

GROUNDWATER LEVELS
in the
UPPER BIG SANDY
DESIGNATED GROUND WATER BASIN
2017



by
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GROUNDWATER LEVELS IN THE UPPER BIG SANDY DESIGNATED BASIN 2017

This report contains the basic groundwater-level data collected in the Upper Big Sandy Designated Ground Water Basin during the spring of 2017. Tabular data are presented for the period 2007 through 2017 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 legislative session). This legislation directed that a portion of the fees collected for water well permit applications be used for the establishment of a program to monitor water-level trends throughout the state.

The wells in this report are listed by well name in numerical order, with the exception of one group of wells, which consists of five of the seven monitoring and production wells owned by the Town of Limon. The data sheets for the five monitoring wells located in the vicinity of the town have all been placed together at the back of the report. The data sheets for the **town's Frasier Farms production well and the well identified as Big Sandy No. 4** are indexed by name. 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 ID numbers in the western half of the basin
- Monitoring well locations and ID numbers in the eastern half of the basin
- Monitoring well locations and ID numbers in the Limon well field

The report contains 2017 water-level measurements for 29 wells, taken on March 22nd and 23rd. Depths to groundwater, below ground surface, ranged from 6 to 51 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 higher than 2016 levels. The water levels showed an overall average increase of 1.2 feet as compared to 2016, and only one well showed a decrease in water level **from the previous year's measurement**. Long term, 10-year comparisons, indicate that water levels:

- a) in the reach around Limon have declined the most (0.1-1.3 ft);
- b) in the reach between River Bend and Simla have decreased slightly (0-1.7 ft);
- c) in the reach between Simla and Ramah Reservoir have increased slightly (-0.5 to +1.3 ft); and
- d) upstream of Ramah Reservoir have increased slightly since 2007 (0 to +2.2 ft).

An electronic copy of this report, in Adobe PDF format, is available on the Division of Water Resources website

<http://water.state.co.us/groundwater/Levels/Pages/HydroGeo.aspx>.

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

<http://cdss.state.co.us/onlineTools/Pages/GroundWaterWaterLevels.aspx>

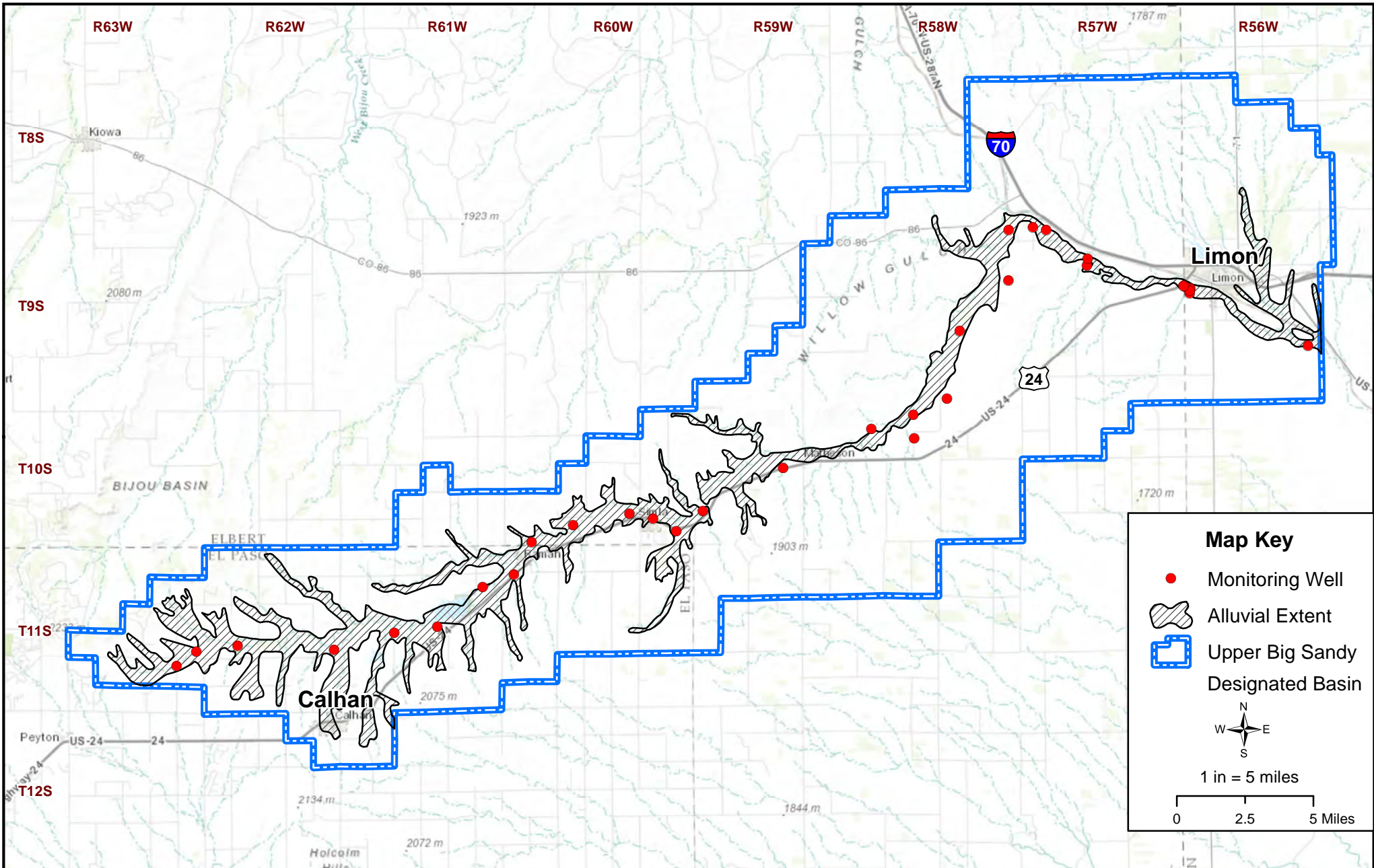
and the Colorado Information Marketplace HydroBase Bulk Data Exporter:

