00	3425525.00	3.482976	1.66E+00	1.66E+02
Kh3_pp152	Kh	3	467500.00	3425525.00	192.0317	3.08E+00	3.08E+02
Kh3_pp153	Kh	3	479700.00	3425525.00	17.21127	1.85E+00	1.85E+02
Kh3_pp154	Kh	3	491900.00	3425525.00	2.0146994	2.01E+00	2.01E+02
Kh3_pp155	Kh	3	504100.00	3425525.00	118.645	1.82E+00	1.82E+02
Kh3_pp156	Kh	3	516300.00	3425525.00	92.62611	3.58E+00	3.58E+02
Kh3_pp157	Kh	3	528500.00	3425525.00	33.83546	4.03E+00	4.03E+02
Kh3_pp158	Kh	3	540700.00	3425525.00	20.14688	1.76E+00	1.76E+02
Kh3_pp159	Kh	3	552900.00	3425525.00	1.981541	1.78E+00	1.78E+02
Kh3_pp160	Kh	3	565100.00	3425525.00	2.85143	2.12E+00	2.12E+02
Kh3_pp161	Kh	3	577300.00	3425525.00	4.747656	2.65E+00	2.65E+02
Kh3_pp162	Kh	3	589500.00	3425525.00	3.6094132	3.61E+00	3.61E+02
Kh3_pp163	Kh	3	601700.00	3425525.00	13.40727	6.10E+00	6.10E+02
Kh3_pp164	Kh	3	613900.00	3425525.00	305.3182	1.46E+01	1.46E+03
Kh3_pp165	Kh	3	626100.00	3425525.00	1303.388	1.49E+01	1.49E+03
Kh3_pp166	Kh	3	437000.63	3437250.00	85.44415	9.53E-01	9.56E+01
Kh3_pp167	Kh	3	449200.00	3437250.00	16.21136	2.00E+00	2.00E+02
Kh3_pp168	Kh	3	461400.00	3437250.00	133.3884	2.93E+00	2.93E+02
Kh3_pp169	Kh	3	473600.00	3437250.00	69.86484	2.52E+00	2.52E+02
Kh3_pp170	Kh	3	485800.00	3437250.00	8.771467	1.84E+00	1.84E+02
Kh3_pp171	Kh	3	498000.00	3437250.00	240.1585	2.40E+00	2.40E+02
Kh3_pp172	Kh	3	510200.00	3437250.00	20.13884	3.31E+00	3.31E+02
Kh3_pp173	Kh	3	522400.00	3437250.00	84.5108	2.58E+00	2.58E+02
Kh3_pp174	Kh	3	534600.00	3437250.00	1.544602	1.24E+00	1.24E+02
Kh3_pp175	Kh	3	546800.00	3437250.00	35.13485	1.63E+00	1.63E+02
Kh3_pp176	Kh	3	559000.00	3437250.00	13.62856	1.55E+00	1.55E+02

Table D-1. Layer 3 Horizontal Hydraulic Conductivity (Kh) Pilot Points.

Pilot Point Name	Type	Model Layer	Longitude (NAD83 UTM16N)	Latitude (NAD83 UTM16N)	Calibrated Value	Minimum Bound	Maximum Bound
Kh3_pp177	Kh	3	571200.00	3437250.00	15.77008	1.58E+00	1.58E+02
Kh3_pp178	Kh	3	583400.00	3437250.00	15.38669	2.50E+00	2.50E+02
Kh3_pp179	Kh	3	595600.00	3437250.00	13.19335	2.45E+00	2.45E+02
Kh3_pp180	Kh	3	607800.00	3437250.00	11.27793	5.38E+00	5.38E+02
Kh3_pp181	Kh	3	620000.00	3437250.00	619.5309	8.12E+00	8.12E+02
Kh3_pp182	Kh	3	632200.00	3437250.00	8.958941	8.89E+00	8.89E+02
Kh3_pp183	Kh	3	443100.00	3448975.00	4.410446	1.86E+00	1.86E+02
Kh3_pp184	Kh	3	455300.00	3448975.00	4.91408	2.75E+00	2.75E+02
Kh3_pp185	Kh	3	467500.00	3448975.00	28.92884	2.82E+00	2.82E+02
Kh3_pp186	Kh	3	479700.00	3448975.00	3.623434	2.32E+00	2.32E+02
Kh3_pp187	Kh	3	491900.00	3448975.00	102.6963	1.80E+00	1.80E+02
Kh3_pp188	Kh	3	504100.00	3448975.00	45.19672	2.04E+00	2.04E+02
Kh3_pp189	Kh	3	516300.00	3448975.00	14.2602	1.83E+00	1.83E+02
Kh3_pp190	Kh	3	528500.00	3448975.00	2.752982	9.67E-01	9.67E+01
Kh3_pp191	Kh	3	540700.00	3448975.00	82.10098	8.98E-01	8.98E+01
Kh3_pp192	Kh	3	552900.00	3448975.00	41.74301	1.08E+00	1.08E+02
Kh3_pp193	Kh	3	565100.00	3448975.00	21.64338	1.25E+00	1.25E+02
Kh3_pp194	Kh	3	577300.00	3448975.00	8.126333	1.39E+00	1.39E+02
Kh3_pp195	Kh	3	589500.00	3448975.00	8.22576	1.54E+00	1.54E+02
Kh3_pp196	Kh	3	601700.00	3448975.00	126.5789	1.71E+00	1.71E+02
Kh3_pp197	Kh	3	613900.00	3448975.00	122.2876	2.96E+00	2.96E+02
Kh3_pp198	Kh	3	626100.00	3448975.00	292.5118	3.51E+00	3.51E+02
Kh3_pp199	Kh	3	437000.63	3460700.00	6.092567	1.67E+00	1.67E+02
Kh3_pp200	Kh	3	449200.00	3460700.00	204.8002	2.66E+00	2.66E+02
Kh3_pp201	Kh	3	461400.00	3460700.00	62.7522	2.25E+00	2.25E+02
Kh3_pp202	Kh	3	473600.00	3460700.00	156.8212	2.01E+00	2.01E+02
Kh3_pp203	Kh	3	485800.00	3460700.00	7.954325	1.65E+00	1.65E+02
Kh3_pp204	Kh	3	498000.00	3460700.00	4.597321	1.55E+00	1.55E+02
Kh3_pp205	Kh	3	510200.00	3460700.00	2.172856	1.66E+00	1.66E+02
Kh3_pp206	Kh	3	522400.00	3460700.00	30.73714	9.37E-01	9.37E+01
Kh3_pp207	Kh	3	534600.00	3460700.00	3.47127	7.08E-01	7.08E+01
Kh3_pp208	Kh	3	546800.00	3460700.00	77.77489	7.78E-01	7.78E+01
Kh3_pp209	Kh	3	559000.00	3460700.00	72.79434	9.36E-01	9.36E+01
Kh3_pp210	Kh	3	571200.00	3460700.00	1.0764972	1.08E+00	1.08E+02
Kh3_pp211	Kh	3	583400.00	3460700.00	2.467813	1.54E+00	1.54E+02
Kh3_pp212	Kh	3	595600.00	3460700.00	5.423939	1.33E+00	1.33E+02
Kh3_pp213	Kh	3	607800.00	3460700.00	1.817845	1.53E+00	1.53E+02
Kh3_pp214	Kh	3	620000.00	3460700.00	51.1898	2.53E+00	2.53E+02
Kh3_pp215	Kh	3	632200.00	3460700.00	21.574	2.81E+00	2.81E+02

Table D-2. Layer 5 Horizontal Hydraulic Conductivity (Kh) Pilot Points.

Pilot Point Name	Type	Model Layer	Longitude (NAD83 UTM16N)	Latitude (NAD83 UTM16N)	Calibrated Value	Minimum Bound	Maximum Bound
Kh5_pp001	Kh	5	437000.625	3320000.75	9.072588	4.78E-01	4.78E+01
Kh5_pp002	Kh	5	449200.00	3320000.75	3.253488	5.92E-01	5.92E+01
Kh5_pp003	Kh	5	461400.00	3320000.75	1.87451	6.42E-01	6.42E+01
Kh5_pp004	Kh	5	473600.00	3320000.75	17.92244	7.37E-01	7.38E+01
Kh5_pp005	Kh	5	485800.00	3320000.75	35.23684	9.36E-01	9.38E+01
Kh5_pp006	Kh	5	498000.00	3320000.75	86.08395	1.11E+00	1.11E+02
Kh5_pp007	Kh	5	510200.00	3320000.75	35.2305	9.62E-01	9.67E+01
Kh5_pp008	Kh	5	522400.00	3320000.75	19.63747	7.90E-01	7.96E+01
Kh5_pp009	Kh	5	534600.00	3320000.75	0.5349294	5.35E-01	5.50E+01
Kh5_pp010	Kh	5	546800.00	3320000.75	0.0716091	3.82E-02	3.82E+01
Kh5_pp011	Kh	5	559000.00	3320000.75	18.86113	3.49E-01	3.49E+01
Kh5_pp012	Kh	5	571200.00	3320000.75	0.6109512	3.54E-01	3.54E+01
Kh5_pp013	Kh	5	583400.00	3320000.75	1.68428	2.91E-01	2.91E+01
Kh5_pp014	Kh	5	595600.00	3320000.75	28.10966	2.81E-01	2.81E+01
Kh5_pp015	Kh	5	607800.00	3320000.75	10.12549	2.33E-01	2.33E+01
Kh5_pp016	Kh	5	620000.00	3320000.75	0.7747054	2.00E-01	2.00E+01
Kh5_pp017	Kh	5	632200.00	3320000.75	14.60083	2.07E-01	2.07E+01
Kh5_pp018	Kh	5	443100.00	3331724.75	5.354996	7.98E-01	7.98E+01
Kh5_pp019	Kh	5	455300.00	3331724.75	0.9892482	8.97E-01	8.97E+01
Kh5_pp020	Kh	5	467500.00	3331724.75	5.181067	7.32E-01	7.32E+01
Kh5_pp021	Kh	5	479700.00	3331724.75	1.669113	1.13E+00	1.13E+02
Kh5_pp022	Kh	5	491900.00	3331724.75	143.4952	1.47E+00	1.47E+02
Kh5_pp023	Kh	5	504100.00	3331724.75	13.39594	9.40E-01	9.40E+01
Kh5_pp024	Kh	5	516300.00	3331724.75	11.93785	6.42E-01	6.42E+01
Kh5_pp025	Kh	5	528500.00	3331724.75	40.99892	4.54E-01	4.54E+01
Kh5_pp026	Kh	5	540700.00	3331724.75	0.9684927	4.07E-01	4.07E+01
Kh5_pp027	Kh	5	552900.00	3331724.75	16.17711	3.96E-01	3.96E+01
Kh5_pp028	Kh	5	565100.00	3331724.75	4.667618	3.23E-01	3.23E+01
Kh5_pp029	Kh	5	577300.00	3331724.75	3.6131	3.08E-01	3.08E+01
Kh5_pp030	Kh	5	589500.00	3331724.75	13.36277	2.89E-01	2.89E+01
Kh5_pp031	Kh	5	601700.00	3331724.75	0.2671776	2.67E-01	2.67E+01
Kh5_pp032	Kh	5	613900.00	3331724.75	0.2536641	2.54E-01	2.54E+01
Kh5_pp033	Kh	5	626100.00	3331724.75	0.3288011	2.92E-01	2.92E+01
Kh5_pp034	Kh	5	437000.63	3343450.00	1.088417	7.51E-01	7.51E+01
Kh5_pp035	Kh	5	449200.00	3343450.00	1.74489	8.32E-01	8.32E+01
Kh5_pp036	Kh	5	461400.00	3343450.00	38.43533	5.55E-01	5.55E+01
Kh5_pp037	Kh	5	473600.00	3343450.00	1.455283	5.42E-01	5.42E+01
Kh5_pp038	Kh	5	485800.00	3343450.00	55.62733	5.56E-01	5.56E+01
Kh5_pp039	Kh	5	498000.00	3343450.00	21.28795	4.89E-01	4.89E+01
Kh5_pp040	Kh	5	510200.00	3343450.00	1.462102	4.98E-01	4.98E+01
Kh5_pp041	Kh	5	522400.00	3343450.00	11.28017	4.99E-01	4.99E+01
Kh5_pp042	Kh	5	534600.00	3343450.00	0.5338101	5.34E-01	5.34E+01
Kh5_pp043	Kh	5	546800.00	3343450.00	1.606067	4.75E-01	4.75E+01
Kh5_pp044	Kh	5	559000.00	3343450.00	1.06107	3.38E-01	3.38E+01

Table D-2. Layer 5 Horizontal Hydraulic Conductivity (Kh) Pilot Points.

Pilot Point Name	Type	Model Layer	Longitude (NAD83 UTM16N)	Latitude (NAD83 UTM16N)	Calibrated Value	Minimum Bound	Maximum Bound
Kh5_pp045	Kh	5	571200.00	3343450.00	4.041456	3.23E-01	3.23E+01
Kh5_pp046	Kh	5	583400.00	3343450.00	6.978393	3.27E-01	3.27E+01
Kh5_pp047	Kh	5	595600.00	3343450.00	0.2871659	2.66E-01	2.66E+01
Kh5_pp048	Kh	5	607800.00	3343450.00	4.696784	2.93E-01	2.93E+01
Kh5_pp049	Kh	5	620000.00	3343450.00	0.372476	3.72E-01	3.72E+01
Kh5_pp050	Kh	5	632200.00	3343450.00	0.6210837	5.58E-01	5.58E+01
Kh5_pp051	Kh	5	443100.00	3355175.00	2.302645	5.69E-01	5.69E+01
Kh5_pp052	Kh	5	455300.00	3355175.00	9.542523	6.77E-01	6.77E+01
Kh5_pp053	Kh	5	467500.00	3355175.00	23.21294	4.68E-01	4.68E+01
Kh5_pp054	Kh	5	479700.00	3355175.00	1.943875	3.40E-01	3.40E+01
Kh5_pp055	Kh	5	491900.00	3355175.00	4.793226	4.39E-01	4.39E+01
Kh5_pp056	Kh	5	504100.00	3355175.00	1.771466	4.77E-01	4.77E+01
Kh5_pp057	Kh	5	516300.00	3355175.00	0.621373	5.85E-01	5.85E+01
Kh5_pp058	Kh	5	528500.00	3355175.00	1.702163	7.31E-01	7.31E+01
Kh5_pp059	Kh	5	540700.00	3355175.00	13.63252	7.72E-01	7.72E+01
Kh5_pp060	Kh	5	552900.00	3355175.00	32.21786	6.80E-01	6.80E+01
Kh5_pp061	Kh	5	565100.00	3355175.00	48.79518	4.88E-01	4.88E+01
Kh5_pp062	Kh	5	577300.00	3355175.00	2.785497	3.01E-01	3.01E+01
Kh5_pp063	Kh	5	589500.00	3355175.00	0.9606719	2.50E-01	2.50E+01
Kh5_pp064	Kh	5	601700.00	3355175.00	0.4613871	3.98E-01	3.98E+01
Kh5_pp065	Kh	5	613900.00	3355175.00	30.15893	7.21E-01	7.21E+01
Kh5_pp066	Kh	5	626100.00	3355175.00	1.3212984	1.32E+00	1.32E+02
Kh5_pp067	Kh	5	437000.63	3366900.00	11.61533	4.09E-01	4.11E+01
Kh5_pp068	Kh	5	449200.00	3366900.00	0.8777236	4.51E-01	4.51E+01
Kh5_pp069	Kh	5	461400.00	3366900.00	16.05895	5.62E-01	5.62E+01
Kh5_pp070	Kh	5	473600.00	3366900.00	51.6807	5.41E-01	5.41E+01
Kh5_pp071	Kh	5	485800.00	3366900.00	33.11568	6.07E-01	6.07E+01
Kh5_pp072	Kh	5	498000.00	3366900.00	61.75602	6.18E-01	6.18E+01
Kh5_pp073	Kh	5	510200.00	3366900.00	1.25034	7.19E-01	7.19E+01
Kh5_pp074	Kh	5	522400.00	3366900.00	4.942321	9.67E-01	9.67E+01
Kh5_pp075	Kh	5	534600.00	3366900.00	30.72672	1.16E+00	1.16E+02
Kh5_pp076	Kh	5	546800.00	3366900.00	83.04941	1.25E+00	1.25E+02
Kh5_pp077	Kh	5	559000.00	3366900.00	96.19262	9.62E-01	9.62E+01
Kh5_pp078	Kh	5	571200.00	3366900.00	92.1355	9.21E-01	9.21E+01
Kh5_pp079	Kh	5	583400.00	3366900.00	74.5838	7.46E-01	7.46E+01
Kh5_pp080	Kh	5	595600.00	3366900.00	10.85993	1.41E+00	1.41E+02
Kh5_pp081	Kh	5	607800.00	3366900.00	190.065	1.90E+00	1.90E+02
Kh5_pp082	Kh	5	620000.00	3366900.00	246.8844	7.03E+01	7.03E+03
Kh5_pp083	Kh	5	632200.00	3366900.00	563.1686	2.36E+02	2.36E+04
Kh5_pp084	Kh	5	443100.00	3378625.25	11.643	3.55E-01	3.55E+01
Kh5_pp085	Kh	5	455300.00	3378625.25	0.3261744	2.46E-01	2.46E+01
Kh5_pp086	Kh	5	467500.00	3378625.25	16.48204	3.68E-01	3.68E+01
Kh5_pp087	Kh	5	479700.00	3378625.25	5.420726	5.90E-01	5.90E+01
Kh5_pp088	Kh	5	491900.00	3378625.25	41.15601	4.58E-01	4.58E+01

Table D-2. Layer 5 Horizontal Hydraulic Conductivity (Kh) Pilot Points.

Pilot Point Name	Type	Model Layer	Longitude (NAD83 UTM16N)	Latitude (NAD83 UTM16N)	Calibrated Value	Minimum Bound	Maximum Bound
Kh5_pp089	Kh	5	504100.00	3378625.25	0.7302548	6.90E-01	6.90E+01
Kh5_pp090	Kh	5	516300.00	3378625.25	10.79716	9.84E-01	9.84E+01
Kh5_pp091	Kh	5	528500.00	3378625.25	1.5962903	1.60E+00	1.60E+02
Kh5_pp092	Kh	5	540700.00	3378625.25	1.6496915	1.65E+00	1.65E+02
Kh5_pp093	Kh	5	552900.00	3378625.25	0.8095385	8.10E-01	8.10E+01
Kh5_pp094	Kh	5	565100.00	3378625.25	1.032441	8.28E-01	8.28E+01
Kh5_pp095	Kh	5	577300.00	3378625.25	0.9295056	9.30E-01	9.30E+01
Kh5_pp096	Kh	5	589500.00	3378625.25	2.219682	2.18E+00	2.18E+02
Kh5_pp097	Kh	5	601700.00	3378625.25	19.45986	7.91E+00	7.91E+02
Kh5_pp098	Kh	5	613900.00	3378625.25	3212.544	4.92E+01	4.92E+03
Kh5_pp099	Kh	5	626100.00	3378625.25	24.70282	1.18E+01	1.18E+03
Kh5_pp100	Kh	5	437000.63	3390350.00	10.77465	3.61E-01	3.77E+01
Kh5_pp101	Kh	5	449200.00	3390350.00	4.00647	2.84E-01	2.84E+01
Kh5_pp102	Kh	5	461400.00	3390350.00	2.307698	3.04E-01	3.04E+01
Kh5_pp103	Kh	5	473600.00	3390350.00	0.7722358	3.71E-01	3.71E+01
Kh5_pp104	Kh	5	485800.00	3390350.00	27.68663	3.44E-01	3.44E+01
Kh5_pp105	Kh	5	498000.00	3390350.00	0.7646274	5.62E-01	5.62E+01
Kh5_pp106	Kh	5	510200.00	3390350.00	4.38356	8.47E-01	8.47E+01
Kh5_pp107	Kh	5	522400.00	3390350.00	4.383728	1.53E+00	1.53E+02
Kh5_pp108	Kh	5	534600.00	3390350.00	6.433125	2.19E+00	2.19E+02
Kh5_pp109	Kh	5	546800.00	3390350.00	5.943483	1.45E+00	1.45E+02
Kh5_pp110	Kh	5	559000.00	3390350.00	1.22896	9.47E-01	9.47E+01
Kh5_pp111	Kh	5	571200.00	3390350.00	1.200232	9.35E-01	9.35E+01
Kh5_pp112	Kh	5	583400.00	3390350.00	1.14785	1.04E+00	1.04E+02
Kh5_pp113	Kh	5	595600.00	3390350.00	14.01131	6.99E+00	6.99E+02
Kh5_pp114	Kh	5	607800.00	3390350.00	33.14568	3.31E+01	3.31E+03
Kh5_pp115	Kh	5	620000.00	3390350.00	100.8972	3.74E+01	3.74E+03
Kh5_pp116	Kh	5	632200.00	3390350.00	565.7332	1.63E+02	1.63E+04
Kh5_pp117	Kh	5	443100.00	3402075.00	1.88689	3.94E-01	3.94E+01
Kh5_pp118	Kh	5	455300.00	3402075.00	3.304338	4.57E-01	4.57E+01
Kh5_pp119	Kh	5	467500.00	3402075.00	5.168969	7.46E-01	7.46E+01
Kh5_pp120	Kh	5	479700.00	3402075.00	0.5903808	4.91E-01	4.91E+01
Kh5_pp121	Kh	5	491900.00	3402075.00	1.461245	4.93E-01	4.93E+01
Kh5_pp122	Kh	5	504100.00	3402075.00	0.6451172	6.23E-01	6.23E+01
Kh5_pp123	Kh	5	516300.00	3402075.00	1.838158	8.52E-01	8.52E+01
Kh5_pp124	Kh	5	528500.00	3402075.00	230.71127	2.31E+00	2.31E+02
Kh5_pp125	Kh	5	540700.00	3402075.00	208.3533	2.26E+00	2.26E+02
Kh5_pp126	Kh	5	552900.00	3402075.00	17.52624	1.30E+00	1.30E+02
Kh5_pp127	Kh	5	565100.00	3402075.00	1.350788	1.35E+00	1.35E+02
Kh5_pp128	Kh	5	577300.00	3402075.00	2.997821	1.49E+00	1.49E+02
Kh5_pp129	Kh	5	589500.00	3402075.00	59.37274	2.77E+00	2.77E+02
Kh5_pp130	Kh	5	601700.00	3402075.00	8020.184	8.02E+00	8.02E+03
Kh5_pp131	Kh	5	613900.00	3402075.00	30.71979	1.21E+01	1.21E+03
Kh5_pp132	Kh	5	626100.00	3402075.00	127.3707	1.66E+01	1.66E+03

Table D-2. Layer 5 Horizontal Hydraulic Conductivity (Kh) Pilot Points.

Pilot Point Name	Type	Model Layer	Longitude (NAD83 UTM16N)	Latitude (NAD83 UTM16N)	Calibrated Value	Minimum Bound	Maximum Bound
Kh5_pp133	Kh	5	437000.63	3413800.00	0.6312851	6.62E-02	6.62E+01
Kh5_pp134	Kh	5	449200.00	3413800.00	3.399386	1.16E+00	1.16E+02
Kh5_pp135	Kh	5	461400.00	3413800.00	56.69635	8.95E-01	8.95E+01
Kh5_pp136	Kh	5	473600.00	3413800.00	2.081624	6.77E-01	6.77E+01
Kh5_pp137	Kh	5	485800.00	3413800.00	0.9991122	6.68E-01	6.68E+01
Kh5_pp138	Kh	5	498000.00	3413800.00	17.37796	7.37E-01	7.37E+01
Kh5_pp139	Kh	5	510200.00	3413800.00	95.78287	9.58E-01	9.58E+01
Kh5_pp140	Kh	5	522400.00	3413800.00	106.3872	2.13E+00	2.13E+02
Kh5_pp141	Kh	5	534600.00	3413800.00	1.743749	1.46E+00	1.46E+02
Kh5_pp142	Kh	5	546800.00	3413800.00	30.64967	1.26E+00	1.26E+02
Kh5_pp143	Kh	5	559000.00	3413800.00	127.773	1.63E+00	1.63E+02
Kh5_pp144	Kh	5	571200.00	3413800.00	27.14092	1.97E+00	1.97E+02
Kh5_pp145	Kh	5	583400.00	3413800.00	18.99071	2.32E+00	2.32E+02
Kh5_pp146	Kh	5	595600.00	3413800.00	4.737492	4.45E+00	4.45E+02
Kh5_pp147	Kh	5	607800.00	3413800.00	67.85908	1.28E+01	1.28E+03
Kh5_pp148	Kh	5	620000.00	3413800.00	20.07325	1.63E+01	1.63E+03
Kh5_pp149	Kh	5	632200.00	3413800.00	690.1727	1.64E+01	1.64E+03
Kh5_pp150	Kh	5	443100.00	3425525.00	2.329528	8.59E-01	8.59E+01
Kh5_pp151	Kh	5	455300.00	3425525.00	0.7296137	7.30E-01	7.30E+01
Kh5_pp152	Kh	5	467500.00	3425525.00	2.875674	5.79E-01	5.79E+01
Kh5_pp153	Kh	5	479700.00	3425525.00	6.942132	6.10E-01	6.10E+01
Kh5_pp154	Kh	5	491900.00	3425525.00	26.908	9.33E-01	9.33E+01
Kh5_pp155	Kh	5	504100.00	3425525.00	64.41657	7.81E-01	7.81E+01
Kh5_pp156	Kh	5	516300.00	3425525.00	40.79267	1.63E+00	1.63E+02
Kh5_pp157	Kh	5	528500.00	3425525.00	17.64945	1.62E+00	1.62E+02
Kh5_pp158	Kh	5	540700.00	3425525.00	7.836112	1.76E+00	1.76E+02
Kh5_pp159	Kh	5	552900.00	3425525.00	177.7083	1.78E+00	1.78E+02
Kh5_pp160	Kh	5	565100.00	3425525.00	147.4247	2.12E+00	2.12E+02
Kh5_pp161	Kh	5	577300.00	3425525.00	3.724652	2.65E+00	2.65E+02
Kh5_pp162	Kh	5	589500.00	3425525.00	69.67167	3.61E+00	3.61E+02
Kh5_pp163	Kh	5	601700.00	3425525.00	9.118399	6.10E+00	6.10E+02
Kh5_pp164	Kh	5	613900.00	3425525.00	26.76678	1.46E+01	1.46E+03
Kh5_pp165	Kh	5	626100.00	3425525.00	561.5895	1.49E+01	1.49E+03
Kh5_pp166	Kh	5	437000.63	3437250.00	7.069647	1.20E-01	1.20E+02
Kh5_pp167	Kh	5	449200.00	3437250.00	2.462663	7.38E-01	7.38E+01
Kh5_pp168	Kh	5	461400.00	3437250.00	69.43173	7.22E-01	7.22E+01
Kh5_pp169	Kh	5	473600.00	3437250.00	4.094036	6.67E-01	6.67E+01
Kh5_pp170	Kh	5	485800.00	3437250.00	9.900294	7.76E-01	7.76E+01
Kh5_pp171	Kh	5	498000.00	3437250.00	32.10633	6.85E-01	6.85E+01
Kh5_pp172	Kh	5	510200.00	3437250.00	2.090219	7.23E-01	7.23E+01
Kh5_pp173	Kh	5	522400.00	3437250.00	18.90588	1.43E+00	1.43E+02
Kh5_pp174	Kh	5	534600.00	3437250.00	16.84699	1.24E+00	1.24E+02
Kh5_pp175	Kh	5	546800.00	3437250.00	136.4328	1.63E+00	1.63E+02
Kh5_pp176	Kh	5	559000.00	3437250.00	59.14632	1.55E+00	1.55E+02

Table D-2. Layer 5 Horizontal Hydraulic Conductivity (Kh) Pilot Points.

Pilot Point Name	Type	Model Layer	Longitude (NAD83 UTM16N)	Latitude (NAD83 UTM16N)	Calibrated Value	Minimum Bound	Maximum Bound
Kh5_pp177	Kh	5	571200.00	3437250.00	6.337567	1.58E+00	1.58E+02
Kh5_pp178	Kh	5	583400.00	3437250.00	27.04253	2.50E+00	2.50E+02
Kh5_pp179	Kh	5	595600.00	3437250.00	5.626812	2.46E+00	2.46E+02
Kh5_pp180	Kh	5	607800.00	3437250.00	160.7772	5.38E+00	5.38E+02
Kh5_pp181	Kh	5	620000.00	3437250.00	68.22632	8.12E+00	8.12E+02
Kh5_pp182	Kh	5	632200.00	3437250.00	244.6922	8.89E+00	8.89E+02
Kh5_pp183	Kh	5	443100.00	3448975.00	54.62403	9.36E-01	9.36E+01
Kh5_pp184	Kh	5	455300.00	3448975.00	0.7631952	7.40E-01	7.40E+01
Kh5_pp185	Kh	5	467500.00	3448975.00	13.4355	7.18E-01	7.18E+01
Kh5_pp186	Kh	5	479700.00	3448975.00	1.121269	7.05E-01	7.05E+01
Kh5_pp187	Kh	5	491900.00	3448975.00	43.3437	7.42E-01	7.42E+01
Kh5_pp188	Kh	5	504100.00	3448975.00	60.32394	8.42E-01	8.42E+01
Kh5_pp189	Kh	5	516300.00	3448975.00	1.871217	1.38E+00	1.38E+02
Kh5_pp190	Kh	5	528500.00	3448975.00	17.61017	1.26E+00	1.26E+02
Kh5_pp191	Kh	5	540700.00	3448975.00	19.43711	8.98E-01	8.98E+01
Kh5_pp192	Kh	5	552900.00	3448975.00	92.45615	1.08E+00	1.08E+02
Kh5_pp193	Kh	5	565100.00	3448975.00	7.049124	1.25E+00	1.25E+02
Kh5_pp194	Kh	5	577300.00	3448975.00	5.602497	1.39E+00	1.39E+02
Kh5_pp195	Kh	5	589500.00	3448975.00	94.67883	1.54E+00	1.54E+02
Kh5_pp196	Kh	5	601700.00	3448975.00	167.1011	1.71E+00	1.71E+02
Kh5_pp197	Kh	5	613900.00	3448975.00	264.9903	2.96E+00	2.96E+02
Kh5_pp198	Kh	5	626100.00	3448975.00	140.3318	3.51E+00	3.51E+02
Kh5_pp199	Kh	5	437000.63	3460700.00	3.150873	1.04E+00	1.04E+03
Kh5_pp200	Kh	5	449200.00	3460700.00	27.51056	8.98E-01	8.98E+01
Kh5_pp201	Kh	5	461400.00	3460700.00	1.941249	9.86E-01	9.86E+01
Kh5_pp202	Kh	5	473600.00	3460700.00	1.278263	8.72E-01	8.72E+01
Kh5_pp203	Kh	5	485800.00	3460700.00	7.08316	1.01E+00	1.01E+02
Kh5_pp204	Kh	5	498000.00	3460700.00	16.65533	1.21E+00	1.21E+02
Kh5_pp205	Kh	5	510200.00	3460700.00	154.5454	1.55E+00	1.55E+02
Kh5_pp206	Kh	5	522400.00	3460700.00	3.704763	1.24E+00	1.24E+02
Kh5_pp207	Kh	5	534600.00	3460700.00	23.95206	7.08E-01	7.08E+01
Kh5_pp208	Kh	5	546800.00	3460700.00	1.737944	7.78E-01	7.78E+01
Kh5_pp209	Kh	5	559000.00	3460700.00	93.57389	9.36E-01	9.36E+01
Kh5_pp210	Kh	5	571200.00	3460700.00	2.503374	1.08E+00	1.08E+02
Kh5_pp211	Kh	5	583400.00	3460700.00	51.35767	1.54E+00	1.54E+02
Kh5_pp212	Kh	5	595600.00	3460700.00	21.08	1.33E+00	1.33E+02
Kh5_pp213	Kh	5	607800.00	3460700.00	3.432359	1.53E+00	1.53E+02
Kh5_pp214	Kh	5	620000.00	3460700.00	51.96999	2.53E+00	2.53E+02
Kh5_pp215	Kh	5	632200.00	3460700.00	258.3676	2.81E+00	2.81E+02

Table D-3. Layer 2 Vertical Hydraulic Conductivity (Kv) Pilot Points.

Pilot Point Name	Type	Model Layer	Longitude (NAD83 UTM16N)	Latitude (NAD83 UTM16N)	Calibrated Value	Minimum Bound	Maximum Bound
Kv2_pp001	Kv	2	437000.625	3320000.75	5.73E-06	2.00E-07	2.00E-05
Kv2_pp002	Kv	2	449200.00	3320000.75	1.37E-05	2.00E-07	2.00E-05
Kv2_pp003	Kv	2	461400.00	3320000.75	2.22E-07	2.00E-07	2.00E-05
Kv2_pp004	Kv	2	473600.00	3320000.75	3.73E-06	2.00E-07	2.00E-05
Kv2_pp005	Kv	2	485800.00	3320000.75	3.39E-06	1.26E-06	1.26E-04
Kv2_pp006	Kv	2	498000.00	3320000.75	3.84E-04	1.88E-05	1.88E-03
Kv2_pp007	Kv	2	510200.00	3320000.75	7.59E-04	9.13E-05	9.13E-03
Kv2_pp008	Kv	2	522400.00	3320000.75	0.0072723	1.67E-04	1.67E-02
Kv2_pp009	Kv	2	534600.00	3320000.75	0.0035985	2.37E-04	2.37E-02
Kv2_pp010	Kv	2	546800.00	3320000.75	8.19E-04	3.00E-04	3.00E-02
Kv2_pp011	Kv	2	559000.00	3320000.75	0.027603	3.00E-04	3.00E-02
Kv2_pp012	Kv	2	571200.00	3320000.75	0.0068711	3.00E-04	3.00E-02
Kv2_pp013	Kv	2	583400.00	3320000.75	0.0013315	3.00E-04	3.00E-02
Kv2_pp014	Kv	2	595600.00	3320000.75	0.0016822	2.00E-05	2.00E-03
Kv2_pp015	Kv	2	607800.00	3320000.75	1.74E-04	2.00E-05	2.00E-03
Kv2_pp016	Kv	2	620000.00	3320000.75	6.18E-05	2.00E-05	2.00E-03
Kv2_pp017	Kv	2	632200.00	3320000.75	9.79E-05	2.00E-05	2.00E-03
Kv2_pp018	Kv	2	443100.00	3331724.75	3.01E-06	2.00E-07	2.00E-05
Kv2_pp019	Kv	2	455300.00	3331724.75	7.54E-07	2.00E-07	2.00E-05
Kv2_pp020	Kv	2	467500.00	3331724.75	2.60E-06	2.00E-07	2.00E-05
Kv2_pp021	Kv	2	479700.00	3331724.75	9.18E-07	2.00E-07	2.00E-05
Kv2_pp022	Kv	2	491900.00	3331724.75	7.25E-05	9.31E-07	9.31E-05
Kv2_pp023	Kv	2	504100.00	3331724.75	2.22E-04	3.67E-06	3.67E-04
Kv2_pp024	Kv	2	516300.00	3331724.75	0.0026348	8.48E-05	8.48E-03
Kv2_pp025	Kv	2	528500.00	3331724.75	1.55E-04	1.55E-04	1.55E-02
Kv2_pp026	Kv	2	540700.00	3331724.75	5.63E-04	2.34E-04	2.34E-01
Kv2_pp027	Kv	2	552900.00	3331724.75	0.0010379	3.00E-04	3.00E-02
Kv2_pp028	Kv	2	565100.00	3331724.75	0.0204482	3.00E-04	3.00E-02
Kv2_pp029	Kv	2	577300.00	3331724.75	0.0277432	3.00E-04	3.00E-02
Kv2_pp030	Kv	2	589500.00	3331724.75	6.10E-04	2.59E-04	2.59E-02
Kv2_pp031	Kv	2	601700.00	3331724.75	0.0018542	2.00E-05	2.00E-03
Kv2_pp032	Kv	2	613900.00	3331724.75	2.00E-05	2.00E-05	2.00E-03
Kv2_pp033	Kv	2	626100.00	3331724.75	1.38E-04	2.00E-05	2.00E-03
Kv2_pp034	Kv	2	437000.63	3343450.00	1.23E-06	2.00E-07	2.00E-05
Kv2_pp035	Kv	2	449200.00	3343450.00	3.85E-06	2.00E-07	2.00E-04
Kv2_pp036	Kv	2	461400.00	3343450.00	2.00E-05	2.00E-07	2.00E-05
Kv2_pp037	Kv	2	473600.00	3343450.00	2.00E-05	2.00E-07	2.00E-05
Kv2_pp038	Kv	2	485800.00	3343450.00	2.50E-06	2.00E-07	2.00E-05
Kv2_pp039	Kv	2	498000.00	3343450.00	4.59E-06	2.00E-07	2.00E-05
Kv2_pp040	Kv	2	510200.00	3343450.00	3.57E-05	3.25E-06	3.25E-04
Kv2_pp041	Kv	2	522400.00	3343450.00	0.0038156	7.52E-05	7.52E-03
Kv2_pp042	Kv	2	534600.00	3343450.00	0.0079368	1.52E-04	1.52E-02
Kv2_pp043	Kv	2	546800.00	3343450.00	0.0206284	2.19E-04	2.19E-02
Kv2_pp044	Kv	2	559000.00	3343450.00	0.0015143	3.00E-04	3.00E-02

Table D-3. Layer 2 Vertical Hydraulic Conductivity (Kv) Pilot Points.

Pilot Point Name	Type	Model Layer	Longitude (NAD83 UTM16N)	Latitude (NAD83 UTM16N)	Calibrated Value	Minimum Bound	Maximum Bound
Kv2_pp045	Kv	2	571200.00	3343450.00	0.0052033	3.00E-04	3.00E-01
Kv2_pp046	Kv	2	583400.00	3343450.00	6.70E-04	3.00E-04	3.00E-02
Kv2_pp047	Kv	2	595600.00	3343450.00	0.0010383	1.32E-04	1.32E-02
Kv2_pp048	Kv	2	607800.00	3343450.00	2.01E-05	2.00E-05	2.00E-03
Kv2_pp049	Kv	2	620000.00	3343450.00	0.0019754	2.00E-05	2.00E-03
Kv2_pp050	Kv	2	632200.00	3343450.00	1.17E-04	2.07E-05	2.07E-03
Kv2_pp051	Kv	2	443100.00	3355175.00	1.83E-05	2.00E-07	2.00E-05
Kv2_pp052	Kv	2	455300.00	3355175.00	4.62E-07	2.00E-07	2.00E-05
Kv2_pp053	Kv	2	467500.00	3355175.00	2.48E-07	2.00E-07	2.00E-05
Kv2_pp054	Kv	2	479700.00	3355175.00	2.29E-06	2.00E-07	2.00E-05
Kv2_pp055	Kv	2	491900.00	3355175.00	1.97E-06	2.00E-07	2.00E-05
Kv2_pp056	Kv	2	504100.00	3355175.00	2.31E-06	2.00E-07	2.00E-05
Kv2_pp057	Kv	2	516300.00	3355175.00	4.16E-06	1.91E-06	1.91E-04
Kv2_pp058	Kv	2	528500.00	3355175.00	0.003303	3.41E-05	3.41E-03
Kv2_pp059	Kv	2	540700.00	3355175.00	4.90E-04	1.09E-04	1.09E-02
Kv2_pp060	Kv	2	552900.00	3355175.00	1.63E-04	1.63E-04	1.63E-01
Kv2_pp061	Kv	2	565100.00	3355175.00	0.0036838	2.24E-04	2.24E-02
Kv2_pp062	Kv	2	577300.00	3355175.00	6.53E-04	3.00E-04	3.00E-02
Kv2_pp063	Kv	2	589500.00	3355175.00	3.63E-04	3.00E-04	3.00E-02
Kv2_pp064	Kv	2	601700.00	3355175.00	0.003576	9.39E-05	9.39E-03
Kv2_pp065	Kv	2	613900.00	3355175.00	0.0108166	5.51E-04	5.51E-02
Kv2_pp066	Kv	2	626100.00	3355175.00	0.0842503	8.43E-04	8.43E-02
Kv2_pp067	Kv	2	437000.63	3366900.00	1.84E-06	2.00E-07	2.00E-05
Kv2_pp068	Kv	2	449200.00	3366900.00	4.75E-06	2.00E-07	2.00E-05
Kv2_pp069	Kv	2	461400.00	3366900.00	3.35E-06	2.00E-07	2.00E-05
Kv2_pp070	Kv	2	473600.00	3366900.00	1.34E-05	2.00E-07	2.00E-05
Kv2_pp071	Kv	2	485800.00	3366900.00	7.95E-06	2.00E-07	2.00E-05
Kv2_pp072	Kv	2	498000.00	3366900.00	2.00E-05	2.00E-07	2.00E-05
Kv2_pp073	Kv	2	510200.00	3366900.00	6.33E-06	2.00E-07	2.00E-05
Kv2_pp074	Kv	2	522400.00	3366900.00	4.20E-05	1.09E-06	1.09E-04
Kv2_pp075	Kv	2	534600.00	3366900.00	3.02E-04	3.02E-06	3.02E-04
Kv2_pp076	Kv	2	546800.00	3366900.00	2.61E-06	7.82E-07	7.82E-04
Kv2_pp077	Kv	2	559000.00	3366900.00	4.87E-04	2.65E-05	2.65E-03
Kv2_pp078	Kv	2	571200.00	3366900.00	8.43E-05	4.11E-05	4.11E-03
Kv2_pp079	Kv	2	583400.00	3366900.00	7.33E-05	7.33E-05	7.33E-03
Kv2_pp080	Kv	2	595600.00	3366900.00	2.68E-04	2.16E-04	2.16E-02
Kv2_pp081	Kv	2	607800.00	3366900.00	0.0016058	1.61E-03	1.61E-01
Kv2_pp082	Kv	2	620000.00	3366900.00	0.0015474	1.55E-03	1.55E-01
Kv2_pp083	Kv	2	632200.00	3366900.00	0.1119347	3.61E-03	3.61E-01
Kv2_pp084	Kv	2	443100.00	3378625.25	5.46E-07	2.00E-07	2.00E-05
Kv2_pp085	Kv	2	455300.00	3378625.25	1.04E-05	2.00E-07	2.00E-05
Kv2_pp086	Kv	2	467500.00	3378625.25	1.31E-06	2.00E-07	2.00E-05
Kv2_pp087	Kv	2	479700.00	3378625.25	8.18E-06	2.00E-07	2.00E-05
Kv2_pp088	Kv	2	491900.00	3378625.25	2.96E-06	2.00E-07	2.00E-05

Table D-3. Layer 2 Vertical Hydraulic Conductivity (Kv) Pilot Points.

Pilot Point Name	Type	Model Layer	Longitude (NAD83 UTM16N)	Latitude (NAD83 UTM16N)	Calibrated Value	Minimum Bound	Maximum Bound
Kv2_pp089	Kv	2	504100.00	3378625.25	3.79E-07	2.00E-07	2.00E-05
Kv2_pp090	Kv	2	516300.00	3378625.25	6.47E-06	2.57E-07	2.57E-05
Kv2_pp091	Kv	2	528500.00	3378625.25	3.63E-06	1.92E-06	1.92E-04
Kv2_pp092	Kv	2	540700.00	3378625.25	8.80E-06	3.89E-06	3.89E-04
Kv2_pp093	Kv	2	552900.00	3378625.25	4.00E-06	4.00E-06	4.00E-04
Kv2_pp094	Kv	2	565100.00	3378625.25	4.07E-06	4.00E-06	4.00E-04
Kv2_pp095	Kv	2	577300.00	3378625.25	5.72E-05	4.00E-06	4.00E-04
Kv2_pp096	Kv	2	589500.00	3378625.25	2.90E-05	2.59E-05	2.59E-03
Kv2_pp097	Kv	2	601700.00	3378625.25	3.05E-05	3.05E-05	3.05E-02
Kv2_pp098	Kv	2	613900.00	3378625.25	0.0020898	2.03E-03	2.03E-01
Kv2_pp099	Kv	2	626100.00	3378625.25	0.0020771	2.08E-03	2.08E-01
Kv2_pp100	Kv	2	437000.63	3390350.00	1.20E-05	2.00E-07	2.00E-05
Kv2_pp101	Kv	2	449200.00	3390350.00	2.06E-06	2.00E-07	2.00E-05
Kv2_pp102	Kv	2	461400.00	3390350.00	5.67E-06	2.00E-07	2.00E-05
Kv2_pp103	Kv	2	473600.00	3390350.00	1.43E-05	2.00E-07	2.00E-04
Kv2_pp104	Kv	2	485800.00	3390350.00	2.13E-05	2.77E-07	2.77E-05
Kv2_pp105	Kv	2	498000.00	3390350.00	4.24E-06	6.66E-07	6.66E-05
Kv2_pp106	Kv	2	510200.00	3390350.00	1.21E-05	1.02E-06	1.02E-04
Kv2_pp107	Kv	2	522400.00	3390350.00	6.65E-07	1.84E-07	1.84E-04
Kv2_pp108	Kv	2	534600.00	3390350.00	3.18E-06	3.00E-06	3.00E-04
Kv2_pp109	Kv	2	546800.00	3390350.00	3.04E-05	4.00E-06	4.00E-04
Kv2_pp110	Kv	2	559000.00	3390350.00	7.56E-06	4.00E-06	4.00E-04
Kv2_pp111	Kv	2	571200.00	3390350.00	2.61E-05	4.00E-06	4.00E-04
Kv2_pp112	Kv	2	583400.00	3390350.00	1.51E-05	4.00E-06	4.00E-04
Kv2_pp113	Kv	2	595600.00	3390350.00	0.0044905	9.36E-05	9.36E-03
Kv2_pp114	Kv	2	607800.00	3390350.00	0.0069375	5.40E-04	5.40E-02
Kv2_pp115	Kv	2	620000.00	3390350.00	0.0020897	6.00E-04	6.00E-02
Kv2_pp116	Kv	2	632200.00	3390350.00	0.0201969	7.66E-04	7.66E-02
Kv2_pp117	Kv	2	443100.00	3402075.00	1.66E-05	2.77E-07	2.77E-05
Kv2_pp118	Kv	2	455300.00	3402075.00	3.31E-07	2.66E-07	2.66E-04
Kv2_pp119	Kv	2	467500.00	3402075.00	2.57E-06	2.94E-08	2.94E-05
Kv2_pp120	Kv	2	479700.00	3402075.00	2.83E-05	3.20E-07	3.20E-05
Kv2_pp121	Kv	2	491900.00	3402075.00	7.73E-06	1.42E-06	1.42E-04
Kv2_pp122	Kv	2	504100.00	3402075.00	5.00E-05	1.79E-06	1.79E-04
Kv2_pp123	Kv	2	516300.00	3402075.00	2.88E-05	2.41E-06	2.41E-04
Kv2_pp124	Kv	2	528500.00	3402075.00	9.45E-06	3.43E-06	3.43E-04
Kv2_pp125	Kv	2	540700.00	3402075.00	1.73E-05	1.73E-05	1.73E-03
Kv2_pp126	Kv	2	552900.00	3402075.00	5.60E-05	3.84E-05	3.84E-03
Kv2_pp127	Kv	2	565100.00	3402075.00	6.18E-06	4.12E-06	4.12E-03
Kv2_pp128	Kv	2	577300.00	3402075.00	2.38E-04	3.73E-06	3.73E-03
Kv2_pp129	Kv	2	589500.00	3402075.00	4.88E-04	6.35E-05	6.35E-03
Kv2_pp130	Kv	2	601700.00	3402075.00	0.0035354	2.17E-04	2.17E-02
Kv2_pp131	Kv	2	613900.00	3402075.00	0.0188988	4.43E-04	4.43E-02
Kv2_pp132	Kv	2	626100.00	3402075.00	0.00146	1.20E-03	1.20E-01

Table D-3. Layer 2 Vertical Hydraulic Conductivity (Kv) Pilot Points.

Pilot Point Name	Type	Model Layer	Longitude (NAD83 UTM16N)	Latitude (NAD83 UTM16N)	Calibrated Value	Minimum Bound	Maximum Bound
Kv2_pp133	Kv	2	437000.63	3413800.00	5.18E-07	4.19E-07	4.19E-05
Kv2_pp134	Kv	2	449200.00	3413800.00	9.14E-07	4.20E-07	4.20E-05
Kv2_pp135	Kv	2	461400.00	3413800.00	3.39E-06	4.20E-07	4.20E-05
Kv2_pp136	Kv	2	473600.00	3413800.00	1.14E-06	4.46E-07	4.46E-05
Kv2_pp137	Kv	2	485800.00	3413800.00	1.24E-07	4.71E-08	4.71E-05
Kv2_pp138	Kv	2	498000.00	3413800.00	9.57E-05	1.85E-06	1.85E-04
Kv2_pp139	Kv	2	510200.00	3413800.00	1.00E-05	2.83E-06	2.83E-04
Kv2_pp140	Kv	2	522400.00	3413800.00	4.20E-05	3.79E-06	3.79E-04
Kv2_pp141	Kv	2	534600.00	3413800.00	5.77E-05	5.77E-05	5.77E-03
Kv2_pp142	Kv	2	546800.00	3413800.00	1.10E-04	7.00E-05	7.00E-03
Kv2_pp143	Kv	2	559000.00	3413800.00	7.88E-04	7.00E-05	7.00E-03
Kv2_pp144	Kv	2	571200.00	3413800.00	1.29E-04	7.00E-05	7.00E-03
Kv2_pp145	Kv	2	583400.00	3413800.00	0.0069997	7.00E-05	7.00E-03
Kv2_pp146	Kv	2	595600.00	3413800.00	9.29E-04	7.05E-05	7.05E-03
Kv2_pp147	Kv	2	607800.00	3413800.00	3.46E-04	8.38E-05	8.38E-03
Kv2_pp148	Kv	2	620000.00	3413800.00	0.006713	2.06E-04	2.06E-02
Kv2_pp149	Kv	2	632200.00	3413800.00	0.0016449	6.62E-04	6.62E-02
Kv2_pp150	Kv	2	443100.00	3425525.00	1.79E-06	5.69E-07	5.69E-05
Kv2_pp151	Kv	2	455300.00	3425525.00	3.55E-06	5.69E-07	5.69E-05
Kv2_pp152	Kv	2	467500.00	3425525.00	6.07E-06	5.69E-07	5.69E-05
Kv2_pp153	Kv	2	479700.00	3425525.00	9.22E-06	5.80E-07	5.80E-05
Kv2_pp154	Kv	2	491900.00	3425525.00	1.68E-05	7.49E-07	7.49E-05
Kv2_pp155	Kv	2	504100.00	3425525.00	2.23E-05	1.94E-06	1.94E-04
Kv2_pp156	Kv	2	516300.00	3425525.00	7.54E-06	3.31E-06	3.31E-04
Kv2_pp157	Kv	2	528500.00	3425525.00	1.09E-04	4.80E-05	4.80E-03
Kv2_pp158	Kv	2	540700.00	3425525.00	7.15E-05	7.00E-05	7.00E-03
Kv2_pp159	Kv	2	552900.00	3425525.00	0.0672996	7.00E-05	7.00E-02
Kv2_pp160	Kv	2	565100.00	3425525.00	1.91E-04	7.00E-05	7.00E-03
Kv2_pp161	Kv	2	577300.00	3425525.00	8.59E-04	7.00E-05	7.00E-03
Kv2_pp162	Kv	2	589500.00	3425525.00	3.57E-04	7.00E-05	7.00E-03
Kv2_pp163	Kv	2	601700.00	3425525.00	4.48E-04	7.03E-05	7.03E-03
Kv2_pp164	Kv	2	613900.00	3425525.00	1.59E-04	7.39E-05	7.39E-03
Kv2_pp165	Kv	2	626100.00	3425525.00	1.17E-04	7.59E-05	7.59E-03
Kv2_pp166	Kv	2	437000.63	3437250.00	2.56E-05	7.19E-07	7.19E-05
Kv2_pp167	Kv	2	449200.00	3437250.00	1.03E-05	7.20E-07	7.20E-04
Kv2_pp168	Kv	2	461400.00	3437250.00	7.20E-05	7.20E-07	7.20E-05
Kv2_pp169	Kv	2	473600.00	3437250.00	3.51E-06	7.20E-07	7.20E-05
Kv2_pp170	Kv	2	485800.00	3437250.00	7.44E-06	7.20E-07	7.20E-05
Kv2_pp171	Kv	2	498000.00	3437250.00	9.51E-05	9.51E-08	9.51E-05
Kv2_pp172	Kv	2	510200.00	3437250.00	1.95E-04	2.17E-06	2.17E-04
Kv2_pp173	Kv	2	522400.00	3437250.00	1.80E-05	7.88E-06	7.88E-04
Kv2_pp174	Kv	2	534600.00	3437250.00	1.75E-04	7.00E-05	7.00E-03
Kv2_pp175	Kv	2	546800.00	3437250.00	0.0010945	7.00E-05	7.00E-03
Kv2_pp176	Kv	2	559000.00	3437250.00	2.69E-04	7.00E-05	7.00E-02

Table D-3. Layer 2 Vertical Hydraulic Conductivity (Kv) Pilot Points.

Pilot Point Name	Type	Model Layer	Longitude (NAD83 UTM16N)	Latitude (NAD83 UTM16N)	Calibrated Value	Minimum Bound	Maximum Bound
Kv2_pp177	Kv	2	571200.00	3437250.00	0.0049788	7.00E-05	7.00E-03
Kv2_pp178	Kv	2	583400.00	3437250.00	0.0053612	7.00E-05	7.00E-03
Kv2_pp179	Kv	2	595600.00	3437250.00	5.35E-04	7.00E-05	7.00E-03
Kv2_pp180	Kv	2	607800.00	3437250.00	0.0018949	7.13E-05	7.13E-03
Kv2_pp181	Kv	2	620000.00	3437250.00	1.83E-04	7.32E-05	7.32E-03
Kv2_pp182	Kv	2	632200.00	3437250.00	8.17E-04	7.54E-05	7.54E-03
Kv2_pp183	Kv	2	443100.00	3448975.00	1.11E-05	8.69E-07	8.69E-05
Kv2_pp184	Kv	2	455300.00	3448975.00	1.02E-05	8.71E-07	8.71E-05
Kv2_pp185	Kv	2	467500.00	3448975.00	3.53E-05	8.71E-07	8.71E-05
Kv2_pp186	Kv	2	479700.00	3448975.00	1.54E-05	8.71E-07	8.71E-05
Kv2_pp187	Kv	2	491900.00	3448975.00	8.70E-06	8.71E-07	8.71E-05
Kv2_pp188	Kv	2	504100.00	3448975.00	3.04E-06	1.04E-06	1.04E-04
Kv2_pp189	Kv	2	516300.00	3448975.00	1.38E-05	2.86E-06	2.86E-03
Kv2_pp190	Kv	2	528500.00	3448975.00	4.32E-04	5.38E-05	5.38E-03
Kv2_pp191	Kv	2	540700.00	3448975.00	2.05E-04	7.00E-05	7.00E-03
Kv2_pp192	Kv	2	552900.00	3448975.00	7.75E-05	7.00E-05	7.00E-03
Kv2_pp193	Kv	2	565100.00	3448975.00	0.0023326	7.00E-05	7.00E-03
Kv2_pp194	Kv	2	577300.00	3448975.00	0.0038263	7.00E-05	7.00E-03
Kv2_pp195	Kv	2	589500.00	3448975.00	7.47E-04	7.00E-05	7.00E-03
Kv2_pp196	Kv	2	601700.00	3448975.00	0.0219838	7.00E-05	7.00E-02
Kv2_pp197	Kv	2	613900.00	3448975.00	0.0021804	7.17E-05	7.17E-03
Kv2_pp198	Kv	2	626100.00	3448975.00	8.62E-06	7.40E-06	7.40E-03
Kv2_pp199	Kv	2	437000.63	3460700.00	2.41E-05	9.70E-07	9.70E-05
Kv2_pp200	Kv	2	449200.00	3460700.00	1.60E-05	9.71E-07	9.71E-05
Kv2_pp201	Kv	2	461400.00	3460700.00	1.25E-05	9.71E-07	9.71E-05
Kv2_pp202	Kv	2	473600.00	3460700.00	9.73E-07	9.71E-07	9.71E-05
Kv2_pp203	Kv	2	485800.00	3460700.00	1.17E-06	9.71E-07	9.71E-05
Kv2_pp204	Kv	2	498000.00	3460700.00	2.76E-05	9.71E-07	9.71E-05
Kv2_pp205	Kv	2	510200.00	3460700.00	2.77E-05	1.63E-07	1.63E-04
Kv2_pp206	Kv	2	522400.00	3460700.00	4.96E-05	8.53E-06	8.53E-04
Kv2_pp207	Kv	2	534600.00	3460700.00	4.10E-04	7.00E-05	7.00E-03
Kv2_pp208	Kv	2	546800.00	3460700.00	1.52E-04	7.00E-05	7.00E-03
Kv2_pp209	Kv	2	559000.00	3460700.00	8.87E-05	7.00E-05	7.00E-02
Kv2_pp210	Kv	2	571200.00	3460700.00	0.00148	7.00E-05	7.00E-03
Kv2_pp211	Kv	2	583400.00	3460700.00	1.48E-04	7.00E-05	7.00E-03
Kv2_pp212	Kv	2	595600.00	3460700.00	0.0065808	7.00E-05	7.00E-03
Kv2_pp213	Kv	2	607800.00	3460700.00	1.27E-04	7.04E-05	7.04E-03
Kv2_pp214	Kv	2	620000.00	3460700.00	1.69E-04	7.27E-05	7.27E-03
Kv2_pp215	Kv	2	632200.00	3460700.00	0.0032365	7.50E-05	7.50E-03

Table D-4. Layer 4 Vertical Hydraulic Conductivity (Kv) Pilot Points.

Pilot Point Name	Type	Model Layer	Longitude (NAD83 UTM16N)	Latitude (NAD83 UTM16N)	Calibrated Value	Minimum Bound	Maximum Bound
Kv4_pp001	Kv	4	437000.625	3320000.75	2.60E-08	2.00E-08	2.00E-06
Kv4_pp002	Kv	4	449200.00	3320000.75	6.54E-07	2.00E-08	2.00E-06
Kv4_pp003	Kv	4	461400.00	3320000.75	2.34E-07	2.00E-08	2.00E-06
Kv4_pp004	Kv	4	473600.00	3320000.75	4.47E-08	2.00E-08	2.00E-06
Kv4_pp005	Kv	4	485800.00	3320000.75	4.80E-08	2.00E-08	2.00E-06
Kv4_pp006	Kv	4	498000.00	3320000.75	2.00E-06	2.00E-08	2.00E-06
Kv4_pp007	Kv	4	510200.00	3320000.75	6.37E-08	2.00E-08	2.00E-06
Kv4_pp008	Kv	4	522400.00	3320000.75	2.98E-07	2.00E-08	2.00E-06
Kv4_pp009	Kv	4	534600.00	3320000.75	6.12E-08	2.00E-08	2.00E-06
Kv4_pp010	Kv	4	546800.00	3320000.75	3.23E-08	2.00E-08	2.00E-06
Kv4_pp011	Kv	4	559000.00	3320000.75	2.29E-07	2.00E-08	2.00E-06
Kv4_pp012	Kv	4	571200.00	3320000.75	1.96E-07	2.00E-08	2.00E-05
Kv4_pp013	Kv	4	583400.00	3320000.75	1.64E-07	2.00E-08	2.00E-06
Kv4_pp014	Kv	4	595600.00	3320000.75	3.44E-08	2.00E-08	2.00E-06
Kv4_pp018	Kv	4	607800.00	3320000.75	3.21E-07	2.00E-08	2.00E-06
Kv4_pp019	Kv	4	620000.00	3320000.75	3.38E-08	2.00E-08	2.00E-06
Kv4_pp020	Kv	4	632200.00	3320000.75	6.40E-08	2.00E-08	2.00E-06
Kv4_pp021	Kv	4	443100.00	3331724.75	5.24E-08	2.00E-08	2.00E-05
Kv4_pp022	Kv	4	455300.00	3331724.75	6.98E-08	2.00E-08	2.00E-06
Kv4_pp023	Kv	4	467500.00	3331724.75	4.25E-08	2.00E-08	2.00E-06
Kv4_pp024	Kv	4	479700.00	3331724.75	2.48E-07	2.00E-08	2.00E-06
Kv4_pp025	Kv	4	491900.00	3331724.75	9.07E-08	2.00E-08	2.00E-06
Kv4_pp026	Kv	4	504100.00	3331724.75	7.70E-08	2.00E-08	2.00E-06
Kv4_pp027	Kv	4	516300.00	3331724.75	1.23E-05	2.00E-08	2.00E-05
Kv4_pp028	Kv	4	528500.00	3331724.75	3.36E-08	2.00E-08	2.00E-06
Kv4_pp029	Kv	4	540700.00	3331724.75	9.93E-08	2.00E-08	2.00E-06
Kv4_pp030	Kv	4	552900.00	3331724.75	1.42E-07	2.00E-08	2.00E-06
Kv4_pp034	Kv	4	565100.00	3331724.75	1.89E-07	2.00E-08	2.00E-06
Kv4_pp035	Kv	4	577300.00	3331724.75	1.08E-06	2.00E-08	2.00E-06
Kv4_pp036	Kv	4	589500.00	3331724.75	2.08E-07	2.00E-08	2.00E-06
Kv4_pp037	Kv	4	601700.00	3331724.75	5.37E-08	2.00E-08	2.00E-06
Kv4_pp038	Kv	4	613900.00	3331724.75	4.35E-07	2.00E-08	2.00E-06
Kv4_pp039	Kv	4	626100.00	3331724.75	9.01E-08	2.00E-08	2.00E-06
Kv4_pp040	Kv	4	437000.63	3343450.00	7.17E-08	2.00E-08	2.00E-06
Kv4_pp041	Kv	4	449200.00	3343450.00	3.68E-08	2.00E-08	2.00E-06
Kv4_pp042	Kv	4	461400.00	3343450.00	1.70E-06	2.00E-08	2.00E-06
Kv4_pp043	Kv	4	473600.00	3343450.00	4.88E-08	2.00E-08	2.00E-06
Kv4_pp044	Kv	4	485800.00	3343450.00	2.04E-08	2.00E-08	2.00E-06
Kv4_pp045	Kv	4	498000.00	3343450.00	2.96E-08	2.00E-08	2.00E-06
Kv4_pp046	Kv	4	510200.00	3343450.00	5.42E-07	2.00E-08	2.00E-06
Kv4_pp051	Kv	4	522400.00	3343450.00	2.16E-07	2.00E-08	2.00E-06
Kv4_pp052	Kv	4	534600.00	3343450.00	2.27E-08	2.00E-08	2.00E-06
Kv4_pp053	Kv	4	546800.00	3343450.00	7.88E-07	2.00E-08	2.00E-06
Kv4_pp054	Kv	4	559000.00	3343450.00	4.83E-07	2.00E-08	2.00E-06

Table D-4. Layer 4 Vertical Hydraulic Conductivity (Kv) Pilot Points.

Pilot Point Name	Type	Model Layer	Longitude (NAD83 UTM16N)	Latitude (NAD83 UTM16N)	Calibrated Value	Minimum Bound	Maximum Bound
Kv4_pp055	Kv	4	571200.00	3343450.00	9.84E-08	2.00E-08	2.00E-06
Kv4_pp056	Kv	4	583400.00	3343450.00	7.44E-08	2.00E-08	2.00E-06
Kv4_pp057	Kv	4	595600.00	3343450.00	3.08E-07	2.00E-08	2.00E-06
Kv4_pp058	Kv	4	607800.00	3343450.00	2.74E-07	2.00E-08	2.00E-06
Kv4_pp059	Kv	4	620000.00	3343450.00	7.92E-07	2.00E-08	2.00E-06
Kv4_pp060	Kv	4	632200.00	3343450.00	1.87E-06	2.00E-08	2.00E-06
Kv4_pp061	Kv	4	443100.00	3355175.00	8.77E-08	2.00E-08	2.00E-06
Kv4_pp062	Kv	4	455300.00	3355175.00	2.40E-05	2.86E-07	2.86E-05
Kv4_pp067	Kv	4	467500.00	3355175.00	3.79E-07	2.00E-08	2.00E-06
Kv4_pp068	Kv	4	479700.00	3355175.00	1.36E-06	2.00E-08	2.00E-06
Kv4_pp069	Kv	4	491900.00	3355175.00	7.99E-07	2.00E-08	2.00E-06
Kv4_pp070	Kv	4	504100.00	3355175.00	2.76E-08	2.00E-08	2.00E-06
Kv4_pp071	Kv	4	516300.00	3355175.00	1.49E-07	2.00E-08	2.00E-06
Kv4_pp072	Kv	4	528500.00	3355175.00	2.90E-07	2.00E-08	2.00E-06
Kv4_pp073	Kv	4	540700.00	3355175.00	3.17E-08	2.00E-08	2.00E-06
Kv4_pp074	Kv	4	552900.00	3355175.00	2.49E-08	2.00E-08	2.00E-06
Kv4_pp075	Kv	4	565100.00	3355175.00	5.71E-05	5.71E-07	5.71E-05
Kv4_pp076	Kv	4	577300.00	3355175.00	7.00E-05	7.00E-07	7.00E-05
Kv4_pp077	Kv	4	589500.00	3355175.00	3.70E-05	2.86E-06	2.86E-04
Kv4_pp084	Kv	4	601700.00	3355175.00	3.08E-07	2.00E-08	2.00E-06
Kv4_pp085	Kv	4	613900.00	3355175.00	2.93E-07	2.00E-08	2.00E-06
Kv4_pp086	Kv	4	626100.00	3355175.00	4.35E-08	2.00E-08	2.00E-06
Kv4_pp087	Kv	4	437000.63	3366900.00	4.40E-08	2.00E-08	2.00E-06
Kv4_pp088	Kv	4	449200.00	3366900.00	5.17E-08	2.00E-08	2.00E-06
Kv4_pp089	Kv	4	461400.00	3366900.00	1.27E-07	2.00E-08	2.00E-06
Kv4_pp090	Kv	4	473600.00	3366900.00	2.30E-07	2.00E-08	2.00E-06
Kv4_pp091	Kv	4	485800.00	3366900.00	2.00E-06	2.00E-08	2.00E-06
Kv4_pp100	Kv	4	498000.00	3366900.00	5.49E-08	2.00E-08	2.00E-06
Kv4_pp101	Kv	4	510200.00	3366900.00	1.18E-07	2.00E-08	2.00E-06
Kv4_pp102	Kv	4	522400.00	3366900.00	4.34E-07	2.00E-08	2.00E-06
Kv4_pp103	Kv	4	534600.00	3366900.00	1.49E-07	2.00E-08	2.00E-06
Kv4_pp104	Kv	4	546800.00	3366900.00	4.22E-08	2.00E-08	2.00E-06
Kv4_pp105	Kv	4	559000.00	3366900.00	1.41E-07	2.00E-08	2.00E-06
Kv4_pp106	Kv	4	571200.00	3366900.00	3.08E-07	2.00E-08	2.00E-06
Kv4_pp107	Kv	4	583400.00	3366900.00	1.84E-06	2.00E-08	2.00E-06
Kv4_pp117	Kv	4	595600.00	3366900.00	9.97E-06	2.00E-08	2.00E-05
Kv4_pp118	Kv	4	607800.00	3366900.00	3.43E-08	2.00E-08	2.00E-06
Kv4_pp119	Kv	4	620000.00	3366900.00	9.22E-07	2.00E-08	2.00E-06
Kv4_pp120	Kv	4	632200.00	3366900.00	3.48E-07	2.00E-08	2.00E-06
Kv4_pp121	Kv	4	443100.00	3378625.25	2.55E-07	2.00E-08	2.00E-06
Kv4_pp122	Kv	4	455300.00	3378625.25	1.17E-07	2.00E-08	2.00E-06
Kv4_pp123	Kv	4	467500.00	3378625.25	1.81E-06	2.00E-08	2.00E-06
Kv4_pp124	Kv	4	479700.00	3378625.25	2.45E-04	2.86E-05	2.86E-03
Kv4_pp133	Kv	4	491900.00	3378625.25	3.94E-08	1.23E-08	1.23E-05

Table D-4. Layer 4 Vertical Hydraulic Conductivity (Kv) Pilot Points.

Pilot Point Name	Type	Model Layer	Longitude (NAD83 UTM16N)	Latitude (NAD83 UTM16N)	Calibrated Value	Minimum Bound	Maximum Bound
Kv4_pp134	Kv	4	504100.00	3378625.25	1.00E-05	1.34E-07	1.34E-05
Kv4_pp135	Kv	4	516300.00	3378625.25	7.85E-06	1.51E-07	1.51E-05
Kv4_pp136	Kv	4	528500.00	3378625.25	1.66E-06	1.66E-07	1.66E-05
Kv4_pp137	Kv	4	540700.00	3378625.25	1.75E-06	1.80E-07	1.80E-05
Kv4_pp138	Kv	4	552900.00	3378625.25	1.81E-05	1.97E-08	1.97E-05
Kv4_pp139	Kv	4	565100.00	3378625.25	1.06E-05	1.23E-07	1.23E-05
Kv4_pp140	Kv	4	577300.00	3378625.25	1.93E-07	3.71E-08	3.71E-06
Kv4_pp150	Kv	4	589500.00	3378625.25	1.34E-05	5.74E-07	5.74E-05
Kv4_pp151	Kv	4	601700.00	3378625.25	2.65E-05	4.91E-07	4.91E-05
Kv4_pp152	Kv	4	613900.00	3378625.25	5.05E-07	4.09E-07	4.09E-05
Kv4_pp153	Kv	4	626100.00	3378625.25	1.81E-04	3.29E-07	3.29E-04
Kv4_pp154	Kv	4	437000.63	3390350.00	8.91E-07	2.91E-07	2.91E-05
Kv4_pp155	Kv	4	449200.00	3390350.00	3.73E-07	2.69E-07	2.69E-05
Kv4_pp156	Kv	4	461400.00	3390350.00	2.06E-06	2.43E-07	2.43E-05
Kv4_pp157	Kv	4	473600.00	3390350.00	1.38E-02	2.86E-04	2.86E-02
Kv4_pp166	Kv	4	485800.00	3390350.00	8.36E-06	7.00E-07	7.00E-05
Kv4_pp167	Kv	4	498000.00	3390350.00	1.10E-06	7.00E-07	7.00E-05
Kv4_pp168	Kv	4	510200.00	3390350.00	4.72E-05	7.00E-07	7.00E-05
Kv4_pp169	Kv	4	522400.00	3390350.00	7.87E-07	7.00E-07	7.00E-05
Kv4_pp170	Kv	4	534600.00	3390350.00	2.19E-06	7.00E-08	7.00E-05
Kv4_pp171	Kv	4	546800.00	3390350.00	1.74E-06	7.00E-07	7.00E-05
Kv4_pp172	Kv	4	559000.00	3390350.00	4.93E-05	7.00E-07	7.00E-05
Kv4_pp173	Kv	4	571200.00	3390350.00	3.00E-06	2.86E-07	2.86E-05
Kv4_pp183	Kv	4	583400.00	3390350.00	1.50E-05	7.00E-07	7.00E-05
Kv4_pp184	Kv	4	595600.00	3390350.00	3.66E-05	7.00E-07	7.00E-05
Kv4_pp185	Kv	4	607800.00	3390350.00	3.95E-06	7.00E-07	7.00E-05
Kv4_pp186	Kv	4	620000.00	3390350.00	1.38E-05	7.00E-07	7.00E-05
Kv4_pp187	Kv	4	632200.00	3390350.00	7.00E-05	7.00E-07	7.00E-05
Kv4_pp188	Kv	4	443100.00	3402075.00	7.15E-08	7.00E-08	7.00E-05
Kv4_pp189	Kv	4	455300.00	3402075.00	7.31E-06	7.00E-07	7.00E-05
Kv4_pp199	Kv	4	467500.00	3402075.00	5.72E-05	7.00E-07	7.00E-05
Kv4_pp200	Kv	4	479700.00	3402075.00	7.92E-07	7.00E-07	7.00E-05
Kv4_pp201	Kv	4	491900.00	3402075.00	9.41E-06	7.00E-07	7.00E-05
Kv4_pp202	Kv	4	504100.00	3402075.00	1.49E-06	7.00E-07	7.00E-05
Kv4_pp203	Kv	4	516300.00	3402075.00	2.26E-05	7.00E-08	7.00E-05
Kv4_pp204	Kv	4	528500.00	3402075.00	1.27E-06	7.00E-07	7.00E-05
Kv4_pp205	Kv	4	540700.00	3402075.00	1.75E-06	7.00E-07	7.00E-05
Kv4_pp015	Kv	4	552900.00	3402075.00	5.65E-01	na	na
Kv4_pp016	Kv	4	565100.00	3402075.00	4.32E-02	na	na
Kv4_pp017	Kv	4	577300.00	3402075.00	8.14E-01	na	na
Kv4_pp031	Kv	4	589500.00	3402075.00	1.49E-02	na	na
Kv4_pp032	Kv	4	601700.00	3402075.00	1.41E-02	na	na
Kv4_pp033	Kv	4	613900.00	3402075.00	1.83E-02	na	na
Kv4_pp047	Kv	4	626100.00	3402075.00	1.60E-02	na	na

Table D-4. Layer 4 Vertical Hydraulic Conductivity (Kv) Pilot Points.

Pilot Point Name	Type	Model Layer	Longitude (NAD83 UTM16N)	Latitude (NAD83 UTM16N)	Calibrated Value	Minimum Bound	Maximum Bound
Kv4_pp048	Kv	4	437000.63	3413800.00	2.62E-01	na	na
Kv4_pp049	Kv	4	449200.00	3413800.00	2.08E-02	na	na
Kv4_pp050	Kv	4	461400.00	3413800.00	3.46E-02	na	na
Kv4_pp063	Kv	4	473600.00	3413800.00	5.36E-02	na	na
Kv4_pp064	Kv	4	485800.00	3413800.00	2.57E-02	na	na
Kv4_pp065	Kv	4	498000.00	3413800.00	1.68E+00	na	na
Kv4_pp066	Kv	4	510200.00	3413800.00	7.37E-02	na	na
Kv4_pp078	Kv	4	522400.00	3413800.00	5.14E+00	na	na
Kv4_pp079	Kv	4	534600.00	3413800.00	4.16E+00	na	na
Kv4_pp080	Kv	4	546800.00	3413800.00	6.06E-01	na	na
Kv4_pp081	Kv	4	559000.00	3413800.00	1.06E+01	na	na
Kv4_pp082	Kv	4	571200.00	3413800.00	1.38E+01	na	na
Kv4_pp083	Kv	4	583400.00	3413800.00	3.14E+01	na	na
Kv4_pp092	Kv	4	595600.00	3413800.00	9.20E-02	na	na
Kv4_pp093	Kv	4	607800.00	3413800.00	4.51E-02	na	na
Kv4_pp094	Kv	4	620000.00	3413800.00	5.76E-02	na	na
Kv4_pp095	Kv	4	632200.00	3413800.00	5.18E-02	na	na
Kv4_pp096	Kv	4	443100.00	3425525.00	1.24E-01	na	na
Kv4_pp097	Kv	4	455300.00	3425525.00	1.09E+00	na	na
Kv4_pp098	Kv	4	467500.00	3425525.00	1.79E+02	na	na
Kv4_pp099	Kv	4	479700.00	3425525.00	1.38E+00	na	na
Kv4_pp108	Kv	4	491900.00	3425525.00	3.59E-01	na	na
Kv4_pp109	Kv	4	504100.00	3425525.00	3.31E-01	na	na
Kv4_pp110	Kv	4	516300.00	3425525.00	6.85E-02	na	na
Kv4_pp111	Kv	4	528500.00	3425525.00	6.69E-02	na	na
Kv4_pp112	Kv	4	540700.00	3425525.00	6.40E-02	na	na
Kv4_pp113	Kv	4	552900.00	3425525.00	7.81E-01	na	na
Kv4_pp114	Kv	4	565100.00	3425525.00	1.85E+00	na	na
Kv4_pp115	Kv	4	577300.00	3425525.00	5.63E+00	na	na
Kv4_pp116	Kv	4	589500.00	3425525.00	3.15E+01	na	na
Kv4_pp125	Kv	4	601700.00	3425525.00	1.16E+01	na	na
Kv4_pp126	Kv	4	613900.00	3425525.00	9.77E-01	na	na
Kv4_pp127	Kv	4	626100.00	3425525.00	7.53E-02	na	na
Kv4_pp128	Kv	4	437000.63	3437250.00	1.67E-01	na	na
Kv4_pp129	Kv	4	449200.00	3437250.00	3.31E+00	na	na
Kv4_pp130	Kv	4	461400.00	3437250.00	4.47E+02	na	na
Kv4_pp131	Kv	4	473600.00	3437250.00	1.71E+00	na	na
Kv4_pp132	Kv	4	485800.00	3437250.00	7.10E+00	na	na
Kv4_pp141	Kv	4	498000.00	3437250.00	9.72E-02	na	na
Kv4_pp142	Kv	4	510200.00	3437250.00	1.71E+00	na	na
Kv4_pp143	Kv	4	522400.00	3437250.00	7.13E+00	na	na
Kv4_pp144	Kv	4	534600.00	3437250.00	1.51E+00	na	na
Kv4_pp145	Kv	4	546800.00	3437250.00	1.06E+00	na	na
Kv4_pp146	Kv	4	559000.00	3437250.00	2.64E-01	na	na

Table D-4. Layer 4 Vertical Hydraulic Conductivity (Kv) Pilot Points.

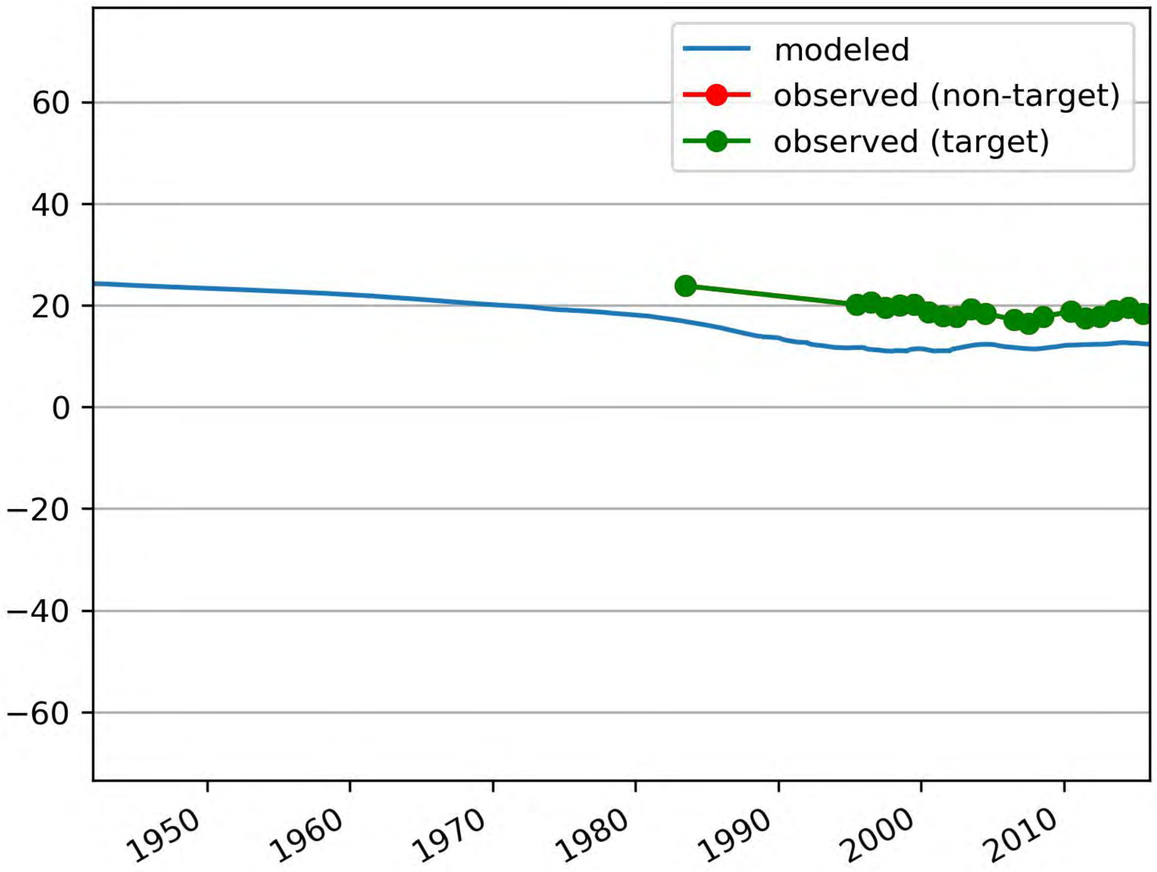
Pilot Point Name	Type	Model Layer	Longitude (NAD83 UTM16N)	Latitude (NAD83 UTM16N)	Calibrated Value	Minimum Bound	Maximum Bound
Kv4_pp147	Kv	4	571200.00	3437250.00	3.78E+00	na	na
Kv4_pp148	Kv	4	583400.00	3437250.00	1.12E+00	na	na
Kv4_pp149	Kv	4	595600.00	3437250.00	3.85E+01	na	na
Kv4_pp158	Kv	4	607800.00	3437250.00	4.37E-01	na	na
Kv4_pp159	Kv	4	620000.00	3437250.00	9.91E+00	na	na
Kv4_pp160	Kv	4	632200.00	3437250.00	8.22E+00	na	na
Kv4_pp161	Kv	4	443100.00	3448975.00	2.08E-01	na	na
Kv4_pp162	Kv	4	455300.00	3448975.00	3.89E+00	na	na
Kv4_pp163	Kv	4	467500.00	3448975.00	5.09E-01	na	na
Kv4_pp164	Kv	4	479700.00	3448975.00	1.49E+00	na	na
Kv4_pp165	Kv	4	491900.00	3448975.00	3.13E+01	na	na
Kv4_pp174	Kv	4	504100.00	3448975.00	9.40E-01	na	na
Kv4_pp175	Kv	4	516300.00	3448975.00	7.61E+00	na	na
Kv4_pp176	Kv	4	528500.00	3448975.00	3.30E+00	na	na
Kv4_pp177	Kv	4	540700.00	3448975.00	3.53E-01	na	na
Kv4_pp178	Kv	4	552900.00	3448975.00	1.51E+00	na	na
Kv4_pp179	Kv	4	565100.00	3448975.00	3.14E-01	na	na
Kv4_pp180	Kv	4	577300.00	3448975.00	8.97E+00	na	na
Kv4_pp181	Kv	4	589500.00	3448975.00	3.80E+00	na	na
Kv4_pp182	Kv	4	601700.00	3448975.00	1.36E+01	na	na
Kv4_pp190	Kv	4	613900.00	3448975.00	9.82E-01	na	na
Kv4_pp191	Kv	4	626100.00	3448975.00	1.08E+00	na	na
Kv4_pp192	Kv	4	437000.63	3460700.00	5.16E+00	na	na
Kv4_pp193	Kv	4	449200.00	3460700.00	3.93E-01	na	na
Kv4_pp194	Kv	4	461400.00	3460700.00	3.12E-01	na	na
Kv4_pp195	Kv	4	473600.00	3460700.00	5.28E+00	na	na
Kv4_pp196	Kv	4	485800.00	3460700.00	9.32E+00	na	na
Kv4_pp197	Kv	4	498000.00	3460700.00	1.48E+01	na	na
Kv4_pp198	Kv	4	510200.00	3460700.00	7.83E+00	na	na
Kv4_pp206	Kv	4	522400.00	3460700.00	2.07E-01	na	na
Kv4_pp207	Kv	4	534600.00	3460700.00	1.34E+00	na	na
Kv4_pp208	Kv	4	546800.00	3460700.00	9.69E-02	na	na
Kv4_pp209	Kv	4	559000.00	3460700.00	5.22E+00	na	na
Kv4_pp210	Kv	4	571200.00	3460700.00	1.40E-01	na	na
Kv4_pp211	Kv	4	583400.00	3460700.00	2.86E+00	na	na
Kv4_pp212	Kv	4	595600.00	3460700.00	1.18E+00	na	na
Kv4_pp213	Kv	4	607800.00	3460700.00	1.91E-01	na	na
Kv4_pp214	Kv	4	620000.00	3460700.00	2.90E+00	na	na
Kv4_pp215	Kv	4	632200.00	3460700.00	1.44E+01	na	na
kv4_ppS01	Kv	4	528500.00	3370808.50	7.00E-05	2.00E-08	7.00E-05
kv4_ppS02	Kv	4	534600.00	3374716.75	3.04E-05	2.00E-08	1.00E+01
kv4_ppS03	Kv	4	540700.00	3370808.50	1.03E-02	1.00E-02	1.00E+01
kv4_ppS04	Kv	4	546800.00	3374716.75	5.64E-05	2.00E-08	7.00E-05
kv4_ppS05	Kv	4	552900.00	3370808.50	2.81E-06	2.00E-08	1.00E+01

Table D-4. Layer 4 Vertical Hydraulic Conductivity (Kv) Pilot Points.

Pilot Point Name	Type	Model Layer	Longitude (NAD83 UTM16N)	Latitude (NAD83 UTM16N)	Calibrated Value	Minimum Bound	Maximum Bound
kv4_ppS06	Kv	4	522400.00	3382533.50	3.72E-05	2.00E-08	1.00E+01
kv4_ppS07	Kv	4	528500.00	3386441.75	1.82E-02	2.00E-08	1.00E+01
kv4_ppS08	Kv	4	534600.00	3382533.50	1.23E-03	2.00E-08	1.00E+01
kv4_ppS09	Kv	4	565100.00	3370808.50	1.94E-02	1.00E-02	1.00E+01
kv4_ppS10	Kv	4	540700.00	3362991.75	2.13E-06	2.00E-08	7.00E-05
kv4_ppS11	Kv	4	552900.00	3362991.75	3.57E-05	2.00E-08	1.00E+01
kv4_ppS12	Kv	4	565100.00	3362991.75	1.06E-05	2.00E-08	1.00E+01
kv4_ppS13	Kv	4	577300.00	3362991.75	2.07E+00	1.00E-02	1.00E+01

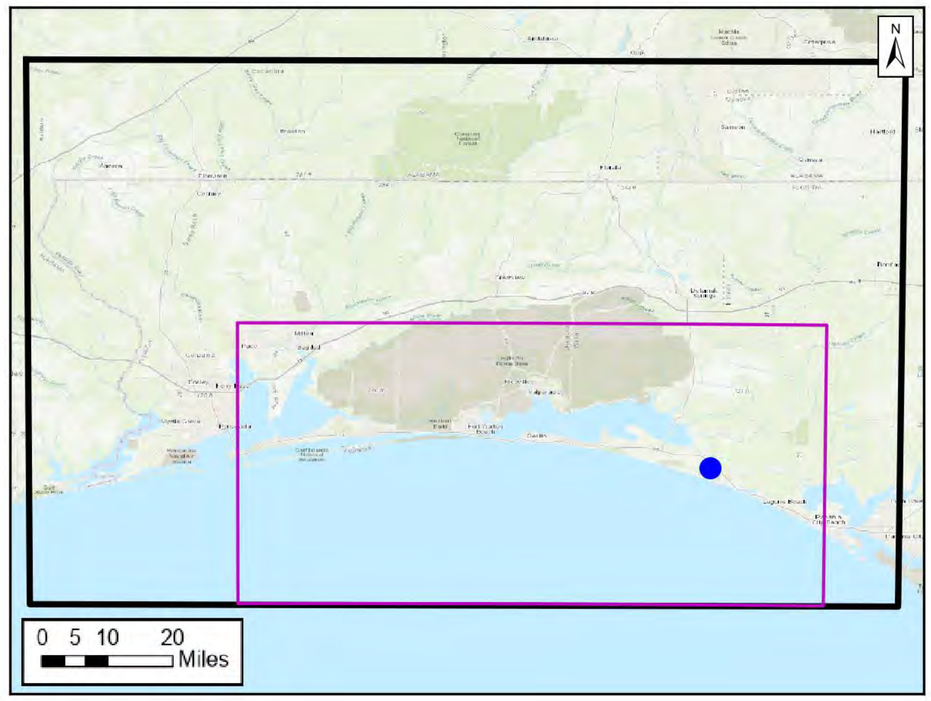
APPENDIX E – WELL HYDROGRAPHS

Water Level Elevation (ft msl, NAVD88)



Number of measurements = 20
Mean residual (ft) = 6.9
Abs Mean residual (ft) = 6.9

Location

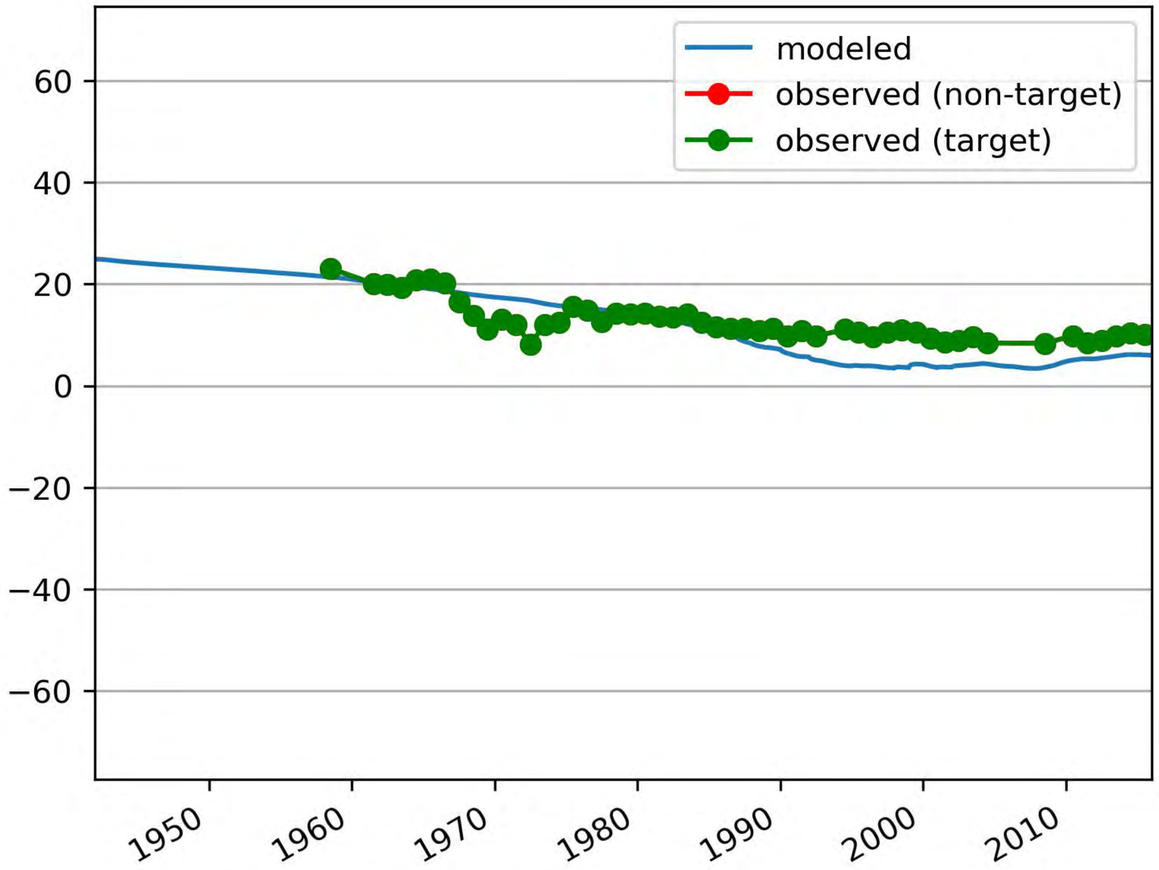


Model layer = 3

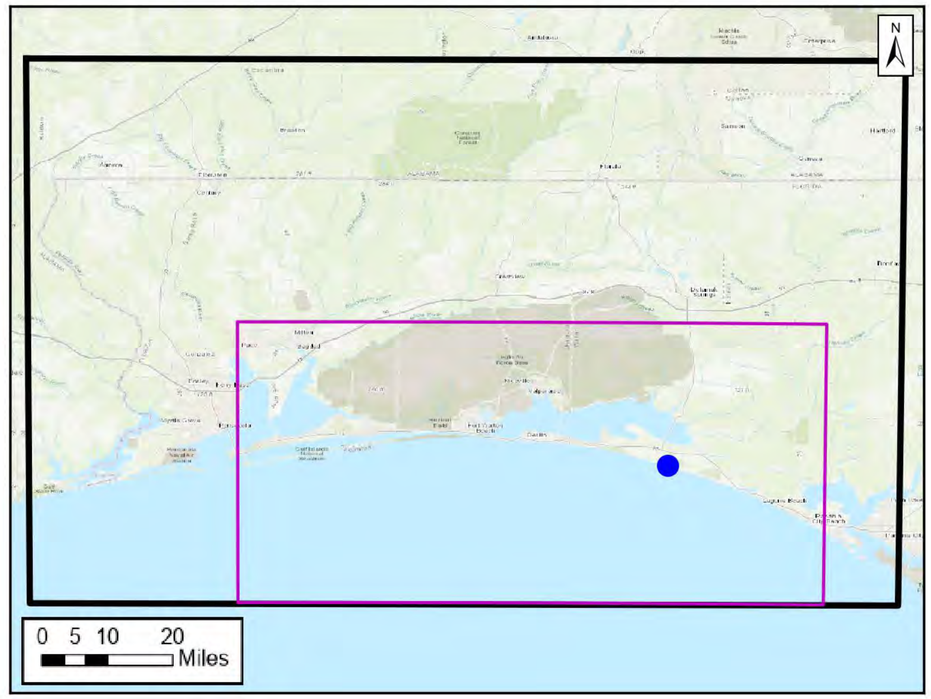
Hydrograph and location for well nwf_1062

TETRA TECH

Water Level Elevation (ft msl, NAVD88)



Location



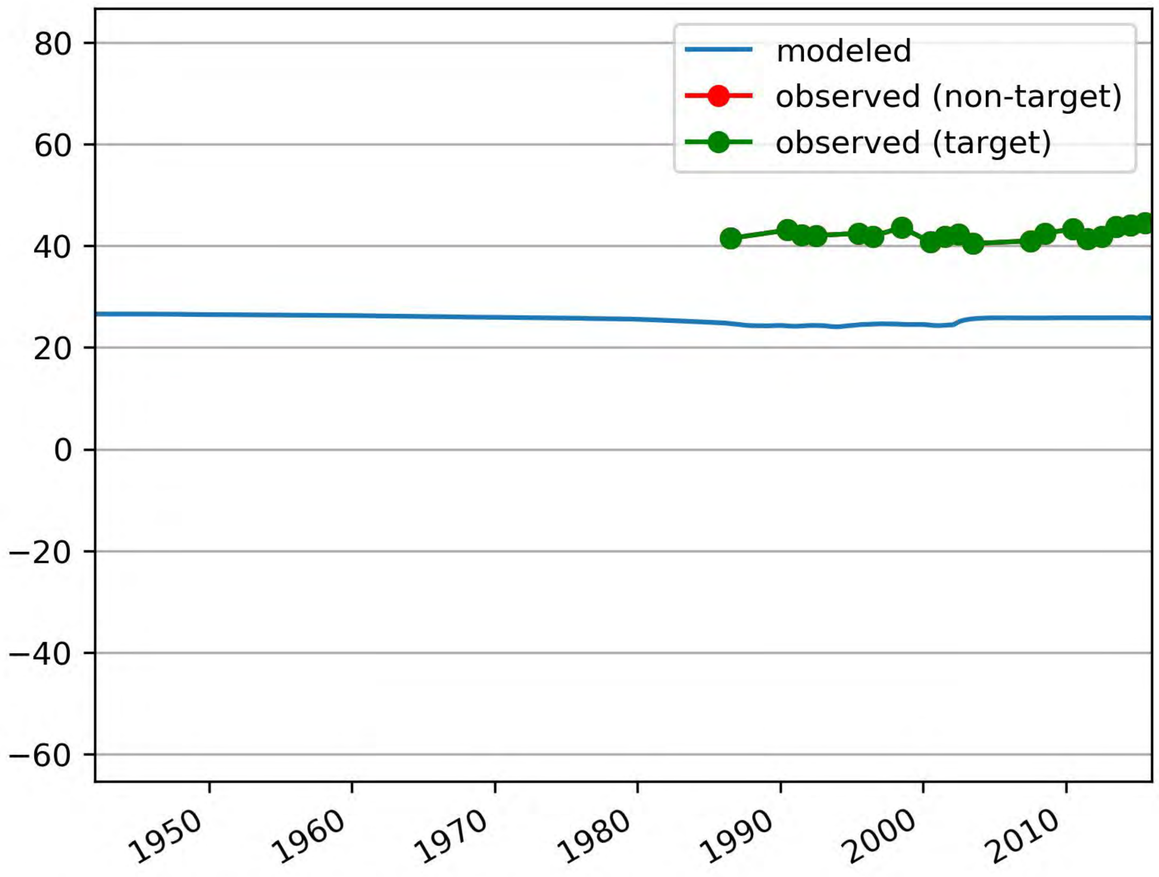
Number of measurements = 51
Mean residual (ft) = 1.71
Abs Mean residual (ft) = 3.36

Model layer = 3

Hydrograph and location for well nwf_1074

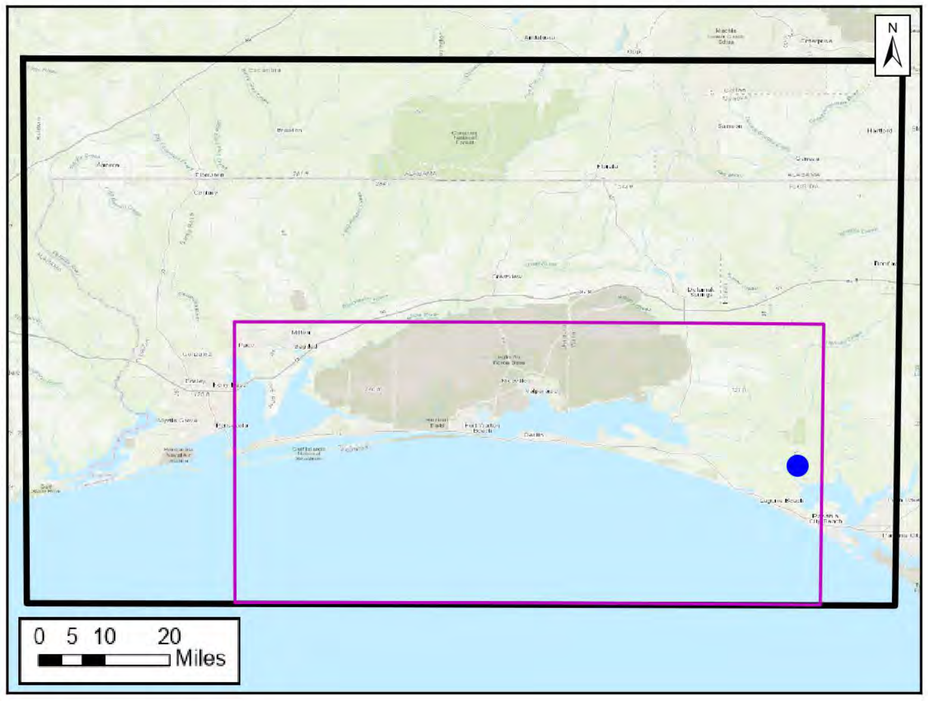
TETRA TECH

Water Level Elevation (ft msl, NAVD88)



Number of measurements = 19
Mean residual (ft) = 17.21
Abs Mean residual (ft) = 17.21

Location

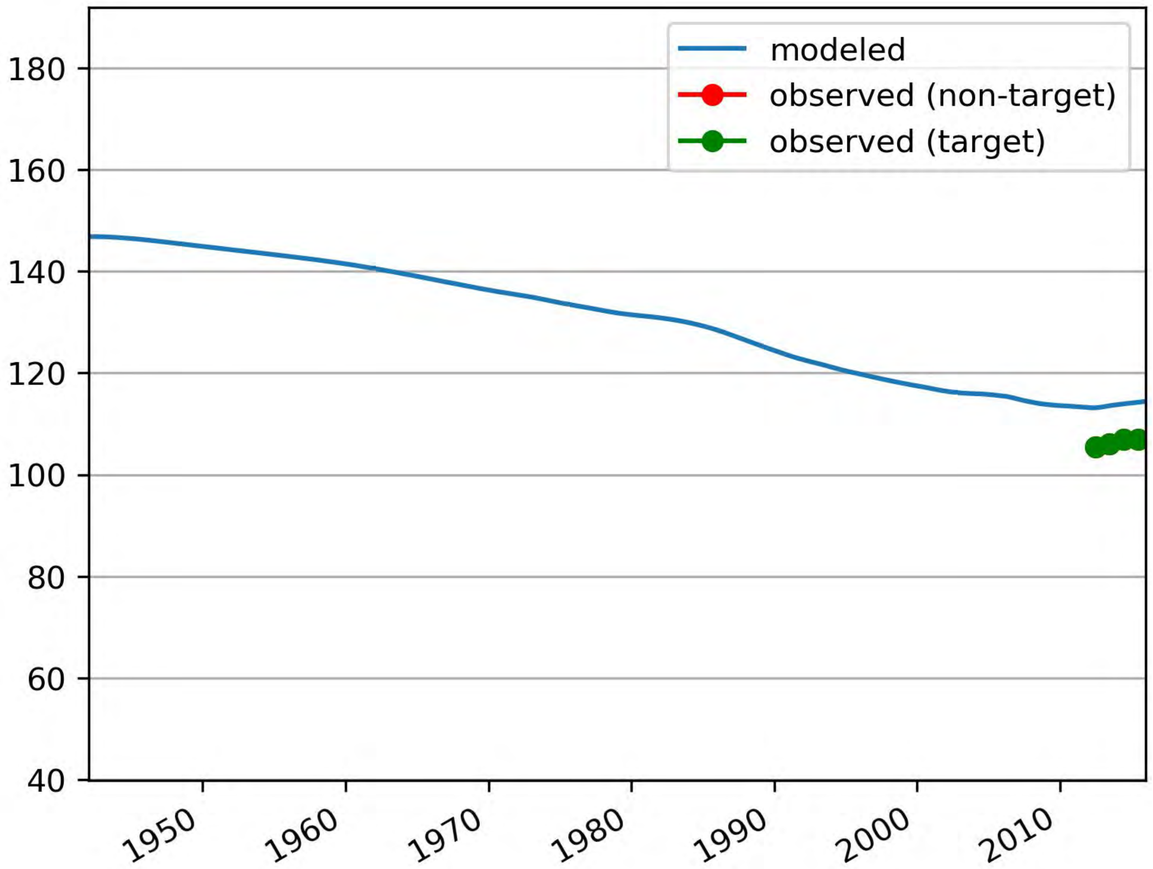


Model layer = 3

Hydrograph and location for well nwf_1093

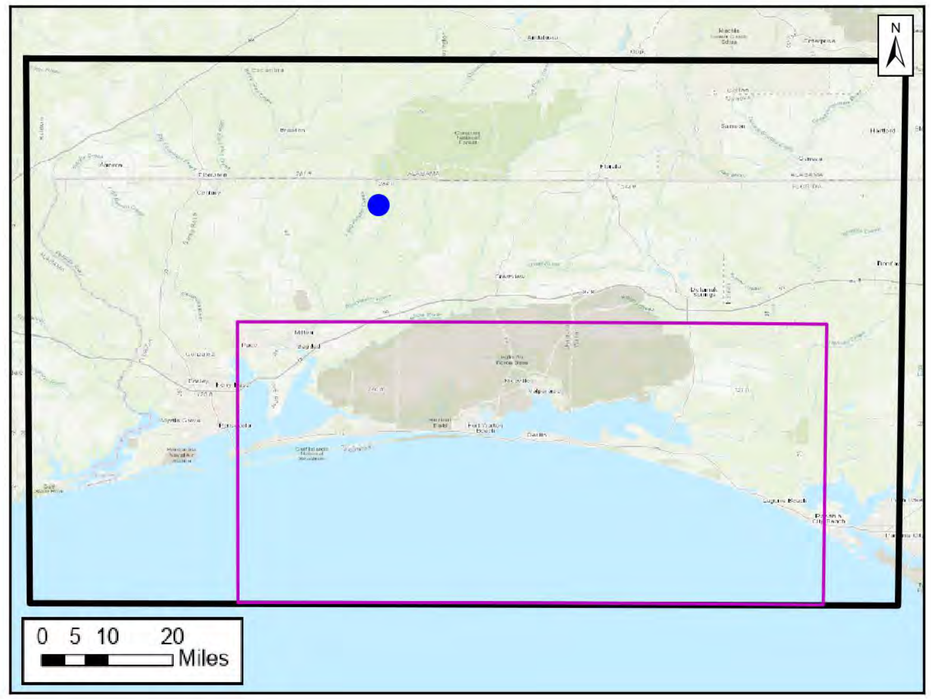
TETRA TECH

Water Level Elevation (ft msl, NAVD88)



Number of measurements = 4
Mean residual (ft) = -7.34
Abs Mean residual (ft) = 7.34

