

Groundwater levels in the Upper Big Sandy Designated Groundwater Basin

2021

by

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Hydrogeology Section

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COLORADO

Division of Water Resources

Department of Natural Resources

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**GROUNDWATER LEVELS IN THE
UPPER BIG SANDY DESIGNATED GROUNDWATER BASIN
2021**

This report contains the basic groundwater-level data collected in the Upper Big Sandy Designated Ground Water Basin during the spring of 2021. Tabular data are presented for the last ten measurements, and graphical data show the entire water-level monitoring record for each well. Acquisition and publication of this information is a cooperative effort between the Upper Big Sandy Ground Water Management District and the Colorado Division of Water Resources. The project is part of a statewide groundwater-level monitoring program funded by Senate Bill 200 (1987). This legislation directed that a portion of the fees collected for well permit applications be used for a program to monitor groundwater level trends throughout the state.

The wells in this report are listed by well name in numerical order. The maps that follow portray the designated basin boundary, mapped extent of alluvium, and trace of Big Sandy Creek and include:

- Monitoring well location map for the entire Upper Big Sandy designated basin
- Monitoring well locations and well names in the Limon well field (Limon Map)
- Monitoring well locations and well names in the eastern half of the basin (East Map)
- Monitoring well locations and well names in the western half of the basin (West Map)

The report contains 2021 groundwater level measurements for 29 wells, taken in early April 2021. Depths to groundwater, below ground surface, ranged from 8 to 52 feet, much the same as in years past. In general, wells located closer to the creek channel had shallower water levels. Water levels exceeding 30 feet were associated with wells located in the upland portions of the alluvial valley.

Overall, groundwater levels in wells measured by the Division of Water Resources were slightly lower than 2020 levels. The water levels showed an overall average decrease of 0.7 feet as compared to 2020, and most wells were less than one foot lower than in 2020. Long term, 10-year comparisons indicate that water levels:

- a) in the reach around Limon (Limon Map) have decreased (-2.1 to 0.0 ft);
- b) in the reach between River Bend and Simla (East Map) have increased and decreased (-4.1 to 0.7 ft);
- c) in the reach between Simla and Ramah Reservoir (West Map) have decreased (-2.8 to 0.0 ft); and
- d) upstream of Ramah Reservoir (West map) have decreased slightly (-0.8 to 1.1 ft) since 2011.

An electronic copy of this report is available on the Division of Water Resources website:

<https://dwr.colorado.gov/services/well-construction-inspection#groundwater-levels>

The direct link to the Upper Big Sandy Publication Area on the CDSS webpage:

<https://dwr.state.co.us/Tools/GroundWater/WaterLevels?submitButton=Submit&SelectedGeoValue=waterDivisionDiv&SelectedPublicationAreaName=UPPER%20BIG%20SANDY&SelectedAquiferName=All>

Additionally, all groundwater level data may be accessed and exported using the tools available on the Colorado Decision Support System:

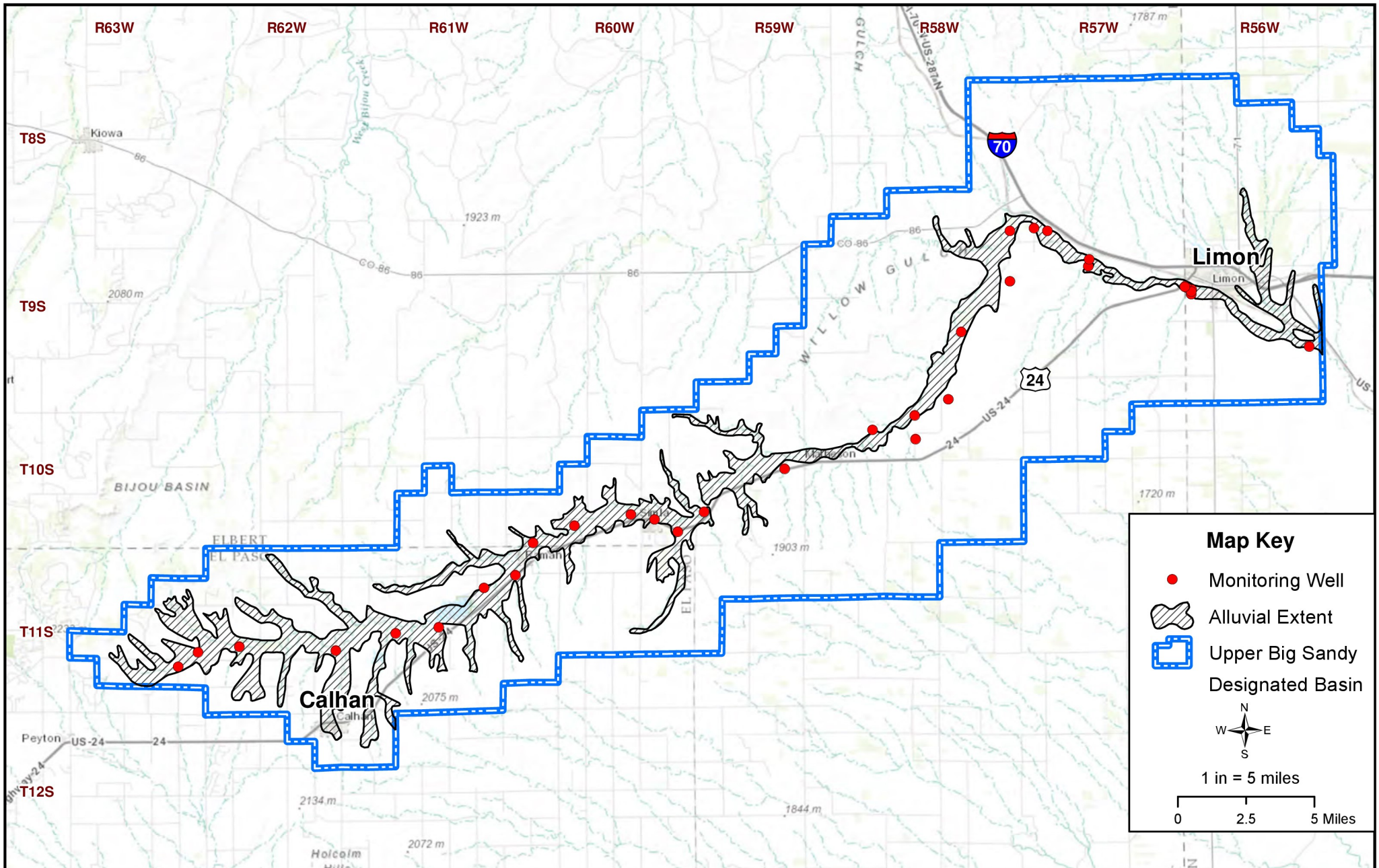
<https://dwr.state.co.us/Tools/GroundWater/WaterLevels>

or the Colorado Decision Support System MapViewer:

<https://dwr.colorado.gov/services/data-information/gis>

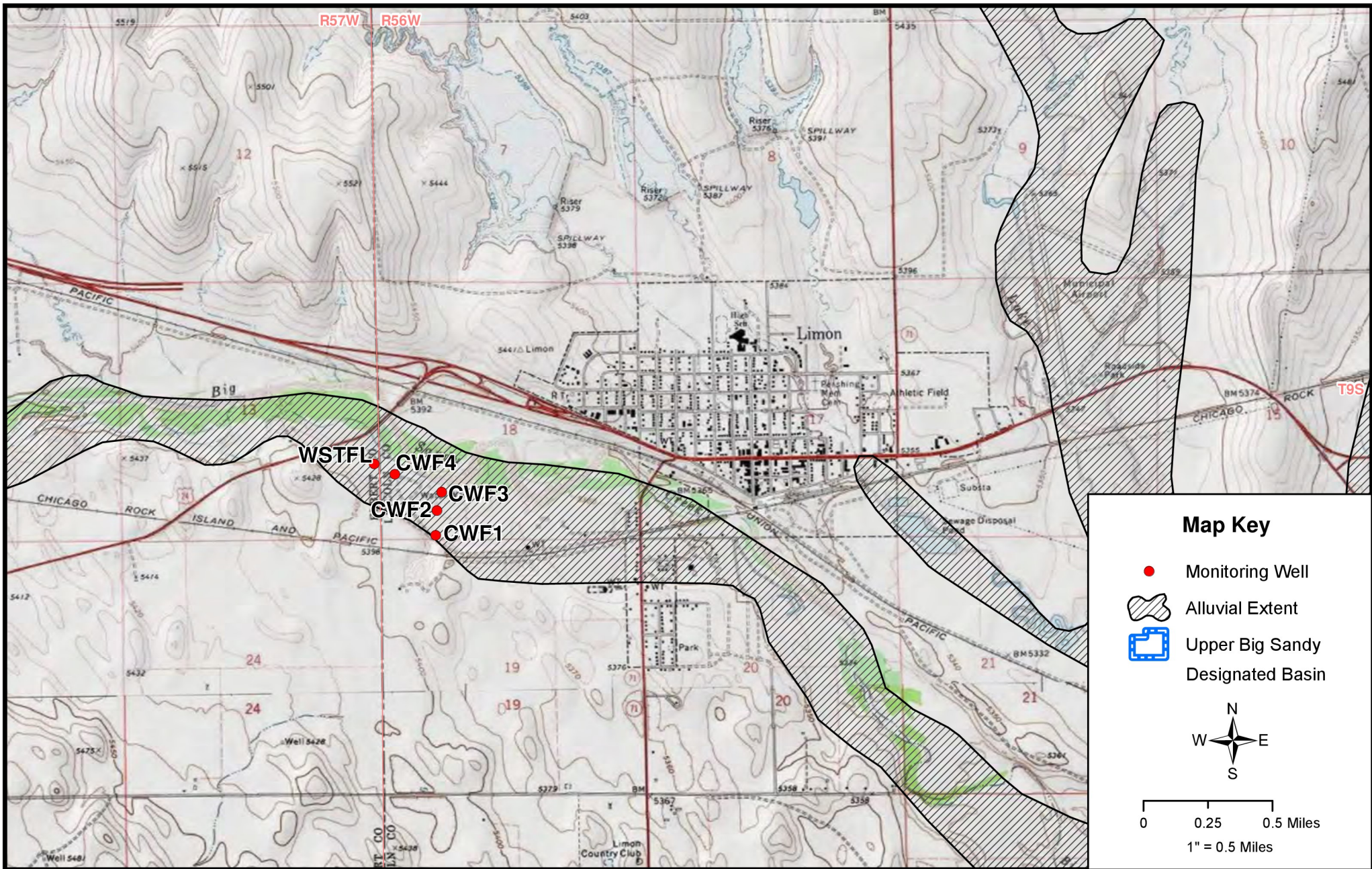
If you have any questions regarding groundwater and the information in this report, please contact the Groundwater Information Desk at (303) 866-3587 or through AskDWR,