<https://data.colorado.gov/Information-Sharing/DWR-Well-Water-Level/hfwh-wsgi>

or the Colorado Decision Support System MapViewer

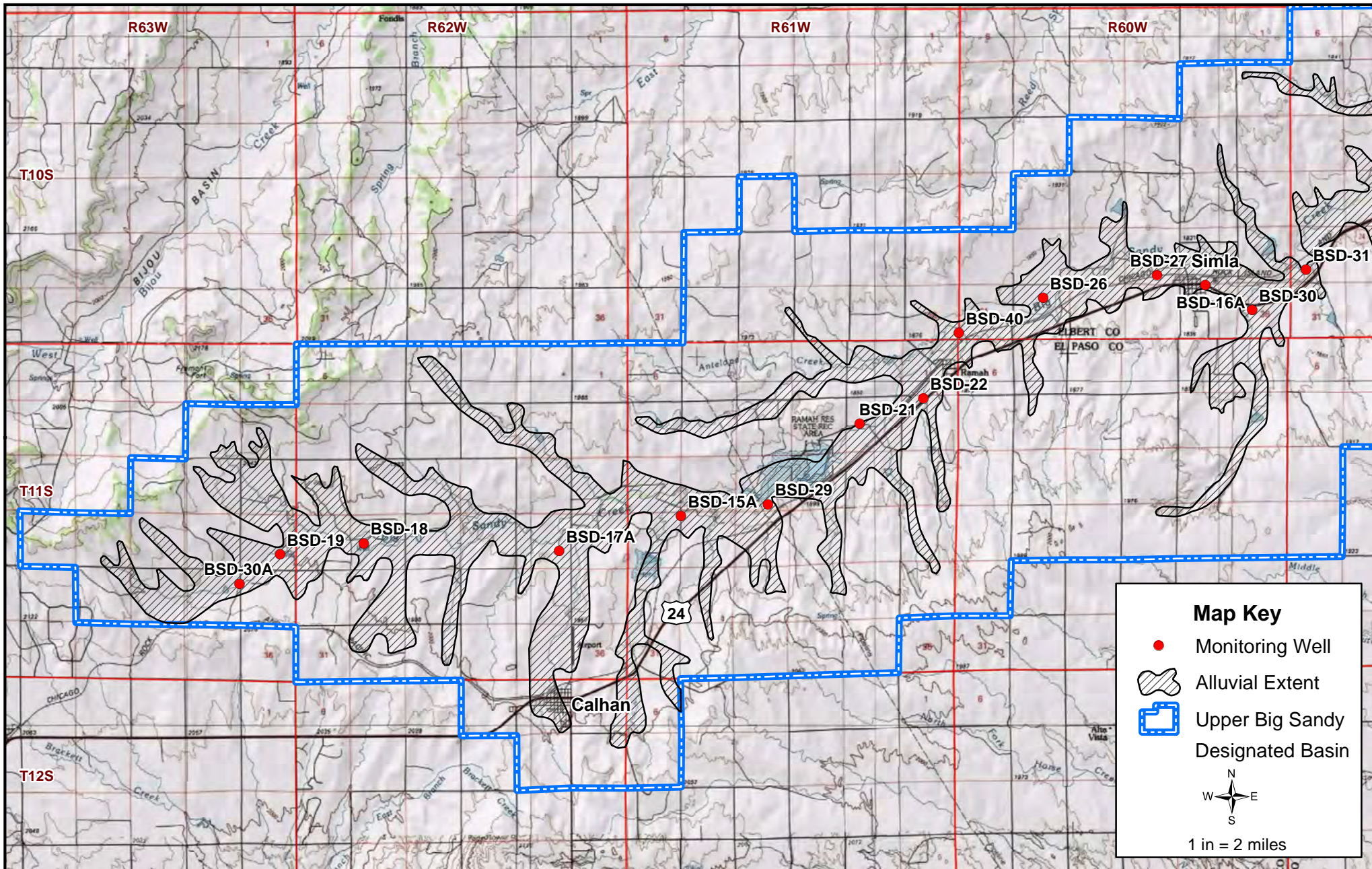
<http://water.state.co.us/DataMaps/GISandMaps/MapViewer/Pages/FAQ.aspx>

If you have any questions regarding groundwater in the Upper Big Sandy alluvial aquifer and the information in this report, please contact the Groundwater Information Desk at (303) 866-3587.