Location

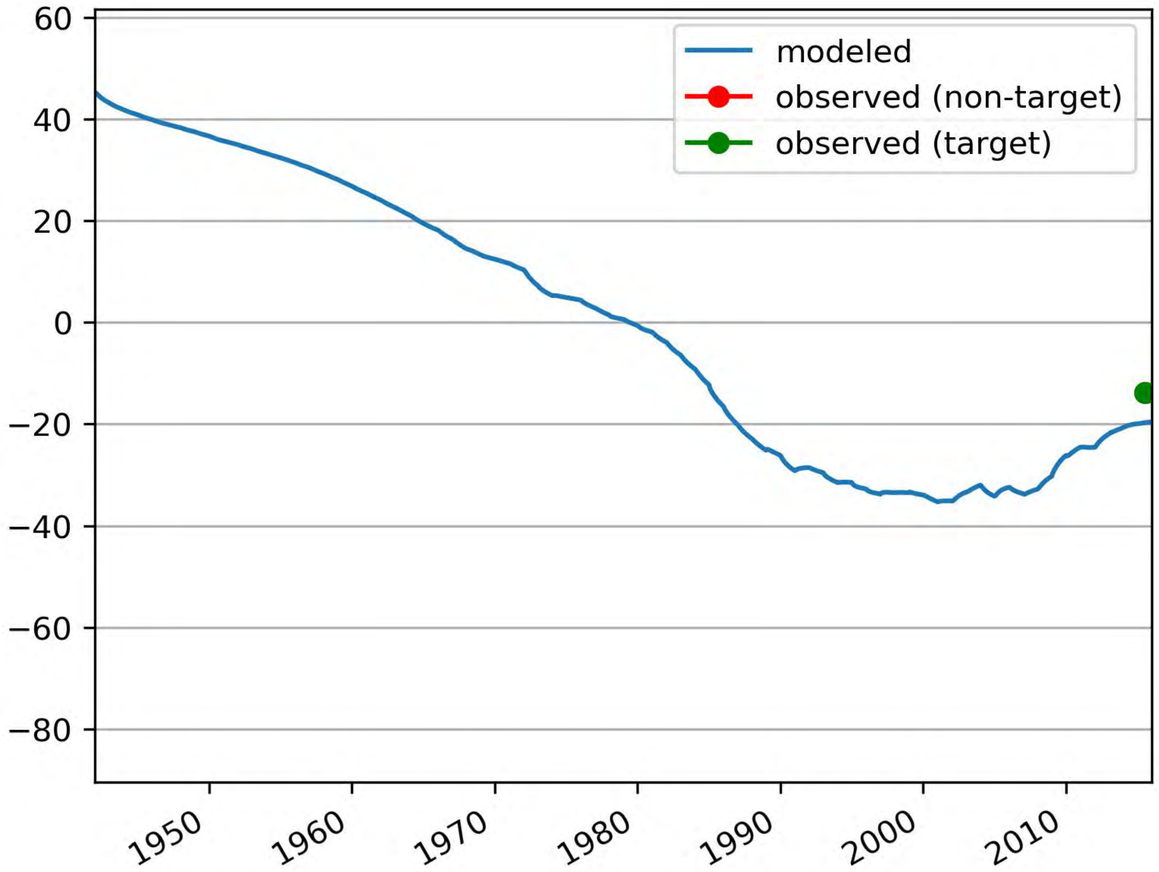


Model layer = 3

Hydrograph and location for well nwf_12335

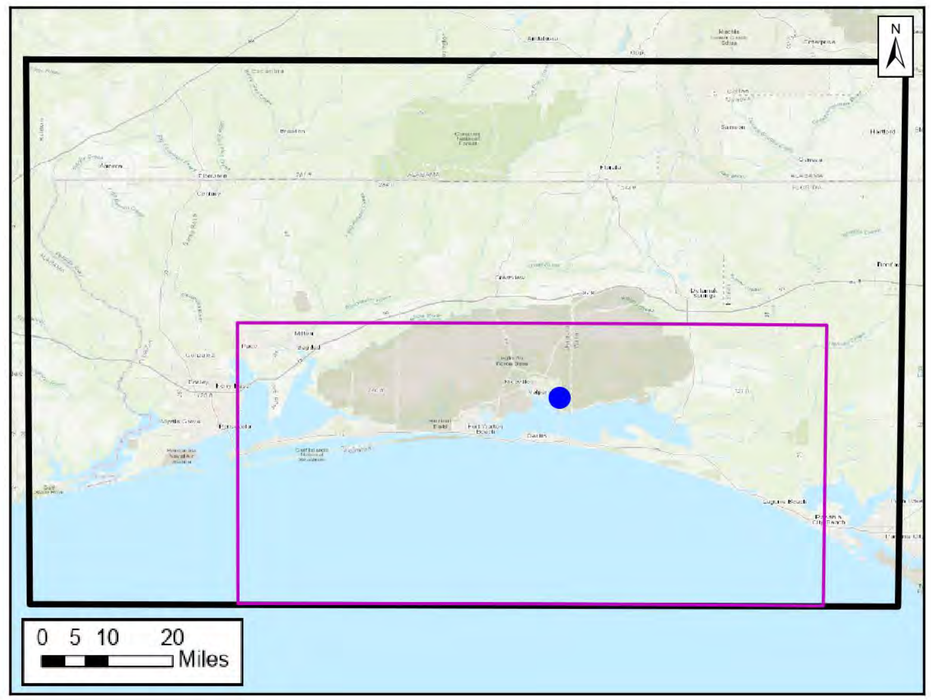
TETRA TECH

Water Level Elevation (ft msl, NAVD88)



Number of measurements = 1
Mean residual (ft) = 5.97
Abs Mean residual (ft) = 5.97

Location

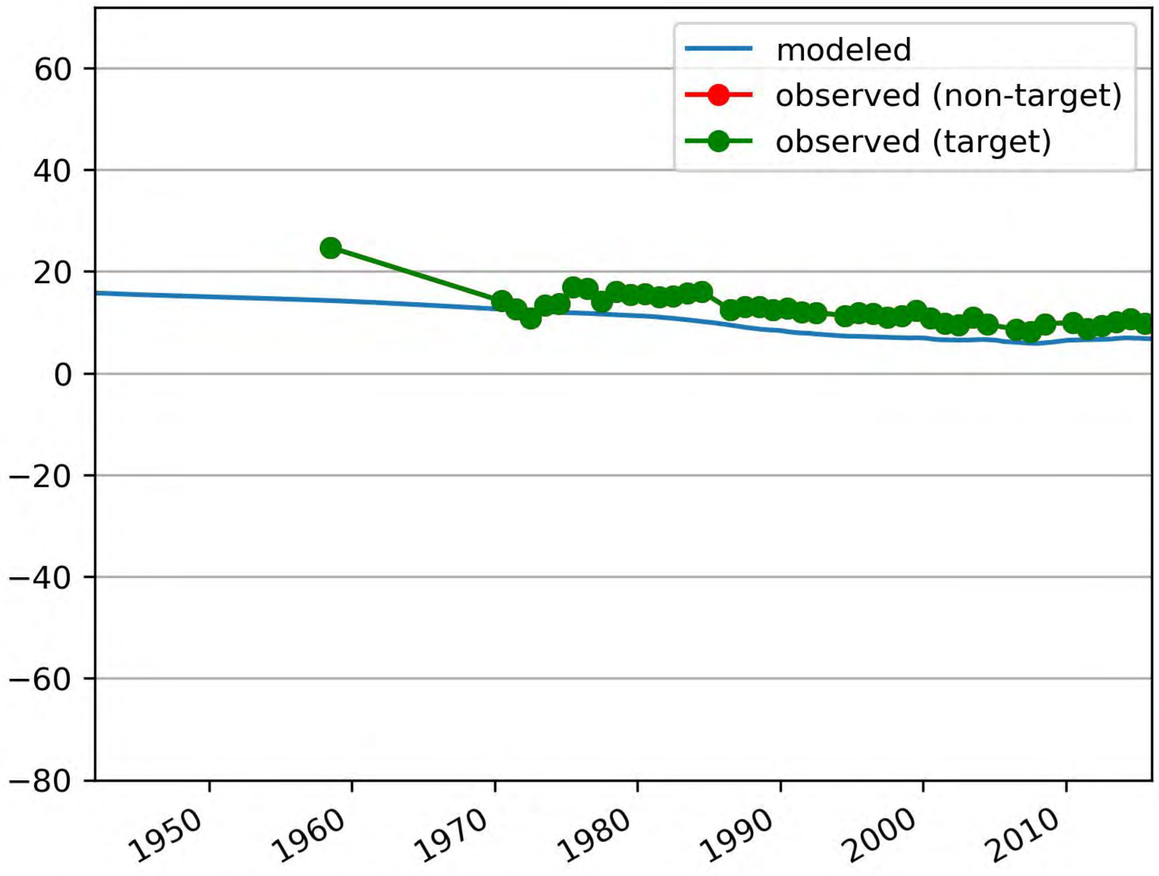


Model layer = 5

Hydrograph and location for well nwf_12840

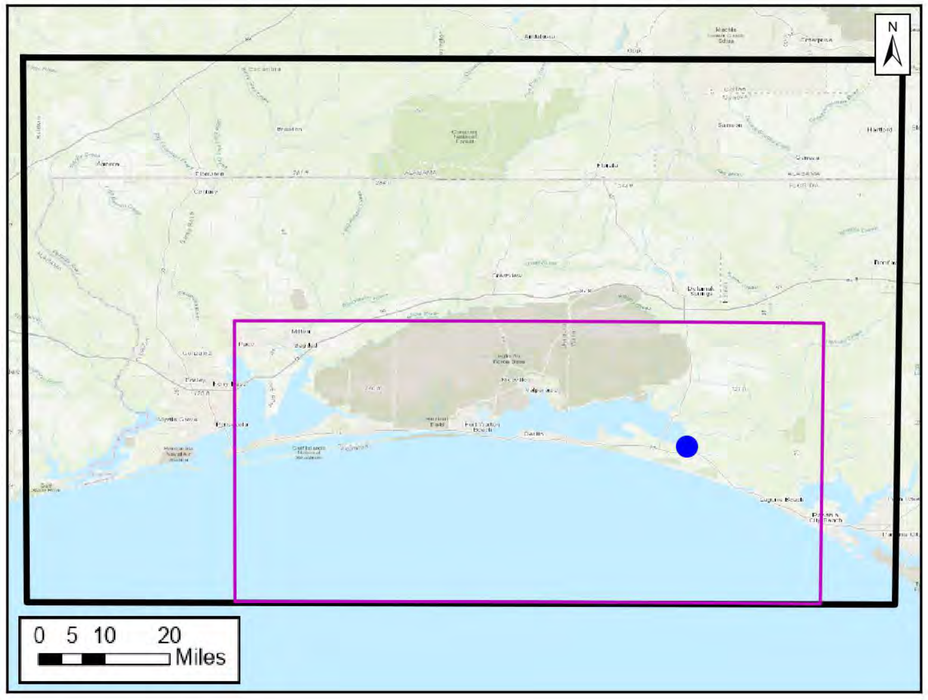
TETRA TECH

Water Level Elevation (ft msl, NAVD88)



Number of measurements = 43
Mean residual (ft) = 3.68
Abs Mean residual (ft) = 3.75

Location

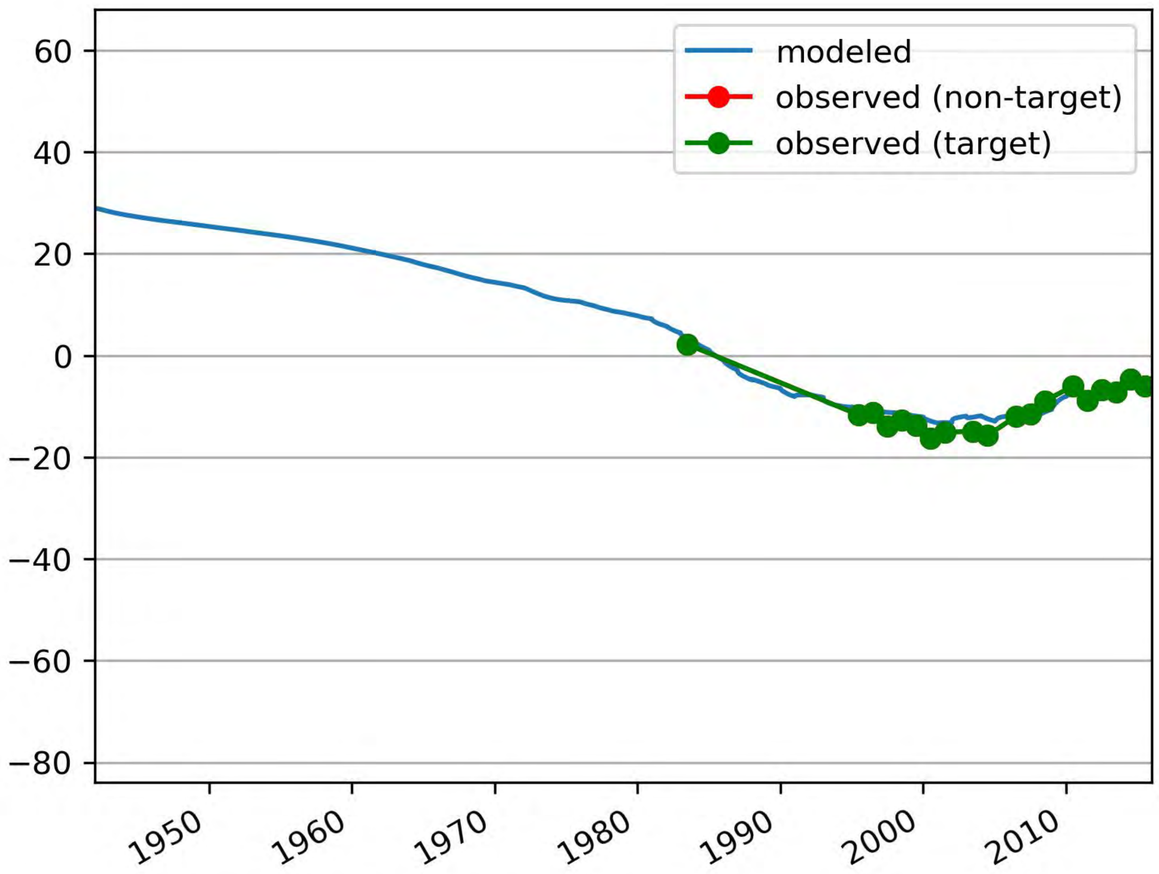


Model layer = 2

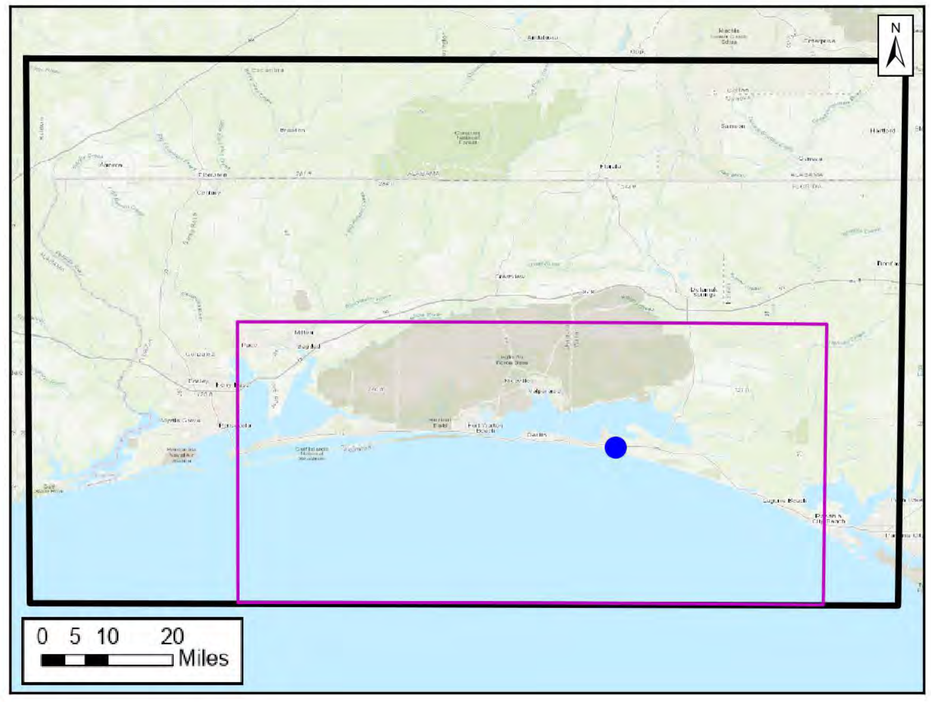
Hydrograph and location for well nwf_1371

TETRA TECH

Water Level Elevation (ft msl, NAVD88)



Location



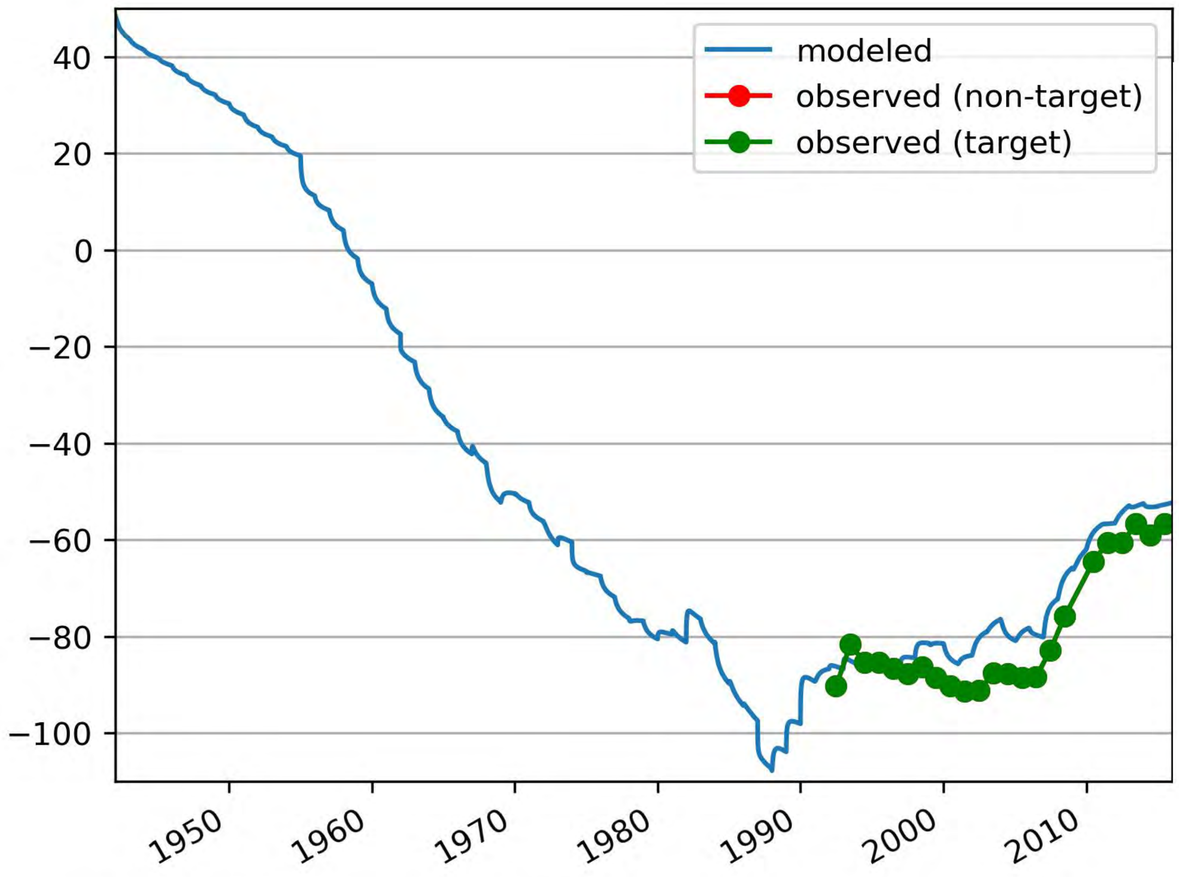
Number of measurements = 19
Mean residual (ft) = -1.04
Abs Mean residual (ft) = 1.5

Model layer = 3

Hydrograph and location for well nwf_1376

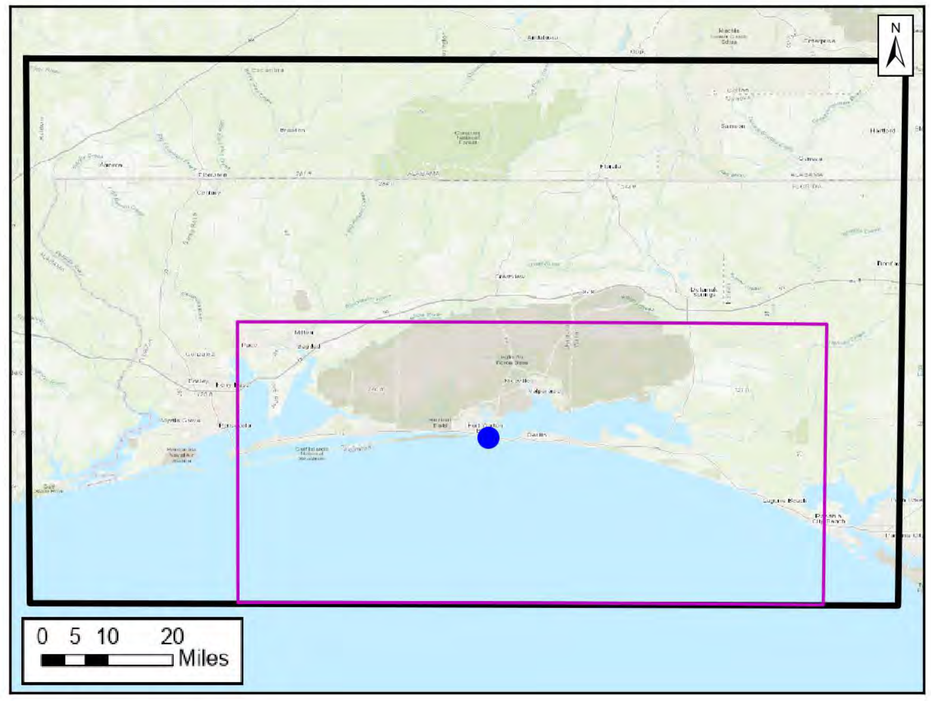
TETRA TECH

Water Level Elevation (ft msl, NAVD88)



Number of measurements = 23
Mean residual (ft) = -5.36
Abs Mean residual (ft) = 5.74

Location

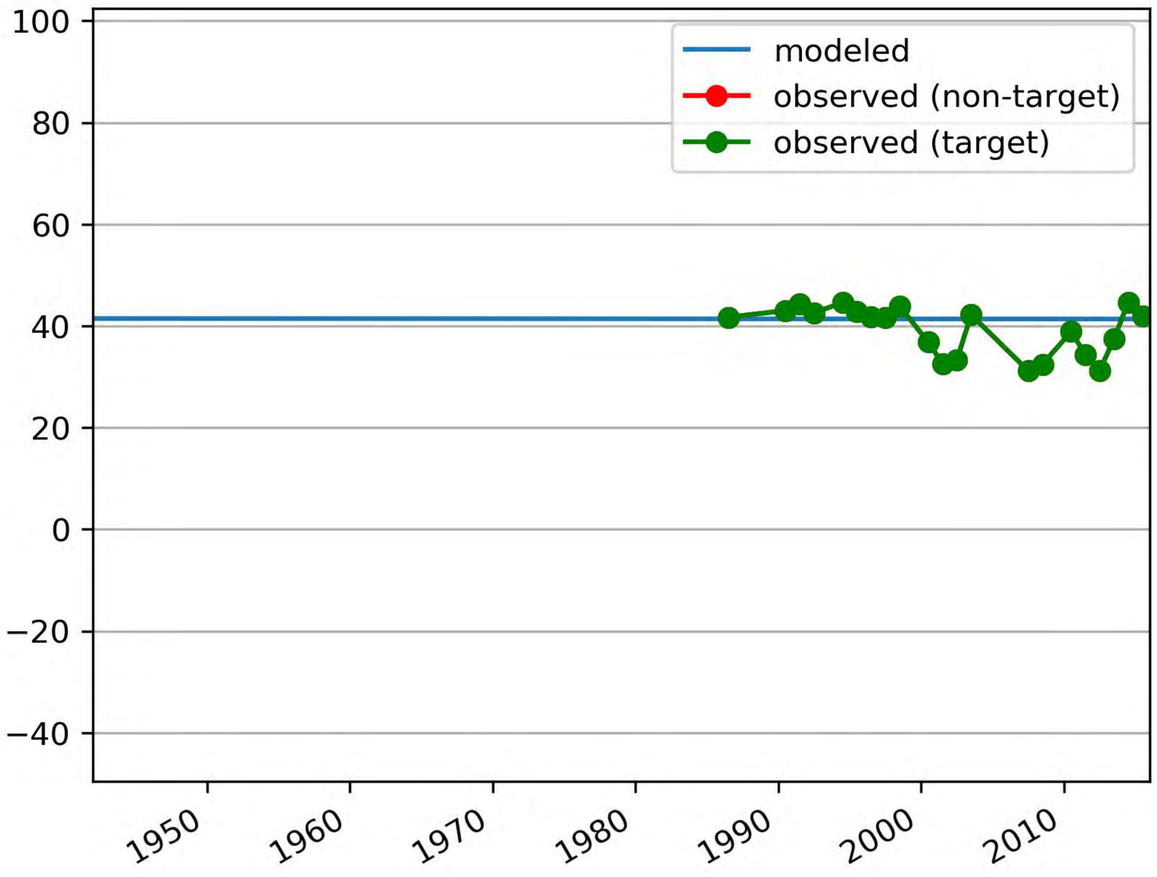


Model layer = 3

Hydrograph and location for well nwf_1696

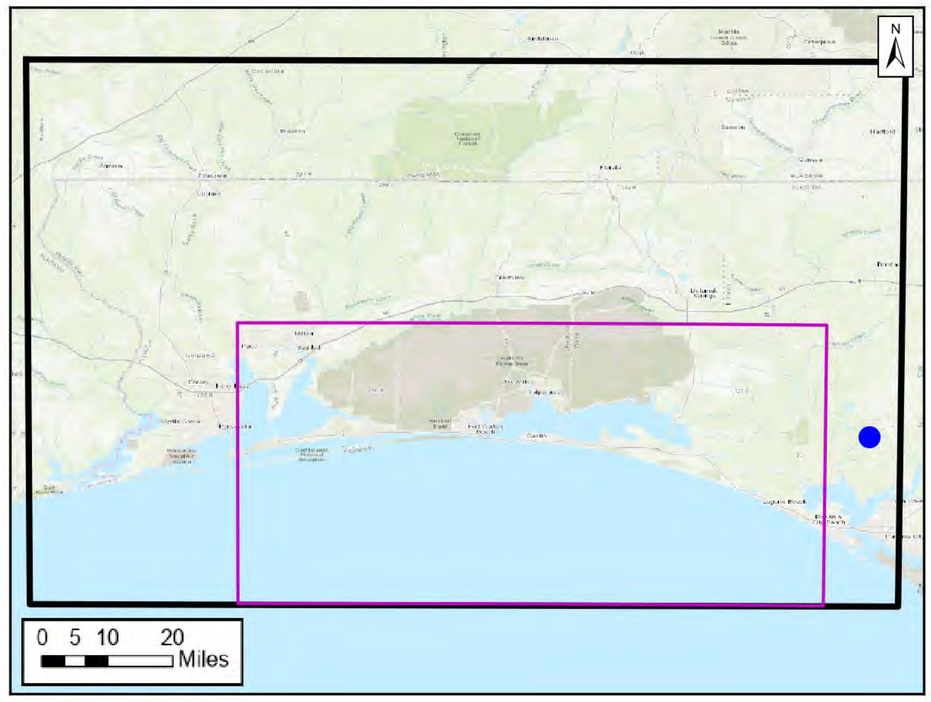
TETRA TECH

Water Level Elevation (ft msl, NAVD88)



Number of measurements = 21
Mean residual (ft) = -2.16
Abs Mean residual (ft) = 3.94

Location

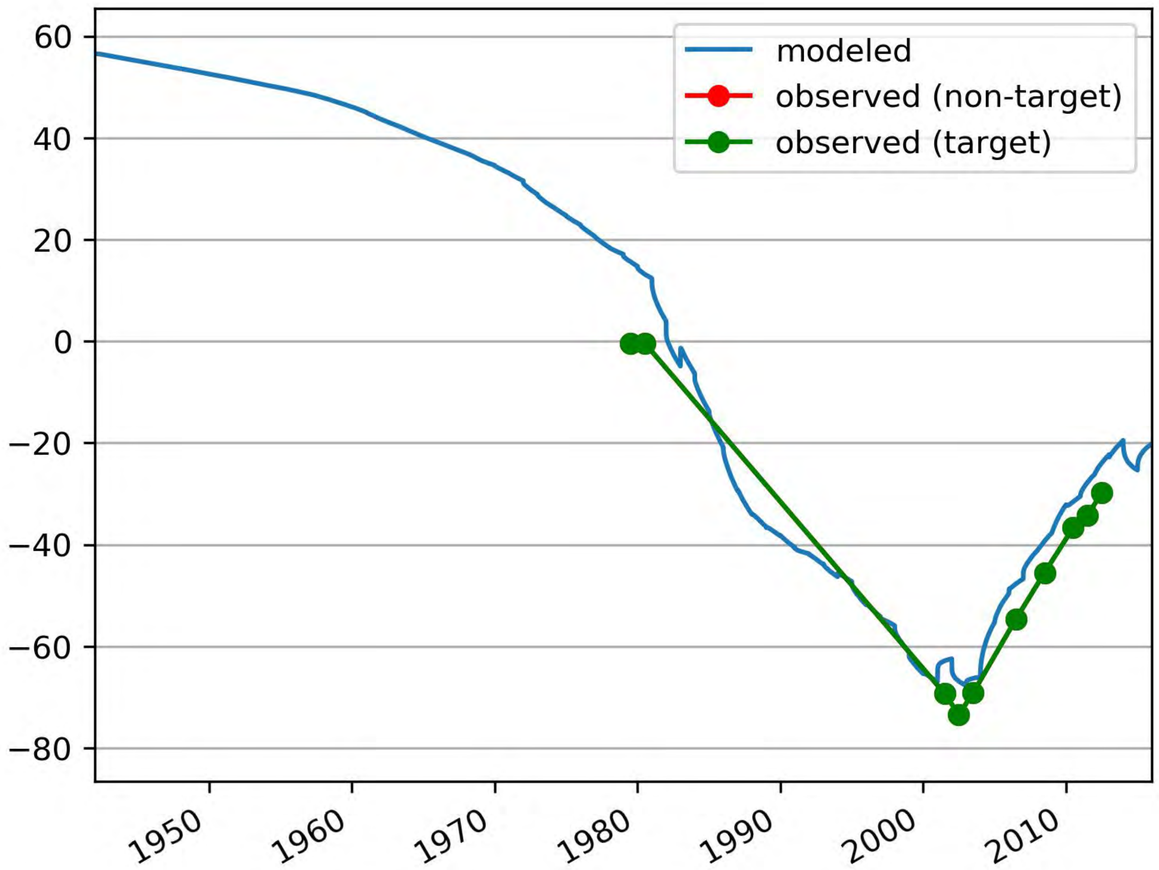


Model layer = 3

Hydrograph and location for well nwf_1760

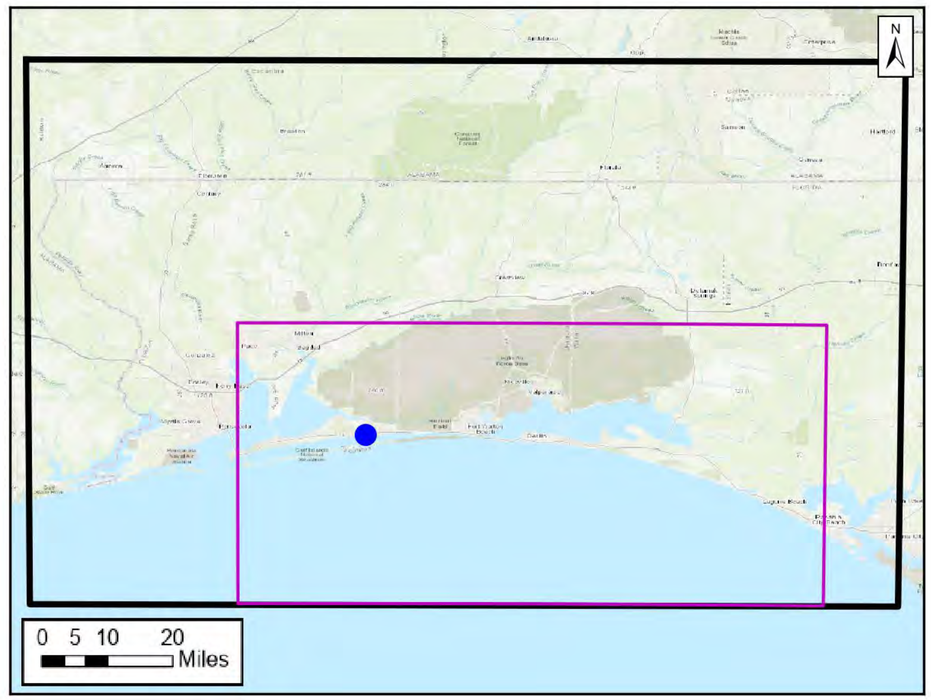
TETRA TECH

Water Level Elevation (ft msl, NAVD88)



Number of measurements = 10
Mean residual (ft) = -7.61
Abs Mean residual (ft) = 7.61

Location

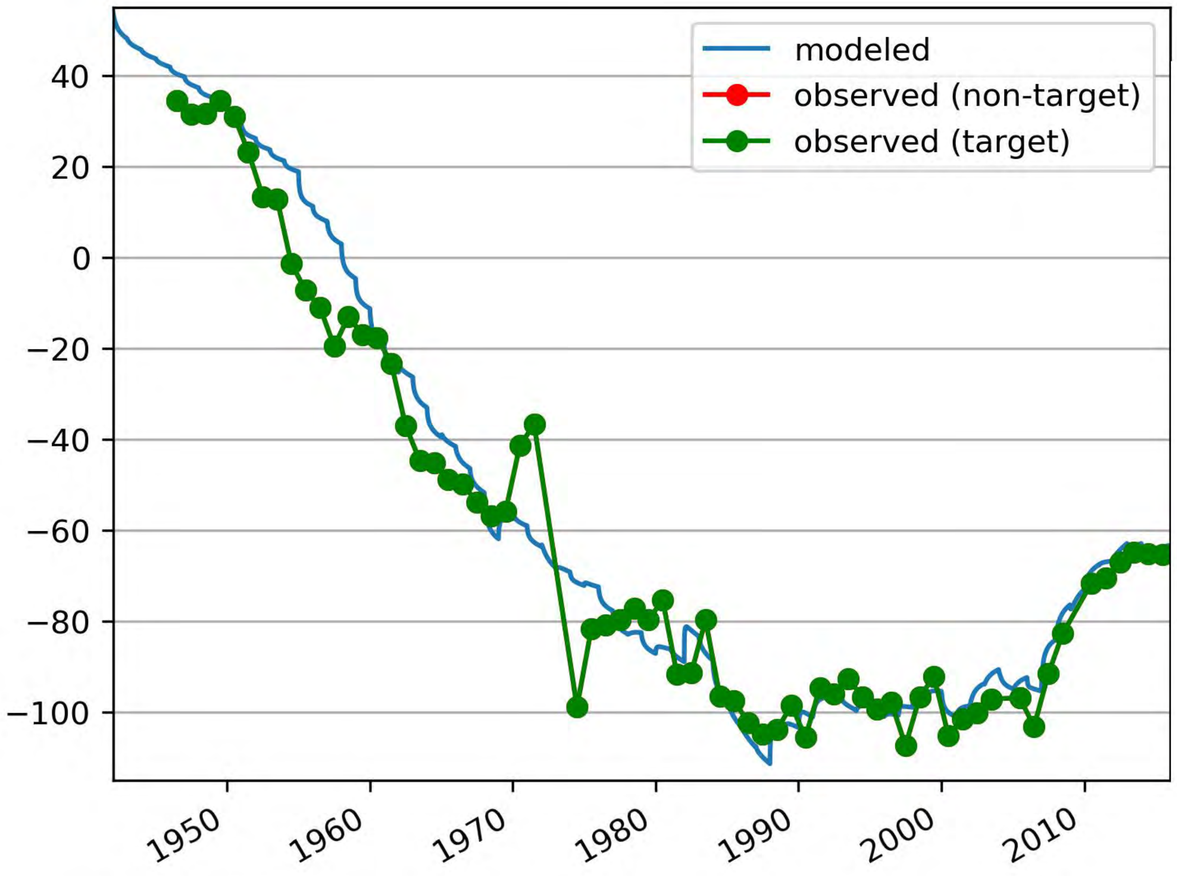


Model layer = 3

Hydrograph and location for well nwf_1888

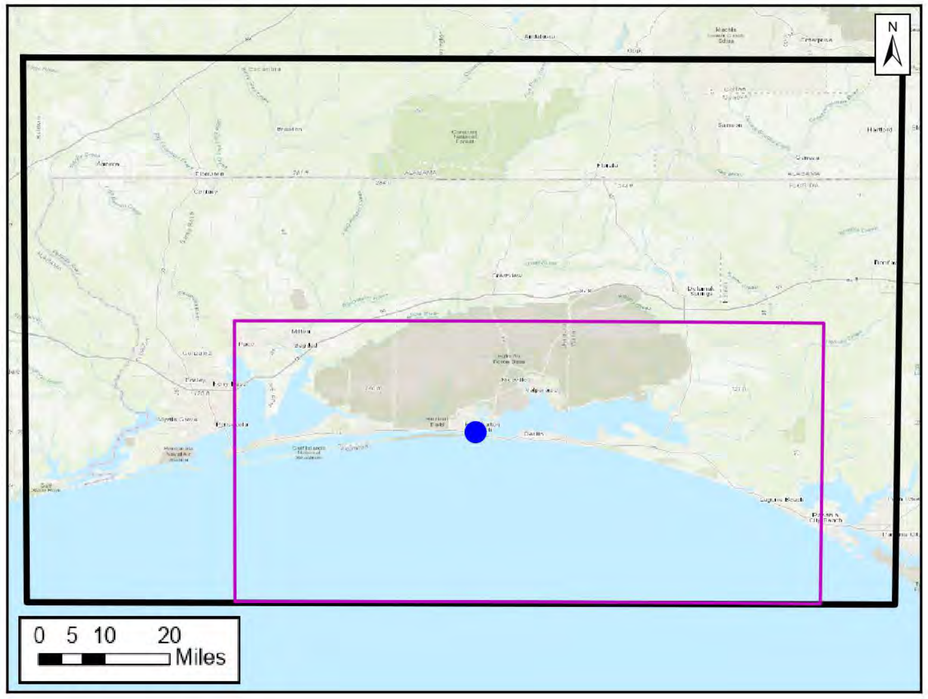
TETRA TECH

Water Level Elevation (ft msl, NAVD88)



Number of measurements = 66
Mean residual (ft) = -2.98
Abs Mean residual (ft) = 6.5

Location

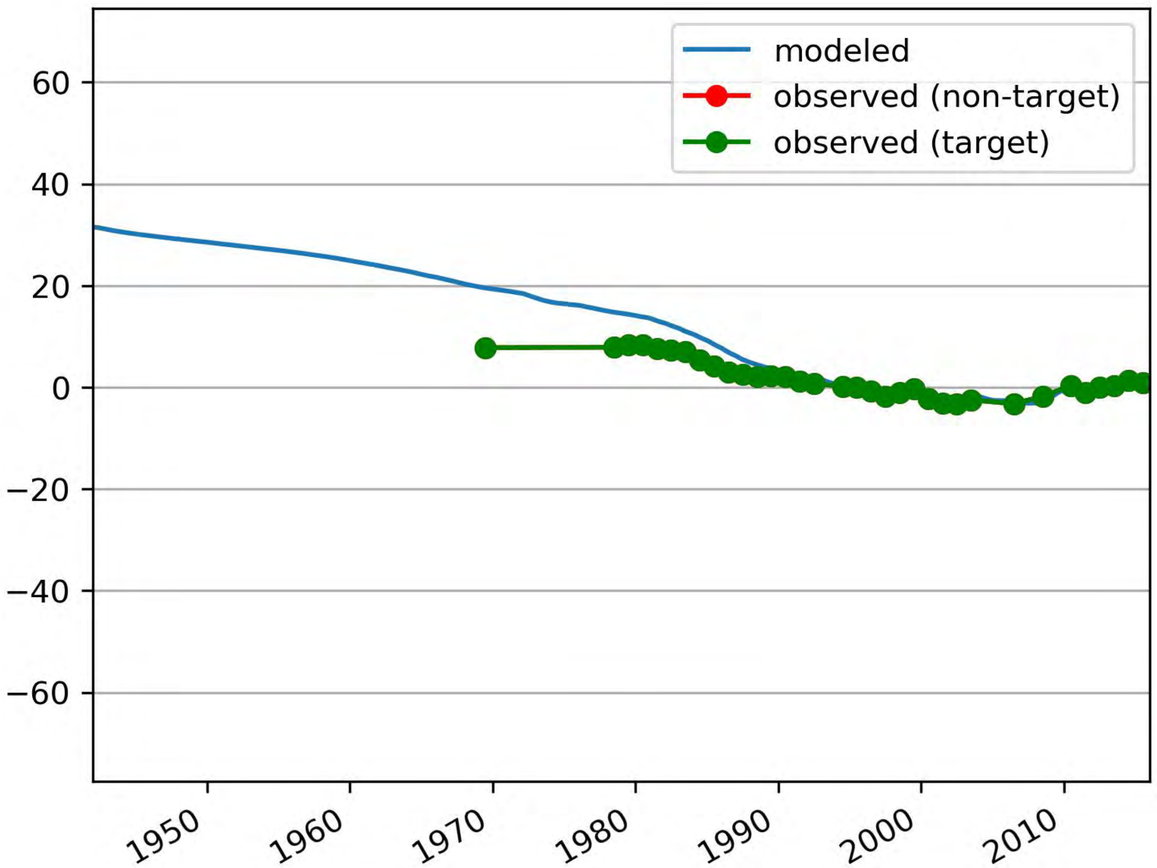


Model layer = 3

Hydrograph and location for well nwf_1894

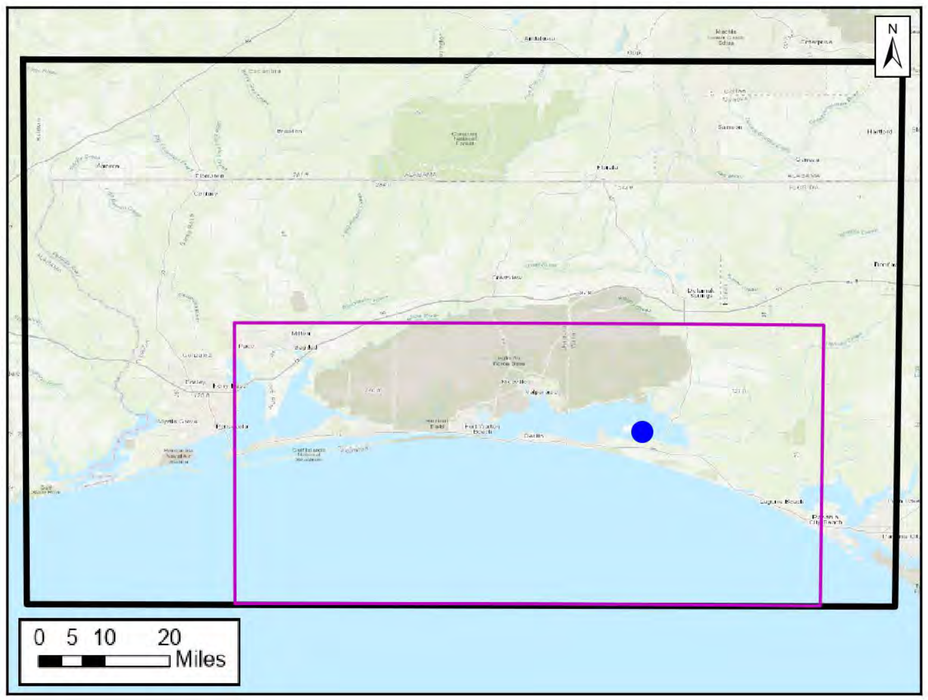
TETRA TECH

Water Level Elevation (ft msl, NAVD88)



Number of measurements = 34
Mean residual (ft) = -2.16
Abs Mean residual (ft) = 2.29

Location

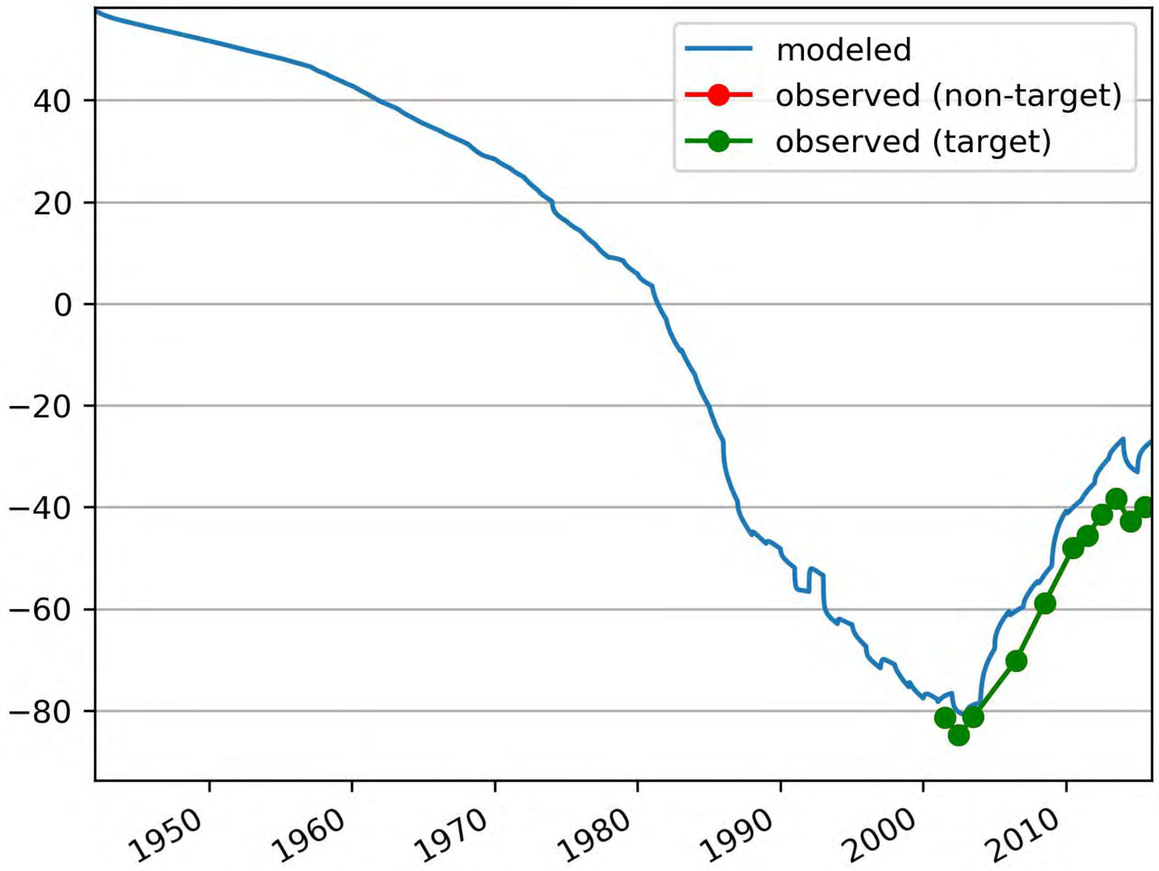


Model layer = 3

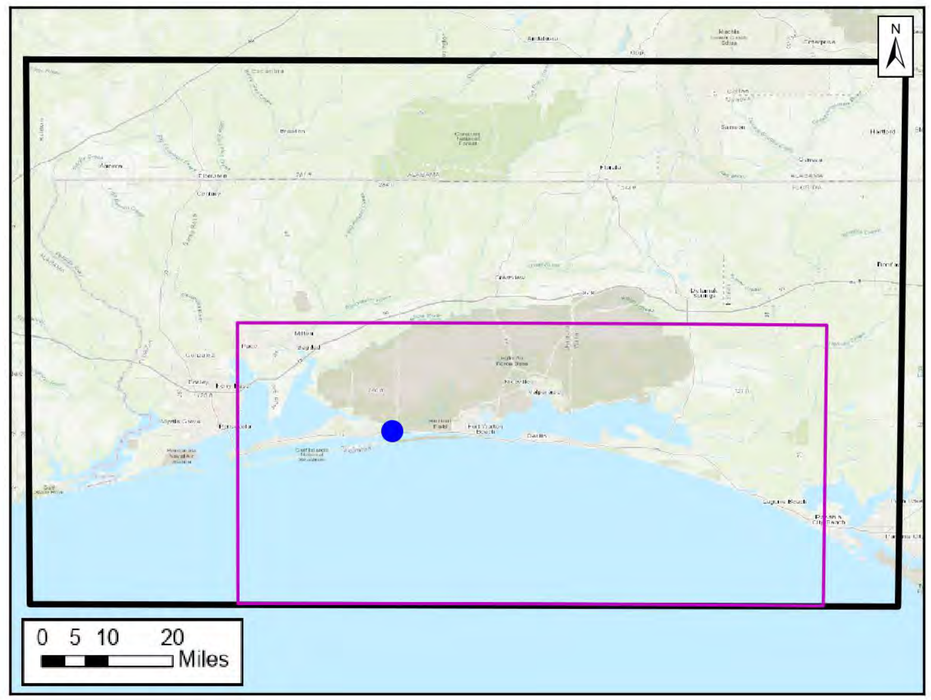
Hydrograph and location for well nwf_2034

TETRA TECH

Water Level Elevation (ft msl, NAVD88)



Location



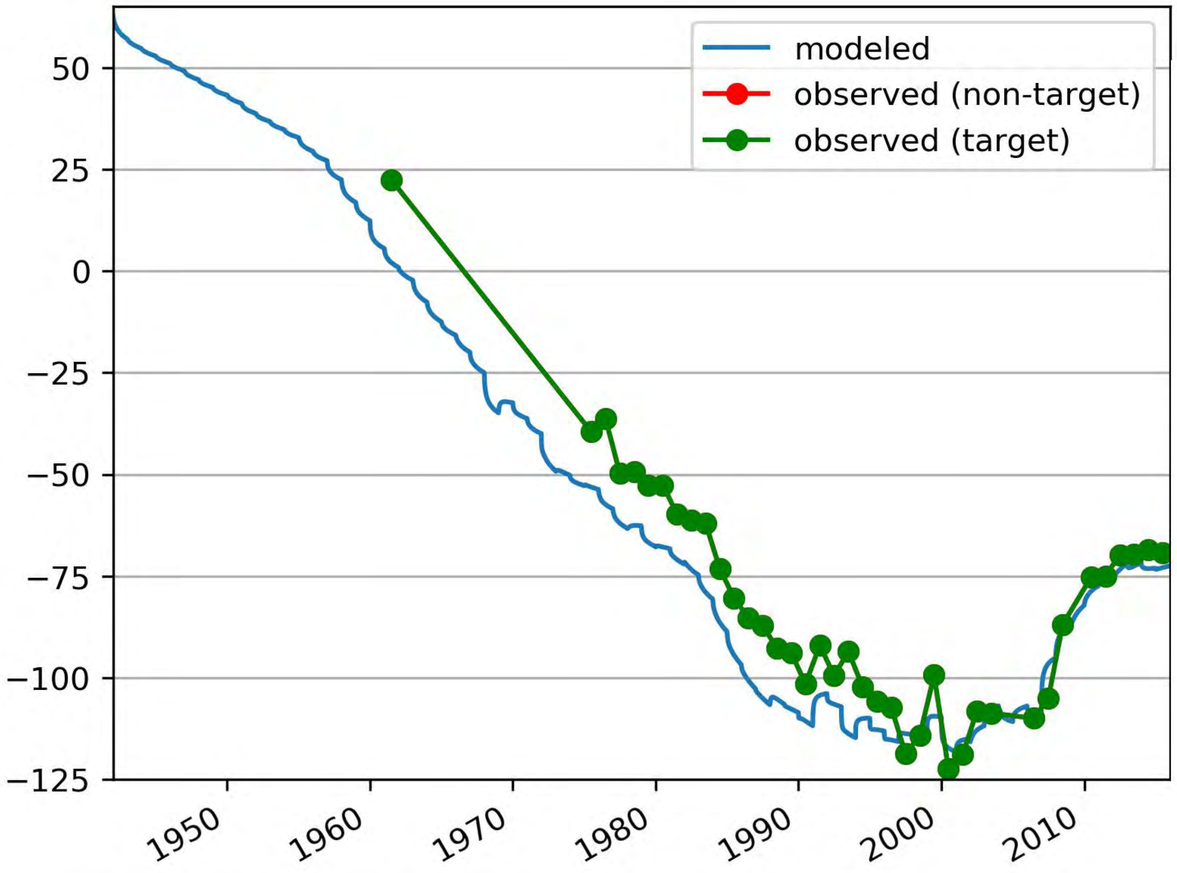
Number of measurements = 11
Mean residual (ft) = -7.74
Abs Mean residual (ft) = 7.74

Model layer = 3

Hydrograph and location for well nwf_2051

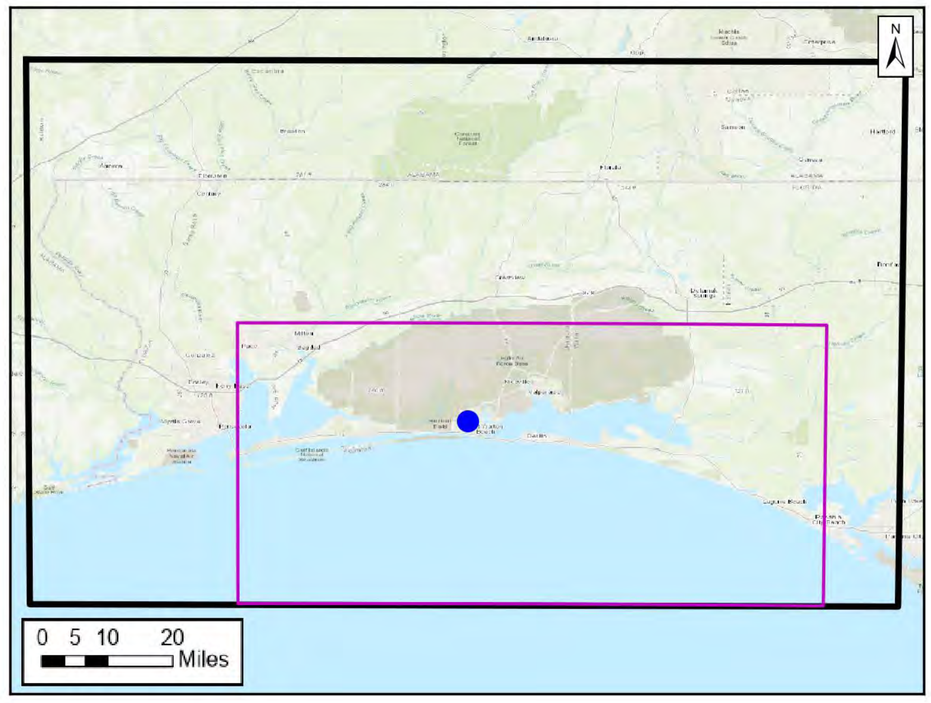
TETRA TECH

Water Level Elevation (ft msl, NAVD88)



Number of measurements = 39
Mean residual (ft) = 8.17
Abs Mean residual (ft) = 9.47

Location

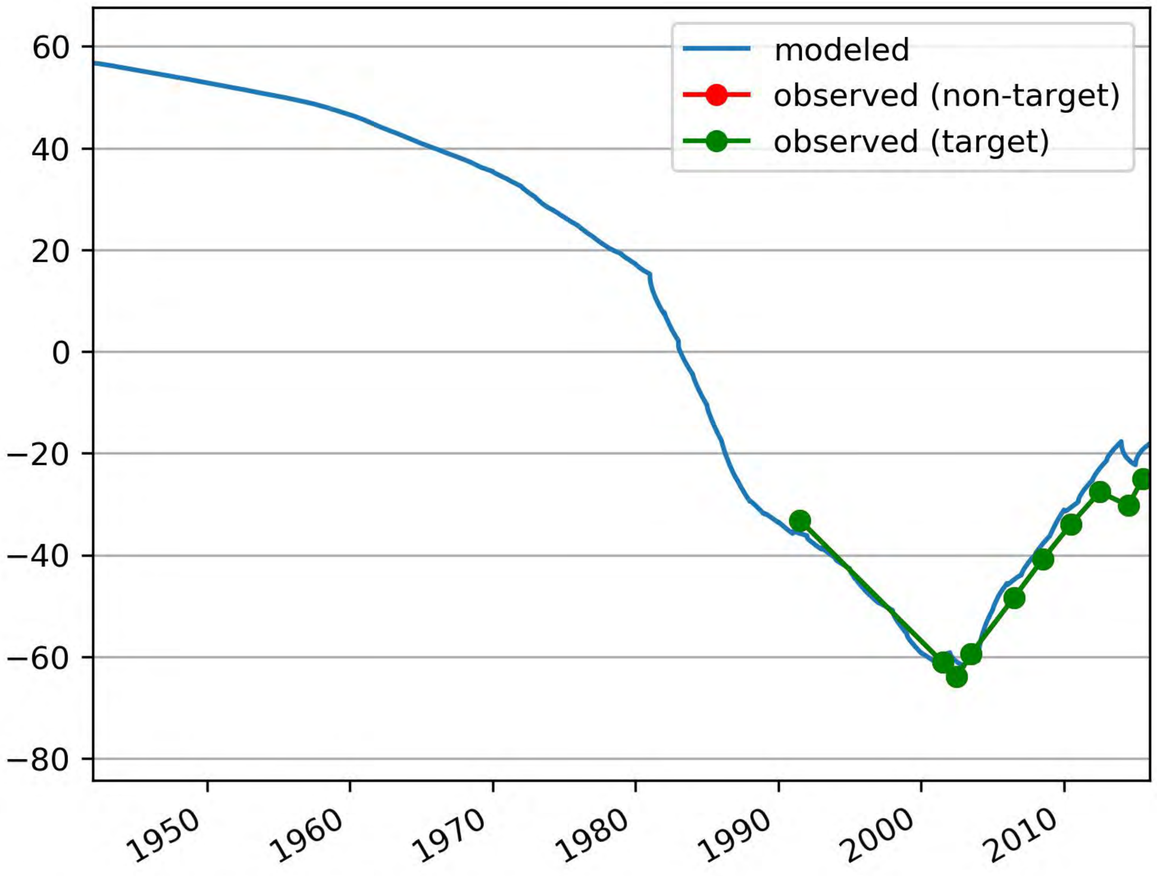


Model layer = 3

Hydrograph and location for well nwf_2394

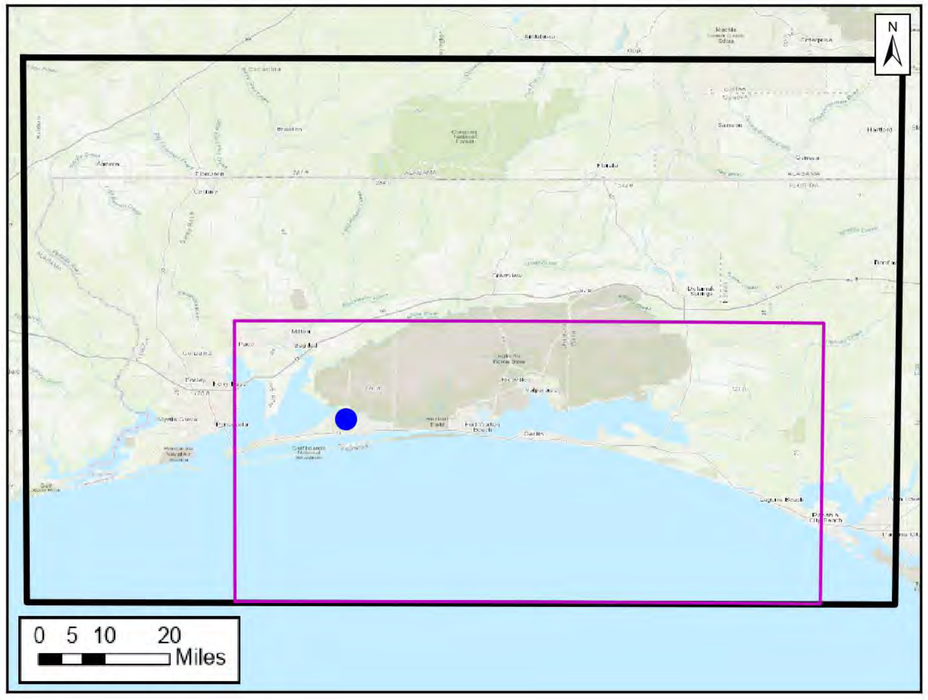
TETRA TECH

Water Level Elevation (ft msl, NAVD88)



Number of measurements = 10
Mean residual (ft) = -2.94
Abs Mean residual (ft) = 3.79

Location

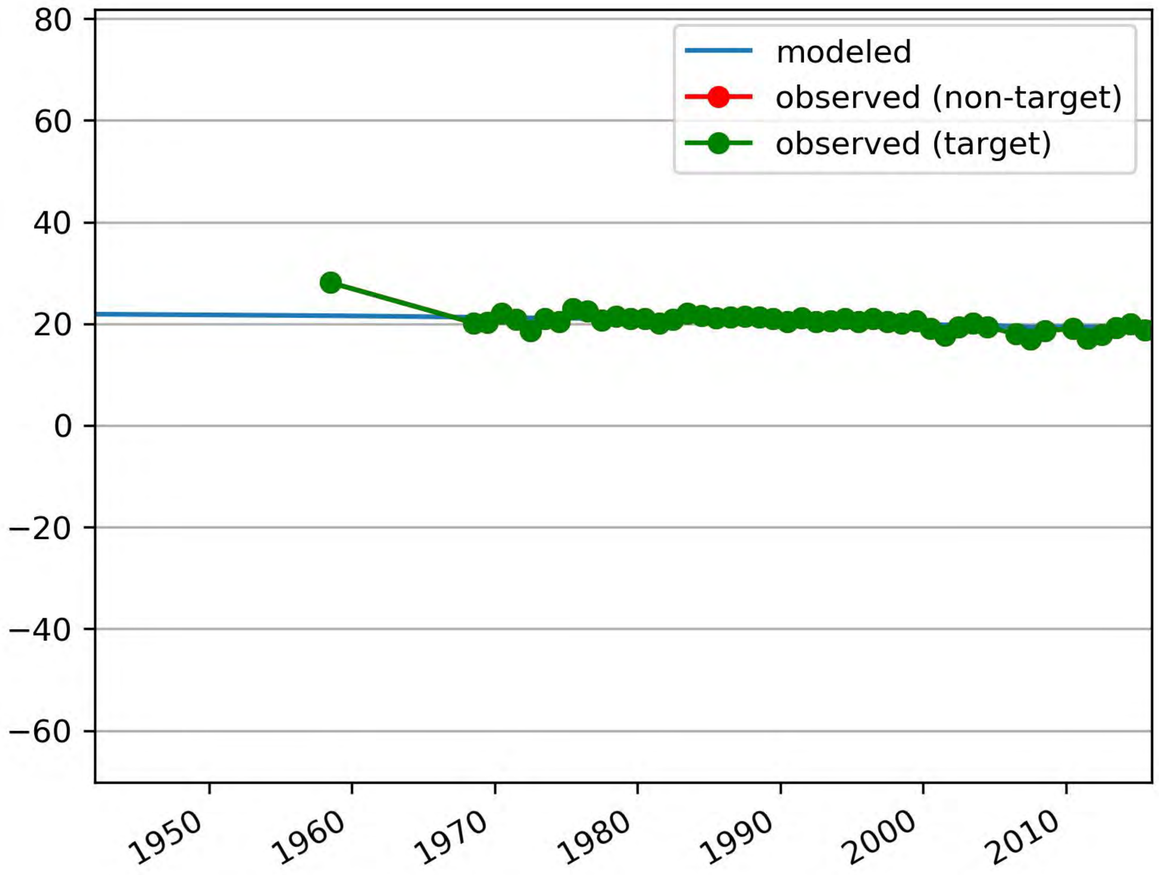


Model layer = 3

Hydrograph and location for well nwf_2397

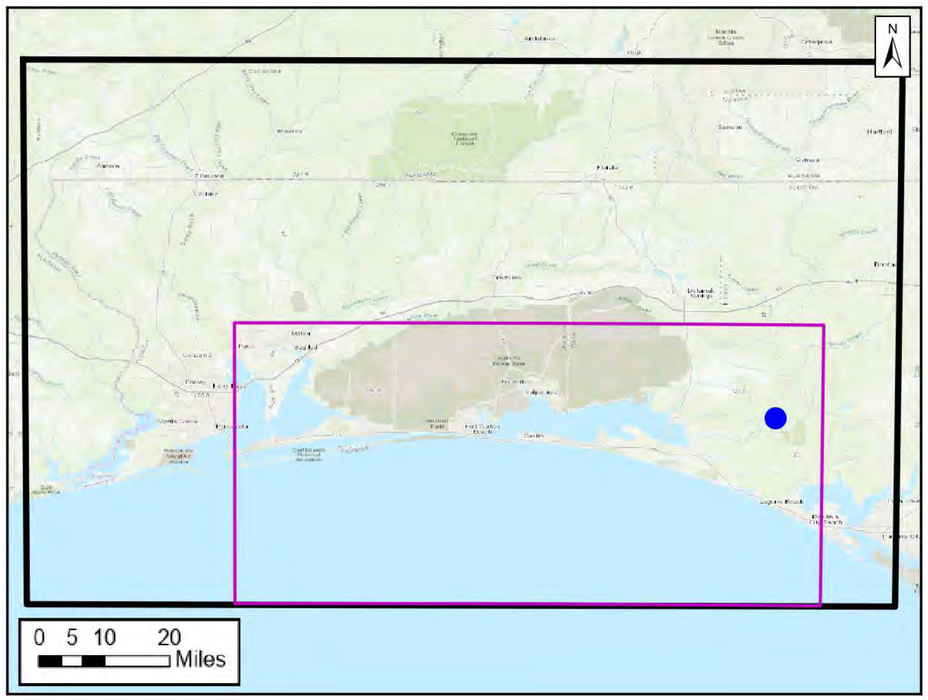
TETRA TECH

Water Level Elevation (ft msl, NAVD88)



Number of measurements = 47
Mean residual (ft) = 0.07
Abs Mean residual (ft) = 0.91

Location

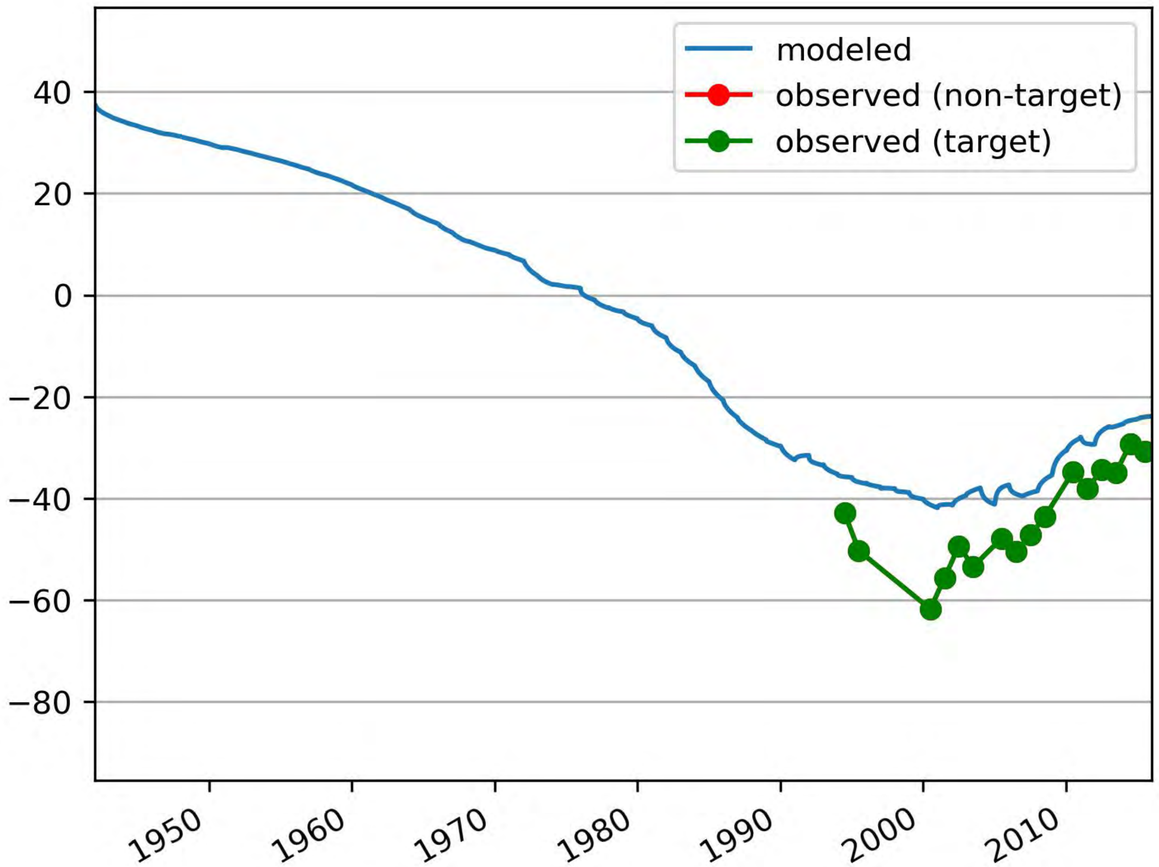


Model layer = 3

Hydrograph and location for well nwf_2534

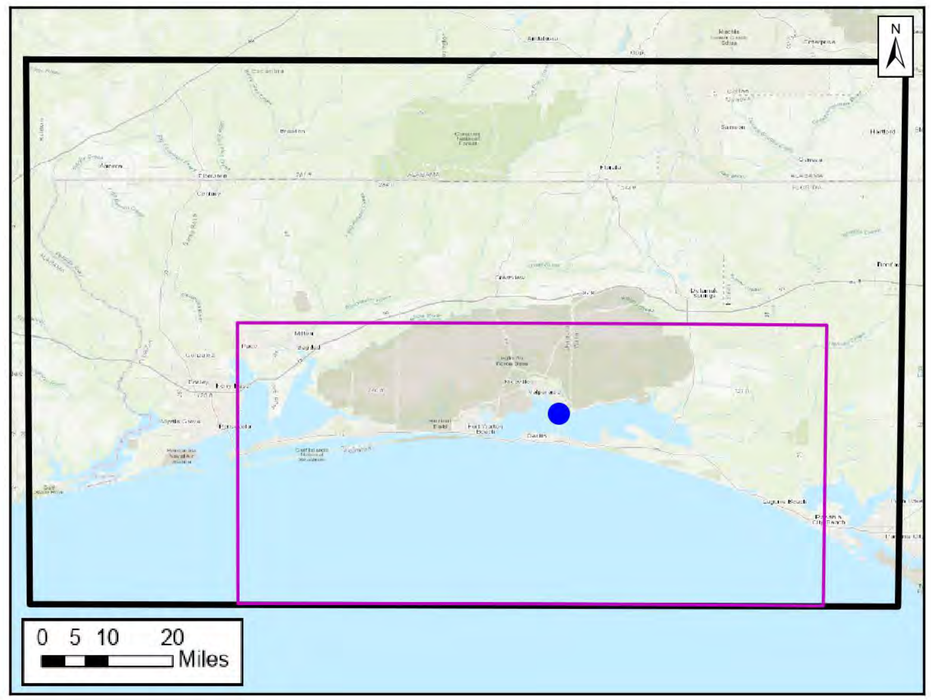
TETRA TECH

Water Level Elevation (ft msl, NAVD88)



Number of measurements = 16
Mean residual (ft) = -9.96
Abs Mean residual (ft) = 9.96

Location

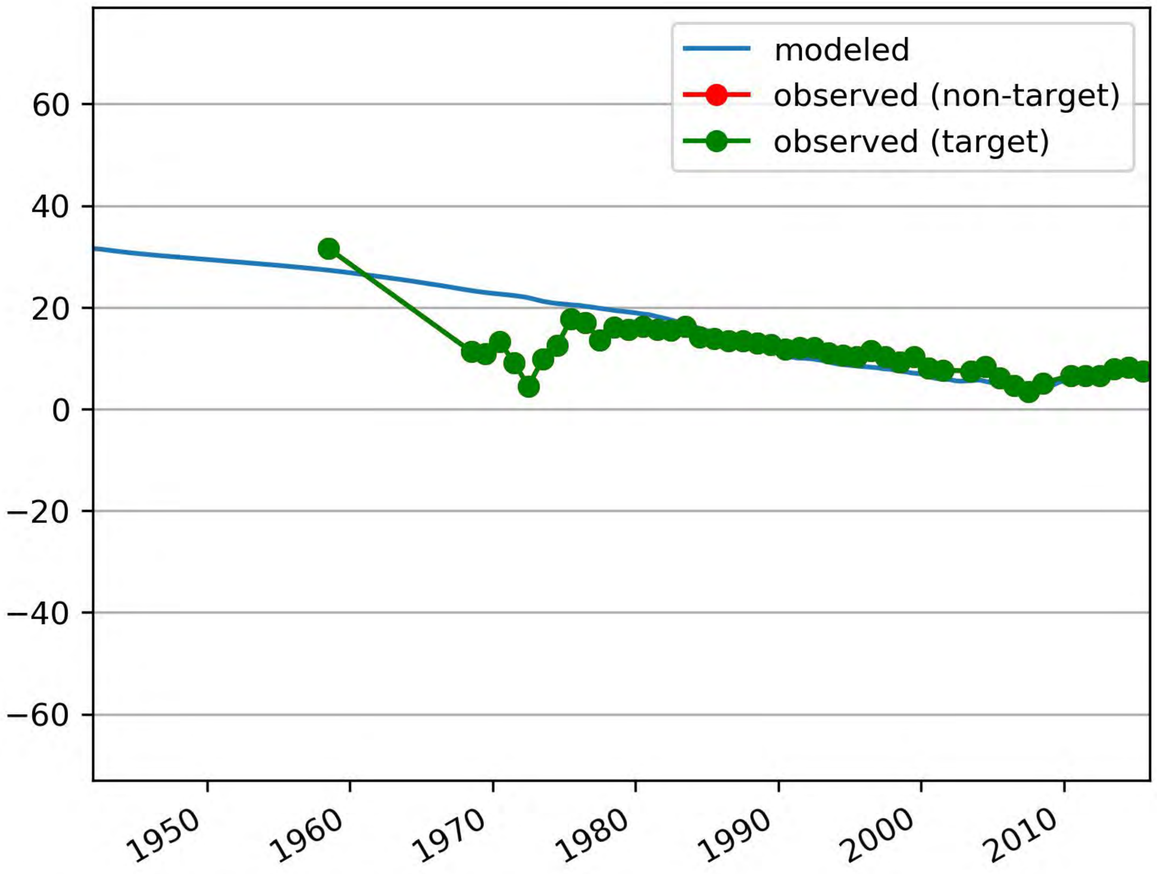


Model layer = 3

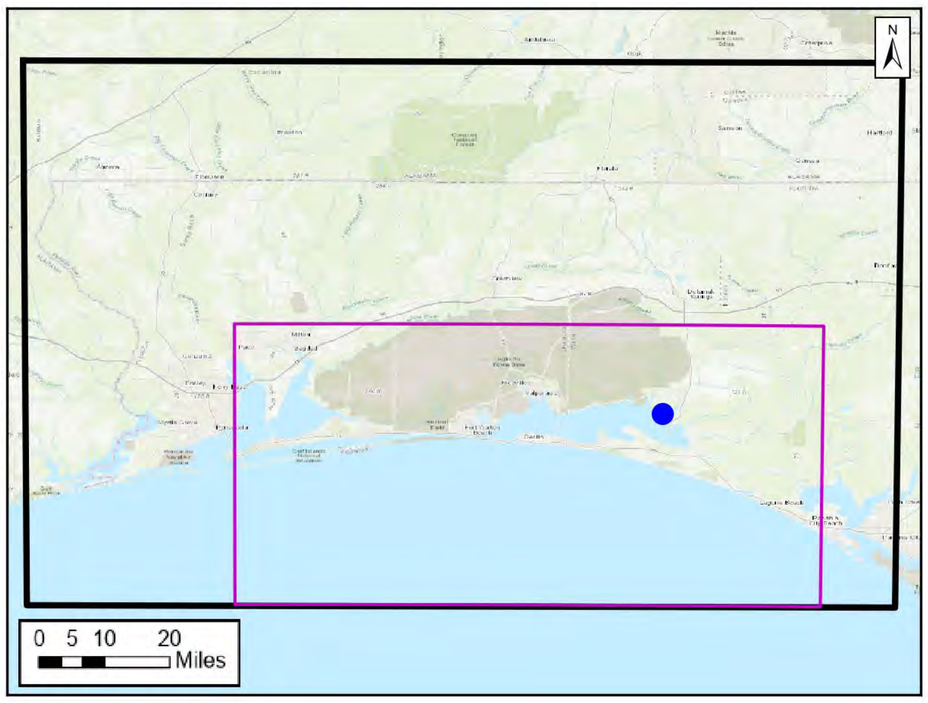
Hydrograph and location for well nwf_2696

TETRA TECH

Water Level Elevation (ft msl, NAVD88)



Location



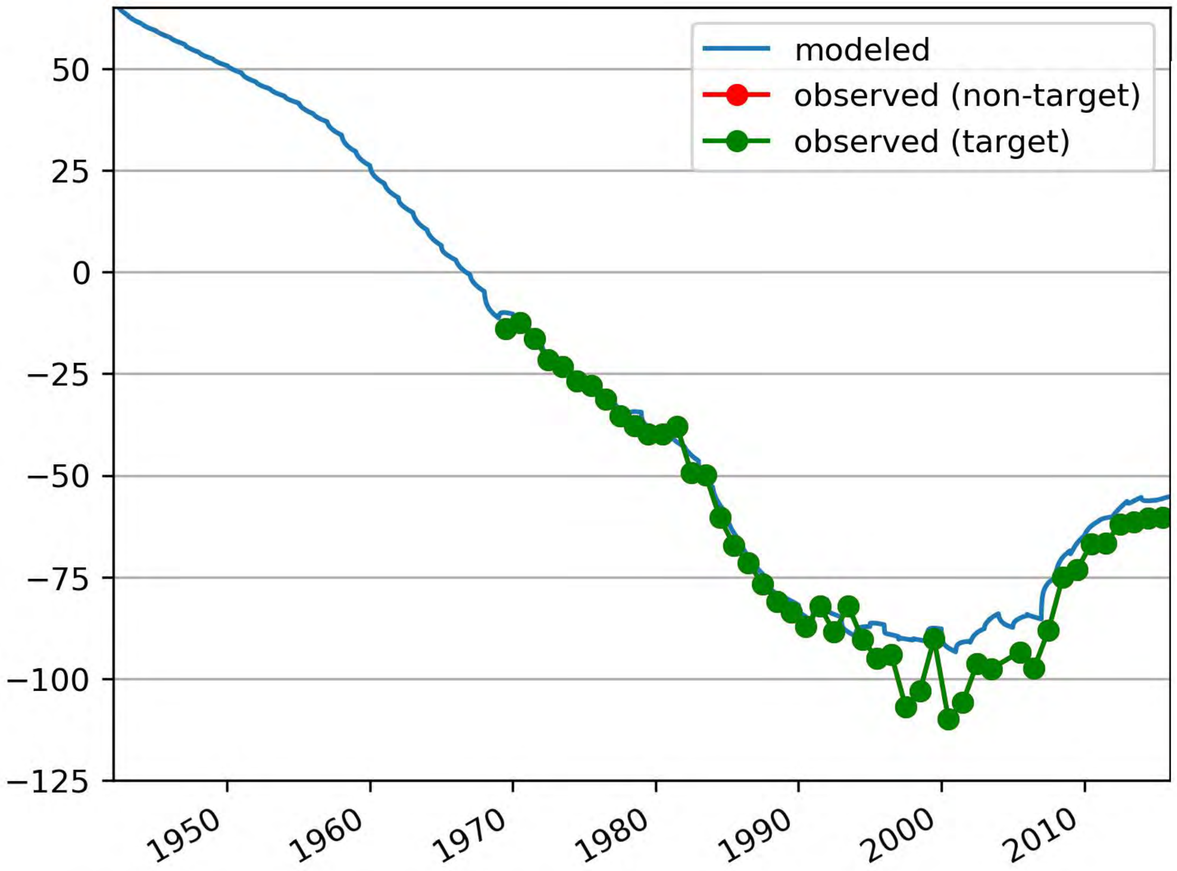
Number of measurements = 47
Mean residual (ft) = -1.43
Abs Mean residual (ft) = 3.39

Model layer = 3

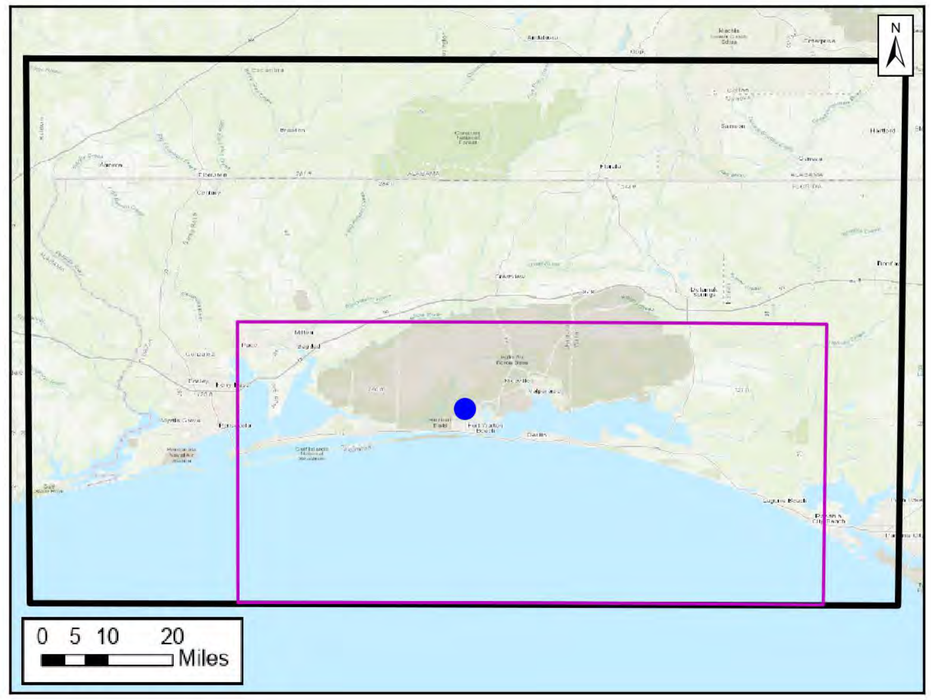
Hydrograph and location for well nwf_2738

TETRA TECH

Water Level Elevation (ft msl, NAVD88)



Location



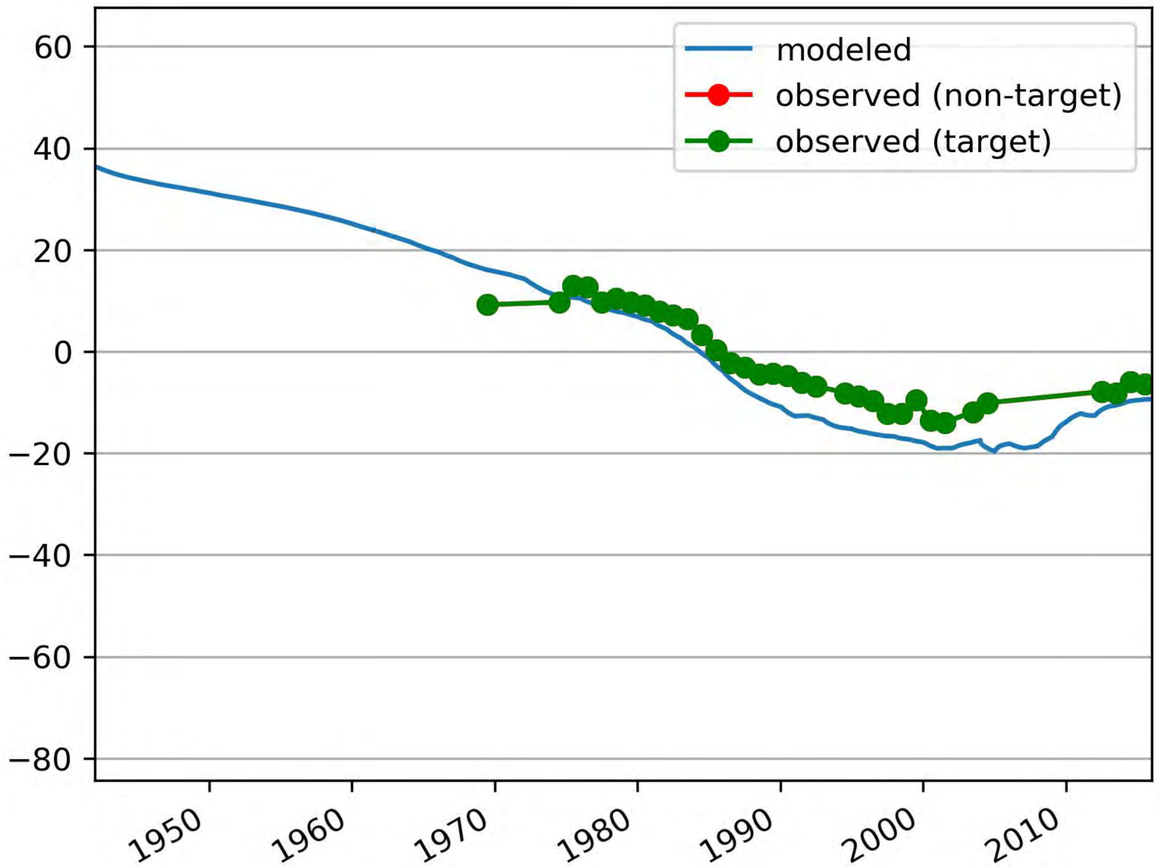
Number of measurements = 46
Mean residual (ft) = -4.44
Abs Mean residual (ft) = 4.97

Model layer = 3

Hydrograph and location for well nwf_2822

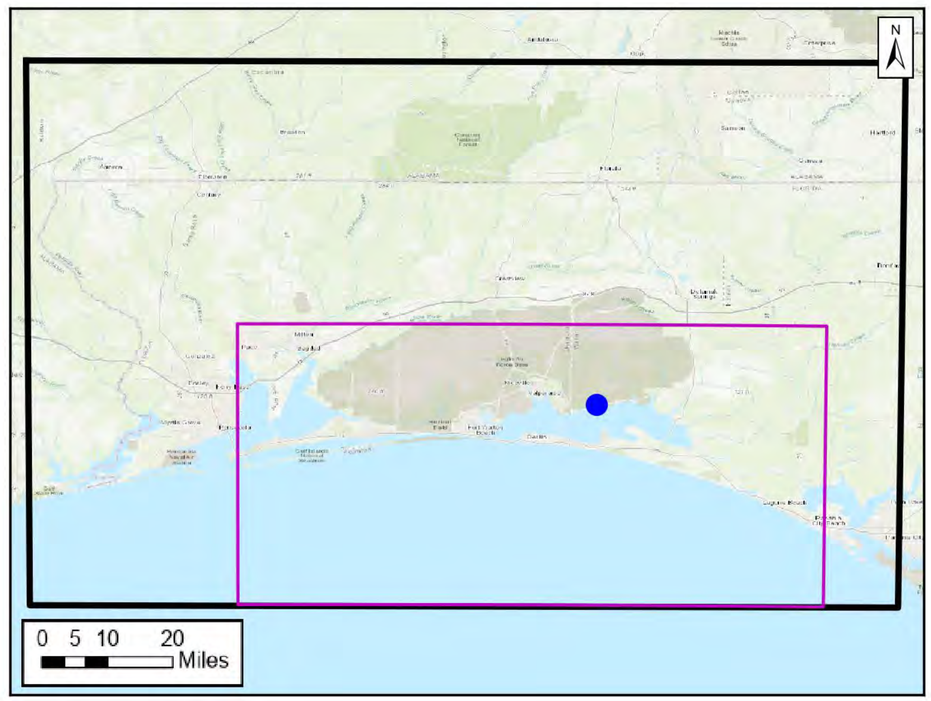
TETRA TECH

Water Level Elevation (ft msl, NAVD88)



Number of measurements = 34
Mean residual (ft) = 4.03
Abs Mean residual (ft) = 4.51

Location

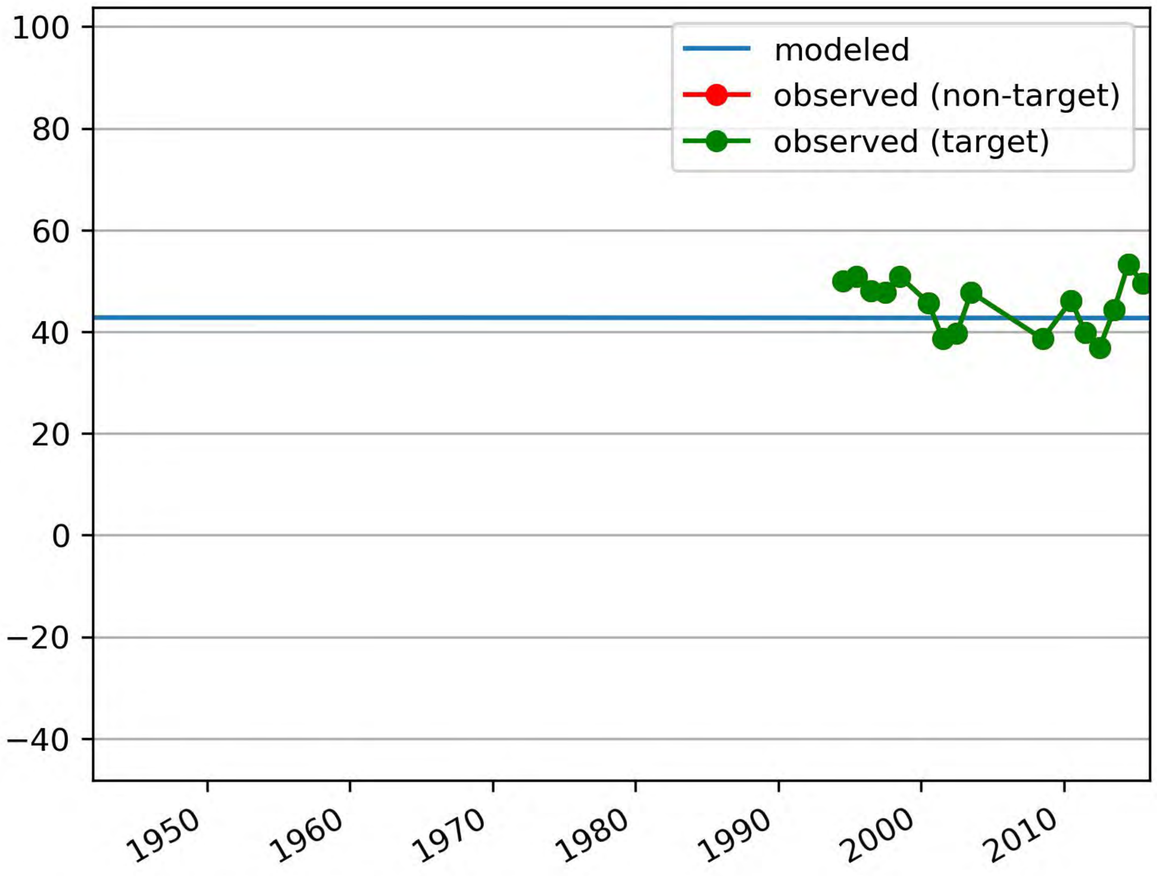


Model layer = 3

Hydrograph and location for well nwf_2962

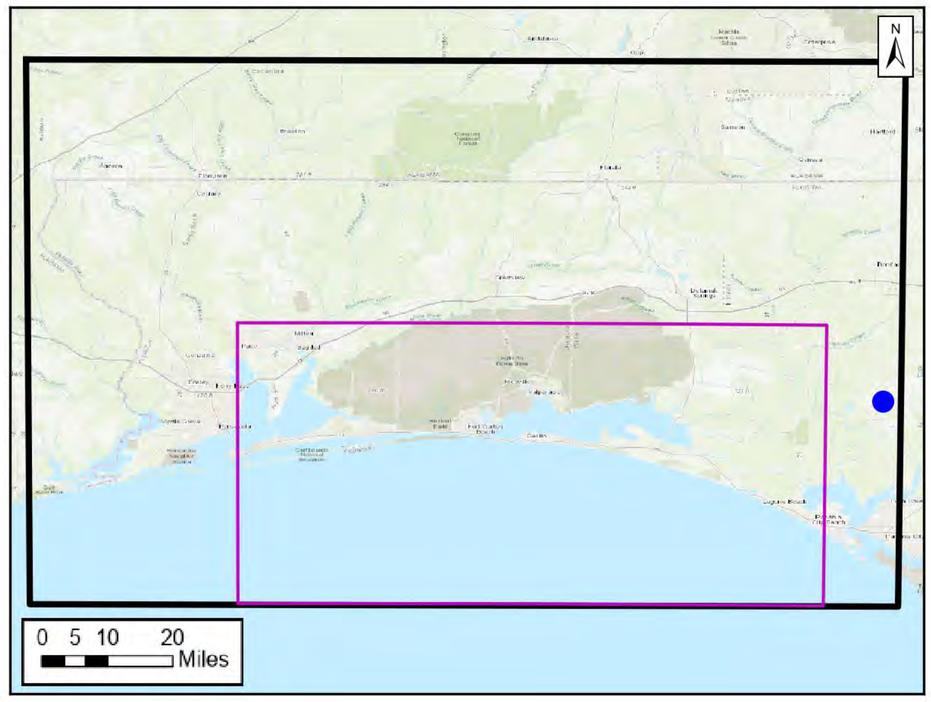
TETRA TECH

Water Level Elevation (ft msl, NAVD88)



Number of measurements = 16
Mean residual (ft) = 2.79
Abs Mean residual (ft) = 5.27

Location

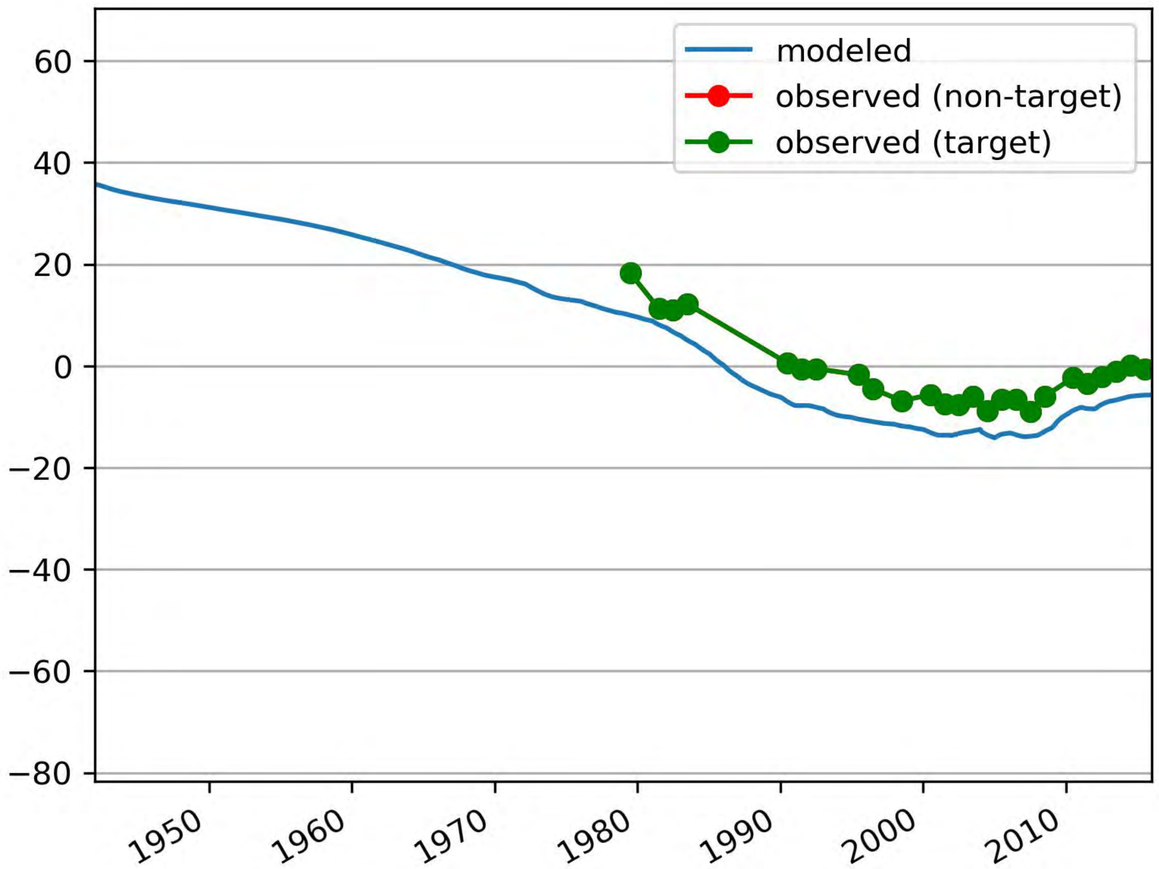


Model layer = 3

Hydrograph and location for well nwf_2992

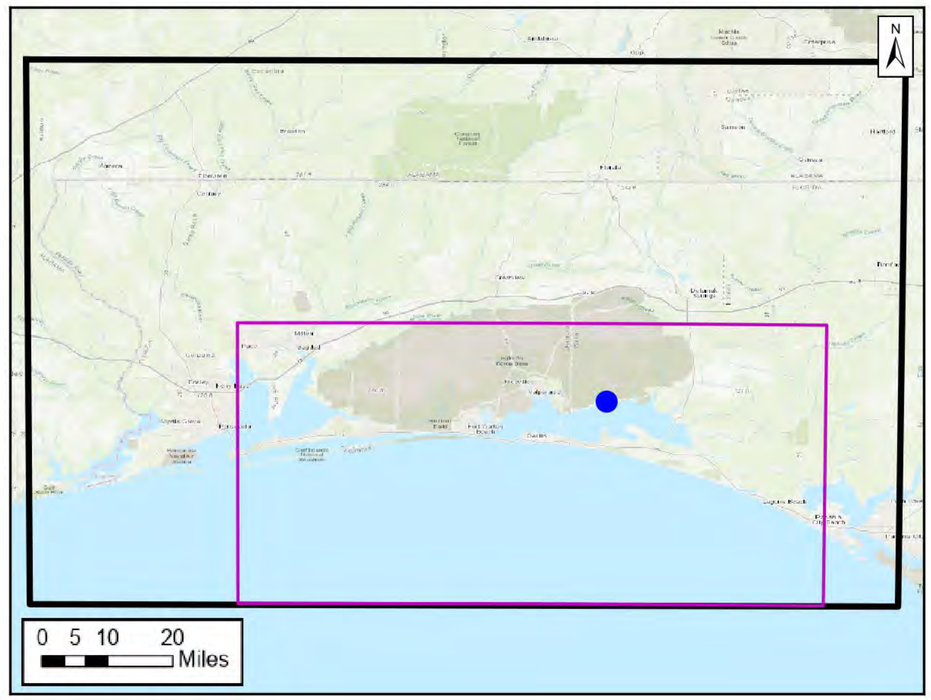
TETRA TECH

Water Level Elevation (ft msl, NAVD88)



Number of measurements = 25
Mean residual (ft) = 6.21
Abs Mean residual (ft) = 6.21

Location

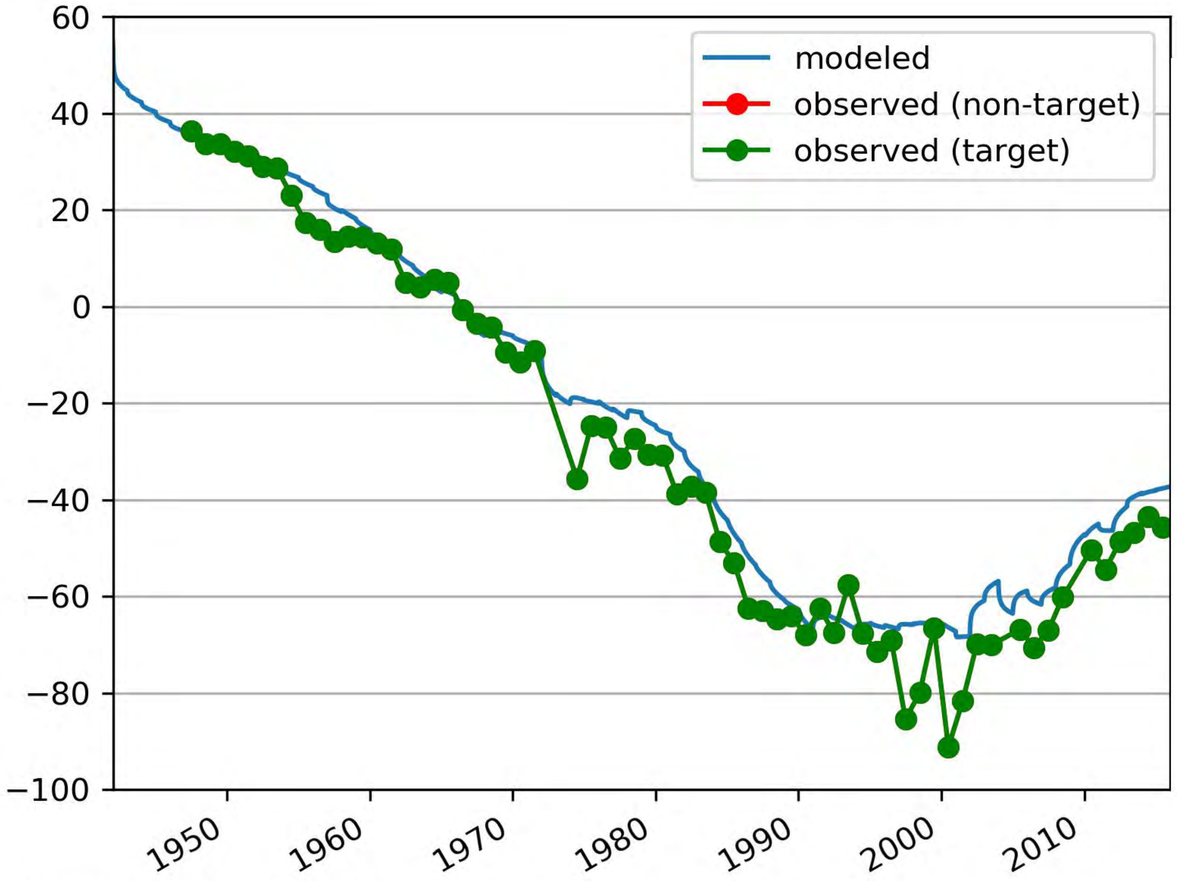


Model layer = 3

Hydrograph and location for well nwf_2993

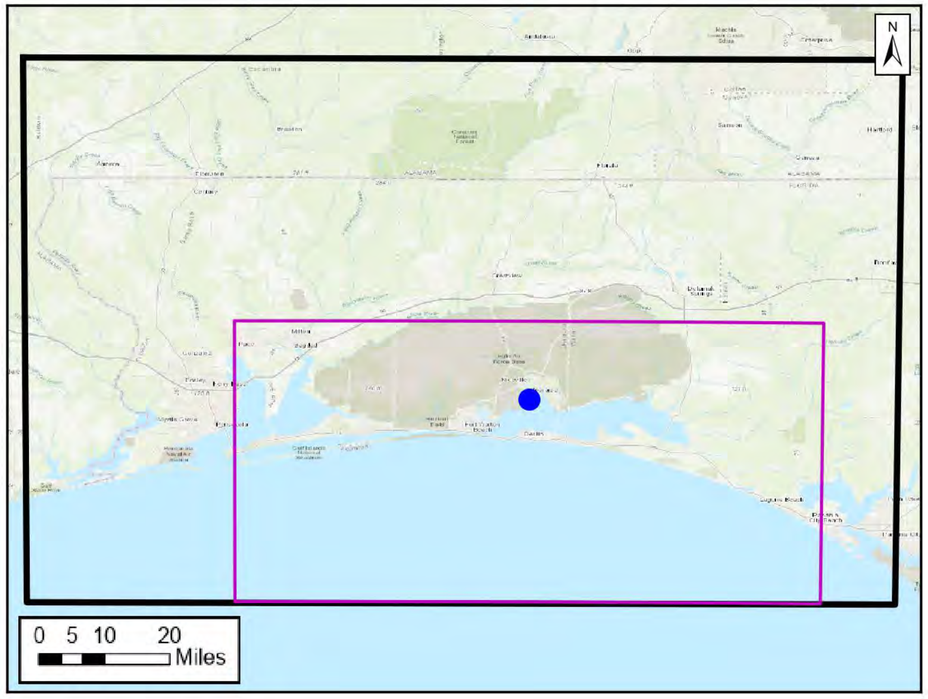
TETRA TECH

Water Level Elevation (ft msl, NAVD88)



Number of measurements = 65
Mean residual (ft) = -4.96
Abs Mean residual (ft) = 5.48

Location

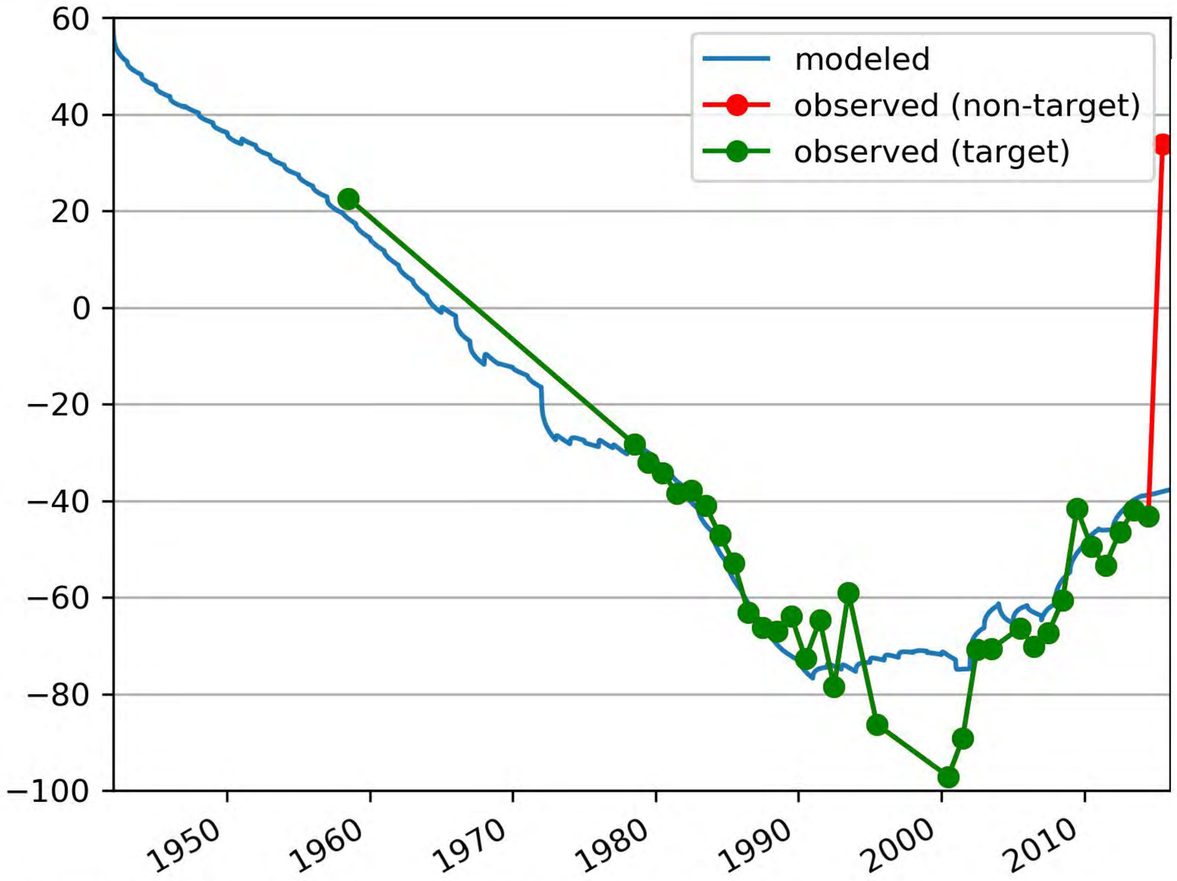


Model layer = 3

Hydrograph and location for well nwf_2994

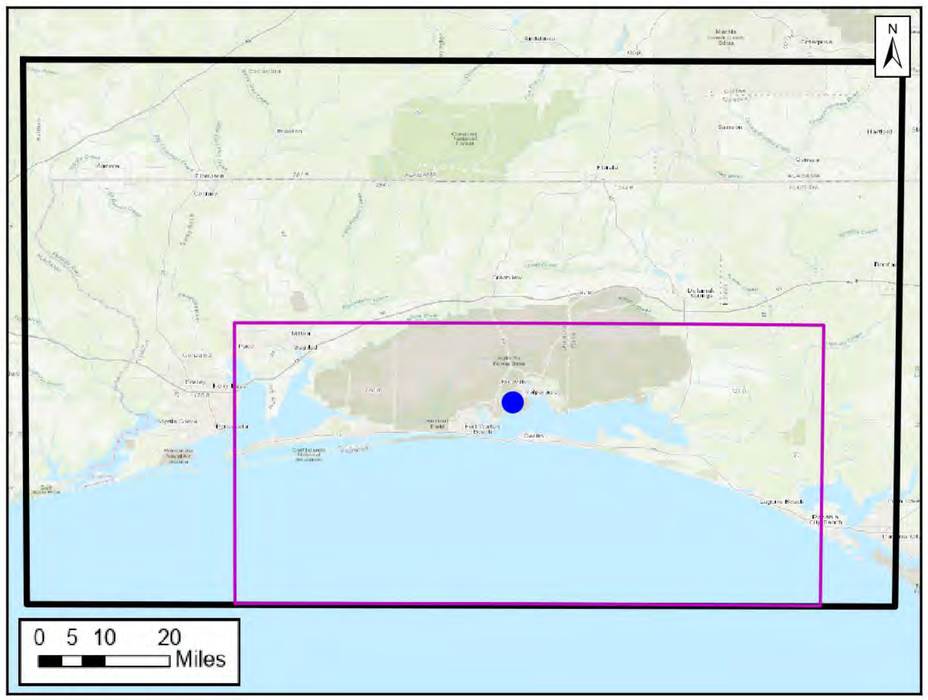
TETRA TECH

Water Level Elevation (ft msl, NAVD88)