<https://dwr.state.co.us/Portal/dwr/AskDWR?topicNum=31&officeNum=8>



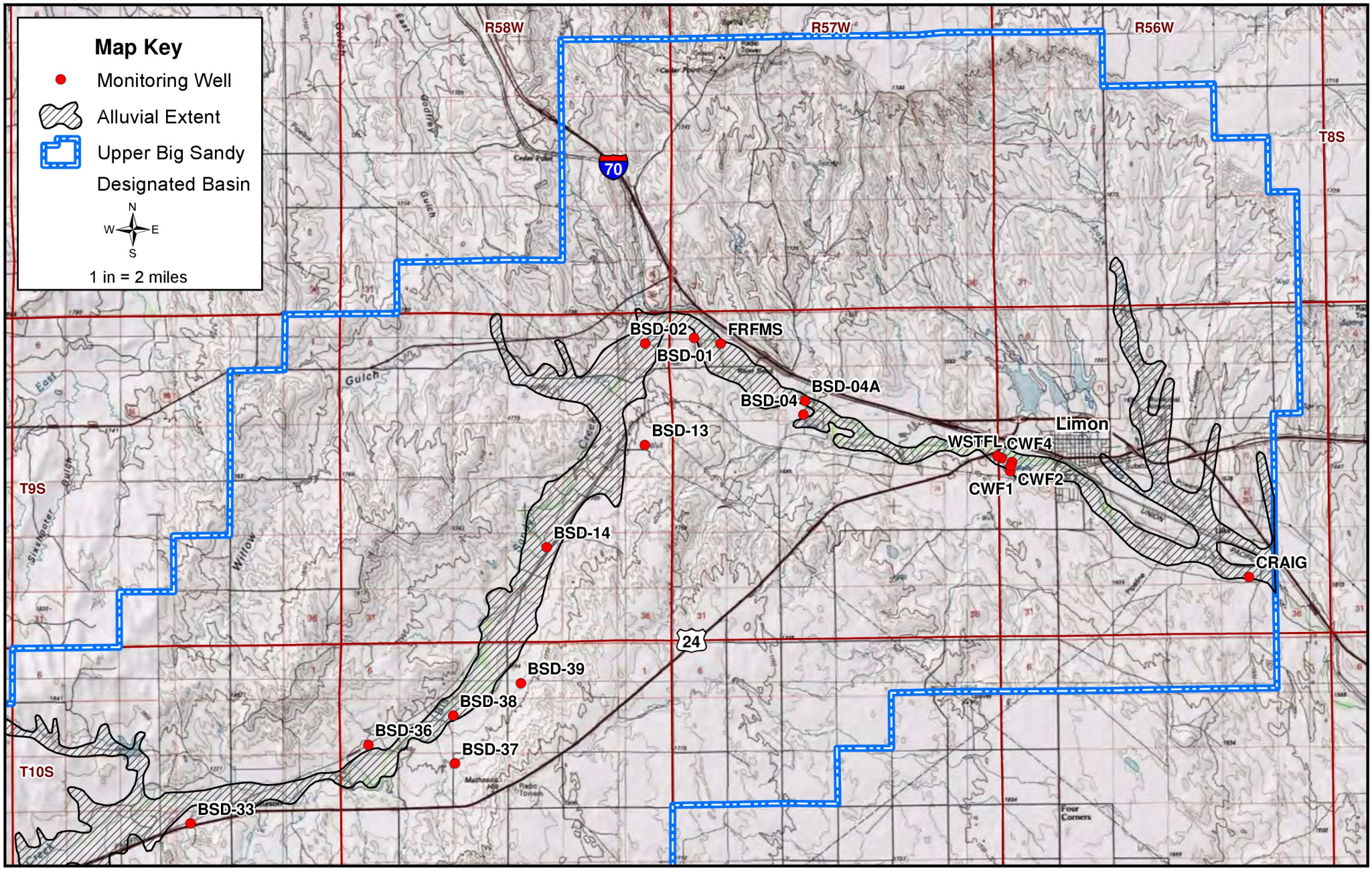
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**Upper Big Sandy Designated Groundwater Basin
 Monitoring Well Locations**



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**Upper Big Sandy Designated Groundwater Basin
 Monitoring Well Locations (Limon Map)**

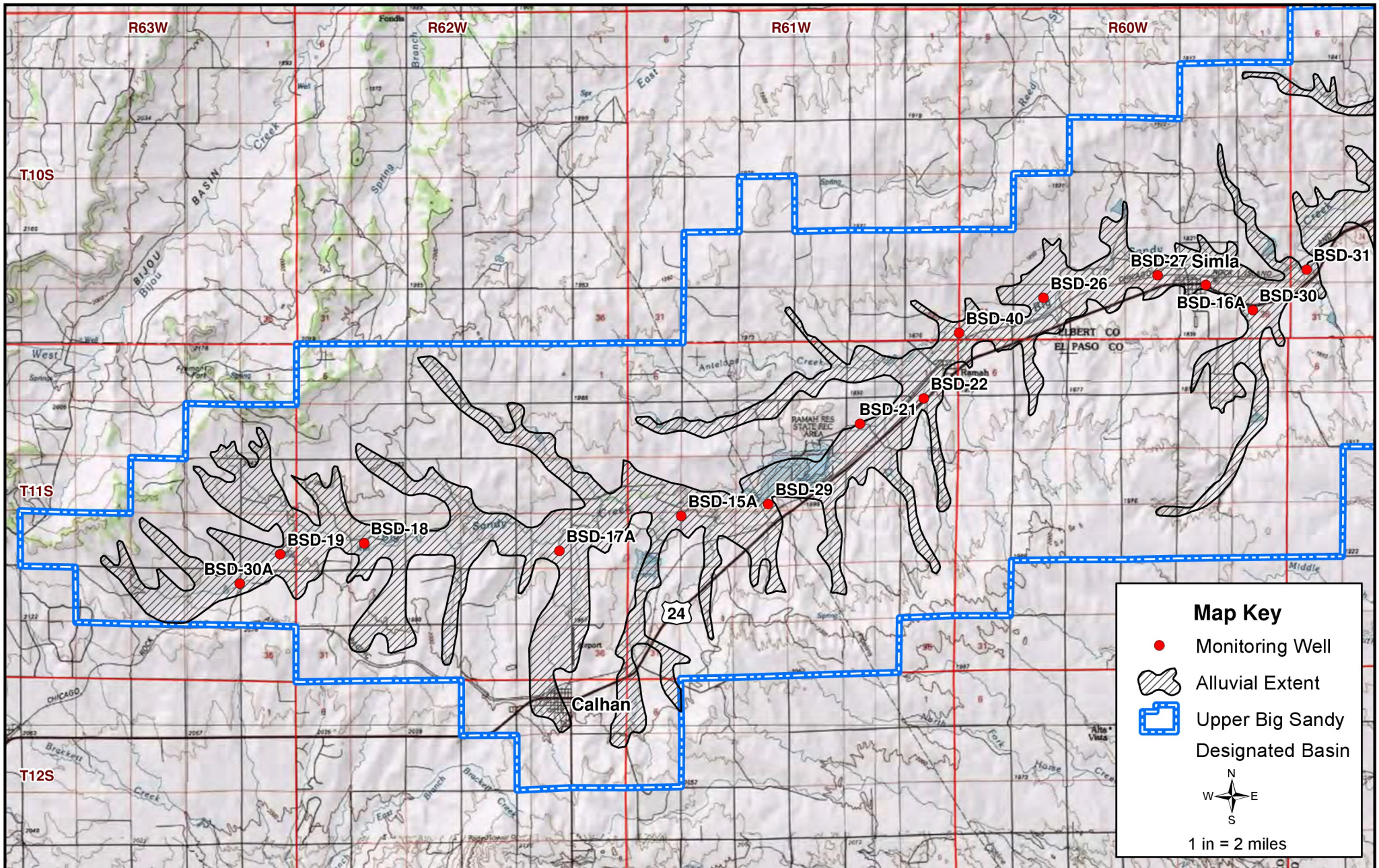


Map Key

- Monitoring Well
- Alluvial Extent
- Upper Big Sandy Designated Basin

N
W E
S

1 in = 2 miles



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**Upper Big Sandy Designated Groundwater Basin
 Monitoring Well Locations (West Map)**