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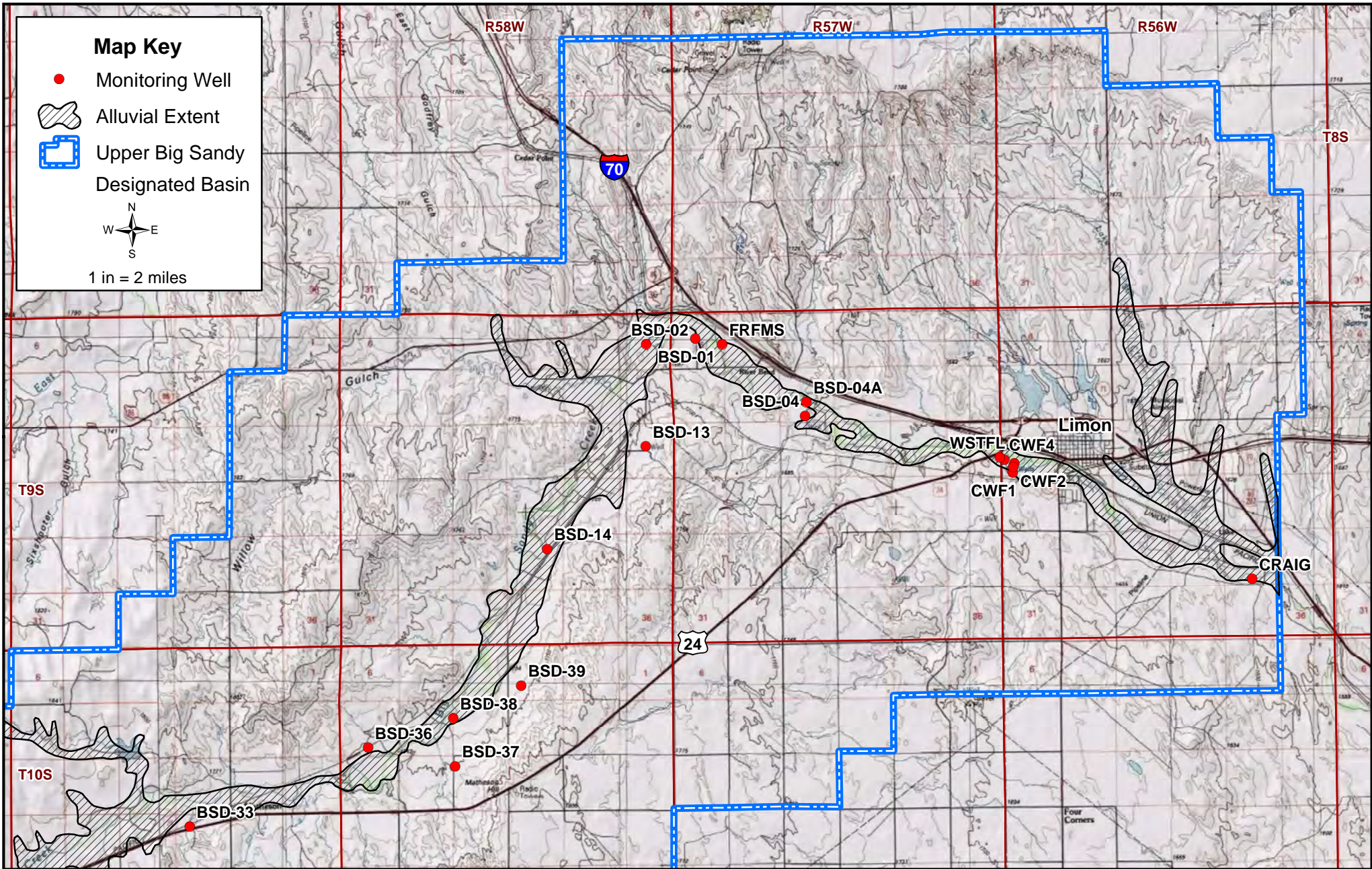
State of Colorado -- Division of Water Resources
**Upper Big Sandy Designated Ground Water Basin
 Monitoring Well Locations**



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State of Colorado -- Division of Water Resources