Number of measurements = 33
Mean residual (ft) = 0.6
Abs Mean residual (ft) = 7.77

Location

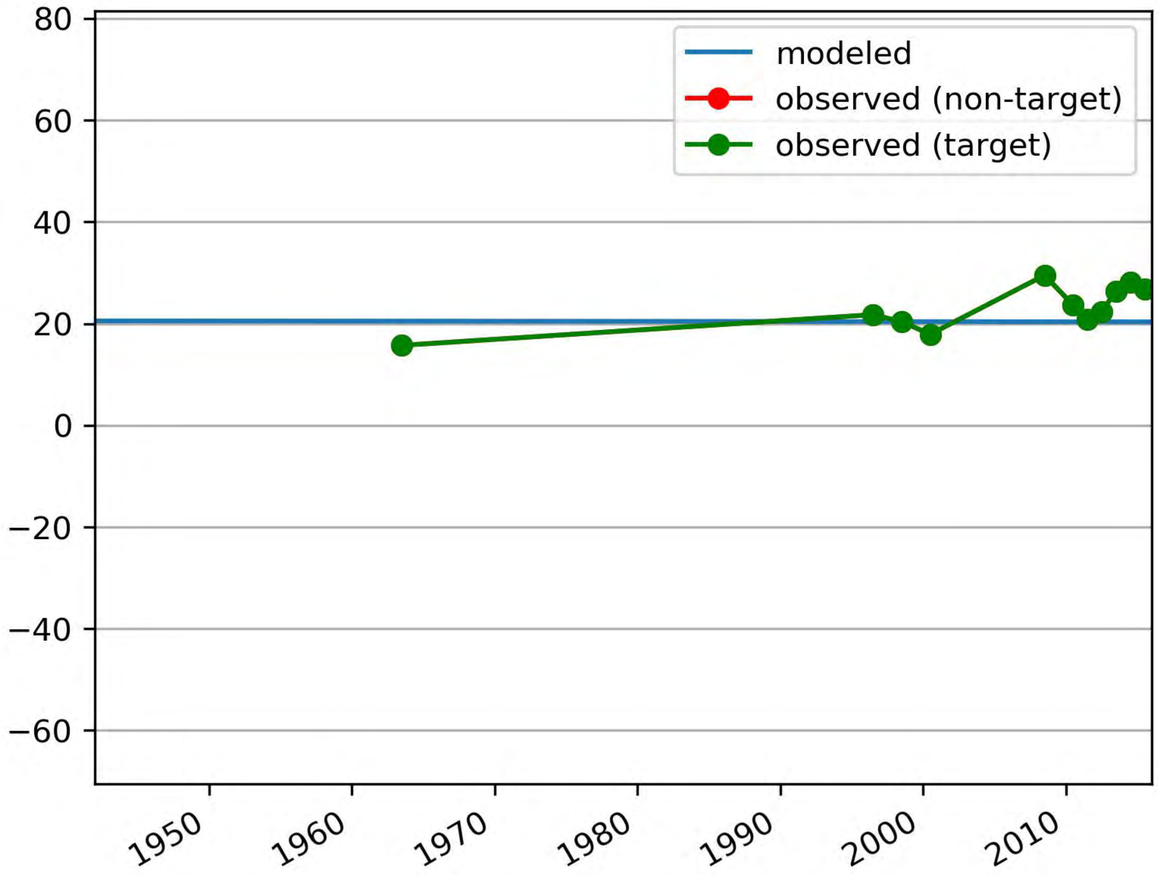


Model layer = 3

Hydrograph and location for well nwf_2995

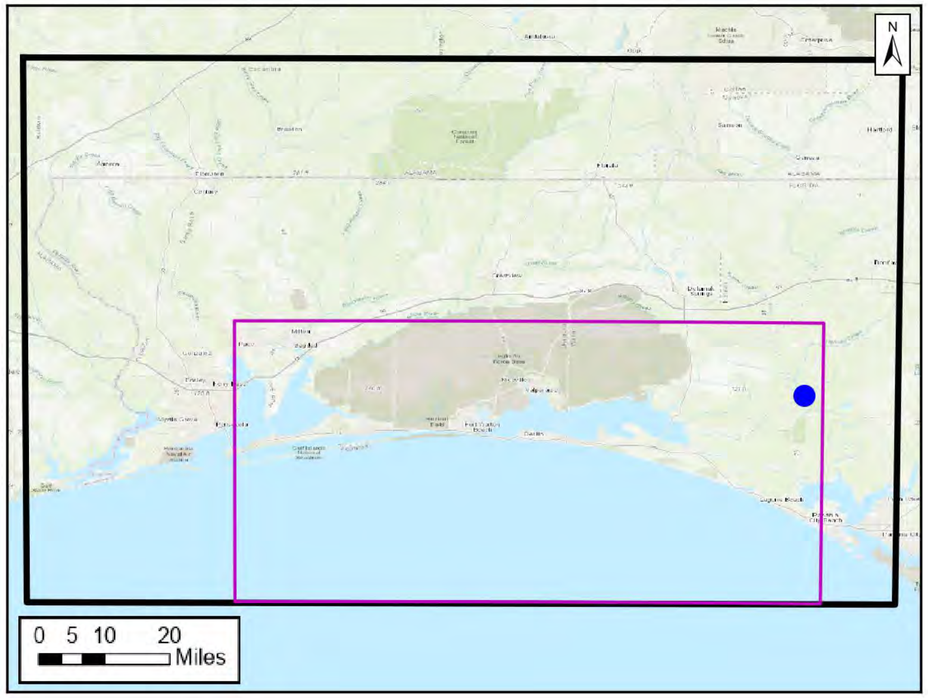
TETRA TECH

Water Level Elevation (ft msl, NAVD88)



Number of measurements = 11
Mean residual (ft) = 2.67
Abs Mean residual (ft) = 3.99

Location

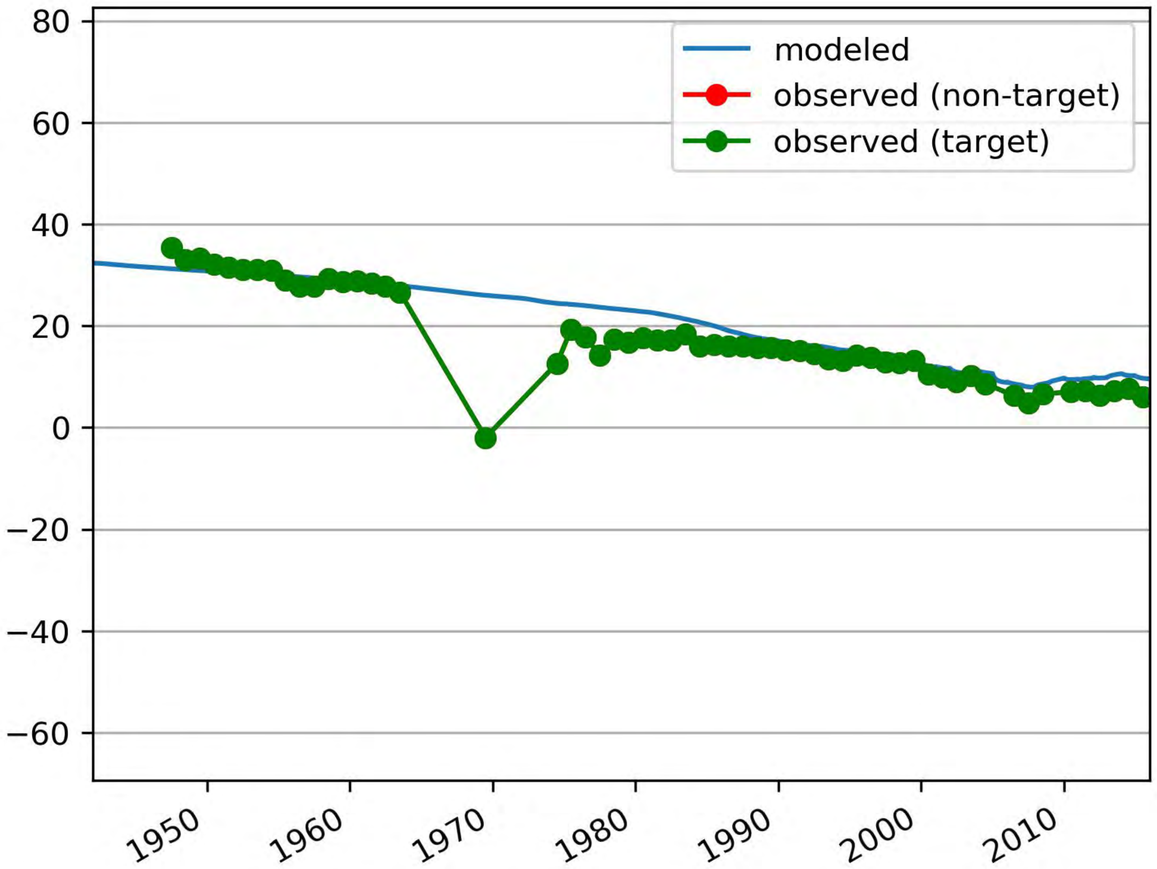


Model layer = 3

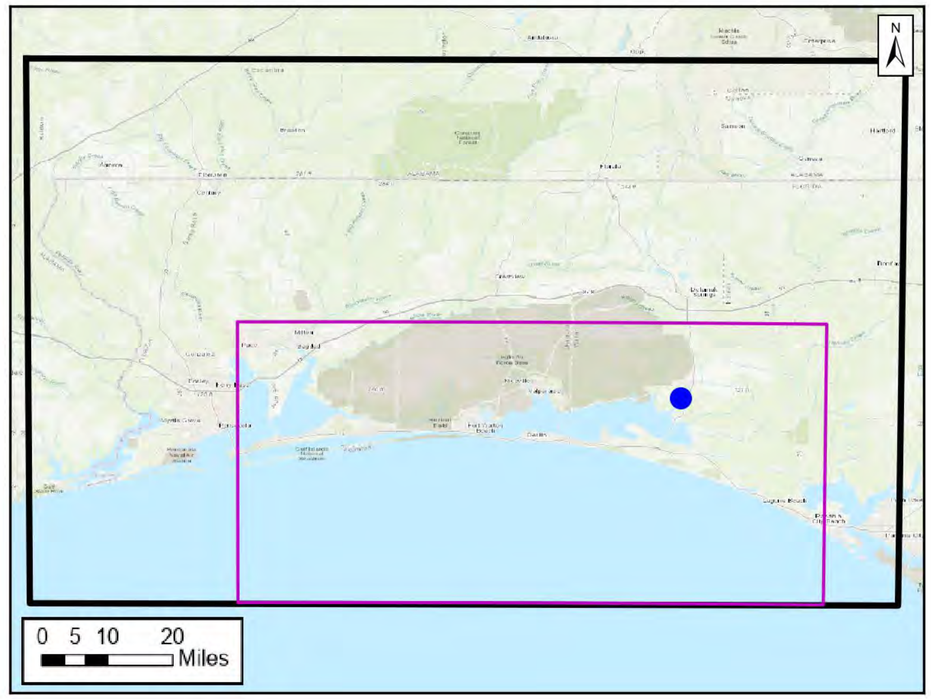
Hydrograph and location for well nwf_3082

TETRA TECH

Water Level Elevation (ft msl, NAVD88)



Location



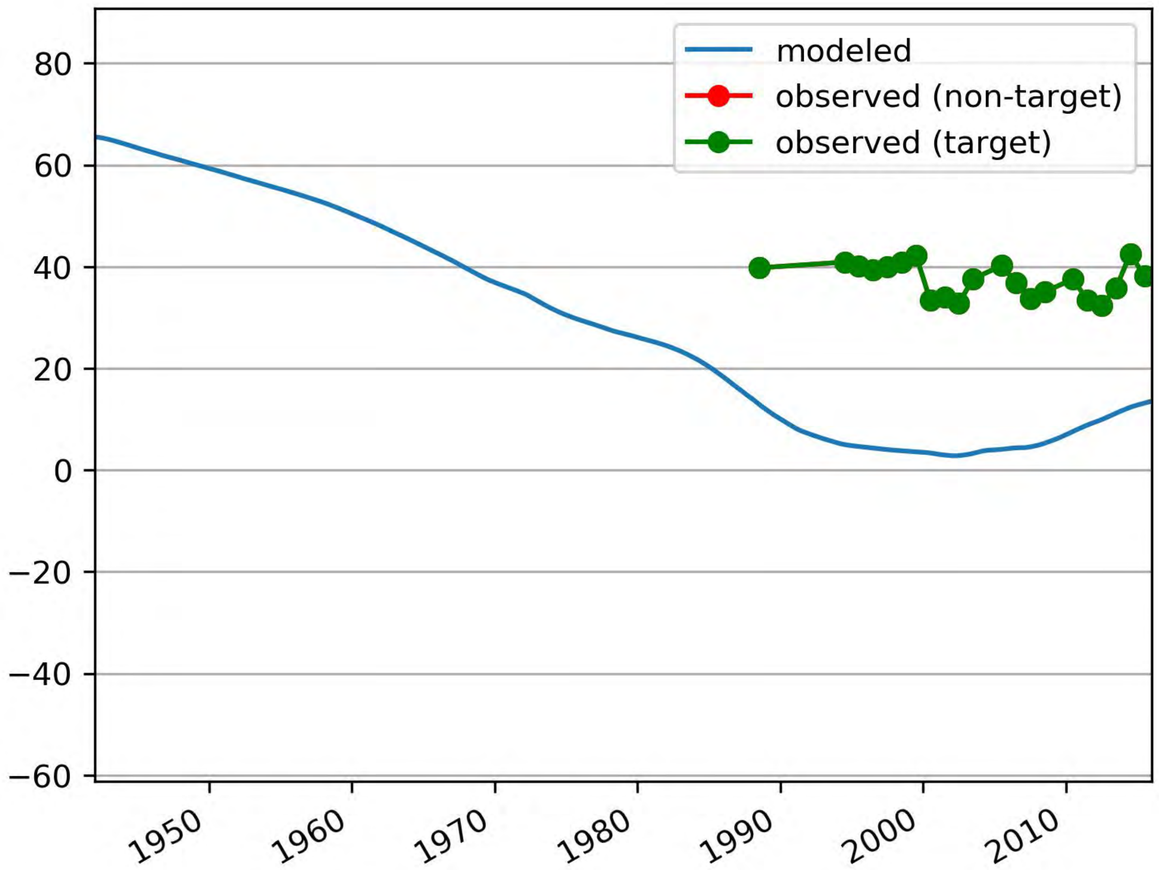
Number of measurements = 58
Mean residual (ft) = -2.53
Abs Mean residual (ft) = 3.01

Model layer = 3

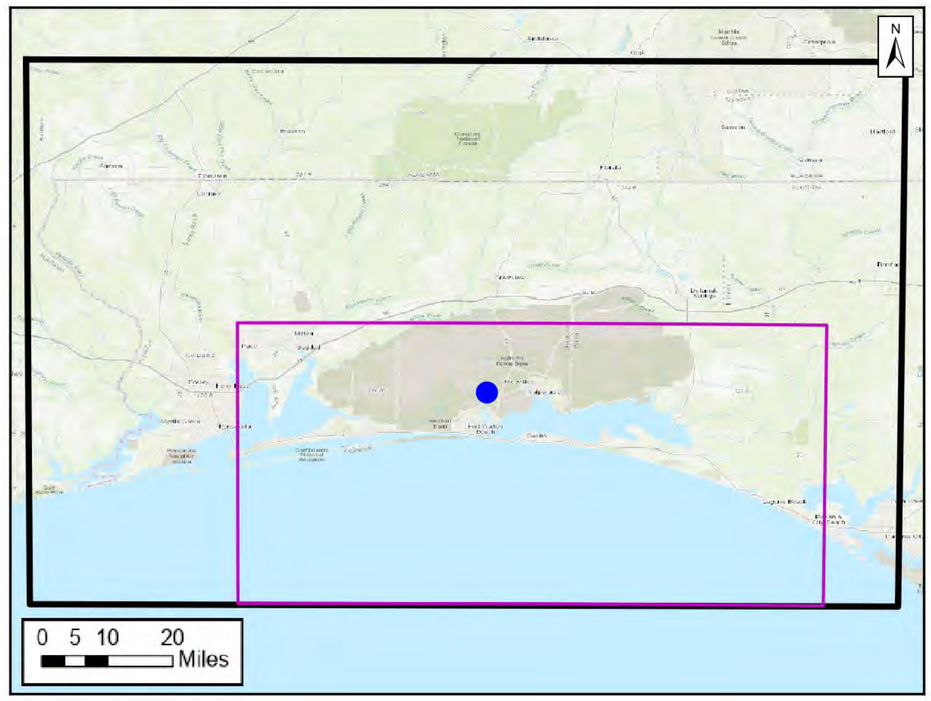
Hydrograph and location for well nwf_3101

TETRA TECH

Water Level Elevation (ft msl, NAVD88)



Location



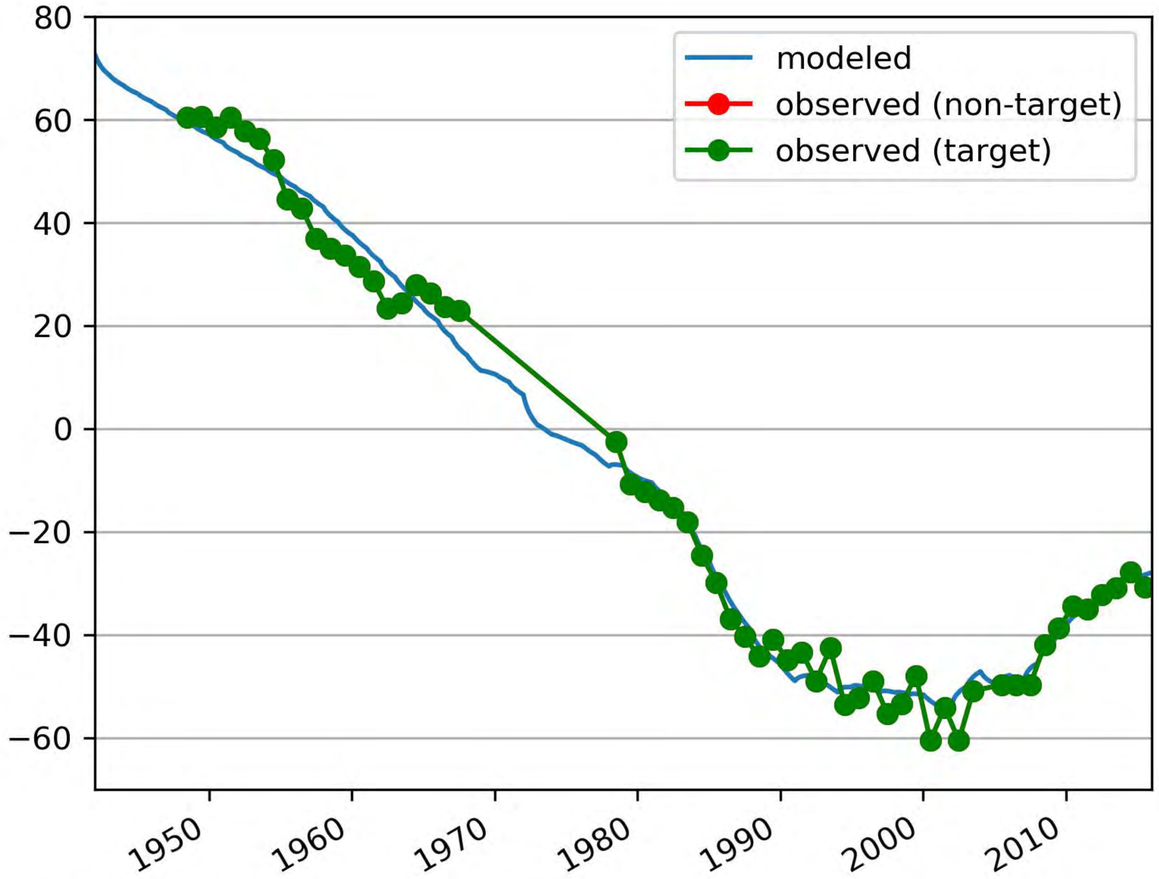
Number of measurements = 21
Mean residual (ft) = 31.16
Abs Mean residual (ft) = 31.16

Model layer = 2

Hydrograph and location for well nwf_3188

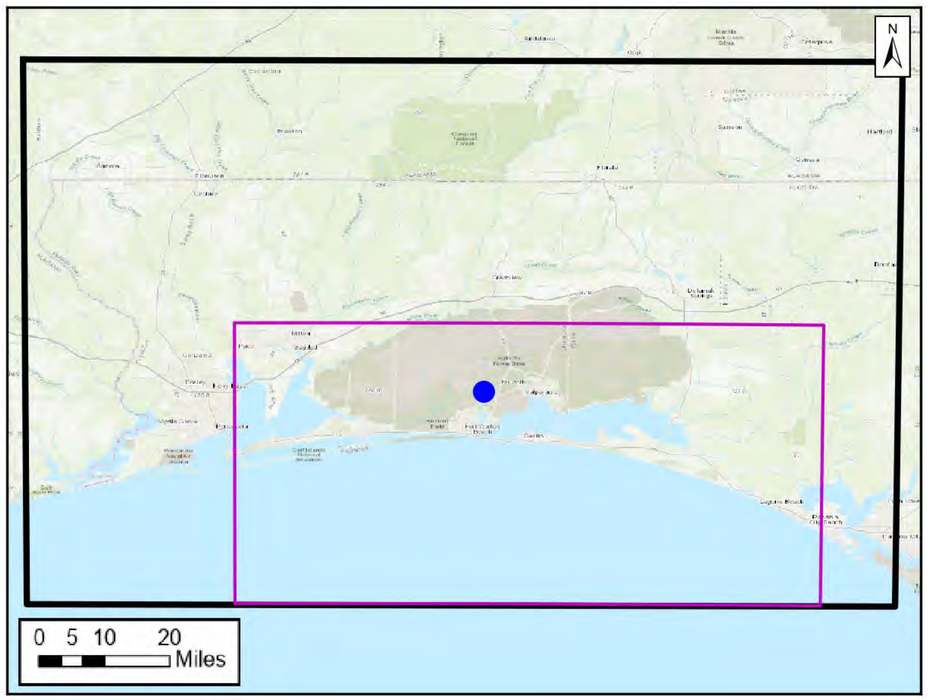
TETRA TECH

Water Level Elevation (ft msl, NAVD88)



Number of measurements = 57
Mean residual (ft) = -0.42
Abs Mean residual (ft) = 3.23

Location

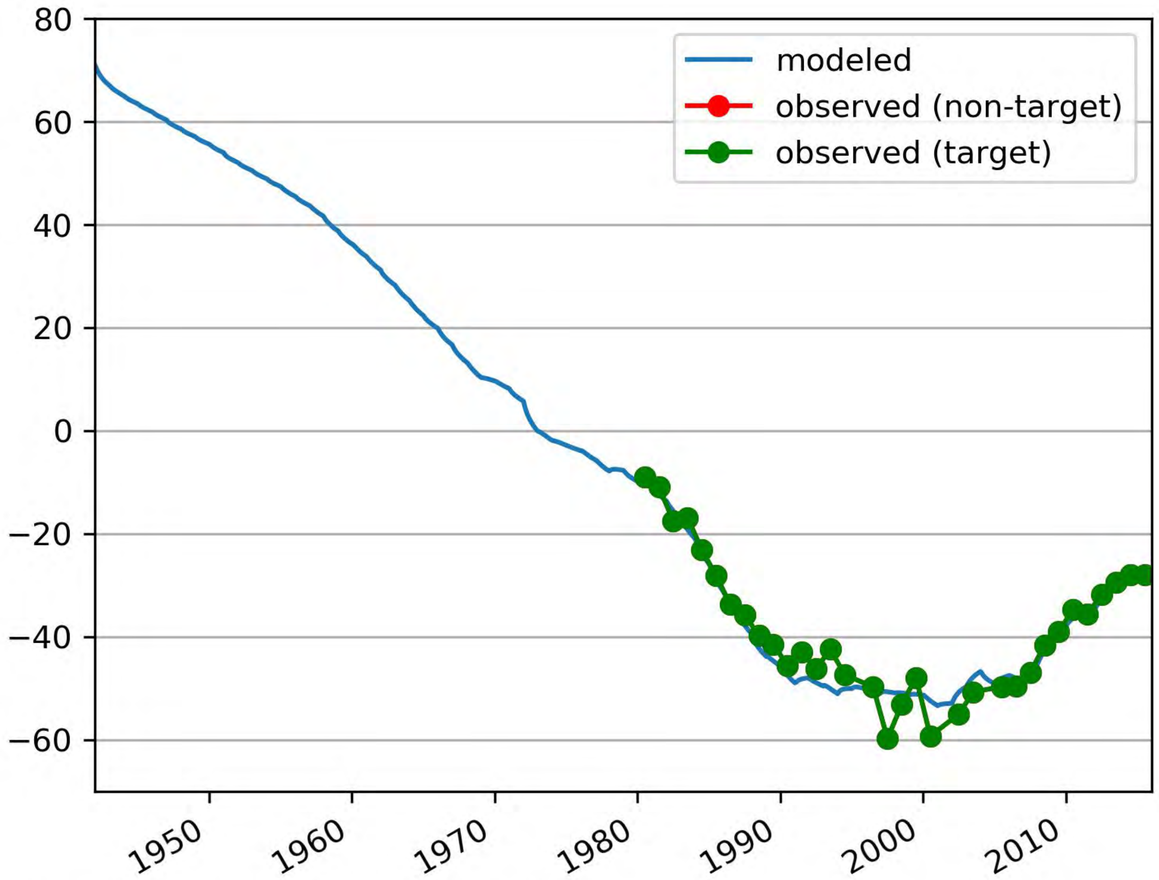


Model layer = 3

Hydrograph and location for well nwf_3209

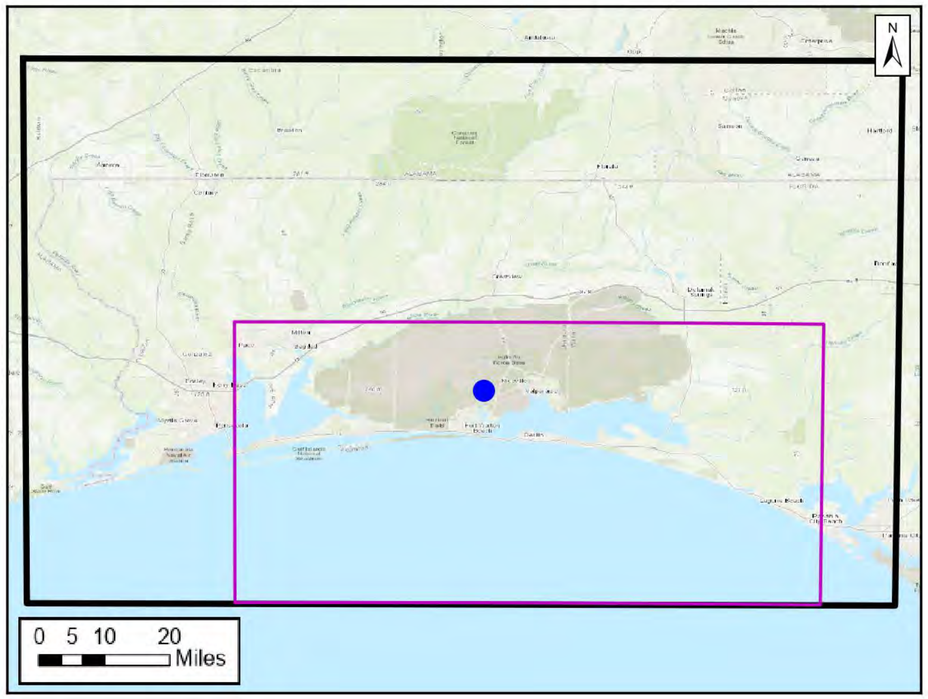
TETRA TECH

Water Level Elevation (ft msl, NAVD88)



Number of measurements = 33
Mean residual (ft) = 0.37
Abs Mean residual (ft) = 2.31

Location

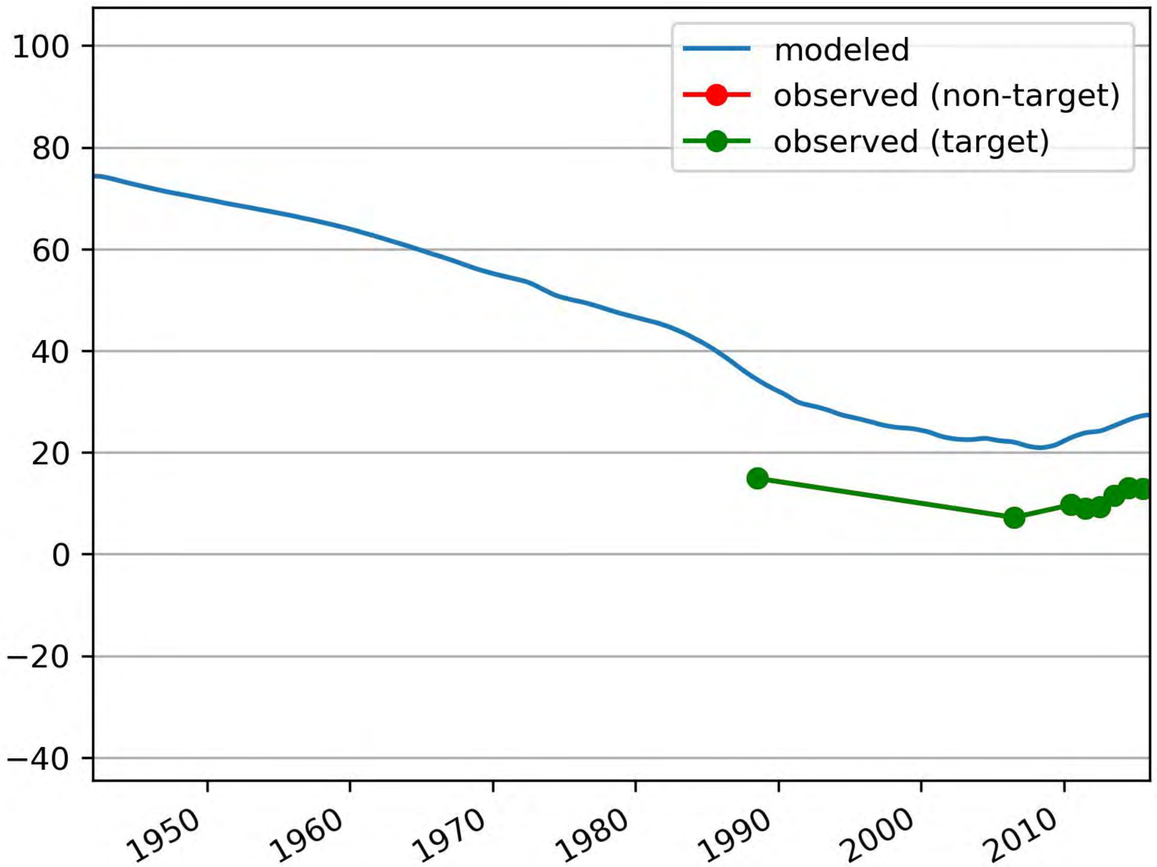


Model layer = 5

Hydrograph and location for well nwf_3210

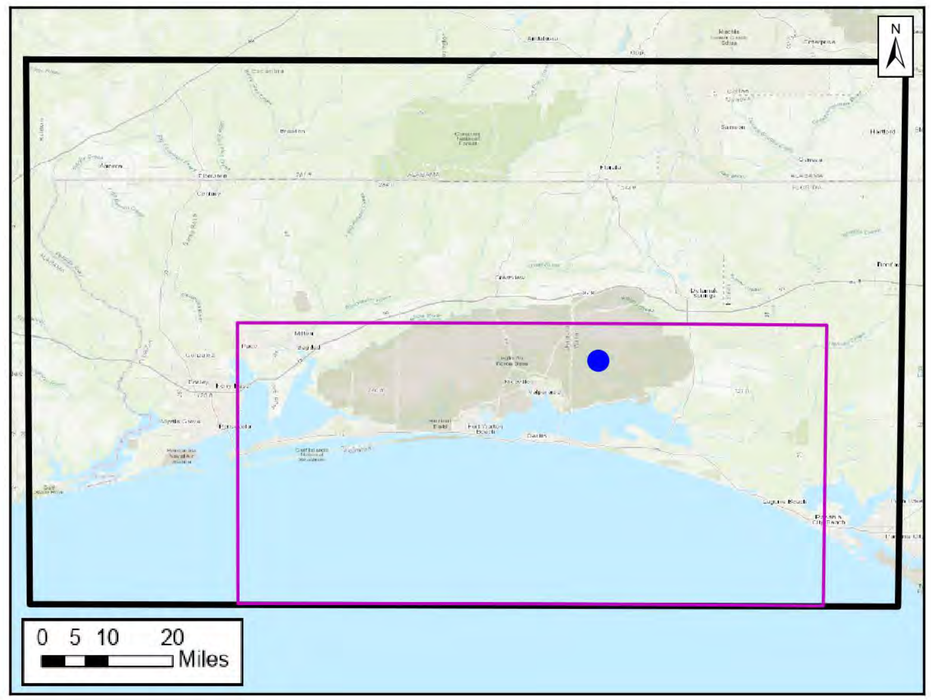
TETRA TECH

Water Level Elevation (ft msl, NAVD88)



Number of measurements = 8
Mean residual (ft) = -14.81
Abs Mean residual (ft) = 14.81

Location

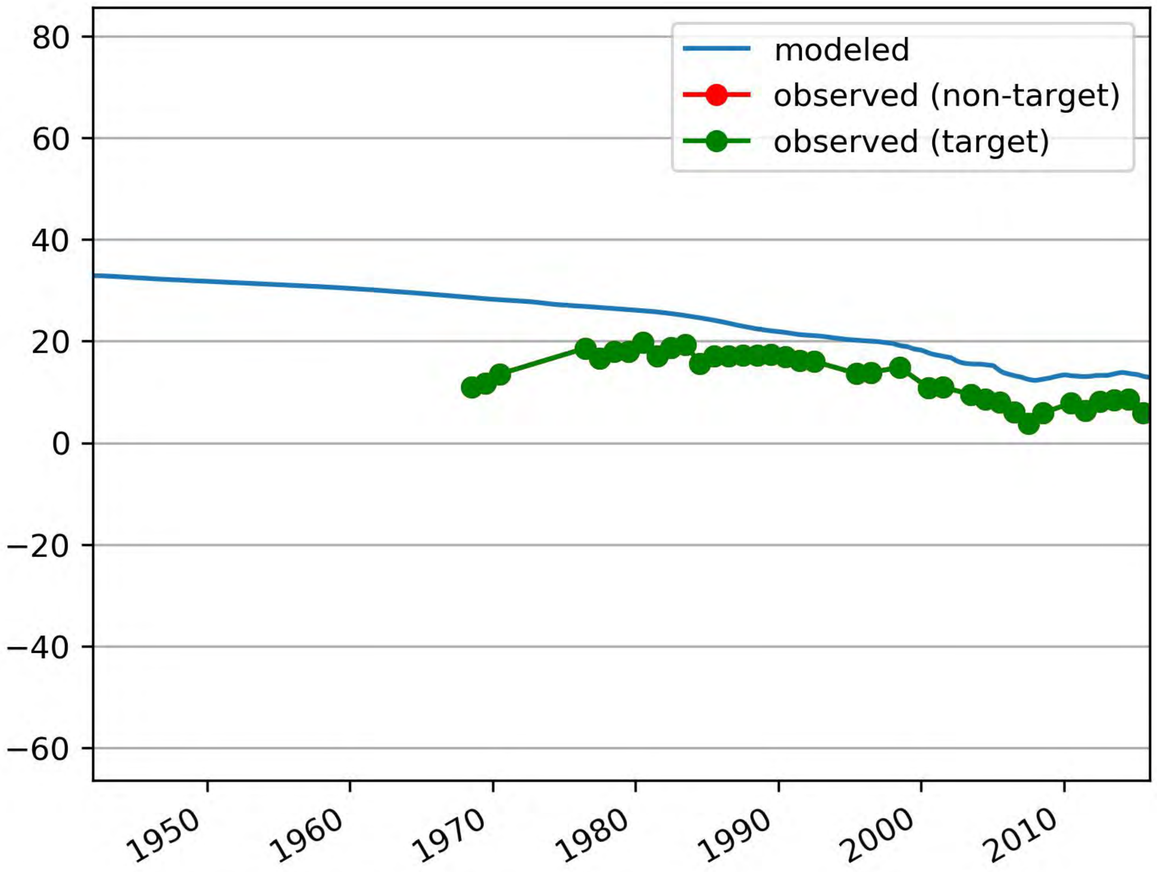


Model layer = 3

Hydrograph and location for well nwf_3280

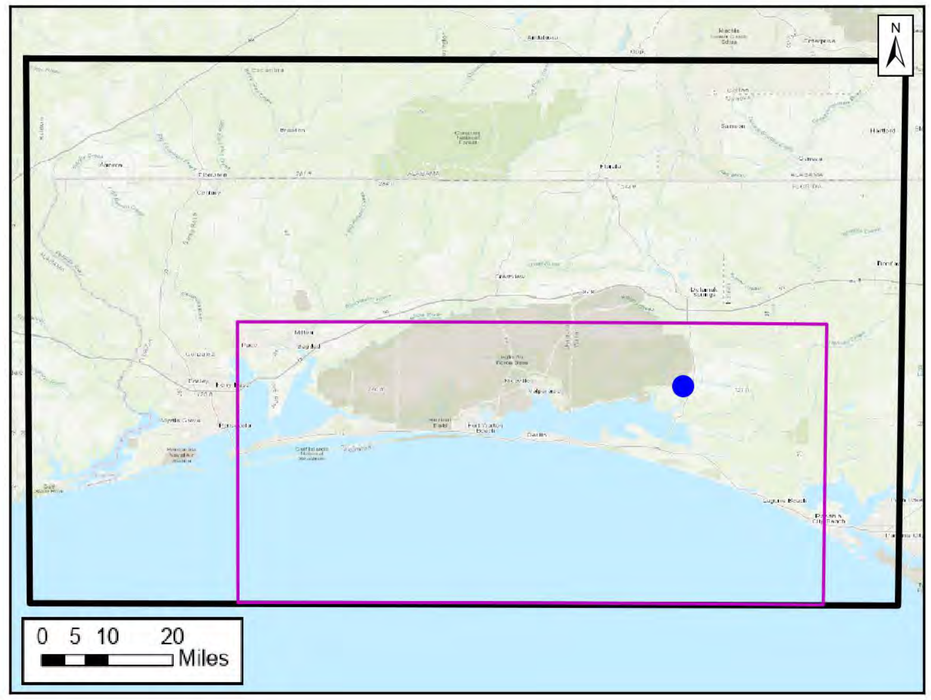
TETRA TECH

Water Level Elevation (ft msl, NAVD88)



Number of measurements = 37
Mean residual (ft) = -7.29
Abs Mean residual (ft) = 7.29

Location

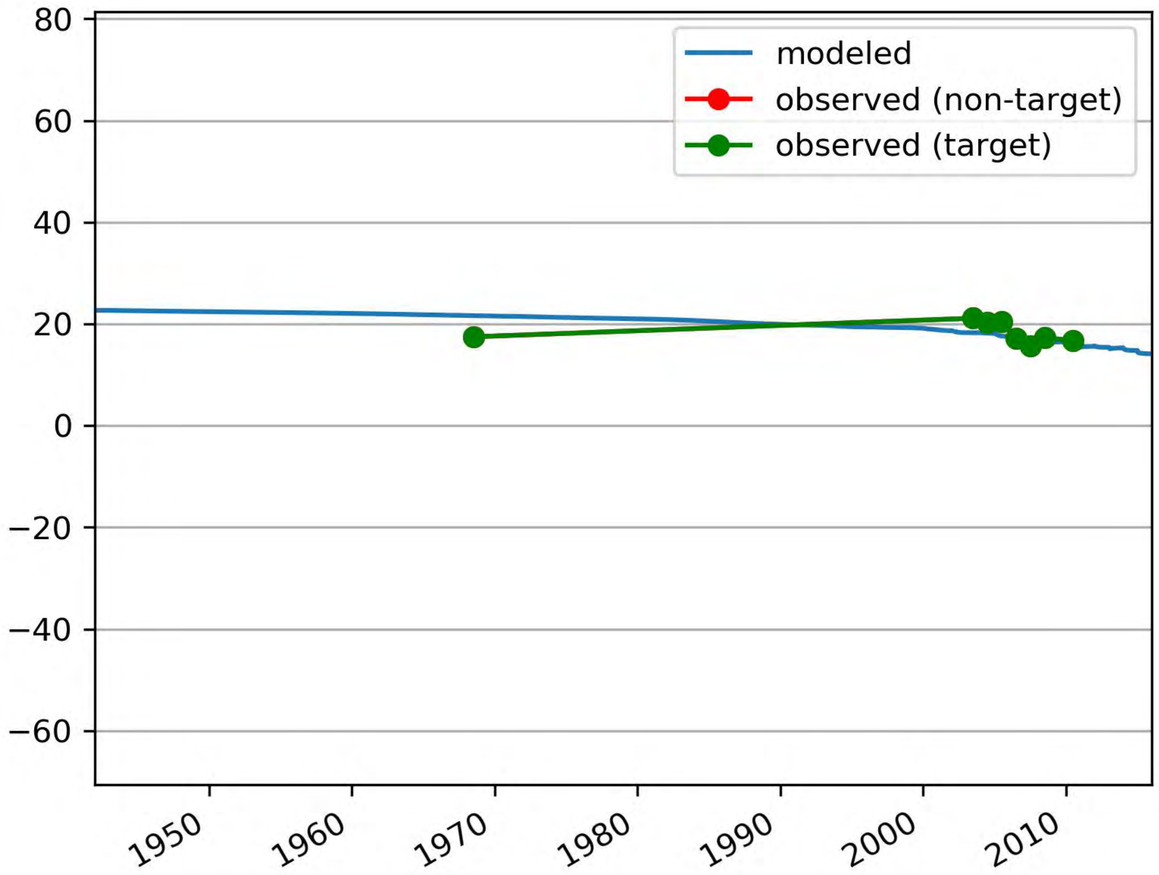


Model layer = 2

Hydrograph and location for well nwf_3293

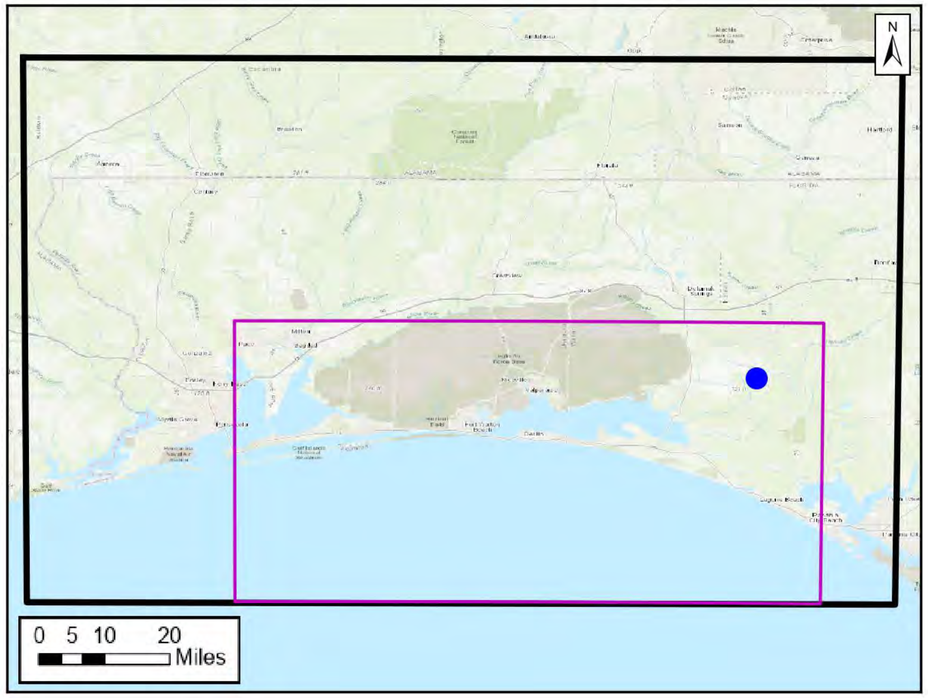
TETRA TECH

Water Level Elevation (ft msl, NAVD88)



Number of measurements = 8
Mean residual (ft) = 0.43
Abs Mean residual (ft) = 1.86

Location

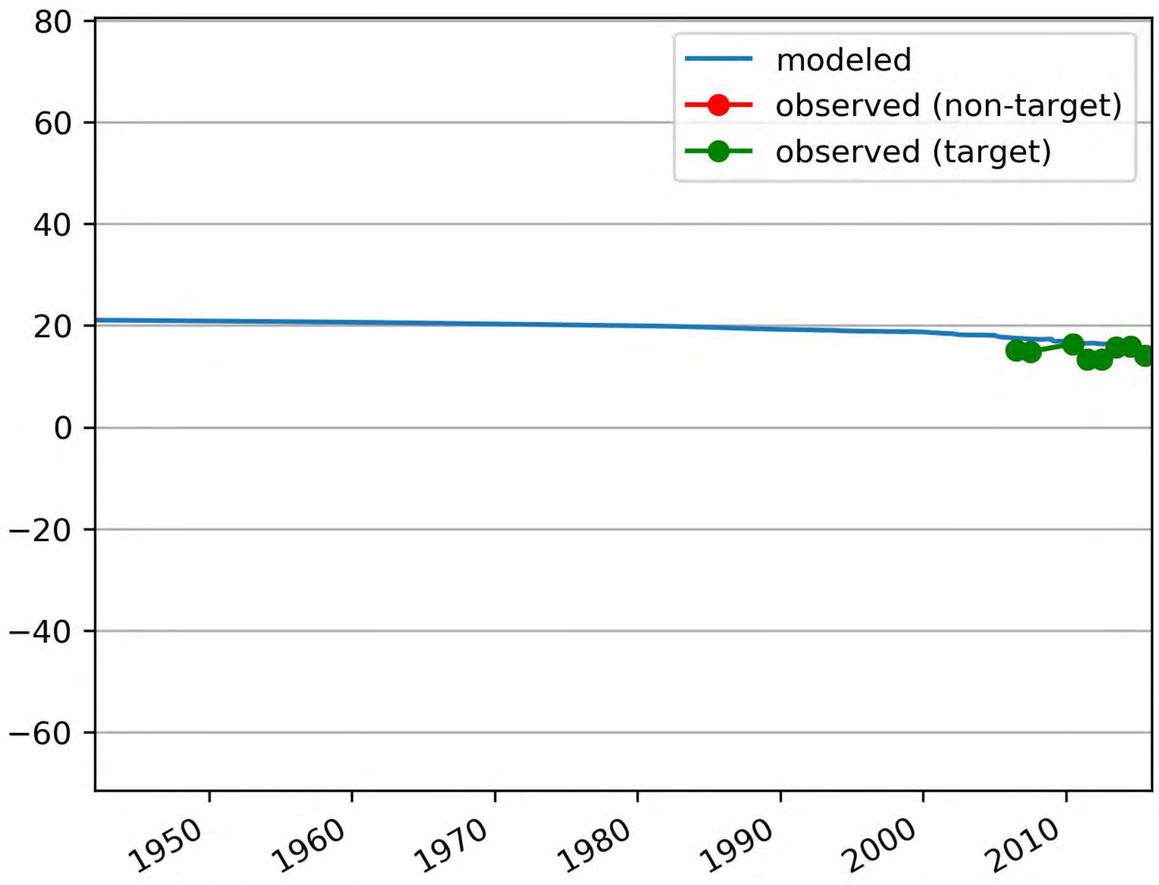


Model layer = 3

Hydrograph and location for well nwf_3441

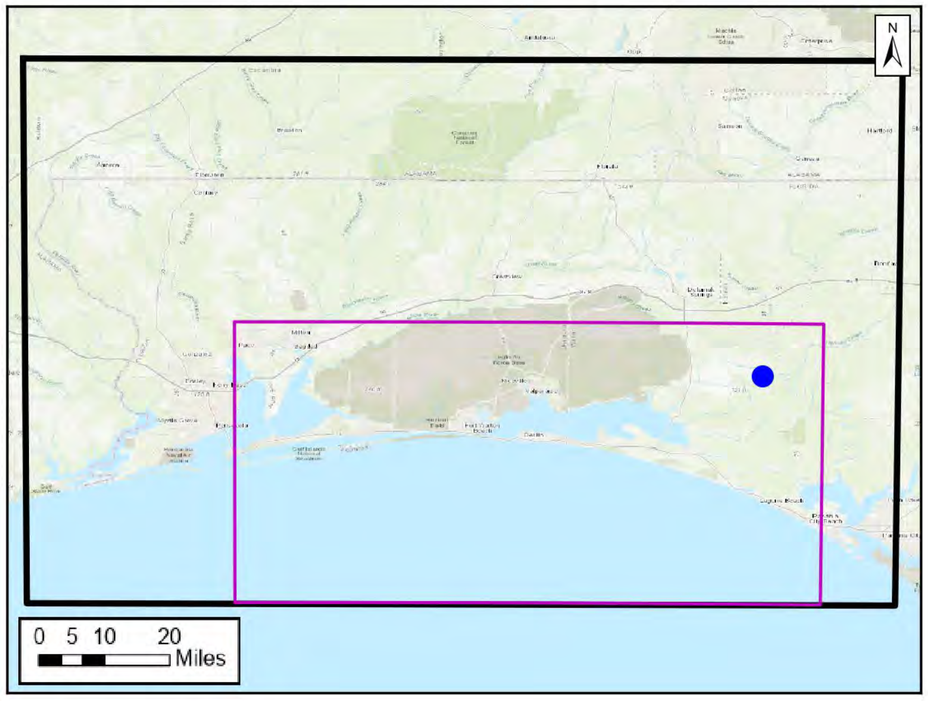
TETRA TECH

Water Level Elevation (ft msl, NAVD88)



Number of measurements = 8
Mean residual (ft) = -1.66
Abs Mean residual (ft) = 1.66

Location

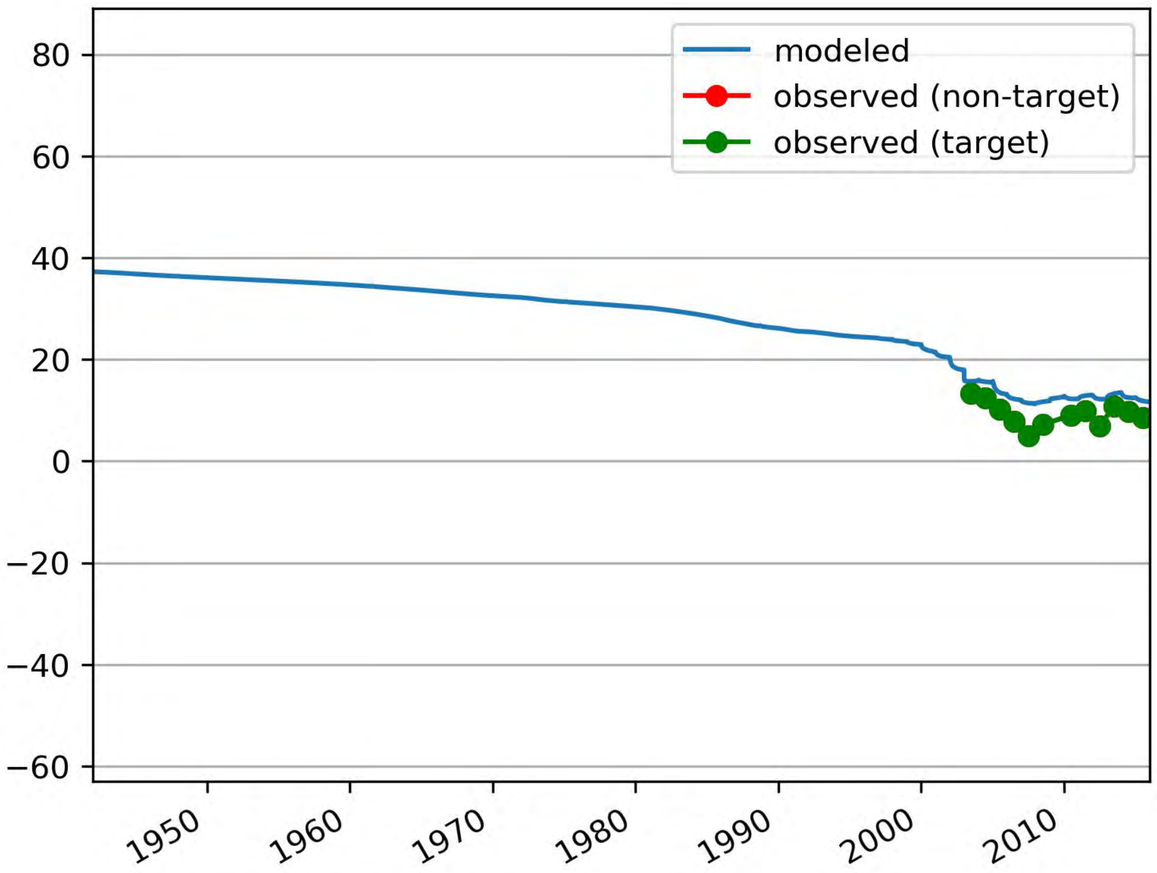


Model layer = 3

Hydrograph and location for well nwf_3502

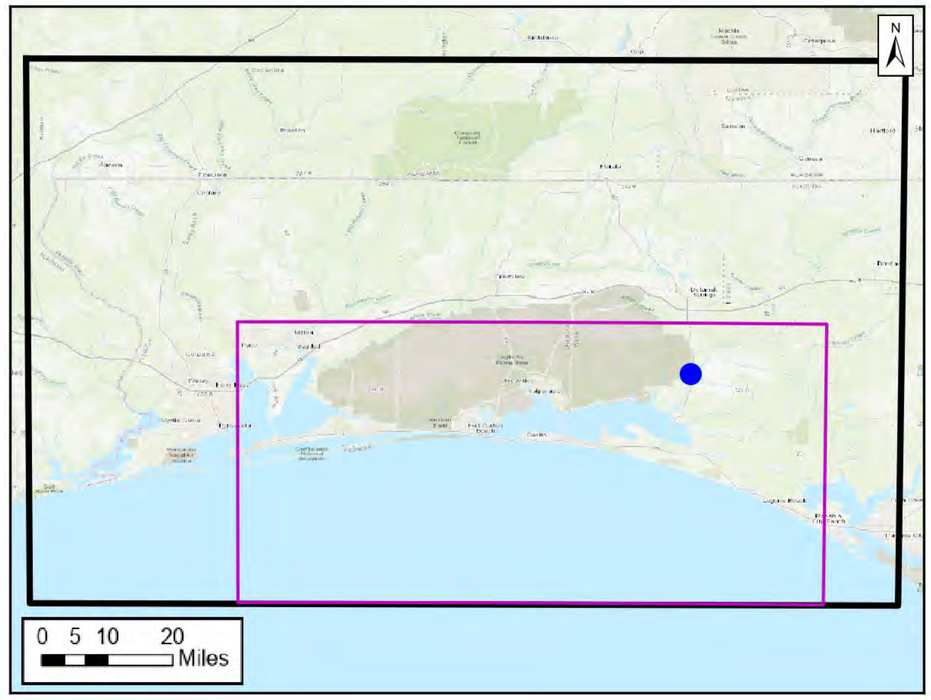
TETRA TECH

Water Level Elevation (ft msl, NAVD88)



Number of measurements = 12
Mean residual (ft) = -3.68
Abs Mean residual (ft) = 3.68

Location

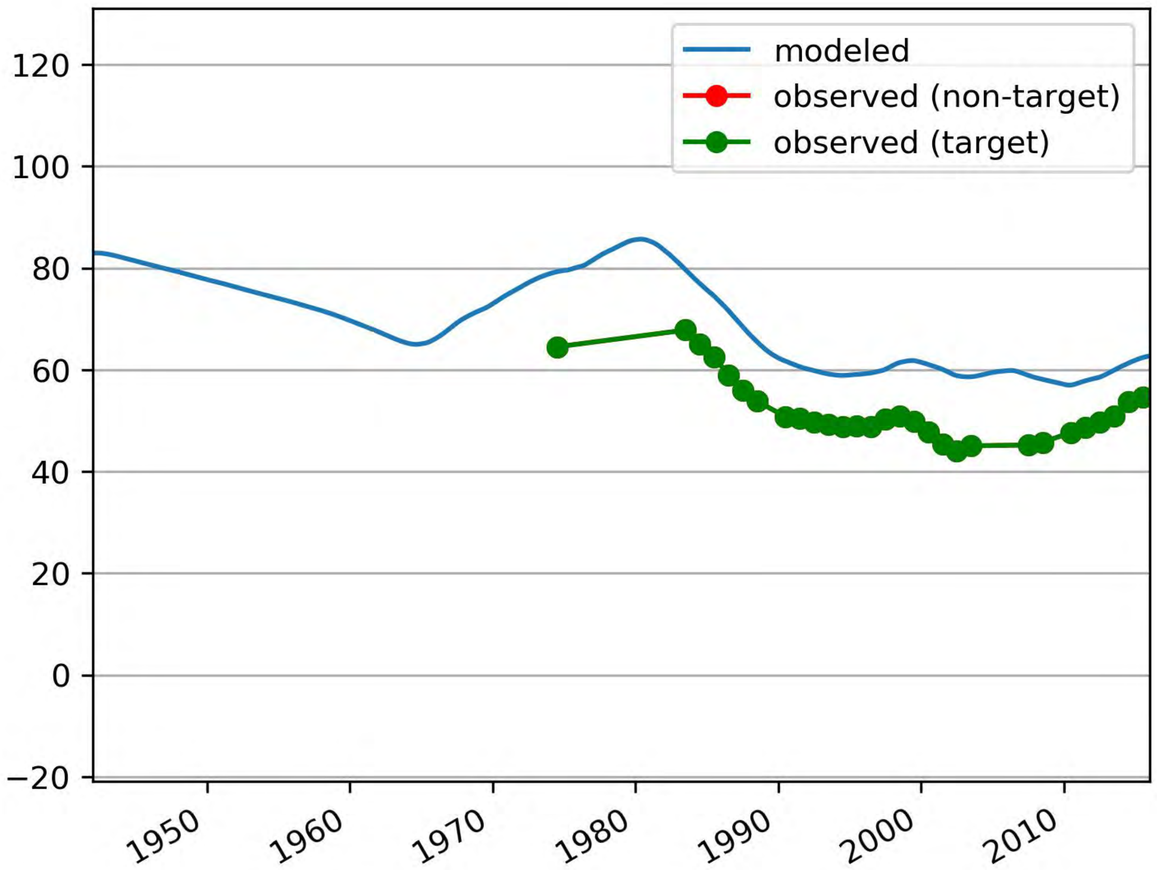


Model layer = 3

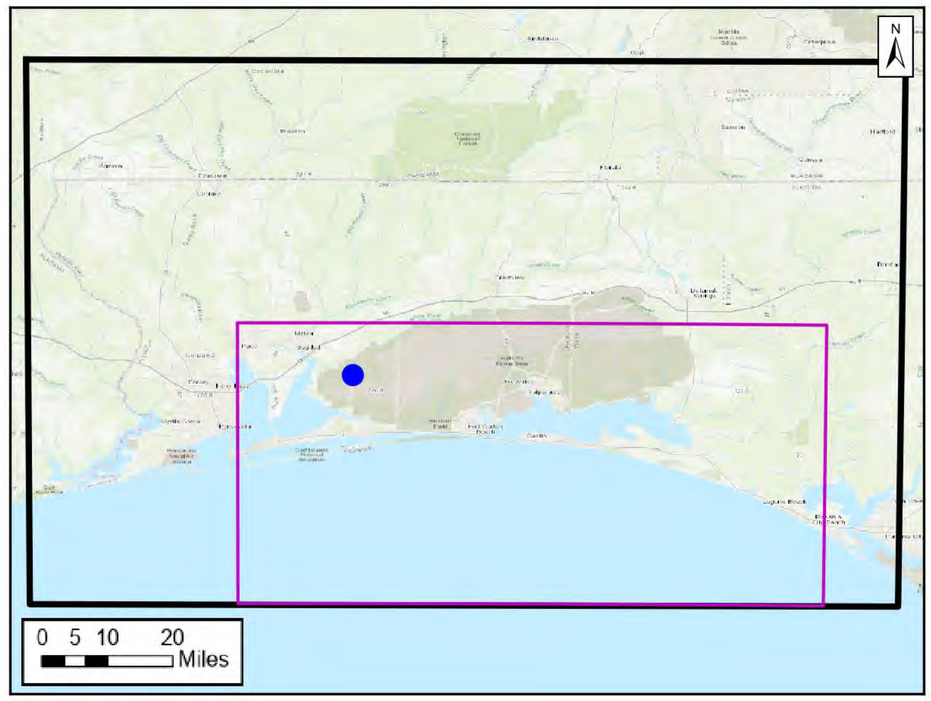
Hydrograph and location for well nwf_3540

TETRA TECH

Water Level Elevation (ft msl, NAVD88)



Location



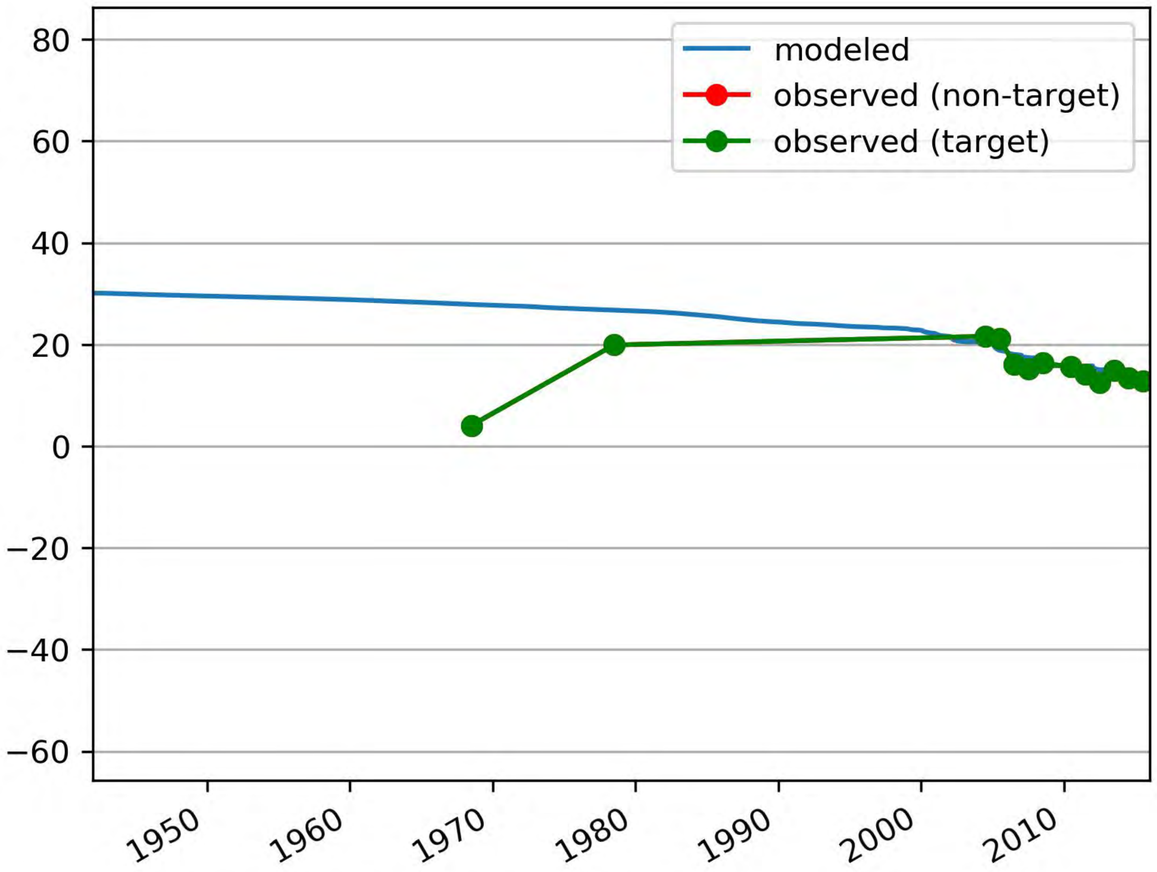
Number of measurements = 29
Mean residual (ft) = -11.24
Abs Mean residual (ft) = 11.24

Model layer = 5

Hydrograph and location for well nwf_3555

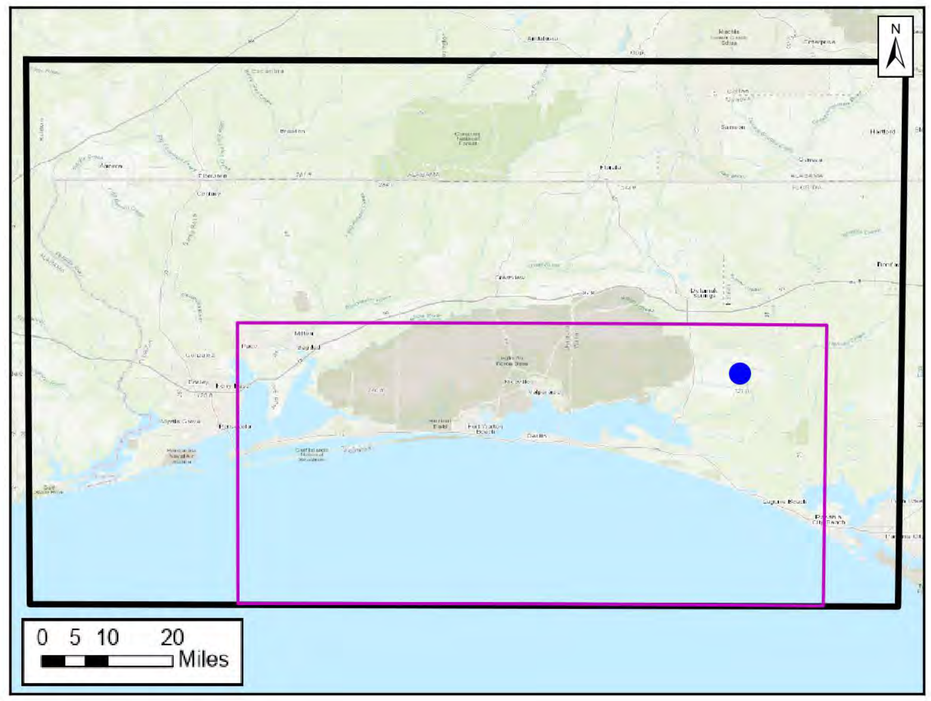
TETRA TECH

Water Level Elevation (ft msl, NAVD88)



Number of measurements = 13
Mean residual (ft) = -2.94
Abs Mean residual (ft) = 3.51

Location

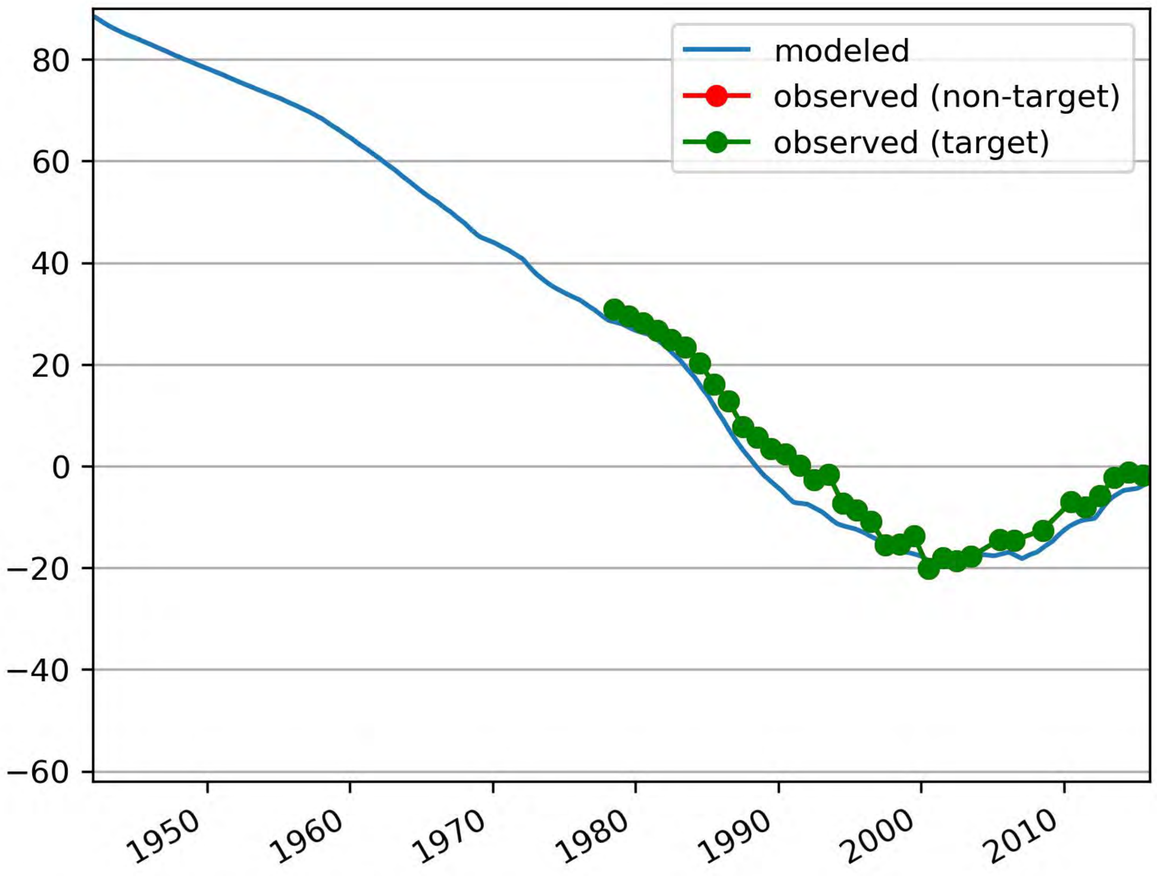


Model layer = 3

Hydrograph and location for well nwf_3588

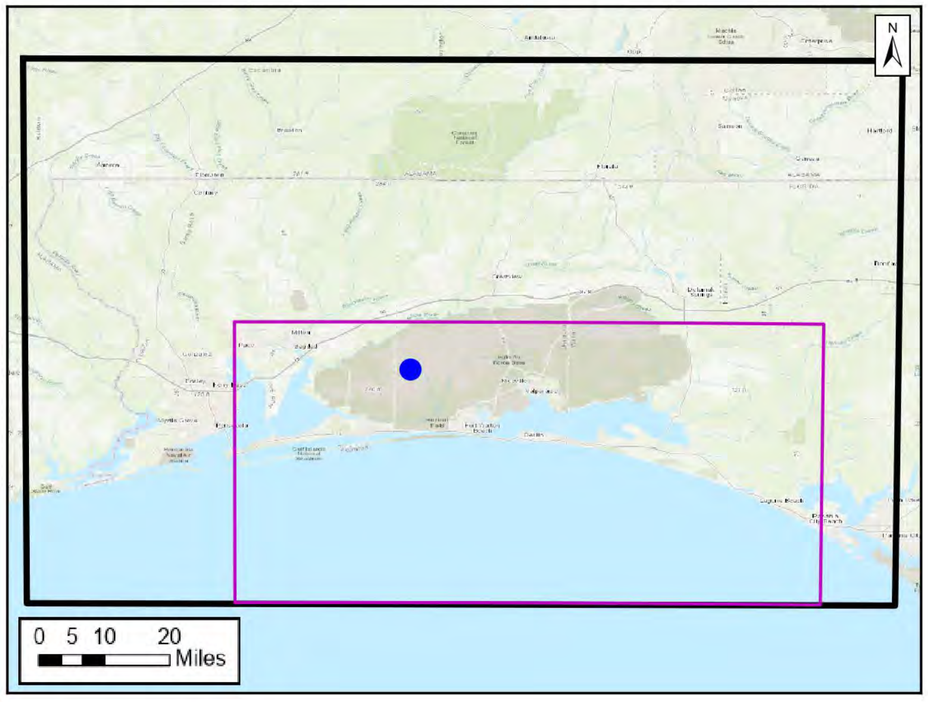
TETRA TECH

Water Level Elevation (ft msl, NAVD88)



Number of measurements = 35
Mean residual (ft) = 3.44
Abs Mean residual (ft) = 3.55

Location

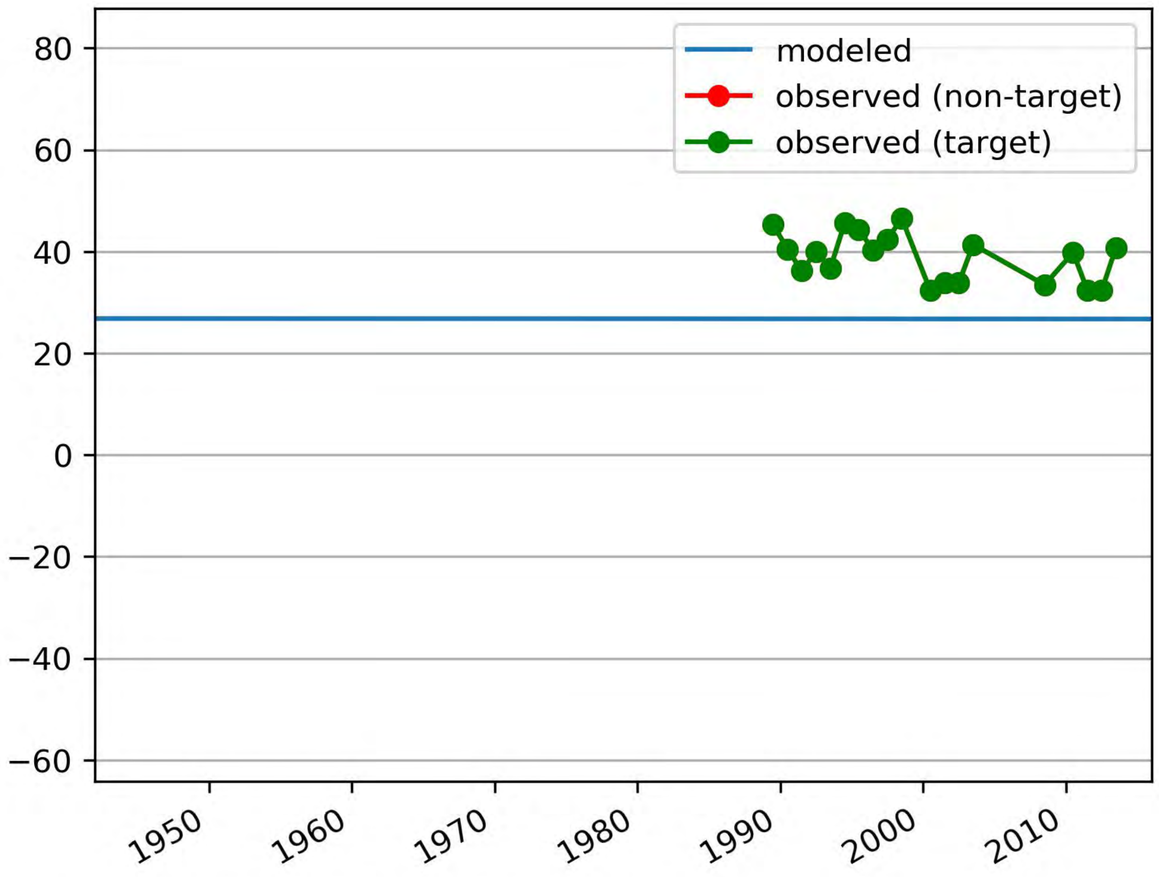


Model layer = 3

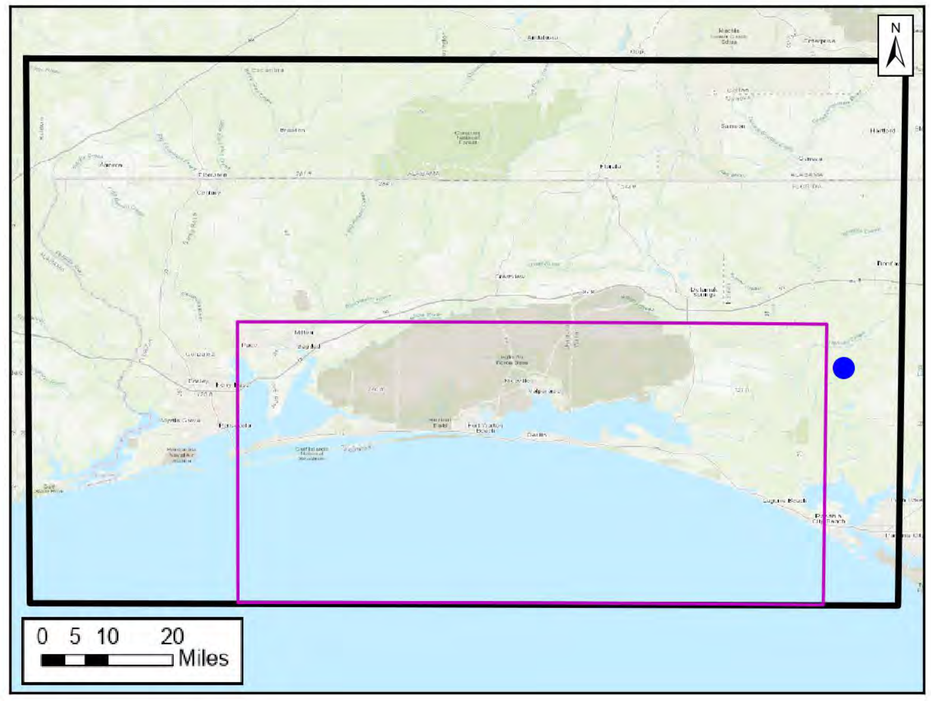
Hydrograph and location for well nwf_3642

TETRA TECH

Water Level Elevation (ft msl, NAVD88)



Location



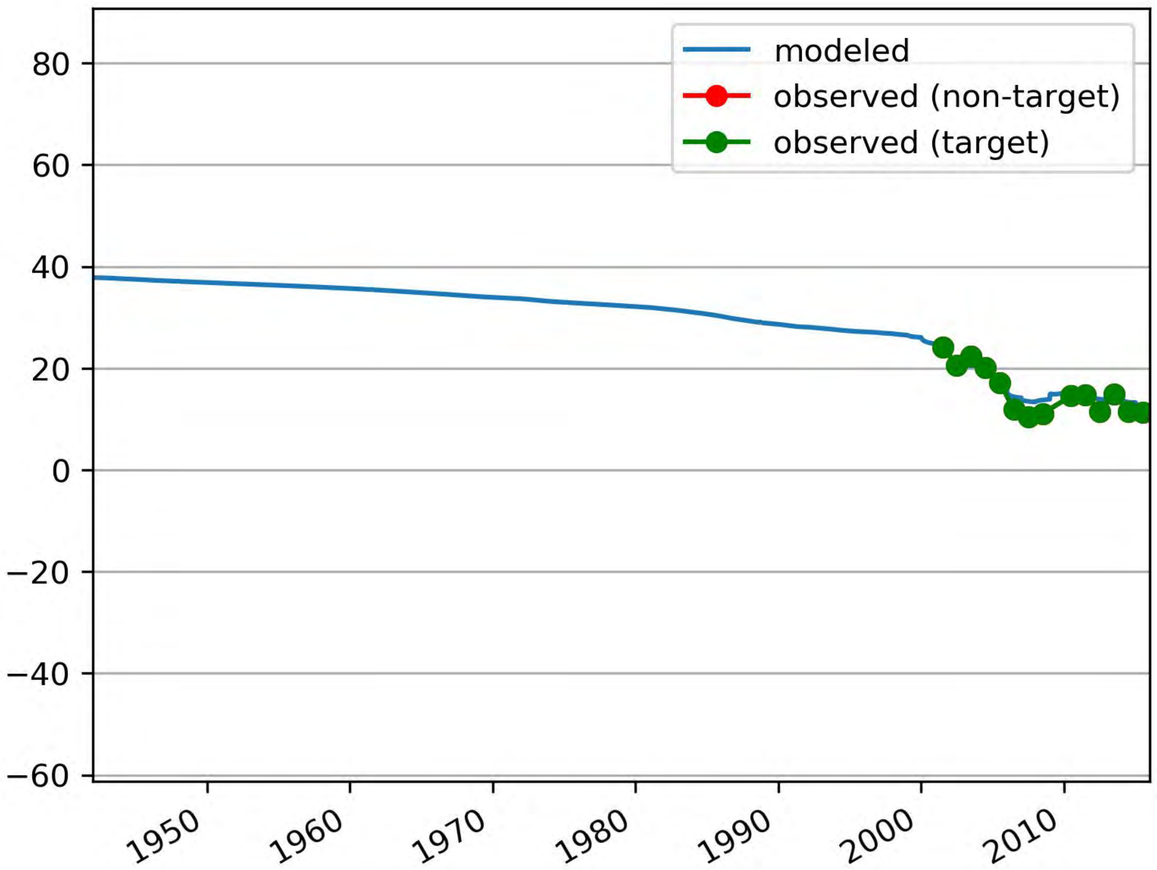
Number of measurements = 19
Mean residual (ft) = 12.08
Abs Mean residual (ft) = 12.08

Model layer = 3

Hydrograph and location for well nwf_3680

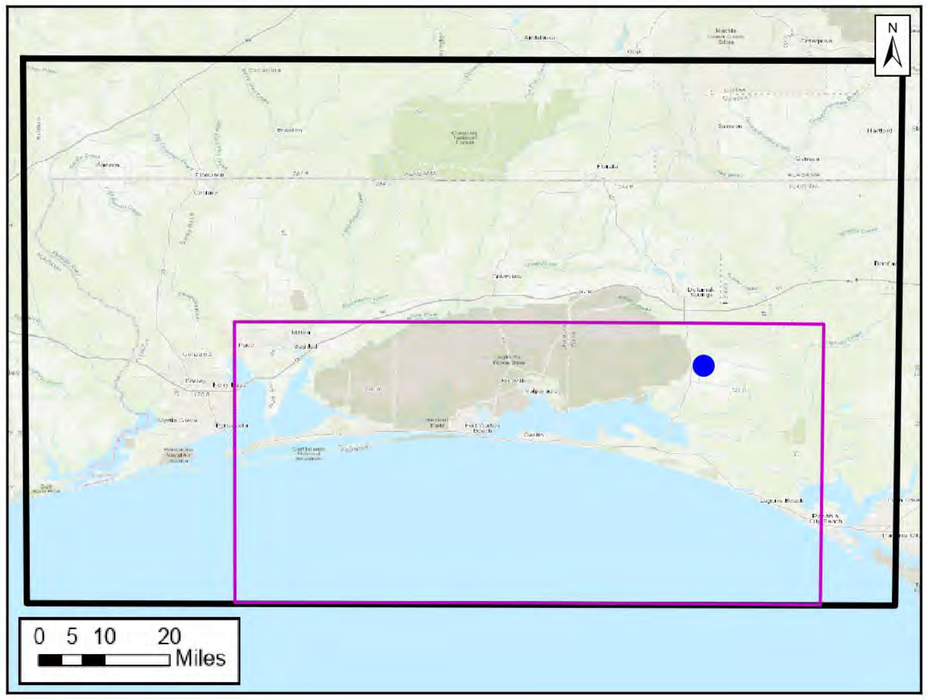
TETRA TECH

Water Level Elevation (ft msl, NAVD88)



Number of measurements = 14
Mean residual (ft) = -0.66
Abs Mean residual (ft) = 1.36

Location

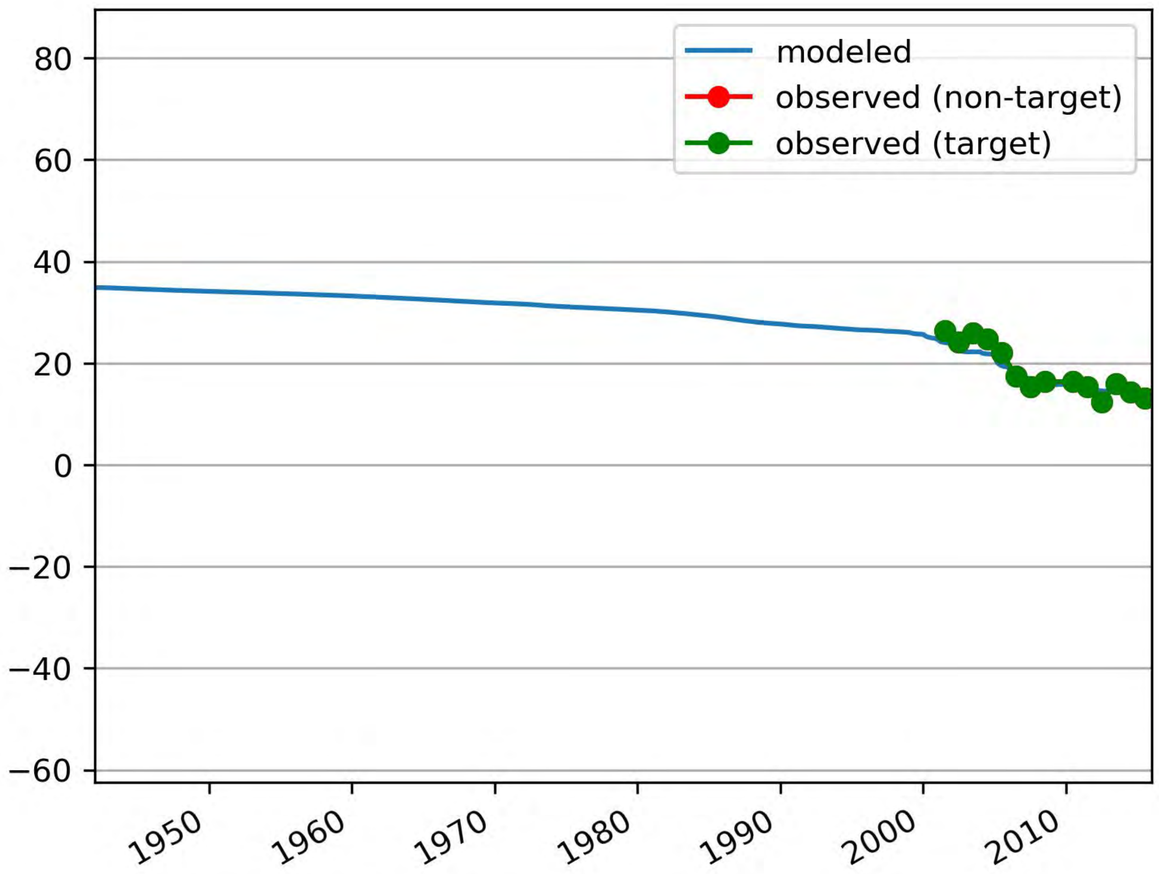


Model layer = 3

Hydrograph and location for well nwf_3711

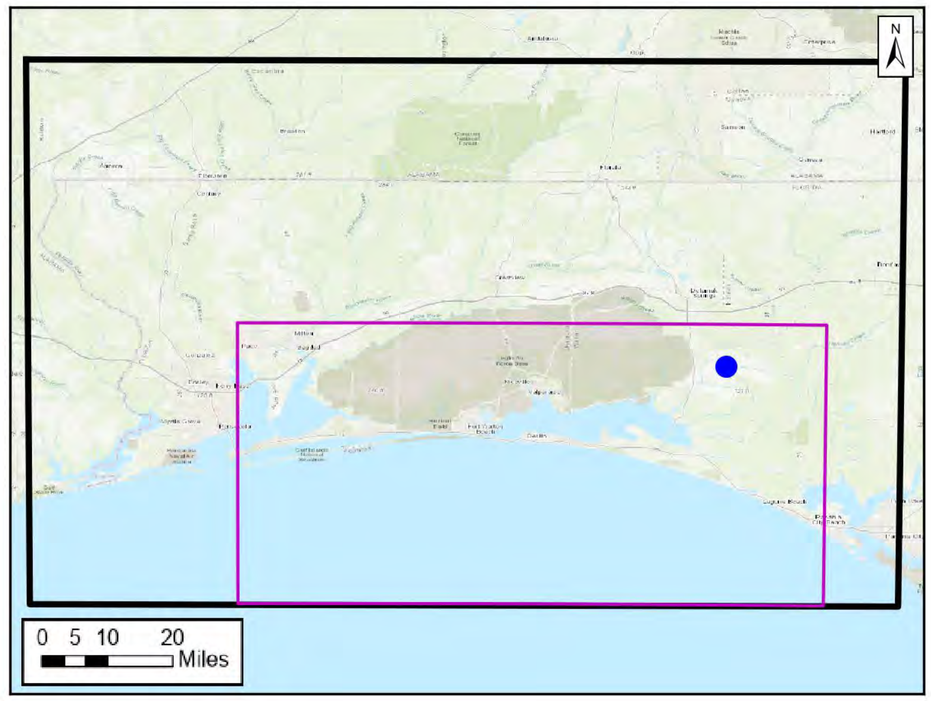
TETRA TECH

Water Level Elevation (ft msl, NAVD88)



Number of measurements = 14
Mean residual (ft) = 0.69
Abs Mean residual (ft) = 1.53

Location

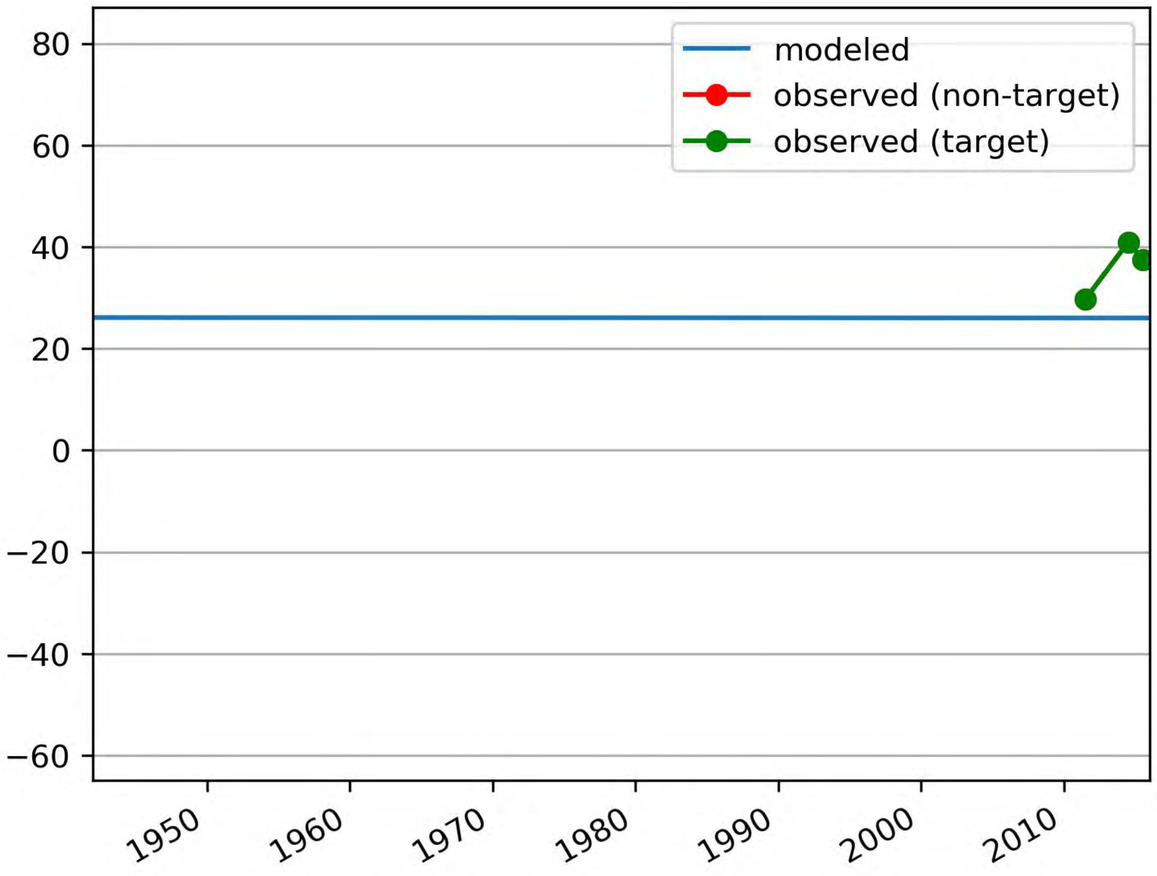


Model layer = 3

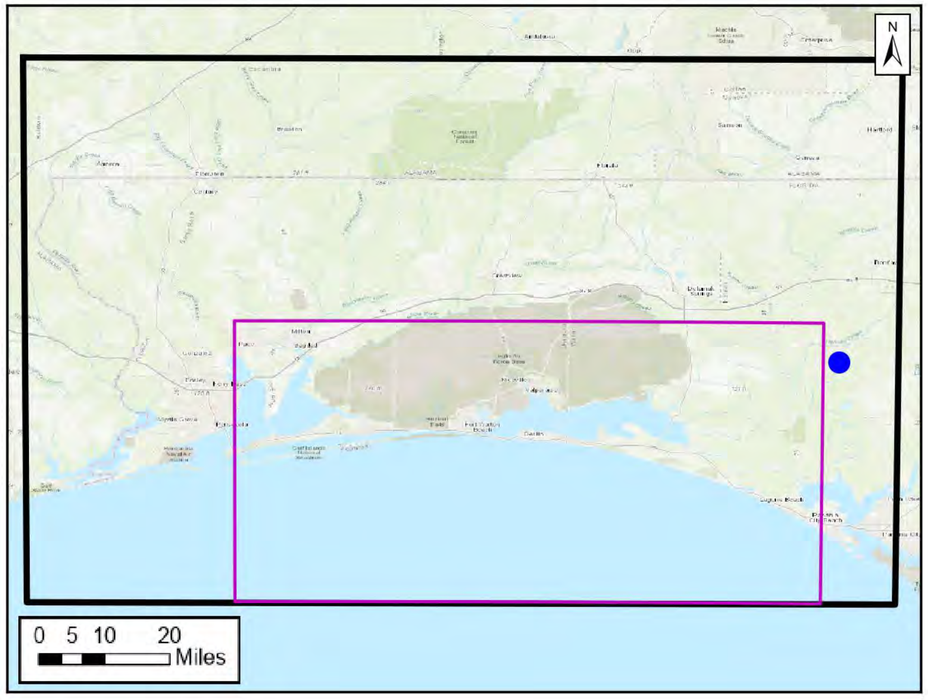
Hydrograph and location for well nwf_3718

TETRA TECH

Water Level Elevation (ft msl, NAVD88)



Location



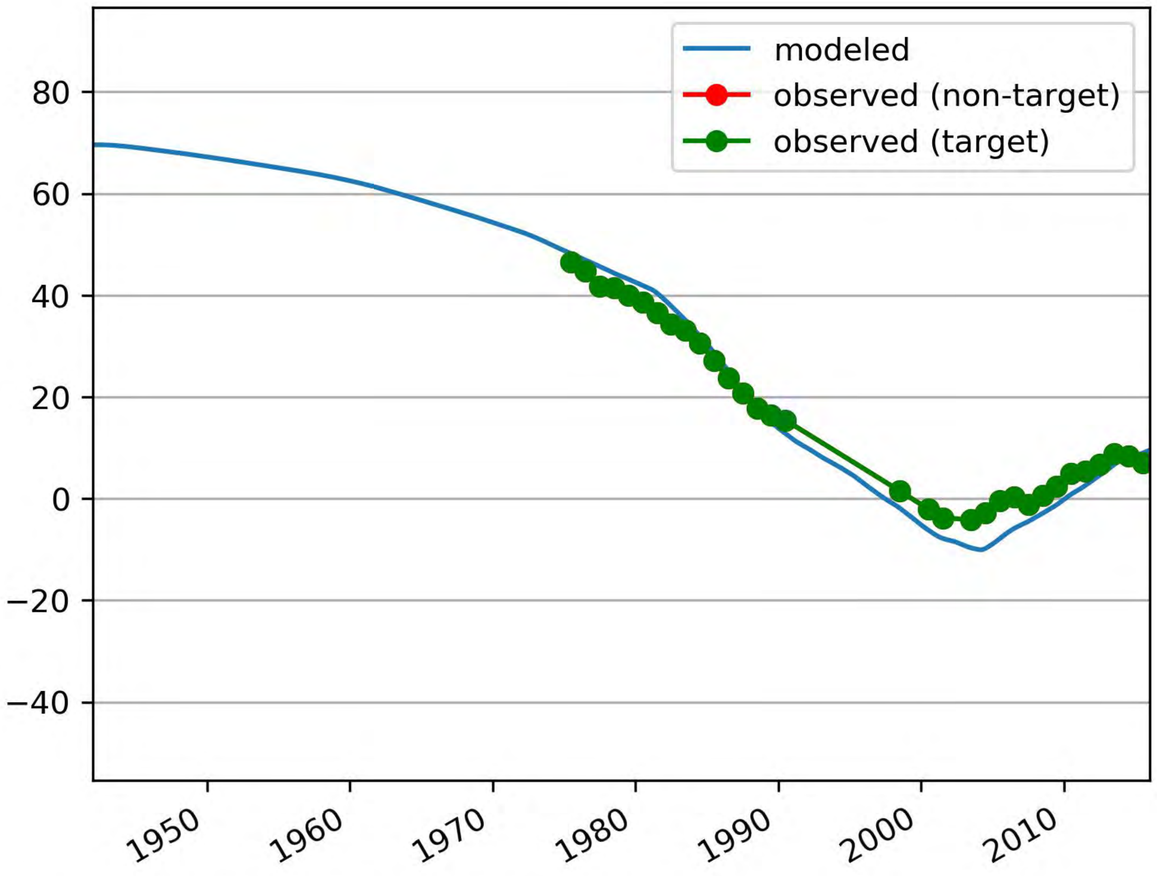
Number of measurements = 3
Mean residual (ft) = 10.04
Abs Mean residual (ft) = 10.04

Model layer = 3

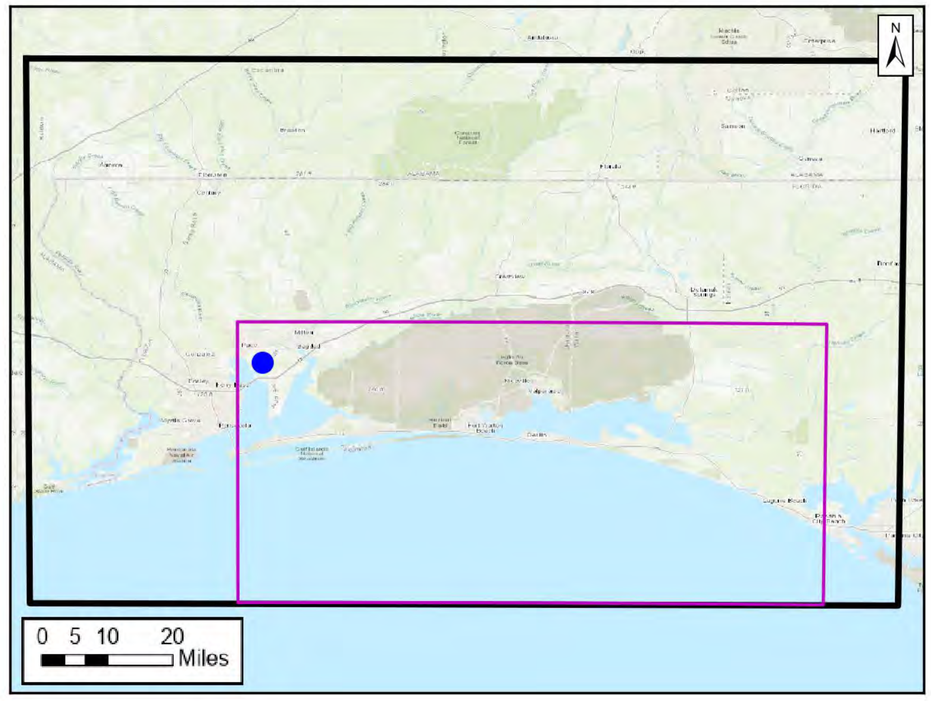
Hydrograph and location for well nwf_3760

TETRA TECH

Water Level Elevation (ft msl, NAVD88)



Location



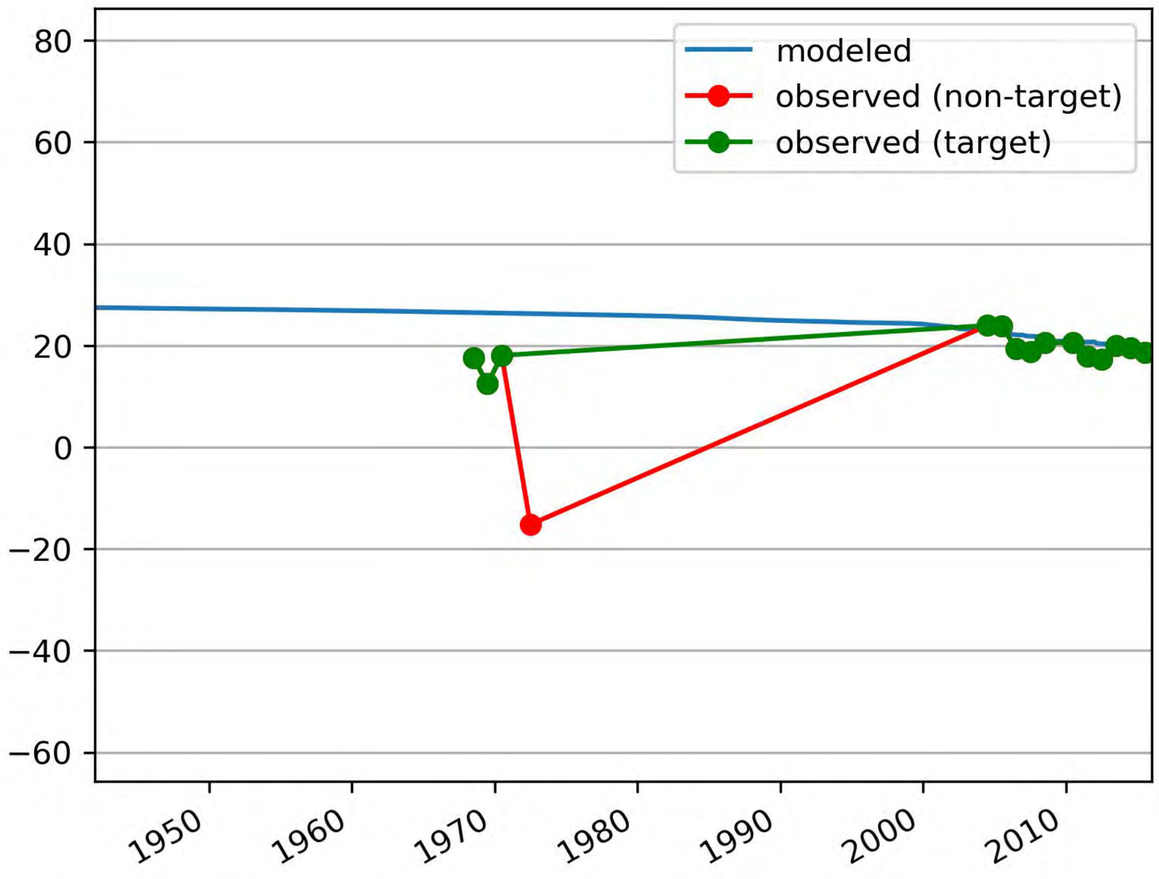
Number of measurements = 32
Mean residual (ft) = 0.93
Abs Mean residual (ft) = 3.03

Model layer = 3

Hydrograph and location for well nwf_3771

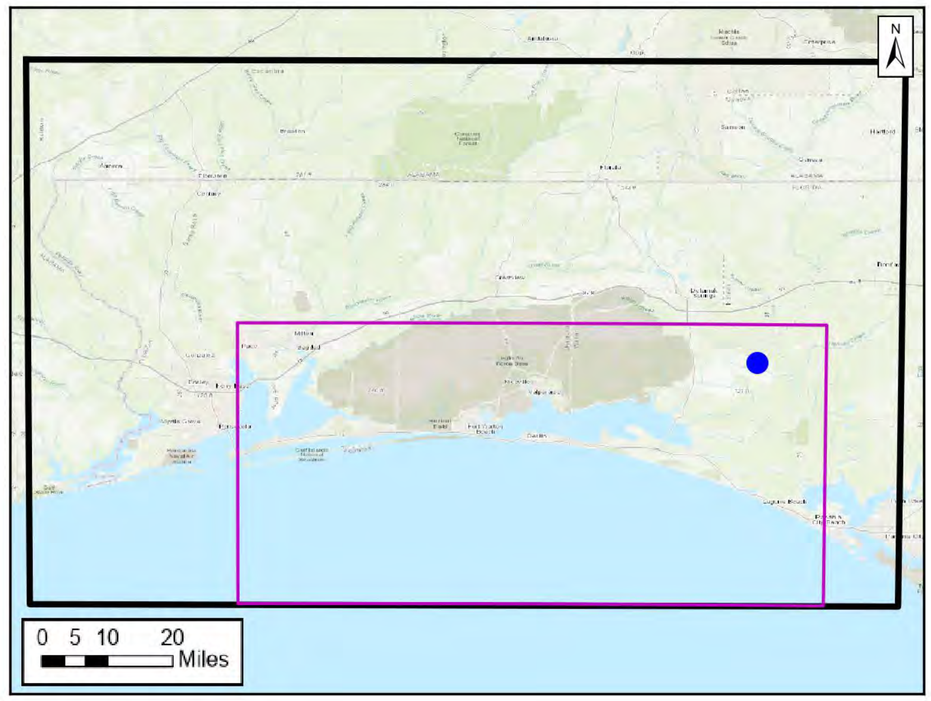
TETRA TECH

Water Level Elevation (ft msl, NAVD88)