GROUNDWATER DETAILS

Well Name: BSD-15A
Permit Number: 475-RFP
WDID:
Data Source: DWR

Location Number: SC01106119AA
USGS Site ID:
Applicant/Contact: EARNEST MIKITA

Physical Location

Dist N/S	Dist E/W	Q10	Q40	Q160	Sec	Township	Range	PM	UTMx	UTMy	Location Accuracy
345 N	17 W		NW	NW	20	11.0 S	61.0 W	S	564329.0	4326282.0	GPS

Division: 2 District: 67
 County: EL PASO
 Designated Basin: UPPER BIG SANDY
 Management District: UPPER BIG SANDY

Ten Most Recent Readings

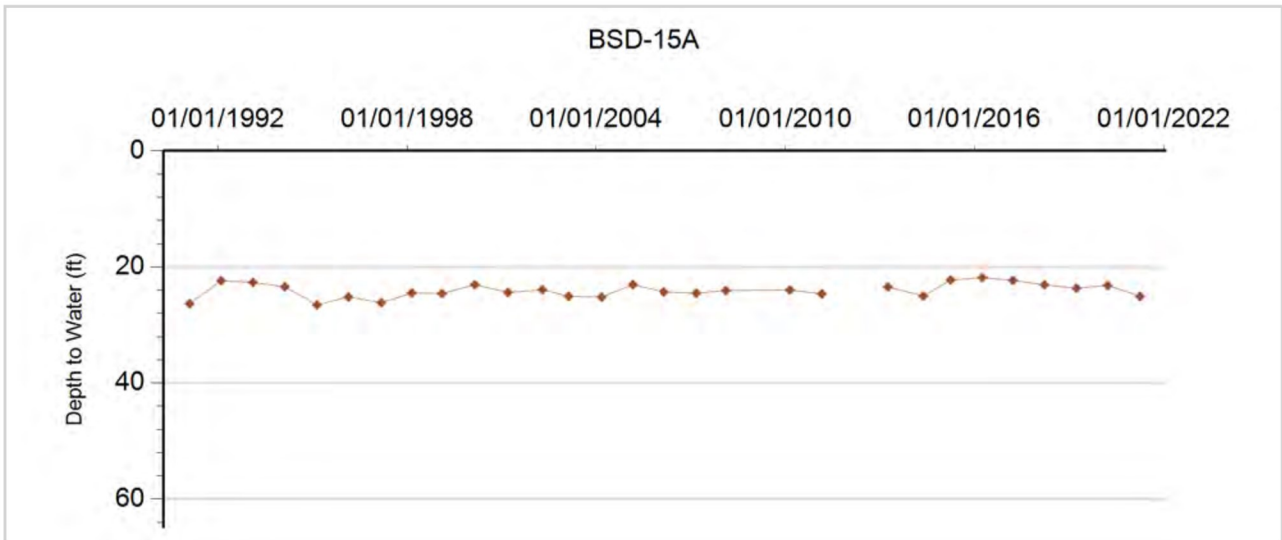
Date	Depth to Water Feet Below Land Surface	Elevation of Water (ft)	Change From Previous Measure (ft)
04/02/2021	25.06	6236.94	-1.88
03/25/2020	23.18	6238.82	0.48
03/28/2019	23.66	6238.34	-0.58
03/22/2018	23.08	6238.92	-0.77
03/22/2017	22.31	6239.69	-0.48
03/31/2016	21.83	6240.17	0.42
03/31/2015	22.25	6239.75	2.75
05/19/2014	25.00	6237.00	-1.56
04/03/2013	23.44	6238.56	
04/23/2012			

Construction Information

Surface Elevation (ft): 6262
 Well Depth (ft): 65
 Depth to Base of Grout (ft):
 Depth to Top of Perforated Casing (ft):
 Depth to Bottom of Perforated Casing (ft):
 Source Aquifer(s): ALLUVIAL

Well Measurement Summary

Start Date: 02/06/1991 End Date: 04/02/2021
 Number of Measurements: 30





GROUNDWATER DETAILS

Well Name: BSD-19
Permit Number: 13038-F
WDID:
Data Source: DWR

Location Number: SC01106324DB
USGS Site ID:
Applicant/Contact: WAYNE TURNER

Physical Location

Dist N/S	Dist E/W	Q10	Q40	Q160	Sec	Township	Range	PM	UTMx	UTMy	Location Accuracy
3683 N	3794 W		NW	SE	24	11.0 S	63.0 W	S	552662.5	4325163.8	GPS

Division: 2 District: 67
 County: EL PASO
 Designated Basin: UPPER BIG SANDY
 Management District: UPPER BIG SANDY