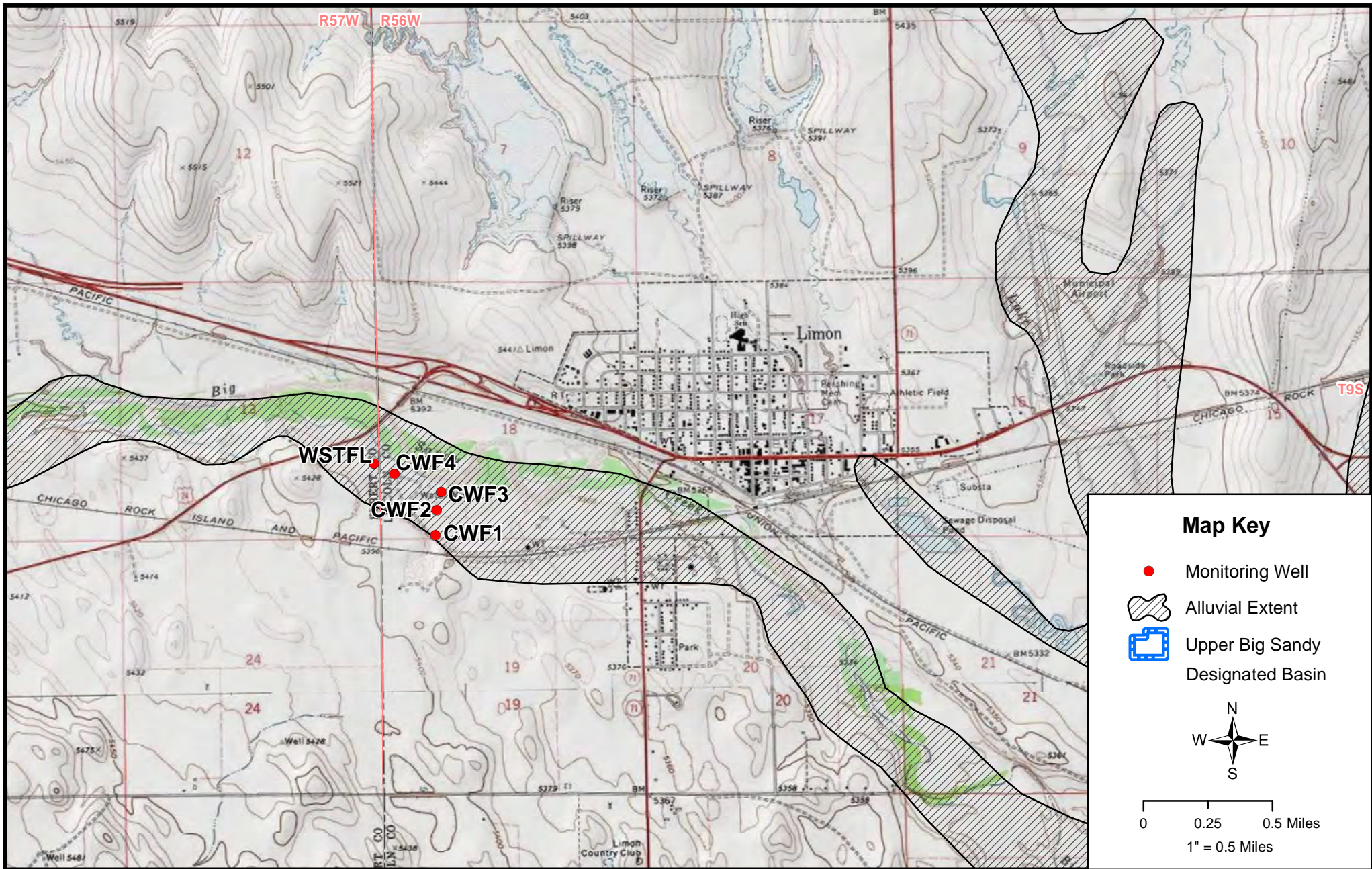
Upper Big Sandy Designated Ground Water Basin Monitoring Well Locations (West Portion)



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**Upper Big Sandy Designated Ground Water Basin
 Monitoring Well Locations (East Portion)**



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**Upper Big Sandy Designated Ground Water Basin
 Monitoring Well Locations (Limon Well Field)**

UPPER BIG SANDY

Well Name: BSD-17A

Owner: MIKE & GERALD HLATKI

Permit #: - -

Location #: SC01106223DA

USGS Site ID:

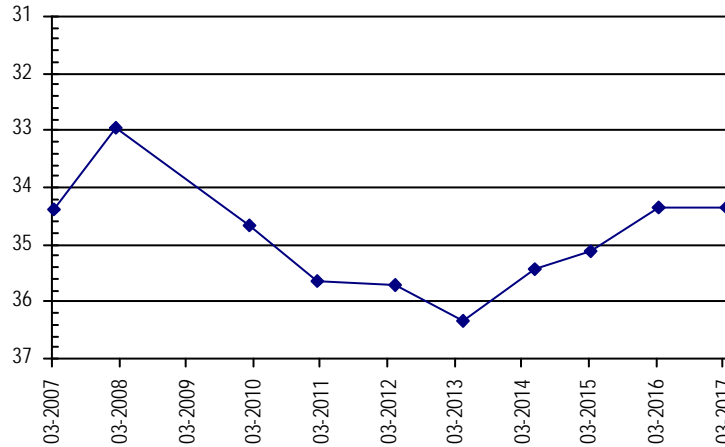
Division: 2 **Water District:** 67 **County:** EL PASO
Location: Q160 Q40 Q10 Section **Twnshp** **Range** **PM** **Distance from section lines:**
 SE NE 23 11 S 62 W S **From N/S line:** 1700 S **From E/W line:** 1220 E
UTM Coordinates (NAD83): **Northing (UTM y):** 4325262.0 **Easting (UTM x):** 560783.0 *GPS*
Latitude/Longitude (decimal degrees): 39.074347 -104.297319

Surface Elevation (ft): 6355 **Top Perforated Interval (ft):** **Base of grout (ft):** **Water Level Change**
Well depth (ft): 80 **Bottom Perforated Interval (ft):** **1 year:** 0.01
Aquifer(s): QUATERNARY ALLUVIUM **5 year:** 1.36
 10 year: 0.03

Measurements from last 10 years

Date	Depth to WL (ft)	Elev of WL (ft)	Change (ft)
3/6/2007	34.37	6320.63	
2/12/2008	32.97	6322.03	1.40
1/1/2009			
2/23/2010	34.67	6320.33	
2/28/2011	35.63	6319.37	-0.96
4/23/2012	35.70	6319.30	-0.07
4/3/2013	36.33	6318.67	-0.63
5/19/2014	35.43	6319.57	0.90
3/30/2015	35.13	6319.87	0.30
3/31/2016	34.35	6320.65	0.78
3/22/2017	34.34	6320.66	0.01

All Historic Measurements



Well Name: BSD-18

Owner: DENNIS KUCERIK

Permit #: 20183 - R - R

Location #: SC01106220BC

USGS Site ID:

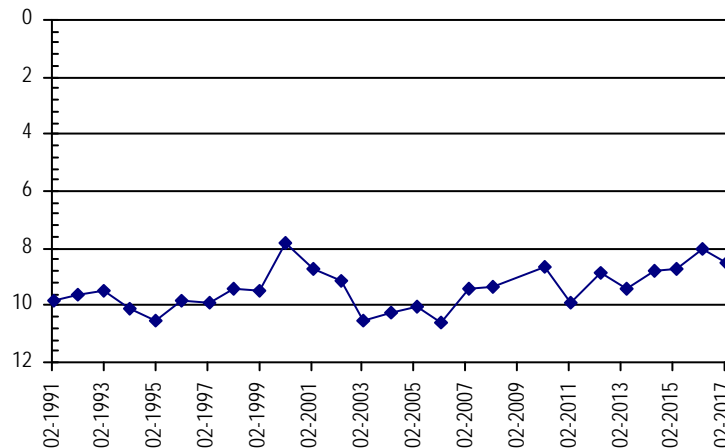
Division: 2 **Water District:** 67 **County:** EL PASO
Location: Q160 Q40 Q10 Section **Twnshp** **Range** **PM** **Distance from section lines:**
 NW SW 20 11 S 62 W S **From N/S line:** 2558 S **From E/W line:** 1246 W
UTM Coordinates (NAD83): **Northing (UTM y):** 4325484.7 **Easting (UTM x):** 555096.5 *GPS*
Latitude/Longitude (decimal degrees): 39.076732 -104.363035

Surface Elevation (ft): 6485 **Top Perforated Interval (ft):** 43 **Base of grout (ft):** **Water Level Change**
Well depth (ft): 83 **Bottom Perforated Interval (ft):** 83 **1 year:** -0.45
Aquifer(s): QUATERNARY ALLUVIUM **5 year:** 0.39
 10 year: 0.94

Measurements from last 10 years

Date	Depth to WL (ft)	Elev of WL (ft)	Change (ft)
3/5/2007	9.44	6475.56	1.15
2/13/2008	9.34	6475.66	0.10
1/1/2009			
2/23/2010	8.63	6476.37	
2/28/2011	9.91	6475.09	-1.28
4/23/2012	8.89	6476.11	1.02
4/3/2013	9.40	6475.60	-0.51
5/19/2014	8.78	6476.22	0.62
3/30/2015	8.71	6476.29	0.07
3/31/2016	8.05	6476.95	0.66
3/22/2017	8.50	6476.50	-0.45

All Historic Measurements



UPPER BIG SANDY

Well Name: BSD-19

Owner: WAYNE TURNER

Permit #: 13038 - F - **Location #:** SC01106324DB

USGS Site ID:

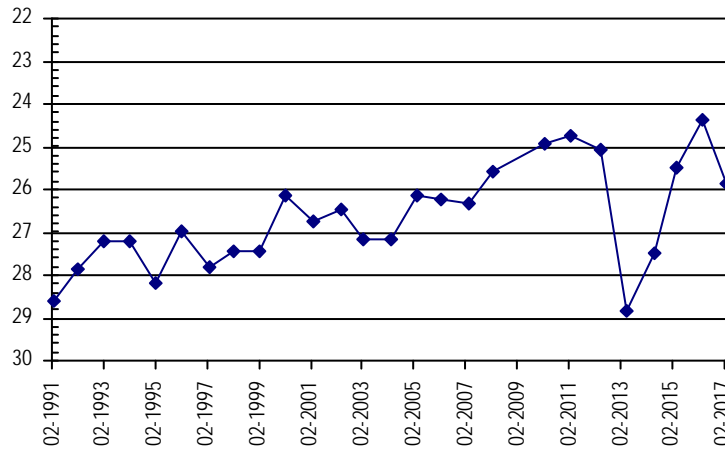
Division: 2 **Water District:** 67 **County:** EL PASO
Location: Q160 Q40 Q10 Section Twnshp Range PM Distance from section lines:
 SE NW 24 11 S 63 W S **From N/S line:** 1609 S **From E/W line:** 1531 E
UTM Coordinates (NAD83): **Northing (UTM y):** 4325163.8 **Easting (UTM x):** 552662.5 *GPS*
Latitude/Longitude (decimal degrees): 39.073990 -104.391197

Surface Elevation (ft): 6575 **Top Perforated Interval (ft):** 36 **Base of grout (ft):** 12 **Water Level Change**
Well depth (ft): 104 **Bottom Perforated Interval (ft):** 104 **1 year:** -1.49
Aquifer(s): QUATERNARY ALLUVIUM **5 year:** -0.81
10 year: 0.48

Measurements from last 10 years

Date	Depth to WL (ft)	Elev of WL (ft)	Change (ft)
3/5/2007	26.34	6548.66	-0.11
2/13/2008	25.59	6549.41	0.75
1/1/2009			
2/23/2010	24.92	6550.08	
2/28/2011	24.73	6550.27	0.19
4/23/2012	25.05	6549.95	-0.32
4/3/2013	28.83	6546.17	-3.78
5/19/2014	27.50	6547.50	1.33
3/30/2015	25.51	6549.49	1.99
3/31/2016	24.37	6550.63	1.14
3/22/2017	25.86	6549.14	-1.49

All Historic Measurements



Well Name: BSD-21

Owner: JOHN MIKITA

Permit #: 10282 - FP - **Location #:** SC01106111BD

USGS Site ID:

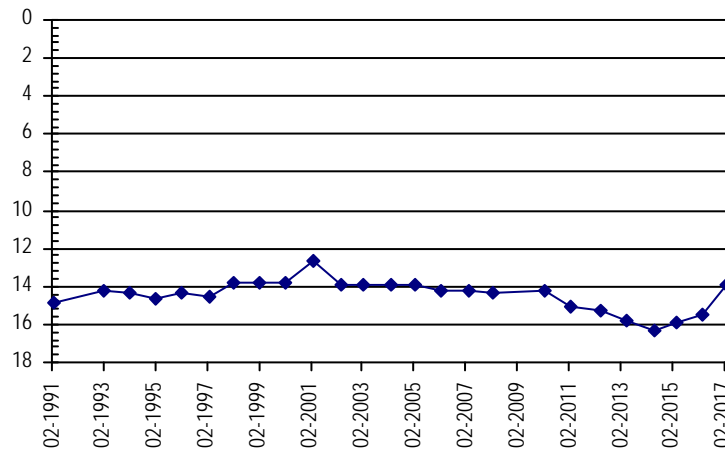
Division: 2 **Water District:** 67 **County:** EL PASO
Location: Q160 Q40 Q10 Section Twnshp Range PM Distance from section lines:
 NW SE 11 11 S 61 W S **From N/S line:** 2530 N **From E/W line:** 1298 W
UTM Coordinates (NAD83): **Northing (UTM y):** 4328960.6 **Easting (UTM x):** 569530.5 *GPS*
Latitude/Longitude (decimal degrees): 39.107020 -104.195823

Surface Elevation (ft): 6143 **Top Perforated Interval (ft):** 23 **Base of grout (ft):** **Water Level Change**
Well depth (ft): 53 **Bottom Perforated Interval (ft):** 53 **1 year:** 1.52
Aquifer(s): QUATERNARY ALLUVIUM **5 year:** 1.30
10 year: 0.28