Number of measurements = 15
Mean residual (ft) = -5.63
Abs Mean residual (ft) = 5.93

Location

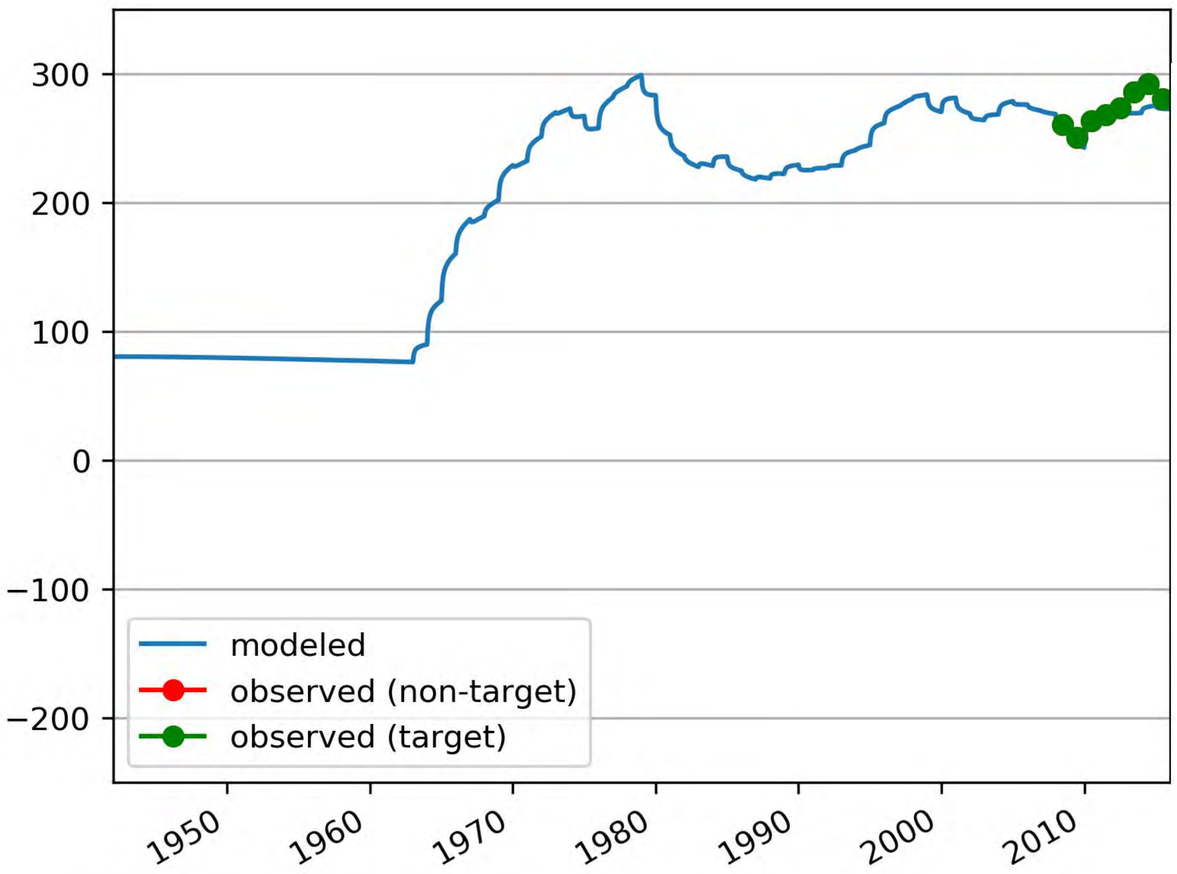


Model layer = 3

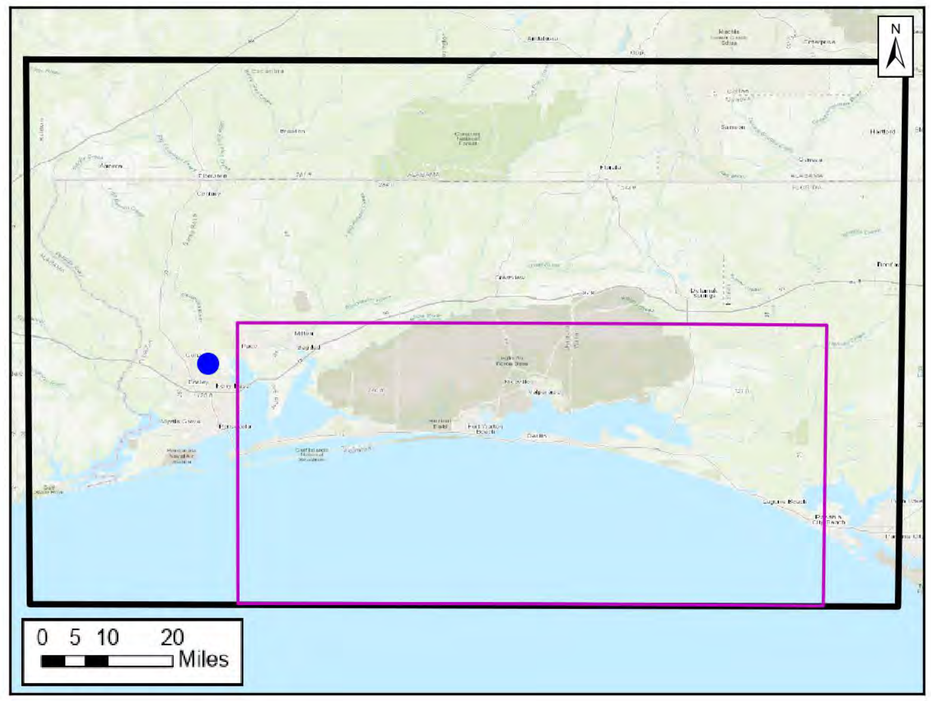
Hydrograph and location for well nwf_3780

TETRA TECH

Water Level Elevation (ft msl, NAVD88)



Location



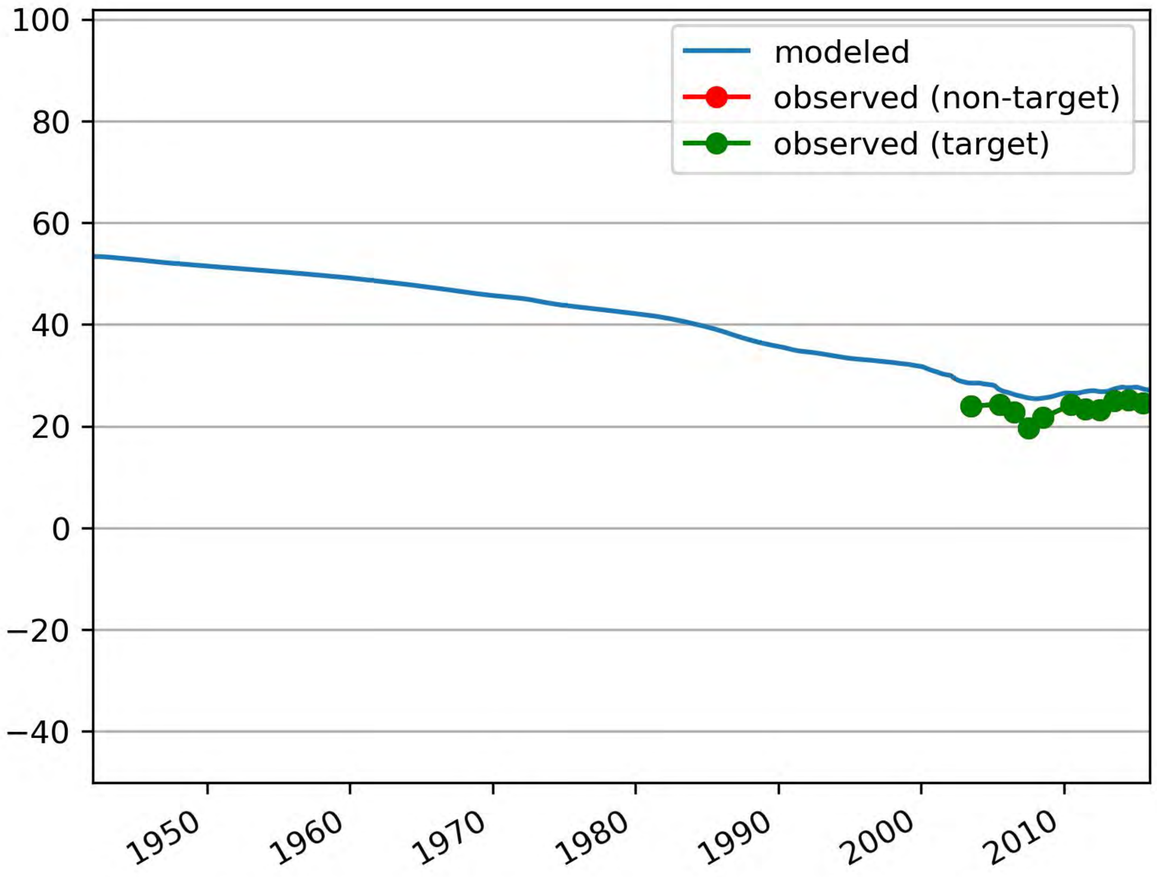
Number of measurements = 8
Mean residual (ft) = 7.31
Abs Mean residual (ft) = 7.31

Model layer = 5

Hydrograph and location for well nwf_3783

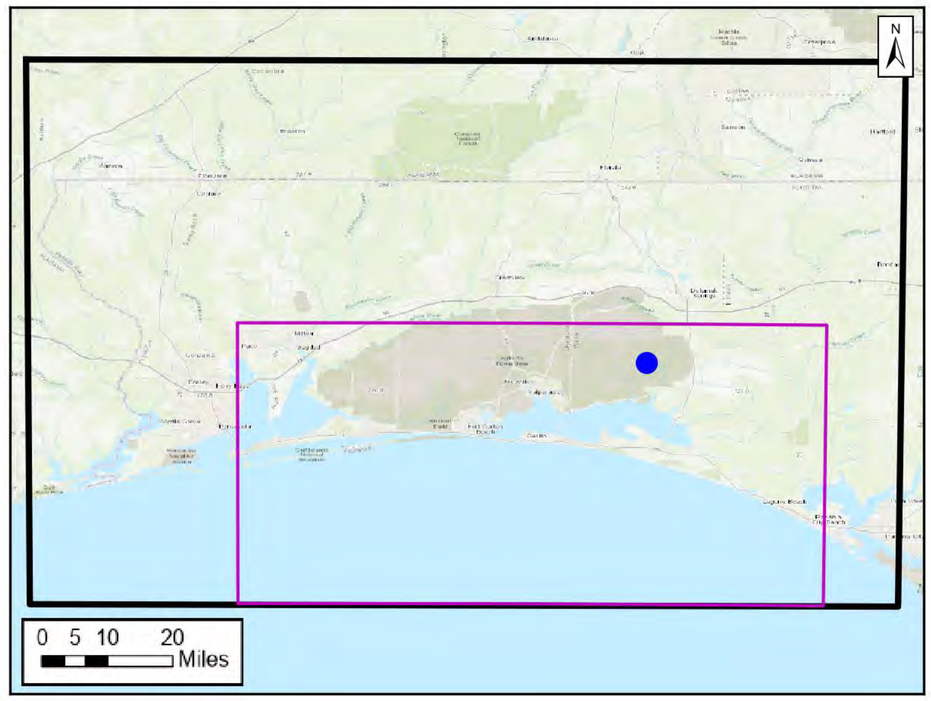
TETRA TECH

Water Level Elevation (ft msl, NAVD88)



Number of measurements = 11
Mean residual (ft) = -3.42
Abs Mean residual (ft) = 3.42

Location

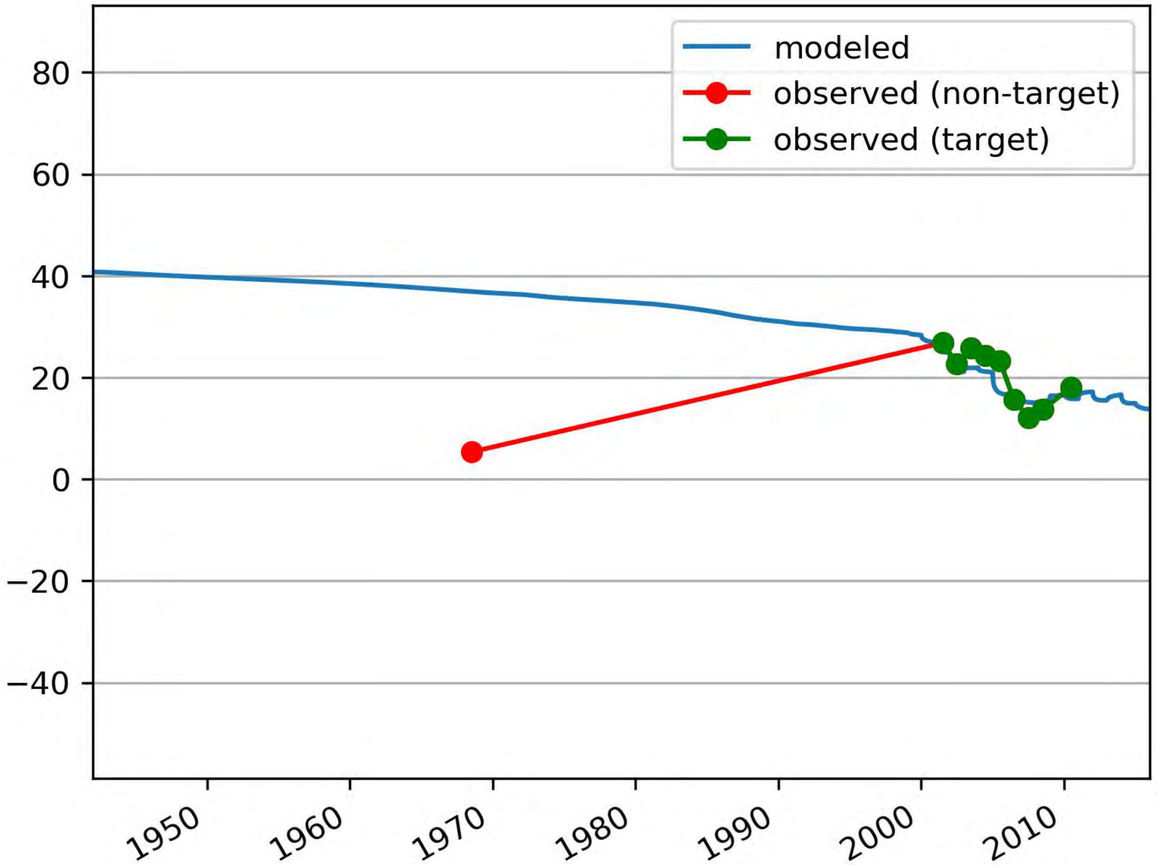


Model layer = 3

Hydrograph and location for well nwf_3797

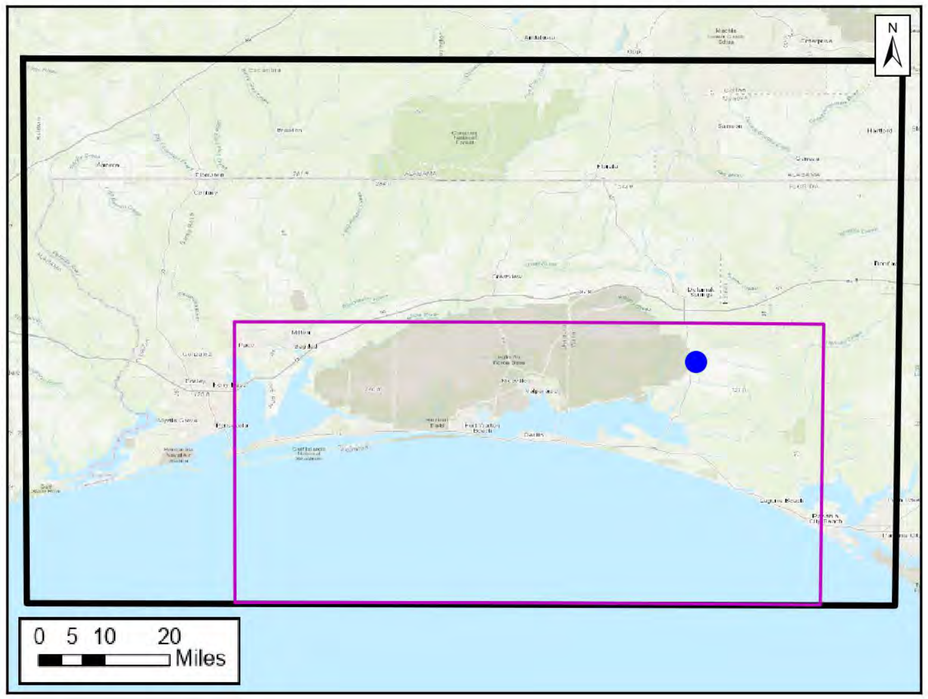
TETRA TECH

Water Level Elevation (ft msl, NAVD88)



Number of measurements = 10
Mean residual (ft) = -1.73
Abs Mean residual (ft) = 5.52

Location

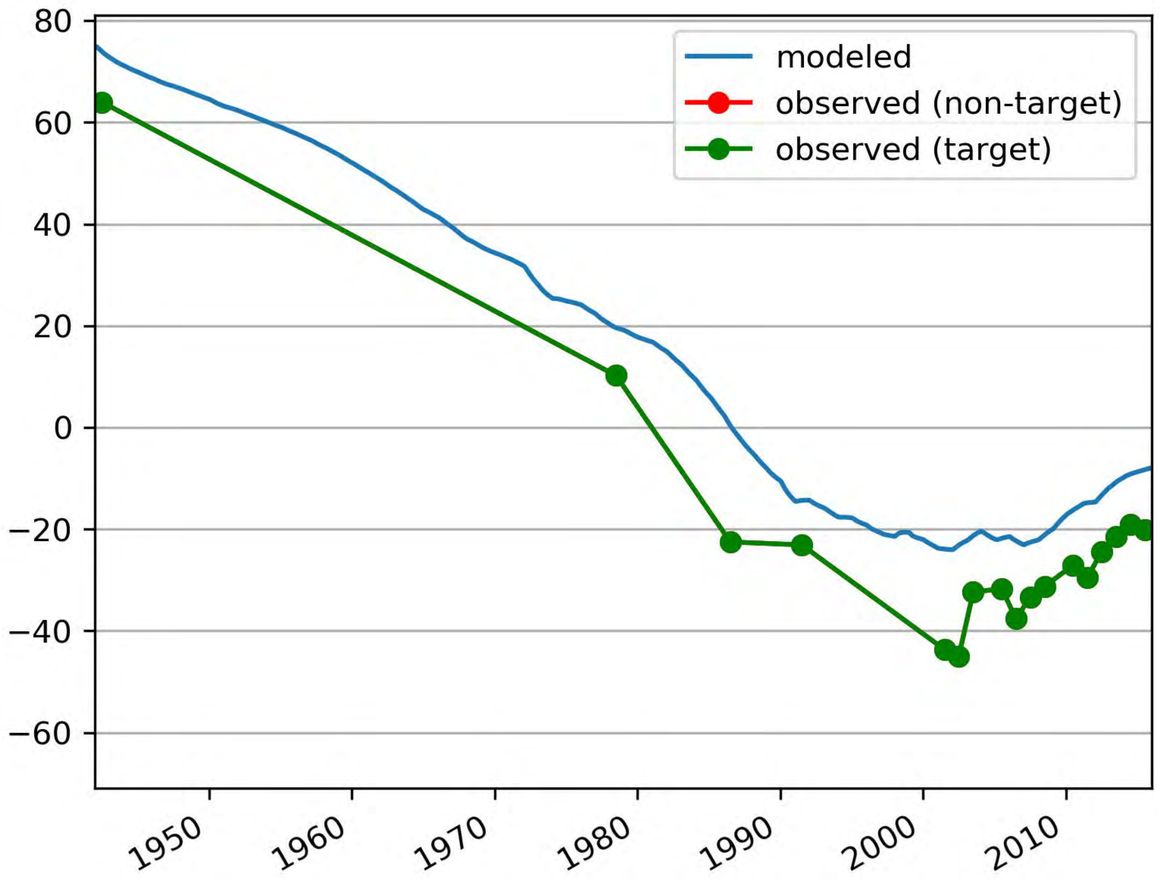


Model layer = 3

Hydrograph and location for well nwf_3806

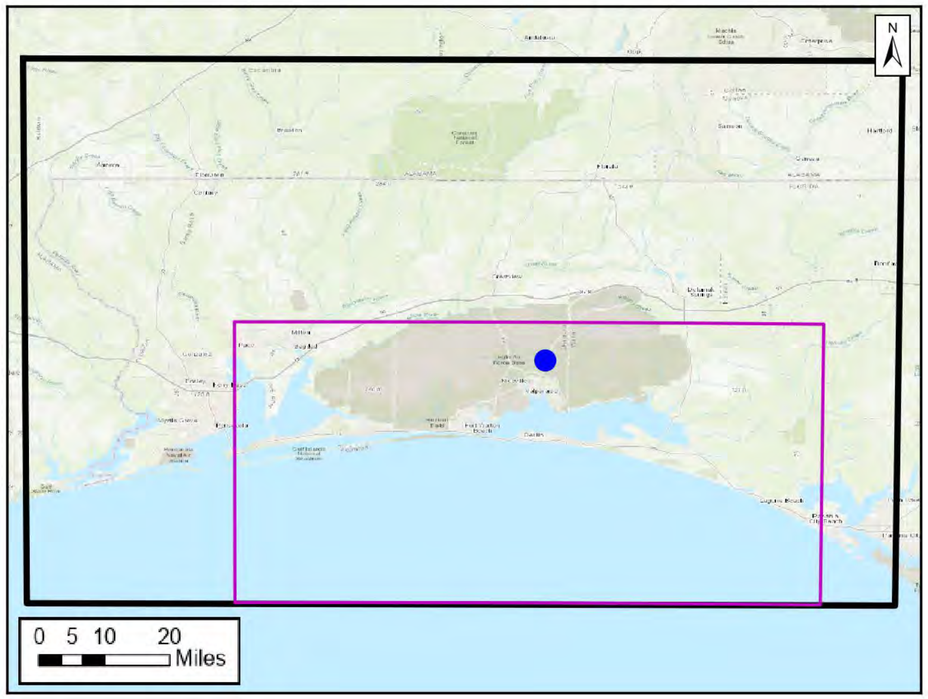
TETRA TECH

Water Level Elevation (ft msl, NAVD88)



Number of measurements = 17
Mean residual (ft) = -12.86
Abs Mean residual (ft) = 12.86

Location

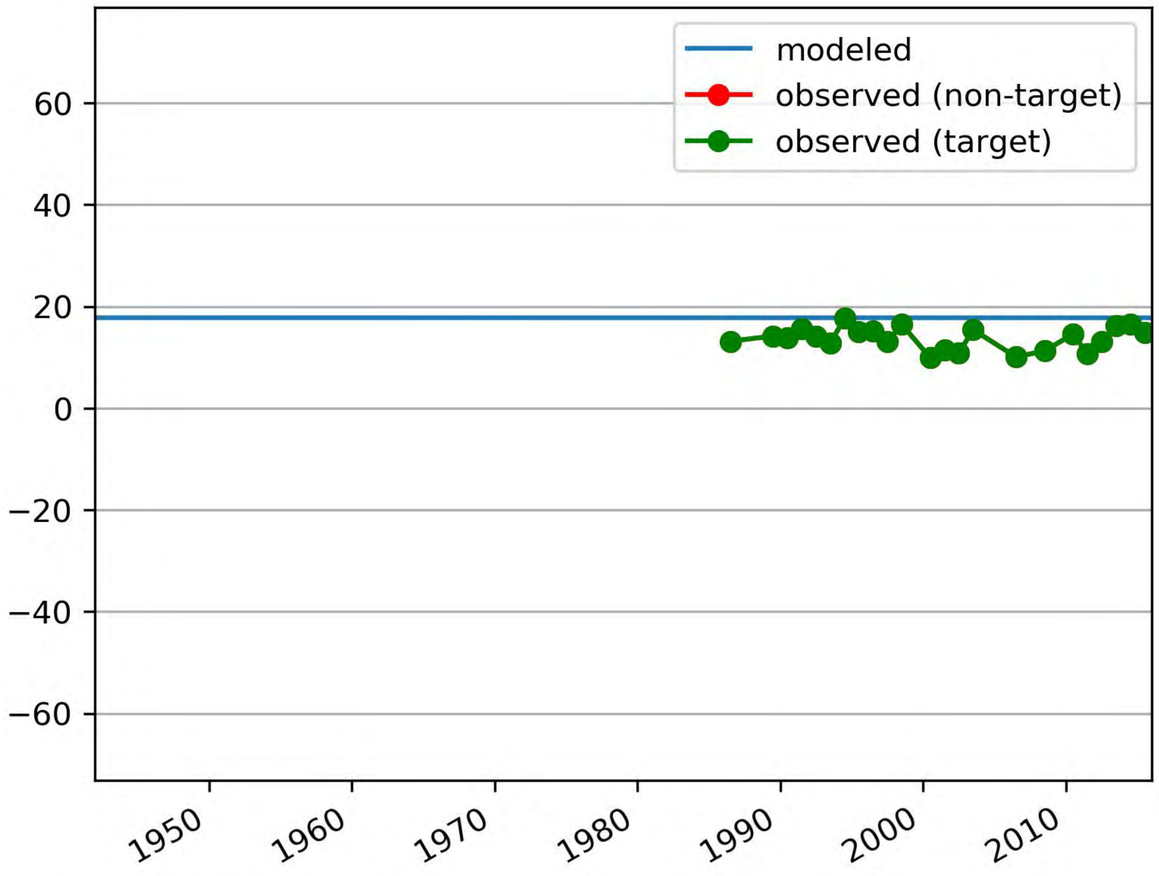


Model layer = 3

Hydrograph and location for well nwf_3815

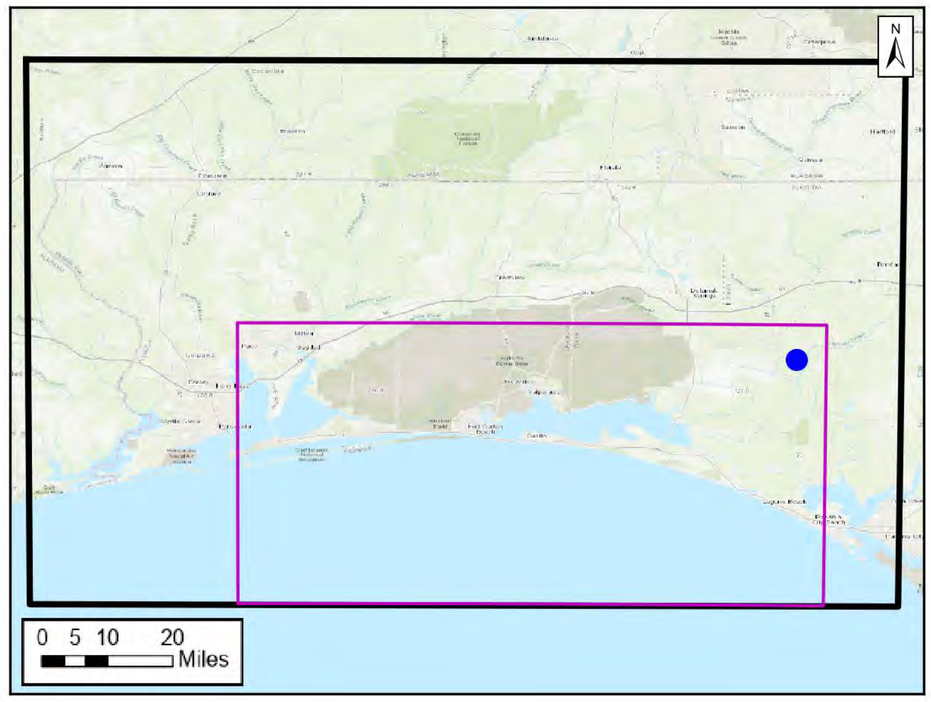
TETRA TECH

Water Level Elevation (ft msl, NAVD88)



Number of measurements = 23
Mean residual (ft) = -4.03
Abs Mean residual (ft) = 4.03

Location

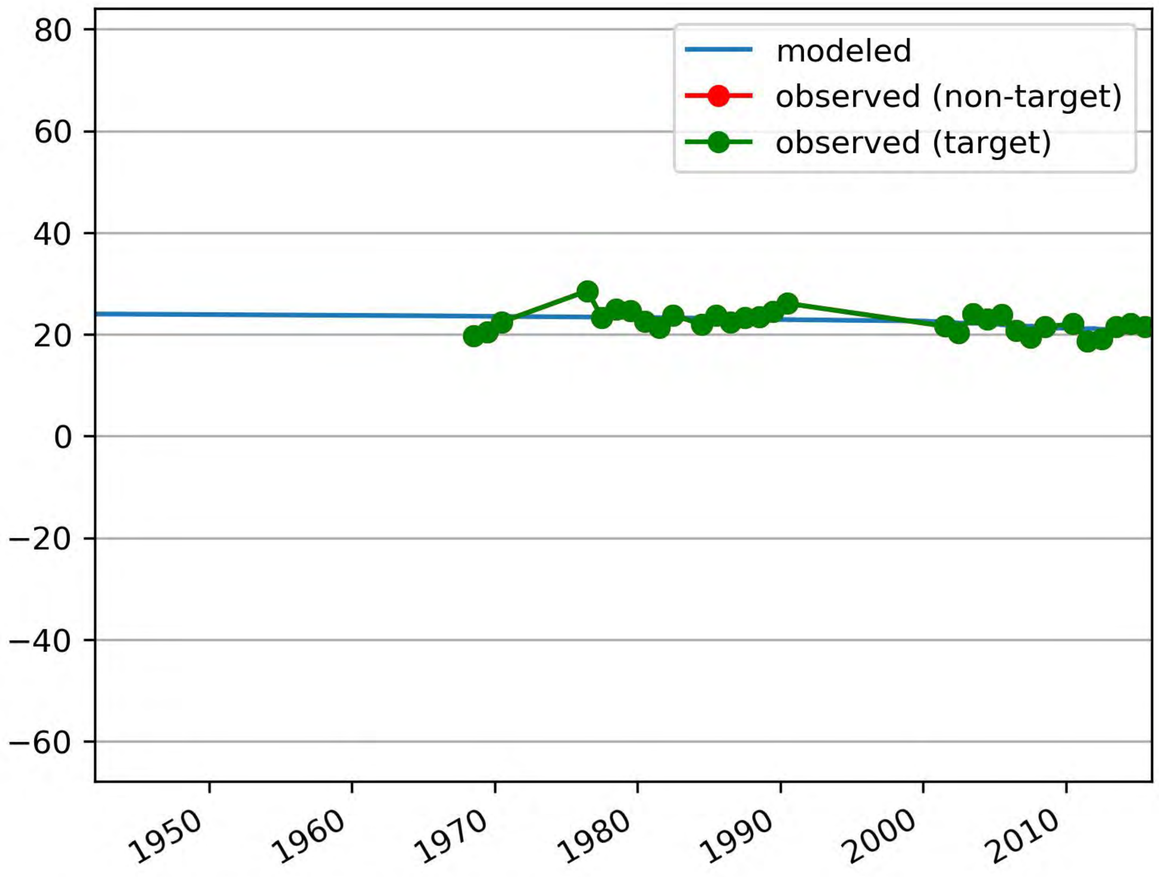


Model layer = 3

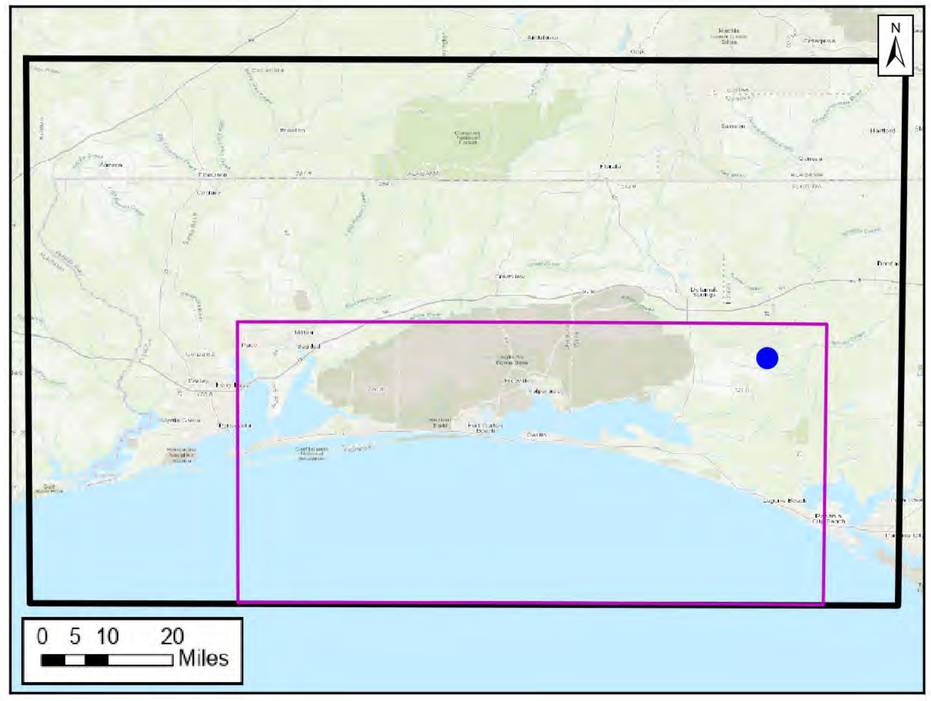
Hydrograph and location for well nwf_3867

TETRA TECH

Water Level Elevation (ft msl, NAVD88)



Location



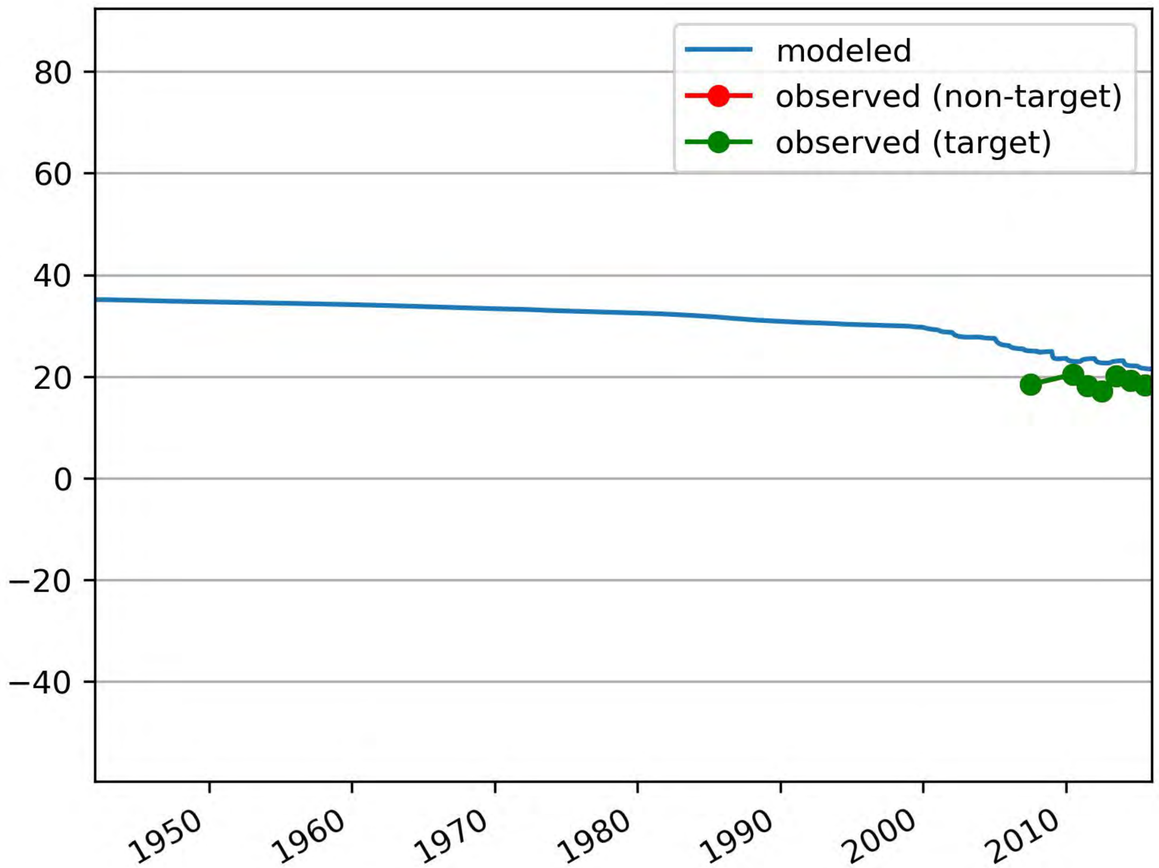
Number of measurements = 31
Mean residual (ft) = 0.02
Abs Mean residual (ft) = 1.48

Model layer = 3

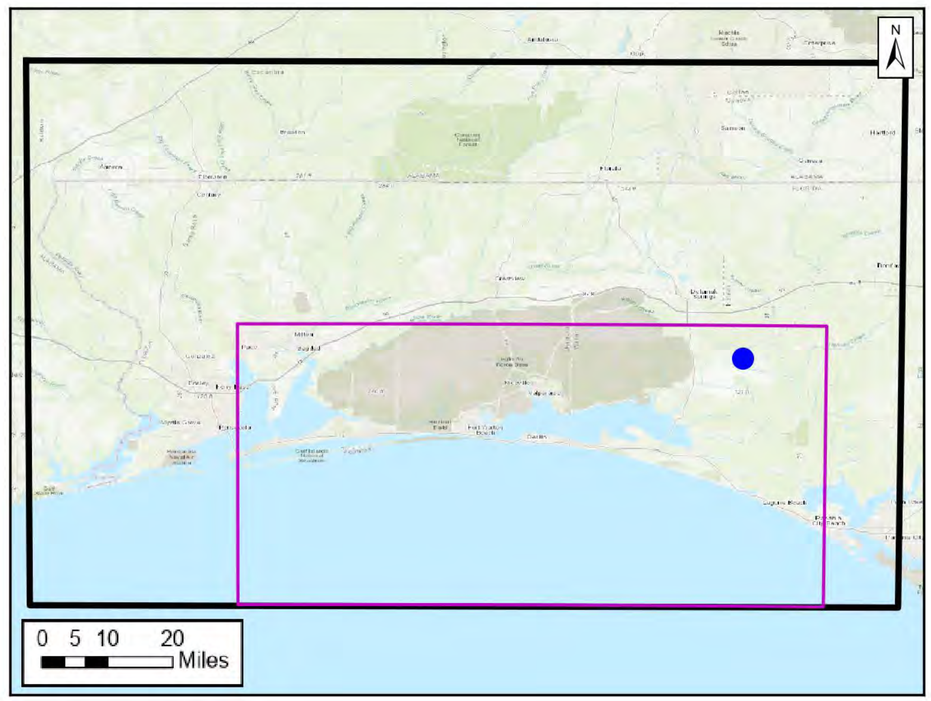
Hydrograph and location for well nwf_3877

TETRA TECH

Water Level Elevation (ft msl, NAVD88)



Location



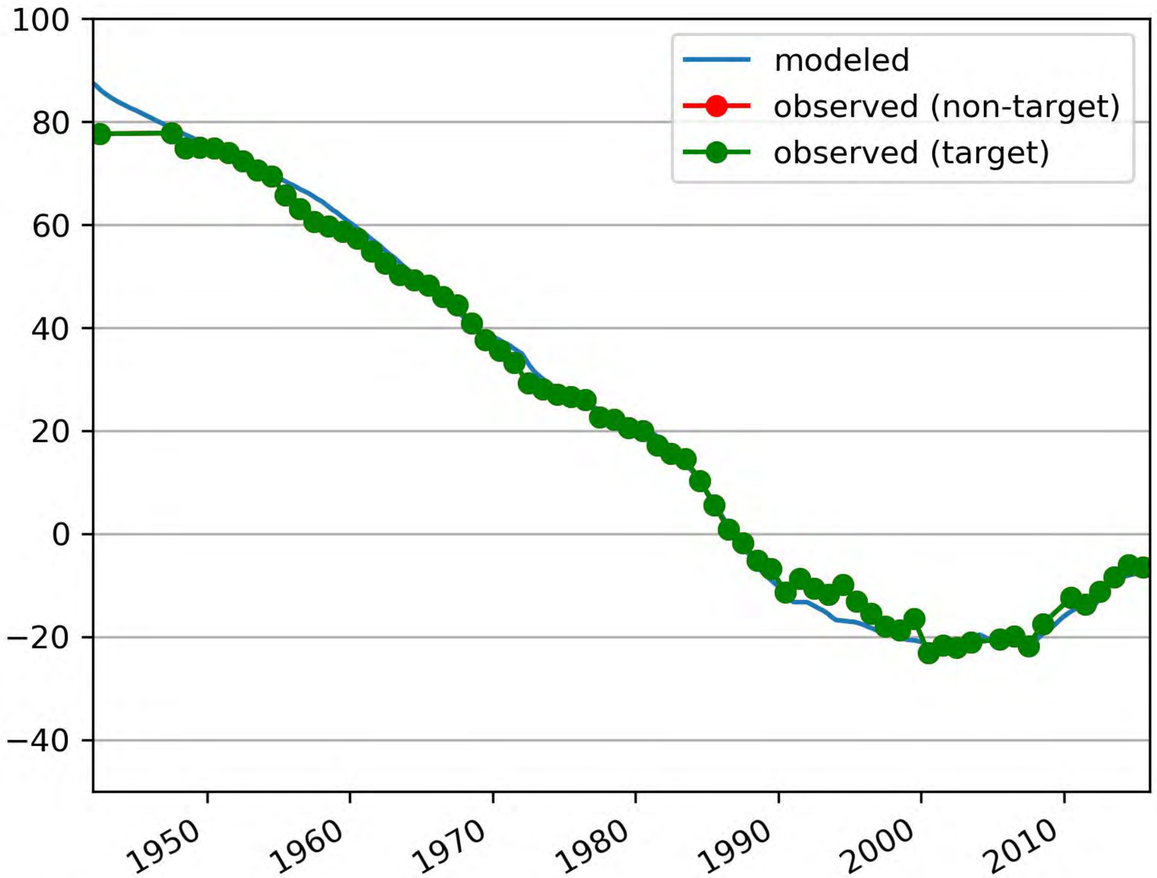
Number of measurements = 7
Mean residual (ft) = -4.17
Abs Mean residual (ft) = 4.17

Model layer = 3

Hydrograph and location for well nwf_3921

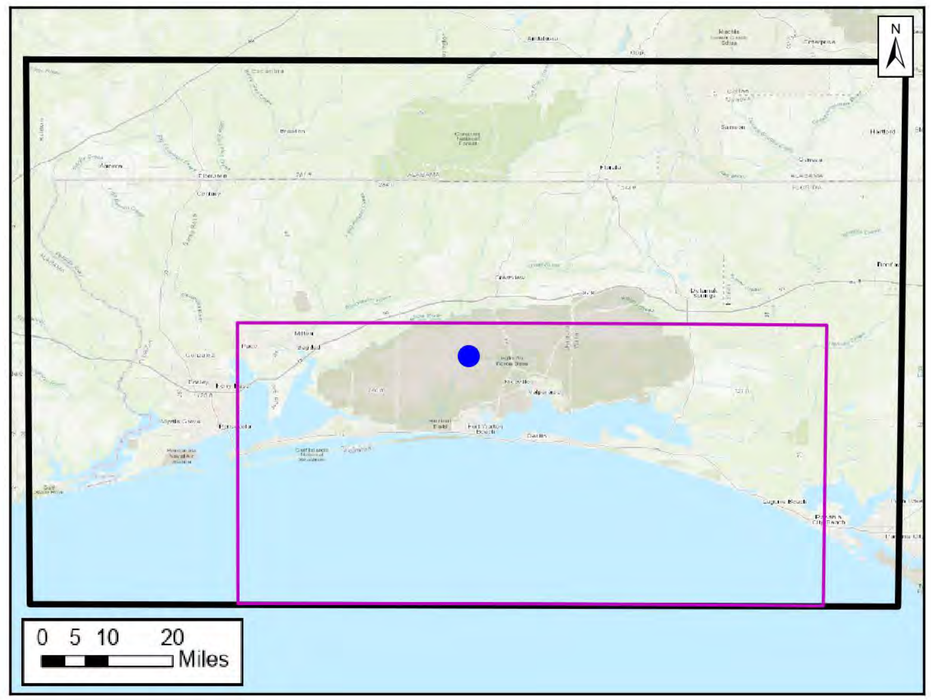
TETRA TECH

Water Level Elevation (ft msl, NAVD88)



Number of measurements = 68
Mean residual (ft) = -0.13
Abs Mean residual (ft) = 1.72

Location

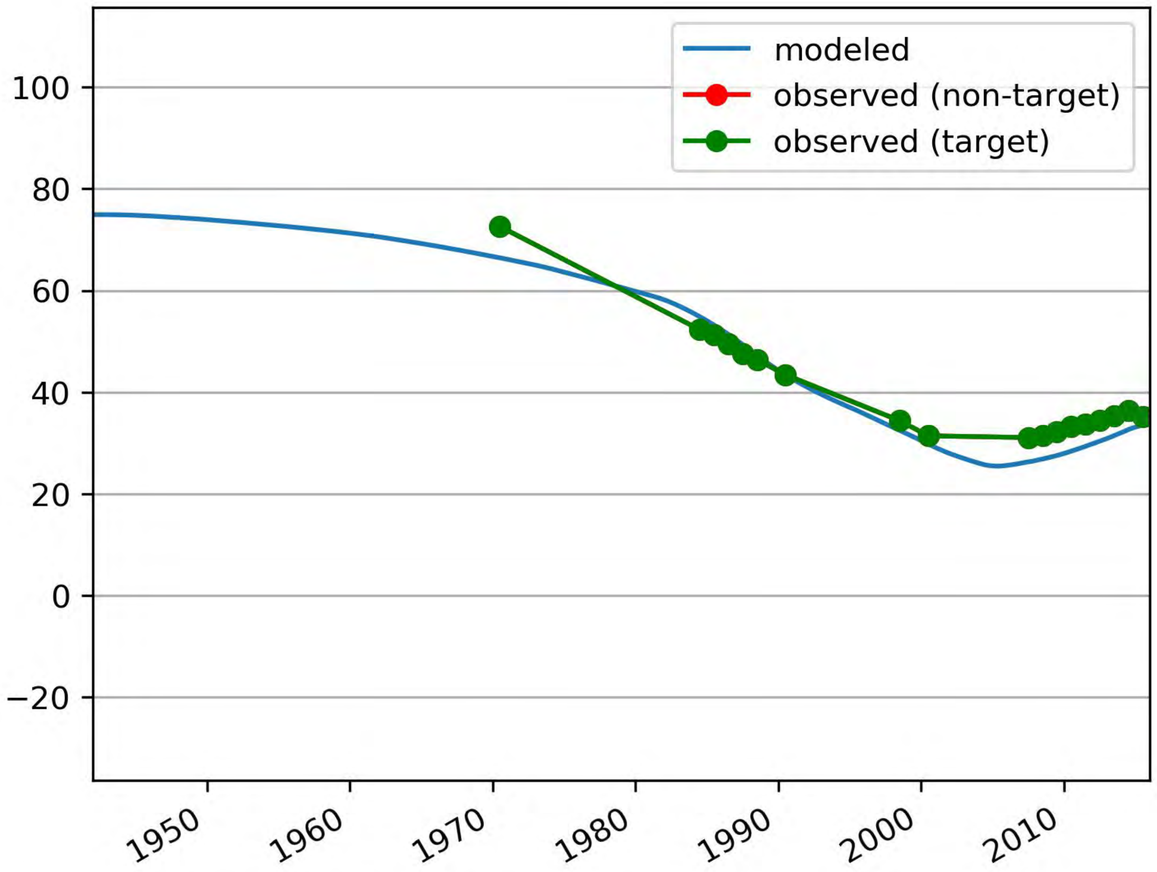


Model layer = 3

Hydrograph and location for well nwf_3923

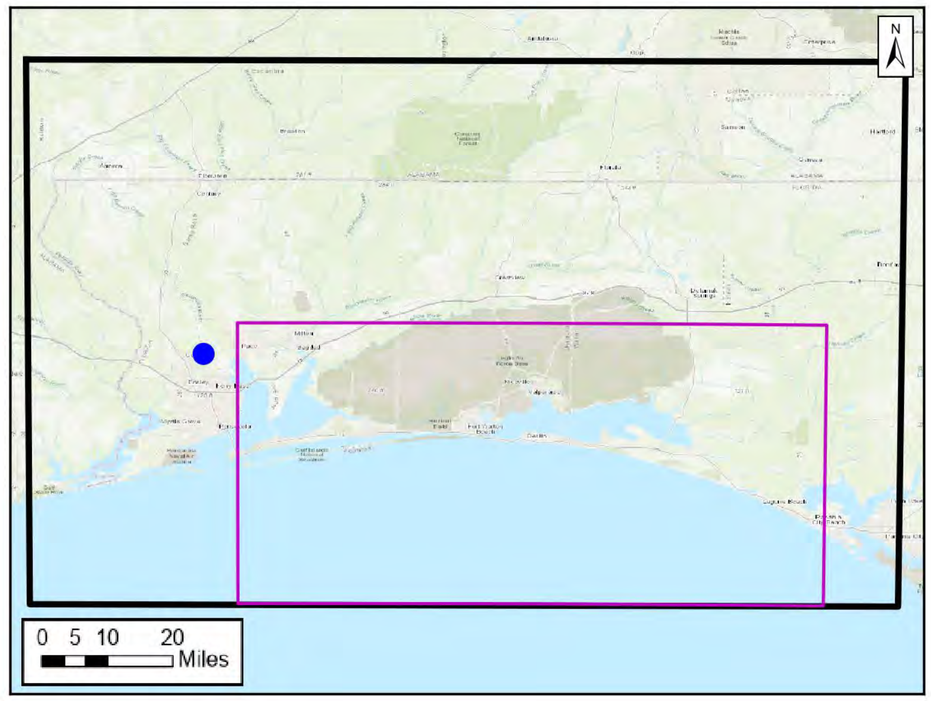
TETRA TECH

Water Level Elevation (ft msl, NAVD88)



Number of measurements = 18
Mean residual (ft) = 2.09
Abs Mean residual (ft) = 3.09

Location

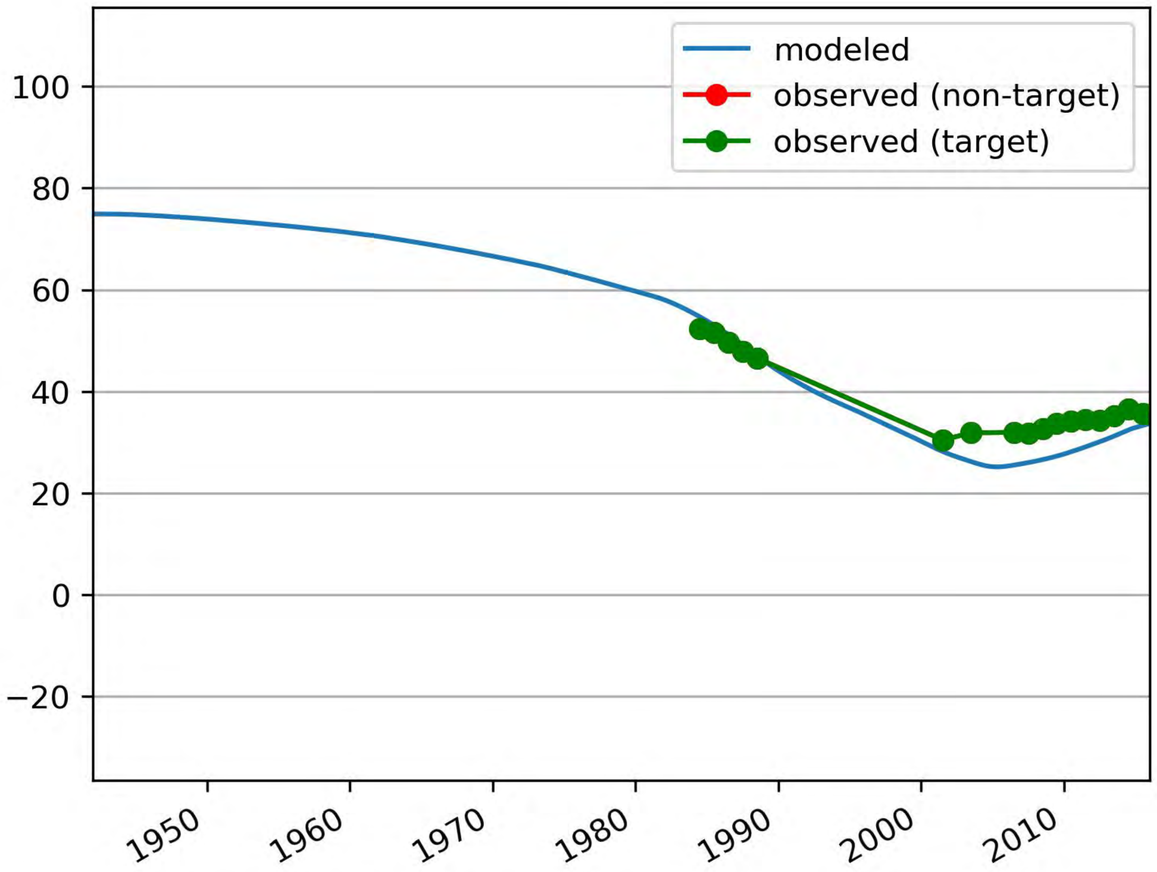


Model layer = 3

Hydrograph and location for well nwf_3998

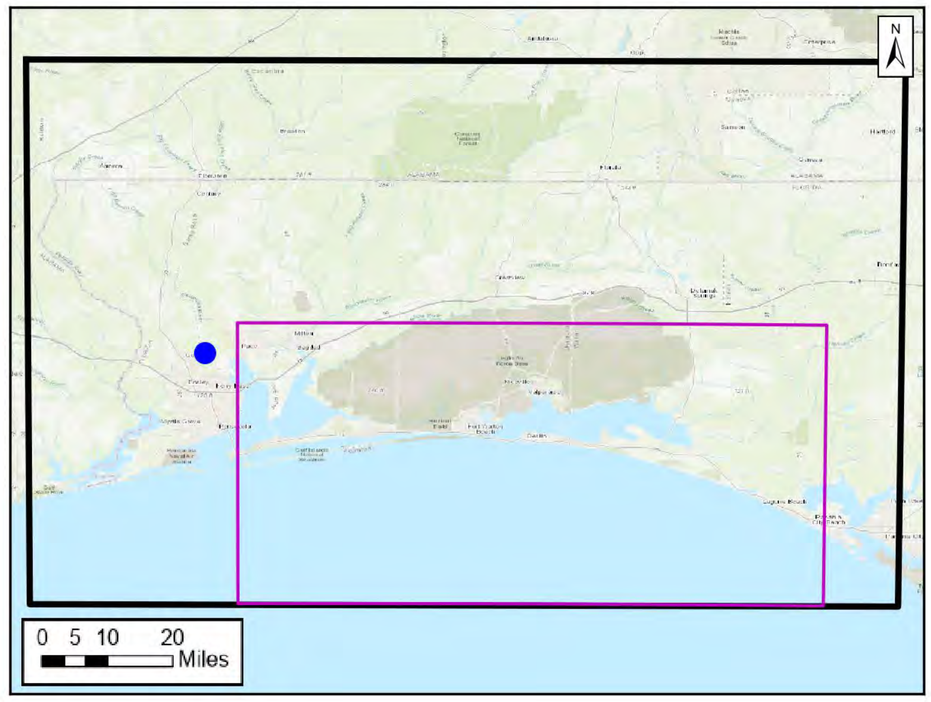
TETRA TECH

Water Level Elevation (ft msl, NAVD88)



Number of measurements = 17
Mean residual (ft) = 3.04
Abs Mean residual (ft) = 3.87

Location

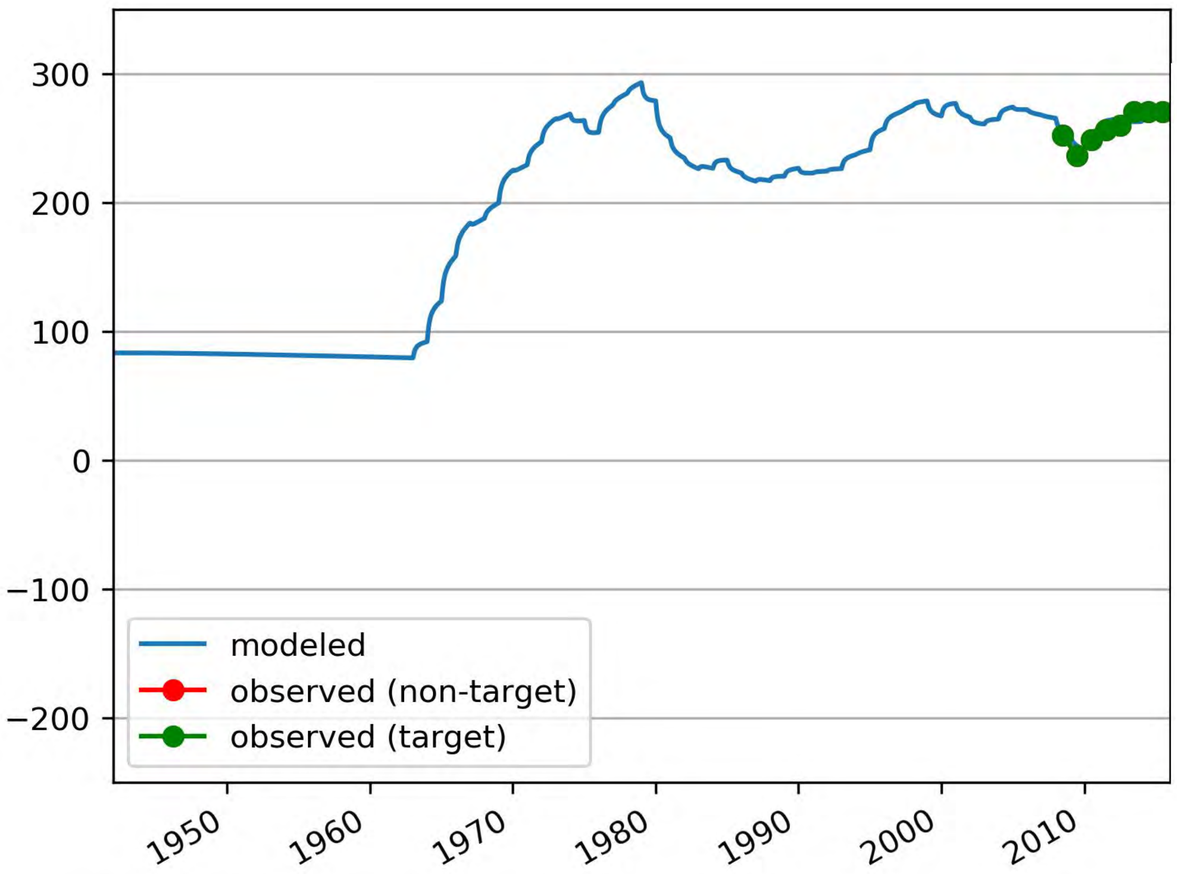


Model layer = 3

Hydrograph and location for well nwf_4006

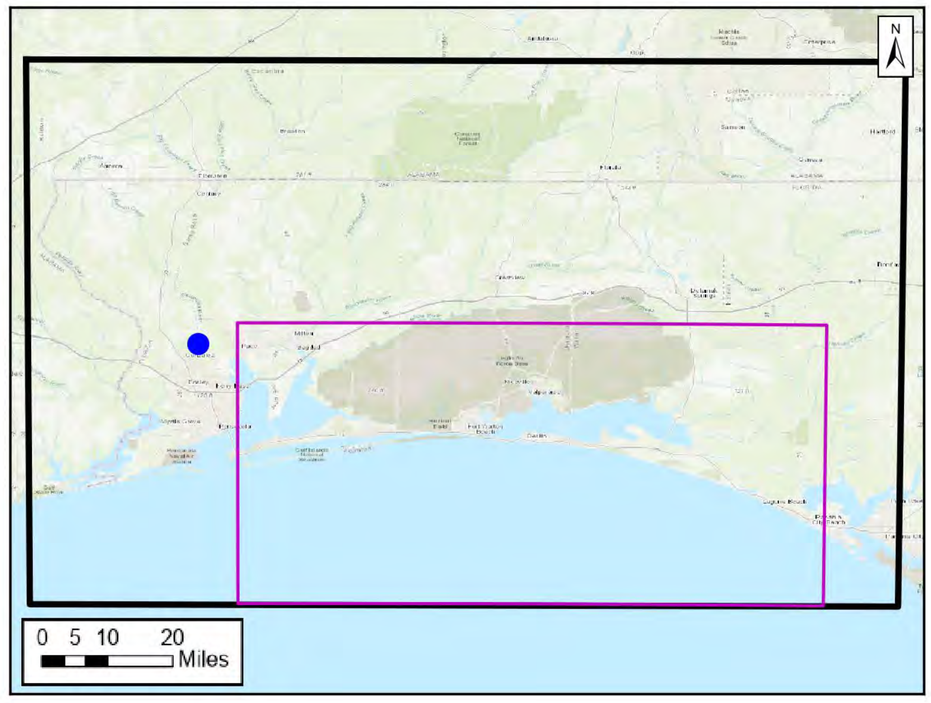
TETRA TECH

Water Level Elevation (ft msl, NAVD88)



Number of measurements = 8
Mean residual (ft) = -1.47
Abs Mean residual (ft) = 5.37

Location

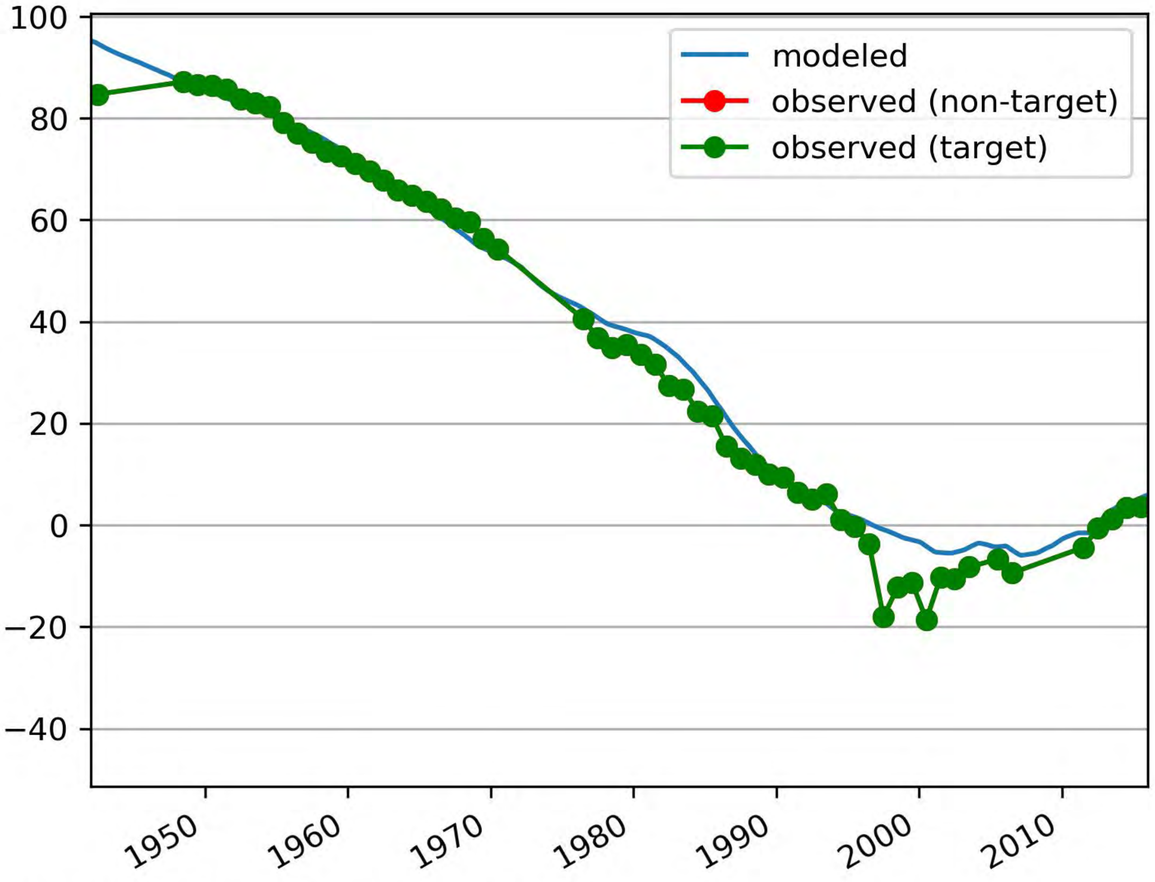


Model layer = 5

Hydrograph and location for well nwf_4173

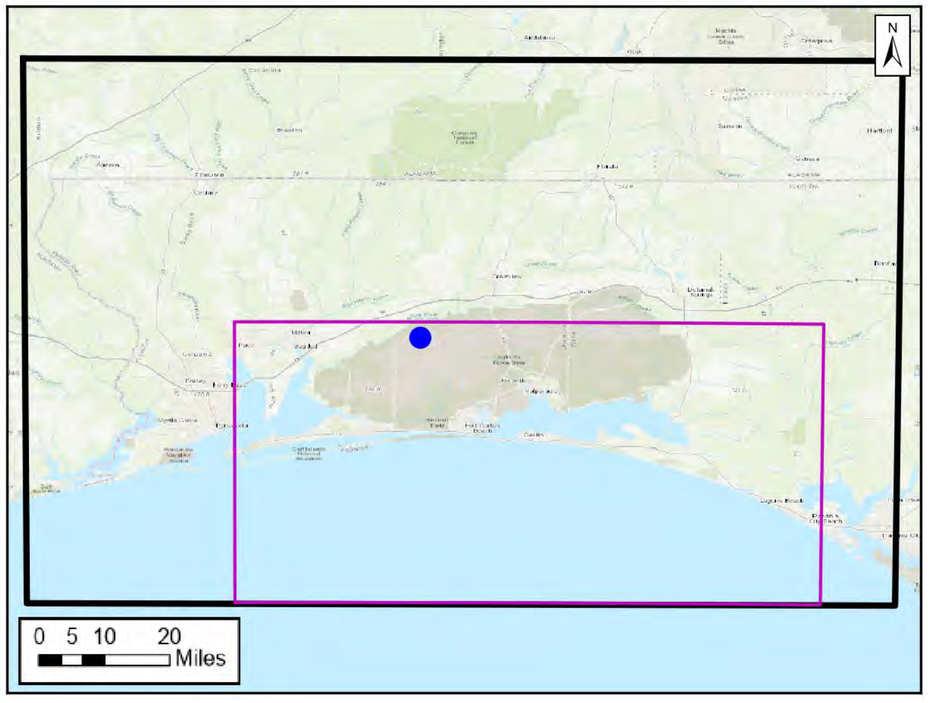
TETRA TECH

Water Level Elevation (ft msl, NAVD88)



Number of measurements = 59
Mean residual (ft) = -2.45
Abs Mean residual (ft) = 3.19

Location

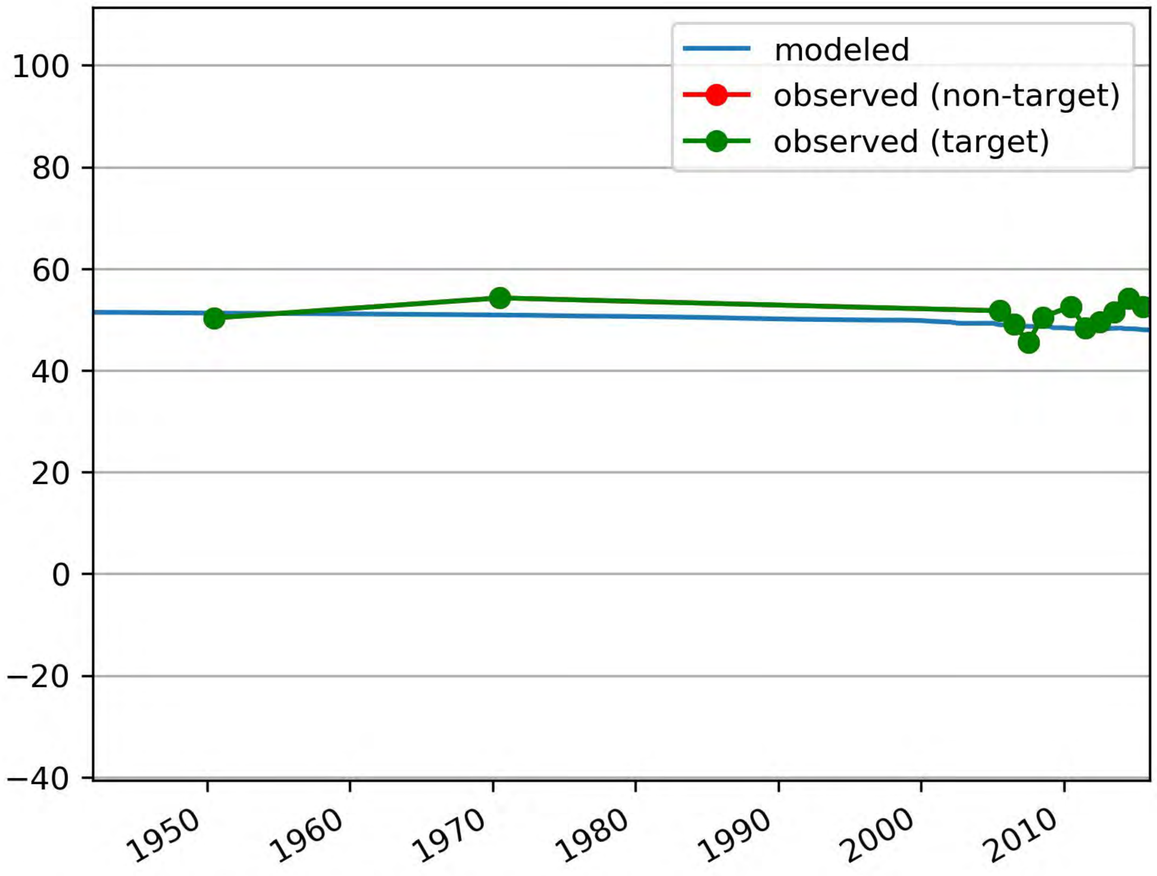


Model layer = 3

Hydrograph and location for well nwf_4262

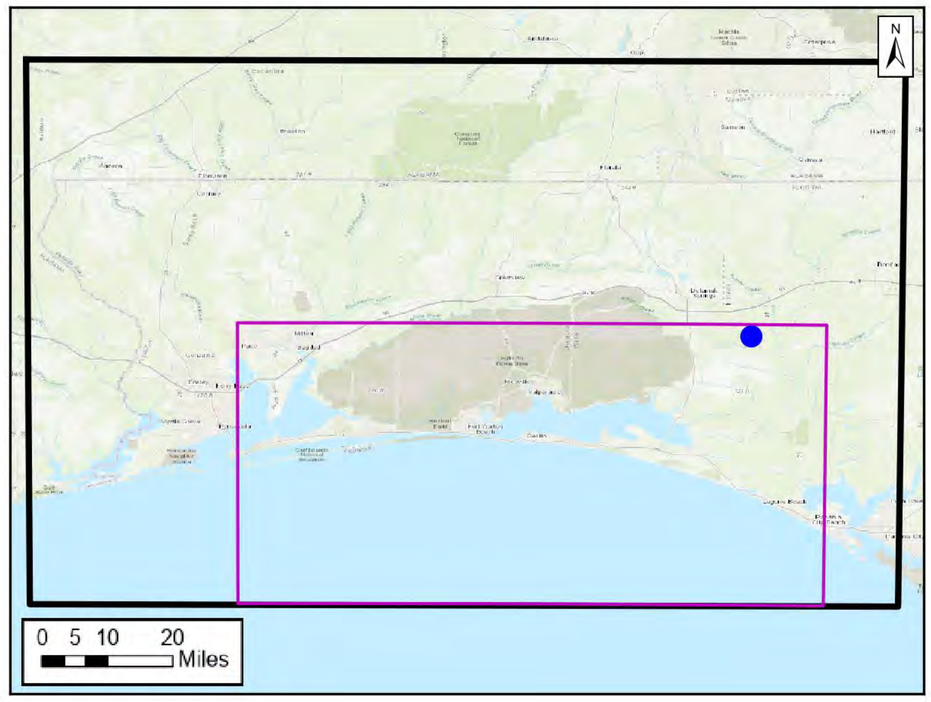
TETRA TECH

Water Level Elevation (ft msl, NAVD88)



Number of measurements = 12
Mean residual (ft) = 1.97
Abs Mean residual (ft) = 2.66

Location

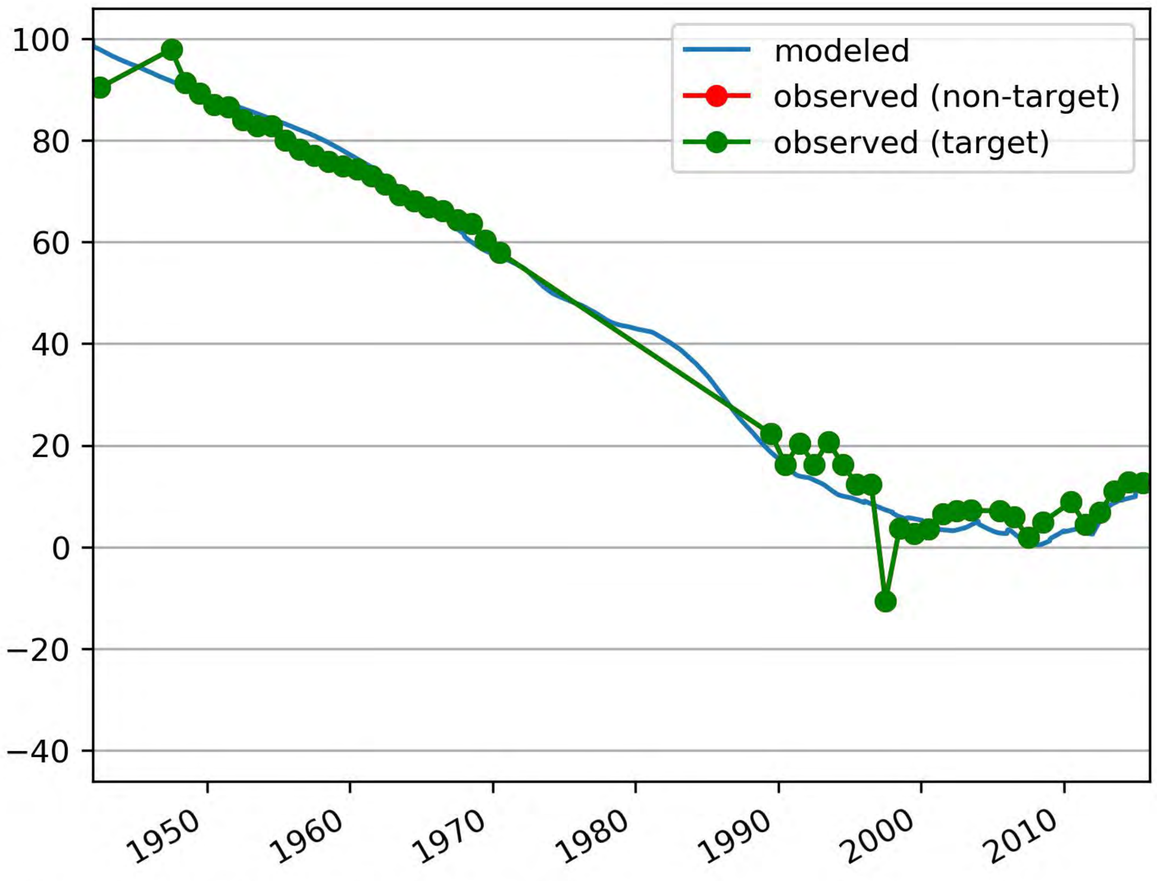


Model layer = 3

Hydrograph and location for well nwf_4285

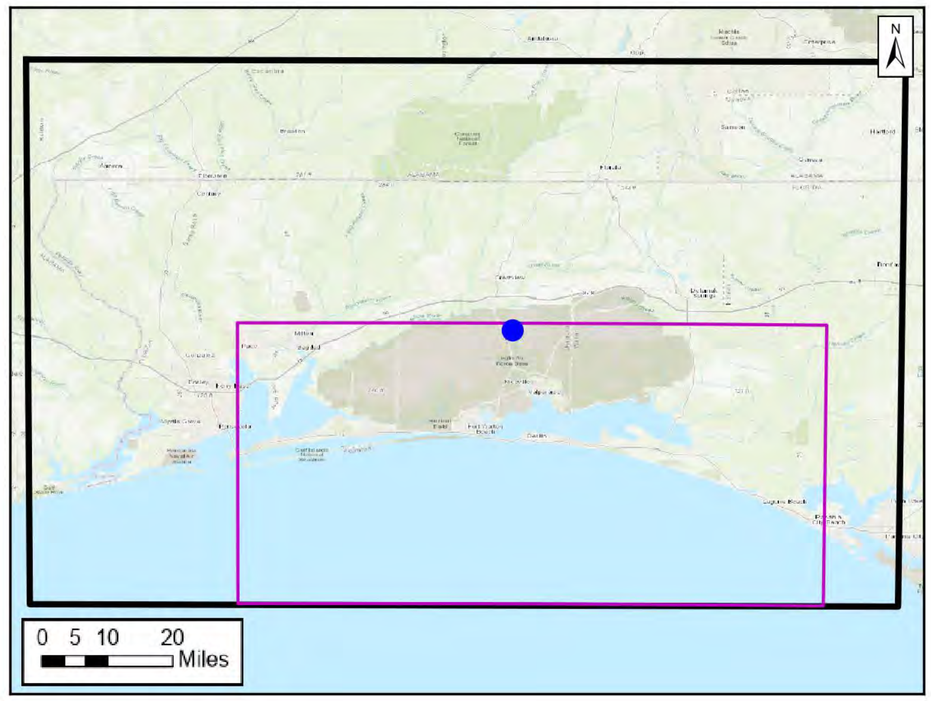
TETRA TECH

Water Level Elevation (ft msl, NAVD88)



Number of measurements = 50
Mean residual (ft) = 0.55
Abs Mean residual (ft) = 3.08

Location

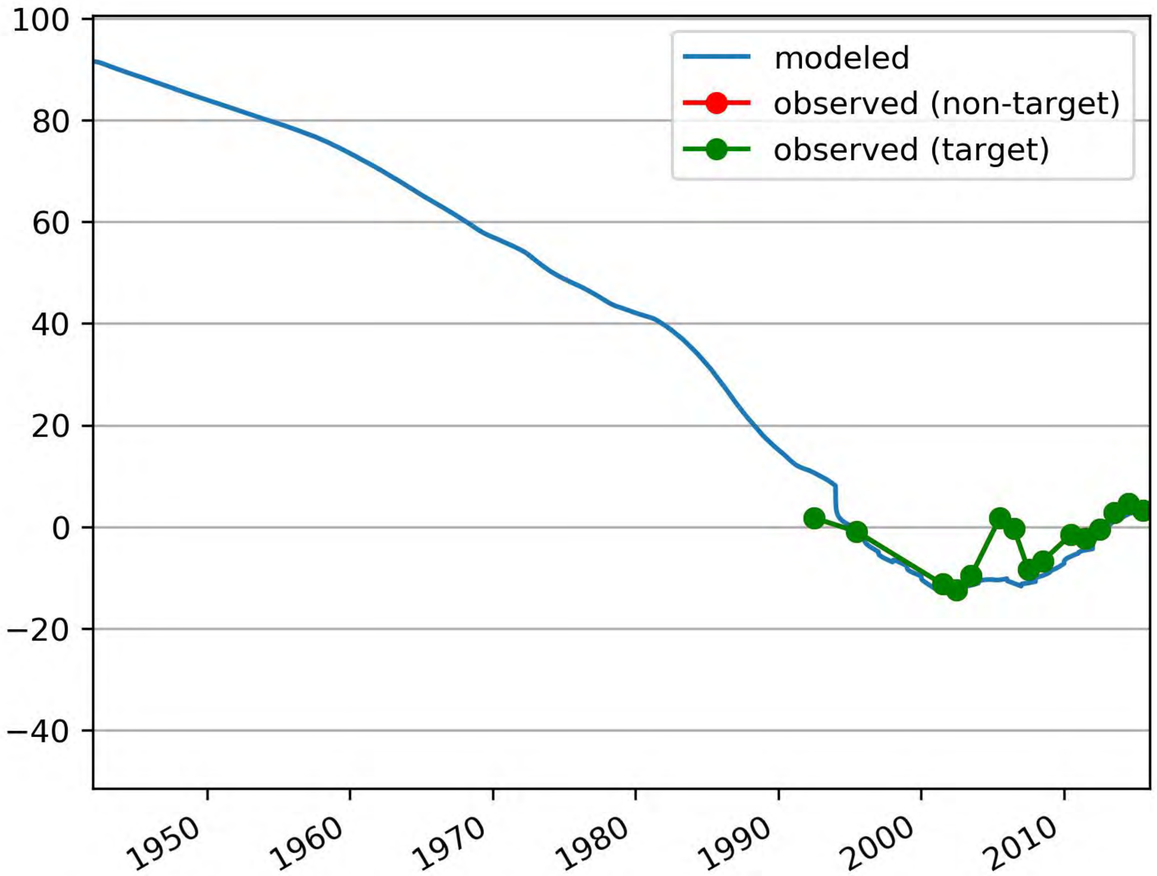


Model layer = 3

Hydrograph and location for well nwf_4368

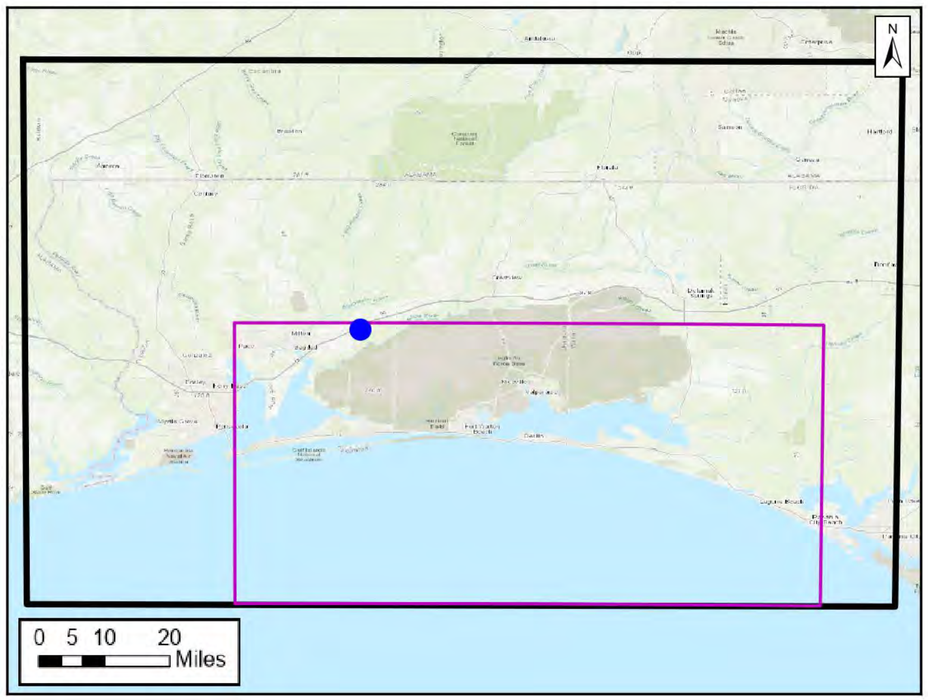
TETRA TECH

Water Level Elevation (ft msl, NAVD88)



Number of measurements = 15
Mean residual (ft) = 2.14
Abs Mean residual (ft) = 3.41

Location

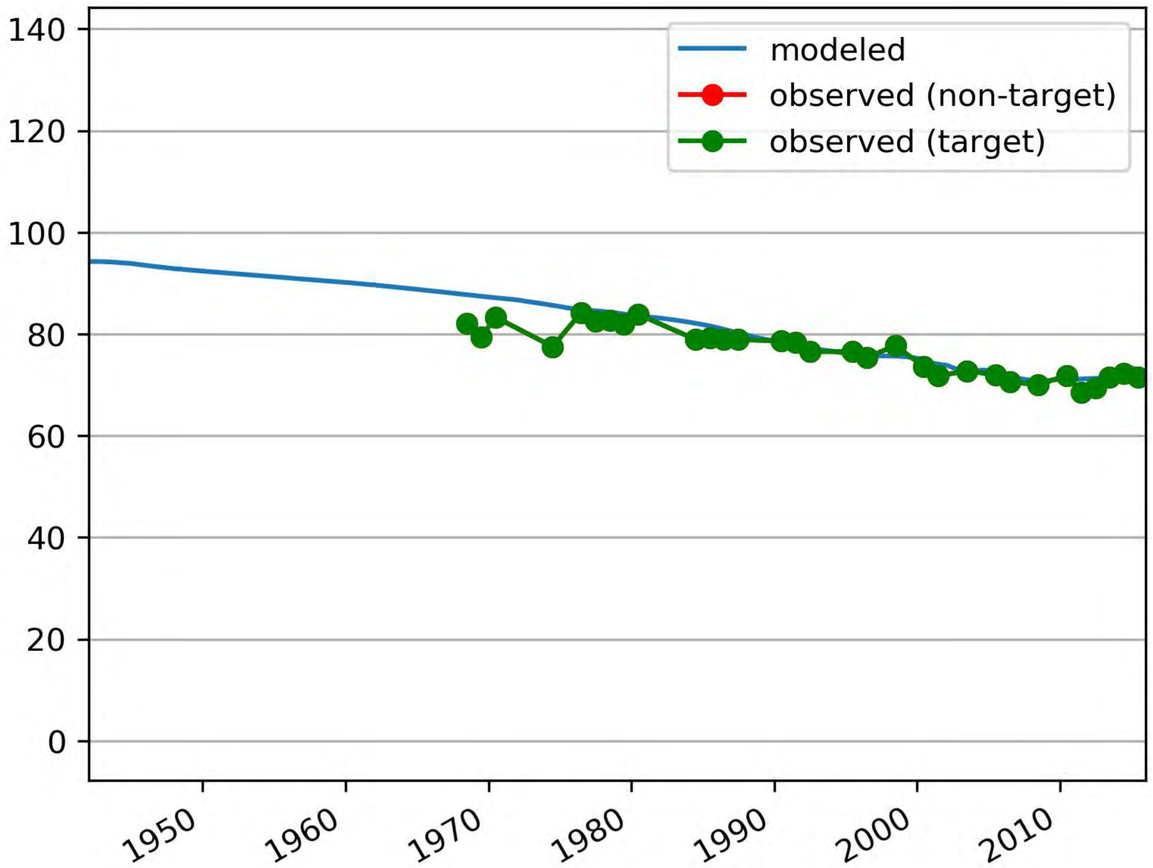


Model layer = 3

Hydrograph and location for well nwf_4393

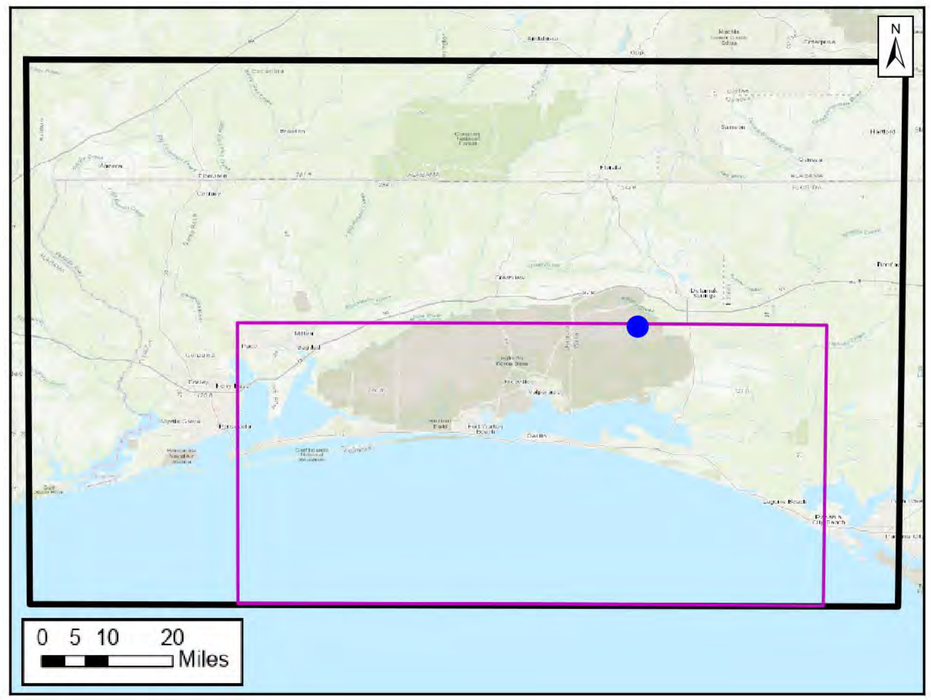
TETRA TECH

Water Level Elevation (ft msl, NAVD88)



Number of measurements = 31
Mean residual (ft) = -1.61
Abs Mean residual (ft) = 1.89

Location

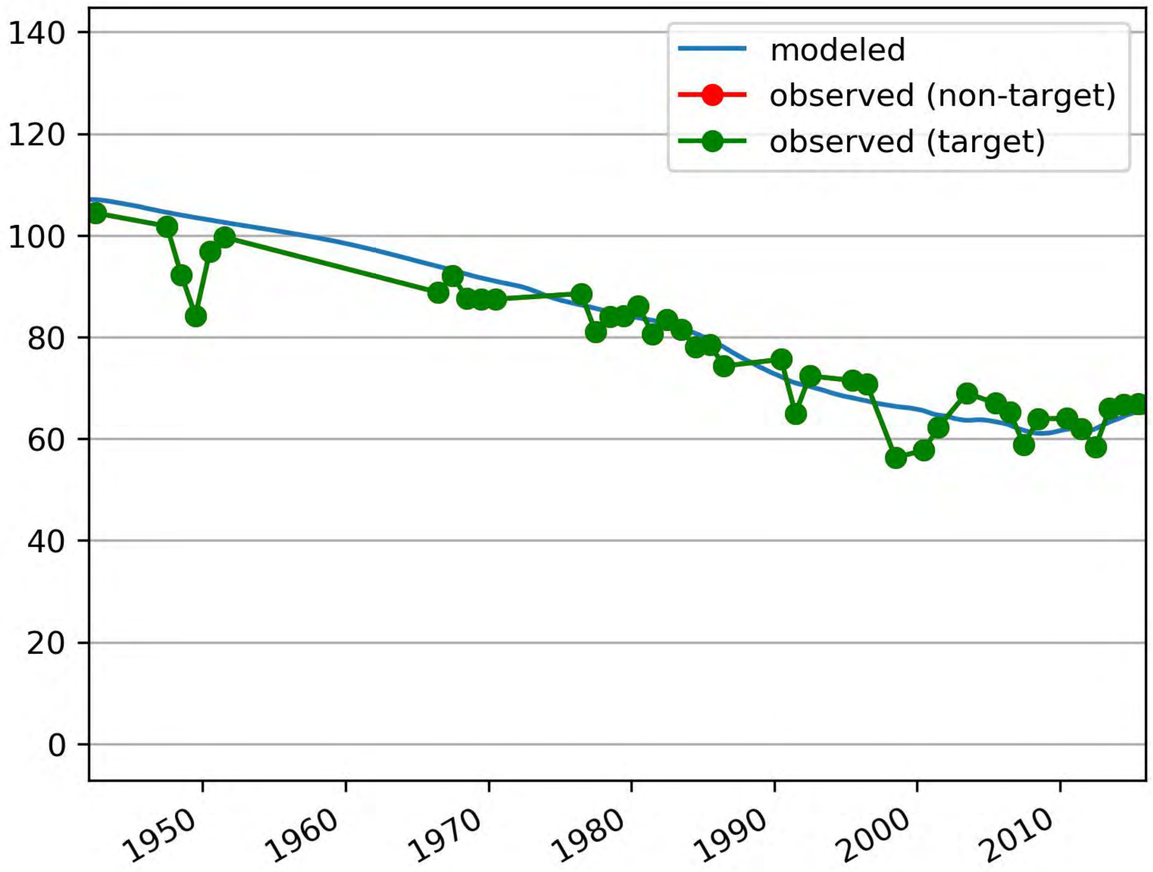


Model layer = 3

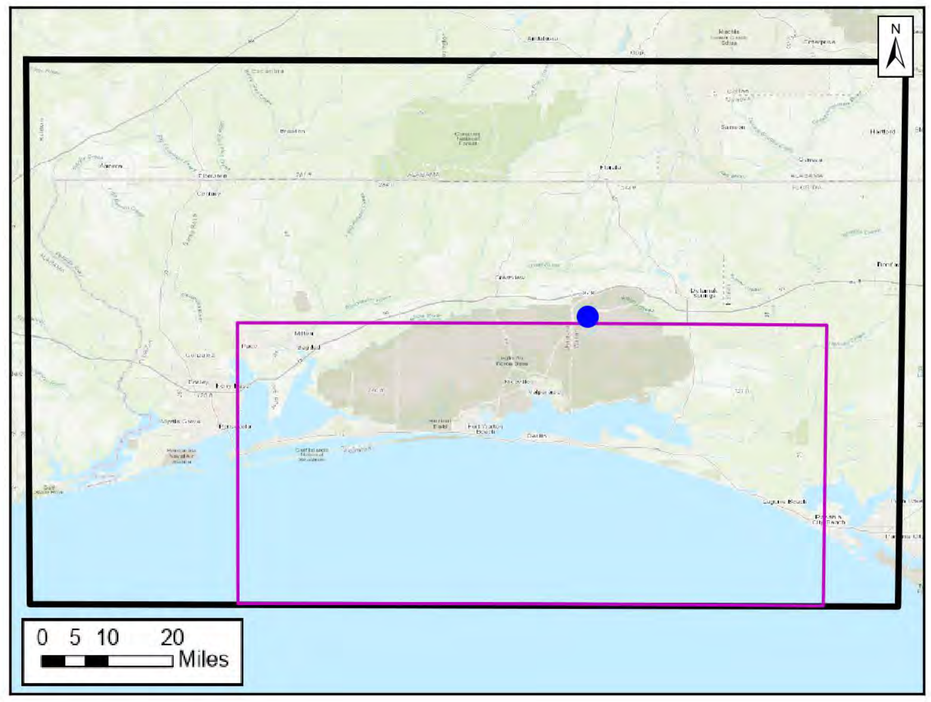
Hydrograph and location for well nwf_4490

TETRA TECH

Water Level Elevation (ft msl, NAVD88)



Location



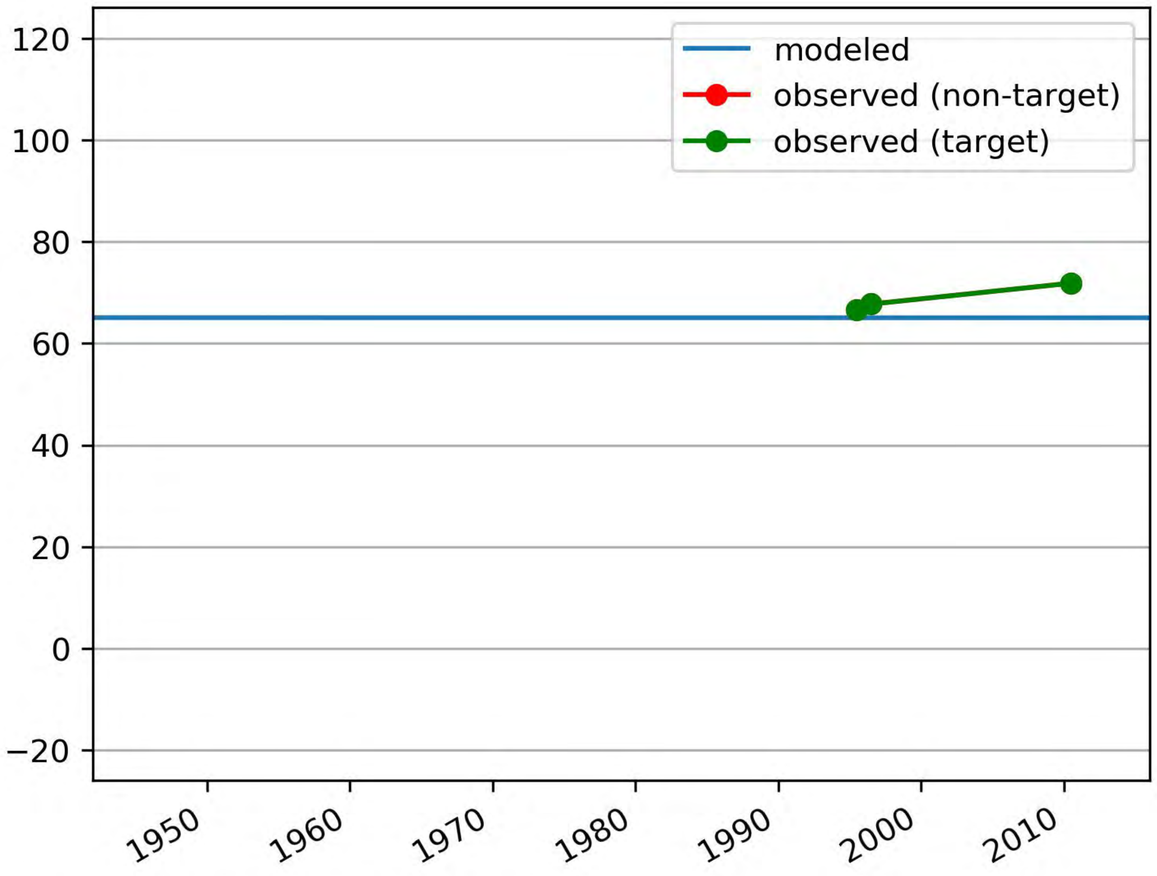
Number of measurements = 41
Mean residual (ft) = -1.75
Abs Mean residual (ft) = 3.75

Model layer = 3

Hydrograph and location for well nwf_4553

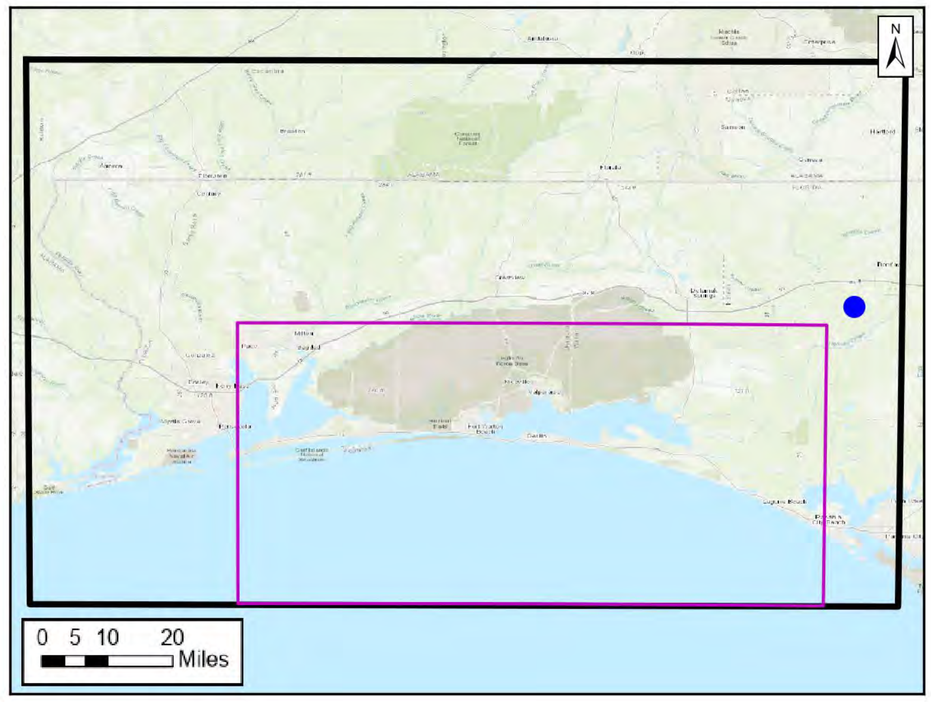
TETRA TECH

Water Level Elevation (ft msl, NAVD88)



Number of measurements = 3
Mean residual (ft) = 3.7
Abs Mean residual (ft) = 3.7

Location

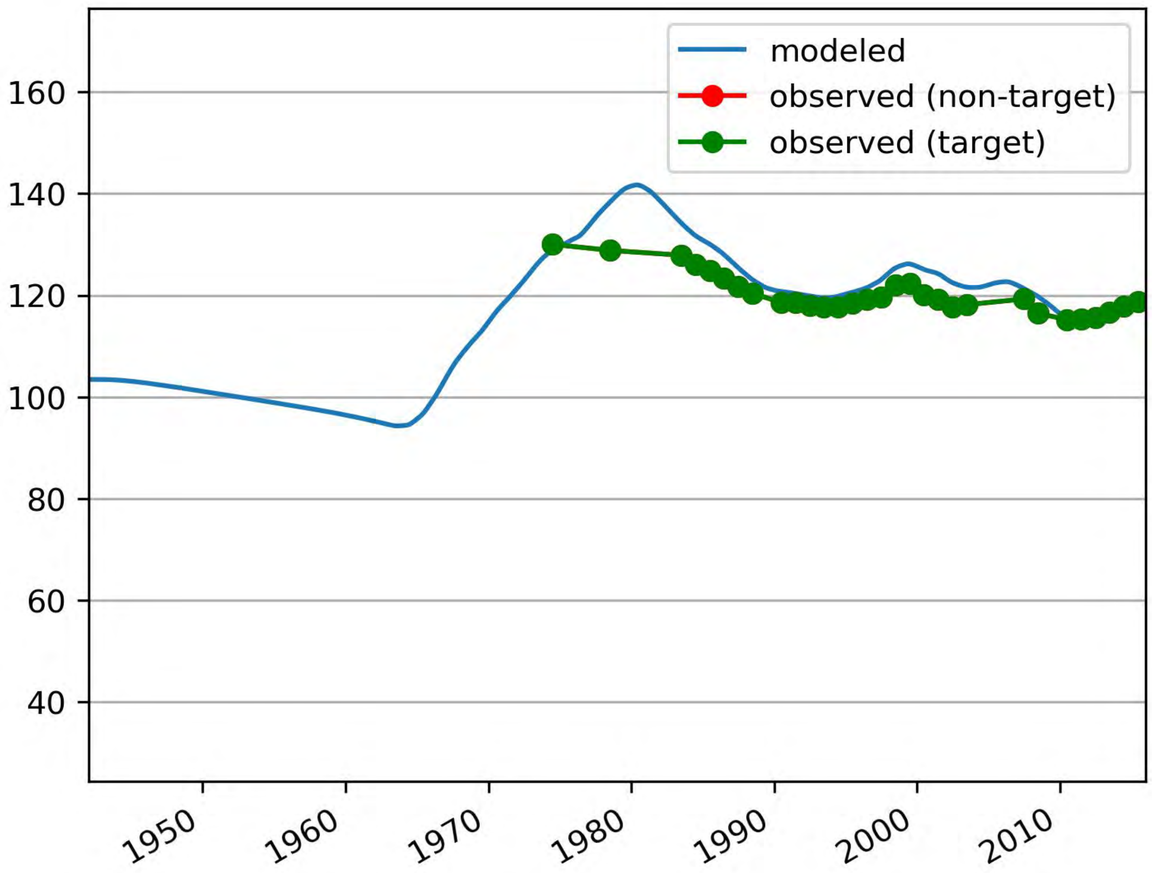


Model layer = 2

Hydrograph and location for well nwf_4648

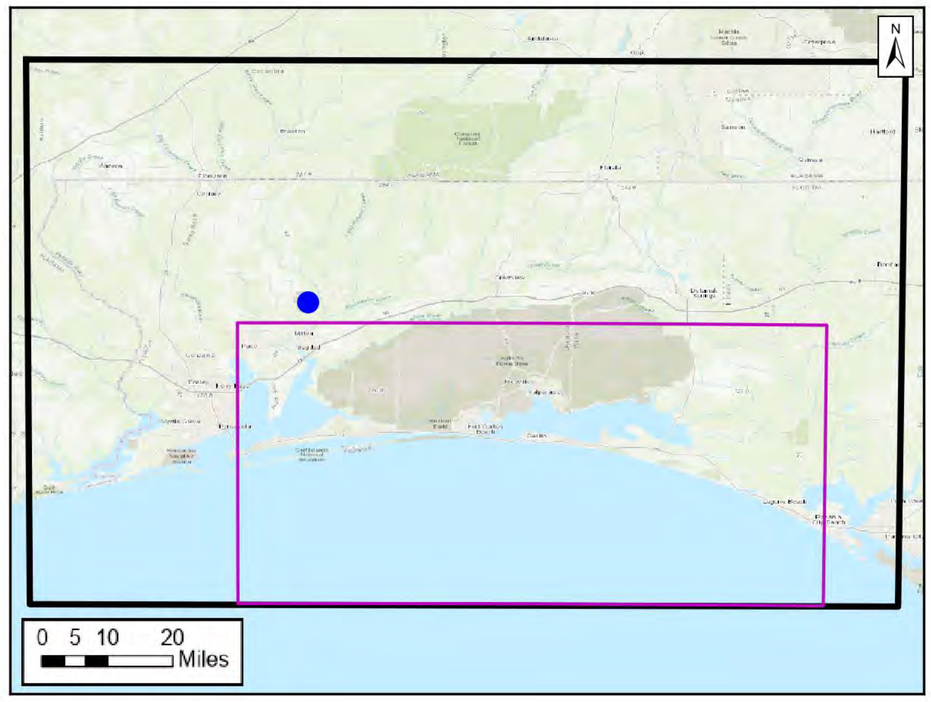
TETRA TECH

Water Level Elevation (ft msl, NAVD88)



Number of measurements = 30
Mean residual (ft) = -2.87
Abs Mean residual (ft) = 2.95