Ten Most Recent Readings

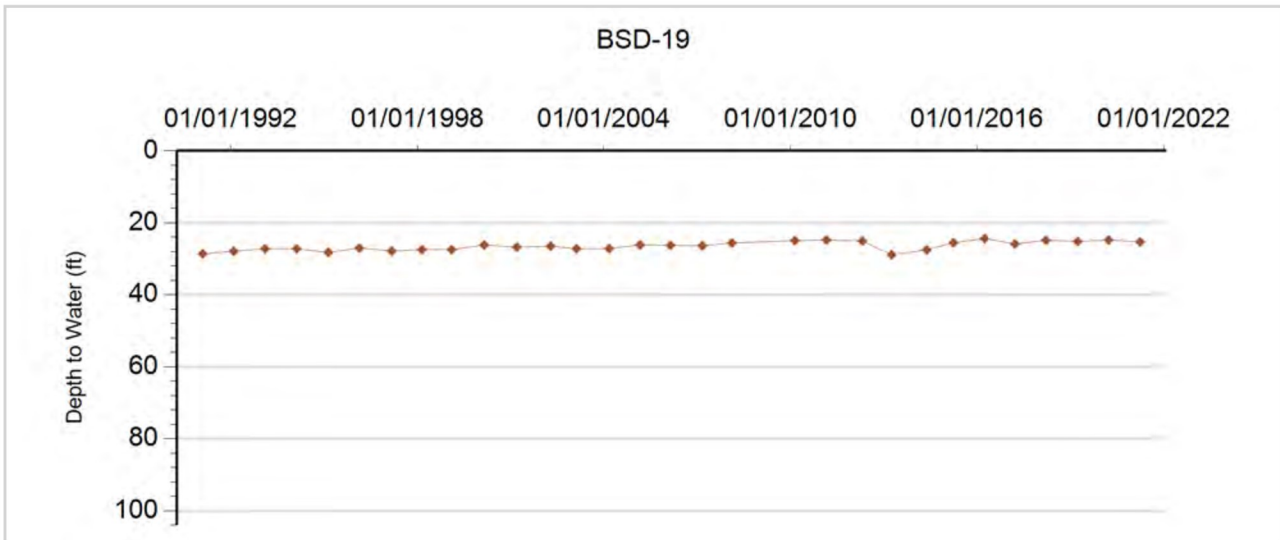
Date	Depth to Water Feet Below Land Surface	Elevation of Water (ft)	Change From Previous Measure (ft)
04/02/2021	25.26	6549.74	-0.50
03/25/2020	24.76	6550.24	0.38
03/28/2019	25.14	6549.86	-0.33
03/22/2018	24.81	6550.19	1.05
03/22/2017	25.86	6549.14	-1.49
03/31/2016	24.37	6550.63	1.14
03/30/2015	25.51	6549.49	1.99
05/19/2014	27.50	6547.50	1.33
04/03/2013	28.83	6546.17	-3.78
04/23/2012	25.05	6549.95	-0.32

Construction Information

Surface Elevation (ft): 6575
 Well Depth (ft): 104
 Depth to Base of Grout (ft): 12
 Depth to Top of Perforated Casing (ft): 36
 Depth to Bottom of Perforated Casing (ft): 104
 Source Aquifer(s): ALLUVIAL

Well Measurement Summary

Start Date: 02/06/1991 End Date: 04/02/2021
 Number of Measurements: 30





GROUNDWATER DETAILS

Well Name: BSD-40
Permit Number: 239238-
WDID:
Data Source: DWR

Location Number: SC01006136DD
USGS Site ID:
Applicant/Contact: KENT GREENWOOD

Physical Location

Dist N/S	Dist E/W	Q10	Q40	Q160	Sec	Township	Range	PM	UTMx	UTMy	Location Accuracy
633 S	7 E		SE	SE	36	10.0 S	61.0 W	S	572412.0	4331606.0	GPS

Division: 2 District: 67
 County: ELBERT
 Designated Basin: UPPER BIG SANDY
 Management District: UPPER BIG SANDY

Ten Most Recent Readings

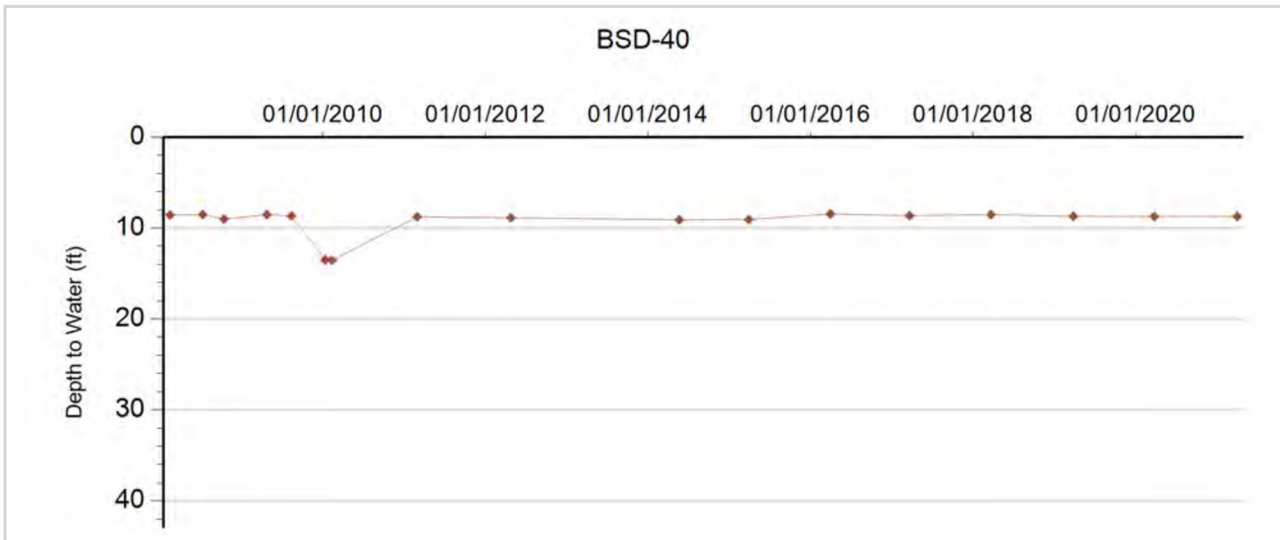
Date	Depth to Water Feet Below Land Surface	Elevation of Water (ft)	Change From Previous Measure (ft)
04/02/2021	8.73	6053.27	0.00
03/25/2020	8.73	6053.27	-0.02
03/28/2019	8.71	6053.29	-0.19
03/22/2018	8.52	6053.48	0.12
03/22/2017	8.64	6053.36	-0.19
03/31/2016	8.45	6053.55	0.61
03/30/2015	9.06	6052.94	0.03
05/21/2014	9.09	6052.91	-0.22
04/24/2012	8.87	6053.13	-0.10
02/28/2011	8.77	6053.23	4.77