Measurements from last 10 years

Date	Depth to WL (ft)	Elev of WL (ft)	Change (ft)
3/5/2007	14.22	6128.78	-0.02
2/13/2008	14.33	6128.67	-0.11
1/1/2009			
2/23/2010	14.23	6128.77	
2/24/2011	15.09	6127.91	-0.86
4/23/2012	15.24	6127.76	-0.15
4/3/2013	15.83	6127.17	-0.59
5/21/2014	16.34	6126.66	-0.51
3/30/2015	15.95	6127.05	0.39
3/31/2016	15.46	6127.54	0.49
3/22/2017	13.94	6129.06	1.52

All Historic Measurements



UPPER BIG SANDY

Well Name: **BSD-27**

Owner: MARYANN MCKIM

Permit #: 10246 - F - **Location #:** SC01006027DC

USGS Site ID:

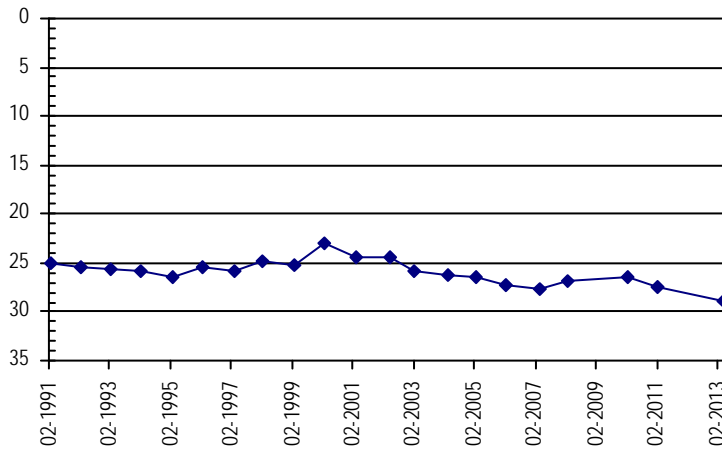
Division: 2 **Water District:** 67 **County:** ELBERT
Location: Q160 Q40 Q10 Section Twnshp Range PM Distance from section lines:
 SE SW 27 10 S 60 W S **From N/S line:** 924 S **From E/W line:** 2099 E
UTM Coordinates (NAD83): **Northing (UTM y):** 4333285.5 **Easting (UTM x):** 578177.5 *GPS*
Latitude/Longitude (decimal degrees): 39.145255 -104.095326

Surface Elevation (ft): 5978 **Top Perforated Interval (ft):** **Base of grout (ft):** **Water Level Change**
Well depth (ft): 56 **Bottom Perforated Interval (ft):** **1 year:**
Aquifer(s): QUATERNARY ALLUVIUM **5 year:**
10 year:

Measurements from last 10 years

Date	Depth to WL (ft)	Elev of WL (ft)	Change (ft)
3/5/2007	27.64	5950.36	-0.47
2/12/2008	26.95	5951.05	0.69
1/1/2009			
2/22/2010	26.55	5951.45	
2/24/2011	27.47	5950.53	-0.92
4/23/2012			
4/3/2013	28.84	5949.16	
5/21/2014			

All Historic Measurements



Well Name: **BSD-29**

Owner: ROGER WOODARD

Permit #: 9446 - FP - **Location #:** SC01106116DC

USGS Site ID:

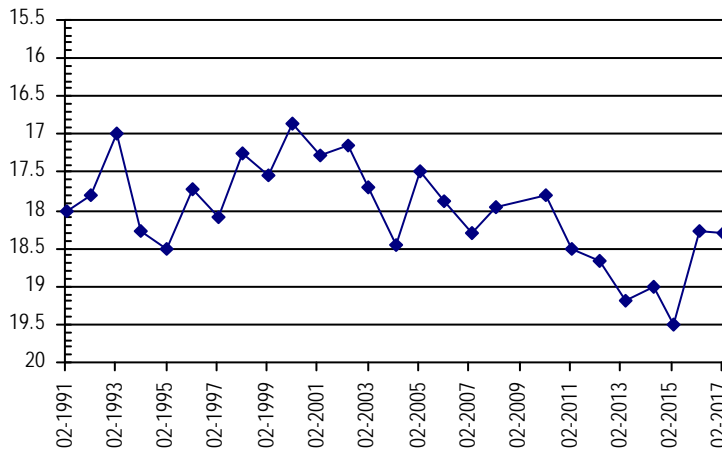
Division: 2 **Water District:** 67 **County:** EL PASO
Location: Q160 Q40 Q10 Section Twnshp Range PM Distance from section lines:
 SE SW 16 11 S 61 W S **From N/S line:** **From E/W line:**
UTM Coordinates (NAD83): **Northing (UTM y):** 4326625.6 **Easting (UTM x):** 566861.5 *GPS*
Latitude/Longitude (decimal degrees): 39.086189 -104.226919

Surface Elevation (ft): 6200 **Top Perforated Interval (ft):** 35 **Base of grout (ft):** **Water Level Change**
Well depth (ft): 50 **Bottom Perforated Interval (ft):** 50 **1 year:** -0.01
Aquifer(s): QUATERNARY ALLUVIUM **5 year:** 0.37
10 year: 0.01