Location

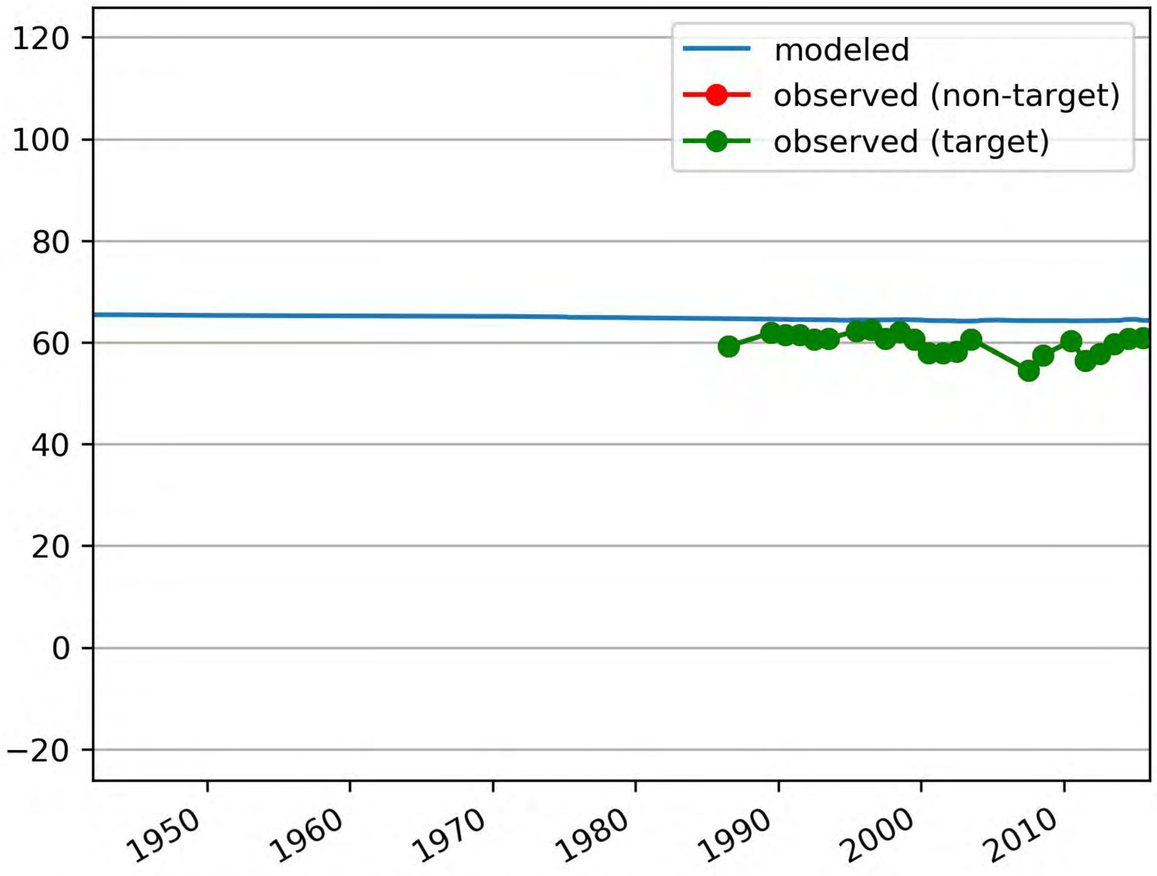


Model layer = 5

Hydrograph and location for well nwf_4700

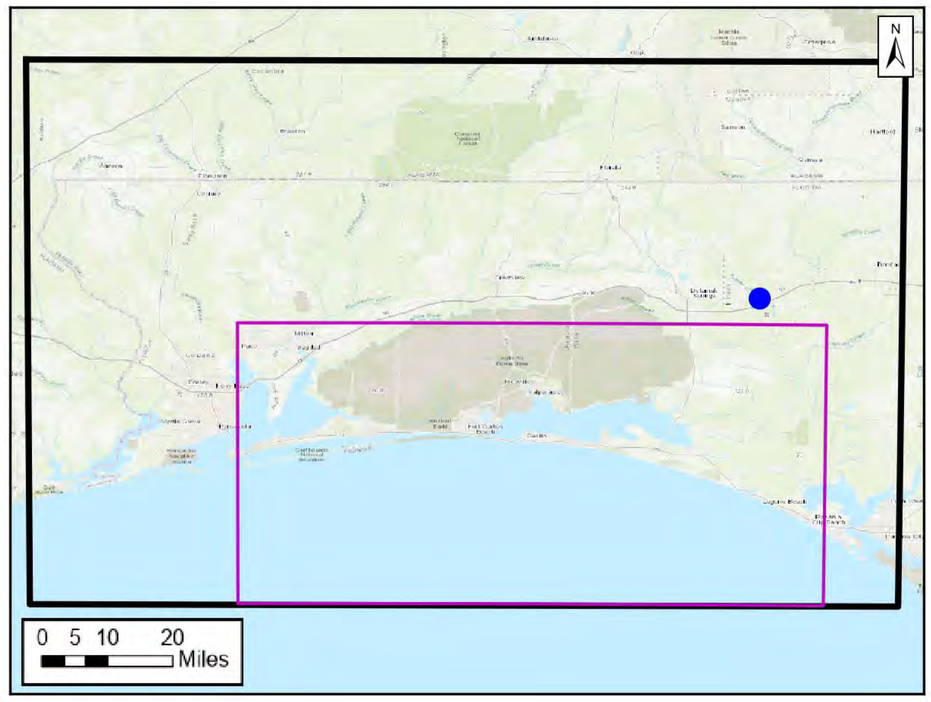
TETRA TECH

Water Level Elevation (ft msl, NAVD88)



Number of measurements = 23
Mean residual (ft) = -4.55
Abs Mean residual (ft) = 4.55

Location

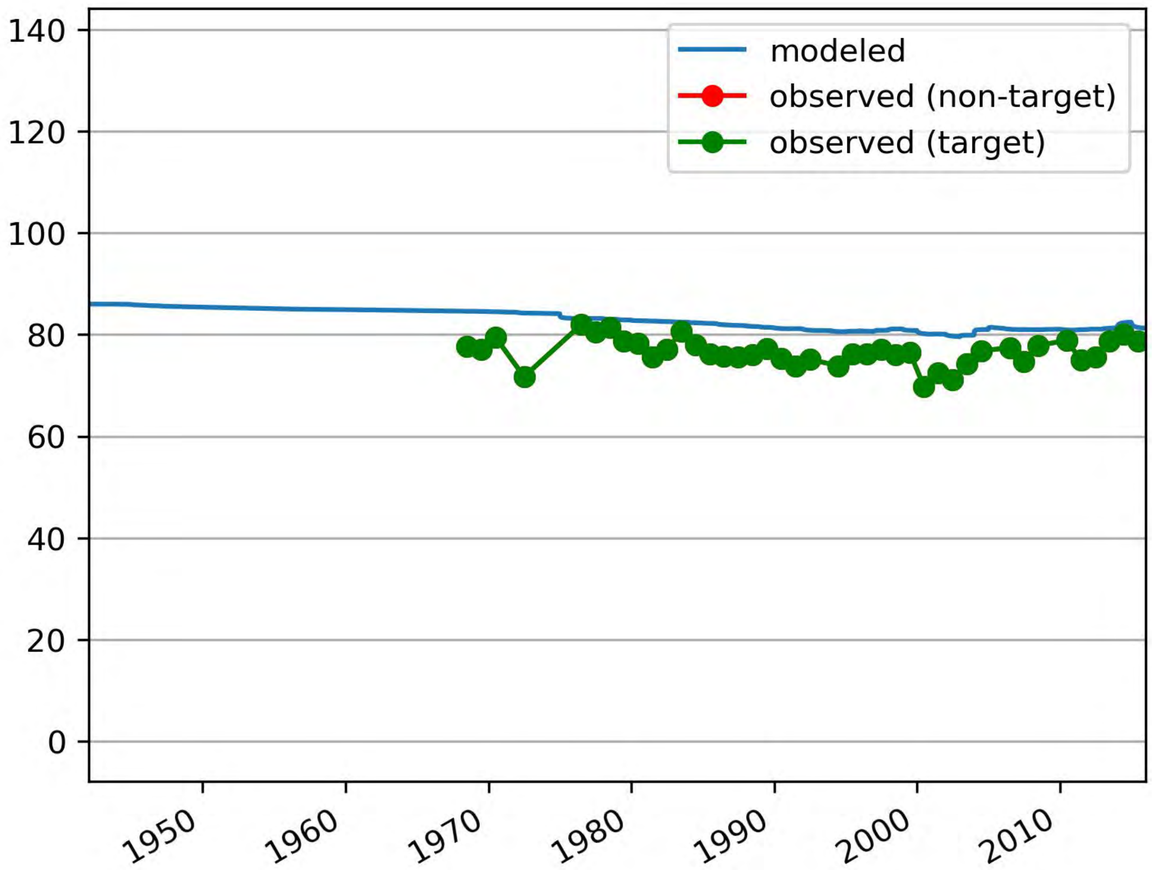


Model layer = 3

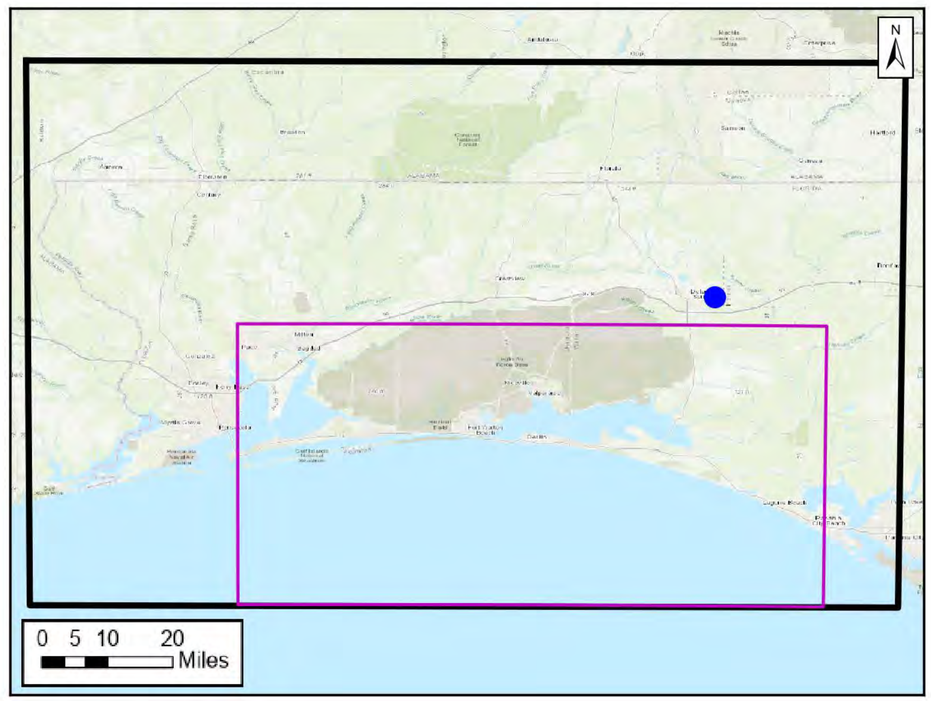
Hydrograph and location for well nwf_4731

TETRA TECH

Water Level Elevation (ft msl, NAVD88)



Location



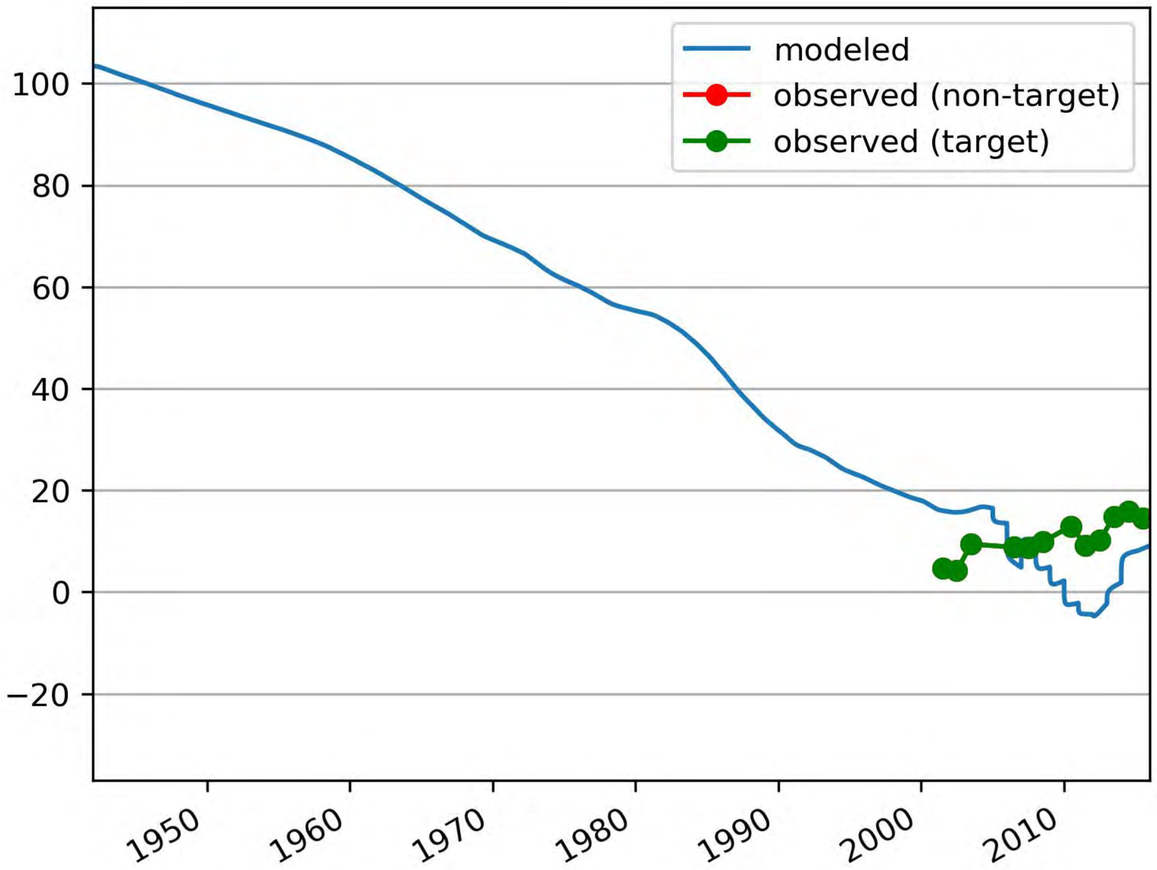
Number of measurements = 41
Mean residual (ft) = -5.15
Abs Mean residual (ft) = 5.15

Model layer = 3

Hydrograph and location for well nwf_4754

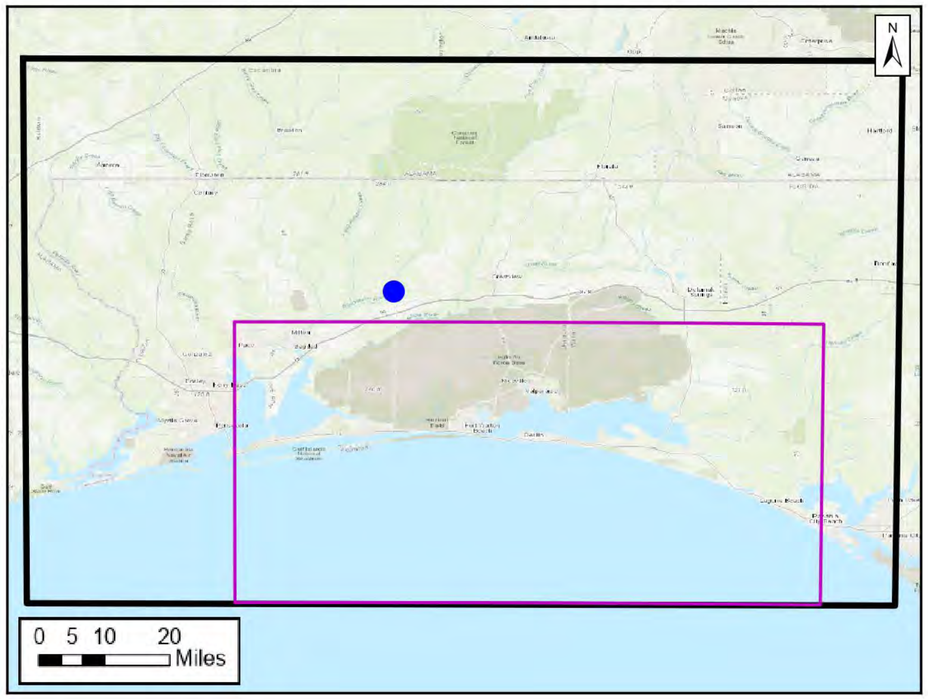
TETRA TECH

Water Level Elevation (ft msl, NAVD88)



Number of measurements = 12
Mean residual (ft) = 4.01
Abs Mean residual (ft) = 9.21

Location

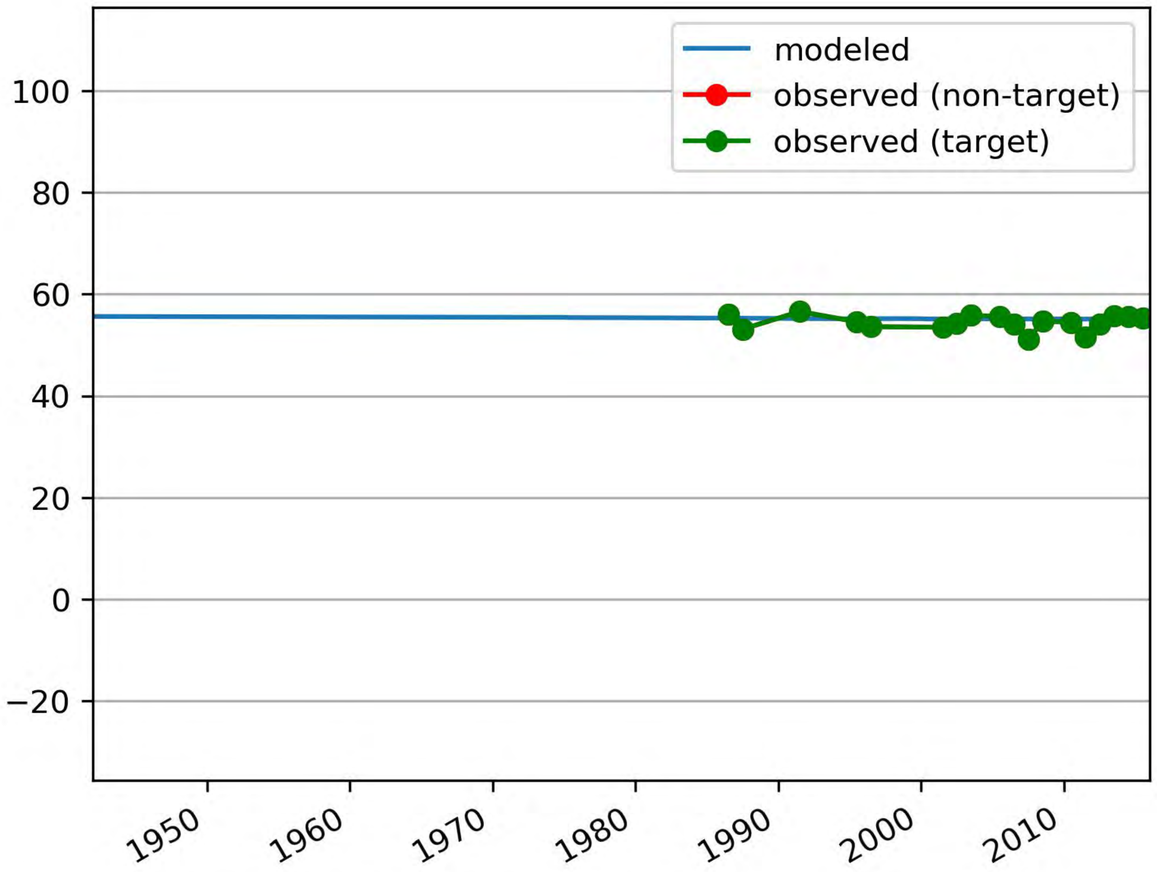


Model layer = 3

Hydrograph and location for well nwf_4788

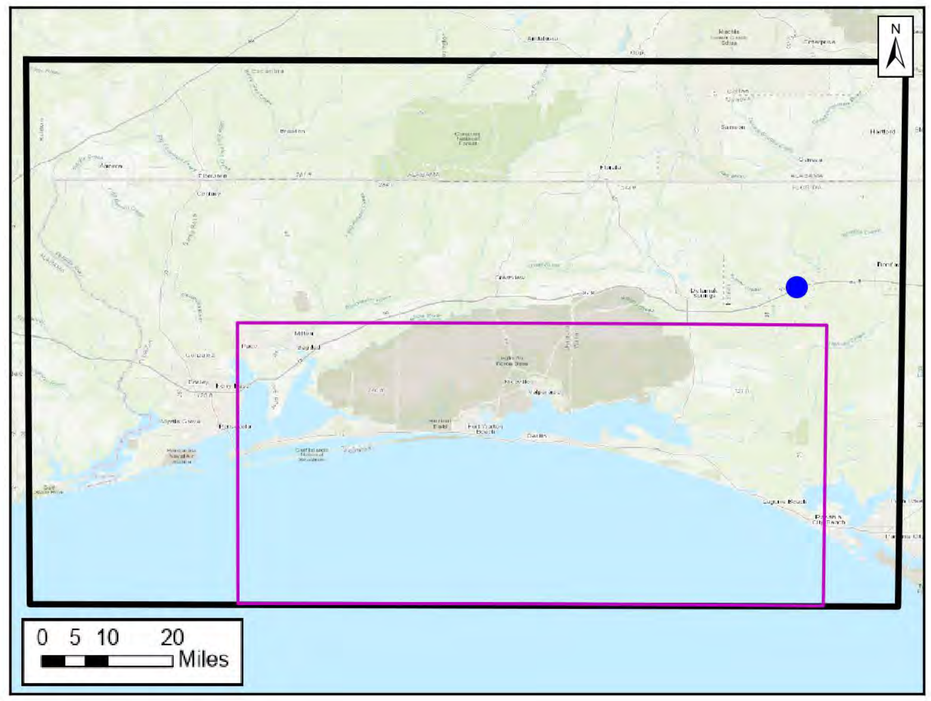
TETRA TECH

Water Level Elevation (ft msl, NAVD88)



Number of measurements = 18
Mean residual (ft) = -0.72
Abs Mean residual (ft) = 1.22

Location

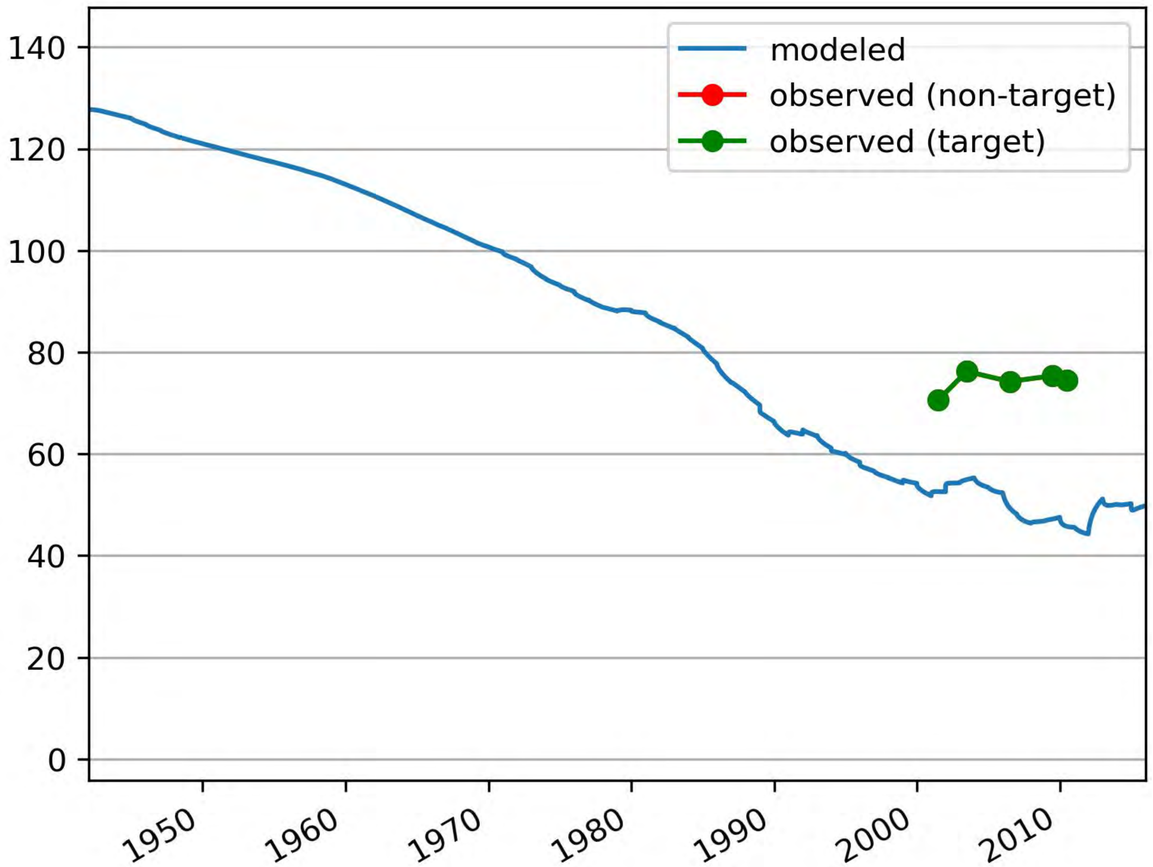


Model layer = 3

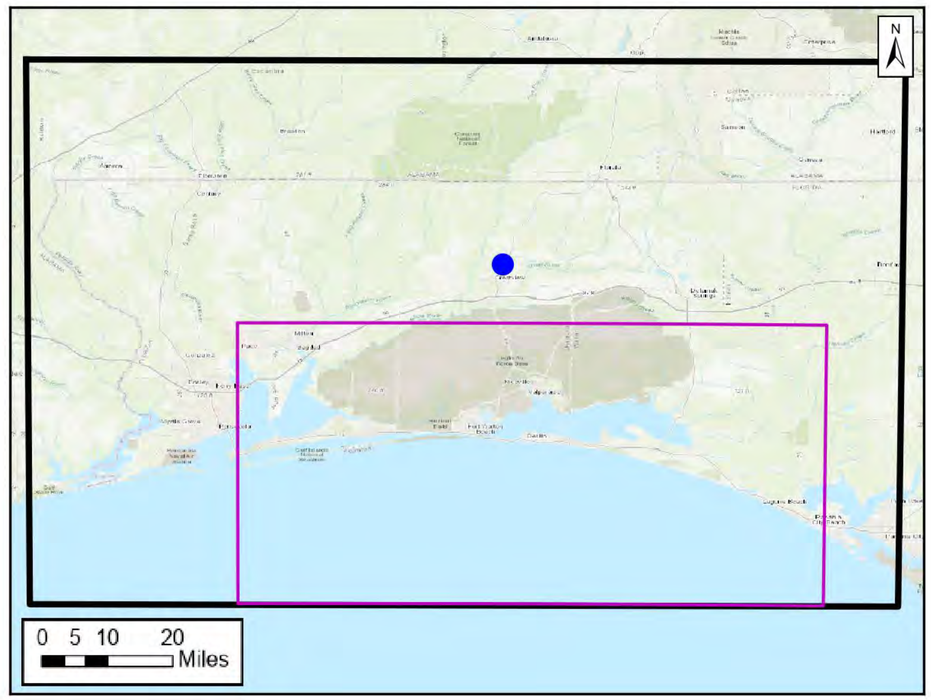
Hydrograph and location for well nwf_4822

TETRA TECH

Water Level Elevation (ft msl, NAVD88)



Location



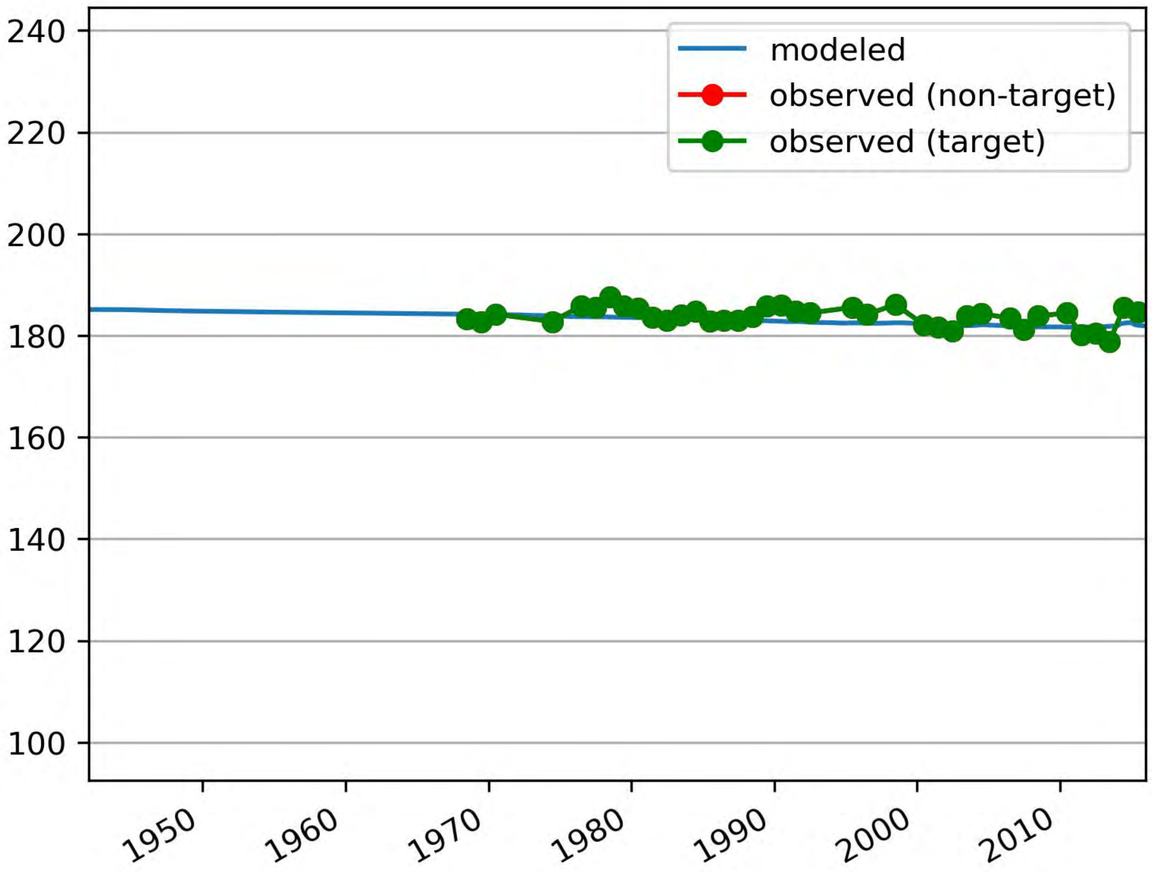
Number of measurements = 5
Mean residual (ft) = 24.2
Abs Mean residual (ft) = 24.2

Model layer = 3

Hydrograph and location for well nwf_5080

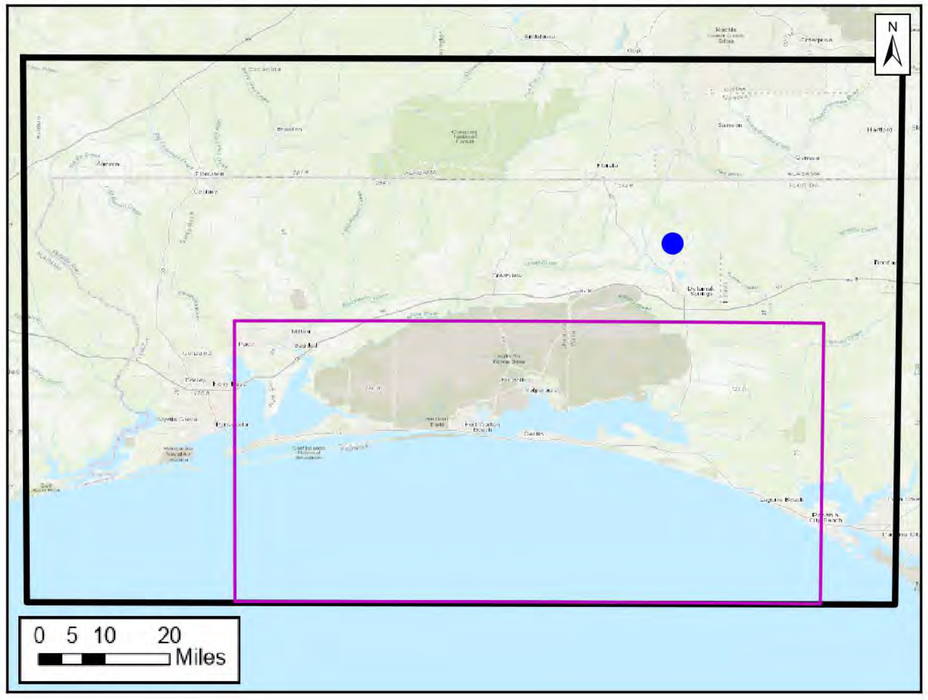
TETRA TECH

Water Level Elevation (ft msl, NAVD88)



Number of measurements = 38
Mean residual (ft) = 0.97
Abs Mean residual (ft) = 1.63

Location

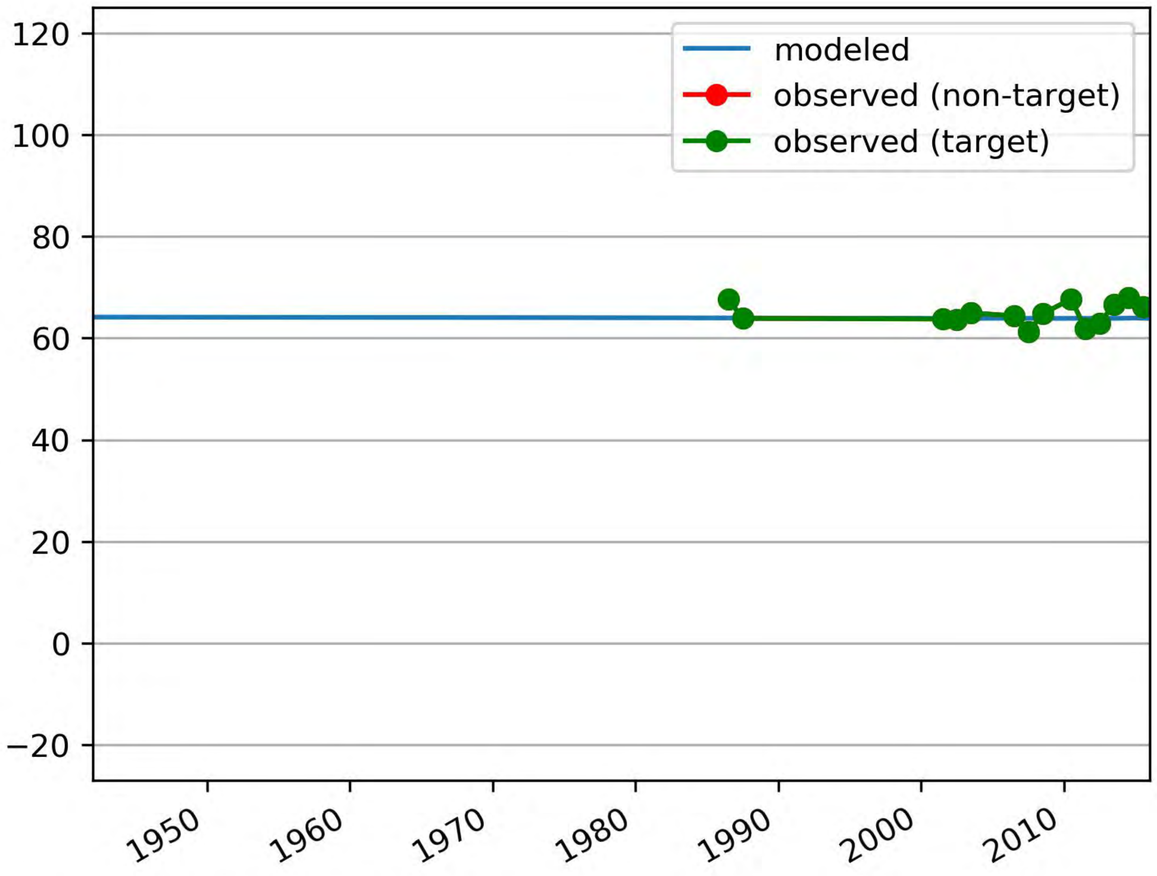


Model layer = 3

Hydrograph and location for well nwf_5240

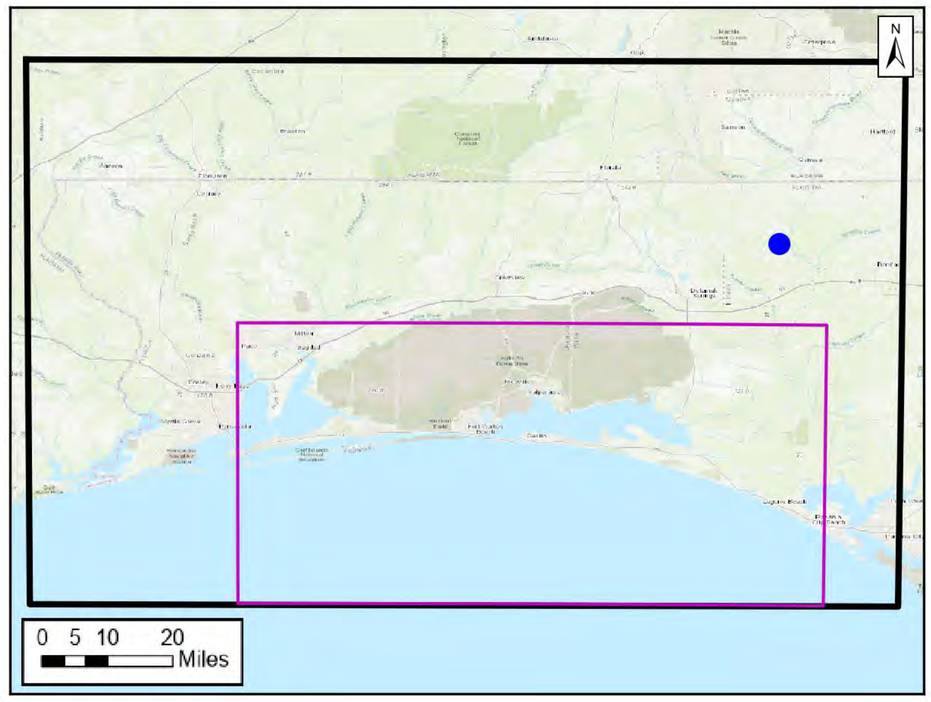
TETRA TECH

Water Level Elevation (ft msl, NAVD88)



Number of measurements = 14
Mean residual (ft) = 0.92
Abs Mean residual (ft) = 1.81

Location

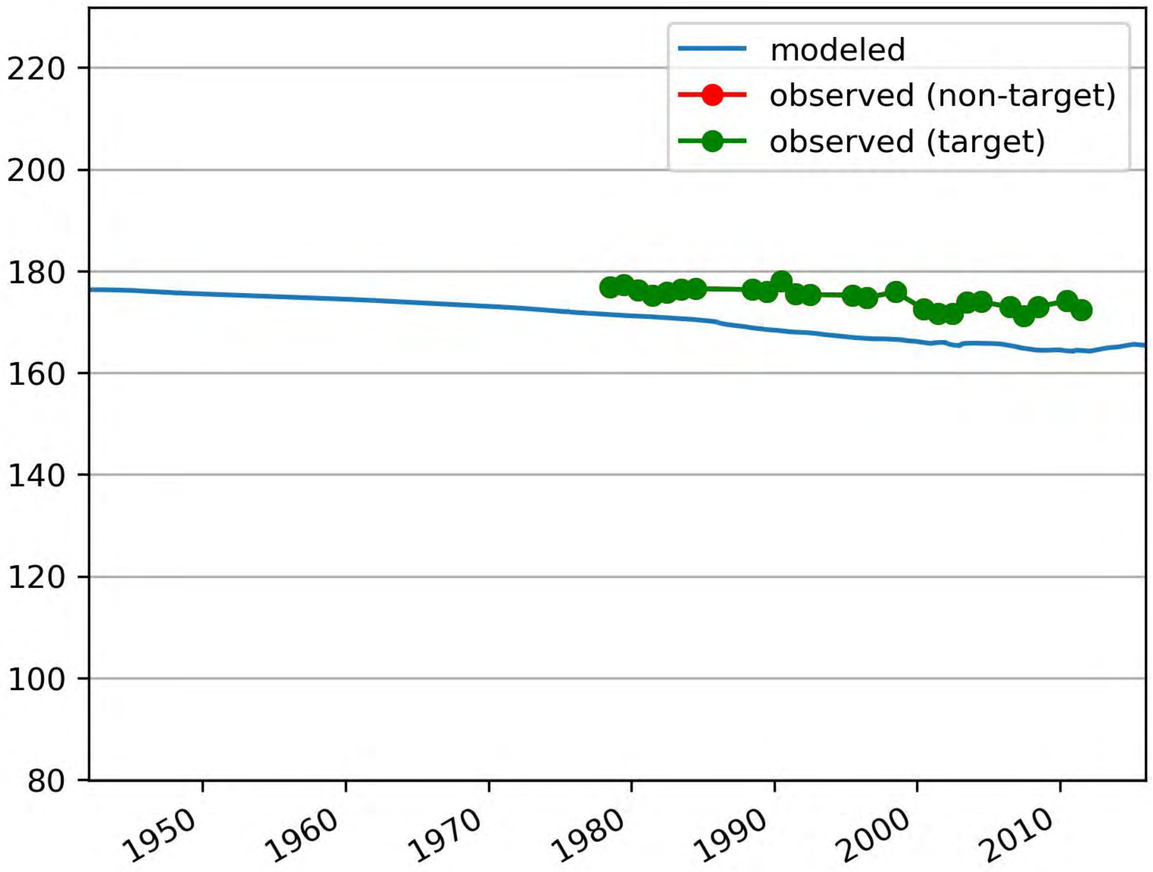


Model layer = 3

Hydrograph and location for well nwf_5254

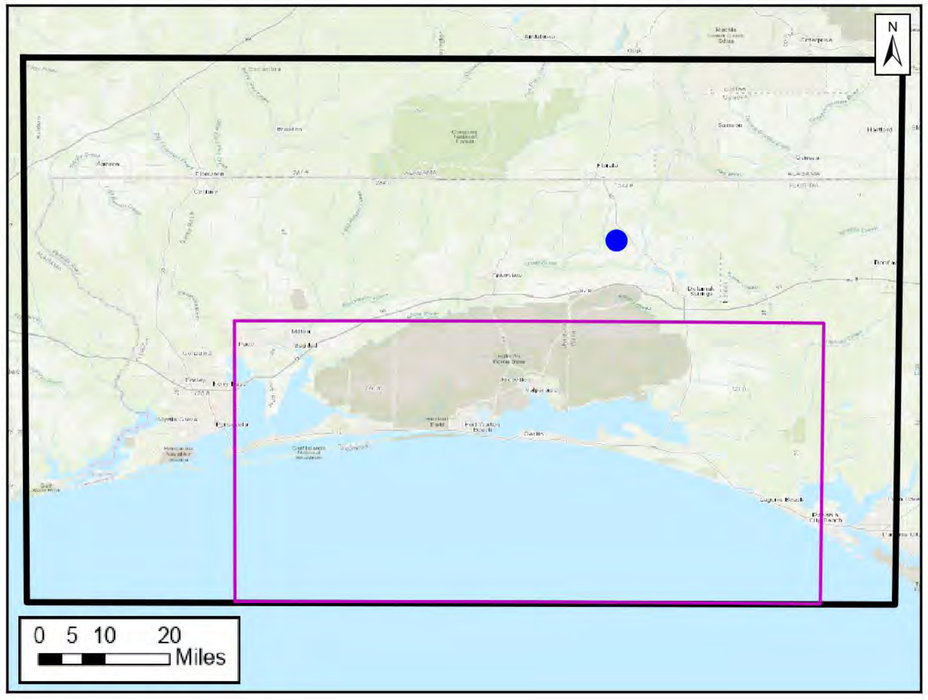
TETRA TECH

Water Level Elevation (ft msl, NAVD88)



Number of measurements = 25
Mean residual (ft) = 7.13
Abs Mean residual (ft) = 7.13

Location

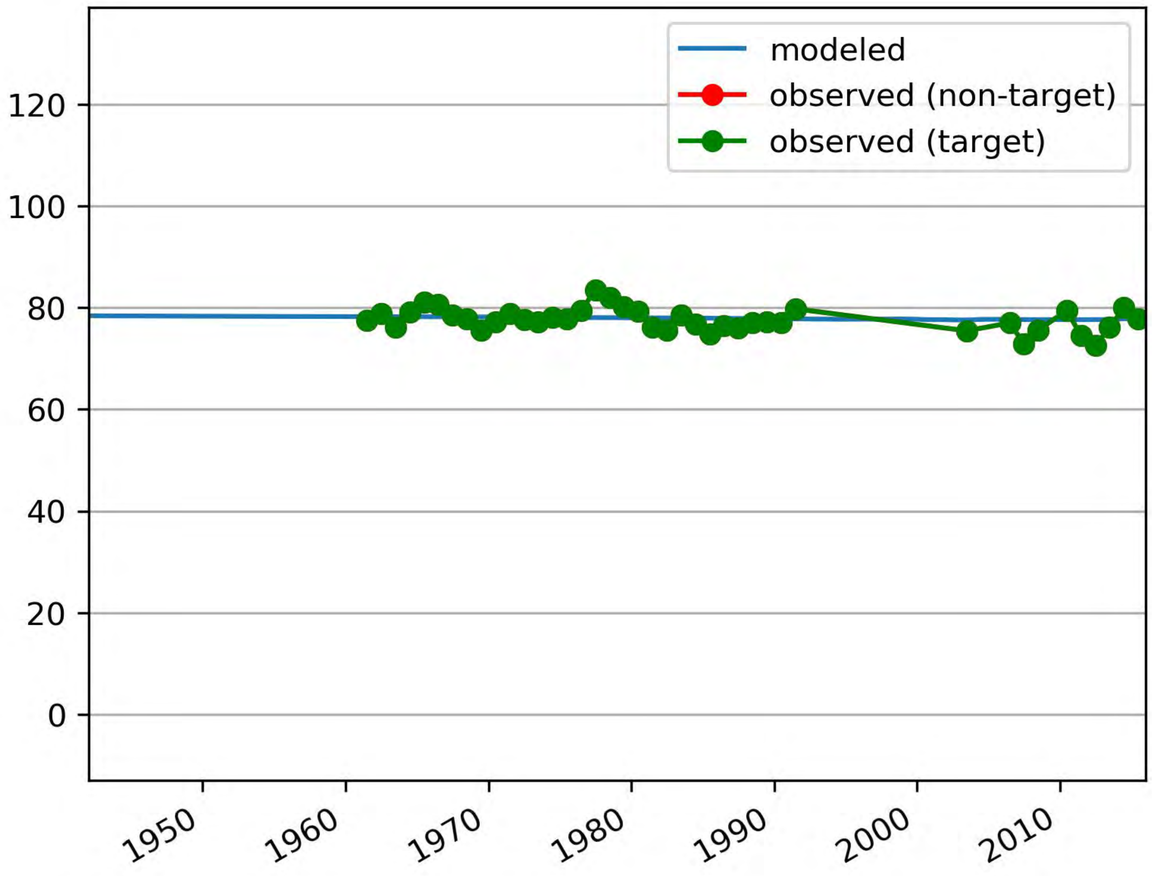


Model layer = 3

Hydrograph and location for well nwf_5261

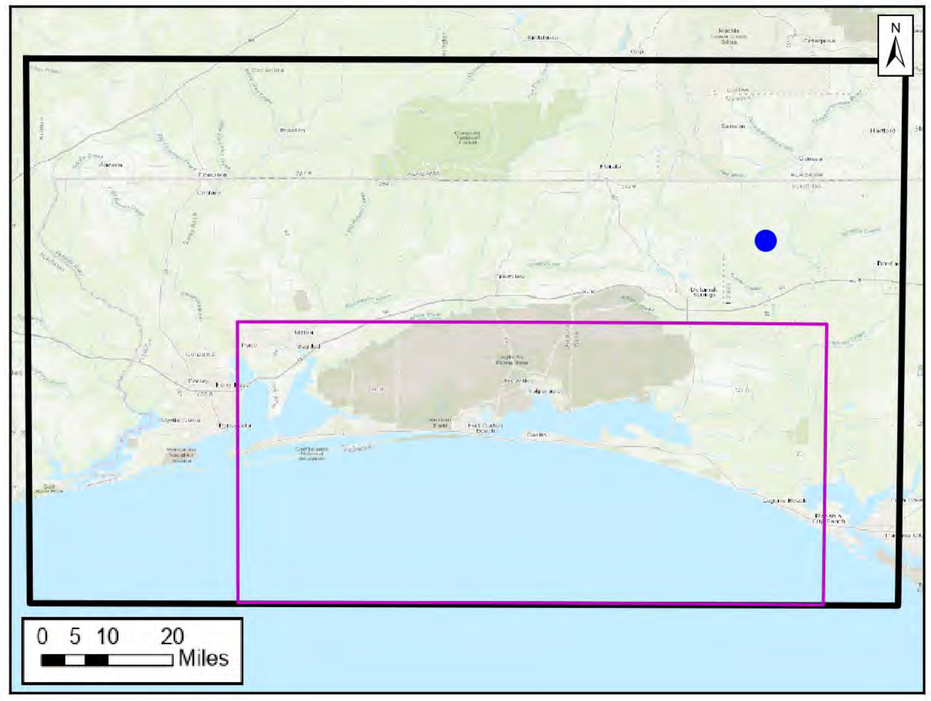
TETRA TECH

Water Level Elevation (ft msl, NAVD88)



Number of measurements = 41
Mean residual (ft) = -0.32
Abs Mean residual (ft) = 1.72

Location

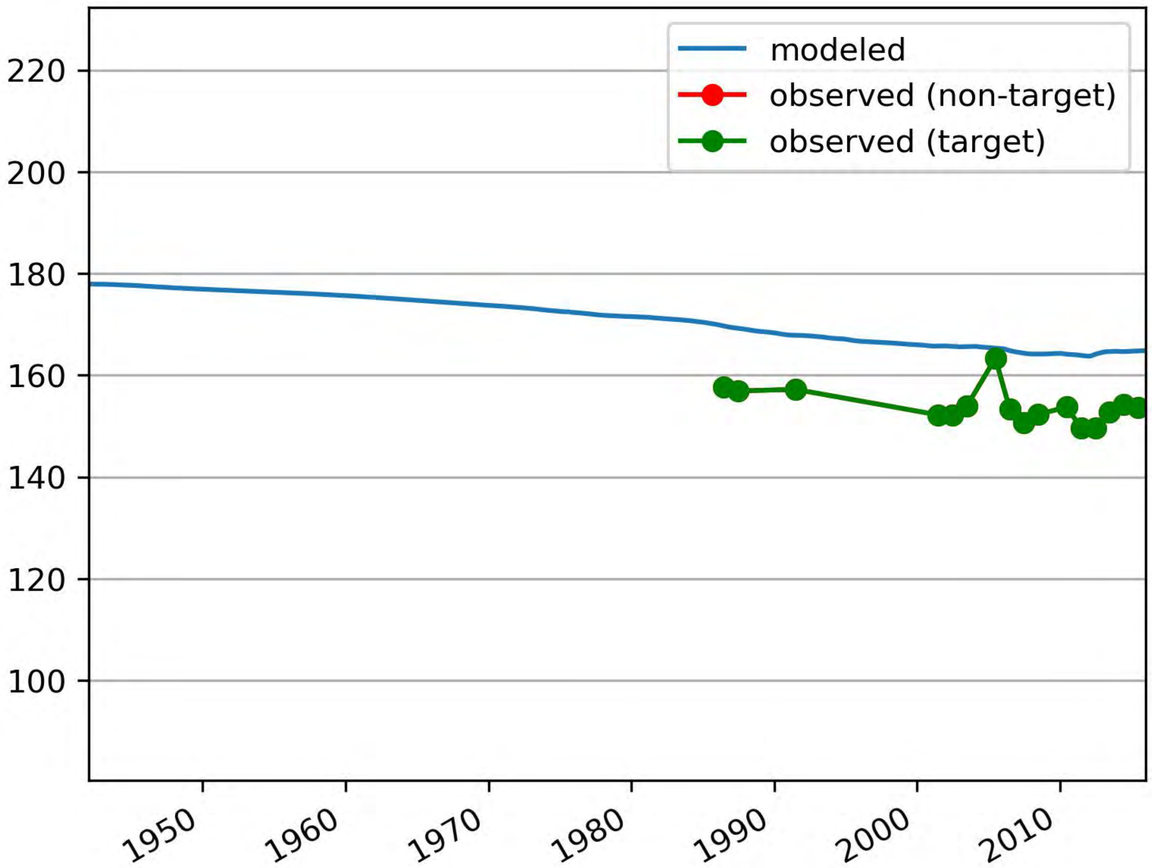


Model layer = 3

Hydrograph and location for well nwf_5271

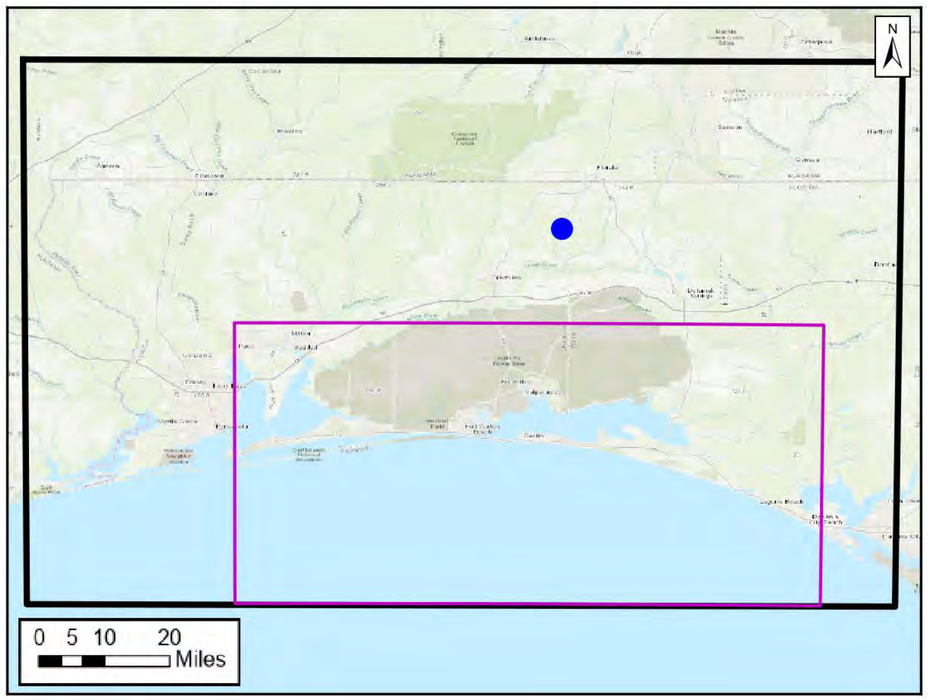
TETRA TECH

Water Level Elevation (ft msl, NAVD88)



Number of measurements = 16
Mean residual (ft) = -11.57
Abs Mean residual (ft) = 11.57

Location

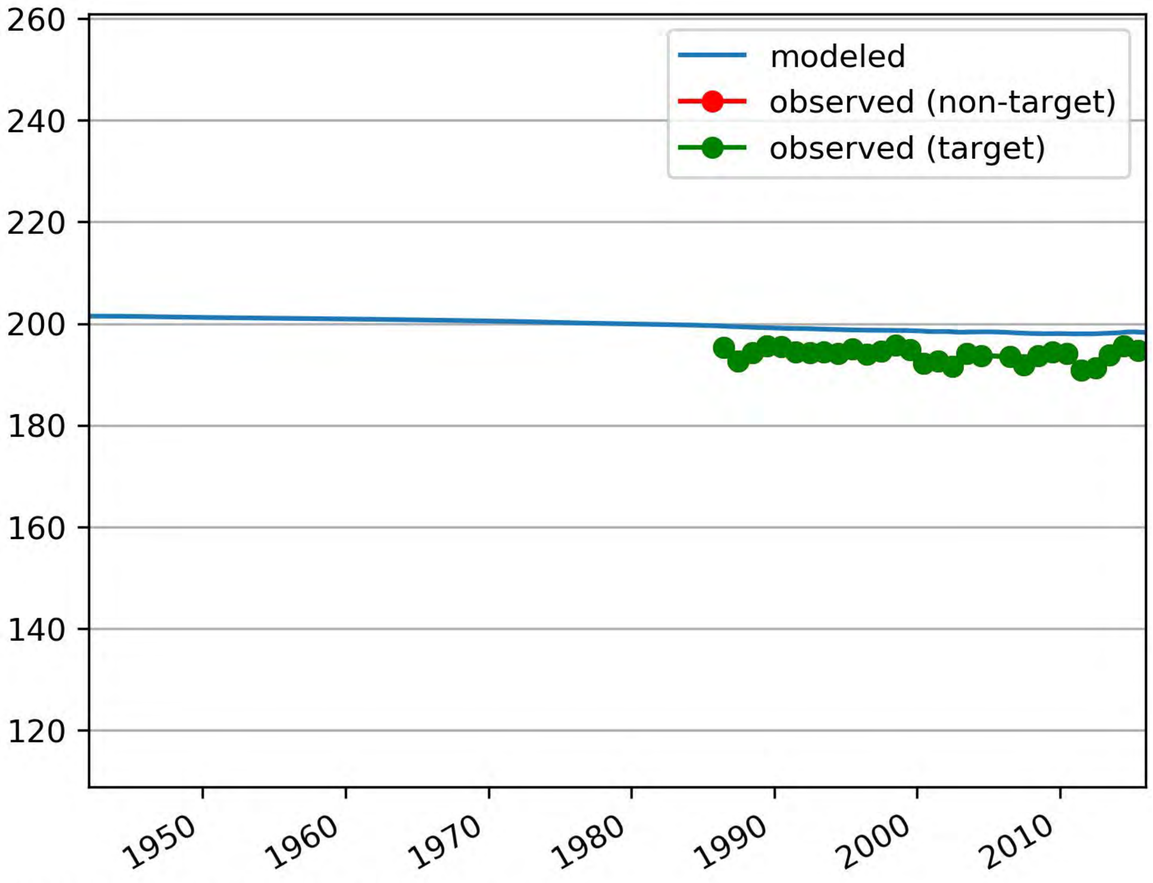


Model layer = 3

Hydrograph and location for well nwf_5363

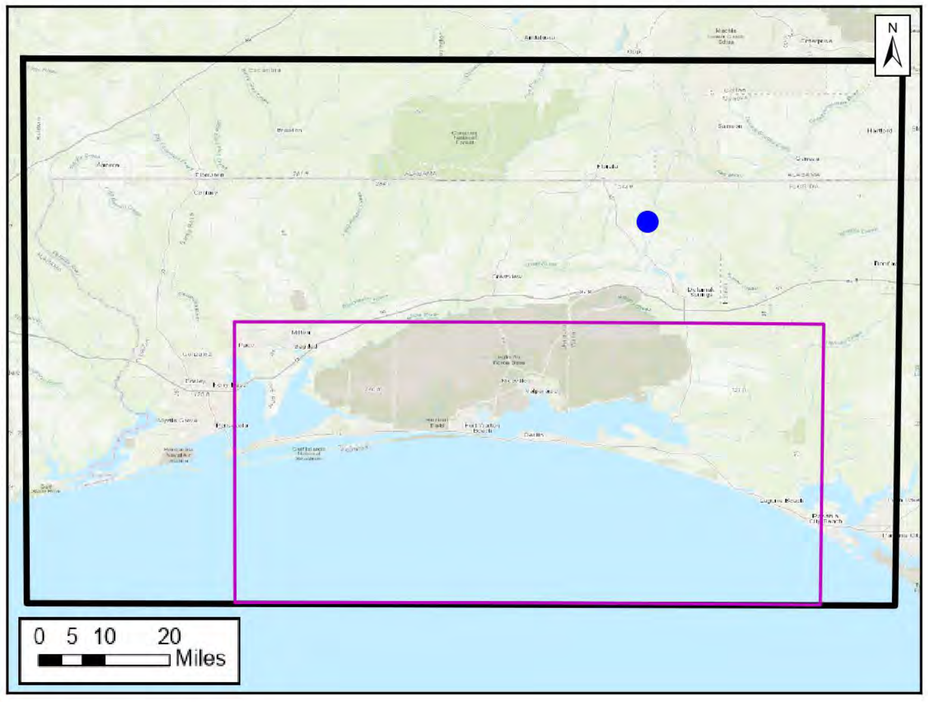
TETRA TECH

Water Level Elevation (ft msl, NAVD88)



Number of measurements = 29
Mean residual (ft) = -4.68
Abs Mean residual (ft) = 4.68

Location

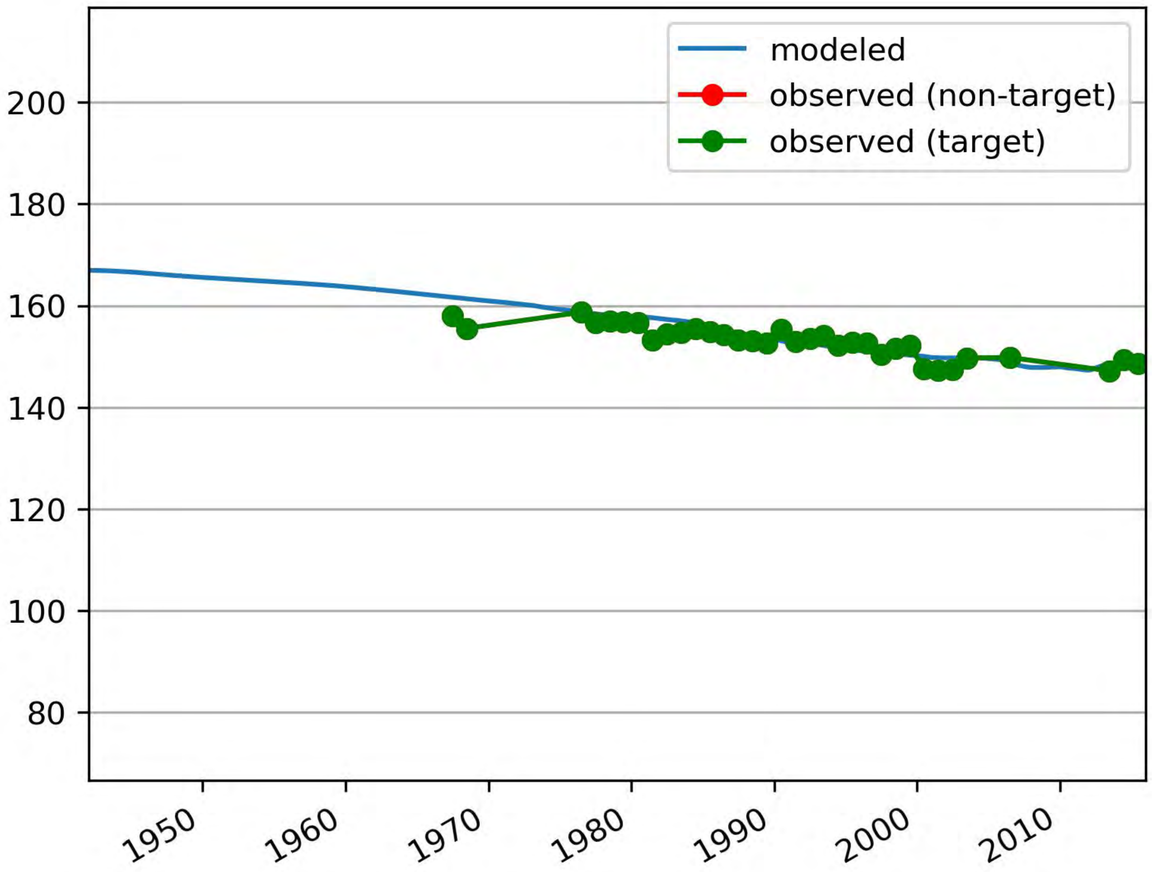


Model layer = 3

Hydrograph and location for well nwf_5417

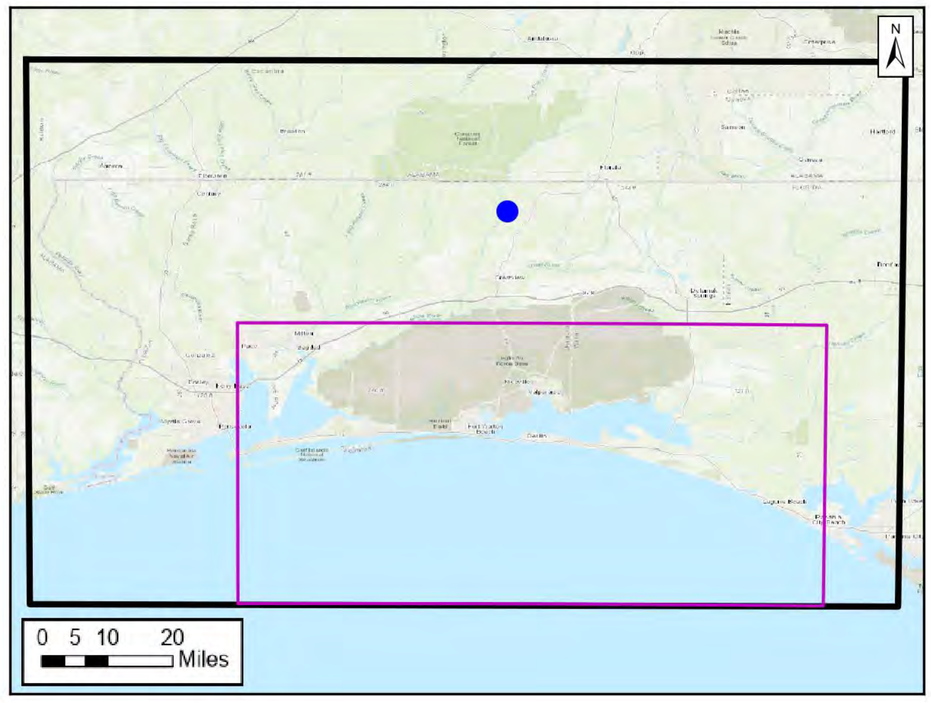
TETRA TECH

Water Level Elevation (ft msl, NAVD88)



Number of measurements = 34
Mean residual (ft) = -0.76
Abs Mean residual (ft) = 1.58

Location

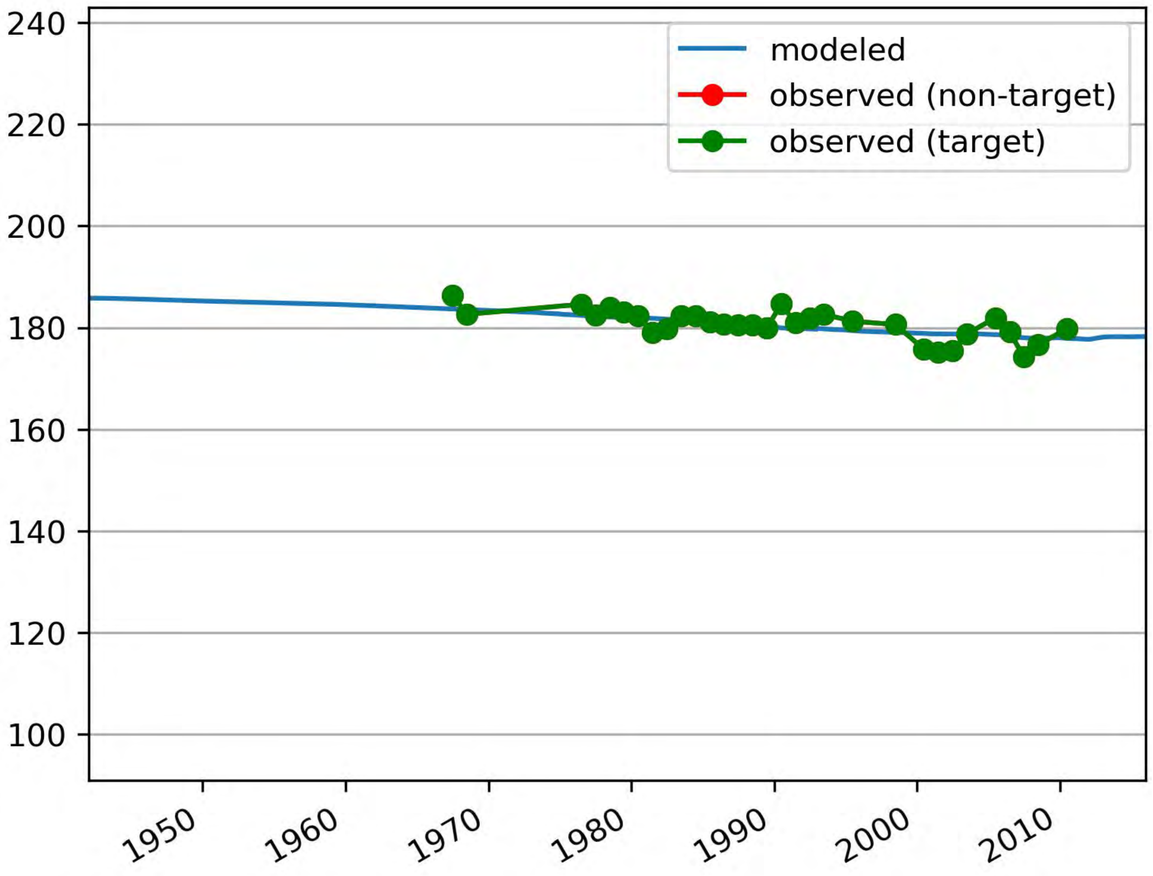


Model layer = 3

Hydrograph and location for well nwf_5499

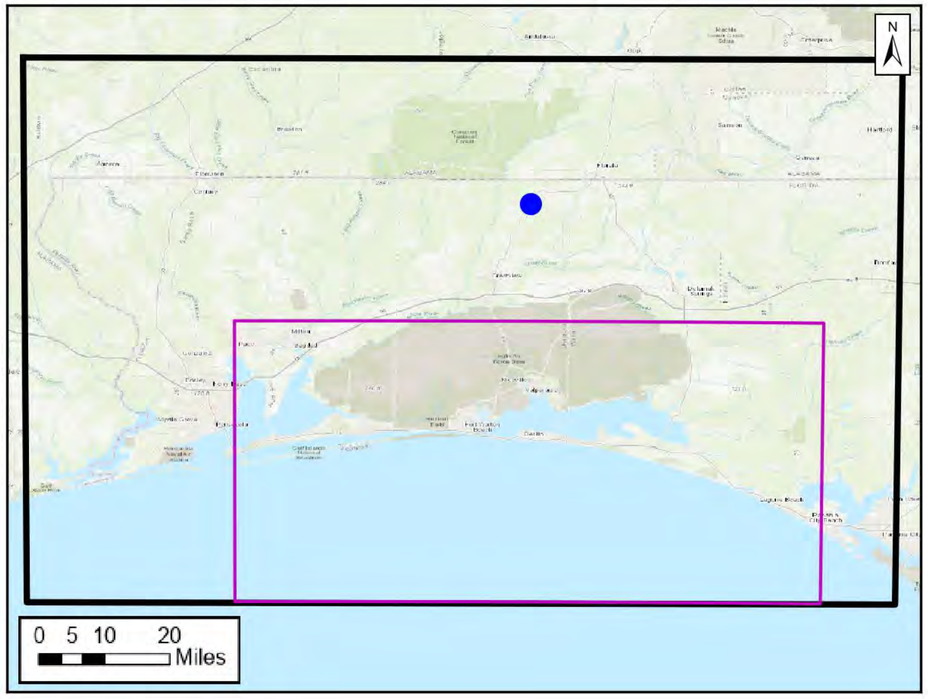
TETRA TECH

Water Level Elevation (ft msl, NAVD88)



Number of measurements = 31
Mean residual (ft) = 0.32
Abs Mean residual (ft) = 1.68

Location

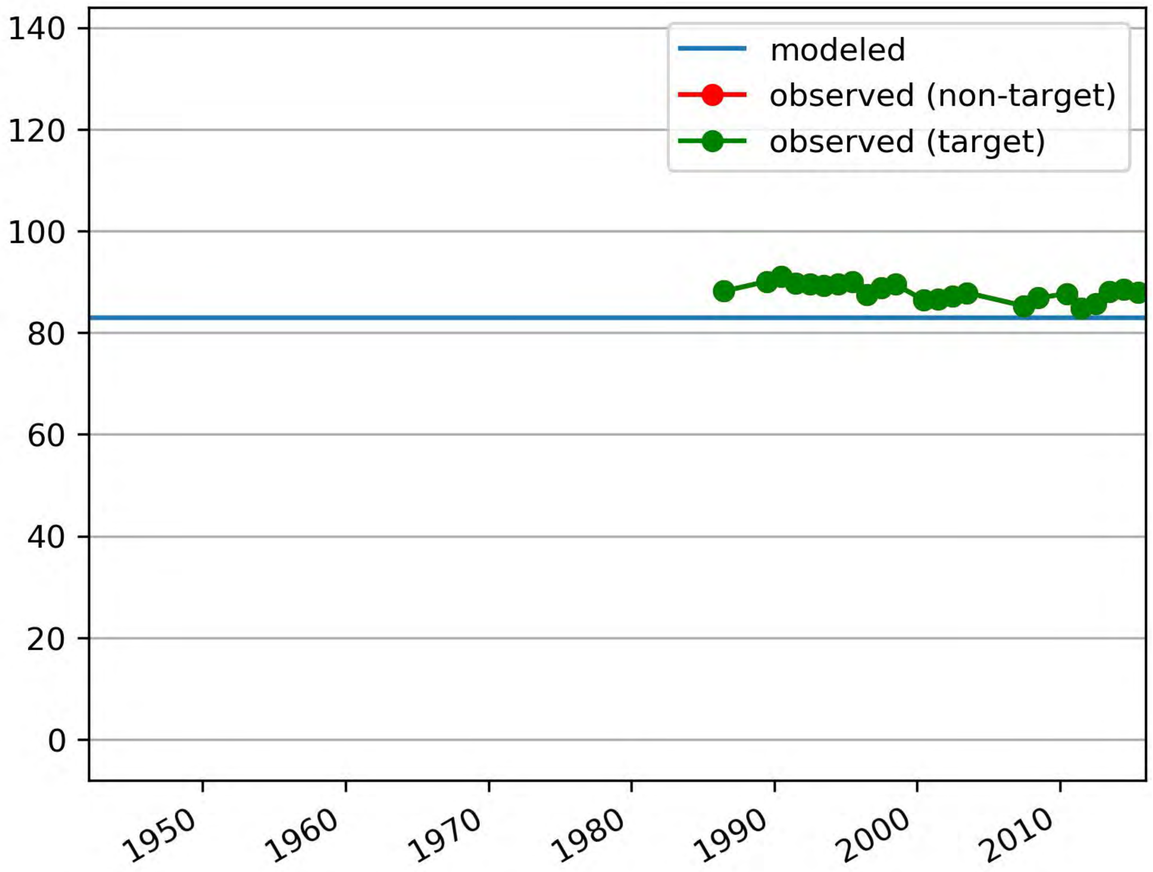


Model layer = 3

Hydrograph and location for well nwf_5543

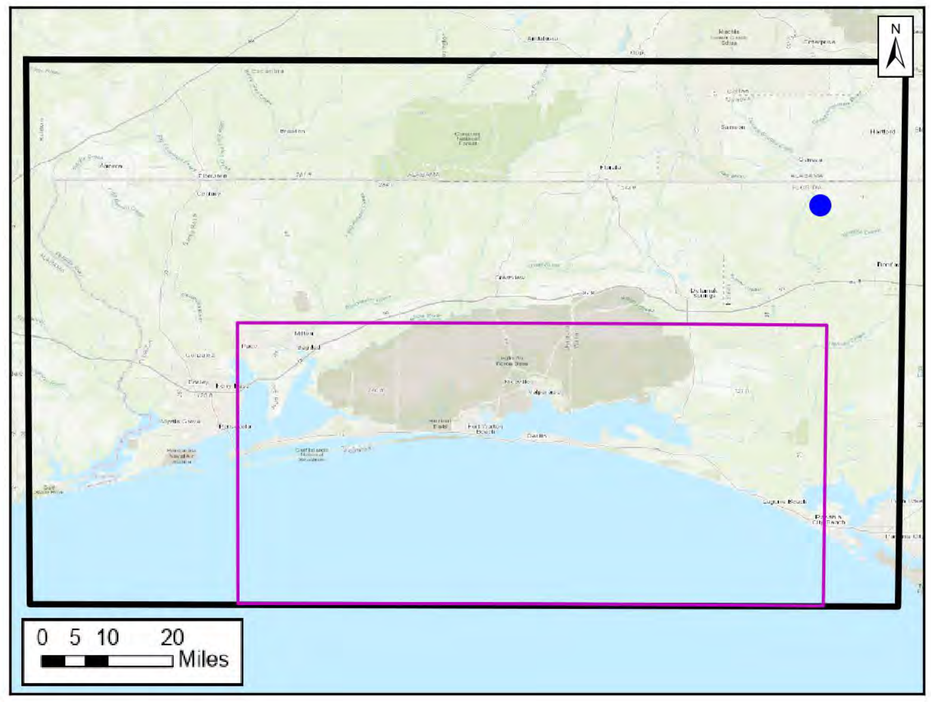
TETRA TECH

Water Level Elevation (ft msl, NAVD88)



Number of measurements = 23
Mean residual (ft) = 5.17
Abs Mean residual (ft) = 5.17

Location

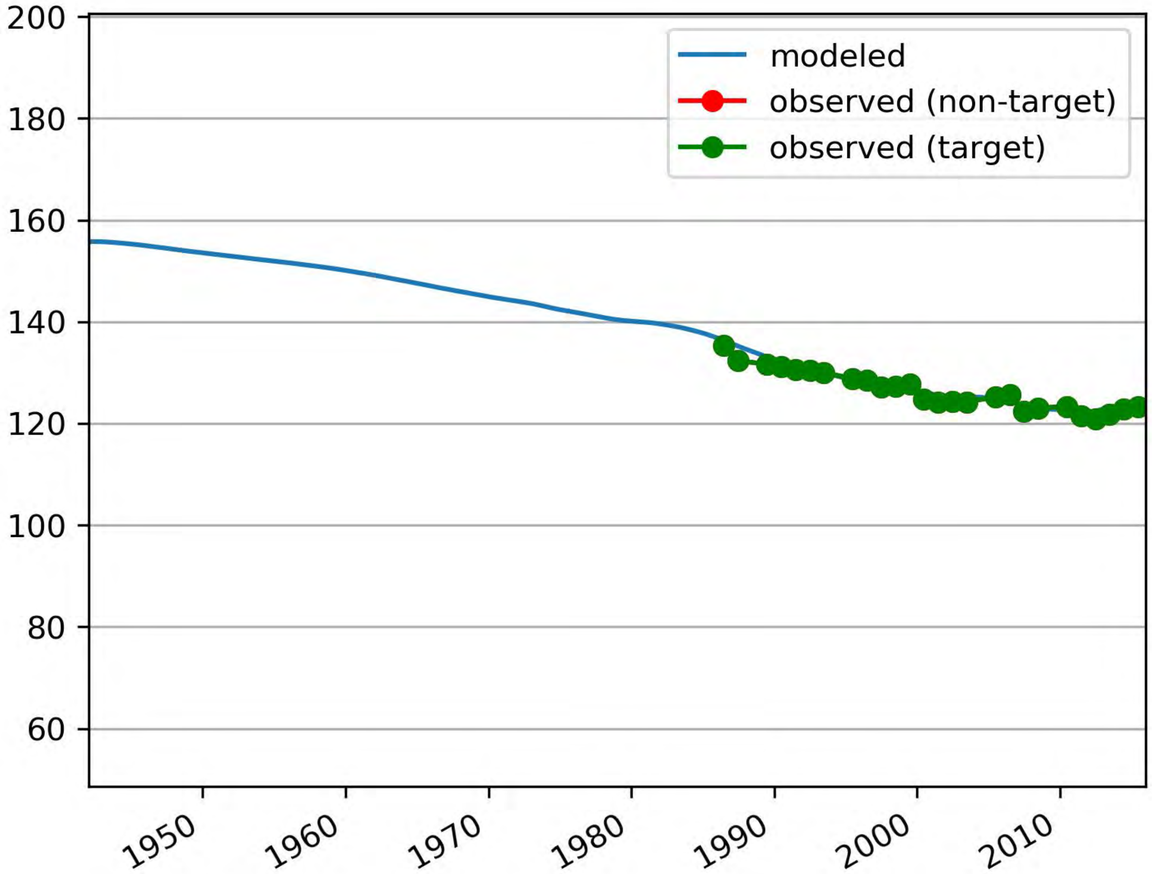


Model layer = 3

Hydrograph and location for well nwf_5547

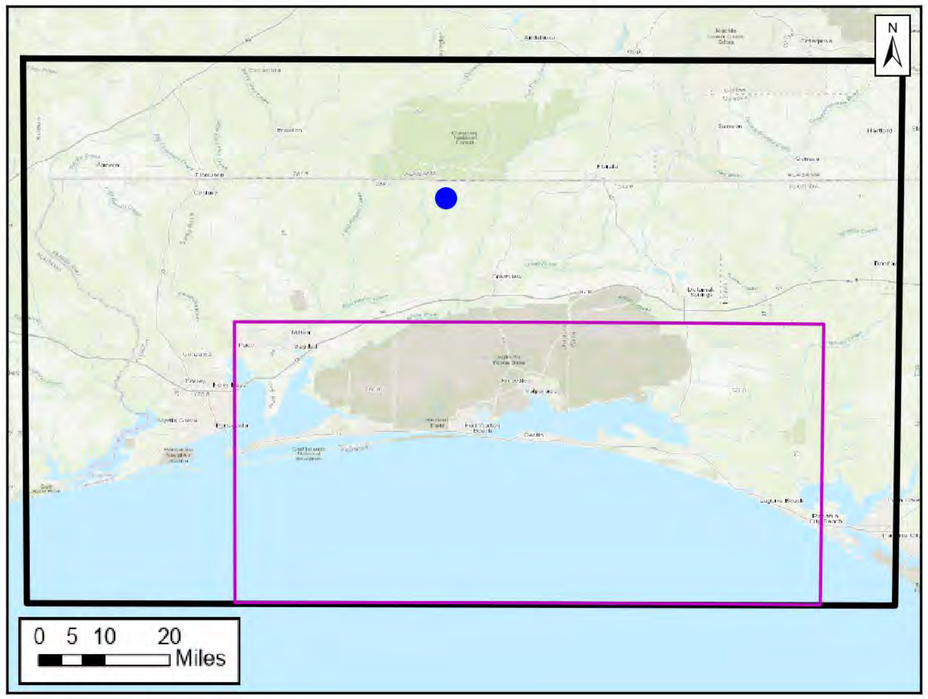
TETRA TECH

Water Level Elevation (ft msl, NAVD88)



Number of measurements = 26
Mean residual (ft) = -0.56
Abs Mean residual (ft) = 0.88

Location

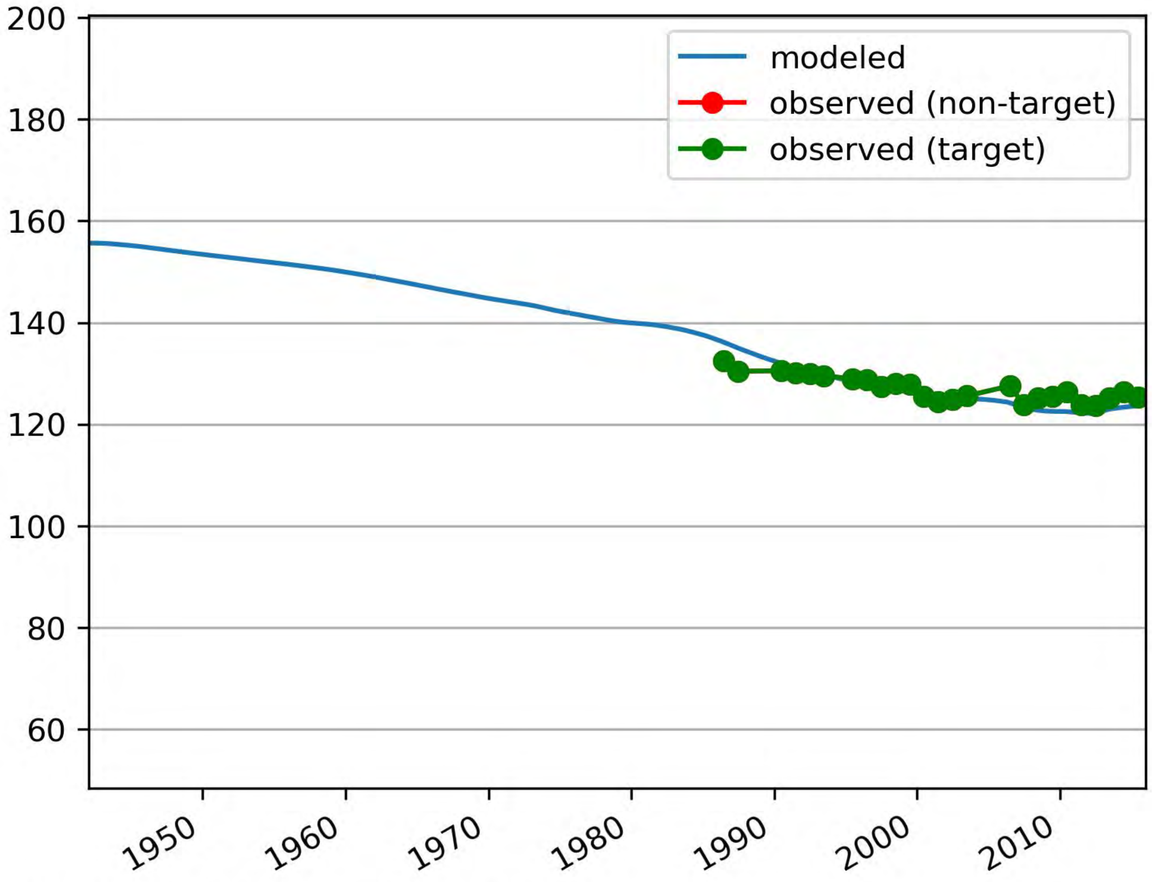


Model layer = 5

Hydrograph and location for well nwf_5596

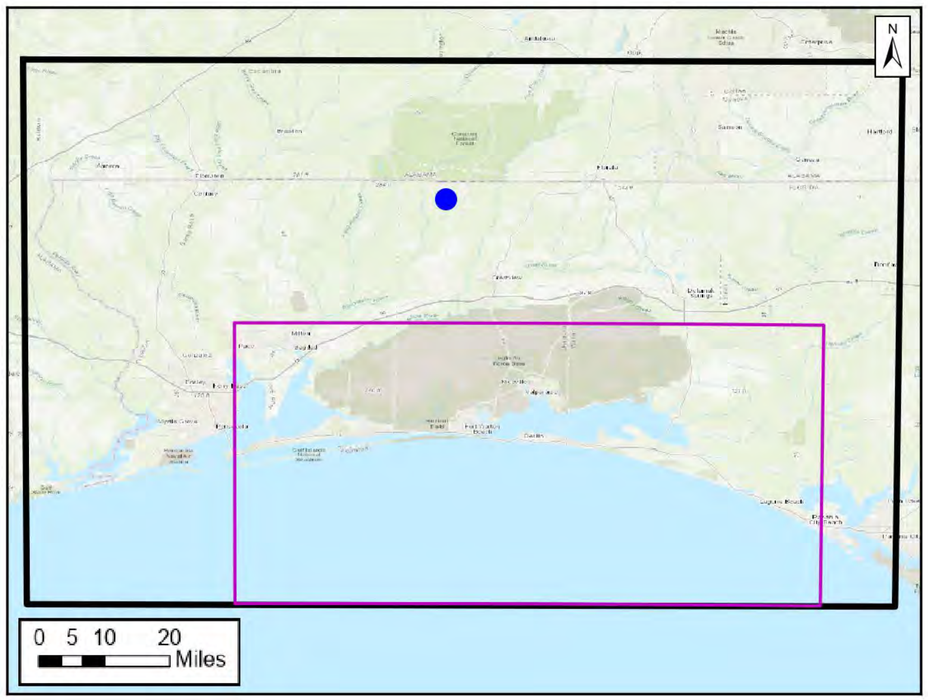
TETRA TECH

Water Level Elevation (ft msl, NAVD88)



Number of measurements = 25
Mean residual (ft) = 0.6
Abs Mean residual (ft) = 1.63

Location

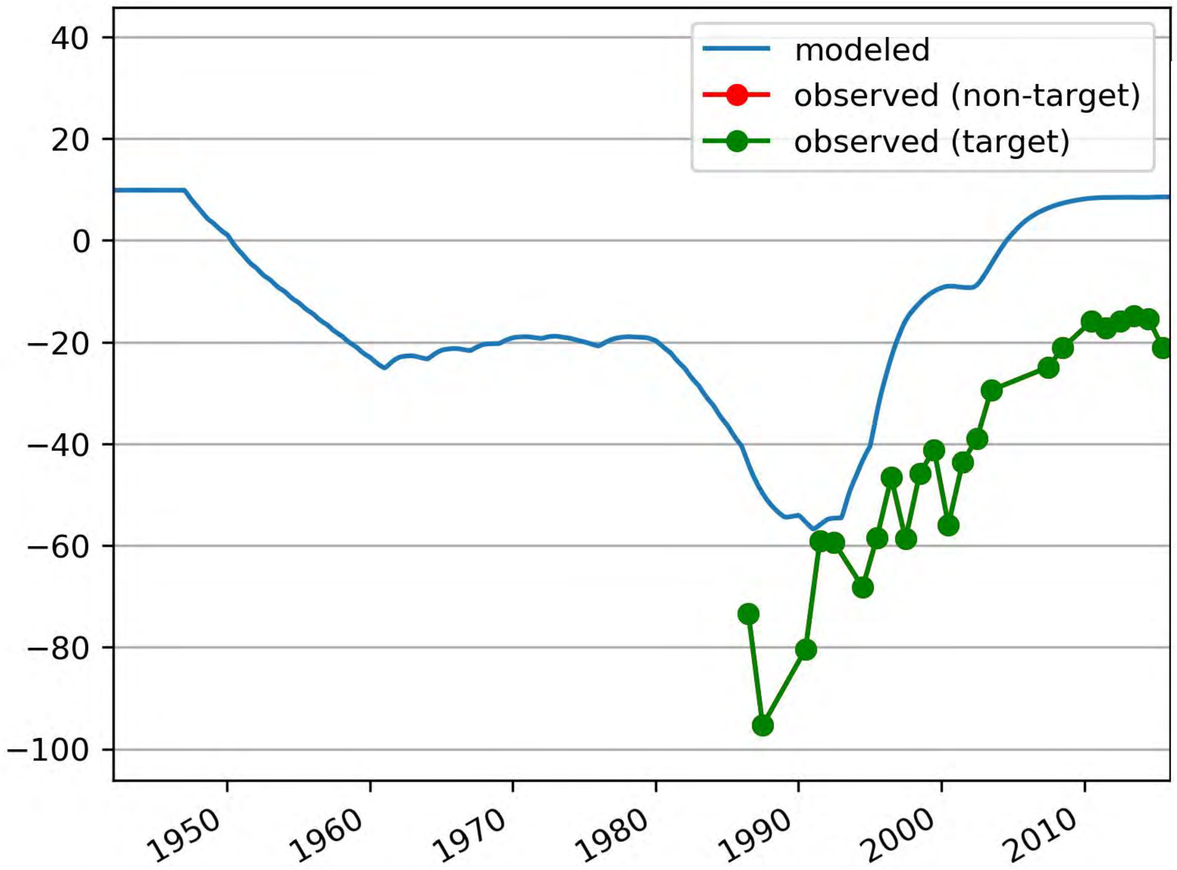


Model layer = 3

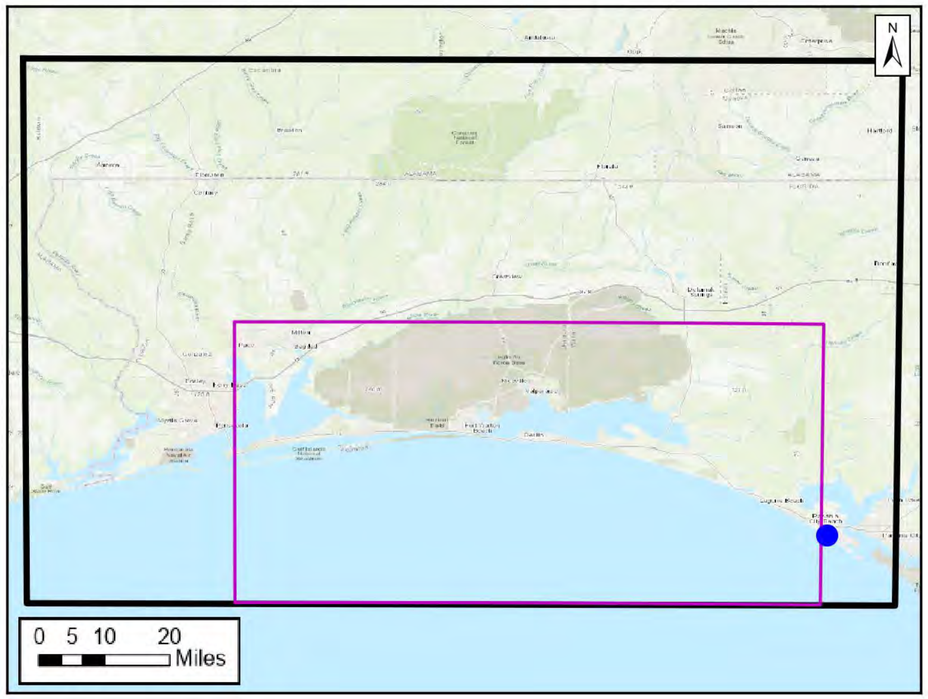
Hydrograph and location for well nwf_5597

TETRA TECH

Water Level Elevation (ft msl, NAVD88)



Location



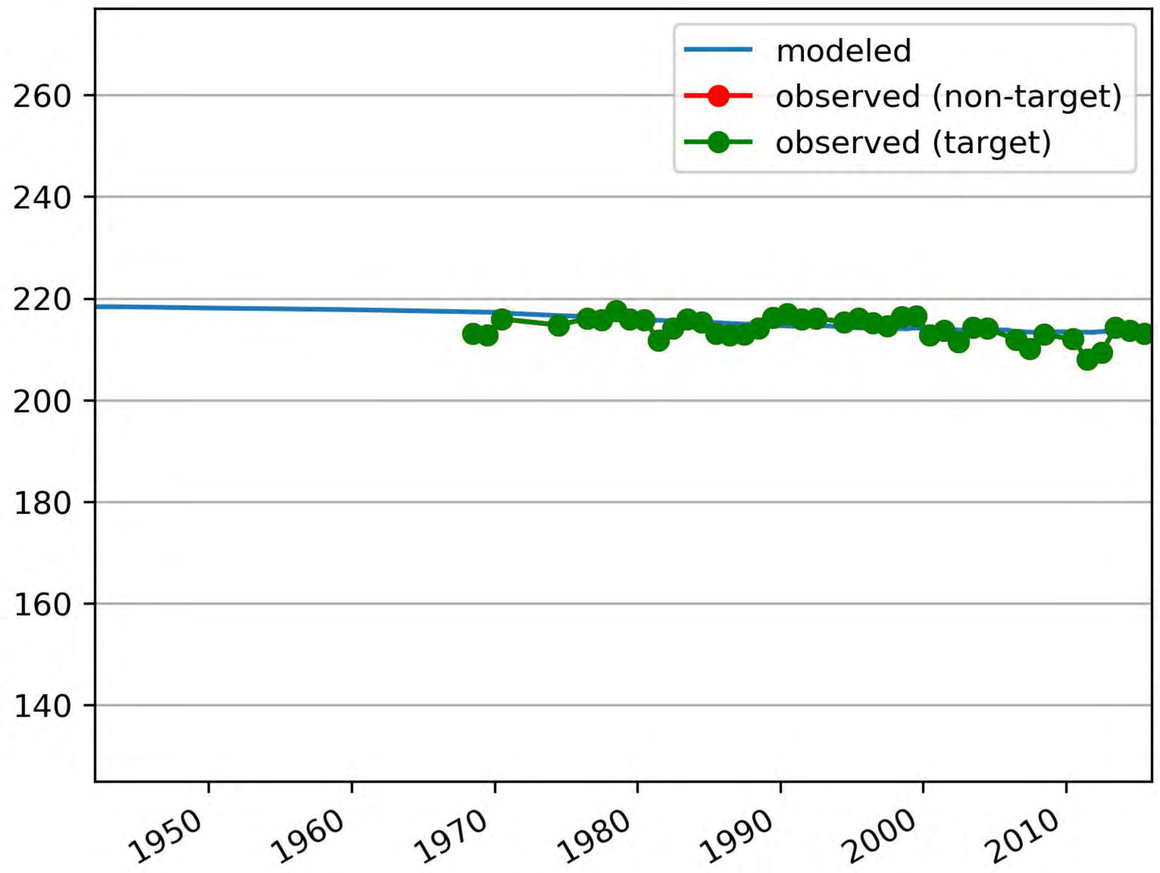
Number of measurements = 23
Mean residual (ft) = -27.64
Abs Mean residual (ft) = 27.64

Model layer = 3

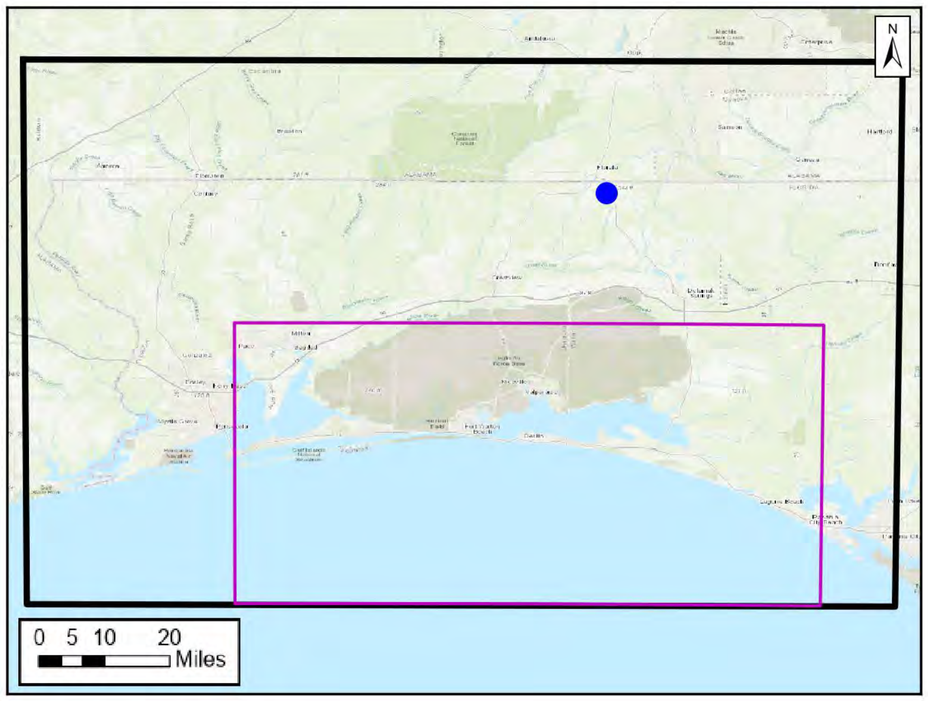
Hydrograph and location for well nwf_563

TETRA TECH

Water Level Elevation (ft msl, NAVD88)



Location



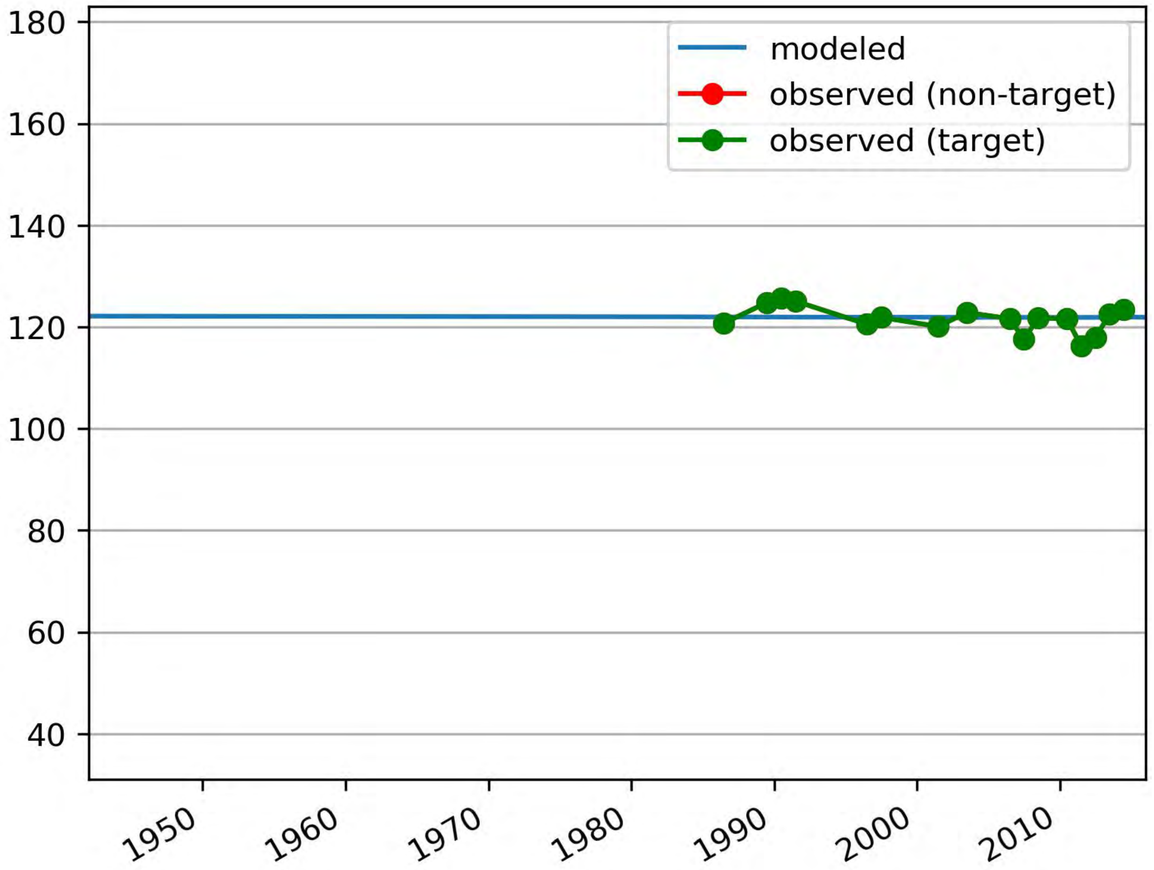
Number of measurements = 41
Mean residual (ft) = -0.64
Abs Mean residual (ft) = 1.58

Model layer = 3

Hydrograph and location for well nwf_5656

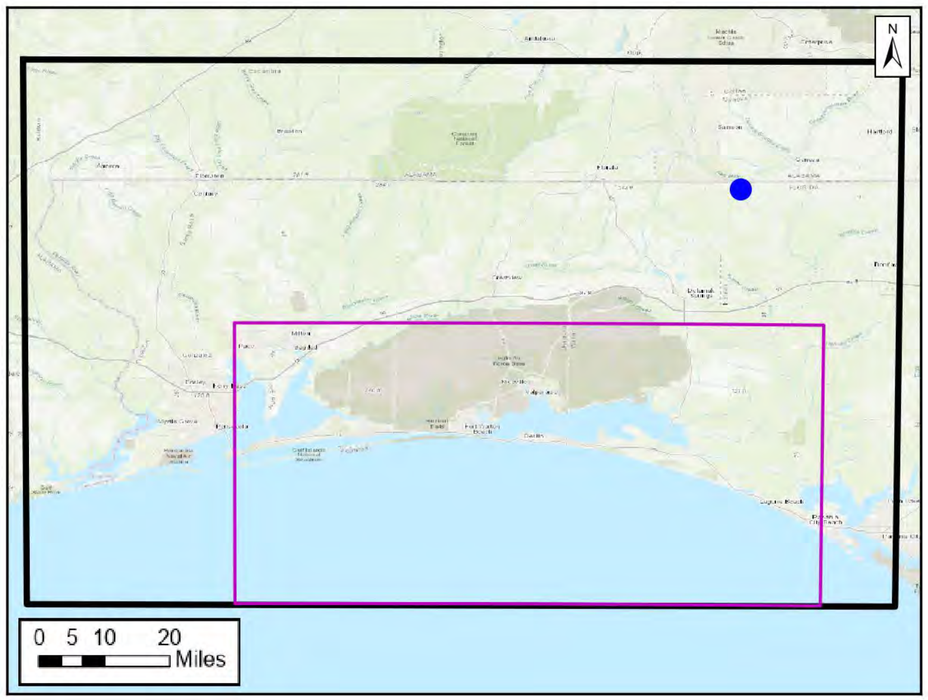
TETRA TECH

Water Level Elevation (ft msl, NAVD88)



Number of measurements = 16
Mean residual (ft) = -0.37
Abs Mean residual (ft) = 1.98