Construction Information

Surface Elevation (ft): 6062
 Well Depth (ft): 43
 Depth to Base of Grout (ft):
 Depth to Top of Perforated Casing (ft): 18
 Depth to Bottom of Perforated Casing (ft): 38
 Source Aquifer(s): ALLUVIAL

Well Measurement Summary

Start Date: 02/13/2008 End Date: 04/02/2021
 Number of Measurements: 17





GROUNDWATER DETAILS

Well Name: CHRISTOPHER #1
Permit Number:
WDID:
Data Source: DWR

Location Number: SC00905618CCD
USGS Site ID:
Applicant/Contact: TOWN OF LIMON

Physical Location

Dist N/S	Dist E/W	Q10	Q40	Q160	Sec	Township	Range	PM	UTMx	UTMy	Location Accuracy
34 S	1165 W	SE	SW	SW	18	9.0 S	56.0 W	S	611241.0	4346281.0	GPS

Division: 2 District: 67
 County: LINCOLN
 Designated Basin: UPPER BIG SANDY
 Management District: UPPER BIG SANDY

Ten Most Recent Readings

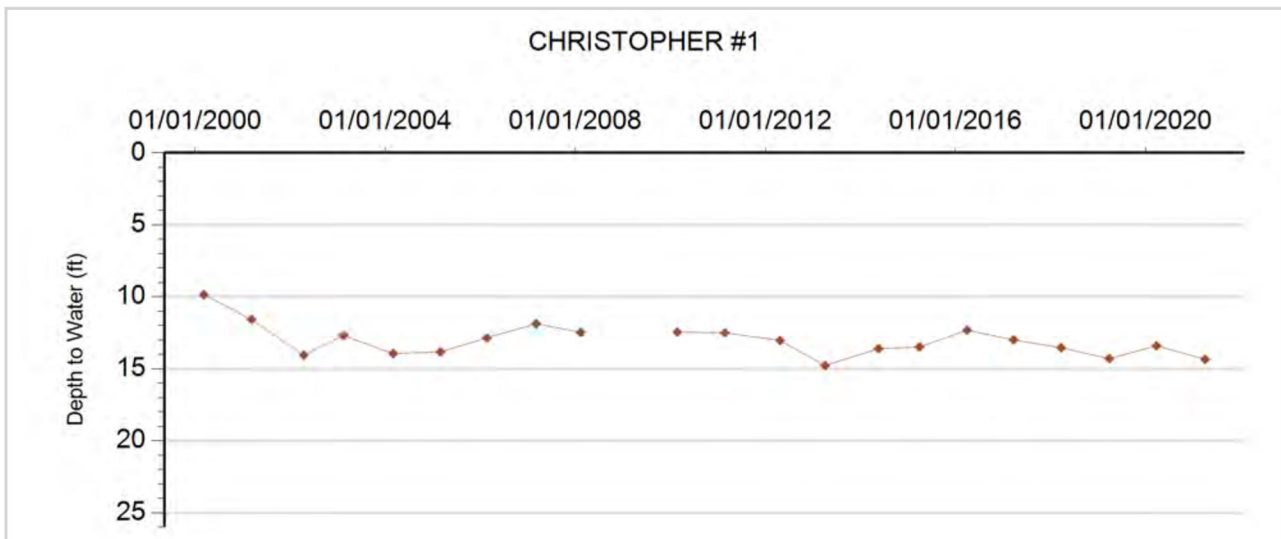
Date	Depth to Water Feet Below Land Surface	Elevation of Water (ft)	Change From Previous Measure (ft)
04/05/2021	14.34	5357.66	-0.94
03/26/2020	13.40	5358.60	0.89
03/29/2019	14.29	5357.71	-0.76
03/23/2018	13.53	5358.47	-0.54
03/23/2017	12.99	5359.01	-0.67
04/01/2016	12.32	5359.68	1.16
03/31/2015	13.48	5358.52	0.12
05/20/2014	13.60	5358.40	1.17
04/04/2013	14.77	5357.23	-1.74
04/24/2012	13.03	5358.97	-0.53

Construction Information

Surface Elevation (ft): 5372
 Well Depth (ft): 26
 Depth to Base of Grout (ft):
 Depth to Top of Perforated Casing (ft):
 Depth to Bottom of Perforated Casing (ft):
 Source Aquifer(s): ALLUVIAL

Well Measurement Summary

Start Date: 03/08/2000 End Date: 04/05/2021
 Number of Measurements: 22





GROUNDWATER DETAILS

Well Name: CHRISTOPHER #2
Permit Number:
WDID:
Data Source: DWR

Location Number: SC00905618CCD
USGS Site ID:
Applicant/Contact: TOWN OF LIMON

Physical Location

Dist N/S	Dist E/W	Q10	Q40	Q160	Sec	Township	Range	PM	UTMx	UTMy	Location Accuracy
486 S	1183 W	SE	SW	SW	18	9.0 S	56.0 W	S	611243.0	4346419.0	GPS

Division: 2 District: 67
 County: LINCOLN
 Designated Basin: UPPER BIG SANDY
 Management District: UPPER BIG SANDY