Measurements from last 10 years

Date	Depth to WL (ft)	Elev of WL (ft)	Change (ft)
3/5/2007	18.30	6181.70	-0.42
2/12/2008	17.97	6182.03	0.33
1/1/2009			
2/23/2010	17.79	6182.21	
2/24/2011	18.50	6181.50	-0.71
4/23/2012	18.66	6181.34	-0.16
4/3/2013	19.18	6180.82	-0.52
5/19/2014	19.00	6181.00	0.18
3/30/2015	19.50	6180.50	-0.50
3/31/2016	18.28	6181.72	1.22
3/22/2017	18.29	6181.71	-0.01

All Historic Measurements



UPPER BIG SANDY

Well Name: **BSD-36**

Owner: LINDA GLOVER

Permit #: 16983 - S - *Location #:* SC01005807CD

USGS Site ID:

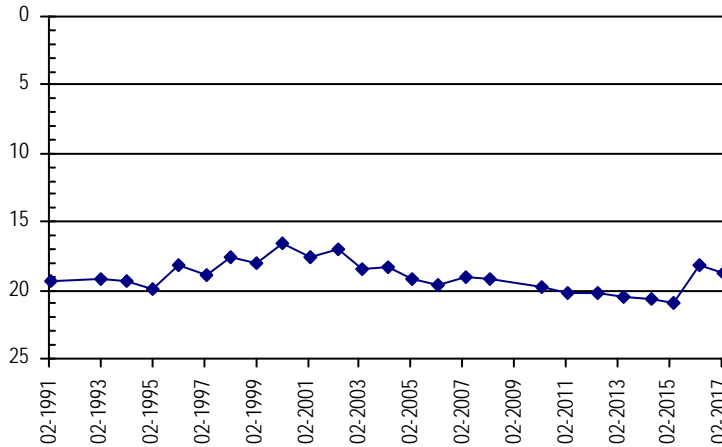
Division: 2 *Water District:* 67 *County:* ELBERT
Location: Q160 Q40 Q10 Section Twnshp Range PM Distance from section lines:
 SW SE 7 10 S 58 W S *From N/S line:* 751 S *From E/W line:* 2687 W
UTM Coordinates (NAD83): Northing (UTM y): 4338276.5 *Easting (UTM x):* 592443.5 *GPS*
Latitude/Longitude (decimal degrees): 39.188823 -103.929584

Surface Elevation (ft): 5733 *Top Perforated Interval (ft):* *Base of grout (ft):* **Water Level Change**
Well depth (ft): 60 *Bottom Perforated Interval (ft):* **1 year:** -0.62
Aquifer(s): QUATERNARY ALLUVIUM **5 year:** 1.51
10 year: 0.36

Measurements from last 10 years

Date	Depth to WL (ft)	Elev of WL (ft)	Change (ft)
3/5/2007	19.08	5713.92	0.53
2/13/2008	19.13	5713.87	-0.05
1/1/2009			
2/22/2010	19.70	5713.30	
2/24/2011	20.20	5712.80	-0.50
4/24/2012	20.23	5712.77	-0.03
4/3/2013	20.52	5712.48	-0.29
5/20/2014	20.57	5712.43	-0.05
3/31/2015	20.89	5712.11	-0.32
3/31/2016	18.10	5714.90	2.79
3/22/2017	18.72	5714.28	-0.62

All Historic Measurements



Well Name: **BSD-37**

Owner: LASATER RANCH

Permit #: - - *Location #:* SC01005816BB

USGS Site ID:

Division: 2 *Water District:* 67 *County:* ELBERT
Location: Q160 Q40 Q10 Section Twnshp Range PM Distance from section lines:
 NW NW 16 10 S 58 W S *From N/S line:* 1078 N *From E/W line:* 175 W
UTM Coordinates (NAD83): Northing (UTM y): 4337734.5 *Easting (UTM x):* 594977.4 *GPS*
Latitude/Longitude (decimal degrees): 39.183666 -103.900323

Surface Elevation (ft): 5740 *Top Perforated Interval (ft):* *Base of grout (ft):* **Water Level Change**
Well depth (ft): *Bottom Perforated Interval (ft):* **1 year:**
Aquifer(s): QUATERNARY ALLUVIUM **5 year:**
10 year:

Measurements from last 10 years

Date	Depth to WL (ft)	Elev of WL (ft)	Change (ft)
3/5/2007	42.62	5697.38	-0.49
2/12/2008	42.18	5697.82	0.44
1/1/2009			
2/22/2010	41.45	5698.55	
2/24/2011	43.39	5696.61	-1.94
4/24/2012	45.20	5694.80	-1.81
4/3/2013			
5/20/2014			
3/31/2015			

All Historic Measurements