Location

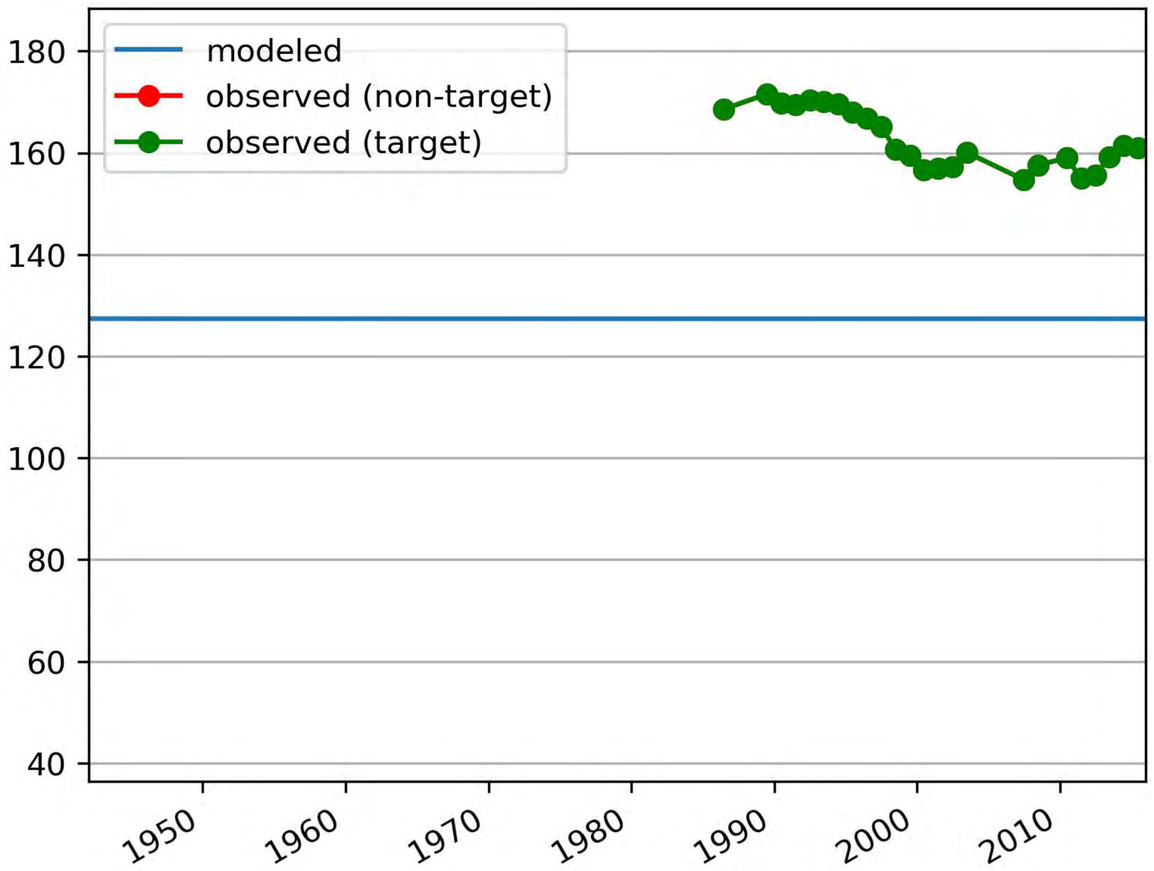


Model layer = 3

Hydrograph and location for well nwf_5691

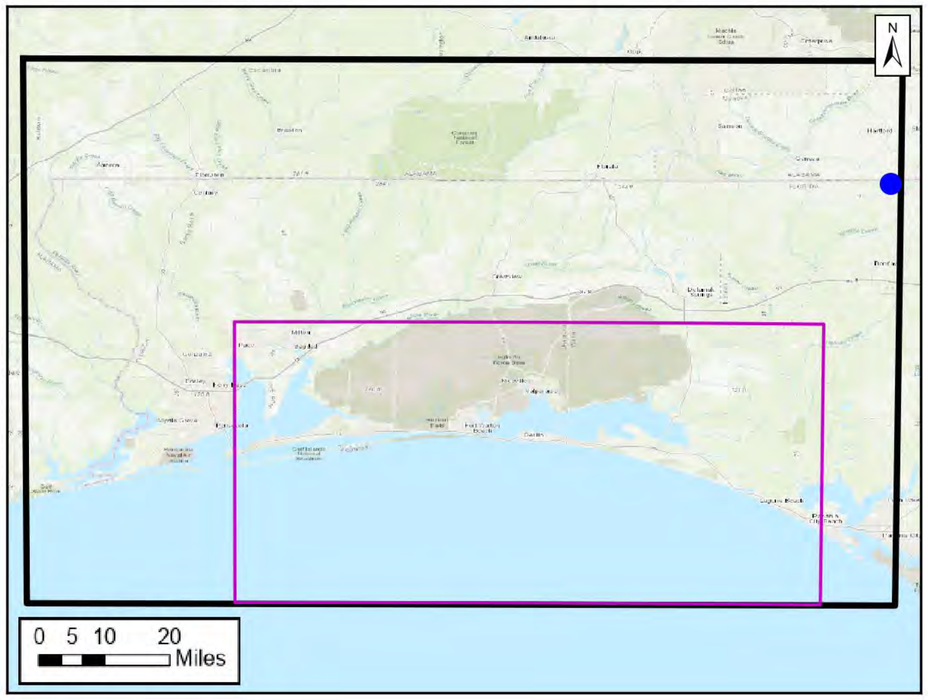
TETRA TECH

Water Level Elevation (ft msl, NAVD88)



Number of measurements = 24
Mean residual (ft) = 35.3
Abs Mean residual (ft) = 35.3

Location

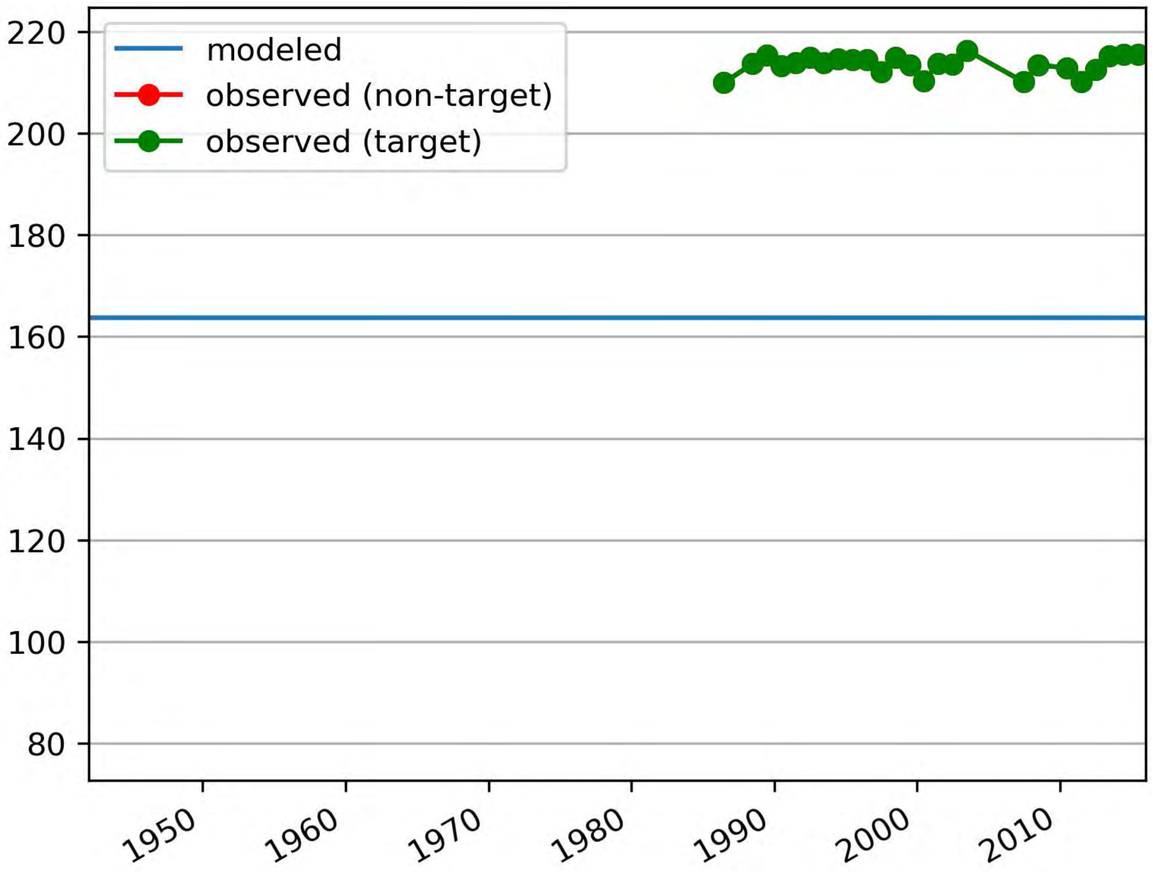


Model layer = 3

Hydrograph and location for well nwf_5732

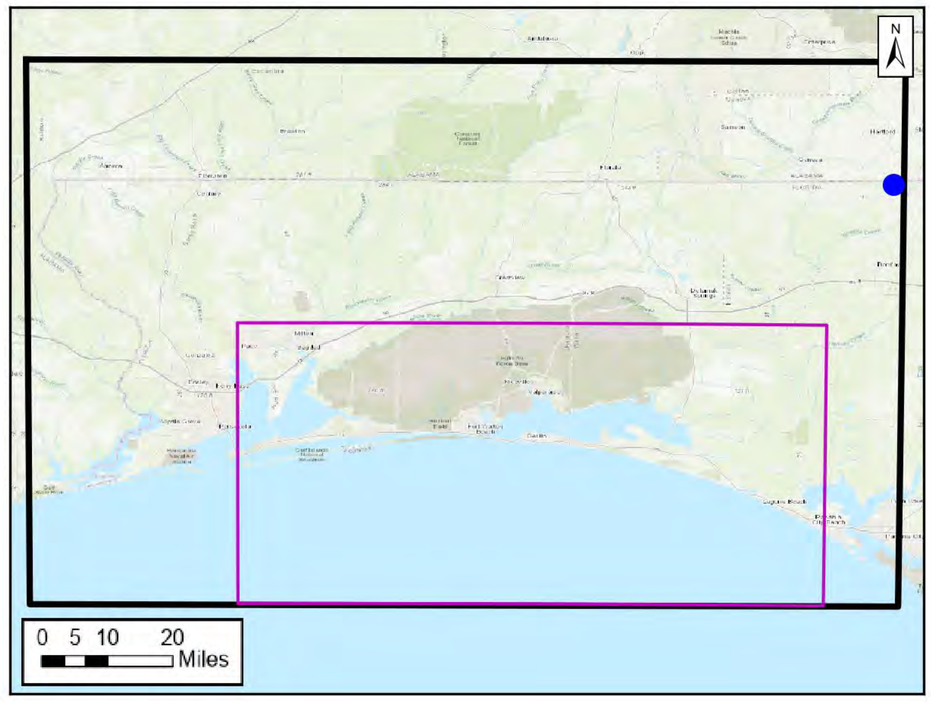
TETRA TECH

Water Level Elevation (ft msl, NAVD88)



Number of measurements = 25
Mean residual (ft) = 49.81
Abs Mean residual (ft) = 49.81

Location

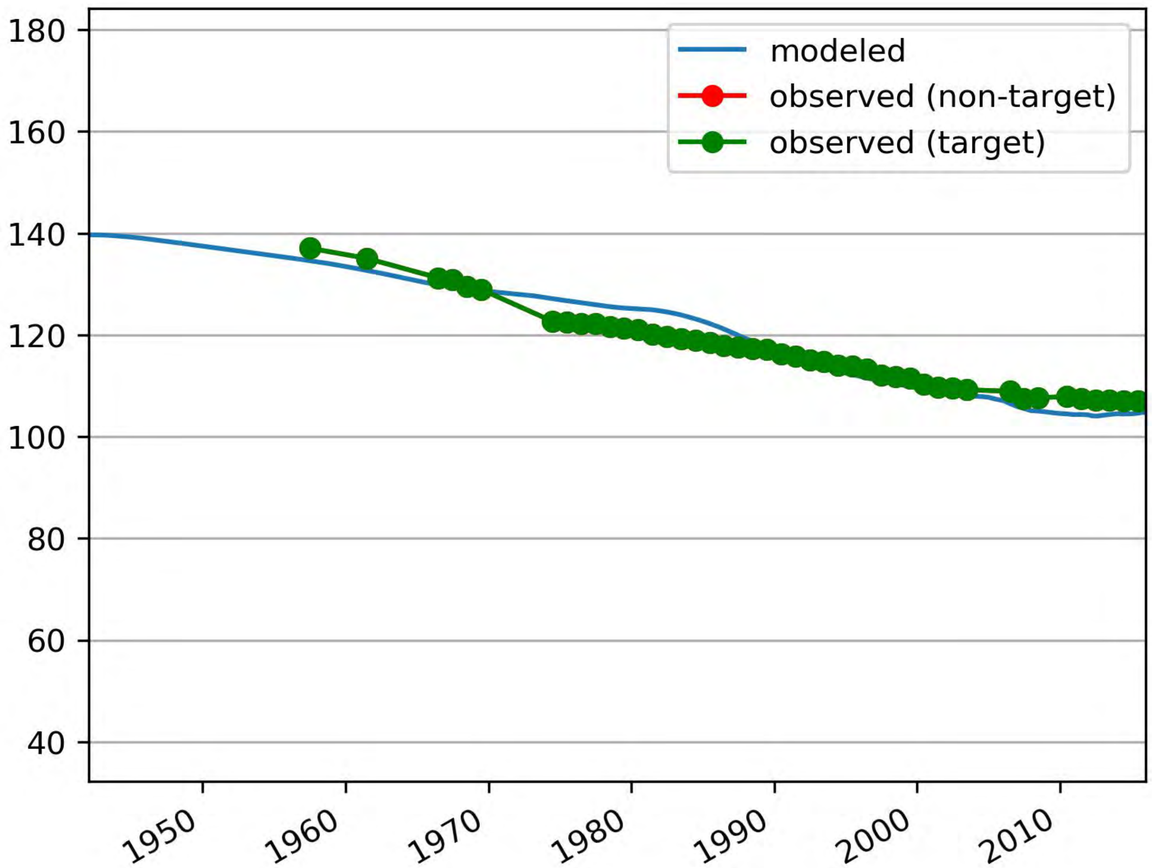


Model layer = 2

Hydrograph and location for well nwf_5733

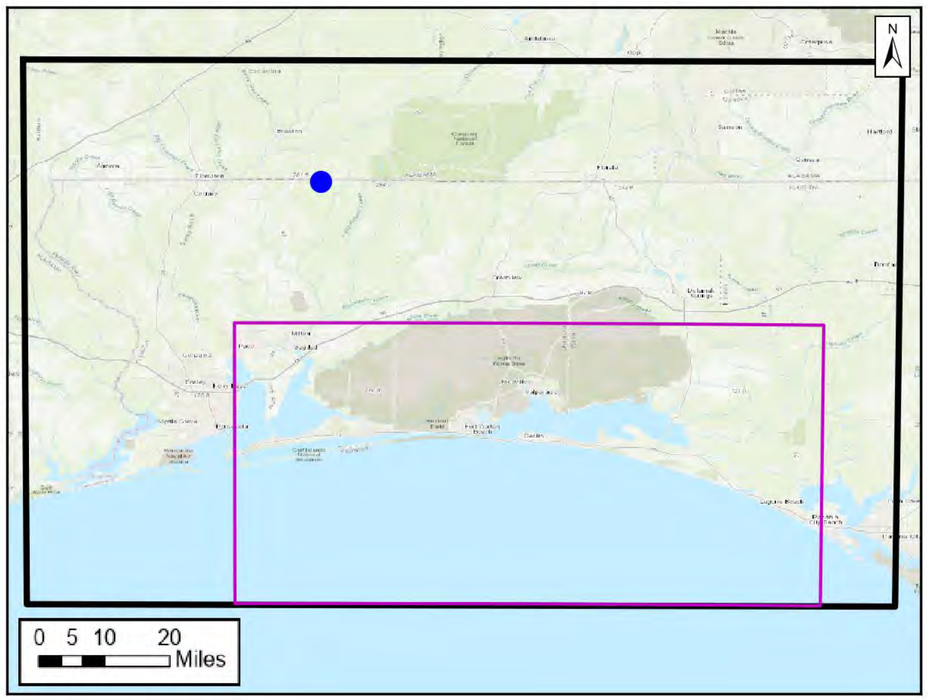
TETRA TECH

Water Level Elevation (ft msl, NAVD88)



Number of measurements = 45
Mean residual (ft) = -0.25
Abs Mean residual (ft) = 2.35

Location

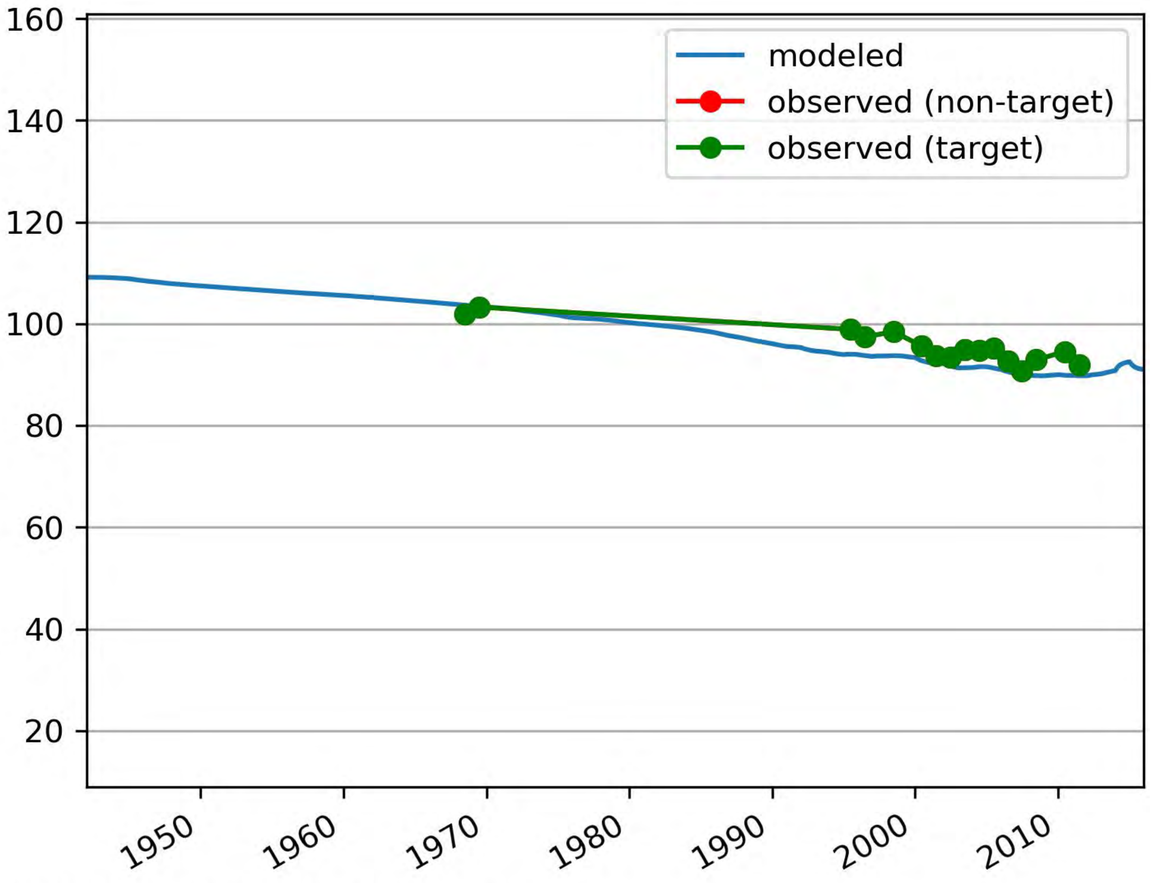


Model layer = 5

Hydrograph and location for well nwf_5746

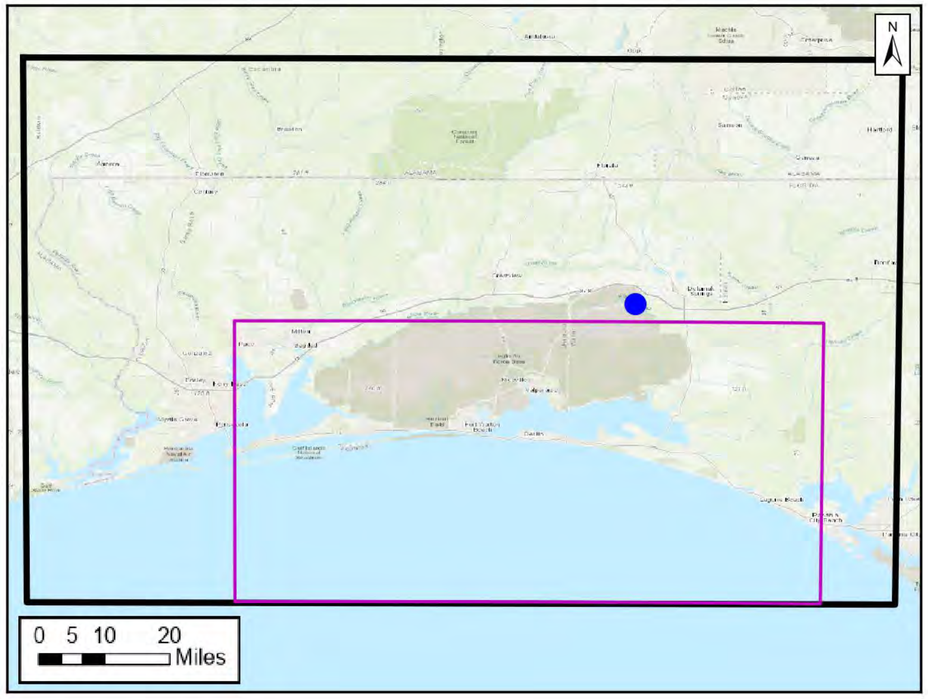
TETRA TECH

Water Level Elevation (ft msl, NAVD88)



Number of measurements = 16
Mean residual (ft) = 2.55
Abs Mean residual (ft) = 2.79

Location

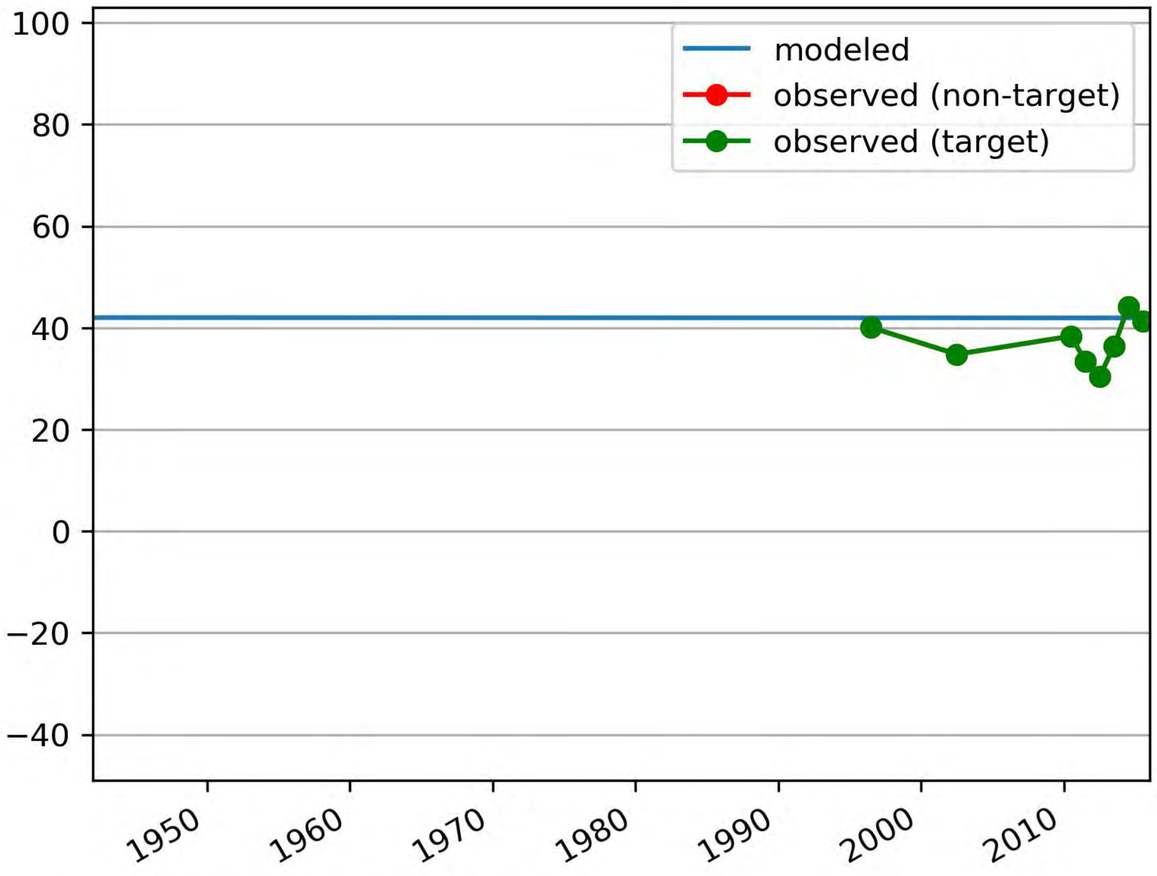


Model layer = 3

Hydrograph and location for well nwf_5802

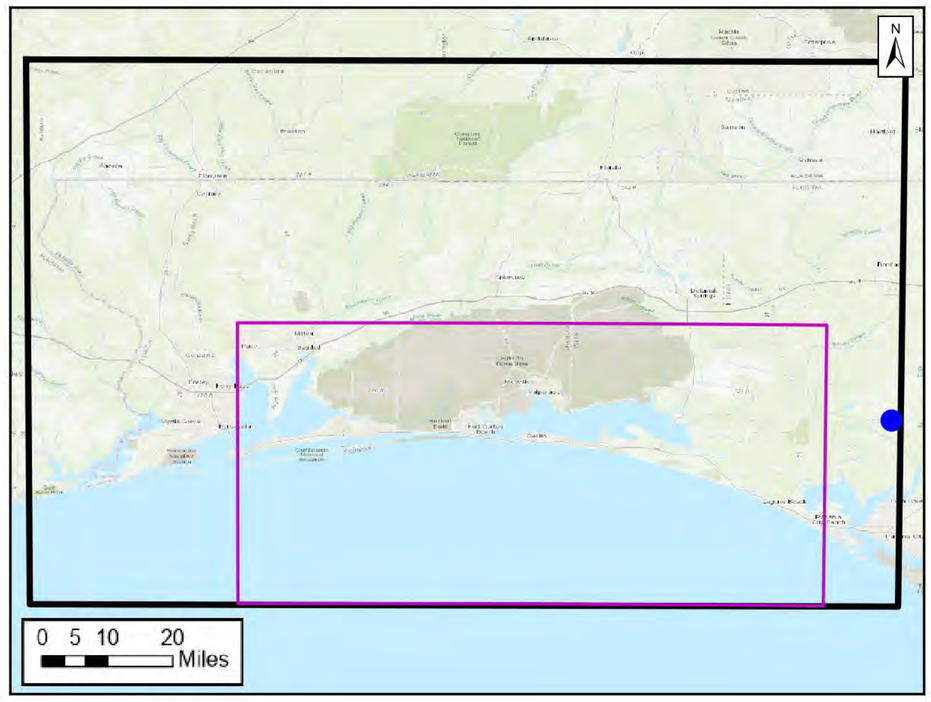
TETRA TECH

Water Level Elevation (ft msl, NAVD88)



Number of measurements = 8
Mean residual (ft) = -4.59
Abs Mean residual (ft) = 5.14

Location

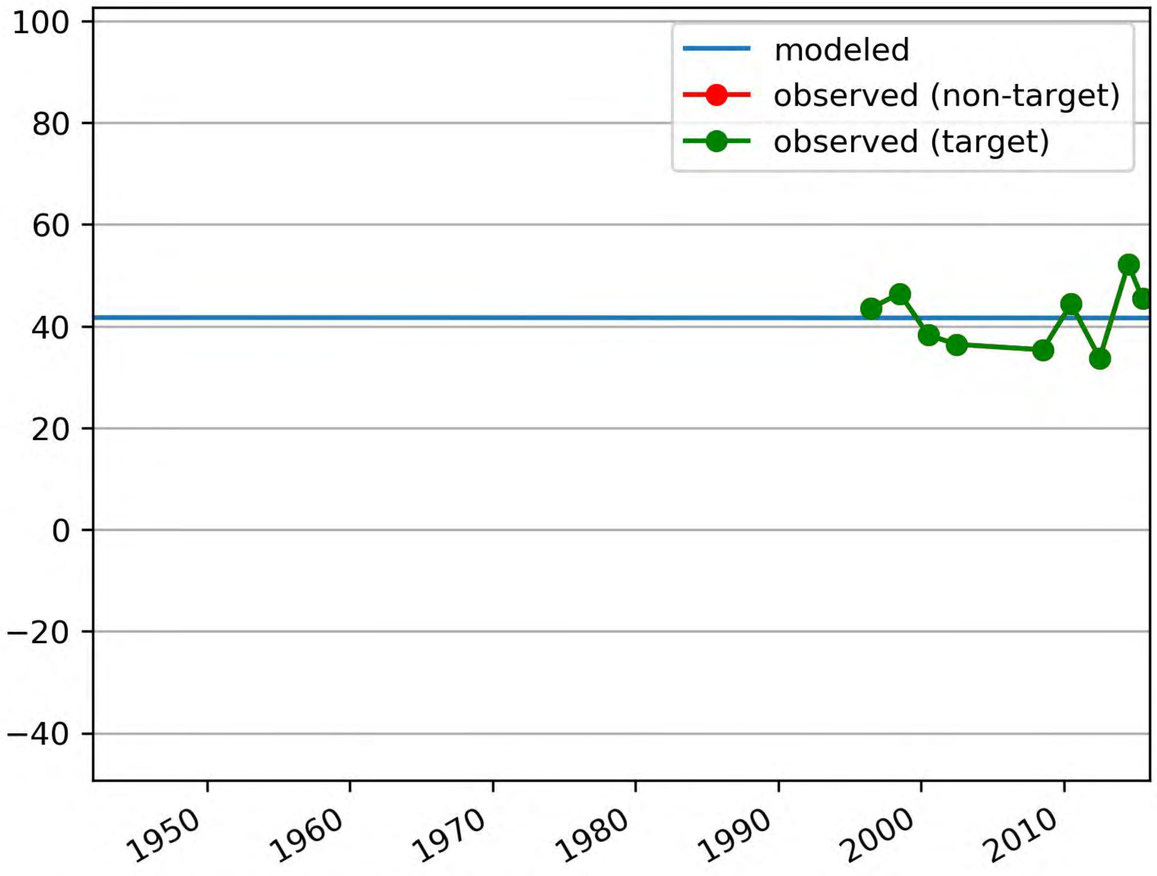


Model layer = 3

Hydrograph and location for well nwf_5953

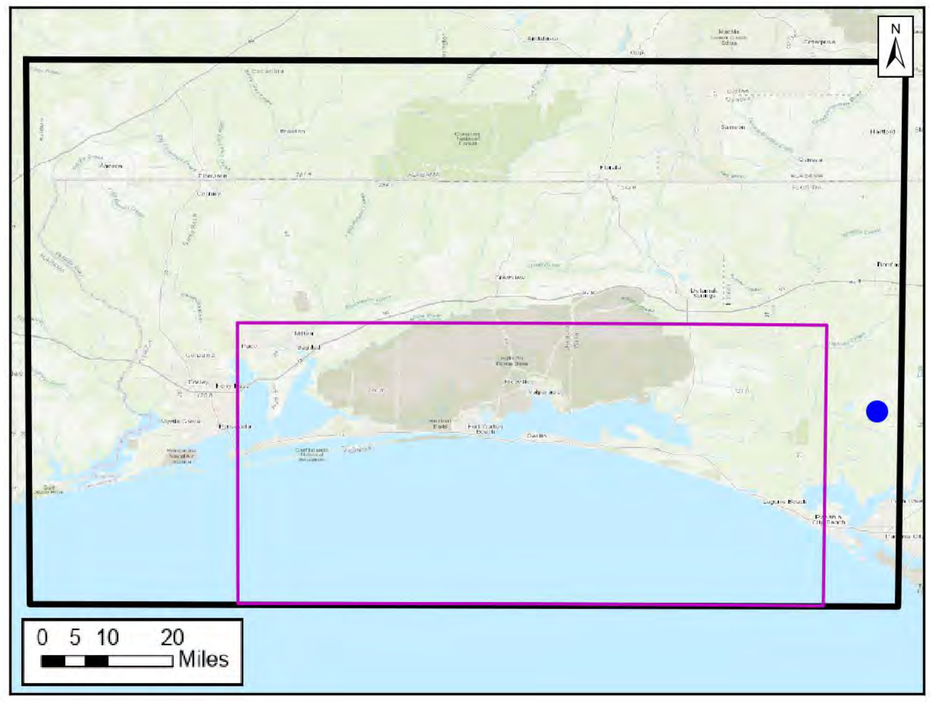
TETRA TECH

Water Level Elevation (ft msl, NAVD88)



Number of measurements = 9
Mean residual (ft) = 0.12
Abs Mean residual (ft) = 5.18

Location

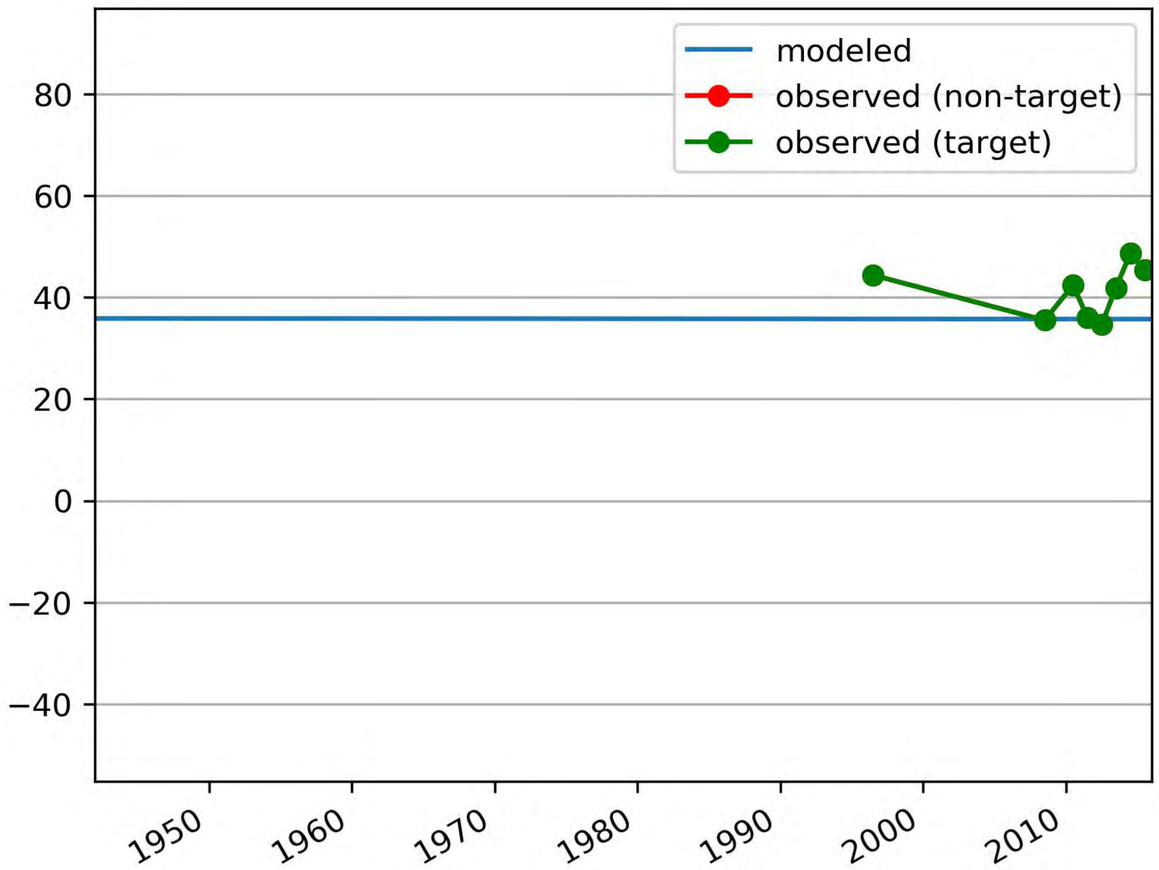


Model layer = 3

Hydrograph and location for well nwf_5954

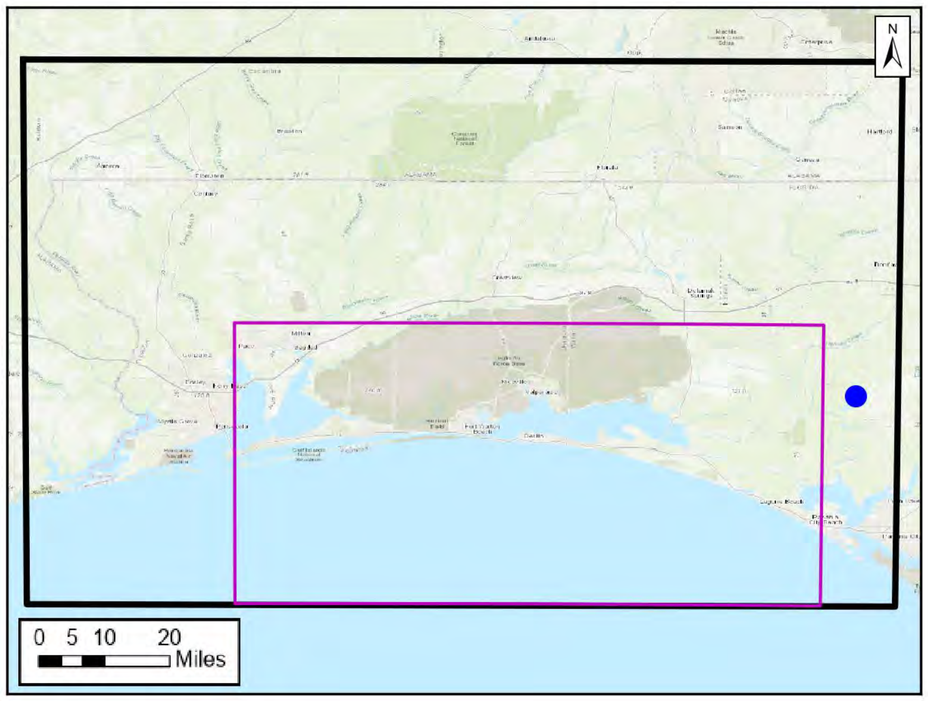
TETRA TECH

Water Level Elevation (ft msl, NAVD88)



Number of measurements = 8
Mean residual (ft) = 5.38
Abs Mean residual (ft) = 5.71

Location

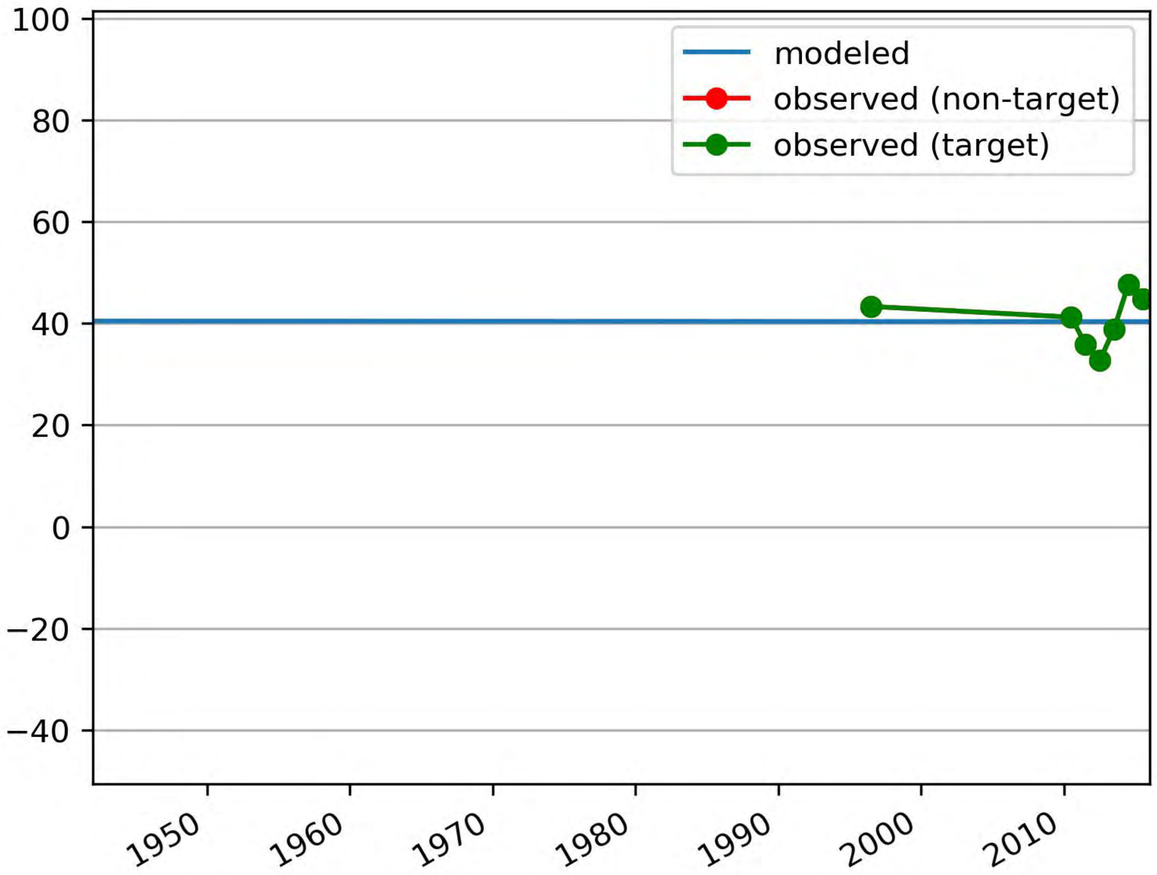


Model layer = 3

Hydrograph and location for well nwf_5962

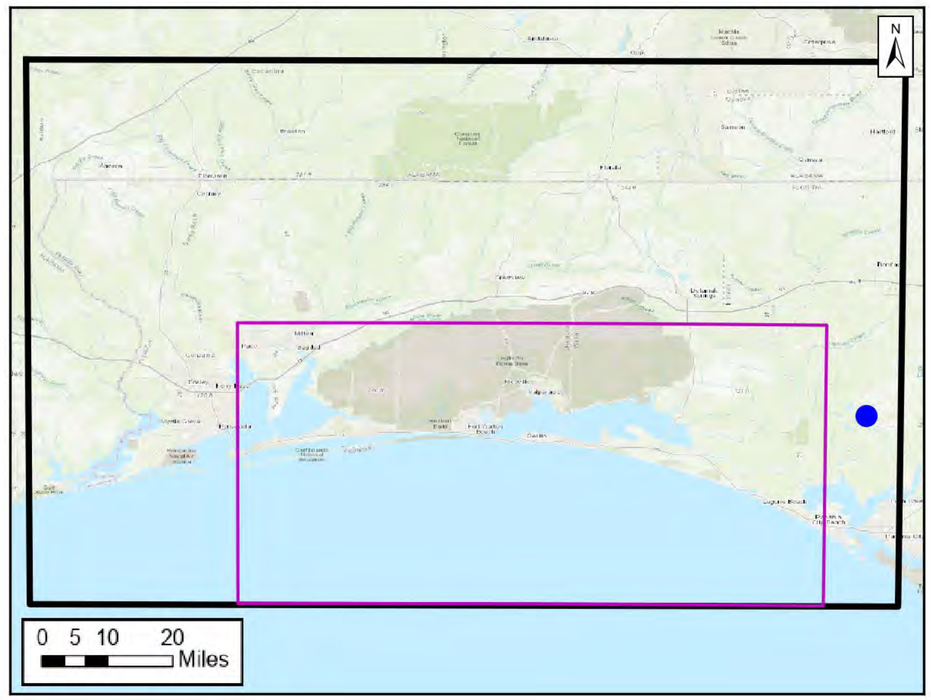
TETRA TECH

Water Level Elevation (ft msl, NAVD88)



Number of measurements = 7
Mean residual (ft) = 0.28
Abs Mean residual (ft) = 4.17

Location

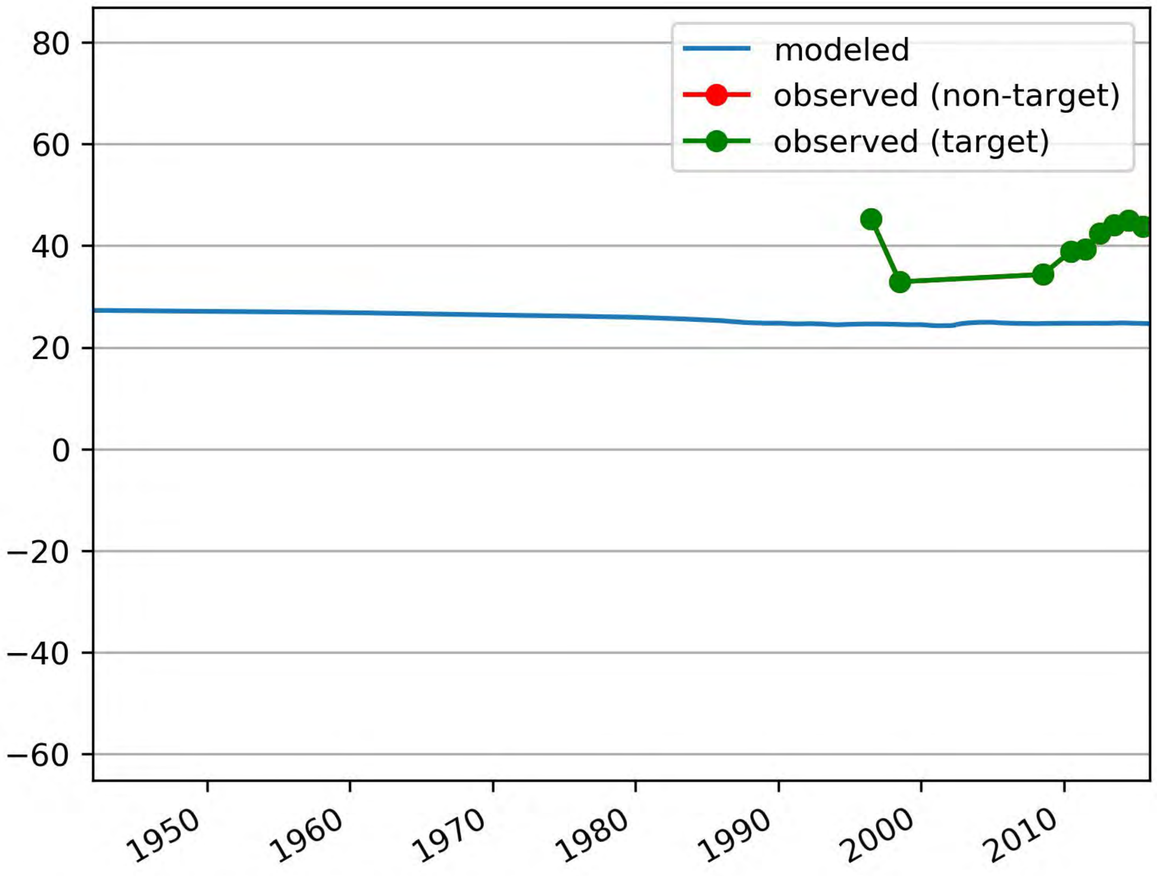


Model layer = 3

Hydrograph and location for well nwf_5963

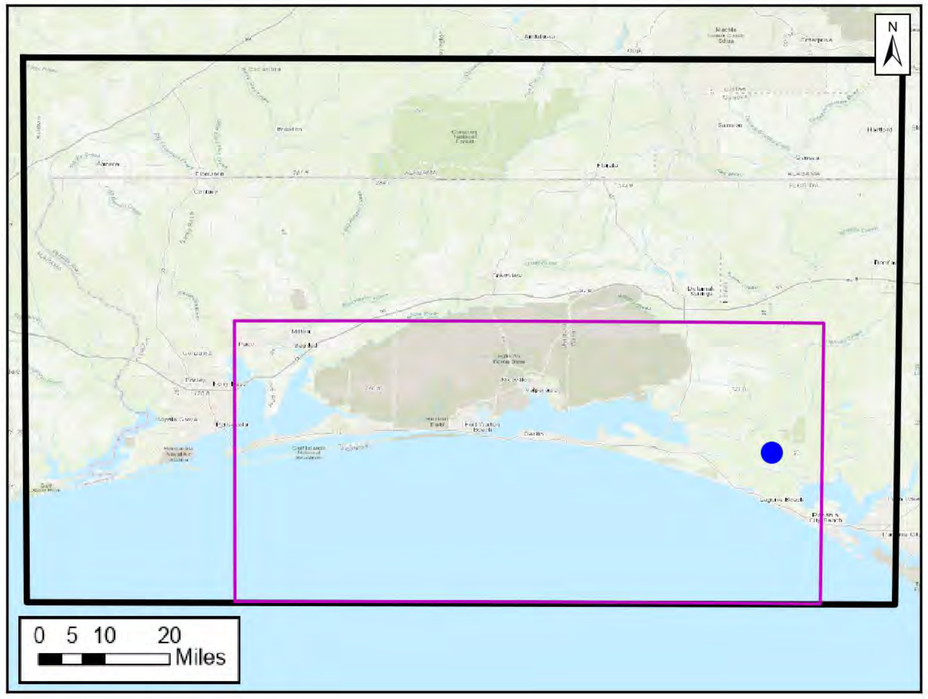
TETRA TECH

Water Level Elevation (ft msl, NAVD88)



Number of measurements = 9
Mean residual (ft) = 15.97
Abs Mean residual (ft) = 15.97

Location

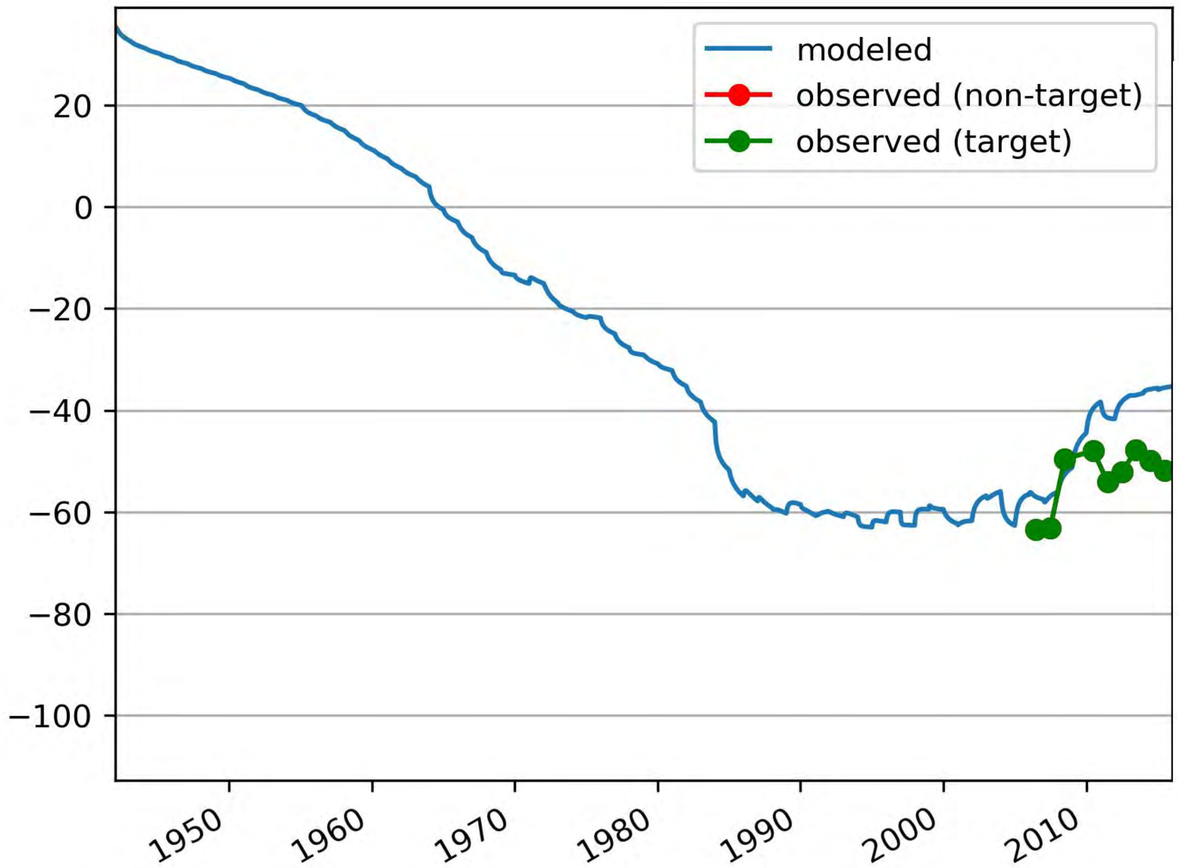


Model layer = 3

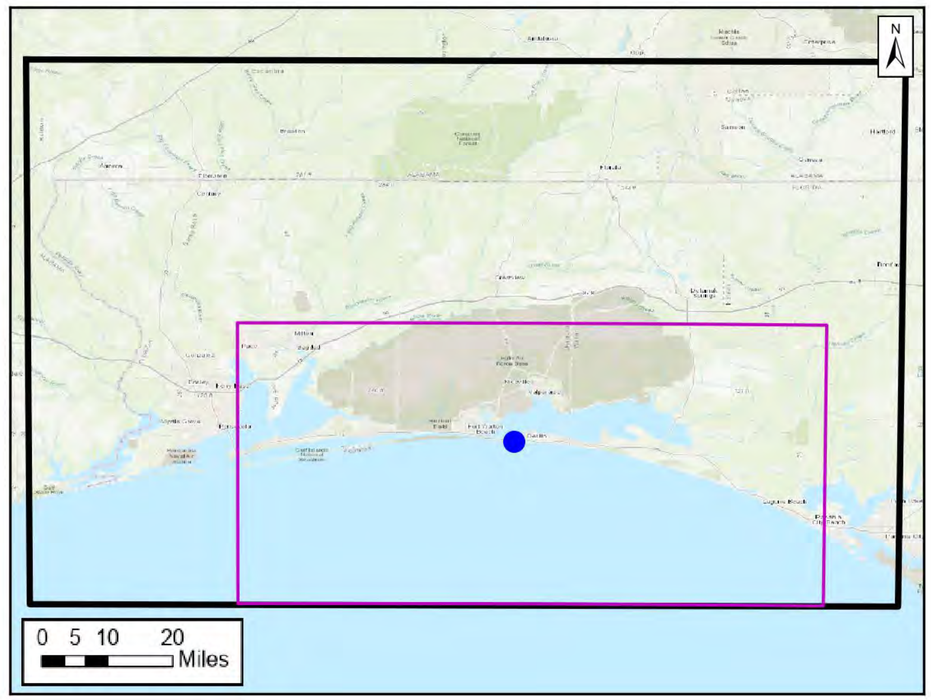
Hydrograph and location for well nwf_5976

TETRA TECH

Water Level Elevation (ft msl, NAVD88)



Location



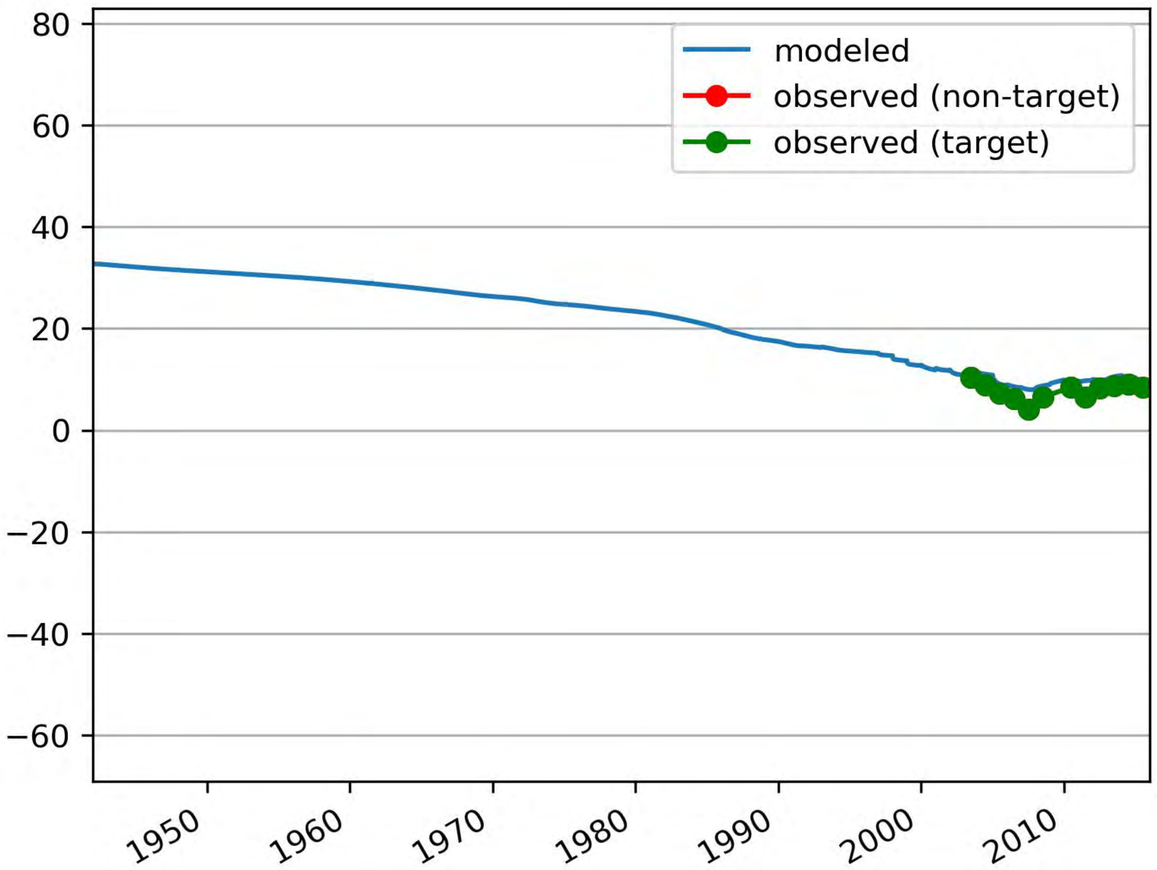
Number of measurements = 9
Mean residual (ft) = -9.49
Abs Mean residual (ft) = 10.16

Model layer = 3

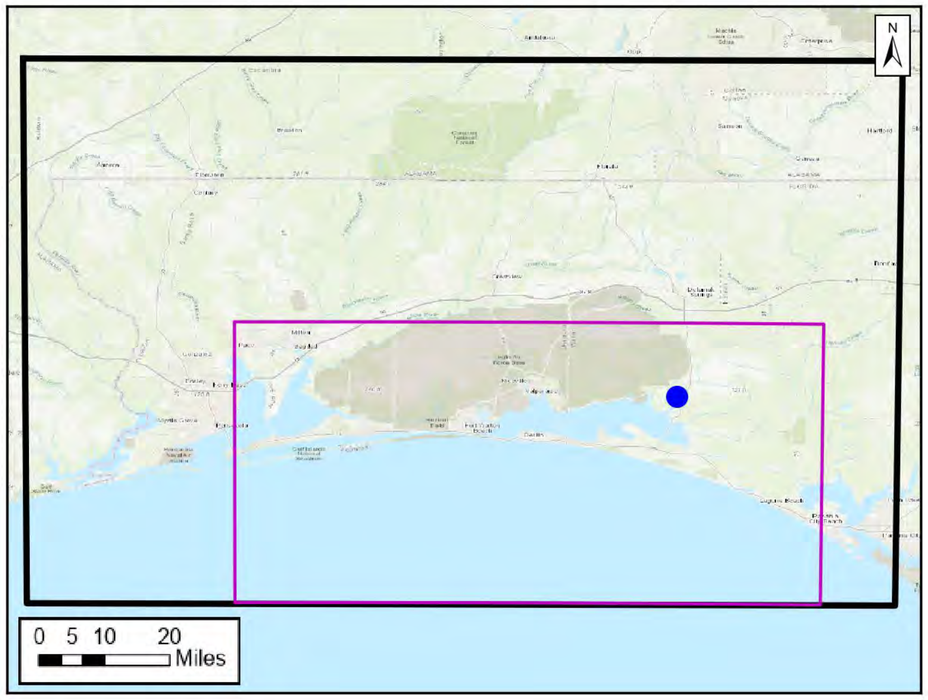
Hydrograph and location for well nwf_6016

TETRA TECH

Water Level Elevation (ft msl, NAVD88)



Location



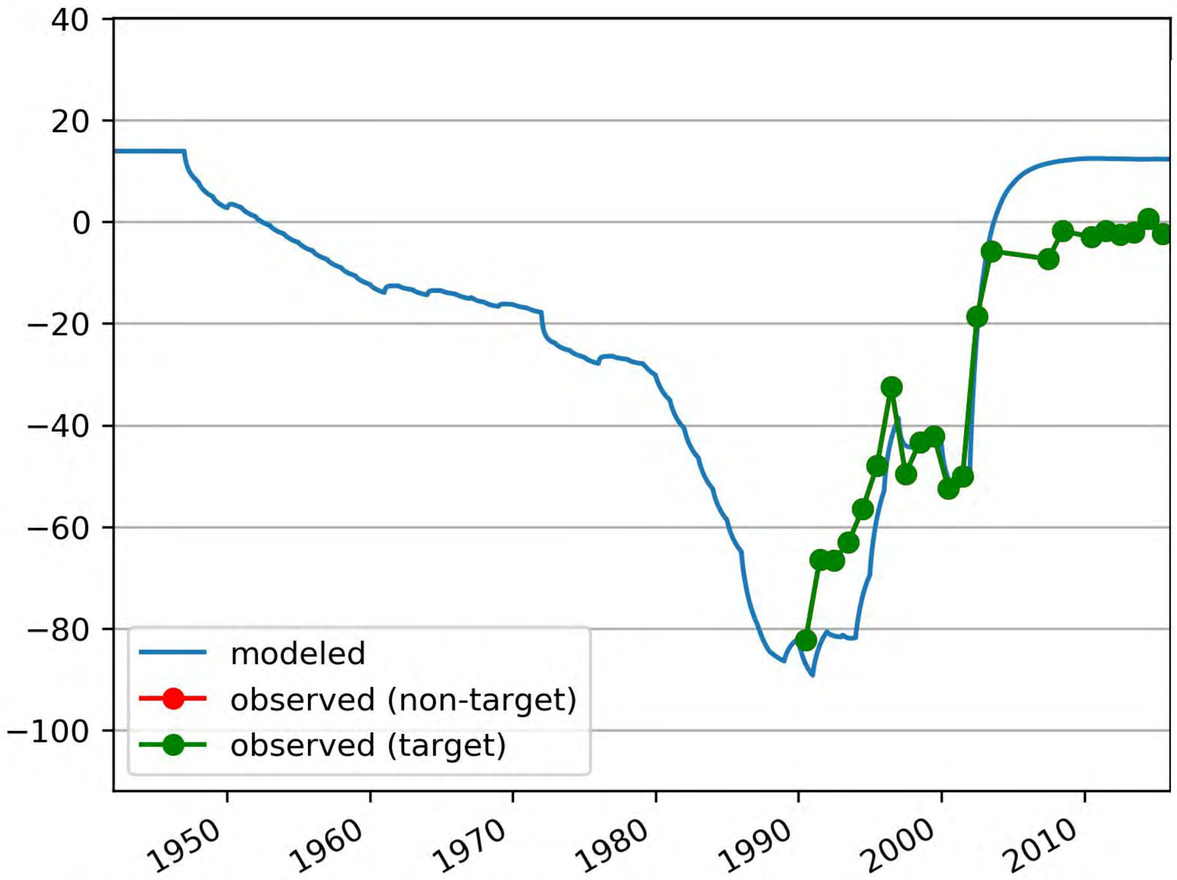
Number of measurements = 12
Mean residual (ft) = -1.99
Abs Mean residual (ft) = 1.99

Model layer = 3

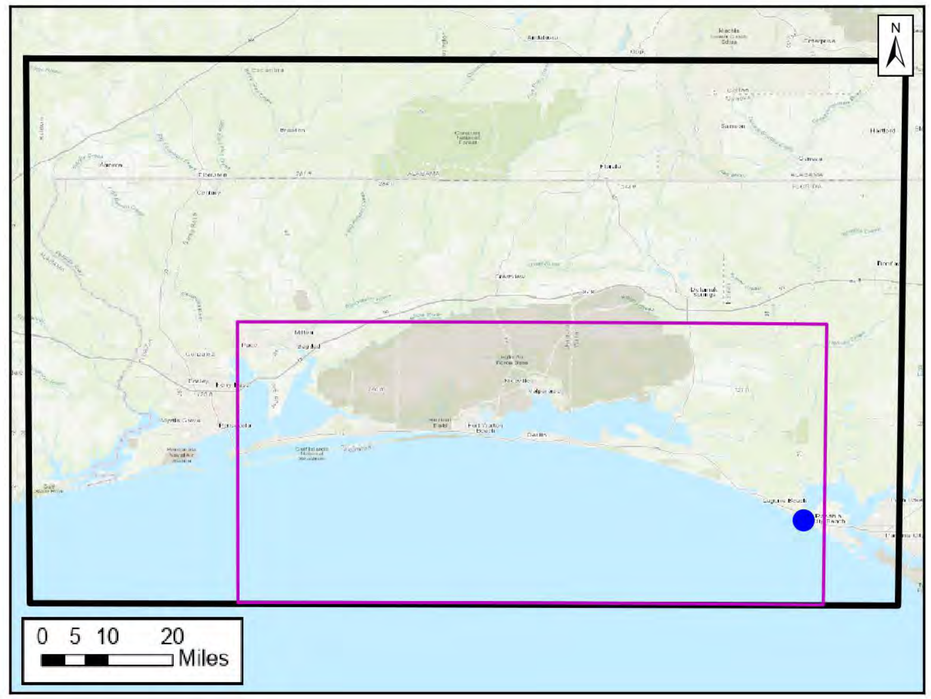
Hydrograph and location for well nwf_6036

TETRA TECH

Water Level Elevation (ft msl, NAVD88)



Location



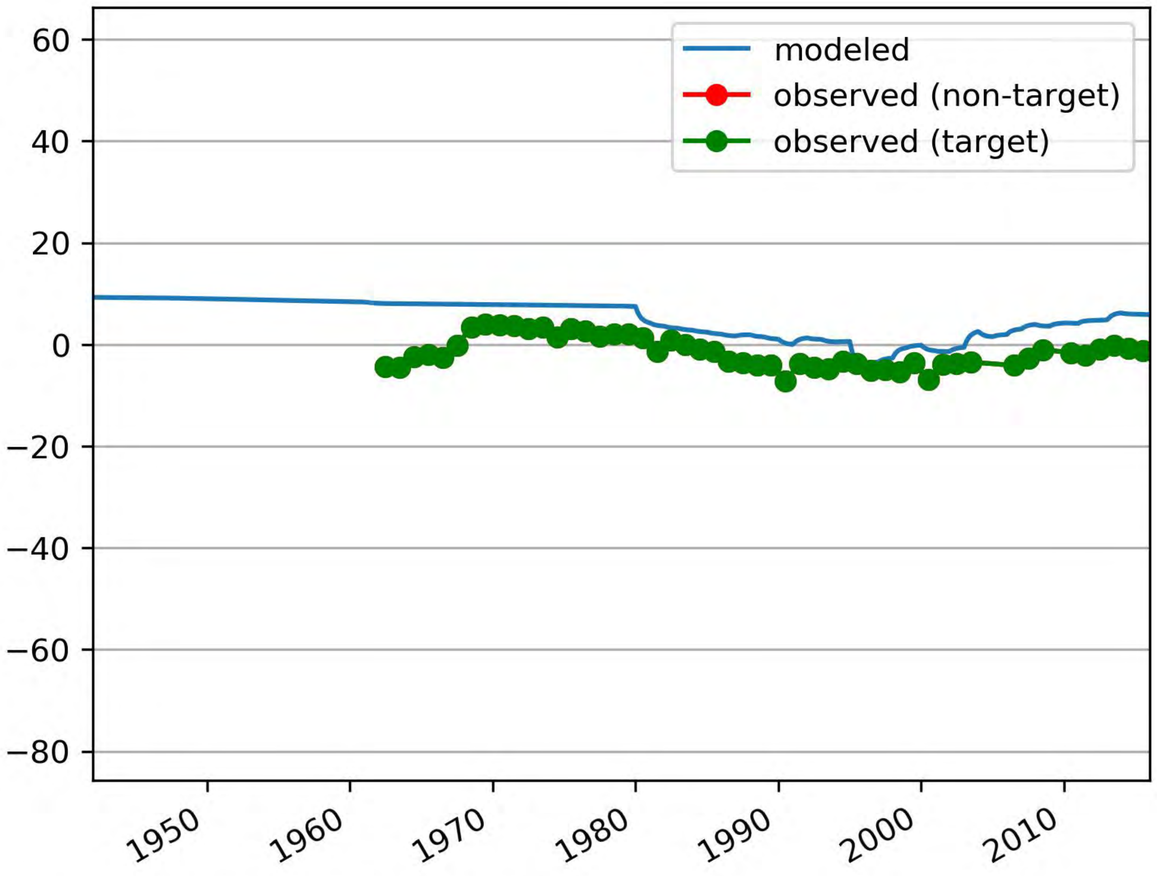
Number of measurements = 22
Mean residual (ft) = -1.41
Abs Mean residual (ft) = 10.36

Model layer = 3

Hydrograph and location for well nwf_679

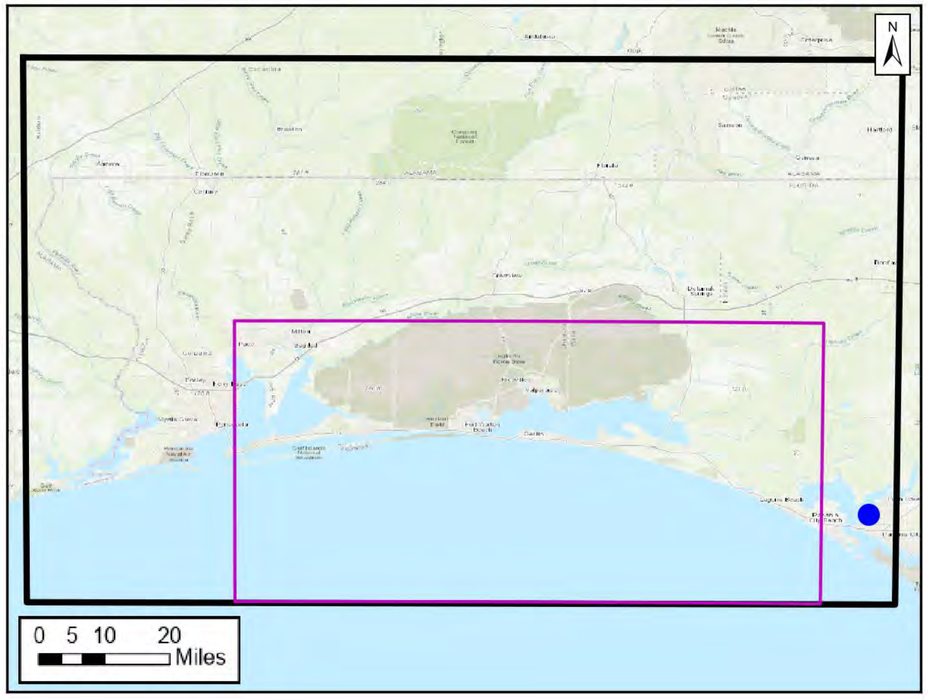
TETRA TECH

Water Level Elevation (ft msl, NAVD88)



Number of measurements = 51
Mean residual (ft) = -5.41
Abs Mean residual (ft) = 5.41

Location

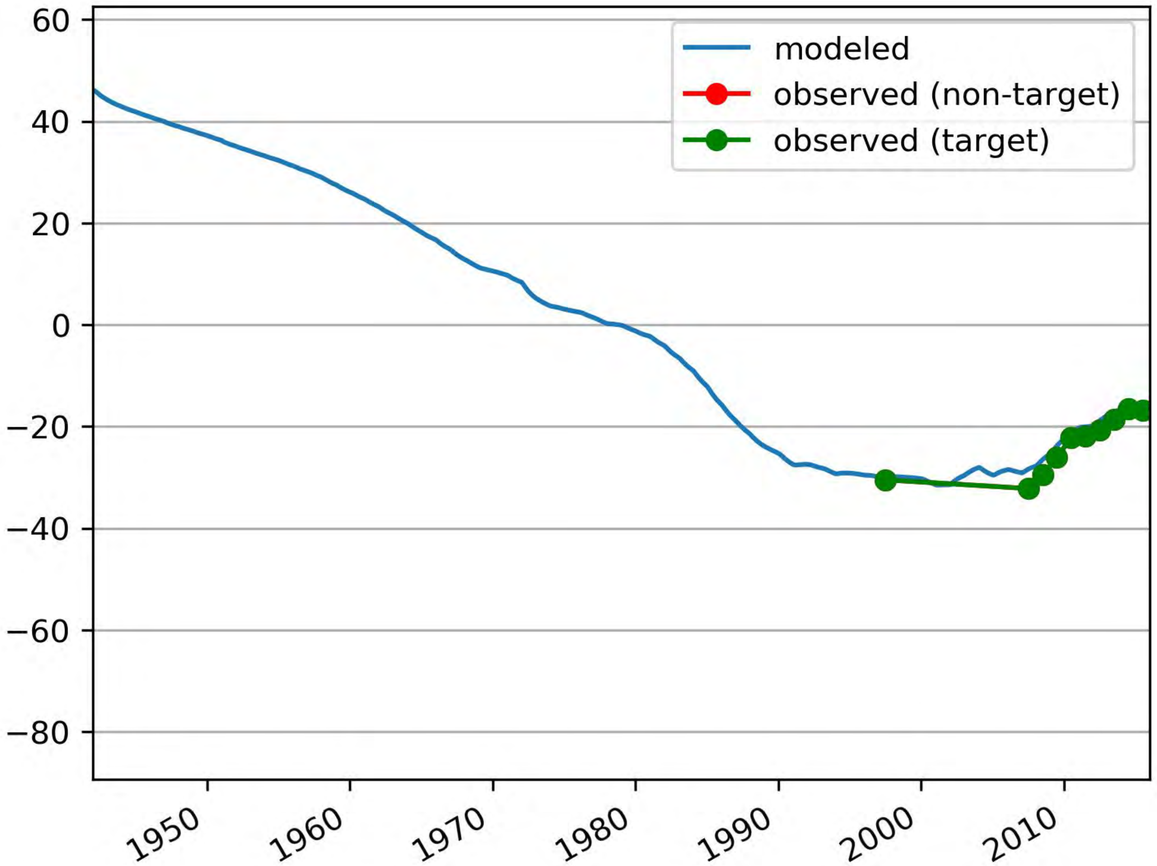


Model layer = 3

Hydrograph and location for well nwf_697

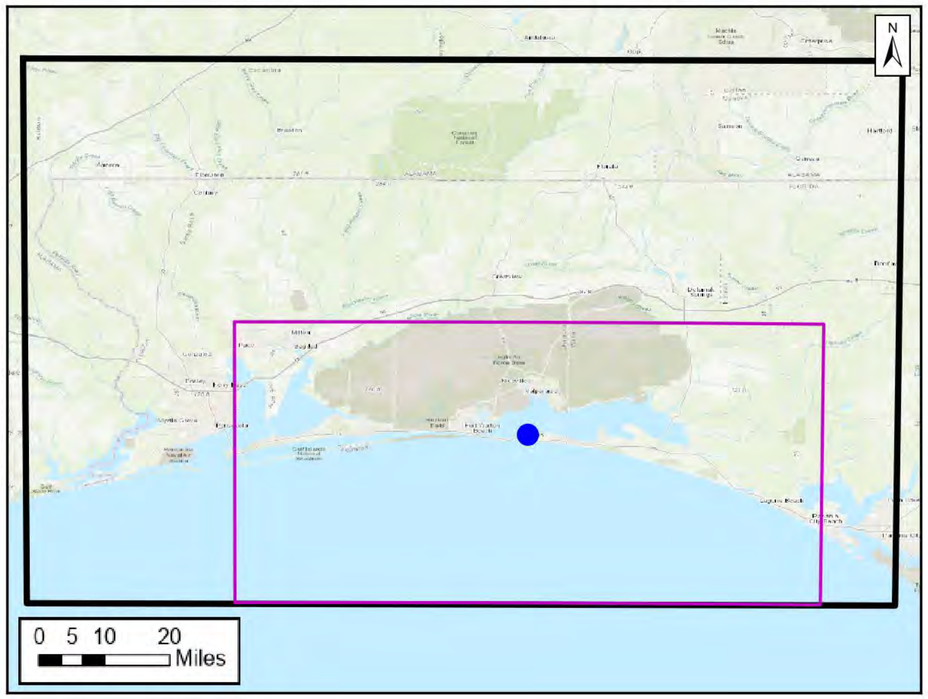
TETRA TECH

Water Level Elevation (ft msl, NAVD88)



Number of measurements = 10
Mean residual (ft) = -1.72
Abs Mean residual (ft) = 1.72

Location

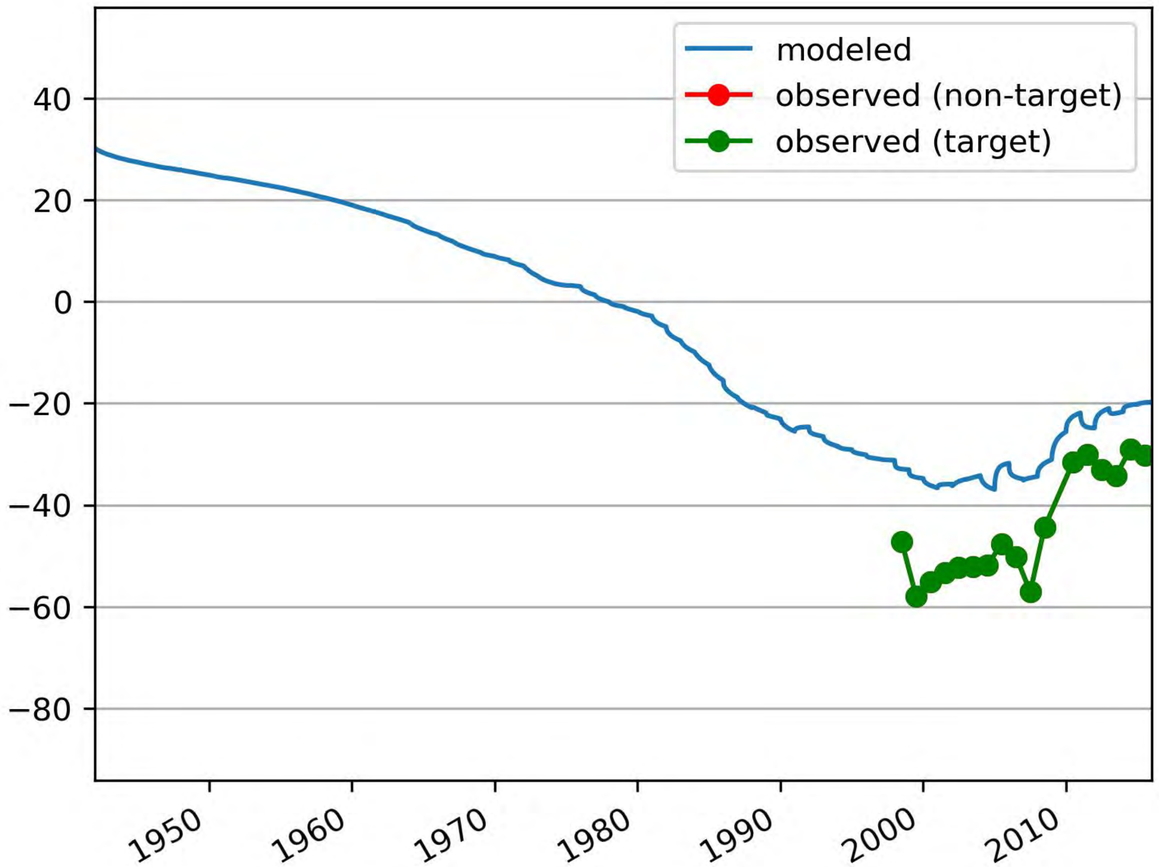


Model layer = 5

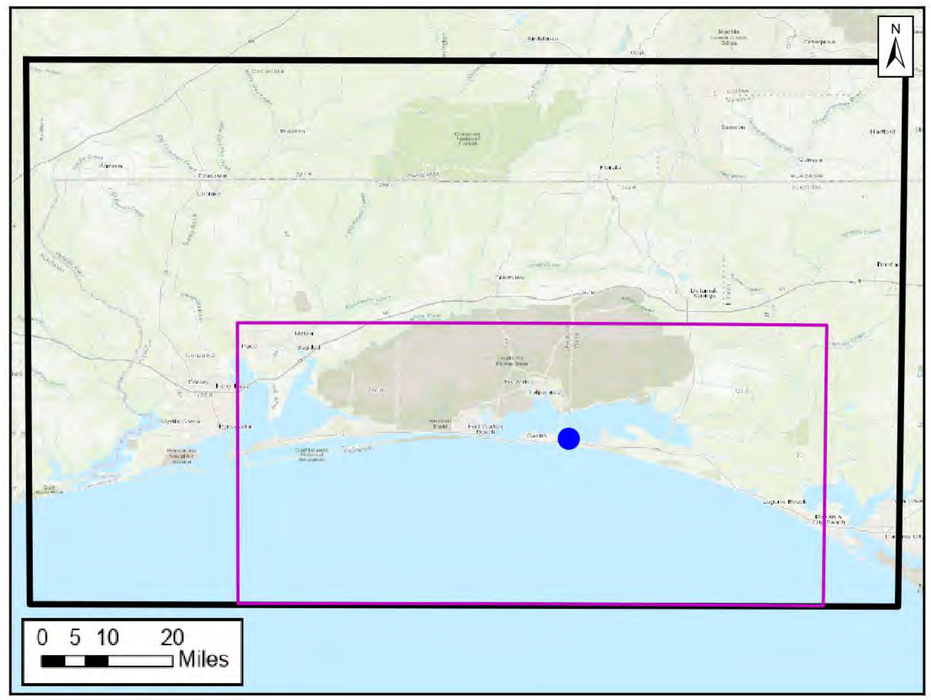
Hydrograph and location for well nwf_7174

TETRA TECH

Water Level Elevation (ft msl, NAVD88)



Location



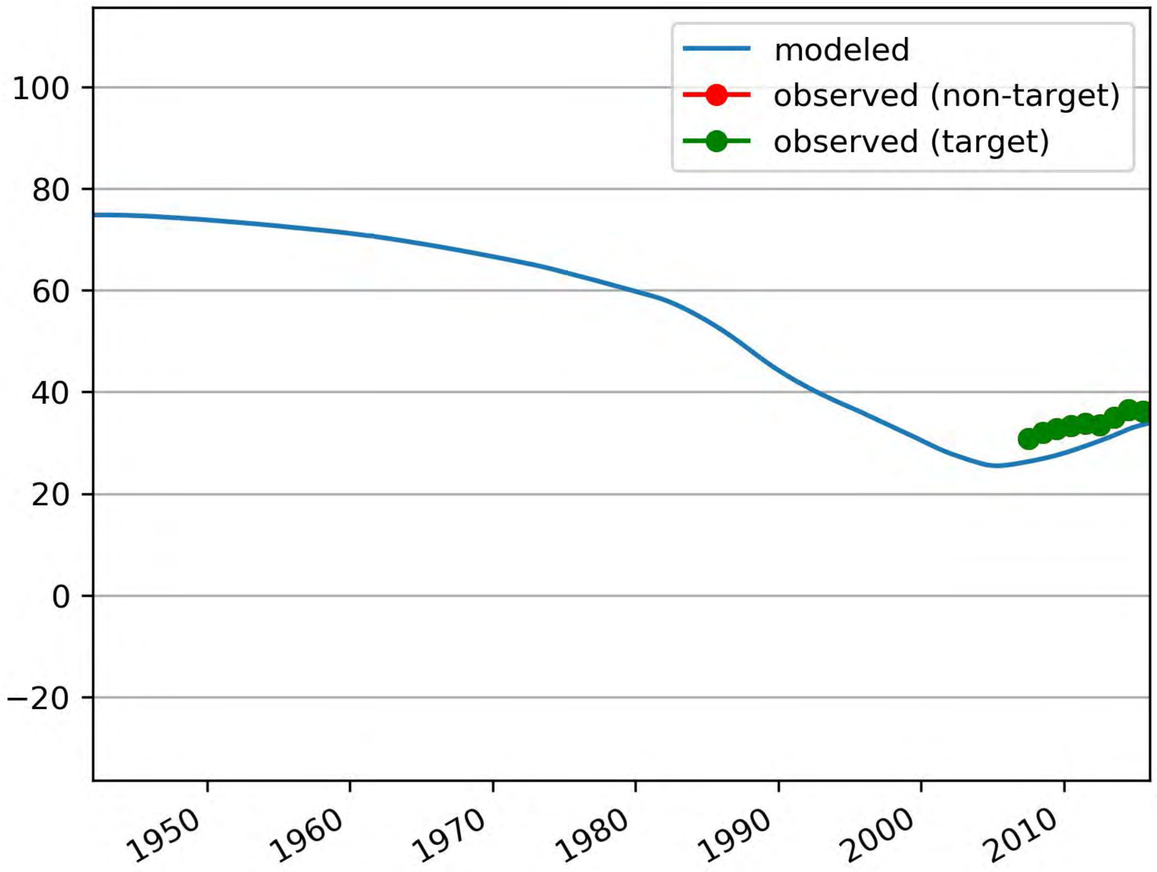
Number of measurements = 17
Mean residual (ft) = -14.52
Abs Mean residual (ft) = 14.52

Model layer = 3

Hydrograph and location for well nwf_7183

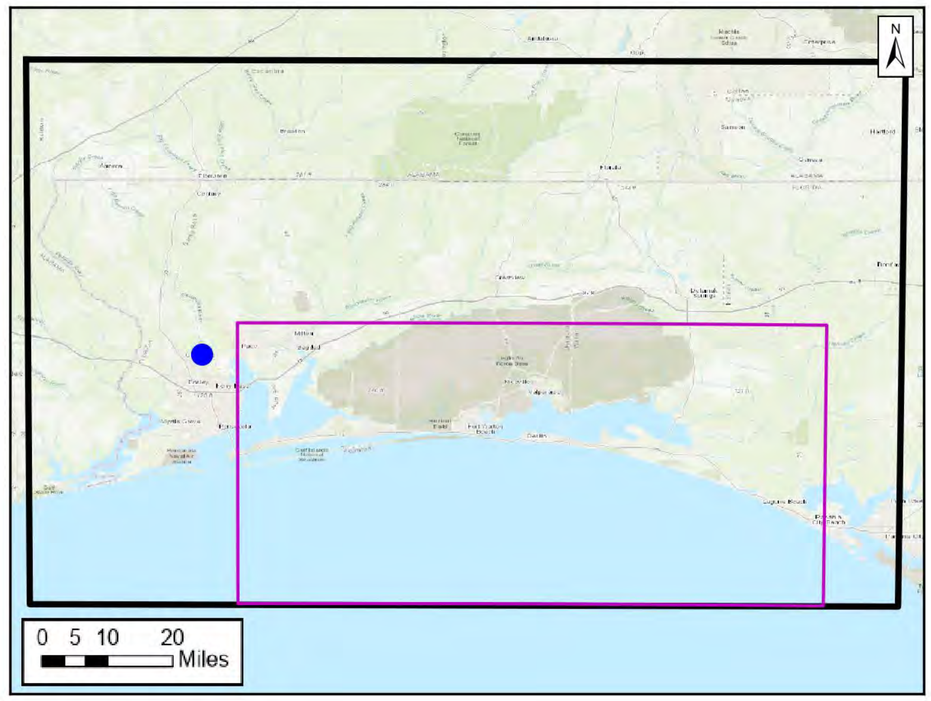
TETRA TECH

Water Level Elevation (ft msl, NAVD88)



Number of measurements = 9
Mean residual (ft) = 4.17
Abs Mean residual (ft) = 4.17

Location

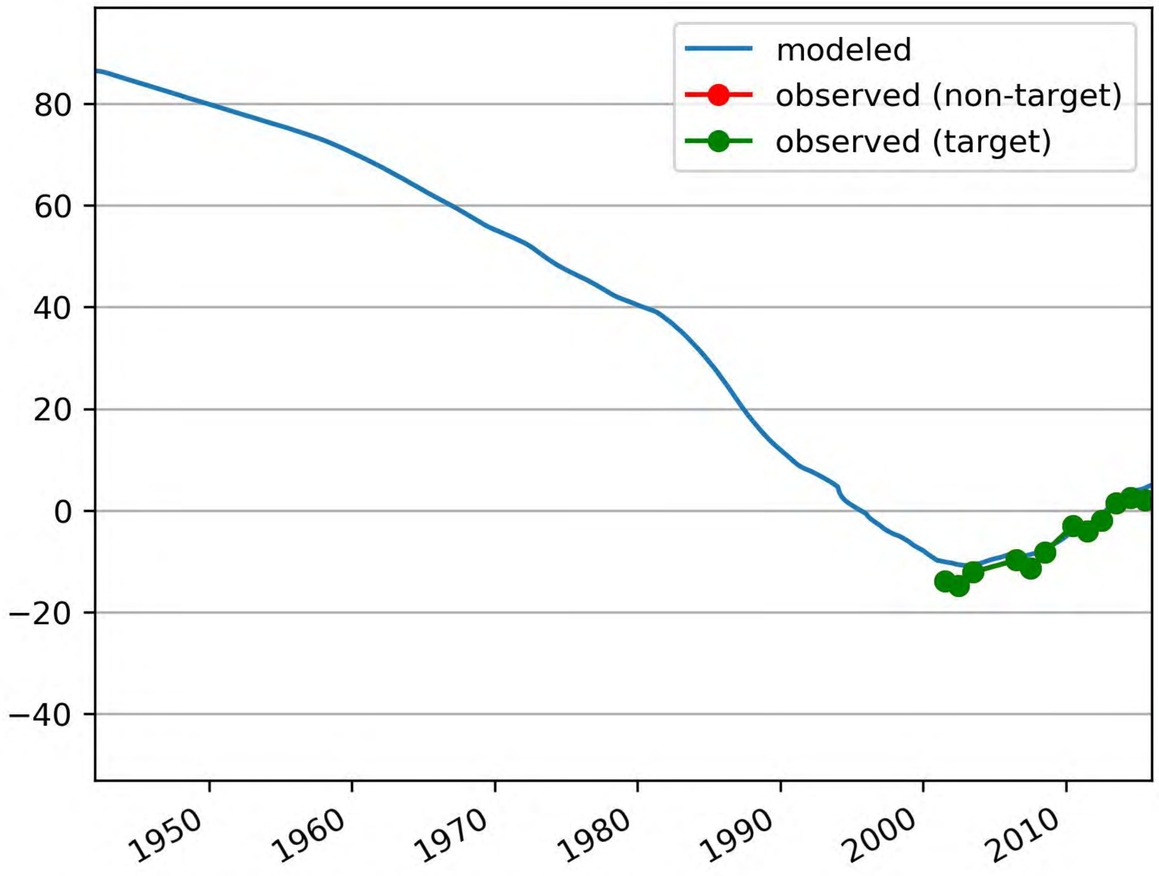


Model layer = 3

Hydrograph and location for well nwf_7187

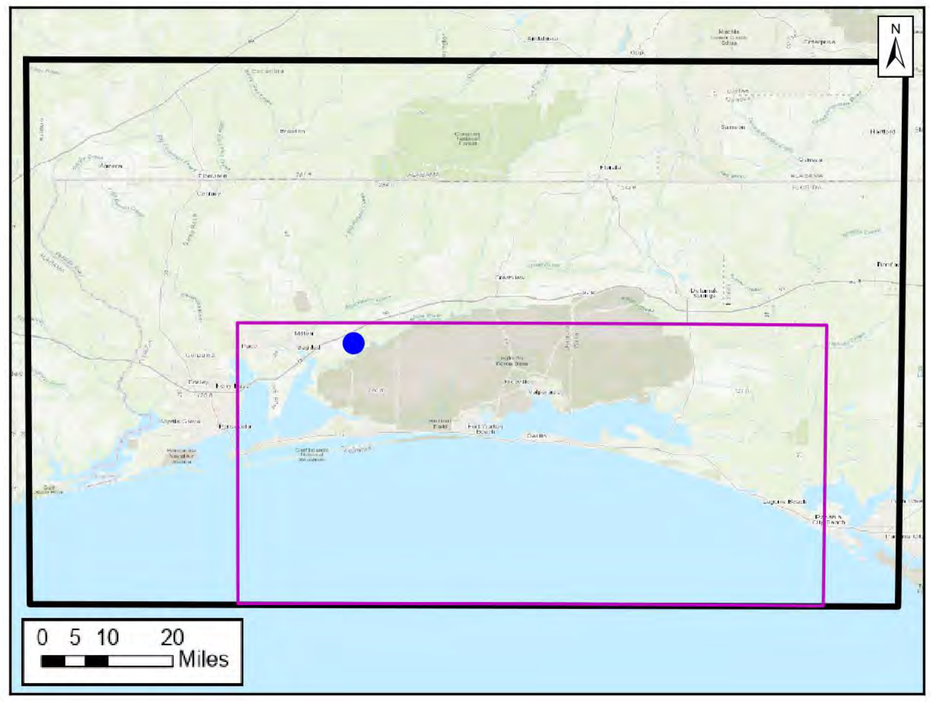
TETRA TECH

Water Level Elevation (ft msl, NAVD88)



Number of measurements = 12
Mean residual (ft) = -1.58
Abs Mean residual (ft) = 1.75

Location

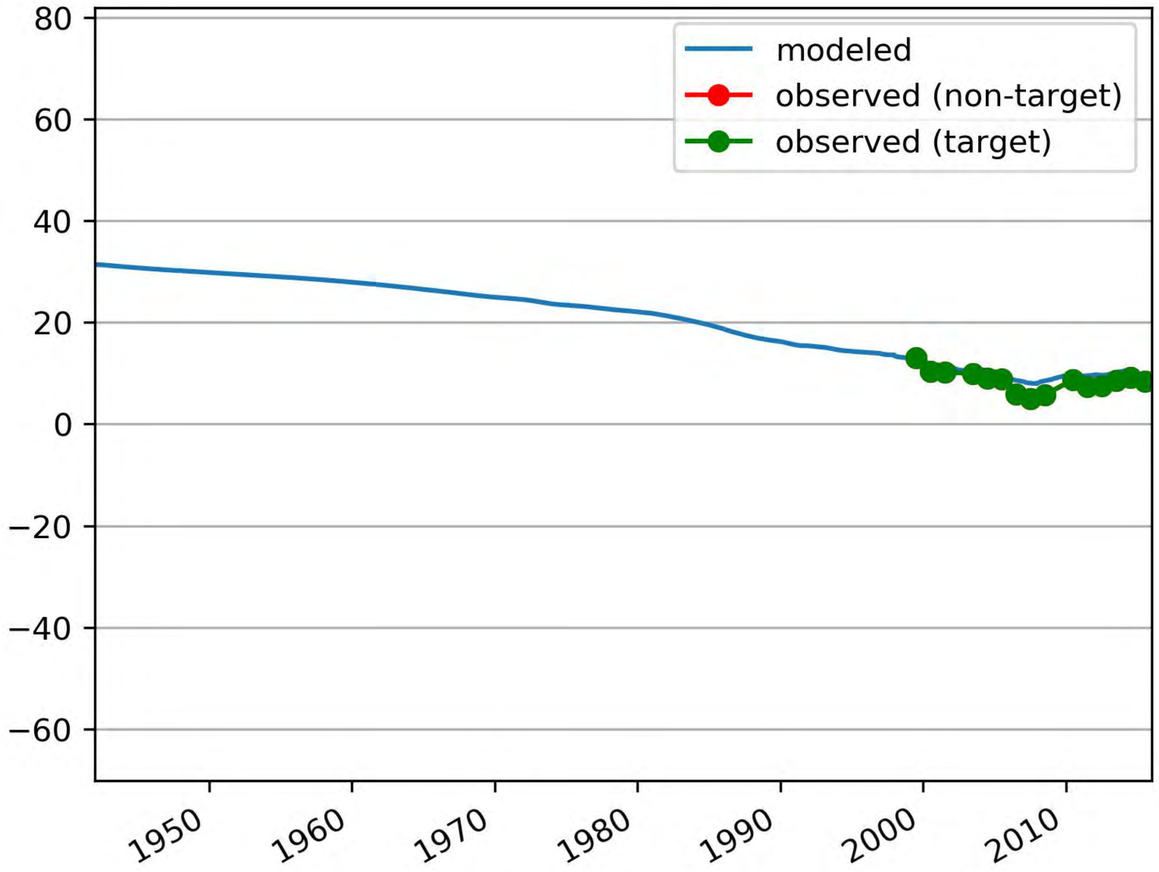


Model layer = 3

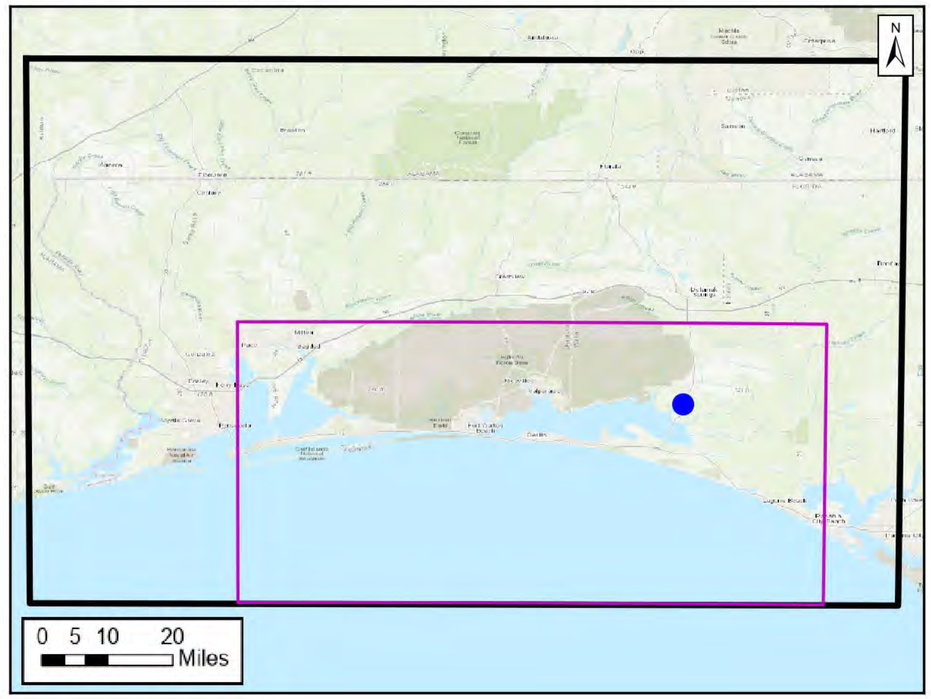
Hydrograph and location for well nwf_7208

TETRA TECH

Water Level Elevation (ft msl, NAVD88)



Location



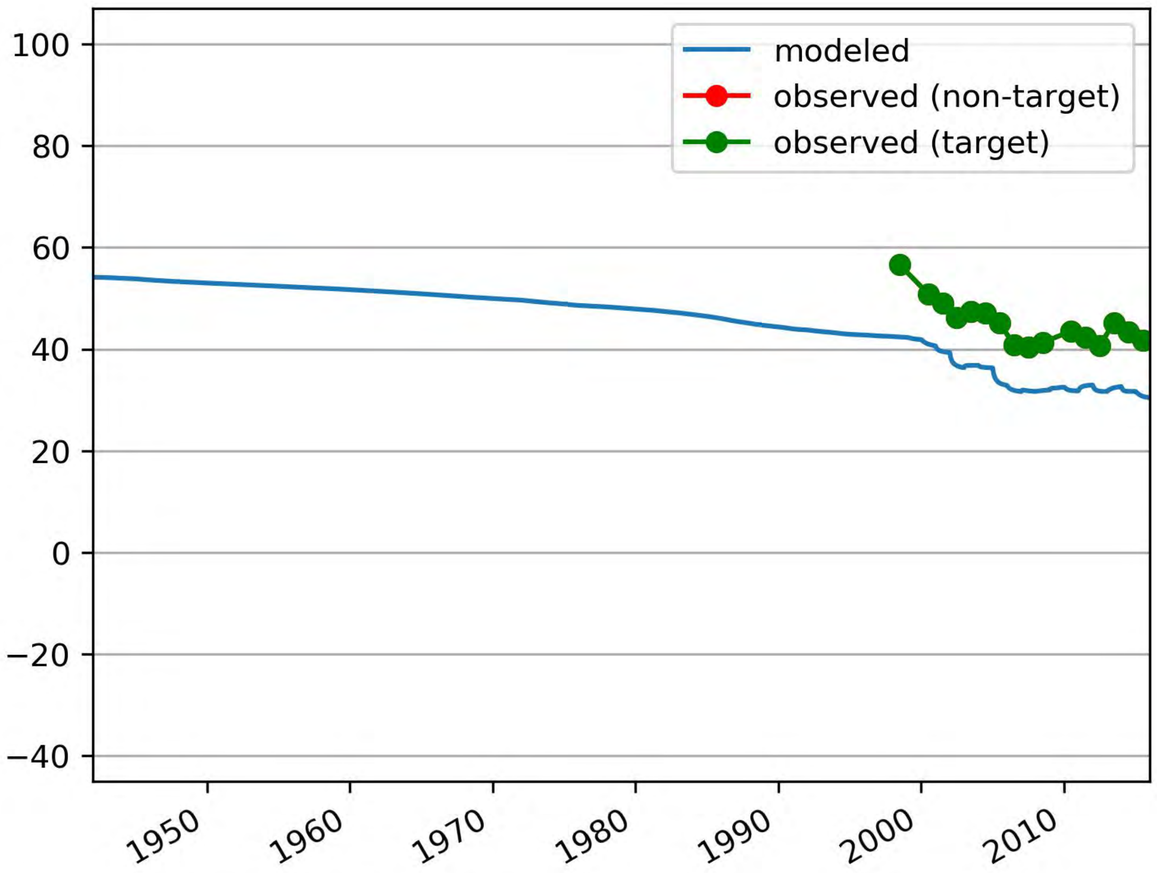
Number of measurements = 15
Mean residual (ft) = -1.46
Abs Mean residual (ft) = 1.52

Model layer = 3

Hydrograph and location for well nwf_7233

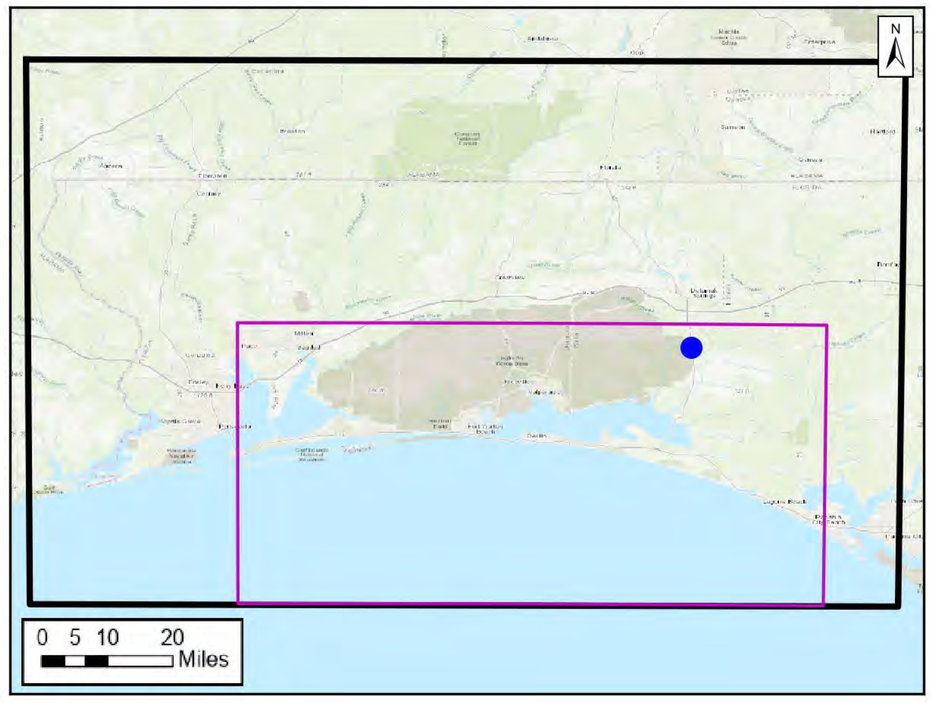
TETRA TECH

Water Level Elevation (ft msl, NAVD88)



Number of measurements = 16
Mean residual (ft) = 10.54
Abs Mean residual (ft) = 10.54

Location

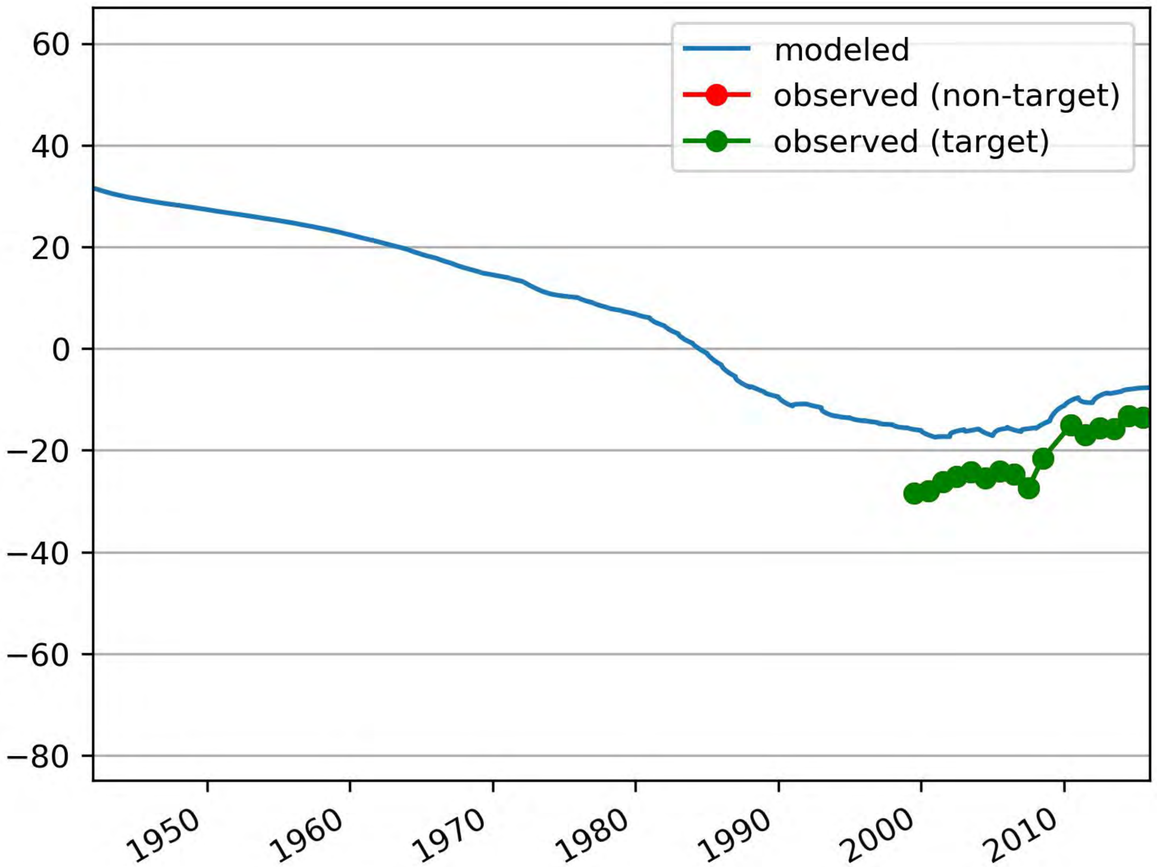


Model layer = 3

Hydrograph and location for well nwf_7250

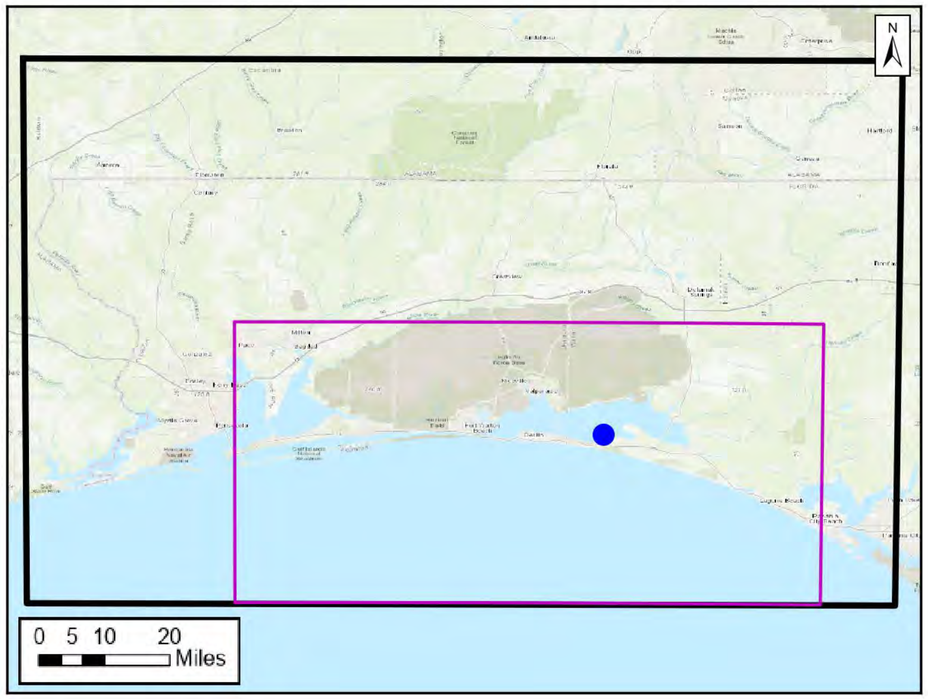
TETRA TECH

Water Level Elevation (ft msl, NAVD88)