Ten Most Recent Readings

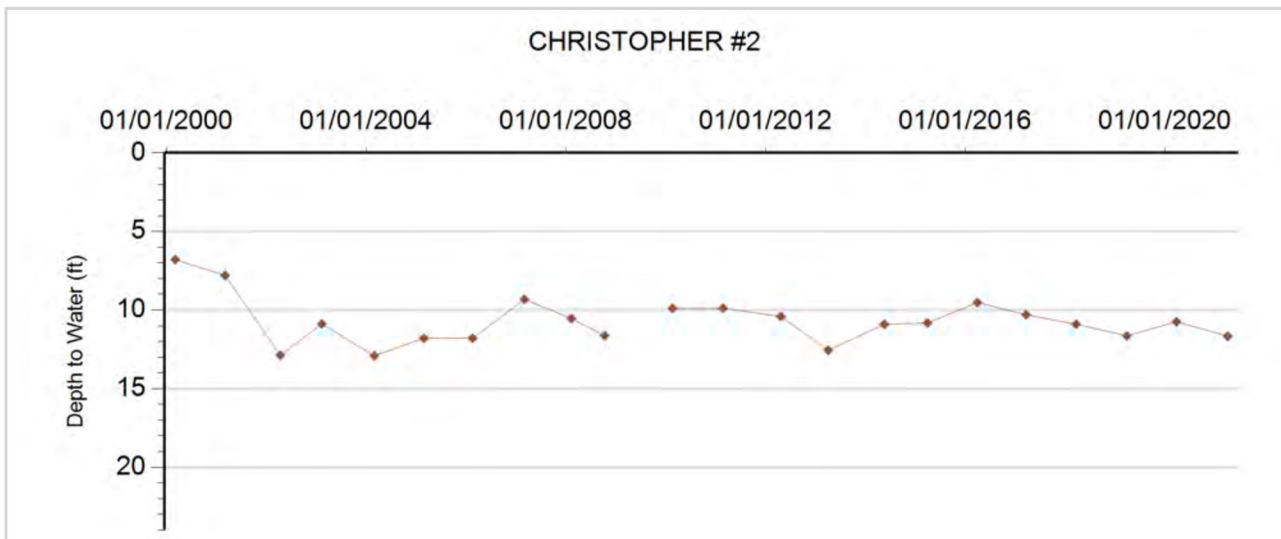
Date	Depth to Water Feet Below Land Surface	Elevation of Water (ft)	Change From Previous Measure (ft)
04/05/2021	11.66	5358.34	-0.92
03/26/2020	10.74	5359.26	0.90
03/29/2019	11.64	5358.36	-0.74
03/23/2018	10.90	5359.10	-0.60
03/23/2017	10.30	5359.70	-0.78
04/01/2016	9.52	5360.48	1.30
03/31/2015	10.82	5359.18	0.09
05/20/2014	10.91	5359.09	1.64
04/04/2013	12.55	5357.45	-2.14
04/24/2012	10.41	5359.59	-0.53

Construction Information

Surface Elevation (ft): 5370
 Well Depth (ft): 24
 Depth to Base of Grout (ft):
 Depth to Top of Perforated Casing (ft):
 Depth to Bottom of Perforated Casing (ft):
 Source Aquifer(s): ALLUVIAL

Well Measurement Summary

Start Date: 03/08/2000 End Date: 04/05/2021
 Number of Measurements: 23





GROUNDWATER DETAILS

Well Name: CHRISTOPHER #3
Permit Number:
WDID:
Data Source: DWR

Location Number: SC00905618CCA
USGS Site ID:
Applicant/Contact: TOWN OF LIMON

Physical Location

Dist N/S	Dist E/W	Q10	Q40	Q160	Sec	Township	Range	PM	UTMx	UTMy	Location Accuracy
922 S	1255 W	NE	SW	SW	18	9.0 S	56.0 W	S	611262.4	4346552.5	GPS

Division: 2 District: 67
 County: LINCOLN
 Designated Basin: UPPER BIG SANDY
 Management District: UPPER BIG SANDY

Ten Most Recent Readings

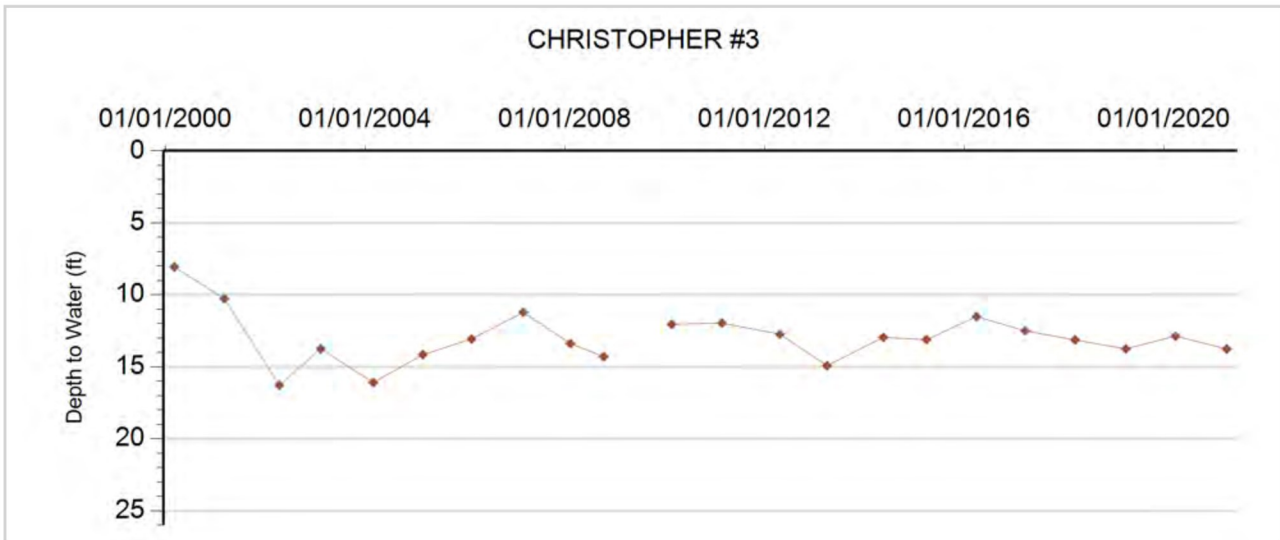
Date	Depth to Water Feet Below Land Surface	Elevation of Water (ft)	Change From Previous Measure (ft)
04/05/2021	13.76	5358.24	-0.90
03/26/2020	12.86	5359.14	0.89
03/29/2019	13.75	5358.25	-0.62
03/23/2018	13.13	5358.87	-0.63
03/23/2017	12.50	5359.50	-0.99
04/01/2016	11.51	5360.49	1.60
03/31/2015	13.11	5358.89	-0.16
05/20/2014	12.95	5359.05	1.97
04/03/2013	14.92	5357.08	-2.19
04/24/2012	12.73	5359.27	-0.77