Number of measurements = 16
Mean residual (ft) = -8.08
Abs Mean residual (ft) = 8.08

Location

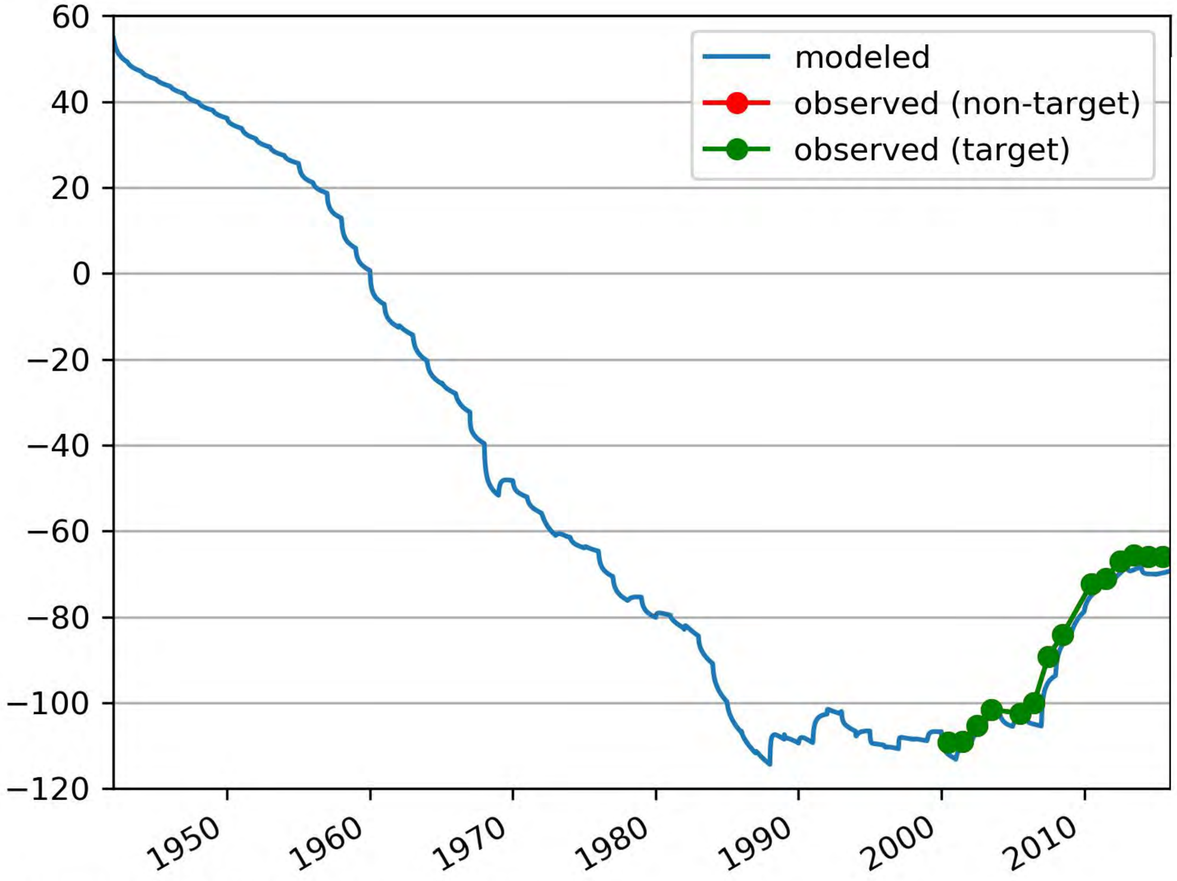


Model layer = 3

Hydrograph and location for well nwf_7349

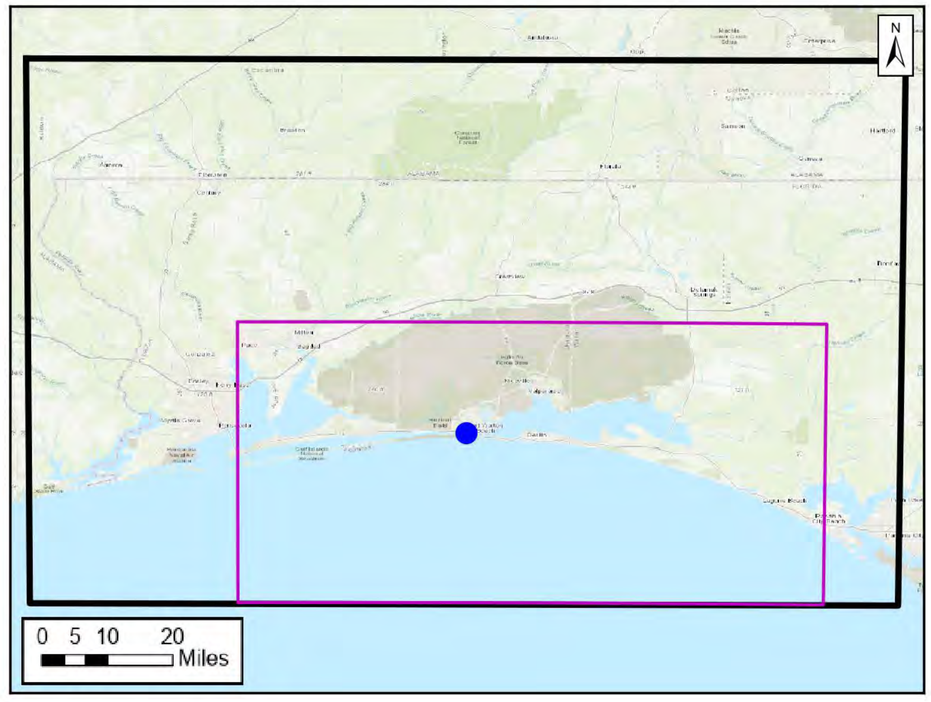
TETRA TECH

Water Level Elevation (ft msl, NAVD88)



Number of measurements = 14
Mean residual (ft) = 2.85
Abs Mean residual (ft) = 2.85

Location

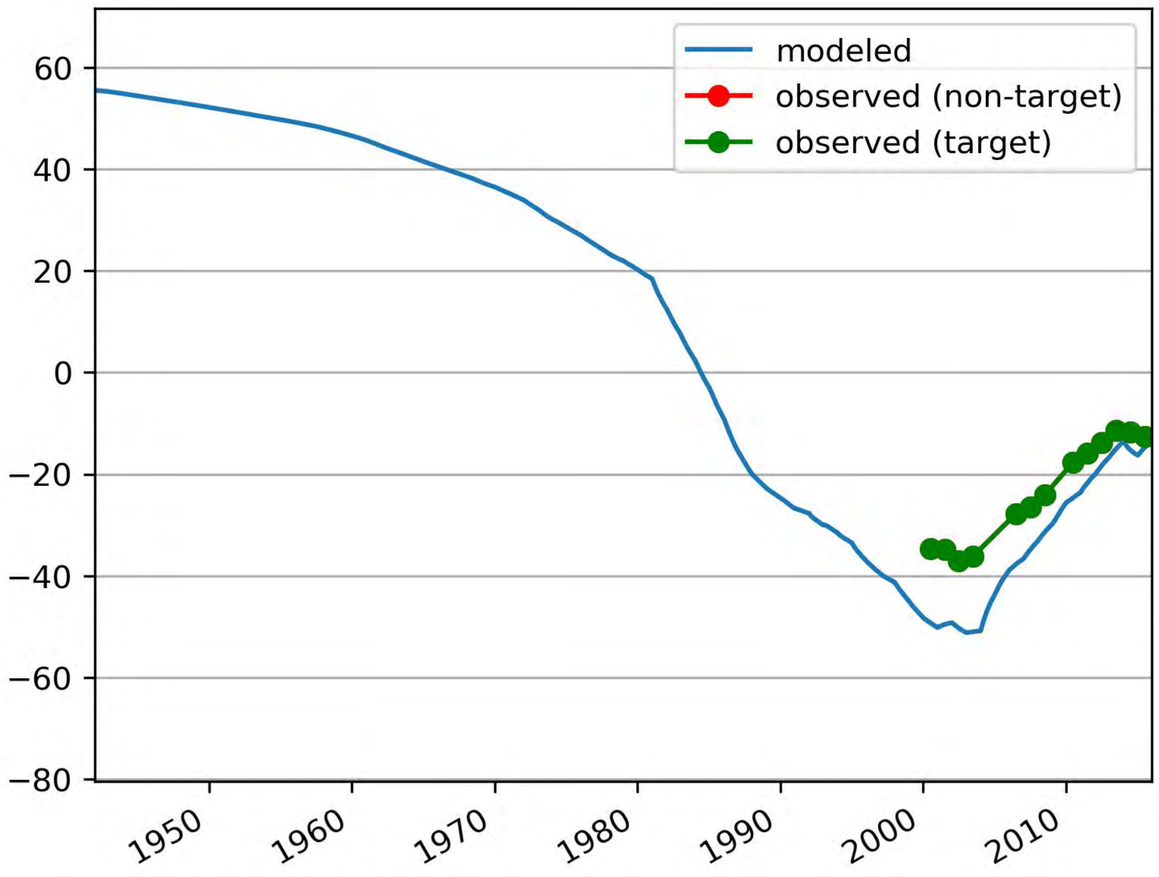


Model layer = 3

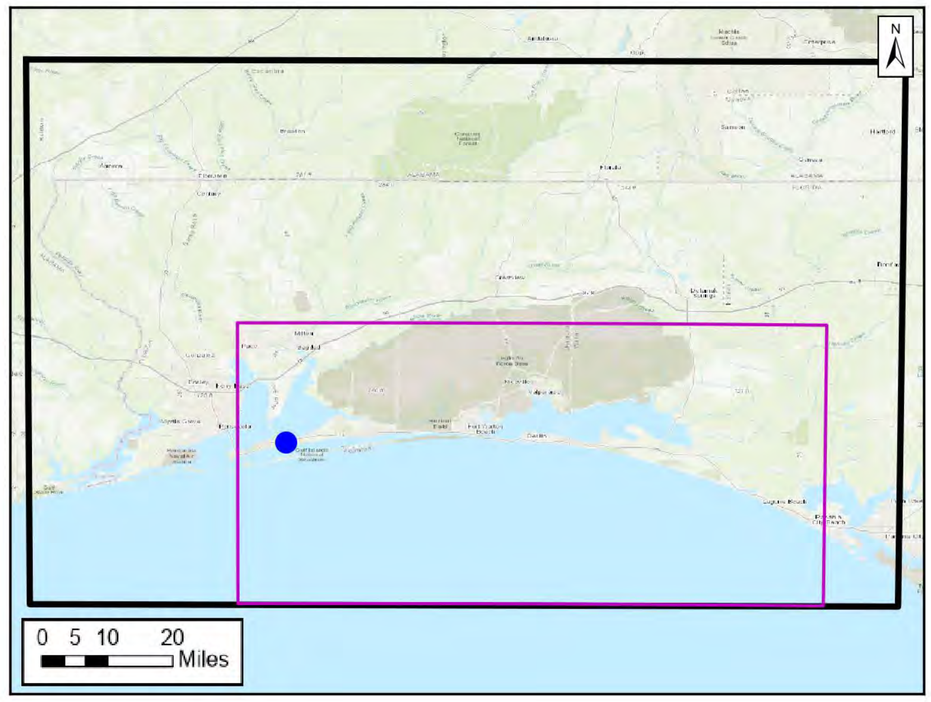
Hydrograph and location for well nwf_7523

TETRA TECH

Water Level Elevation (ft msl, NAVD88)



Location



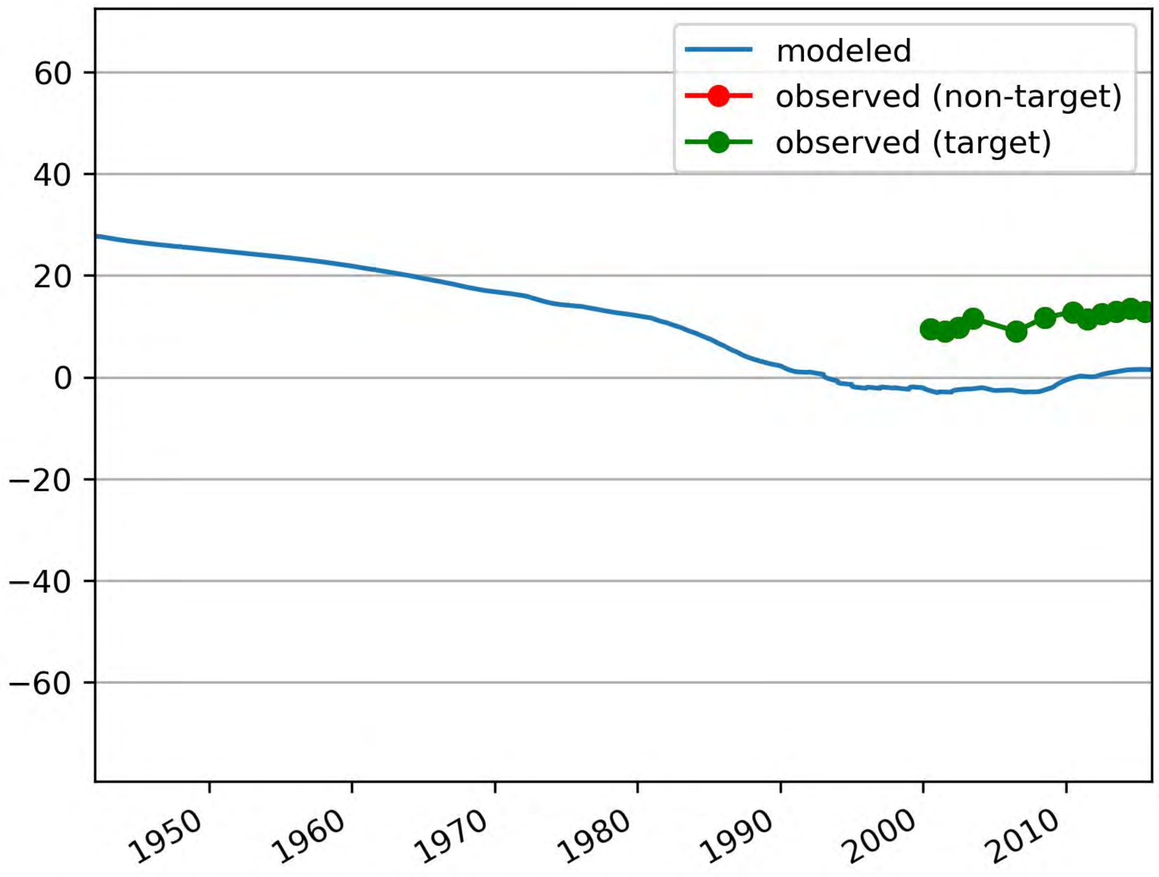
Number of measurements = 13
Mean residual (ft) = 8.44
Abs Mean residual (ft) = 8.44

Model layer = 3

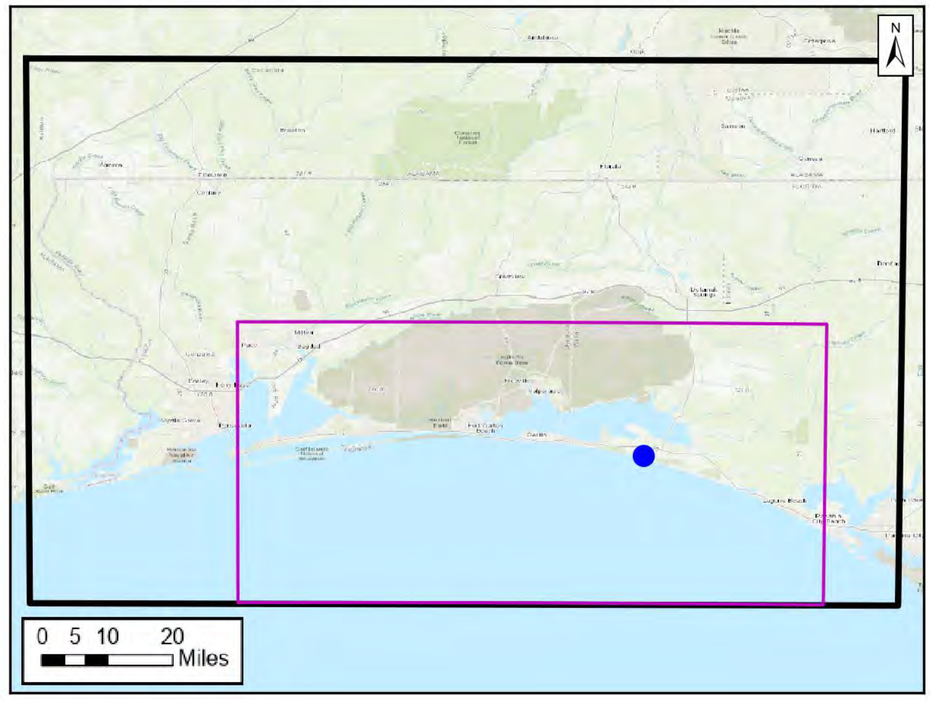
Hydrograph and location for well nwf_7686

TETRA TECH

Water Level Elevation (ft msl, NAVD88)



Location



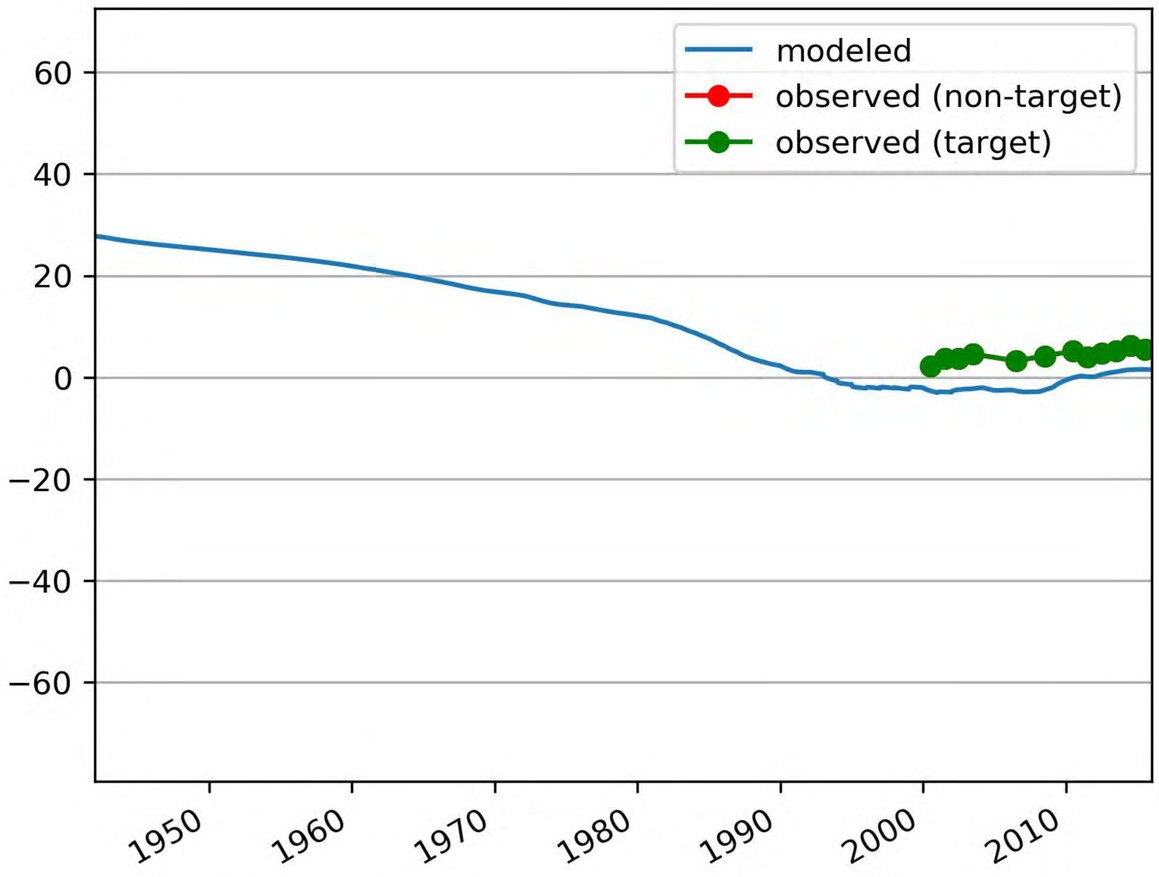
Number of measurements = 12
Mean residual (ft) = 12.31
Abs Mean residual (ft) = 12.31

Model layer = 3

Hydrograph and location for well nwf_7687

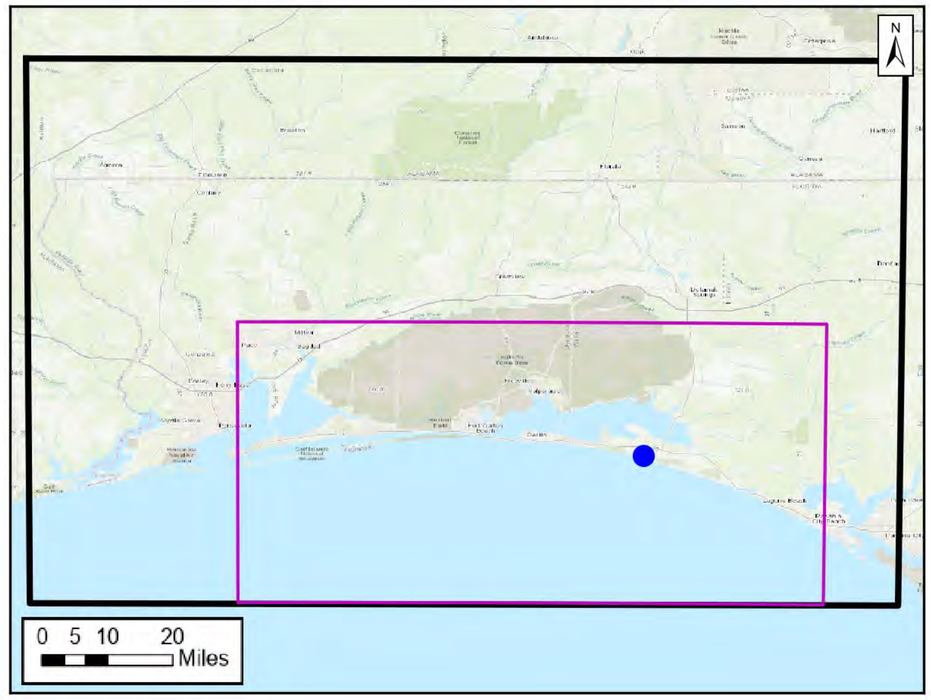
TETRA TECH

Water Level Elevation (ft msl, NAVD88)



Number of measurements = 12
Mean residual (ft) = 5.23
Abs Mean residual (ft) = 5.23

Location

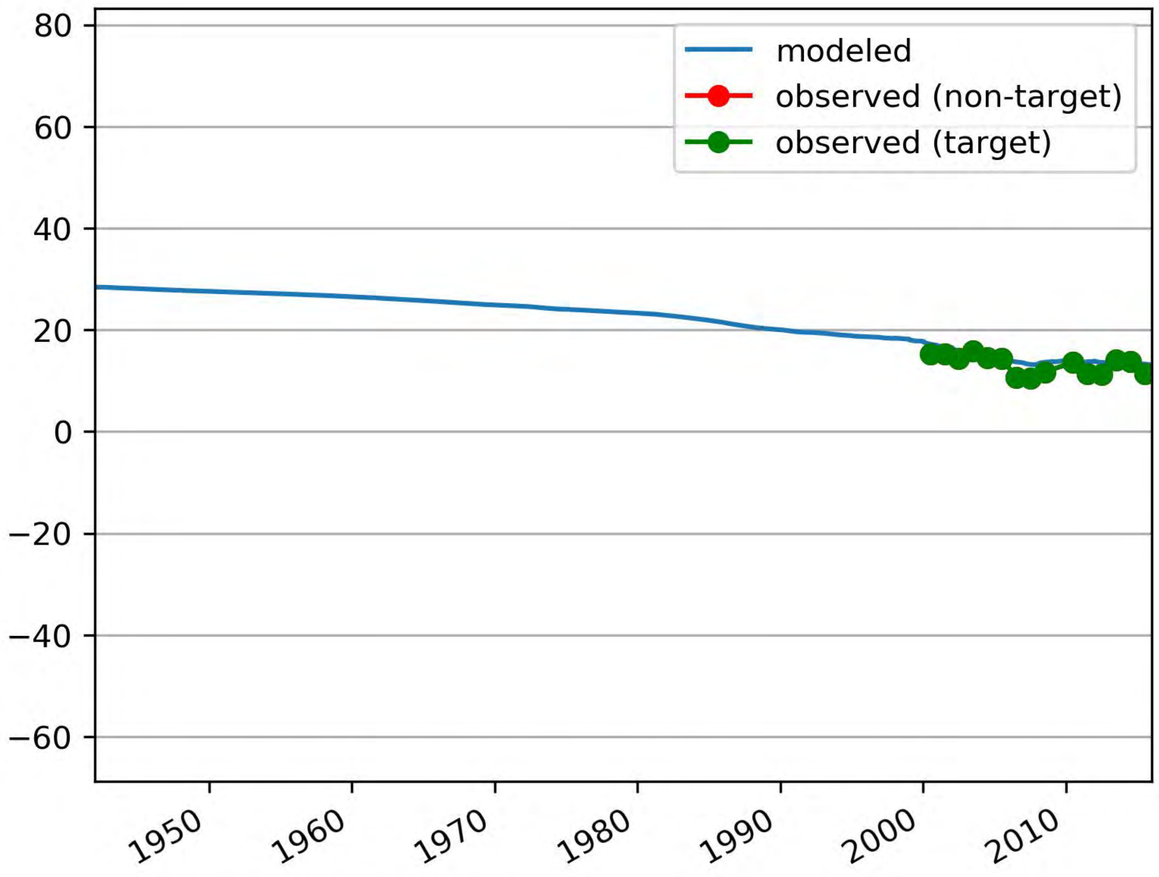


Model layer = 3

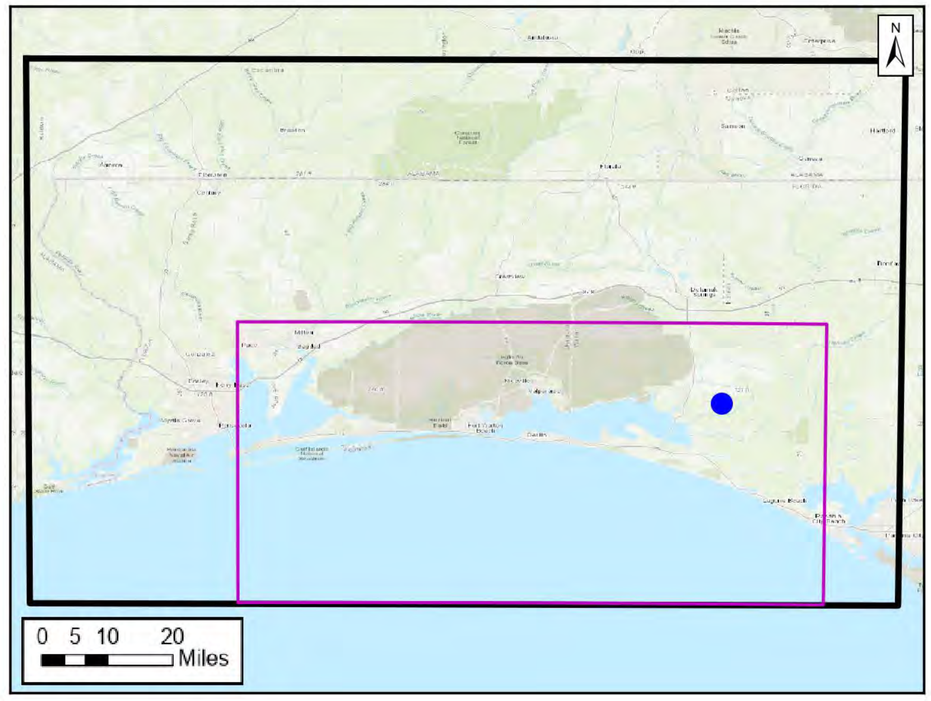
Hydrograph and location for well nwf_7751

TETRA TECH

Water Level Elevation (ft msl, NAVD88)



Location



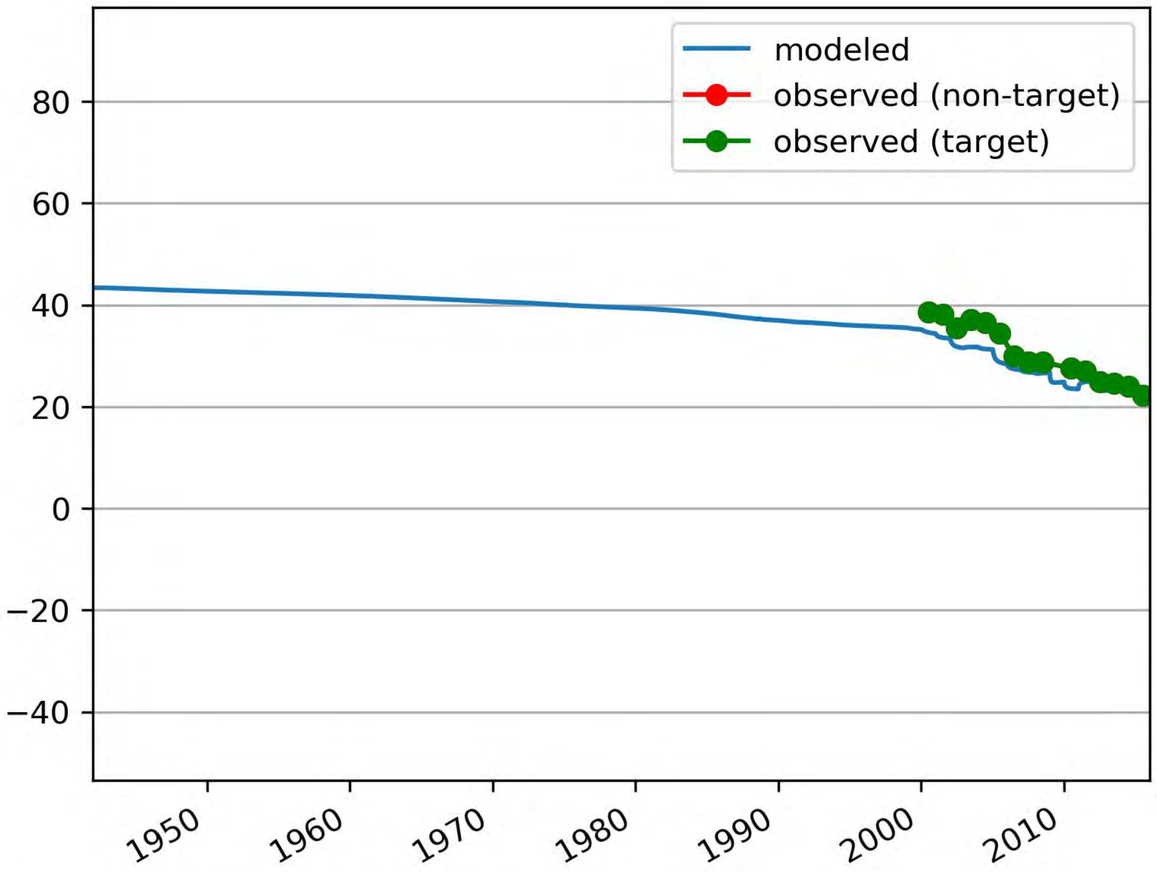
Number of measurements = 15
Mean residual (ft) = -1.33
Abs Mean residual (ft) = 1.37

Model layer = 3

Hydrograph and location for well nwf_7767

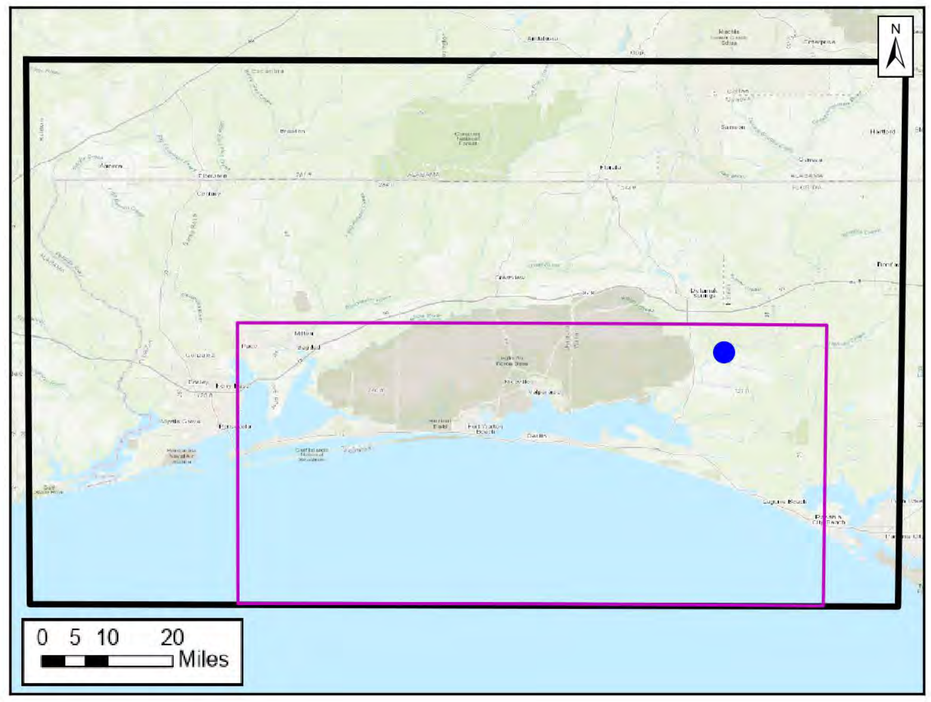
TETRA TECH

Water Level Elevation (ft msl, NAVD88)



Number of measurements = 15
Mean residual (ft) = 3.02
Abs Mean residual (ft) = 3.02

Location

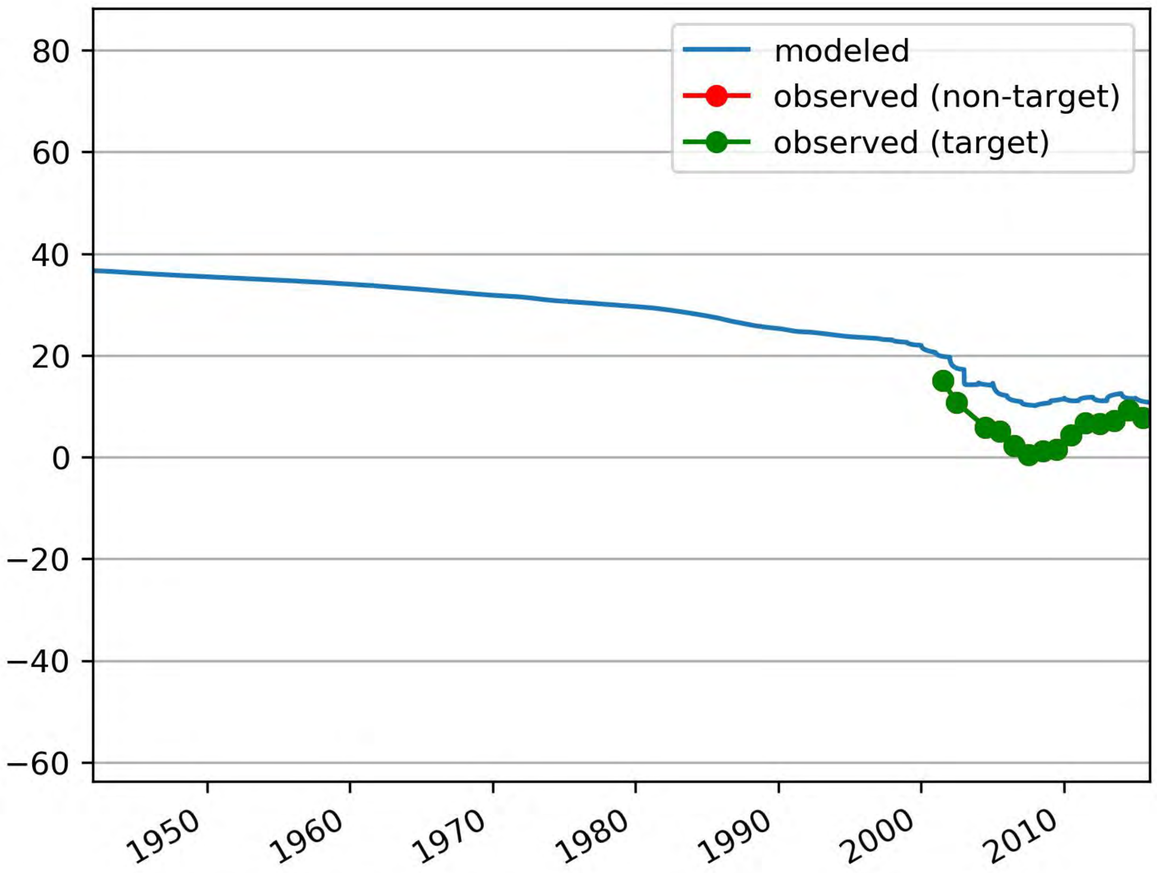


Model layer = 3

Hydrograph and location for well nwf_7768

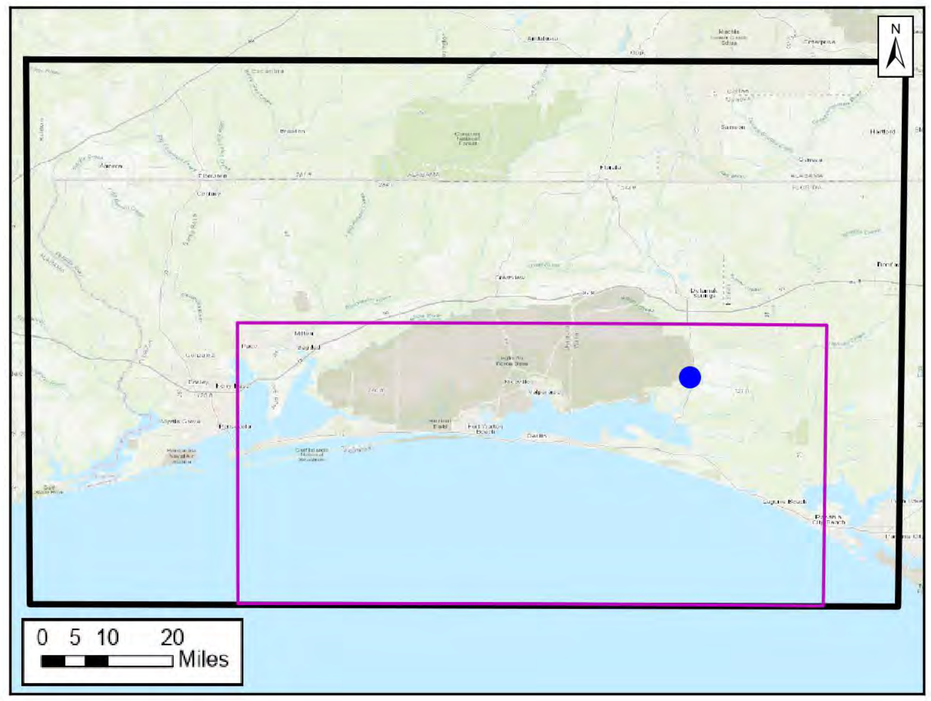
TETRA TECH

Water Level Elevation (ft msl, NAVD88)



Number of measurements = 14
Mean residual (ft) = -6.55
Abs Mean residual (ft) = 6.55

Location

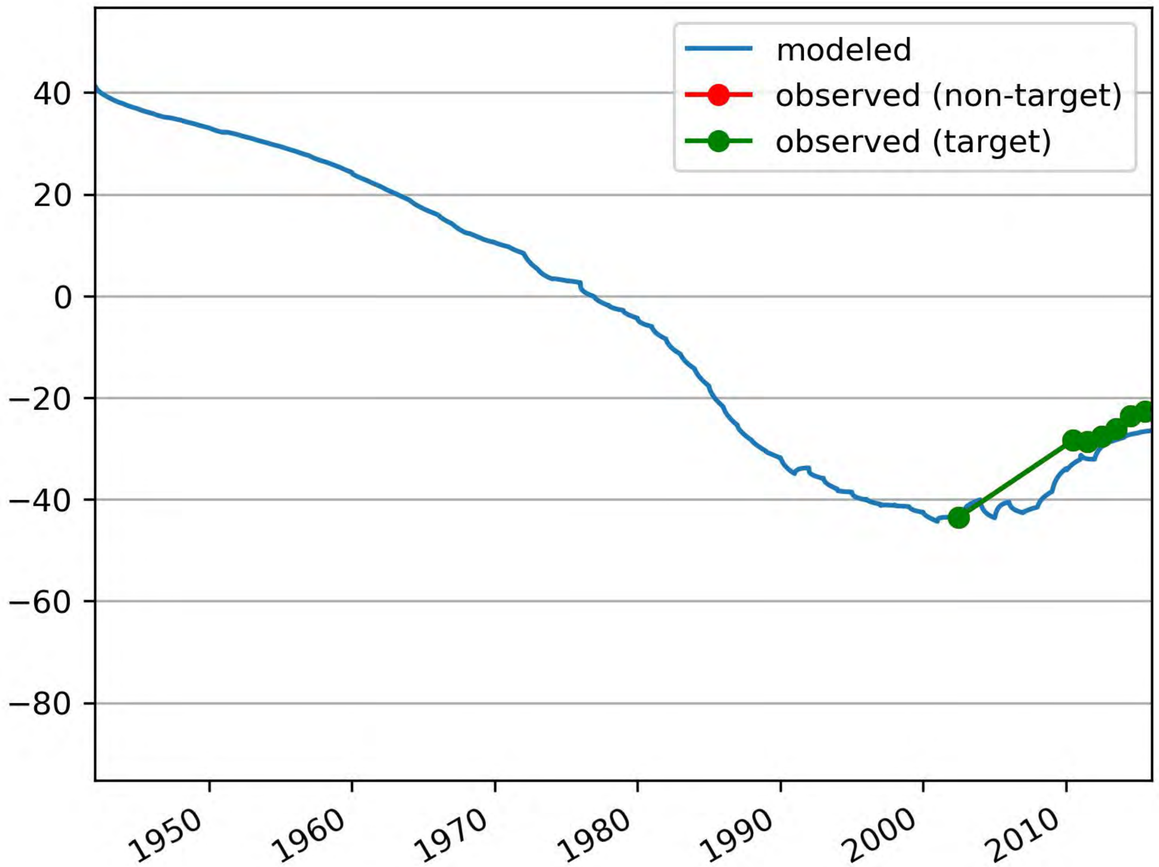


Model layer = 3

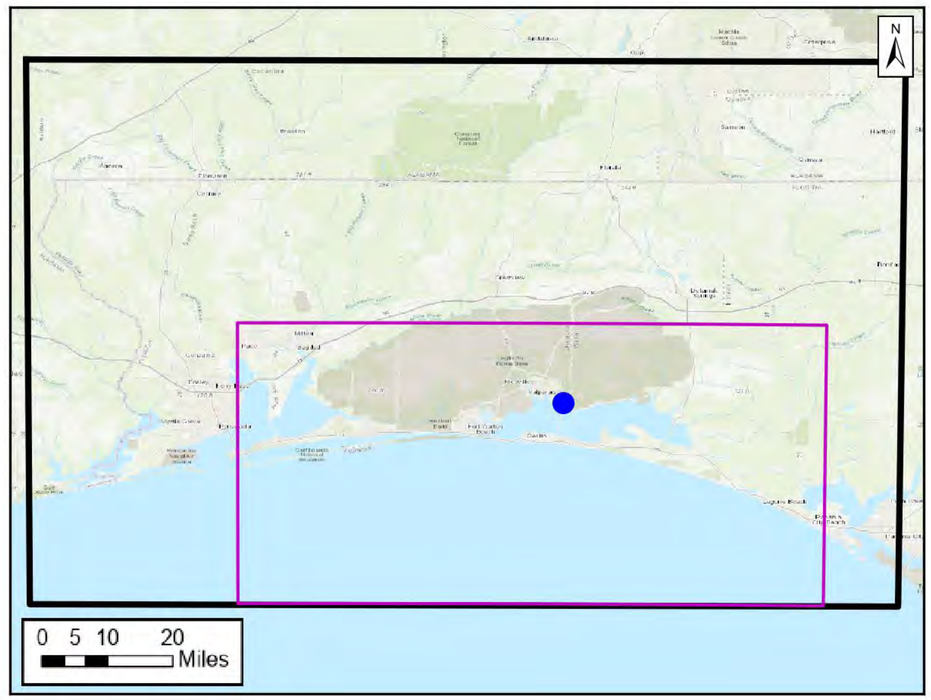
Hydrograph and location for well nwf_8194

TETRA TECH

Water Level Elevation (ft msl, NAVD88)



Location



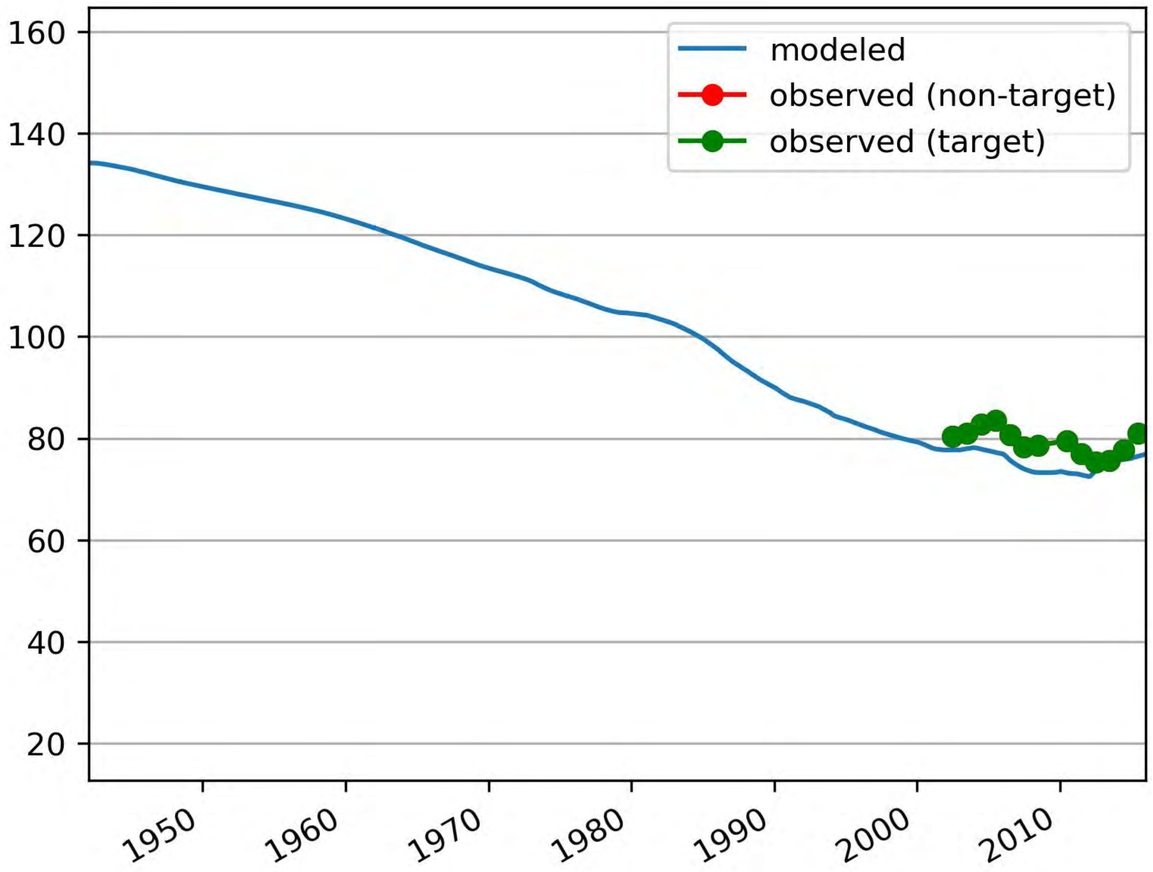
Number of measurements = 7
Mean residual (ft) = 2.69
Abs Mean residual (ft) = 2.99

Model layer = 3

Hydrograph and location for well nwf_8314

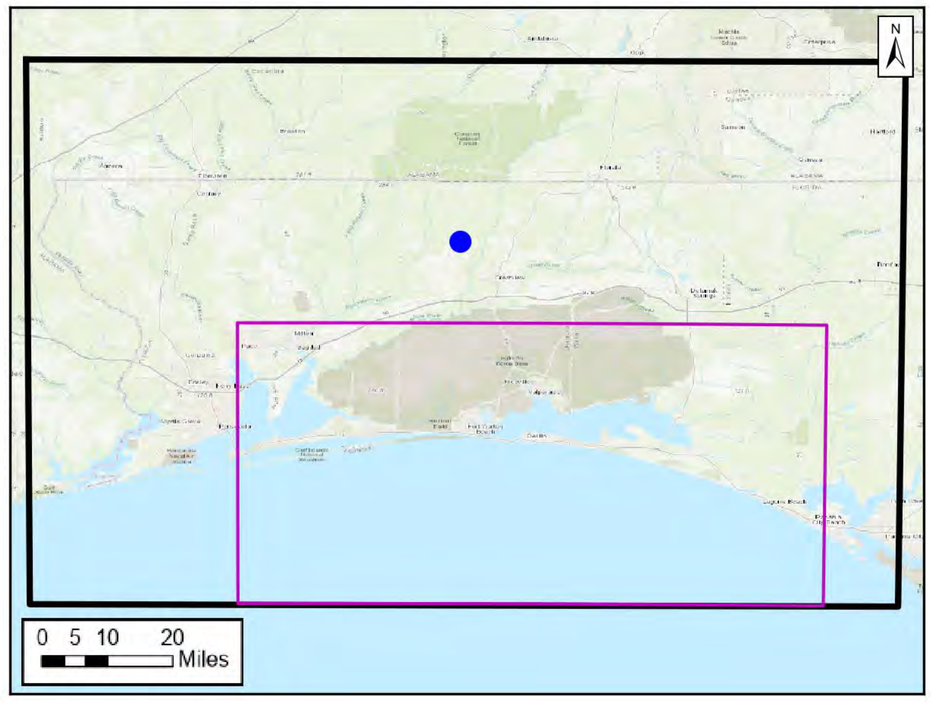
TETRA TECH

Water Level Elevation (ft msl, NAVD88)



Number of measurements = 13
Mean residual (ft) = 3.87
Abs Mean residual (ft) = 3.87

Location

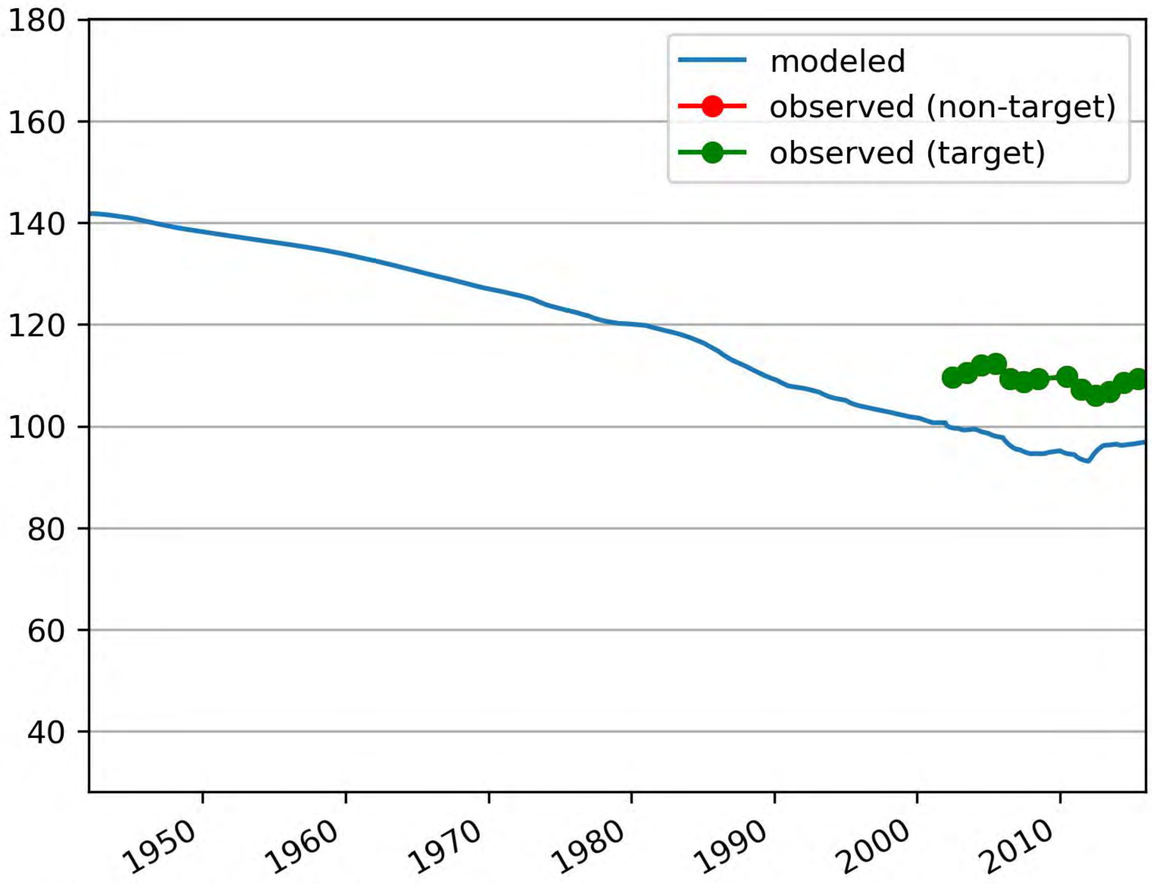


Model layer = 3

Hydrograph and location for well nwf_8350

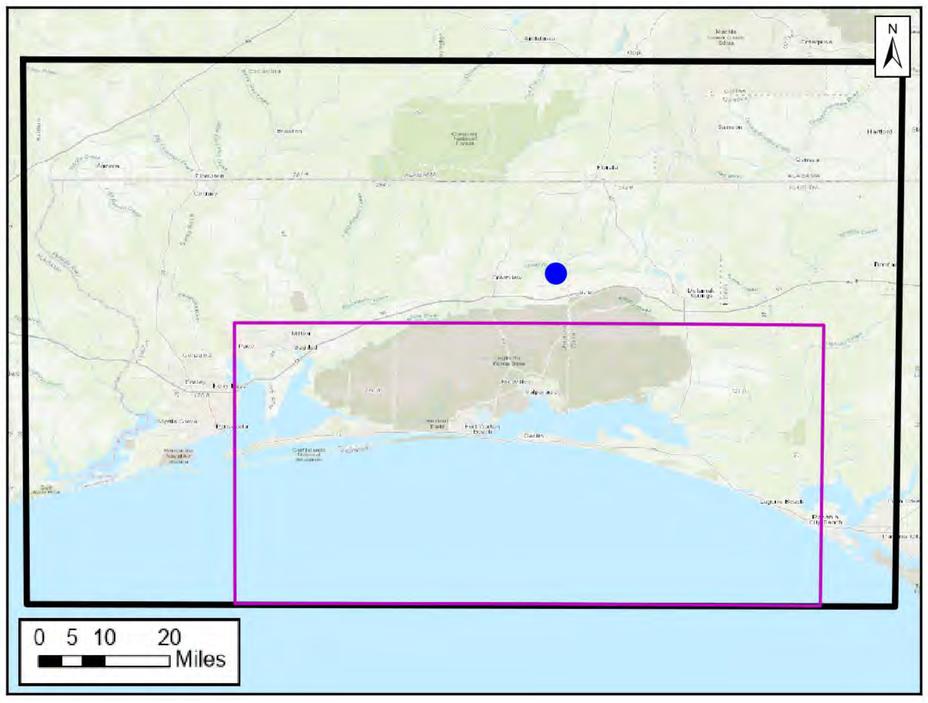
TETRA TECH

Water Level Elevation (ft msl, NAVD88)



Number of measurements = 13
Mean residual (ft) = 12.75
Abs Mean residual (ft) = 12.75

Location

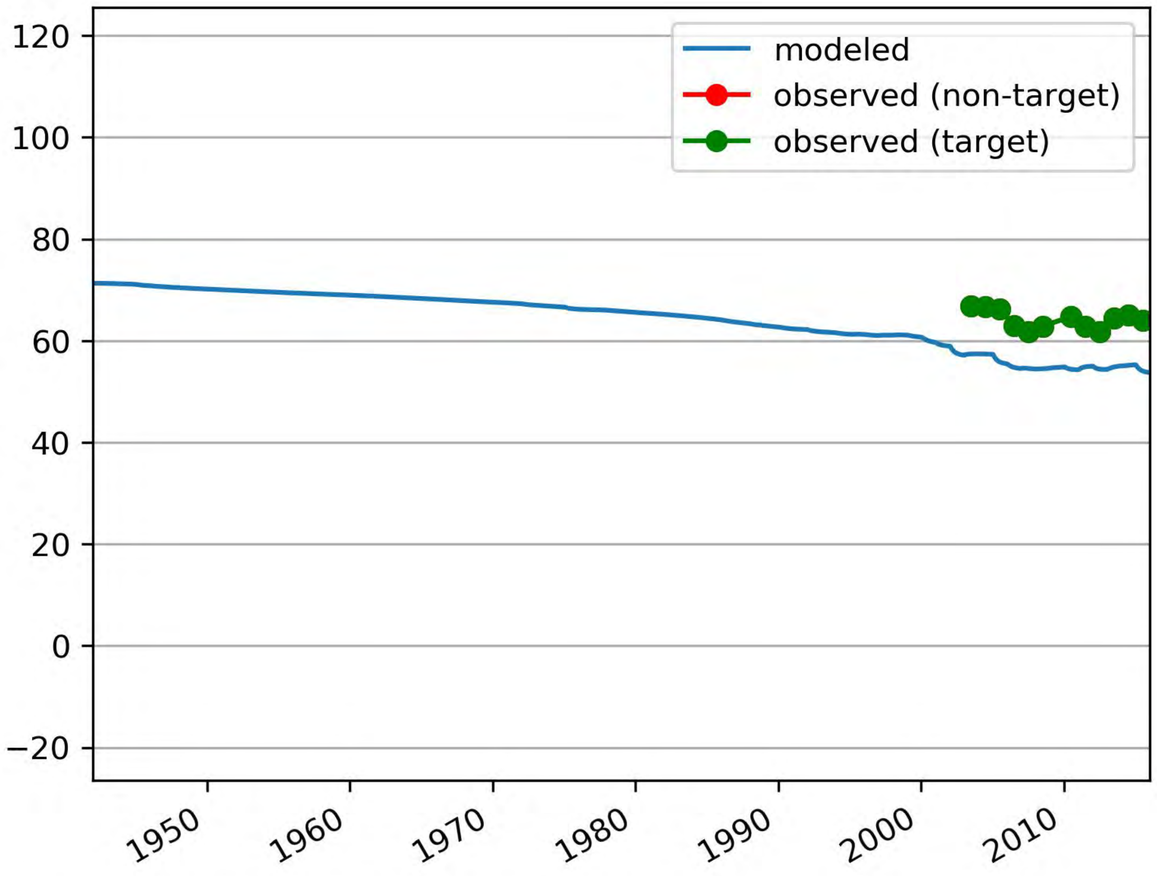


Model layer = 3

Hydrograph and location for well nwf_8353

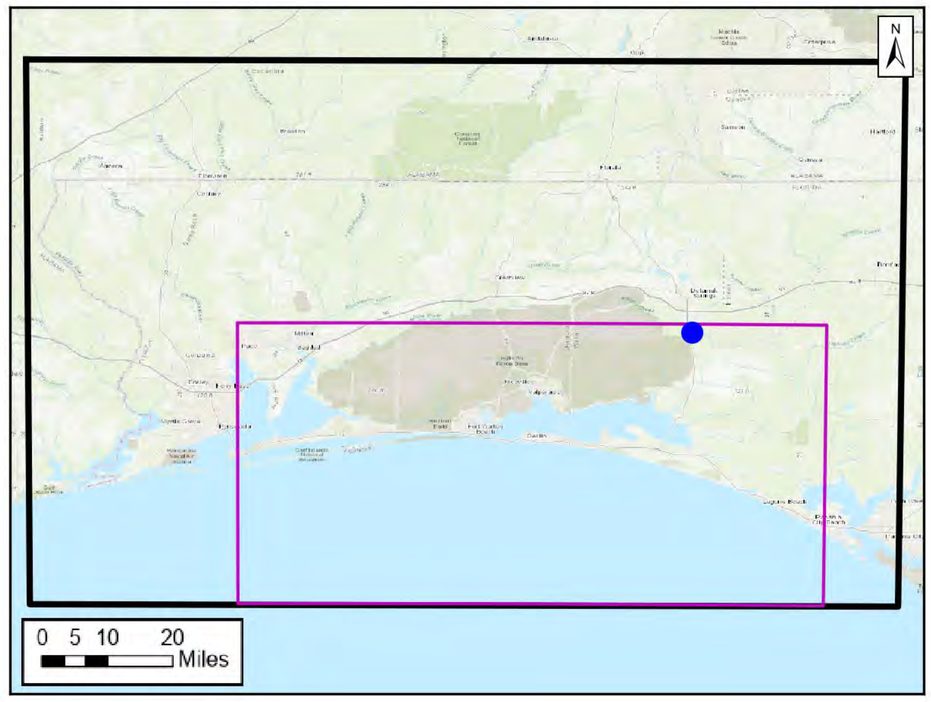
TETRA TECH

Water Level Elevation (ft msl, NAVD88)



Number of measurements = 12
Mean residual (ft) = 9.0
Abs Mean residual (ft) = 9.0

Location

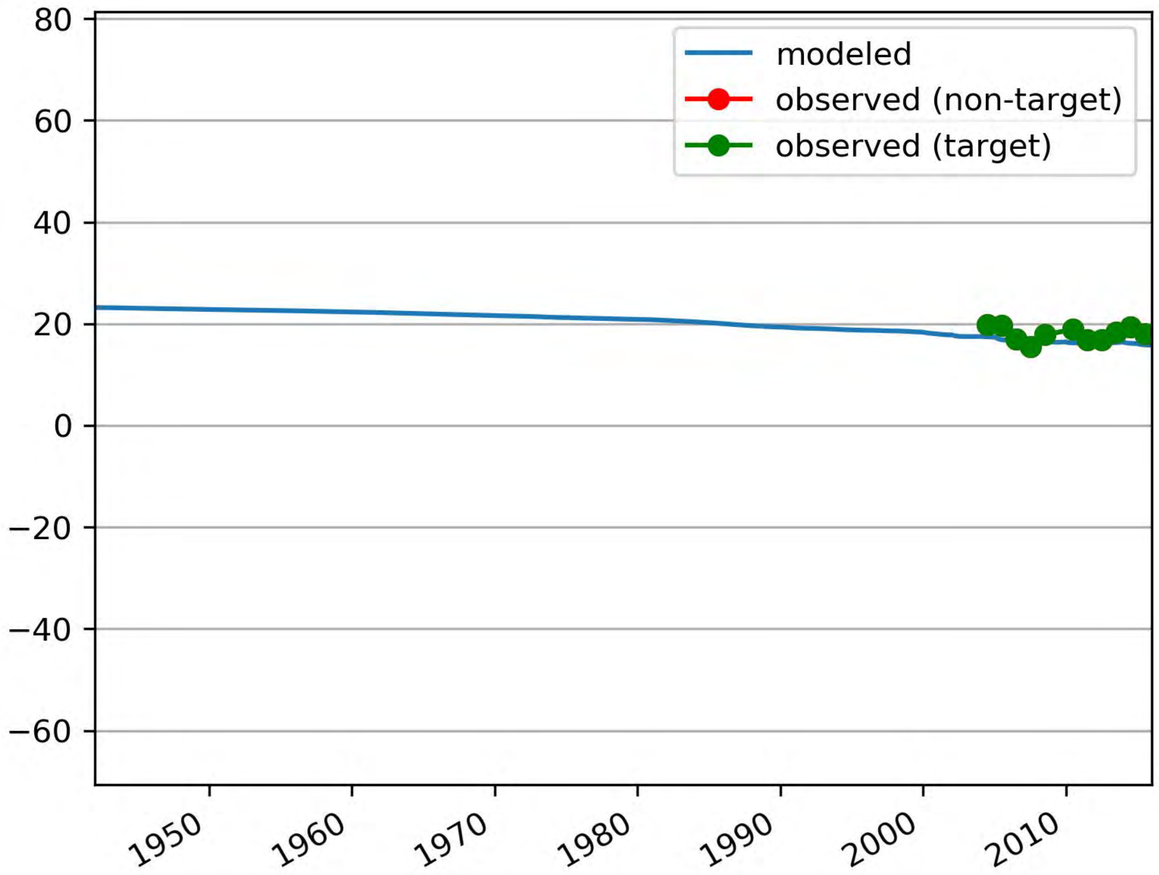


Model layer = 3

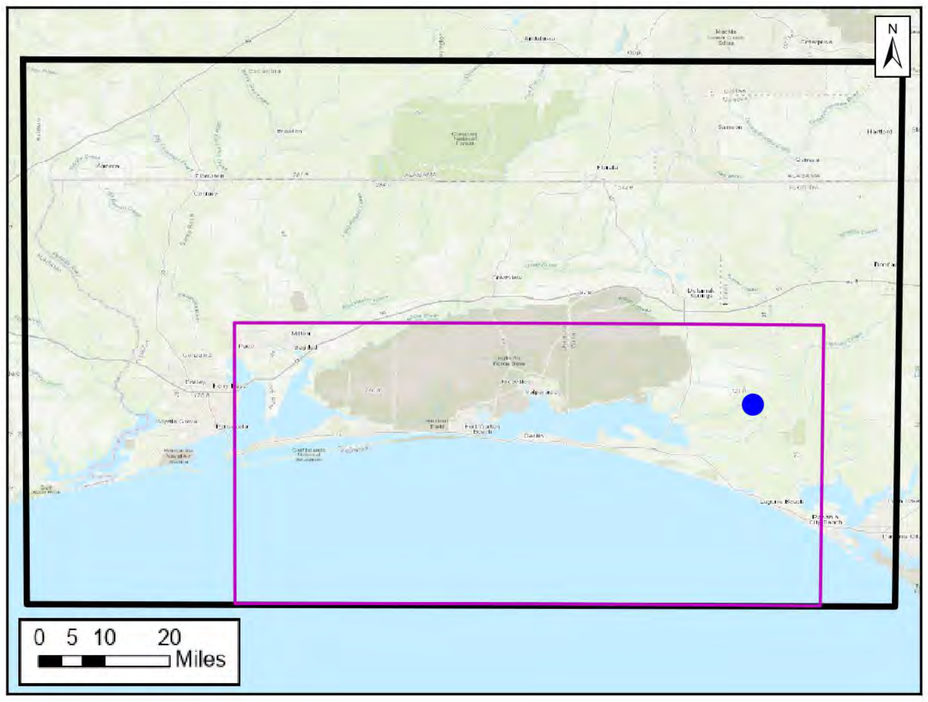
Hydrograph and location for well nwf_8361

TETRA TECH

Water Level Elevation (ft msl, NAVD88)



Location



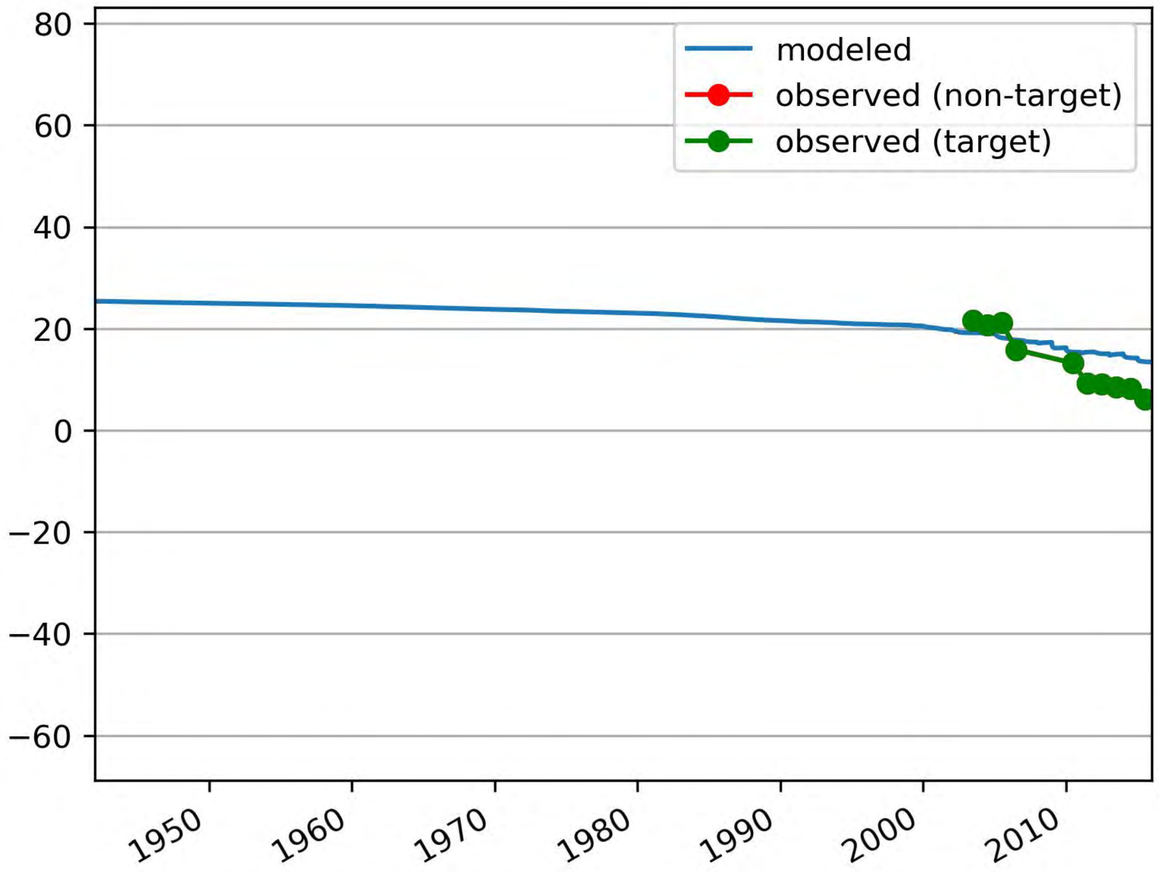
Number of measurements = 11
Mean residual (ft) = 1.58
Abs Mean residual (ft) = 1.71

Model layer = 3

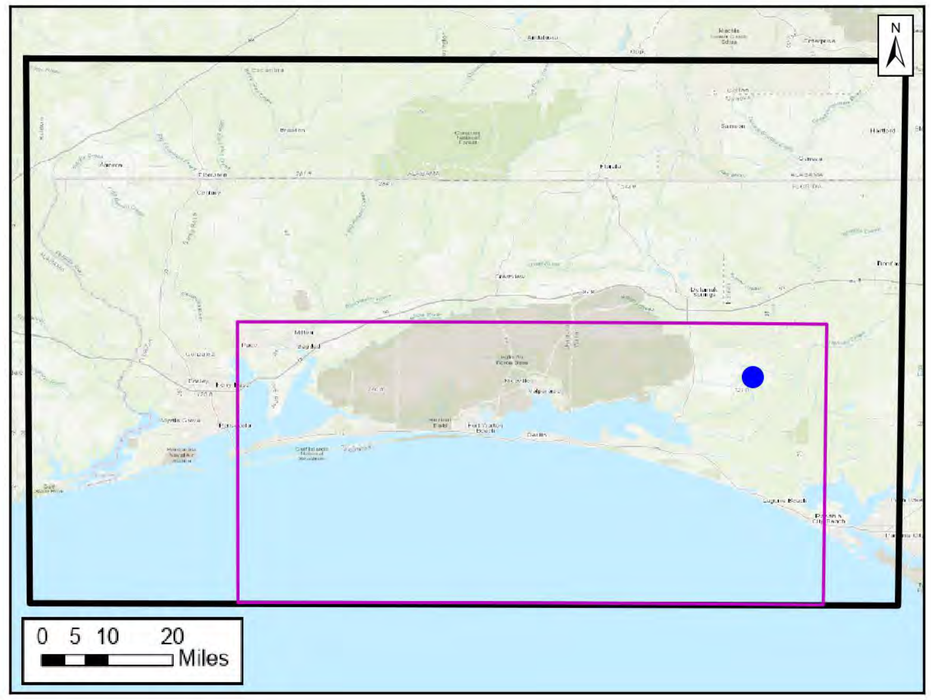
Hydrograph and location for well nwf_8505

TETRA TECH

Water Level Elevation (ft msl, NAVD88)



Location



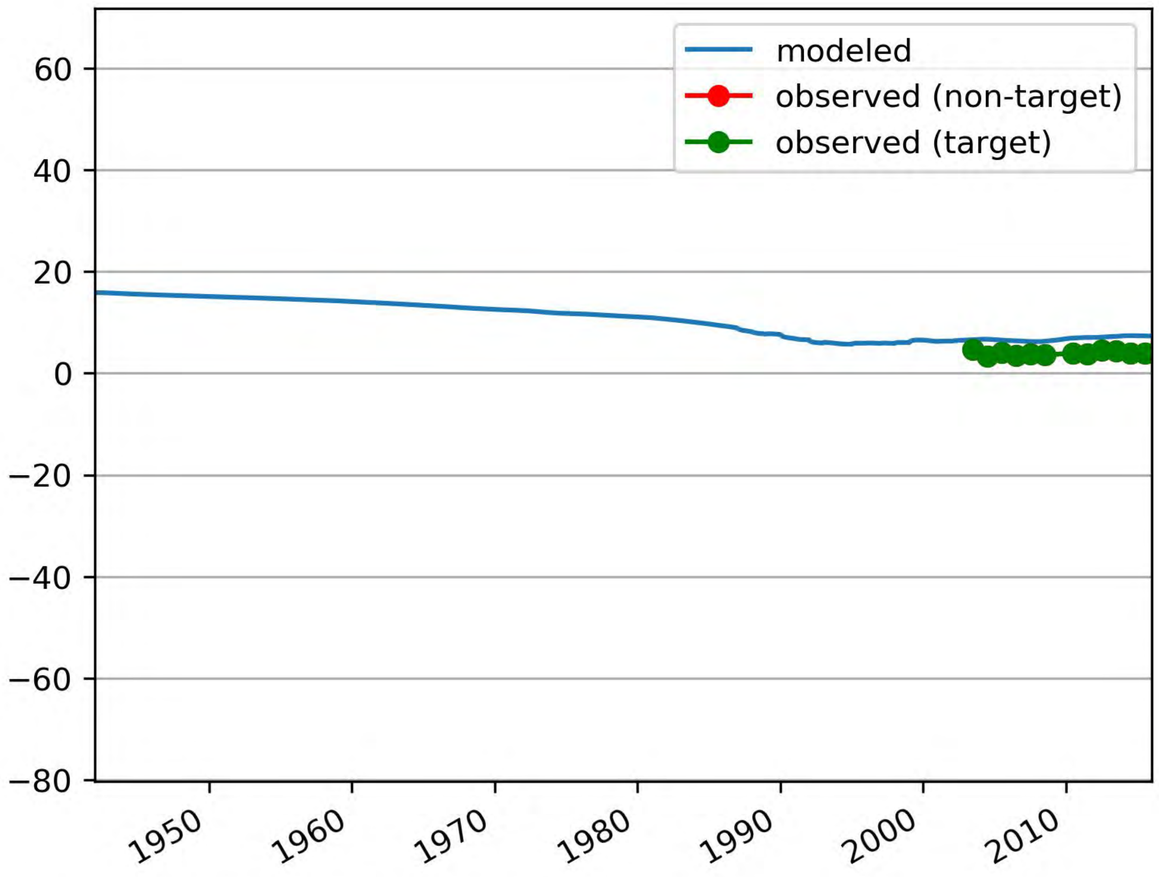
Number of measurements = 10
Mean residual (ft) = -2.9
Abs Mean residual (ft) = 4.31

Model layer = 3

Hydrograph and location for well nwf_8643

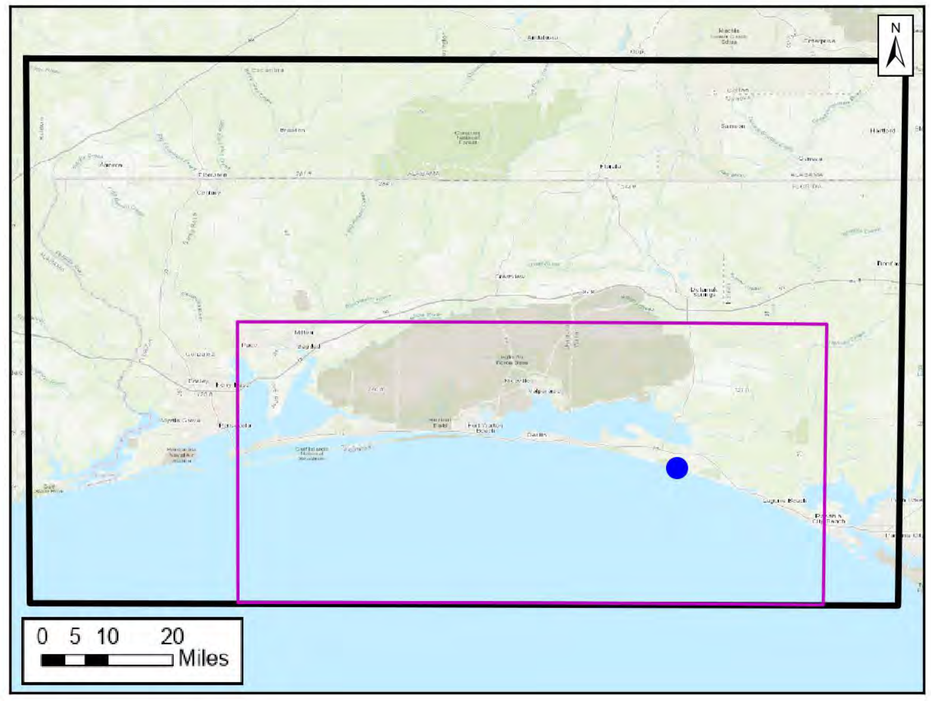
TETRA TECH

Water Level Elevation (ft msl, NAVD88)



Number of measurements = 12
Mean residual (ft) = -2.87
Abs Mean residual (ft) = 2.87

Location

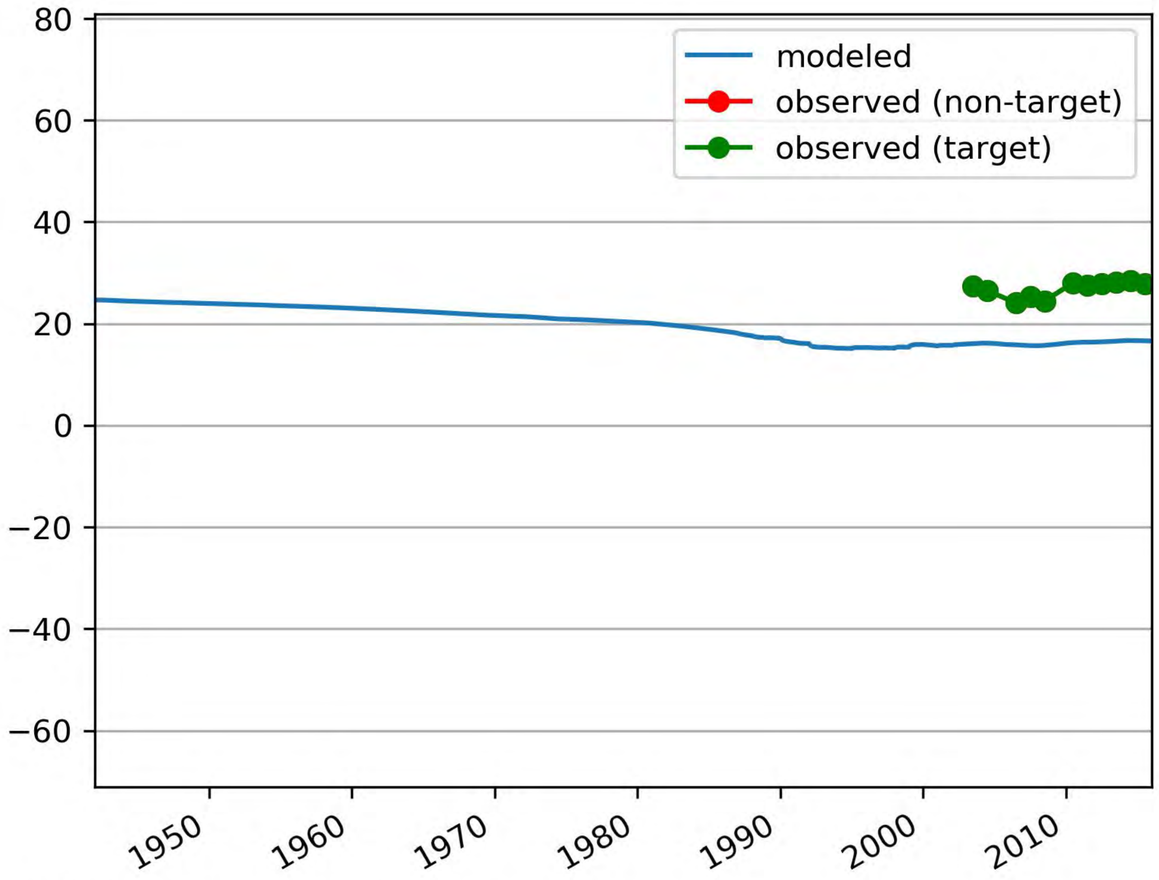


Model layer = 2

Hydrograph and location for well nwf_8711

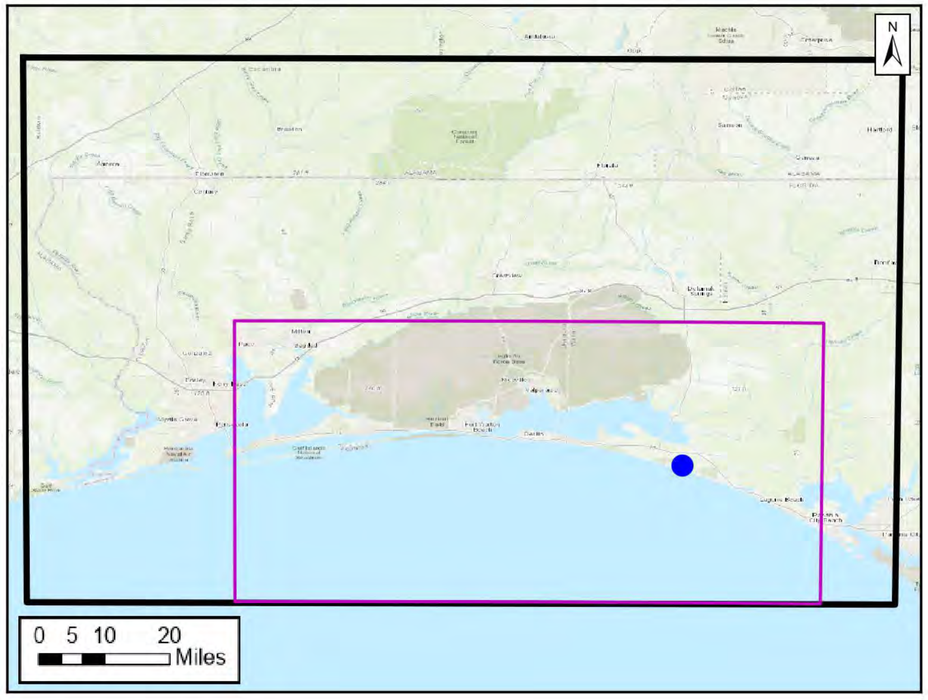
TETRA TECH

Water Level Elevation (ft msl, NAVD88)



Number of measurements = 11
Mean residual (ft) = 10.64
Abs Mean residual (ft) = 10.64

Location

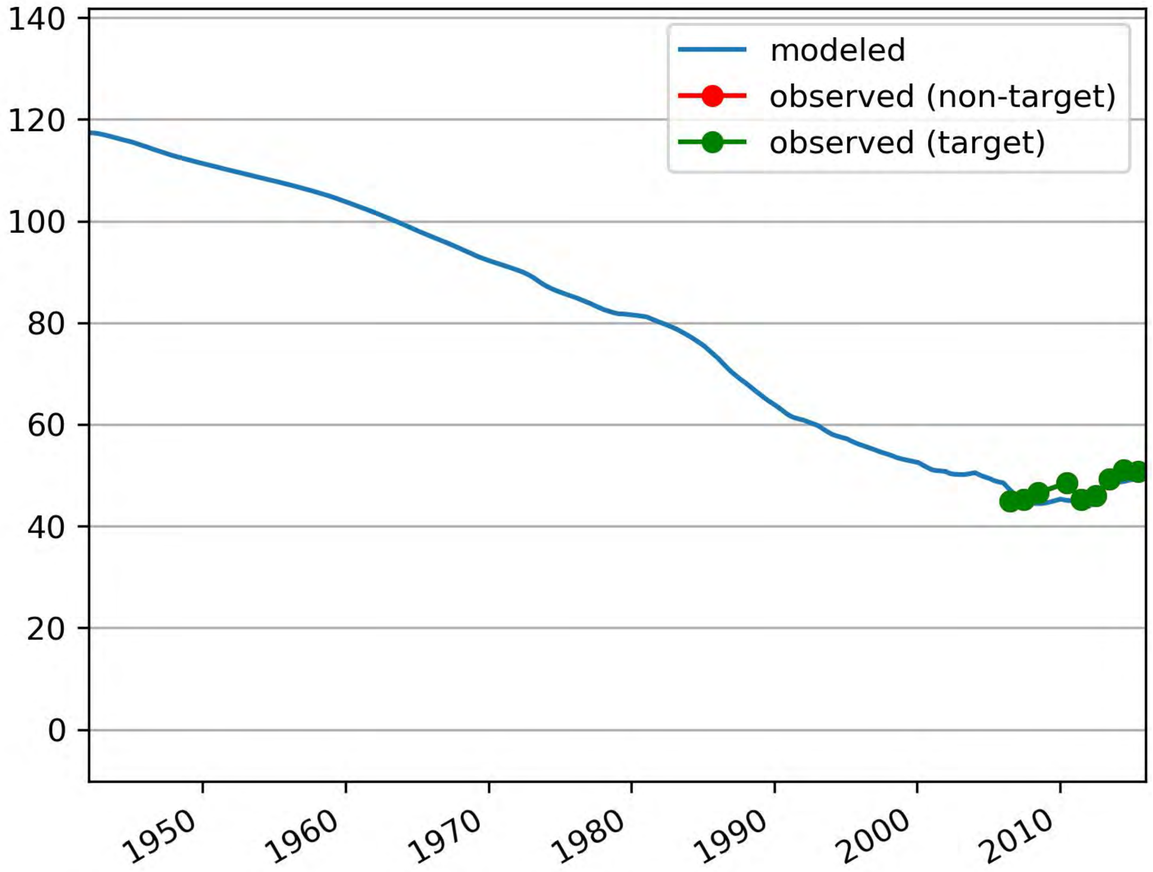


Model layer = 2

Hydrograph and location for well nwf_8721

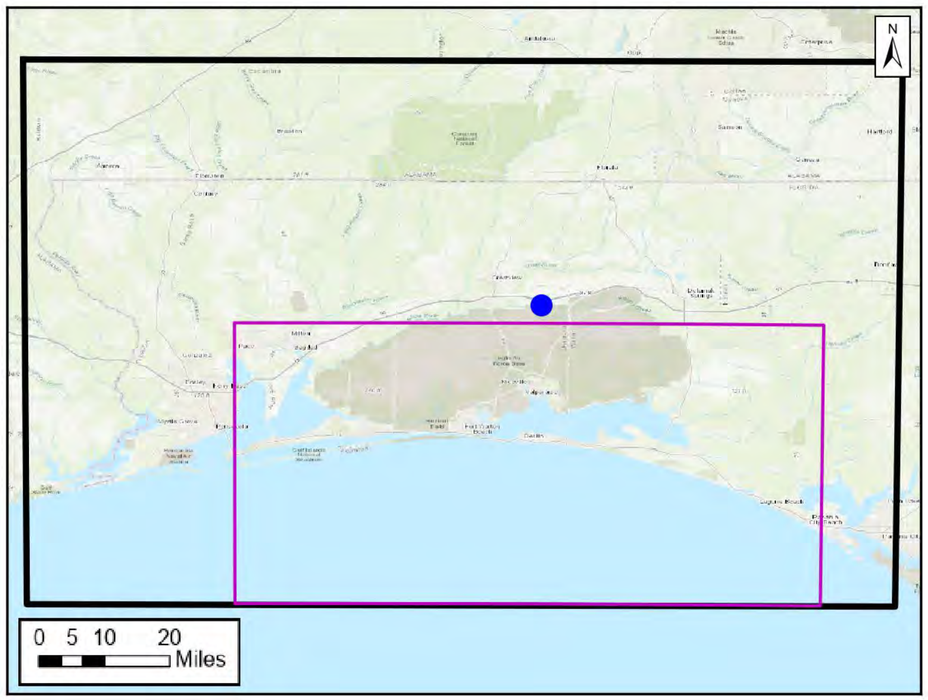
TETRA TECH

Water Level Elevation (ft msl, NAVD88)



Number of measurements = 9
Mean residual (ft) = 0.97
Abs Mean residual (ft) = 1.49

Location

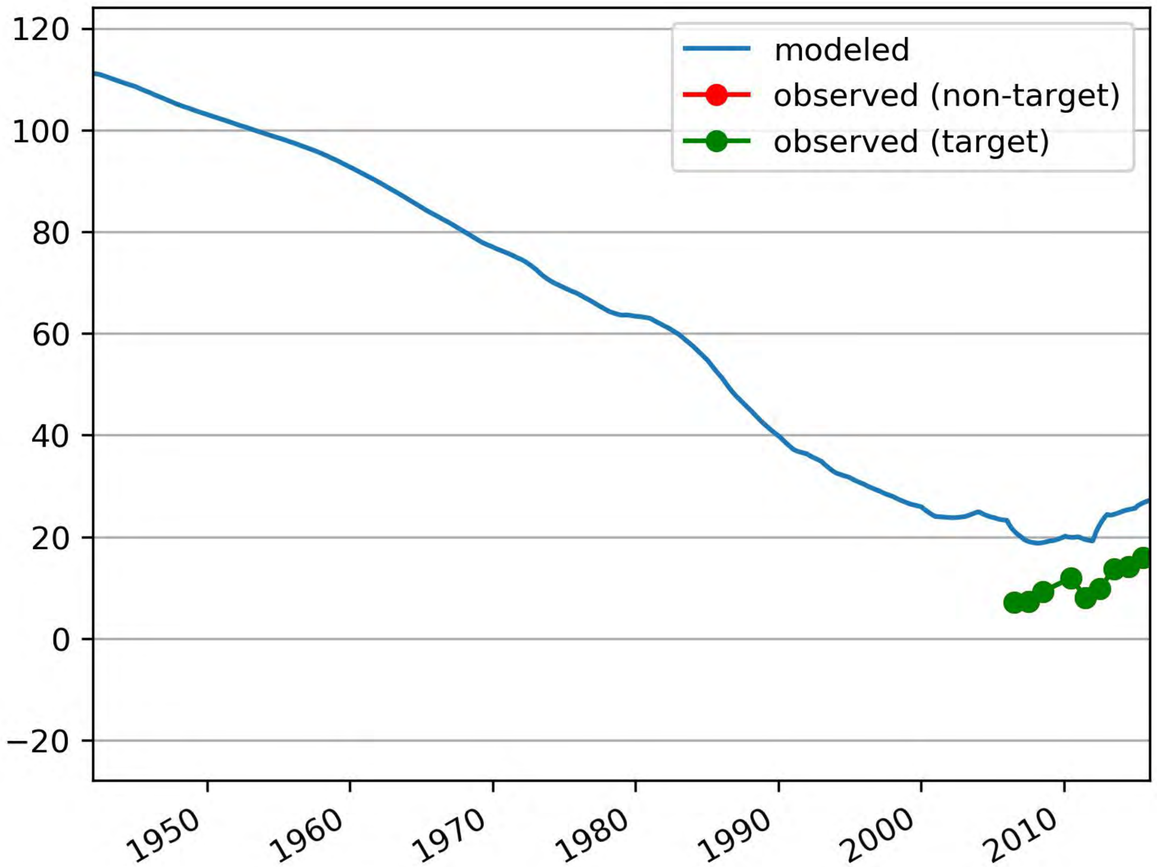


Model layer = 3

Hydrograph and location for well nwf_8758

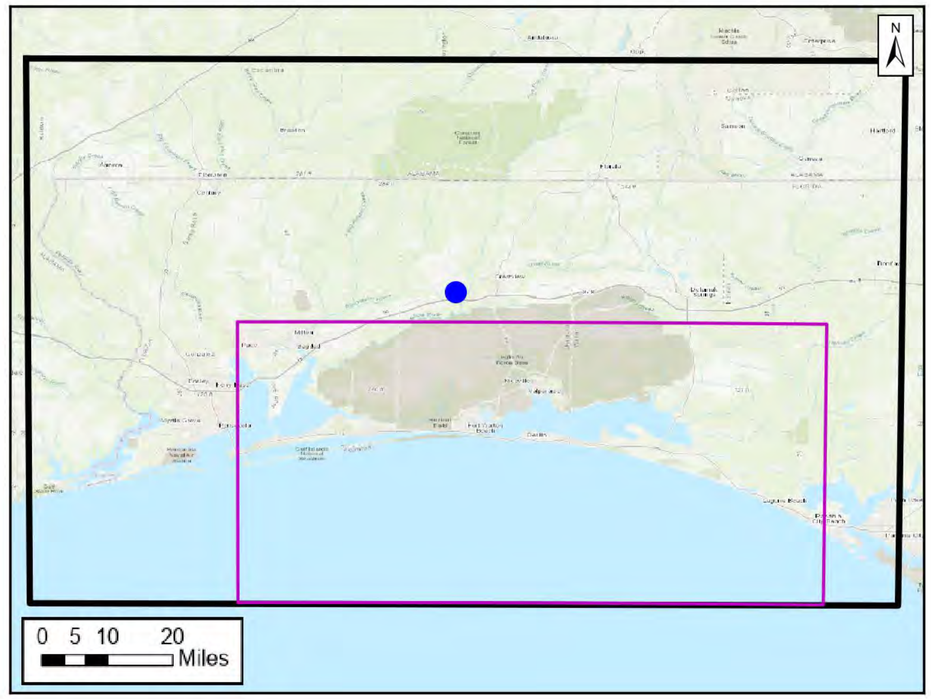
TETRA TECH

Water Level Elevation (ft msl, NAVD88)



Number of measurements = 9
Mean residual (ft) = -11.12
Abs Mean residual (ft) = 11.12

Location

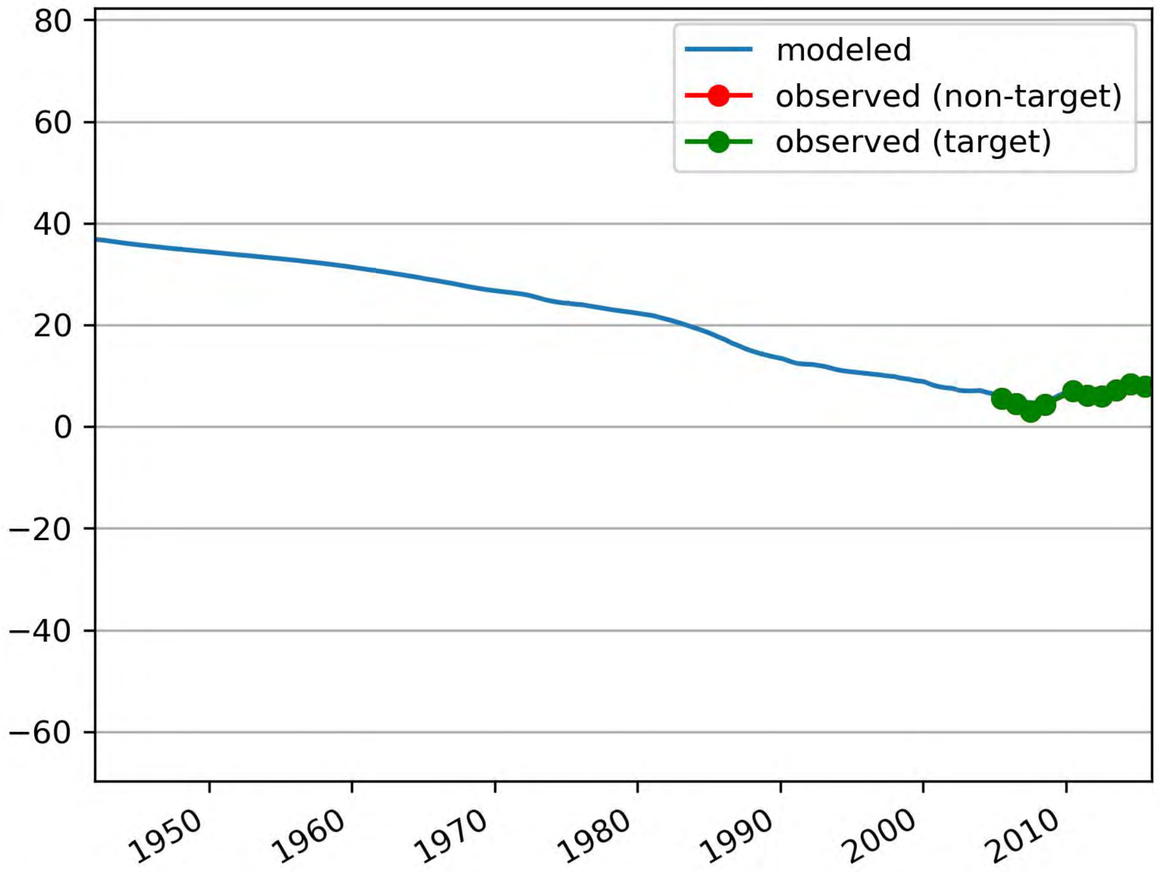


Model layer = 3

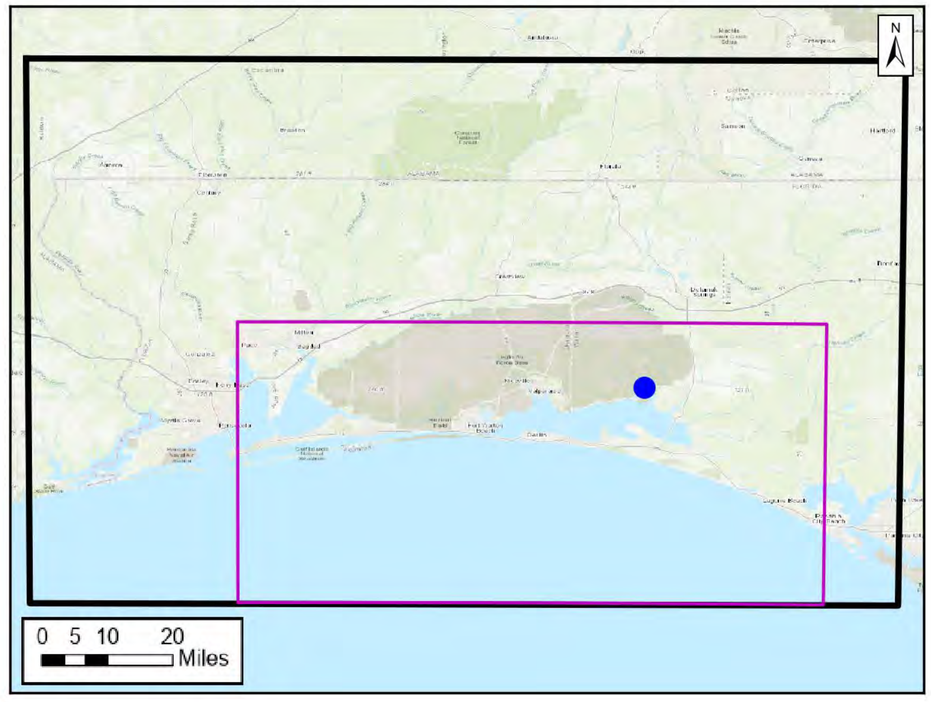
Hydrograph and location for well nwf_8759

TETRA TECH

Water Level Elevation (ft msl, NAVD88)



Location



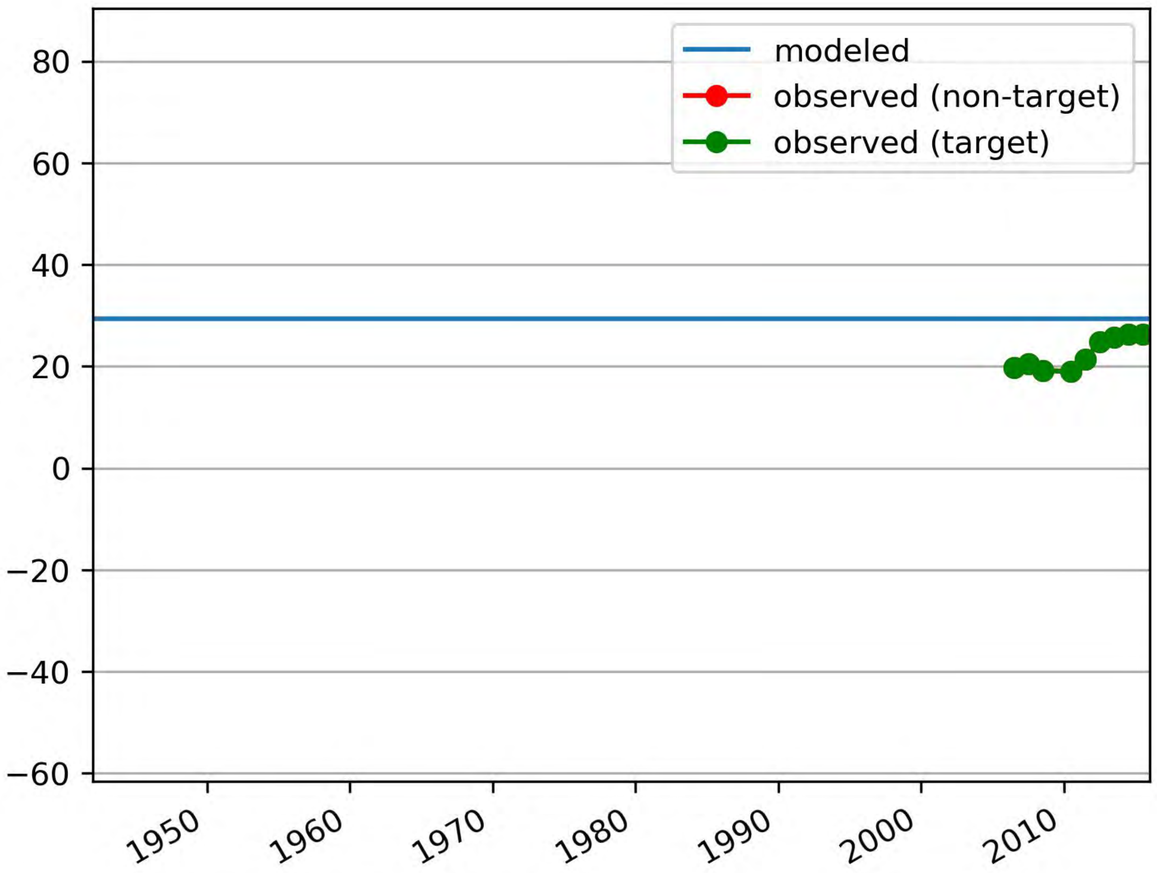
Number of measurements = 10
Mean residual (ft) = -0.71
Abs Mean residual (ft) = 0.75

Model layer = 3

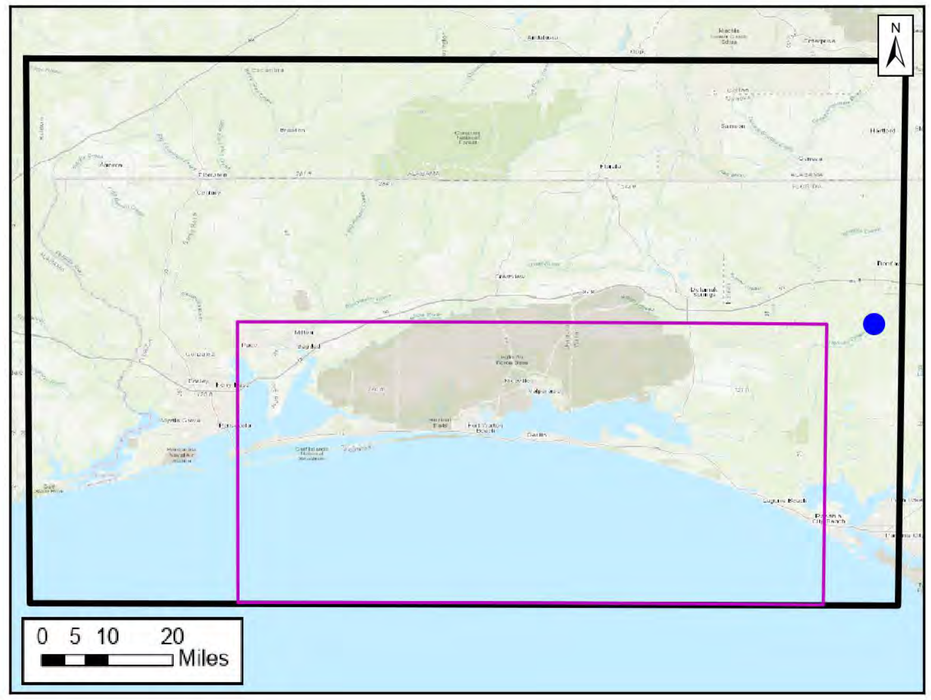
Hydrograph and location for well nwf_8762