Construction Information

Surface Elevation (ft): 5372
 Well Depth (ft): 26
 Depth to Base of Grout (ft):
 Depth to Top of Perforated Casing (ft):
 Depth to Bottom of Perforated Casing (ft):
 Source Aquifer(s): ALLUVIAL

Well Measurement Summary

Start Date: 03/08/2000 End Date: 04/05/2021
 Number of Measurements: 23





GROUNDWATER DETAILS

Well Name: CHRISTOPHER #4
Permit Number:
WDID:
Data Source: DWR

Location Number: SC00905618CCB
USGS Site ID:
Applicant/Contact: TOWN OF LIMON

Physical Location

Dist N/S	Dist E/W	Q10	Q40	Q160	Sec	Township	Range	PM	UTMx	UTMy	Location Accuracy
3870 N	305 W	NW	NW	SW	18	9.0 S	56.0 W	S	610969.0	4346690.0	GPS

Division: 2 District: 67
 County: LINCOLN
 Designated Basin: UPPER BIG SANDY
 Management District: UPPER BIG SANDY

Ten Most Recent Readings

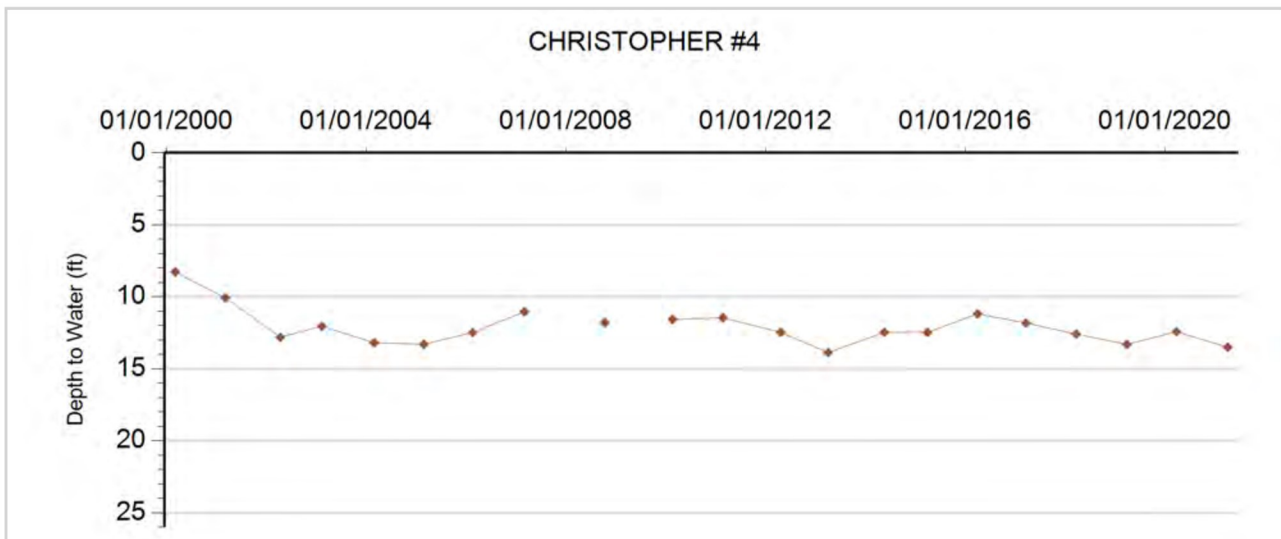
Date	Depth to Water Feet Below Land Surface	Elevation of Water (ft)	Change From Previous Measure (ft)
04/05/2021	13.50	5356.50	-1.08
03/26/2020	12.42	5357.58	0.88
03/29/2019	13.30	5356.70	-0.72
03/23/2018	12.58	5357.42	-0.76
03/23/2017	11.82	5358.18	-0.64
04/01/2016	11.18	5358.82	1.29
03/31/2015	12.47	5357.53	-0.01
05/20/2014	12.46	5357.54	1.41
04/04/2013	13.87	5356.13	-1.40
04/23/2012	12.47	5357.53	-1.02

Construction Information

Surface Elevation (ft): 5370
 Well Depth (ft): 26
 Depth to Base of Grout (ft):
 Depth to Top of Perforated Casing (ft):
 Depth to Bottom of Perforated Casing (ft):
 Source Aquifer(s): ALLUVIAL

Well Measurement Summary

Start Date: 03/08/2000 End Date: 04/05/2021
 Number of Measurements: 23





GROUNDWATER DETAILS

Well Name: JOHN CRAIG
Permit Number: 35186-MH
WDID:
Data Source: DWR

Location Number: SC00905626DCC
USGS Site ID:
Applicant/Contact: UPPER BIG SANDY GWMD

Physical Location

Dist N/S	Dist E/W	Q10	Q40	Q160	Sec	Township	Range	PM	UTMx	UTMy	Location Accuracy
174 S	2693 W	SW	SW	SE	26	9.0 S	56.0 W	S	618194.4	4343186.4	GPS

Division: 2 District: 67
 County: LINCOLN
 Designated Basin: UPPER BIG SANDY
 Management District: UPPER BIG SANDY

Ten Most Recent Readings

Date	Depth to Water Feet Below Land Surface	Elevation of Water (ft)	Change From Previous Measure (ft)
04/05/2021	10.87	5269.13	-0.03
03/26/2020	10.84	5269.16	-0.26
03/29/2019	10.58	5269.42	0.28
03/23/2018	10.86	5269.14	0.11
03/23/2017	10.97	5269.03	-0.28
04/01/2016	10.69	5269.31	0.22
03/31/2015	10.91	5269.09	0.04
05/20/2014	10.95	5269.05	0.13
04/04/2013	11.08	5268.92	-0.06
04/24/2012	11.02	5268.98	-0.15

Construction Information

Surface Elevation (ft): 5280
 Well Depth (ft): 40
 Depth to Base of Grout (ft):
 Depth to Top of Perforated Casing (ft): 20
 Depth to Bottom of Perforated Casing (ft): 30
 Source Aquifer(s): ALLUVIAL

Well Measurement Summary

Start Date: 05/06/1999 End Date: 04/05/2021
 Number of Measurements: 23