TETRA TECH

Water Level Elevation (ft msl, NAVD88)



Location



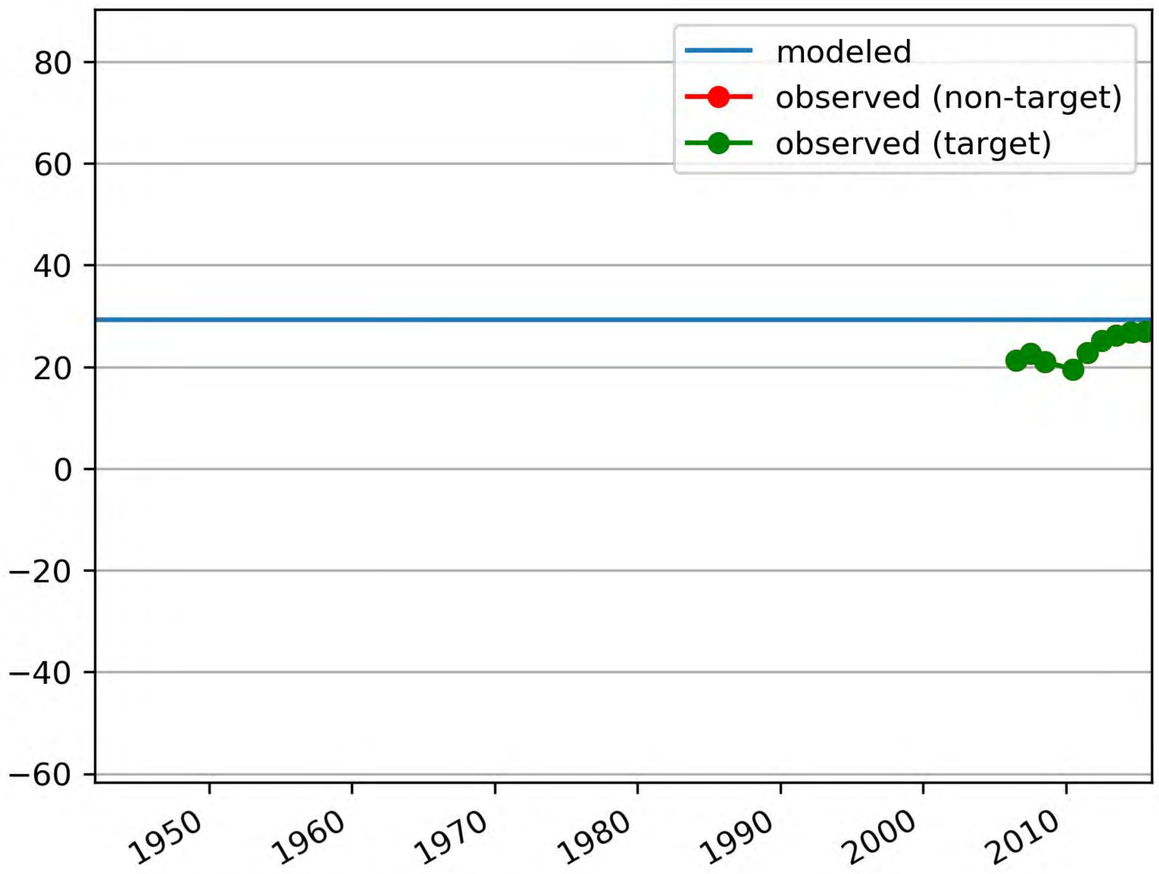
Number of measurements = 9
Mean residual (ft) = -6.8
Abs Mean residual (ft) = 6.8

Model layer = 3

Hydrograph and location for well nwf_8780

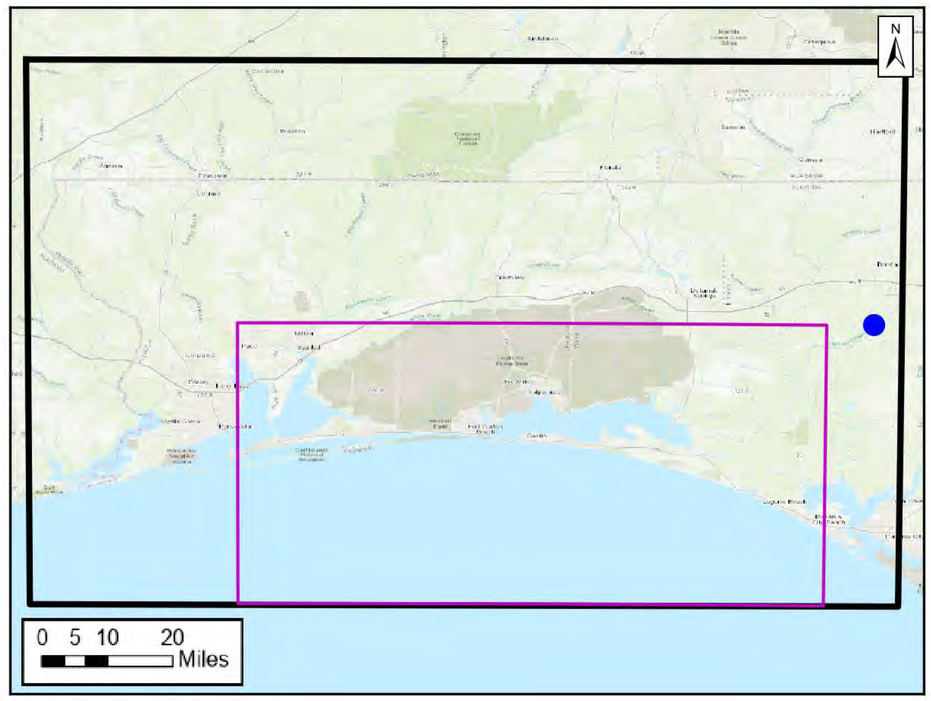
TETRA TECH

Water Level Elevation (ft msl, NAVD88)



Number of measurements = 9
Mean residual (ft) = -5.66
Abs Mean residual (ft) = 5.66

Location

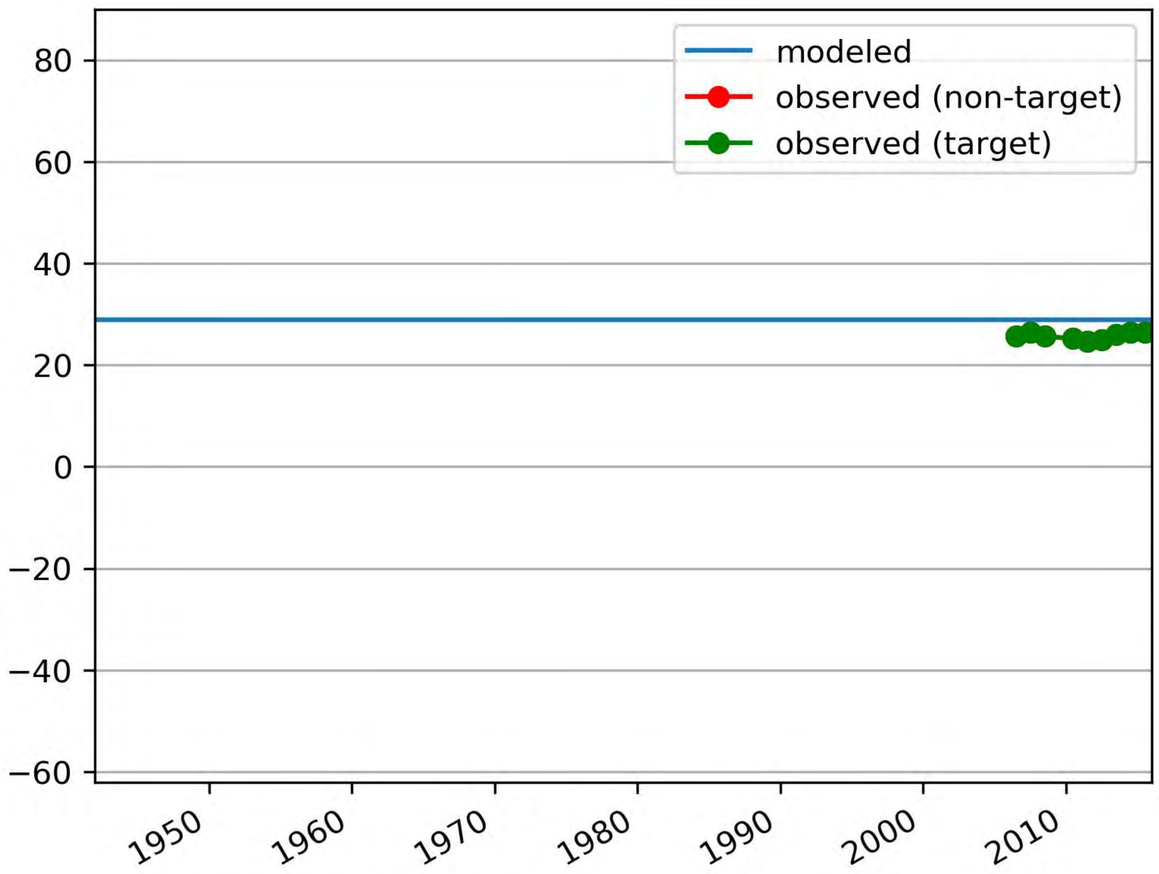


Model layer = 3

Hydrograph and location for well nwf_8781

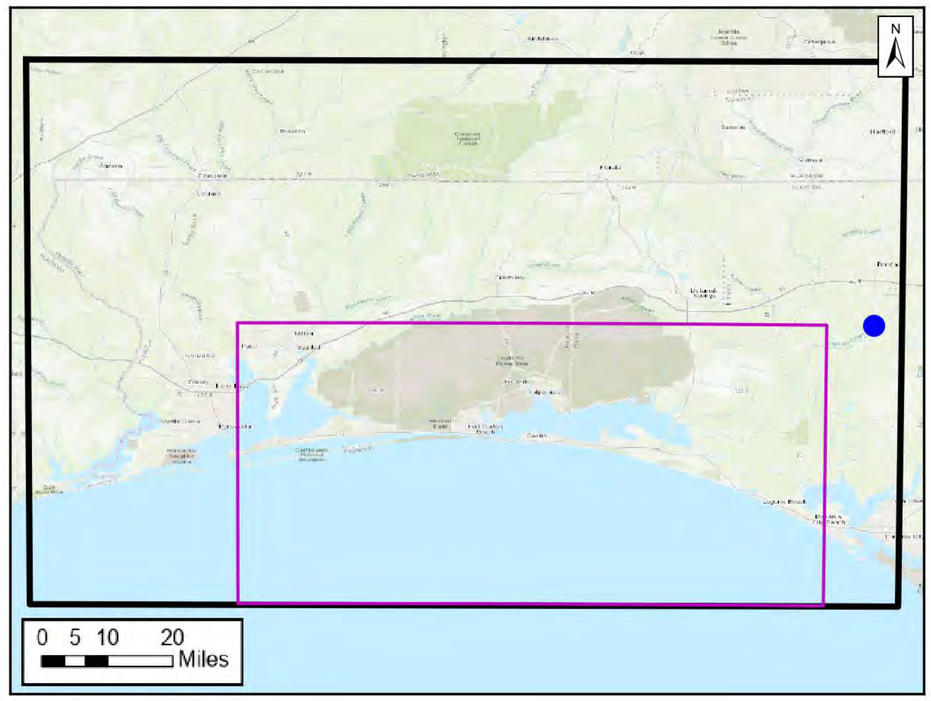
TETRA TECH

Water Level Elevation (ft msl, NAVD88)



Number of measurements = 9
Mean residual (ft) = -3.16
Abs Mean residual (ft) = 3.16

Location

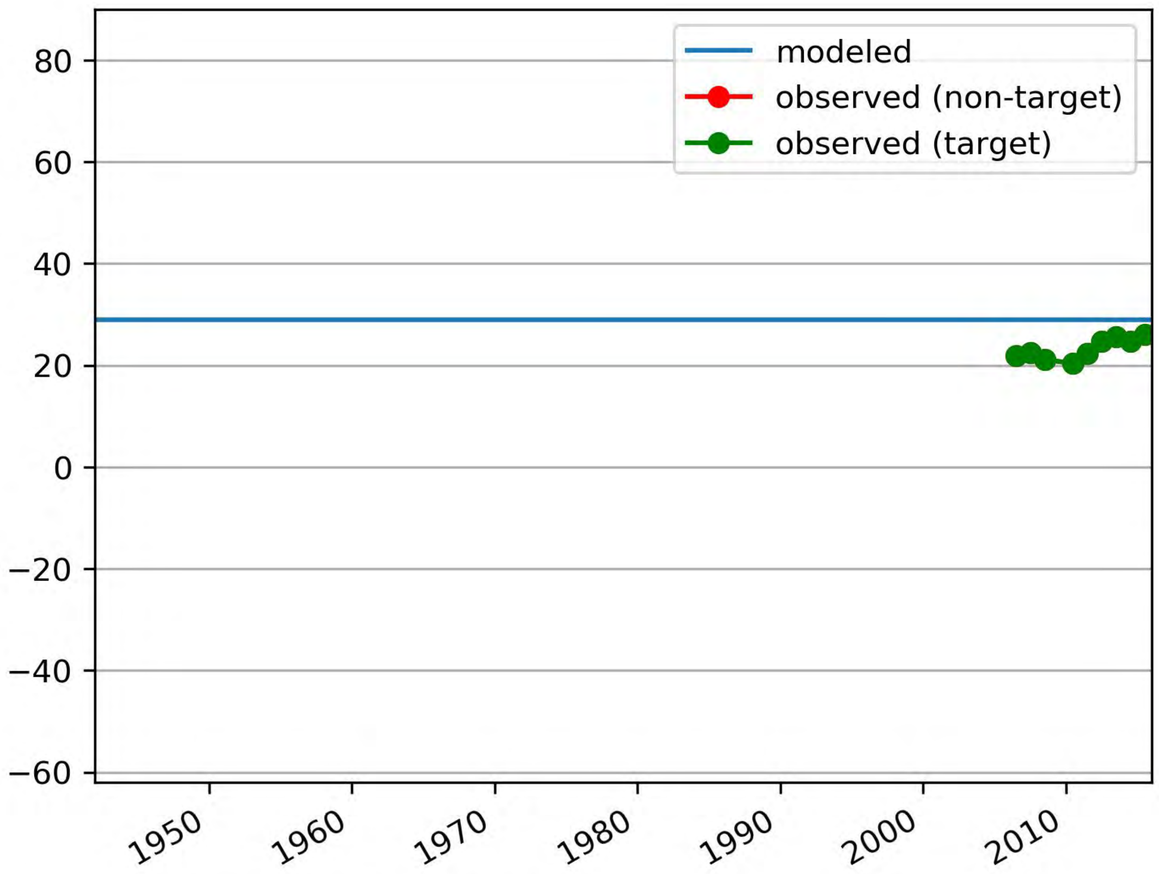


Model layer = 3

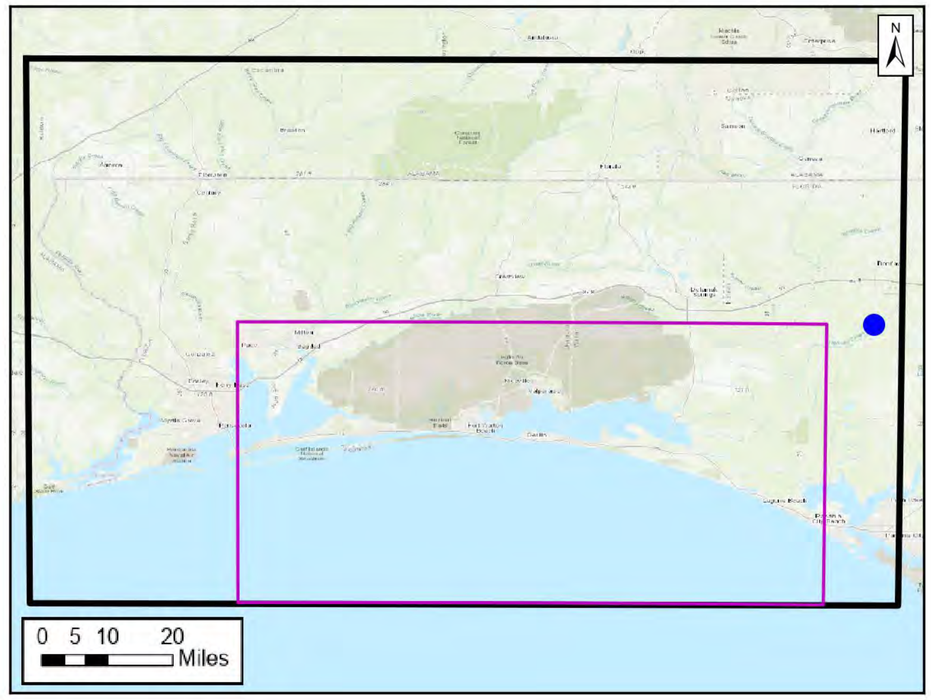
Hydrograph and location for well nwf_8782

TETRA TECH

Water Level Elevation (ft msl, NAVD88)



Location



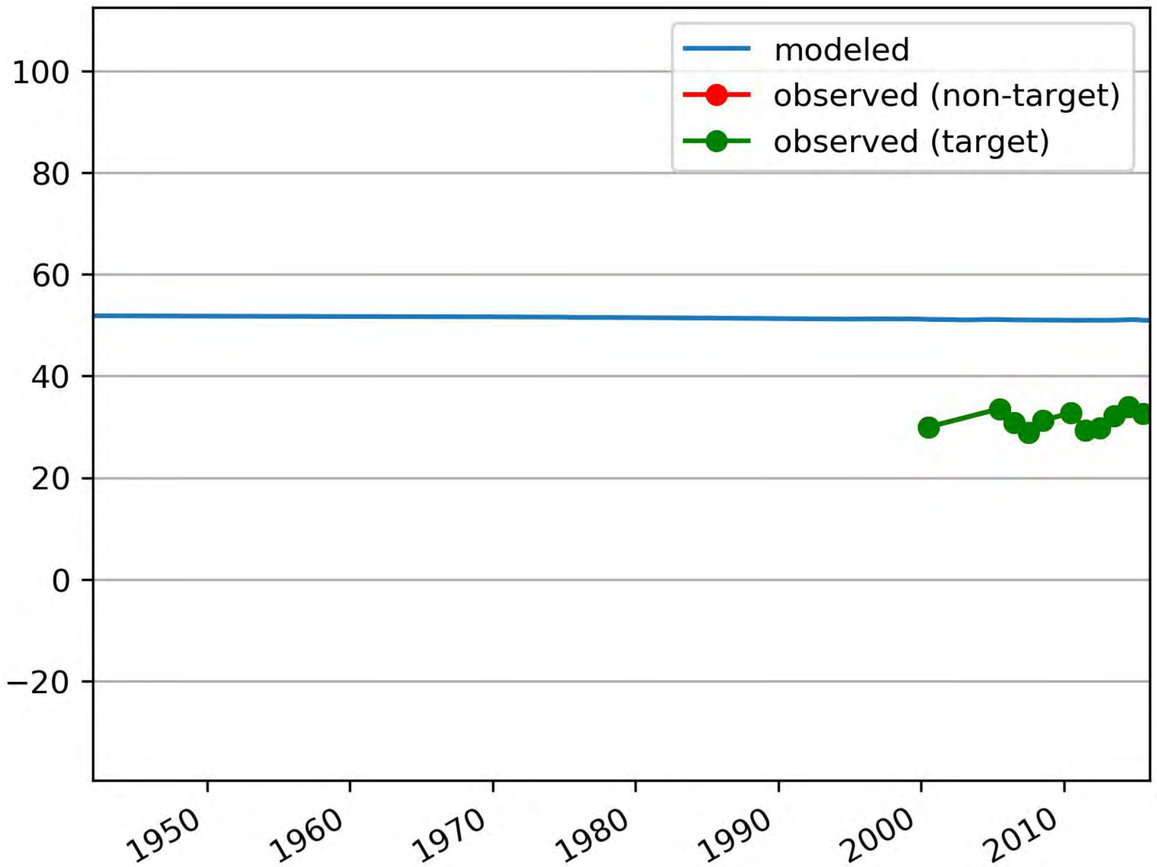
Number of measurements = 9
Mean residual (ft) = -5.7
Abs Mean residual (ft) = 5.7

Model layer = 3

Hydrograph and location for well nwf_8783

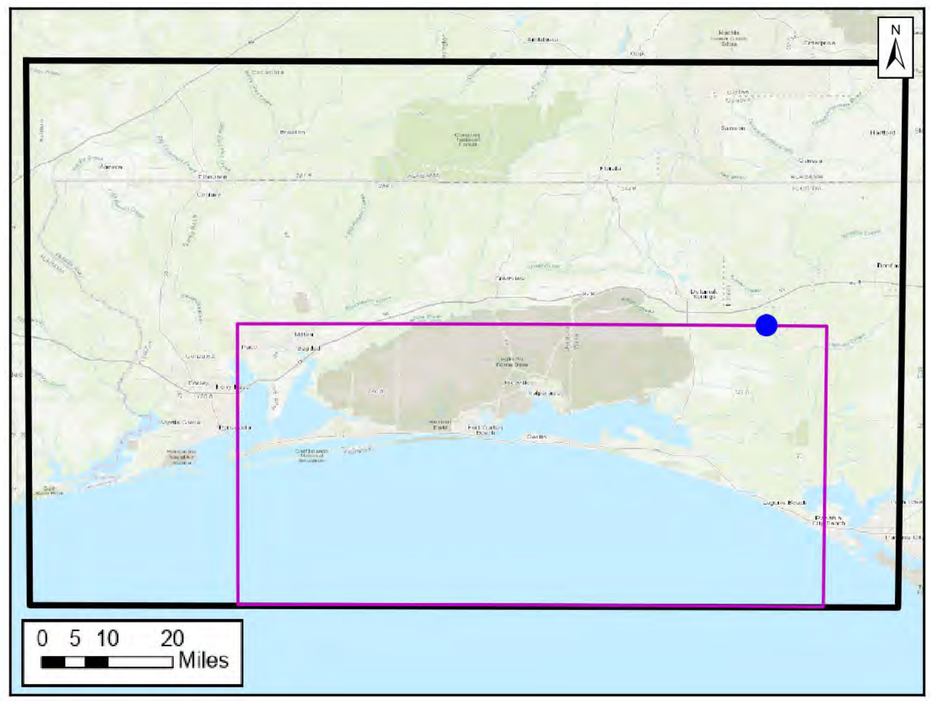
TETRA TECH

Water Level Elevation (ft msl, NAVD88)



Number of measurements = 11
Mean residual (ft) = -19.65
Abs Mean residual (ft) = 19.65

Location

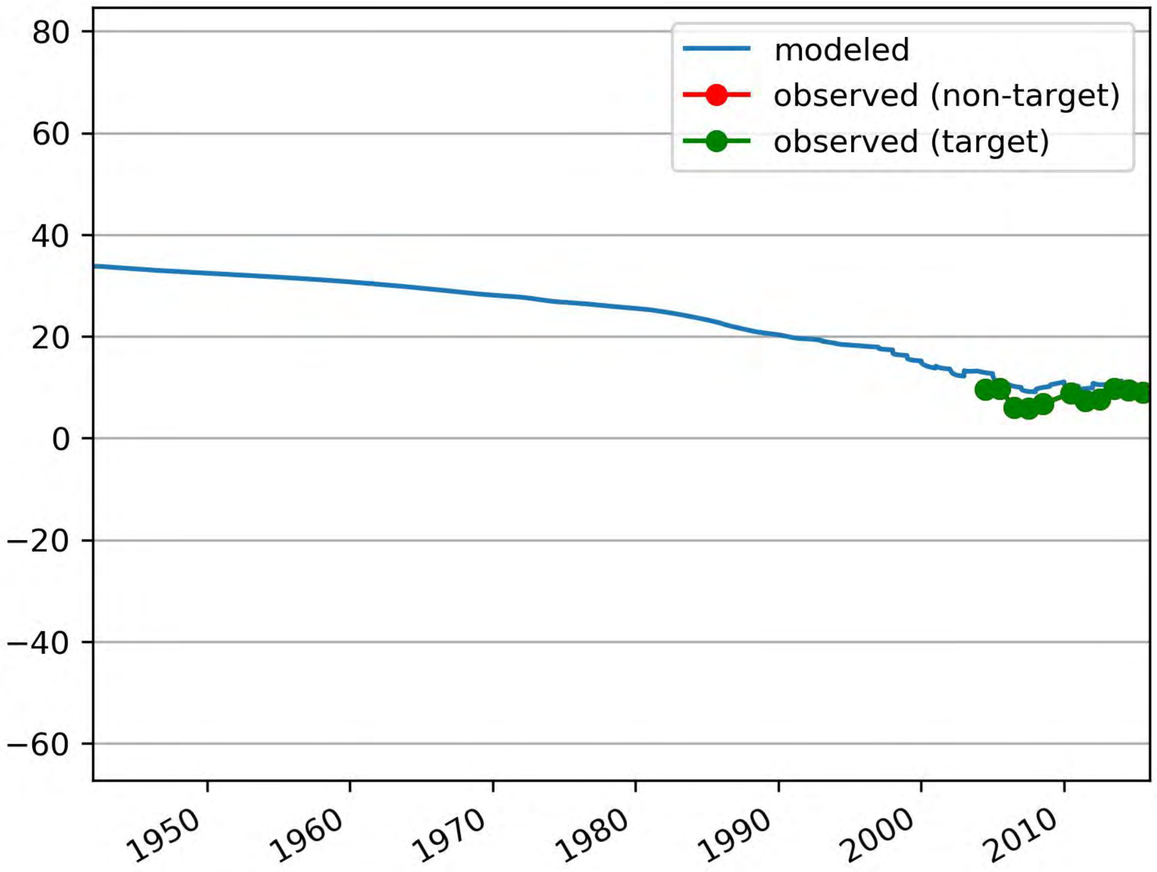


Model layer = 3

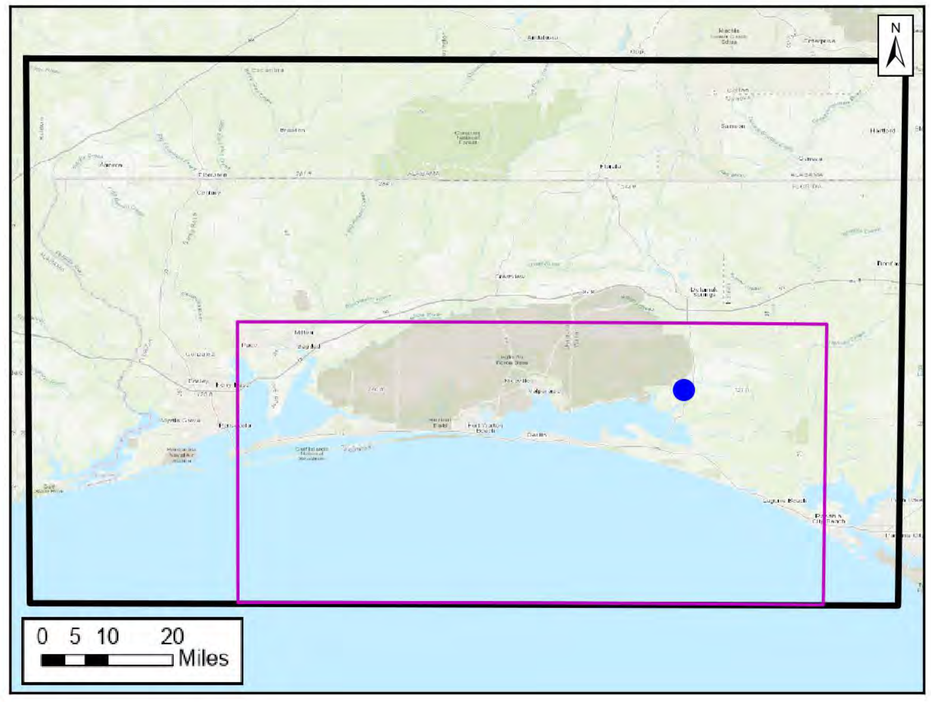
Hydrograph and location for well nwf_8907

TETRA TECH

Water Level Elevation (ft msl, NAVD88)



Location



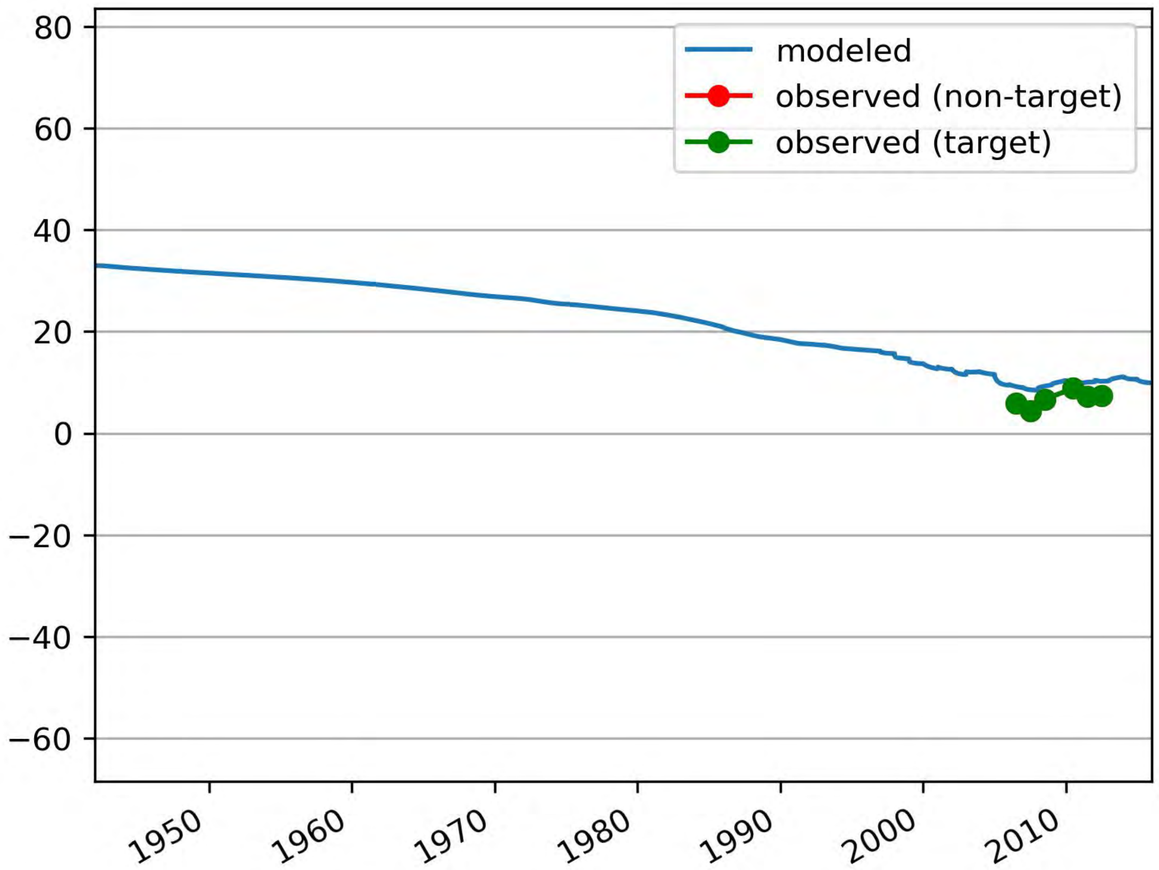
Number of measurements = 11
Mean residual (ft) = -2.26
Abs Mean residual (ft) = 2.26

Model layer = 3

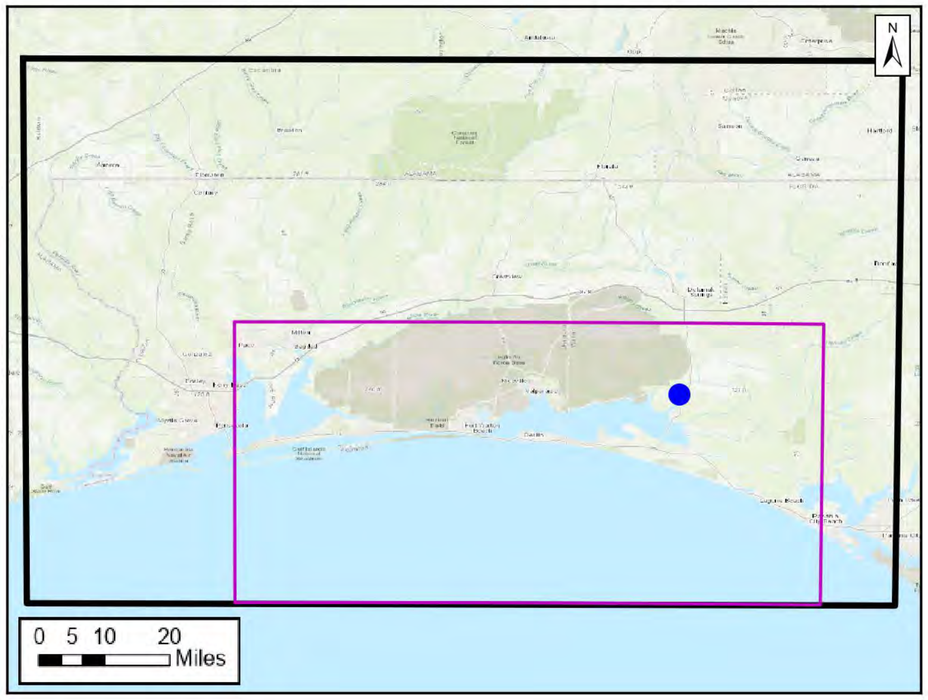
Hydrograph and location for well nwf_8921

TETRA TECH

Water Level Elevation (ft msl, NAVD88)



Location



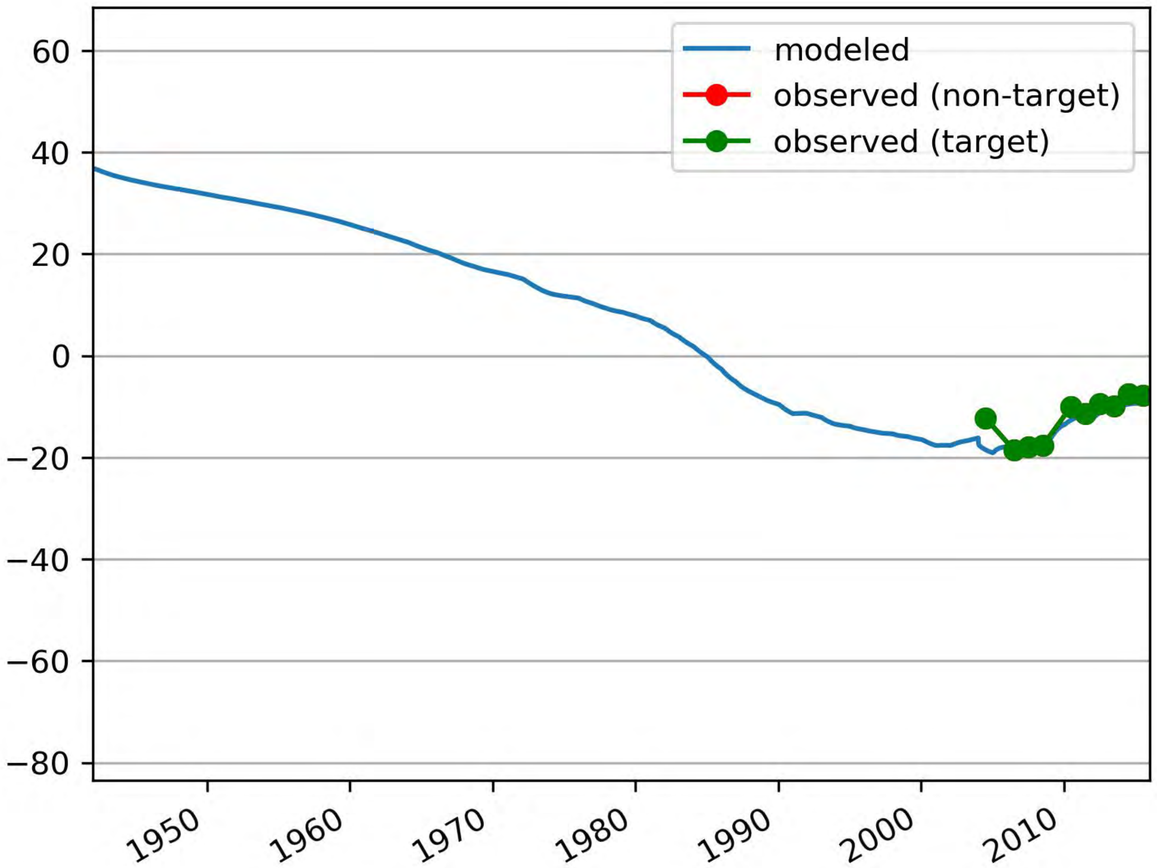
Number of measurements = 6
Mean residual (ft) = -2.8
Abs Mean residual (ft) = 2.8

Model layer = 3

Hydrograph and location for well nwf_9054

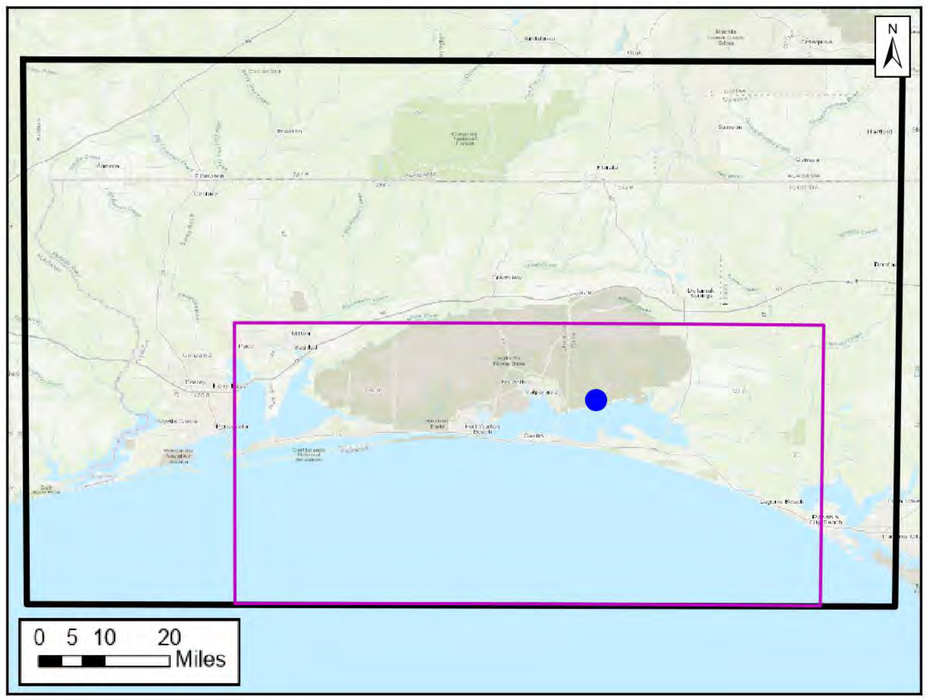
TETRA TECH

Water Level Elevation (ft msl, NAVD88)



Number of measurements = 10
Mean residual (ft) = 1.51
Abs Mean residual (ft) = 1.69

Location

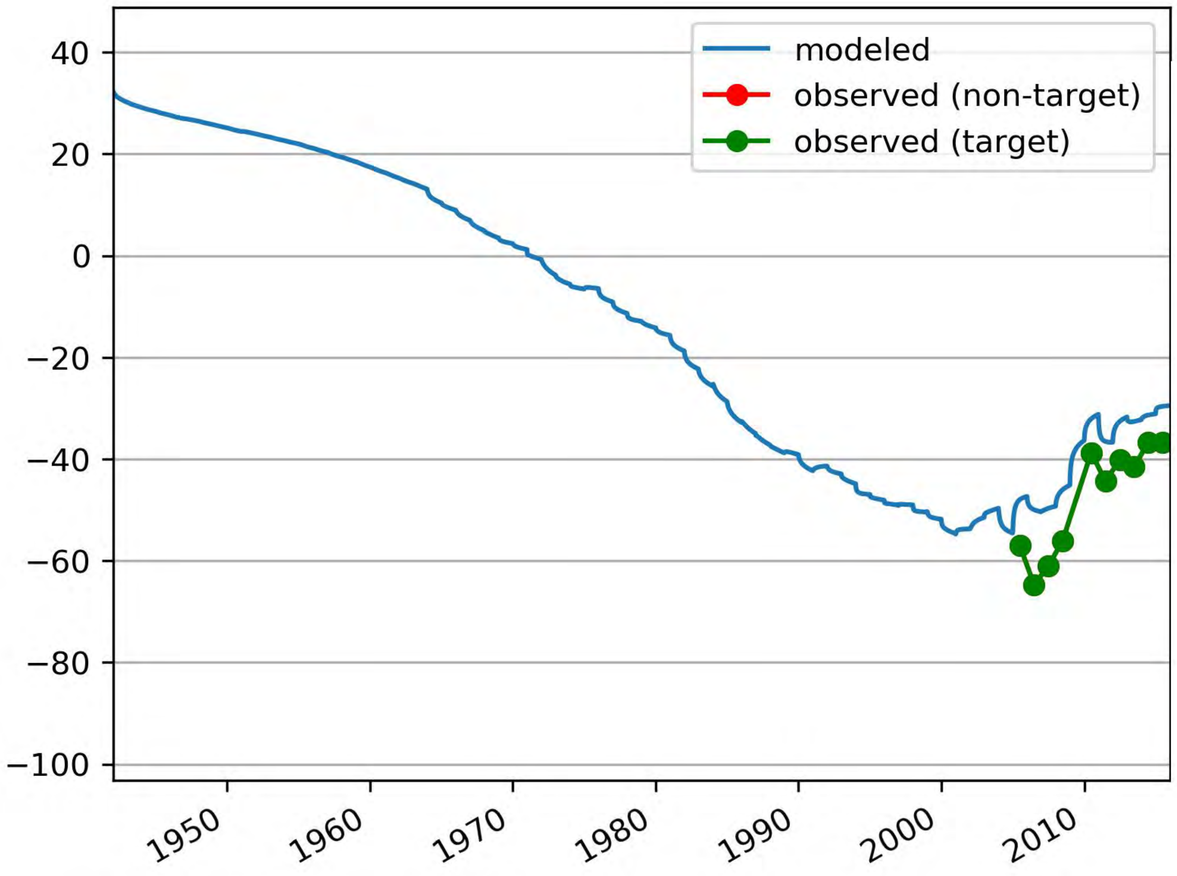


Model layer = 3

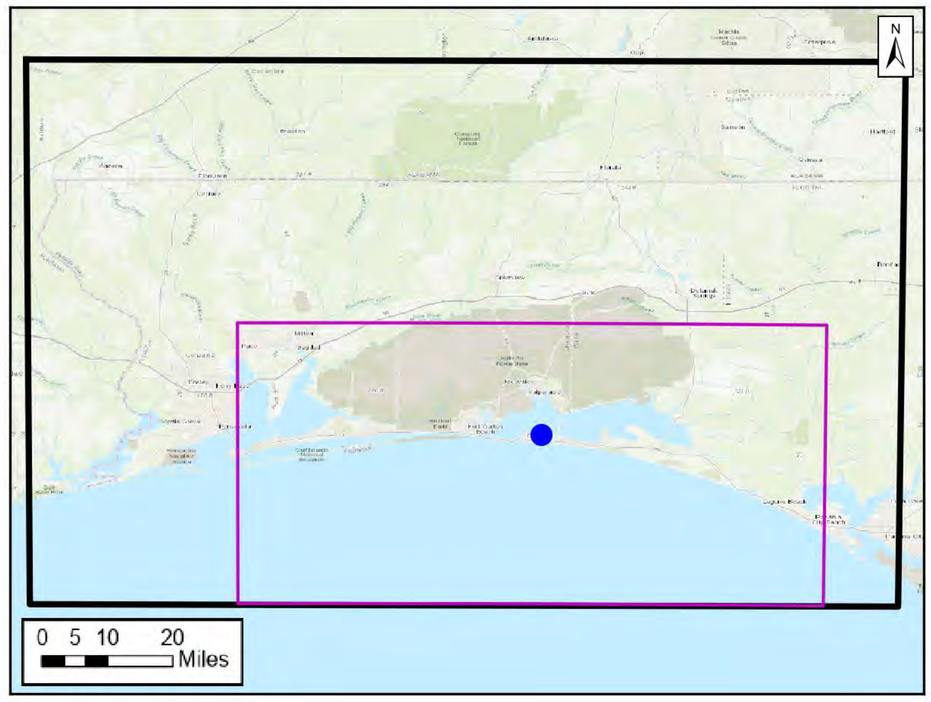
Hydrograph and location for well nwf_9117

TETRA TECH

Water Level Elevation (ft msl, NAVD88)



Location



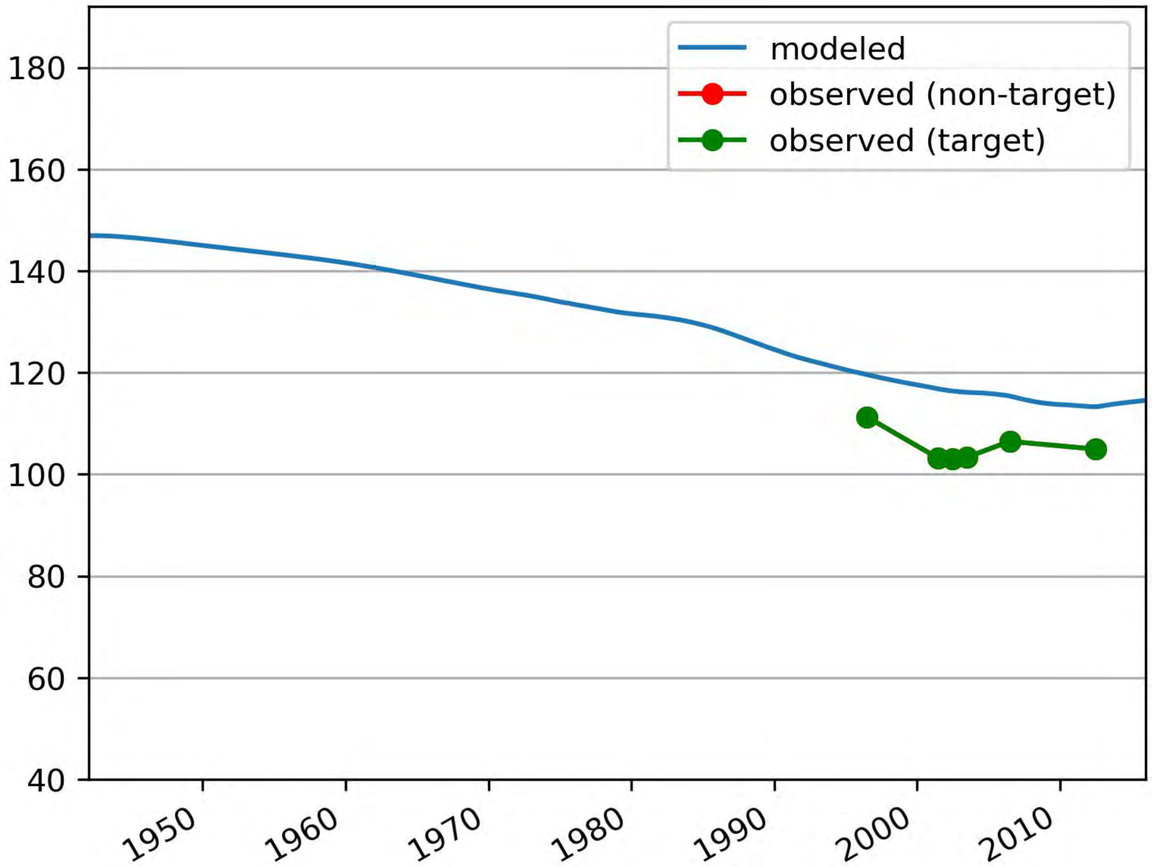
Number of measurements = 10
Mean residual (ft) = -8.85
Abs Mean residual (ft) = 8.85

Model layer = 3

Hydrograph and location for well nwf_9137

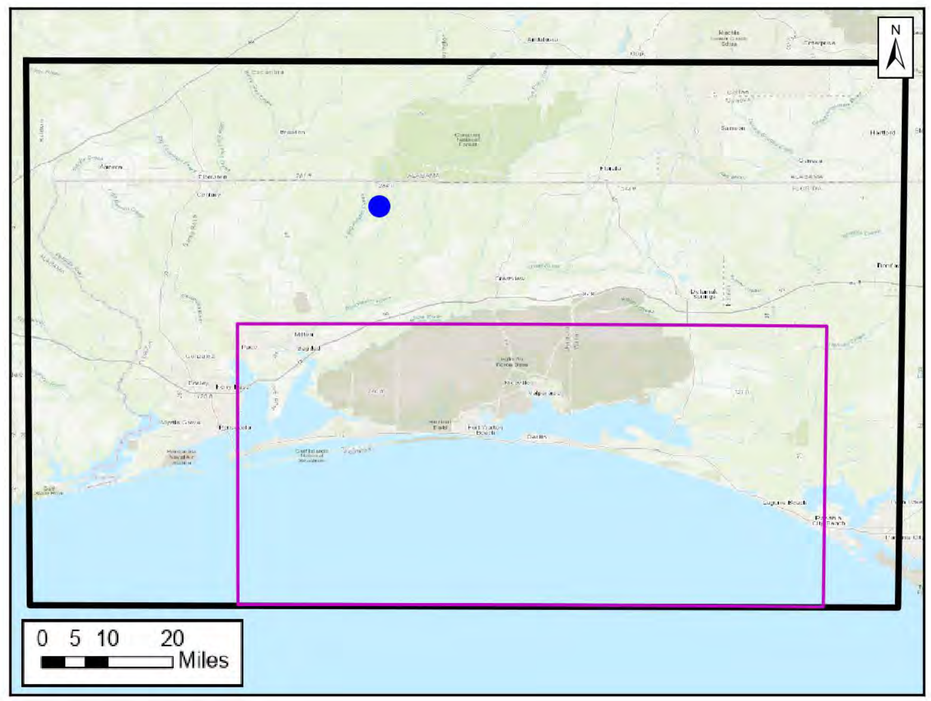
TETRA TECH

Water Level Elevation (ft msl, NAVD88)



Number of measurements = 6
Mean residual (ft) = -10.88
Abs Mean residual (ft) = 10.88

Location

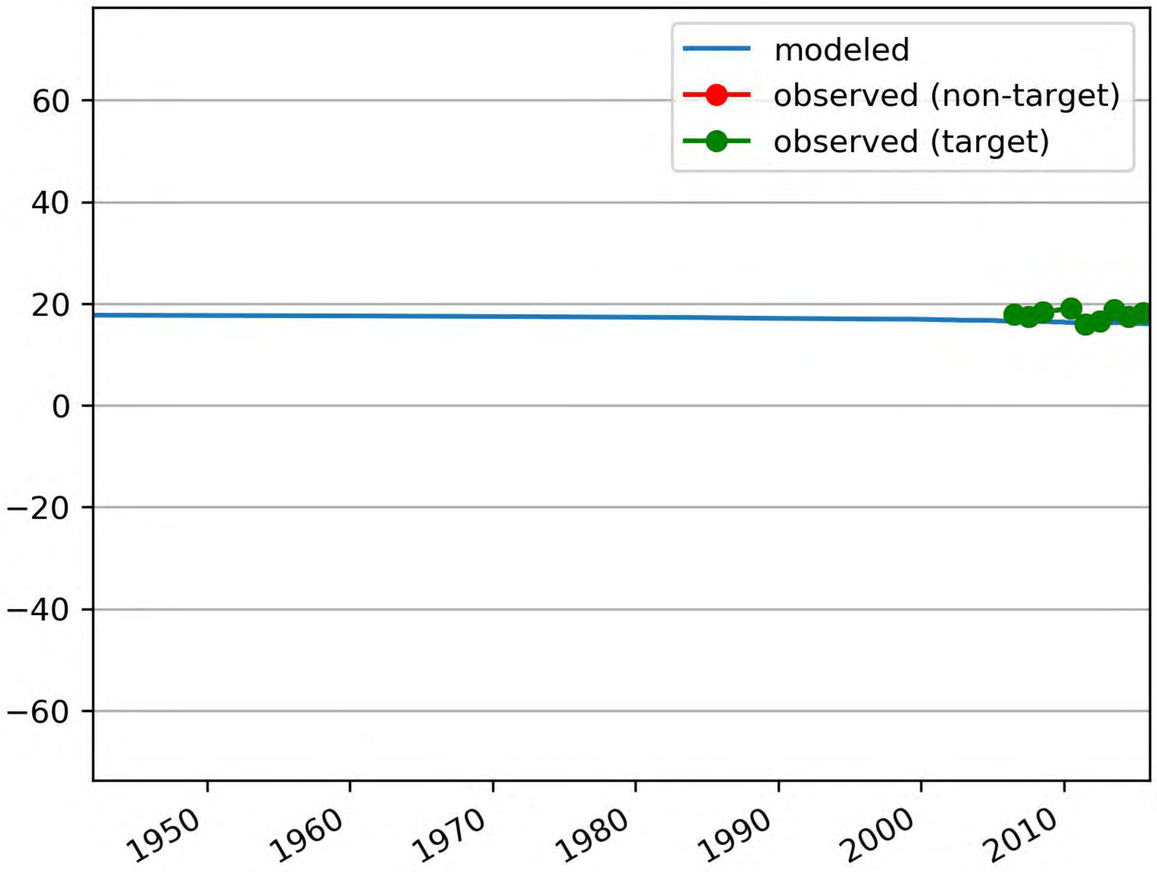


Model layer = 3

Hydrograph and location for well nwf_9402

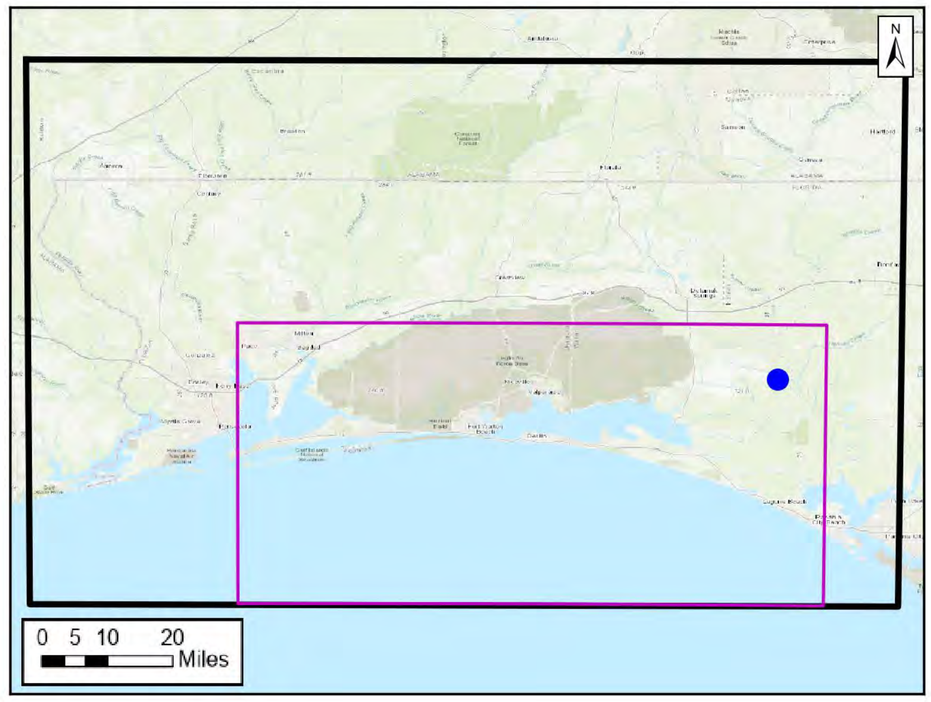
TETRA TECH

Water Level Elevation (ft msl, NAVD88)



Number of measurements = 9
Mean residual (ft) = 1.45
Abs Mean residual (ft) = 1.51

Location

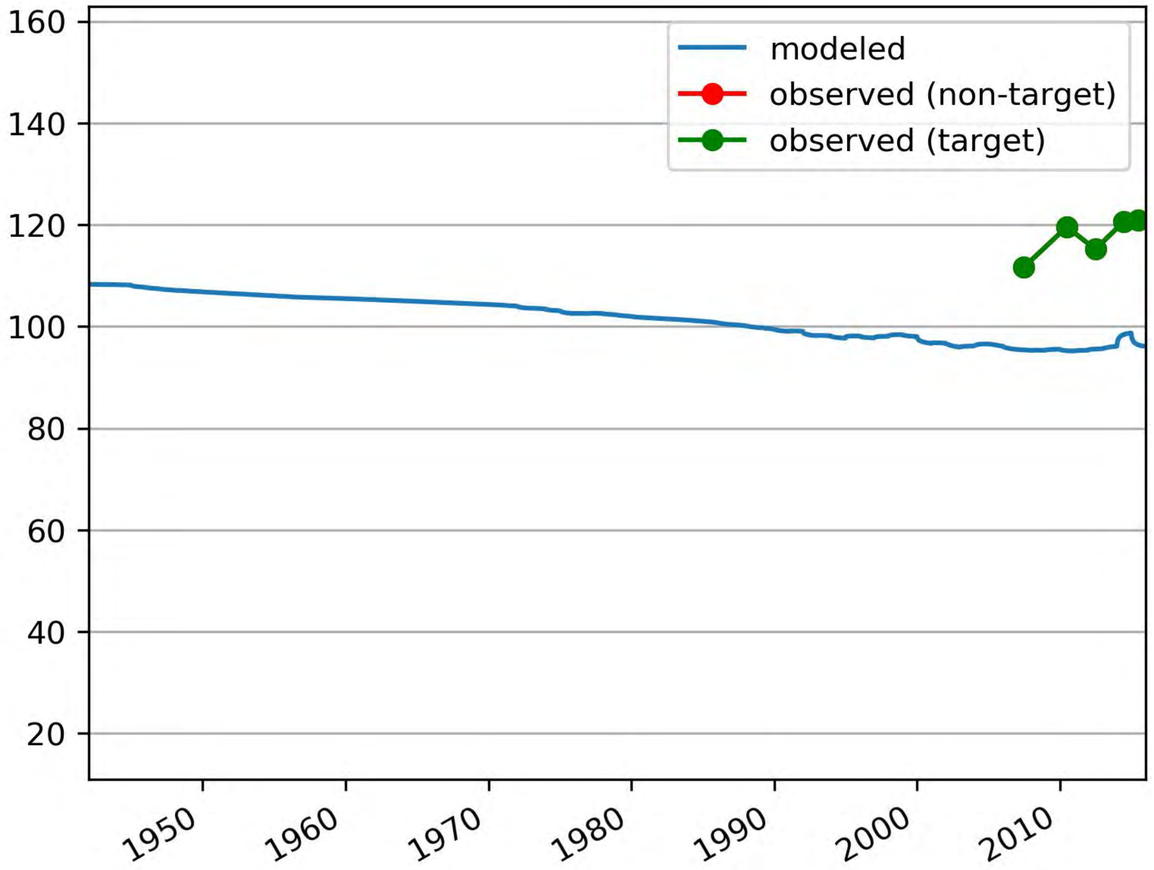


Model layer = 3

Hydrograph and location for well nwf_9413

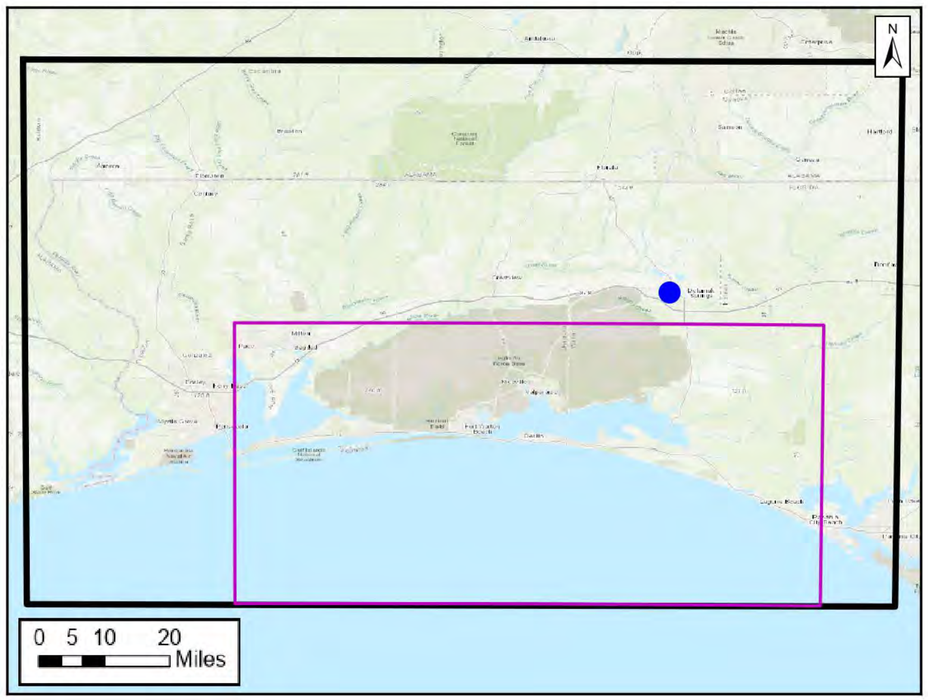
TETRA TECH

Water Level Elevation (ft msl, NAVD88)



Number of measurements = 5
Mean residual (ft) = 21.4
Abs Mean residual (ft) = 21.4

Location

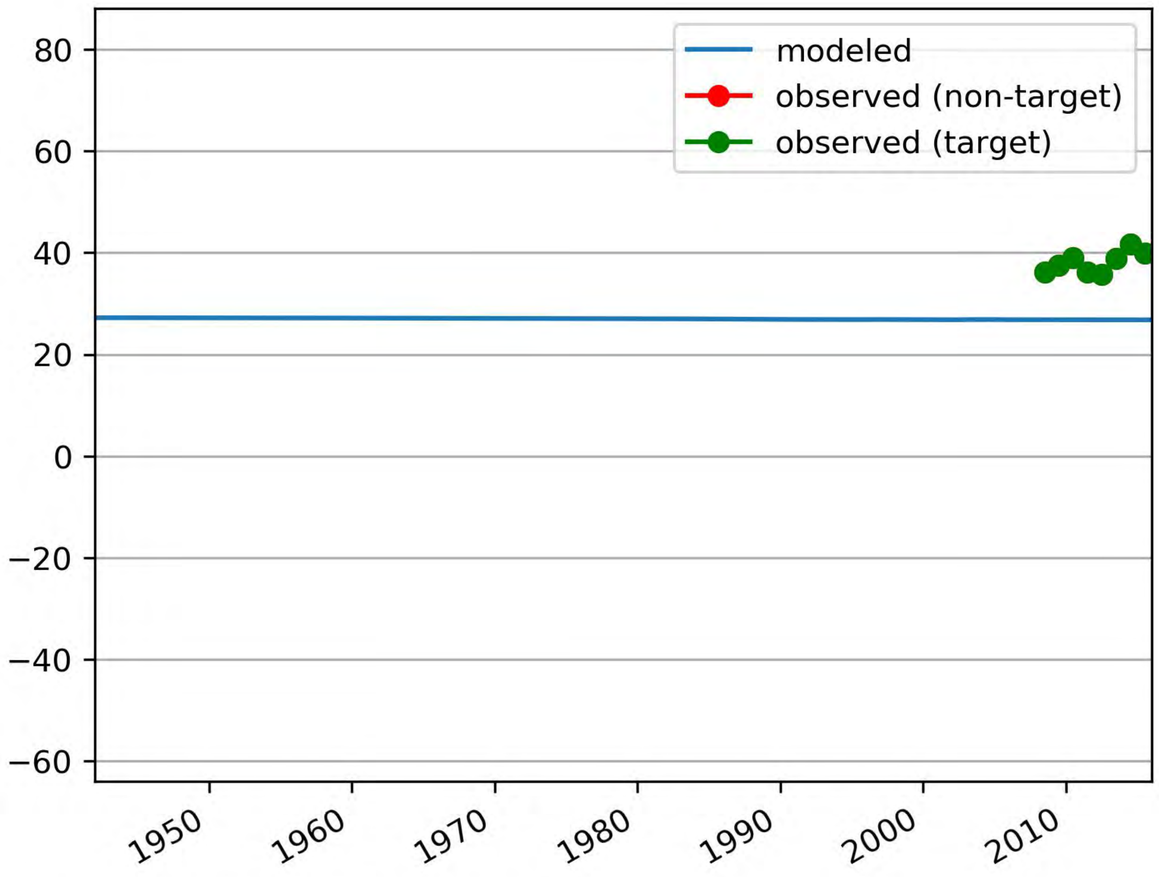


Model layer = 3

Hydrograph and location for well nwf_9595

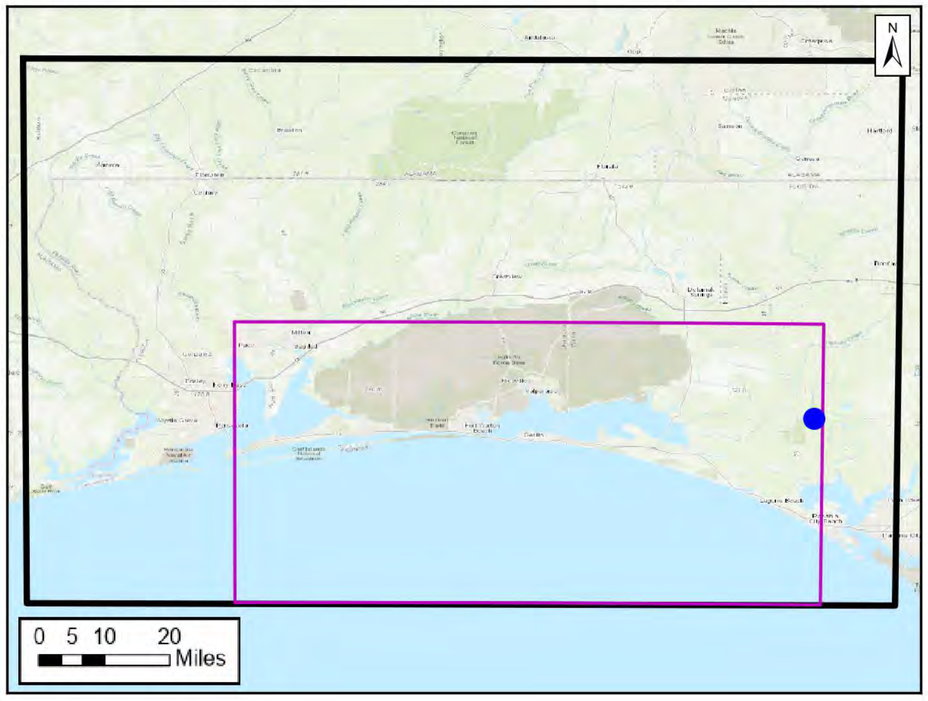
TETRA TECH

Water Level Elevation (ft msl, NAVD88)



Number of measurements = 8
Mean residual (ft) = 11.32
Abs Mean residual (ft) = 11.32

Location

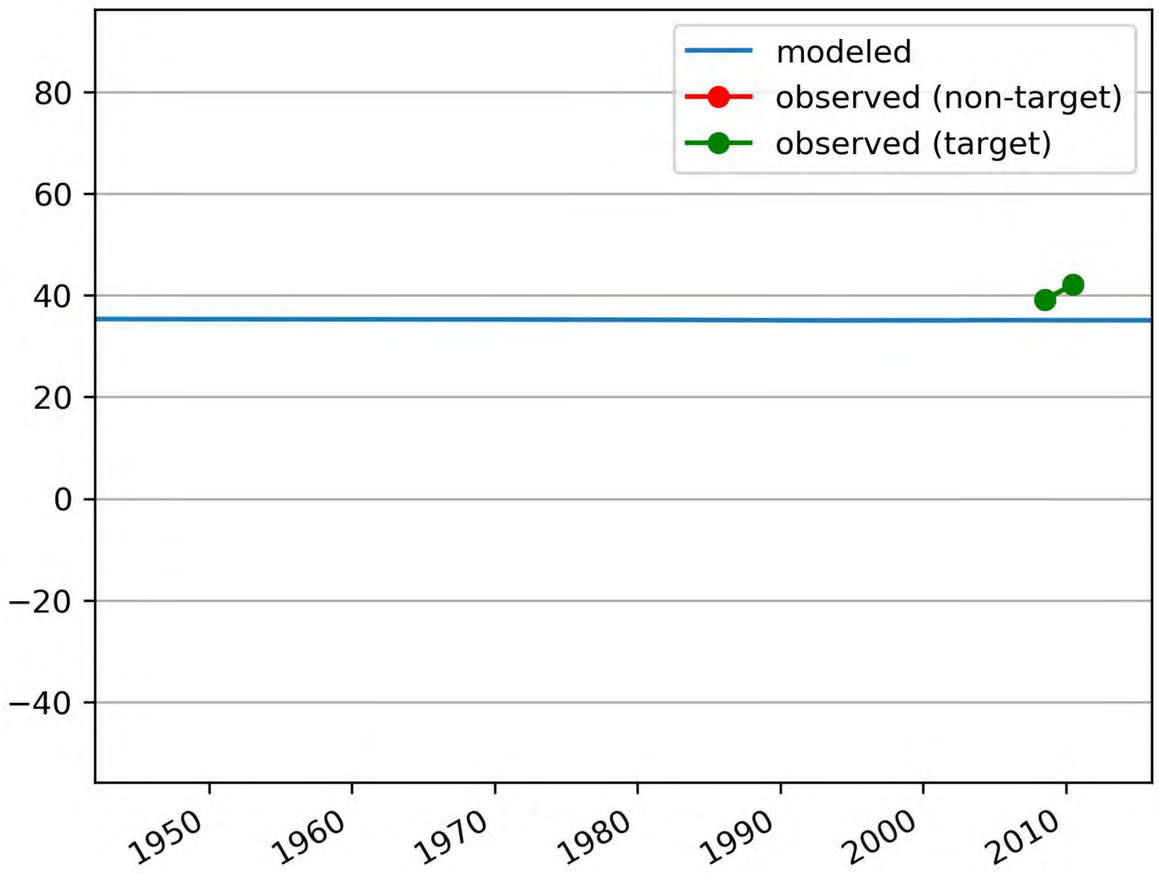


Model layer = 3

Hydrograph and location for well nwf_9638

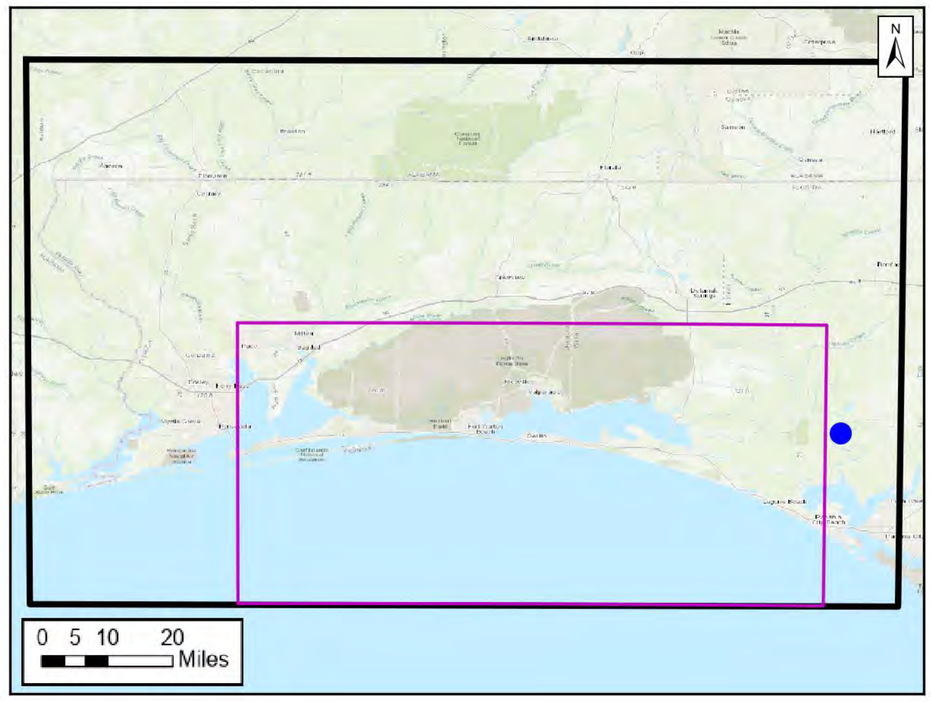
TETRA TECH

Water Level Elevation (ft msl, NAVD88)



Number of measurements = 2
Mean residual (ft) = 5.54
Abs Mean residual (ft) = 5.54

Location

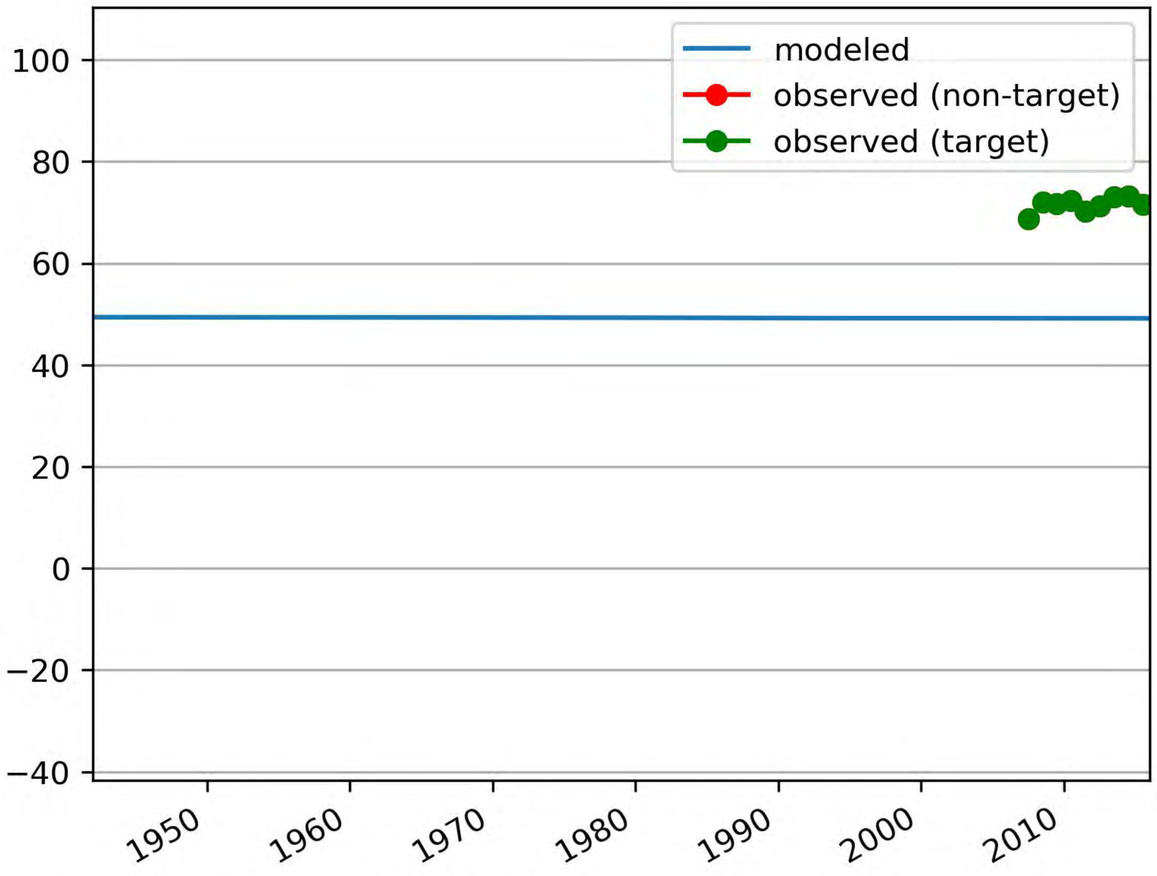


Model layer = 3

Hydrograph and location for well nwf_9734

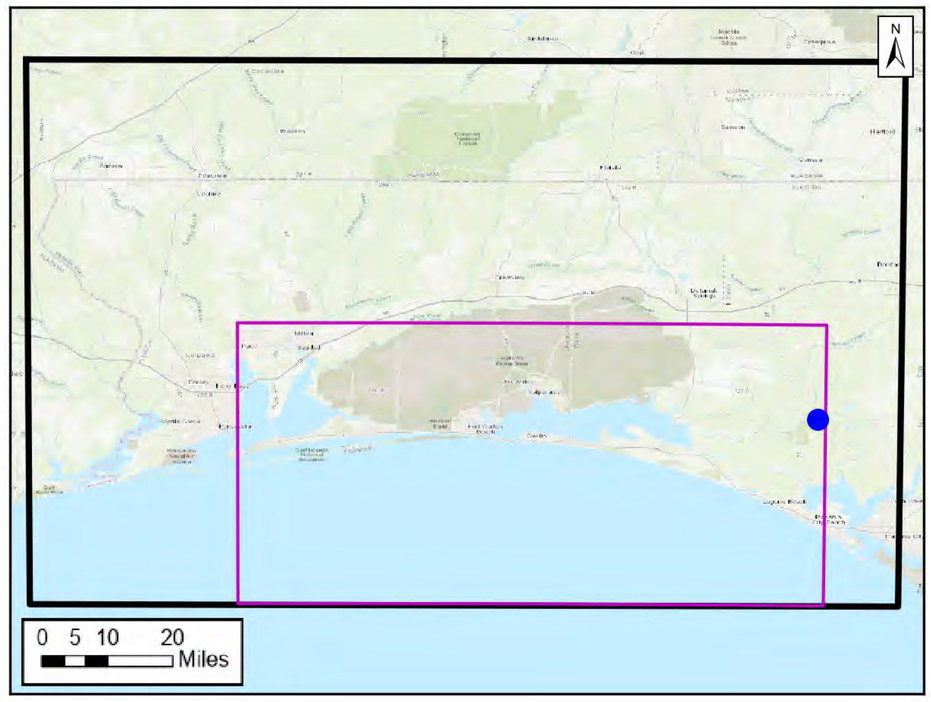
TETRA TECH

Water Level Elevation (ft msl, NAVD88)



Number of measurements = 9
Mean residual (ft) = 22.4
Abs Mean residual (ft) = 22.4

Location

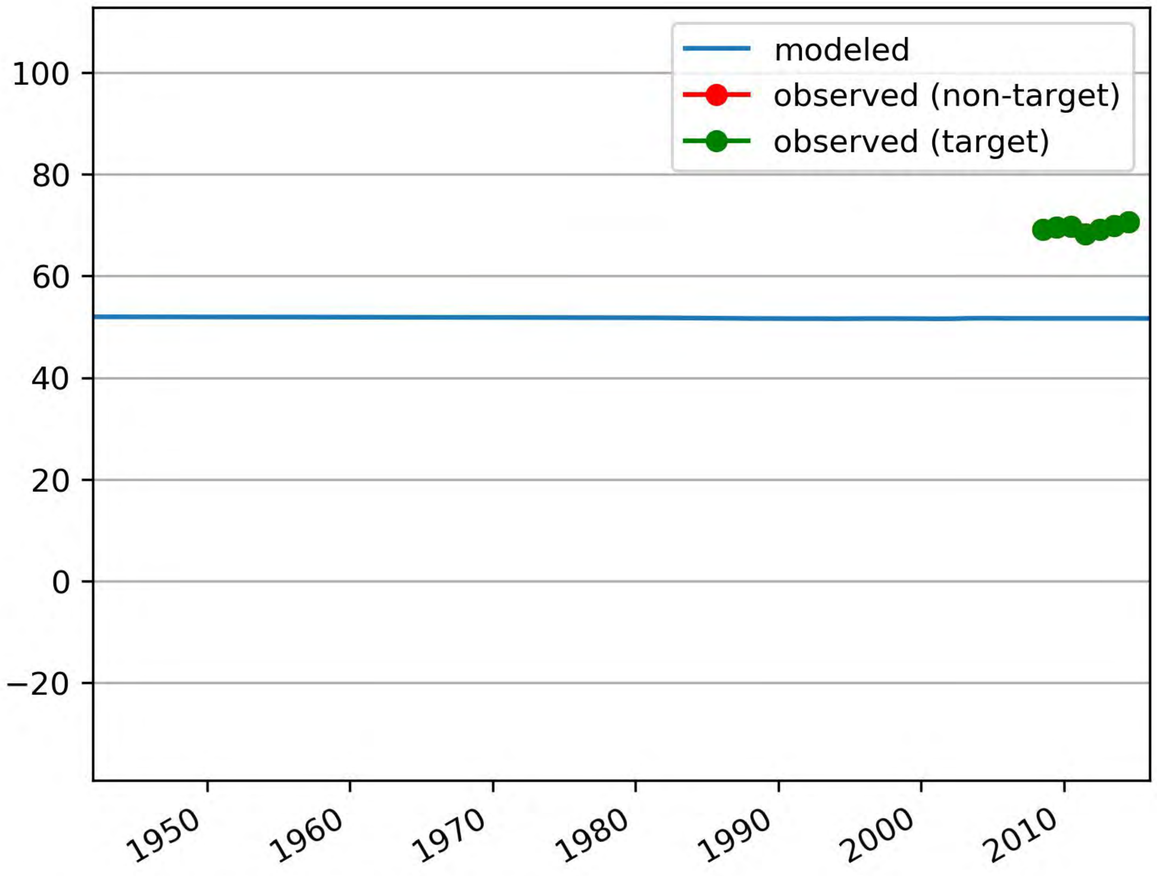


Model layer = 2

Hydrograph and location for well nwf_9745

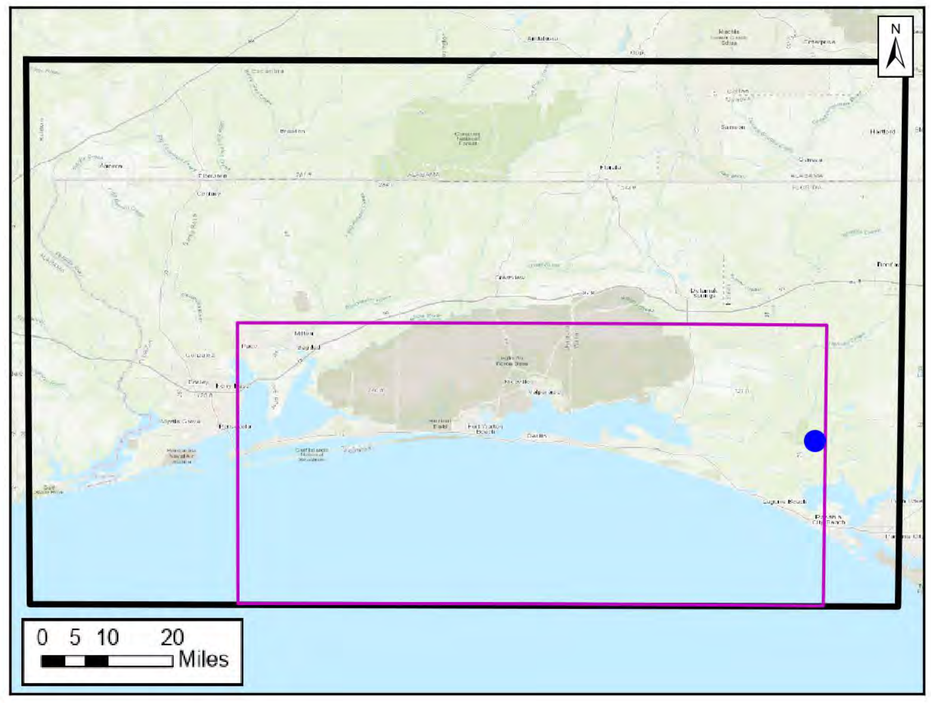
TETRA TECH

Water Level Elevation (ft msl, NAVD88)



Number of measurements = 7
Mean residual (ft) = 17.8
Abs Mean residual (ft) = 17.8

Location

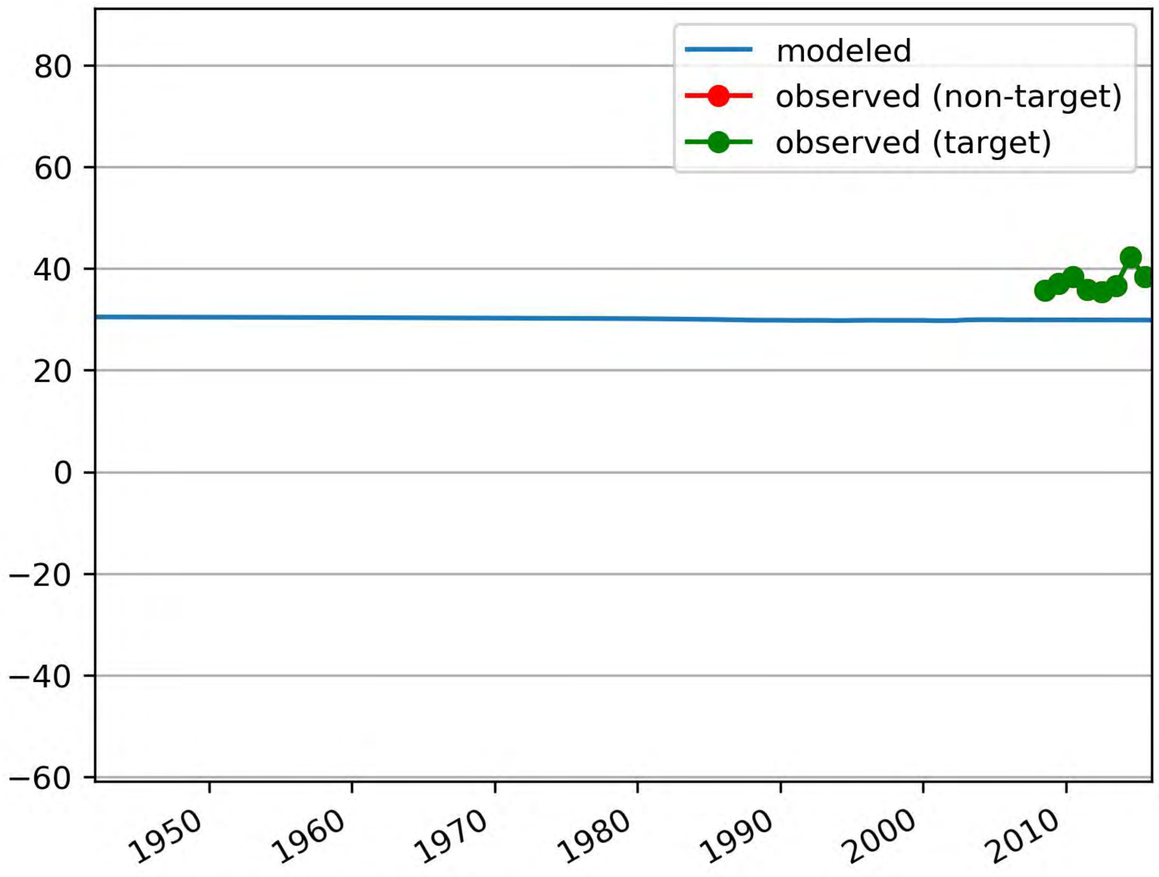


Model layer = 2

Hydrograph and location for well nwf_9747

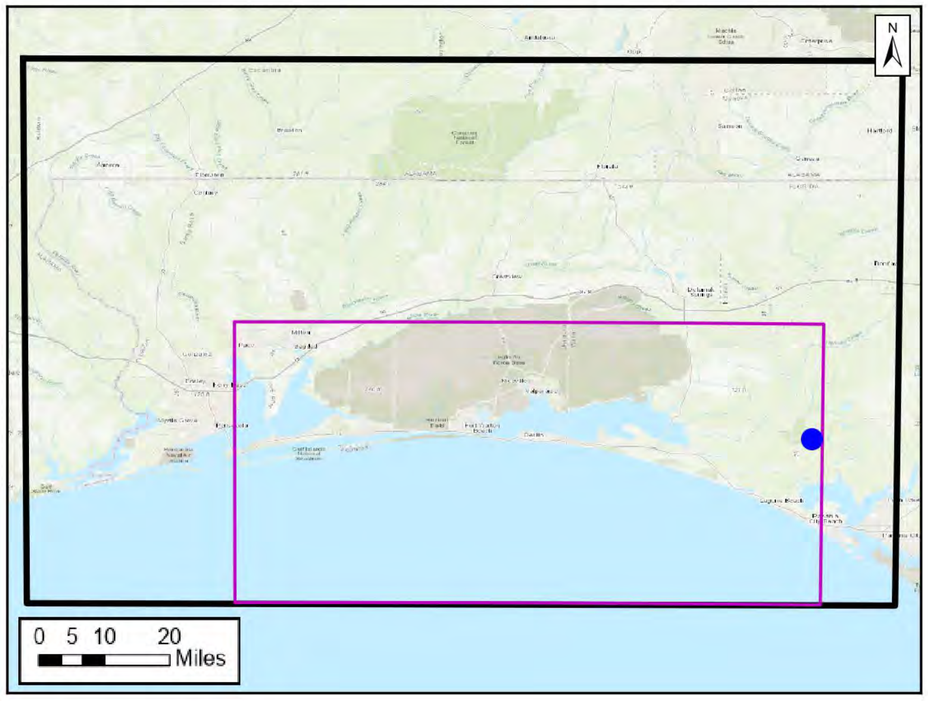
TETRA TECH

Water Level Elevation (ft msl, NAVD88)



Number of measurements = 8
Mean residual (ft) = 7.58
Abs Mean residual (ft) = 7.58

Location

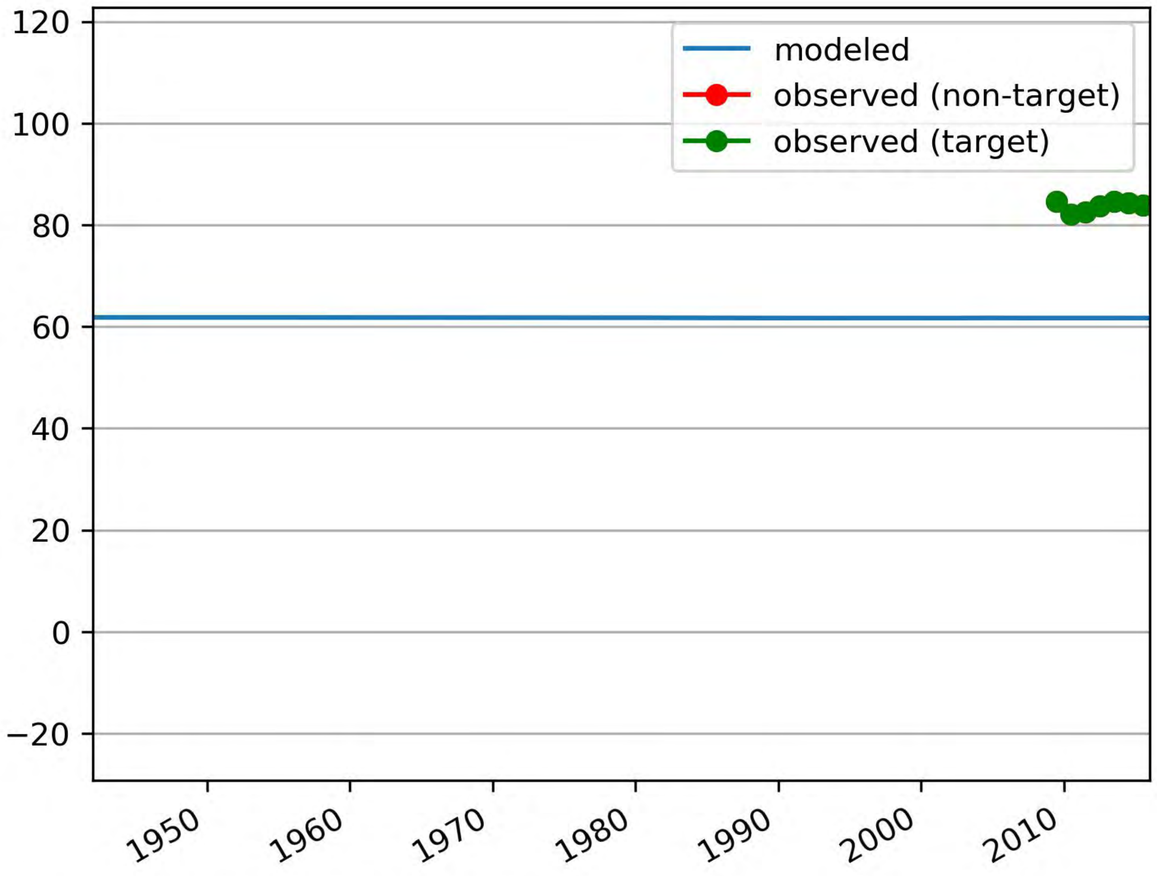


Model layer = 3

Hydrograph and location for well nwf_9748

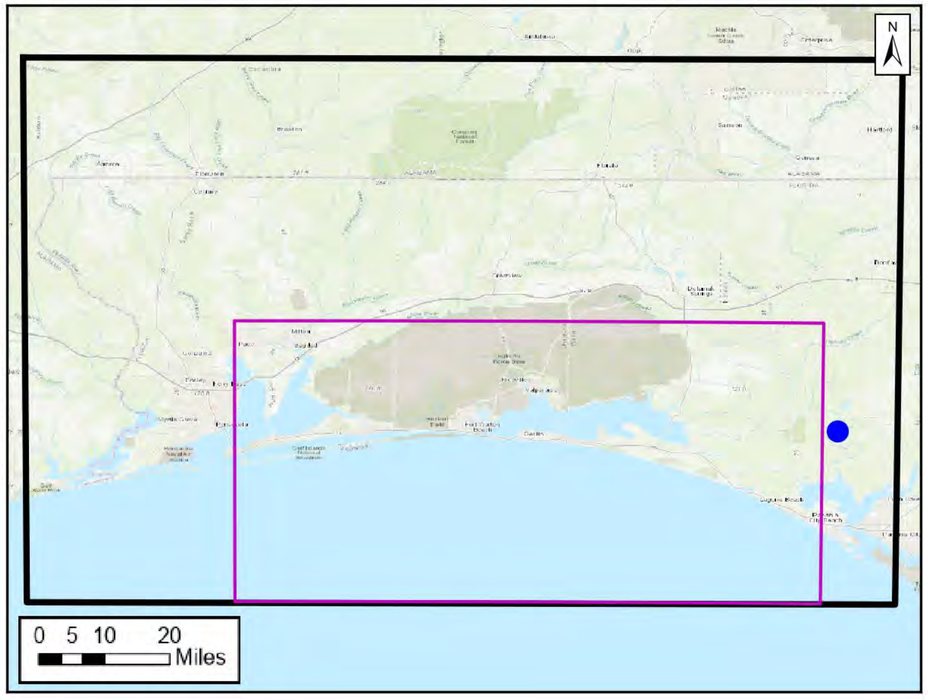
TETRA TECH

Water Level Elevation (ft msl, NAVD88)



Number of measurements = 7
Mean residual (ft) = 22.02
Abs Mean residual (ft) = 22.02

Location

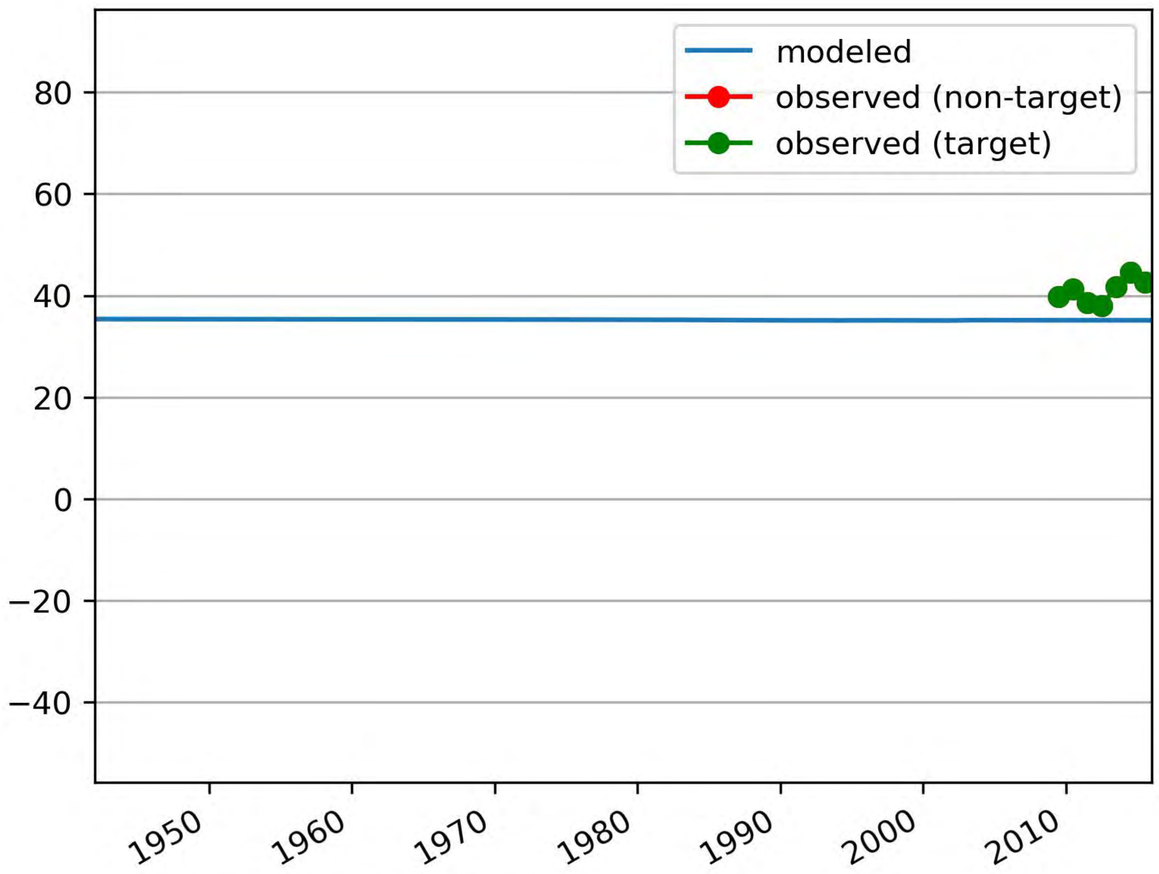


Model layer = 2

Hydrograph and location for well nwf_9750

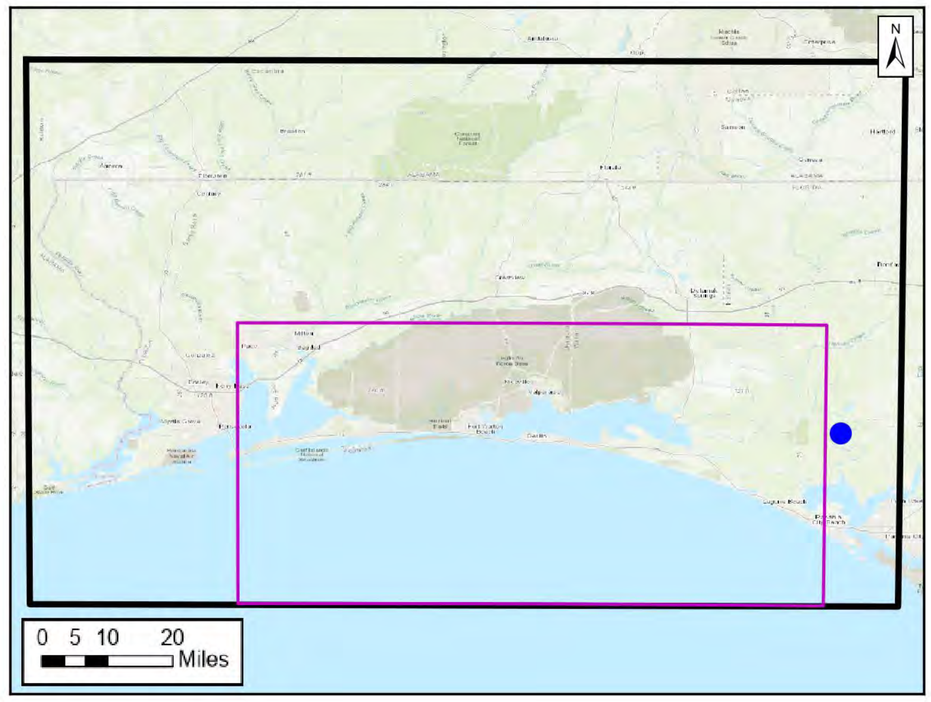
TETRA TECH

Water Level Elevation (ft msl, NAVD88)



Number of measurements = 7
Mean residual (ft) = 5.79
Abs Mean residual (ft) = 5.79

Location

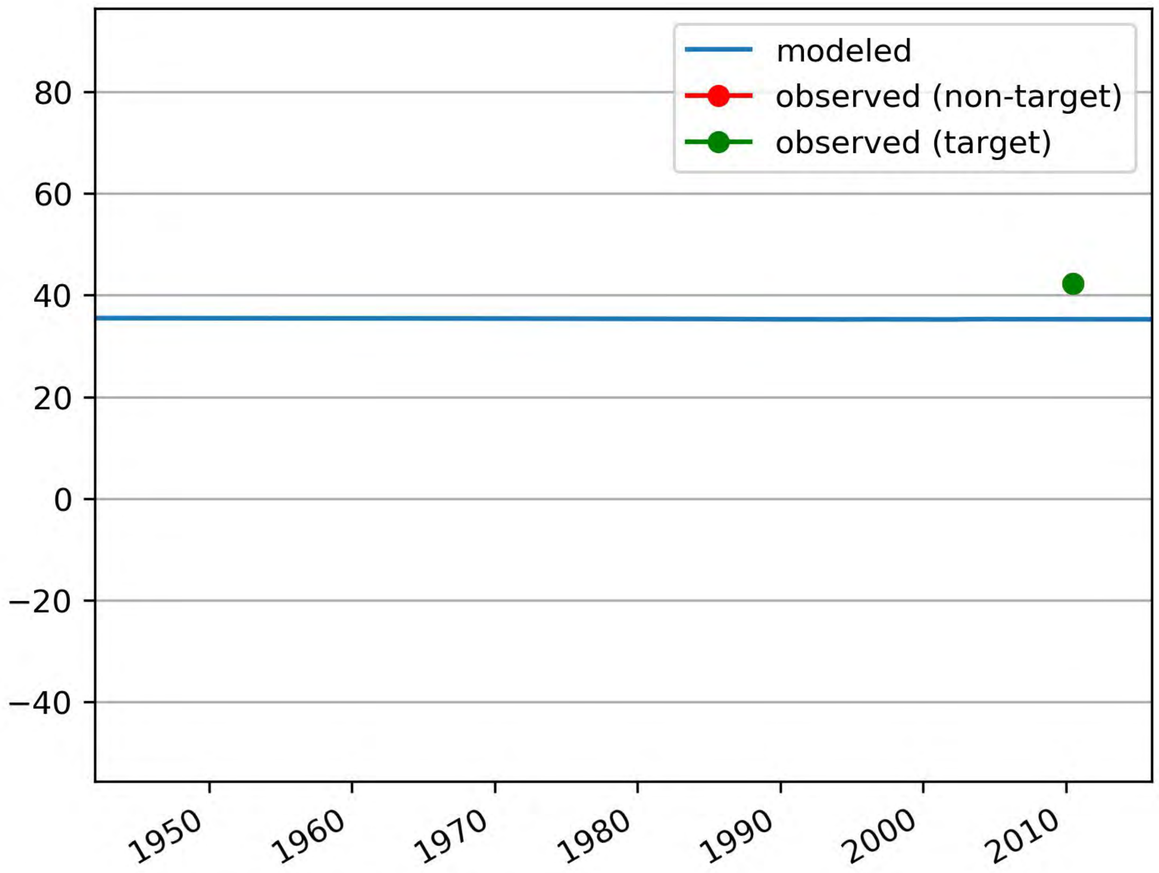


Model layer = 3

Hydrograph and location for well nwf_9941

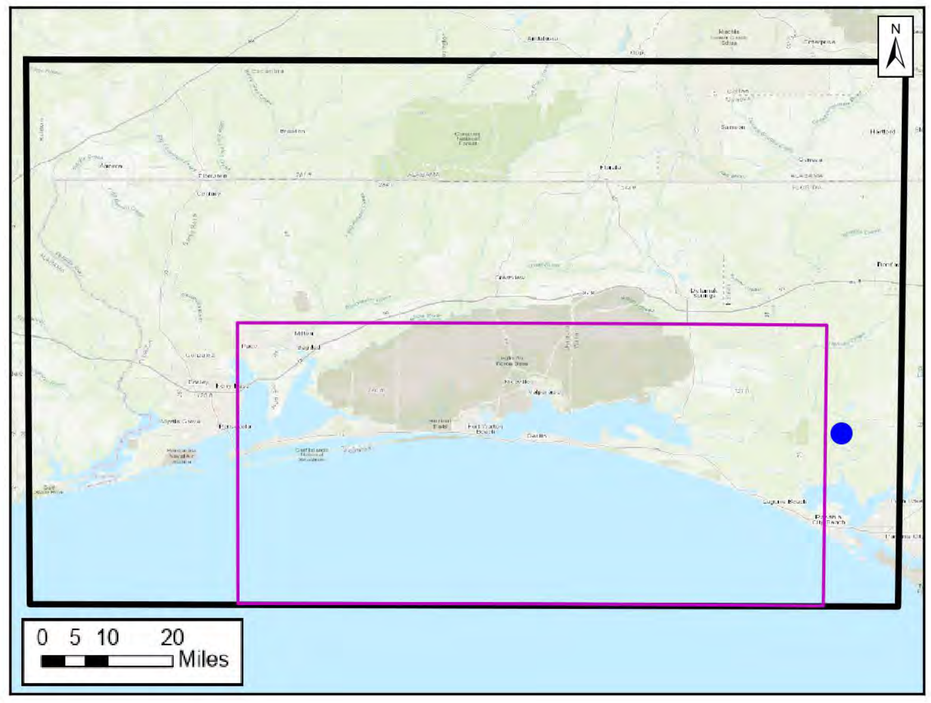
TETRA TECH

Water Level Elevation (ft msl, NAVD88)



Number of measurements = 1
Mean residual (ft) = 7.02
Abs Mean residual (ft) = 7.02

Location



Model layer = 3

Hydrograph and location for well nwf_9942

TETRA TECH