

GROUNDWATER LEVELS
in the
LOST CREEK
DESIGNATED GROUND WATER BASIN
2015



by
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COLORADO
Division of Water Resources
Department of Natural Resources

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LOST CREEK DESIGNATED GROUND WATER BASIN 2015

This report contains groundwater level data collected from wells in the Lost Creek Designated Basin during the period from 2005 through 2015. Acquisition and publication of this information is a cooperative effort between the well owners, Lost Creek 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.

Water level measurements were collected from twenty-six wells in late January 2015. The locations of those wells and the extent of the alluvial aquifer are shown on the following map. GS-6 was removed from the monitoring program this year as access has been lost due to a new pump installation. LC-9 has been added to the program to expand the southern coverage. Well N-1, included in previous reports, will now be included in the Lower South Platte monitoring network.

Previous work in the basin (Topper, 2011) suggests that analysis of groundwater levels by sub-regions is appropriate. Water level measurements are typically recorded in the winter or spring of each year. The 2015 water levels produced the following general conclusions:

North Area: North of Roggen/I-76 to Hwy 34

- Depth to water generally ranges from 5 to 45 feet. Water levels were relatively stable between 2014 and 2015. Longer term averages indicate a decline of approximately 2.5 feet over 5 years, and 3.5 feet over 10 years.

Middle Area: Between Roggen/I-76 and Prospect Valley/Hwy 52

- Depth to water generally ranges from 18 to 67 feet. Water levels both rose and dropped depending upon location between 2014 and 2015. Longer term averages indicate a decline of nearly 5 feet over 5 years, and 12 feet over 10 years.

South Area: South of Prospect Valley/Hwy 52 to 144th Avenue

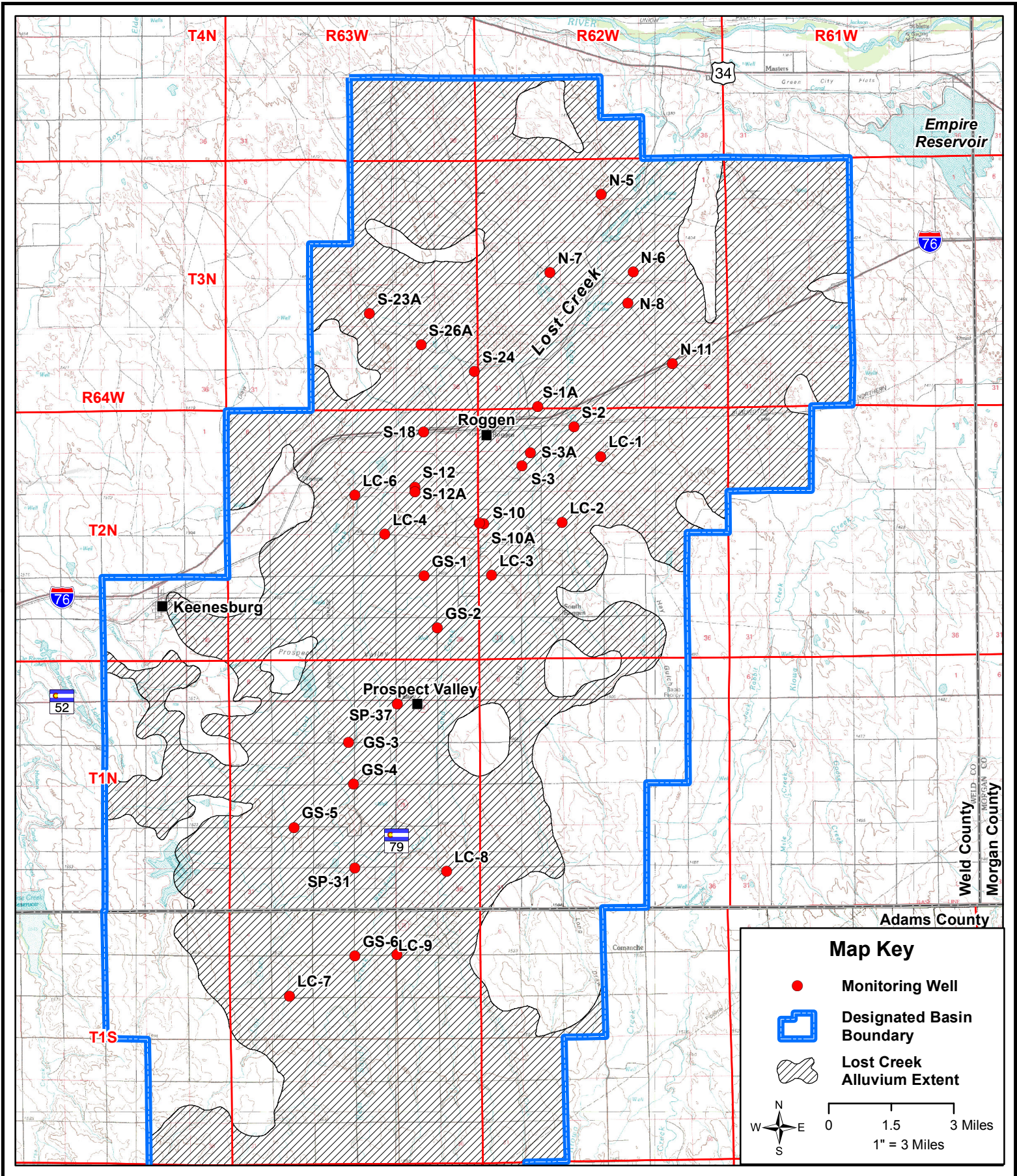
- Depth to water generally ranges from 42 to 119 feet. Water levels rose an average of 5 feet between 2014 and 2015. Longer term averages indicate a decline of 2 feet over 5 years, and 5 feet over 10 years.

On average, groundwater levels in wells measured by the Division of Water Resources were up by 0.7 feet compared to 2014. The medium term, 5-year trend, showed an average decline of -3.8 feet. Over the long term, 10-year trend, all wells exhibited a decline within the basin with the average being -5.8 feet. To assist stakeholders in evaluating groundwater flow directions and gradients we include a water table elevation map compiled from Spring 2010 that was produced for the basin's 2011 recharge and storage study.

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/Pages/HydroGeo.aspx>. Additionally, all groundwater level data may be accessed and exported using the tools available on the Colorado Decision Support System website: <http://cdss.state.co.us/onlineTools/Pages/GroundWaterWaterLevels.aspx>

Hardcopy reports may be obtained from the Colorado Division of Water Resources, Public Records Section at 1313 Sherman Street, Room 818, Denver, CO 80203.

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

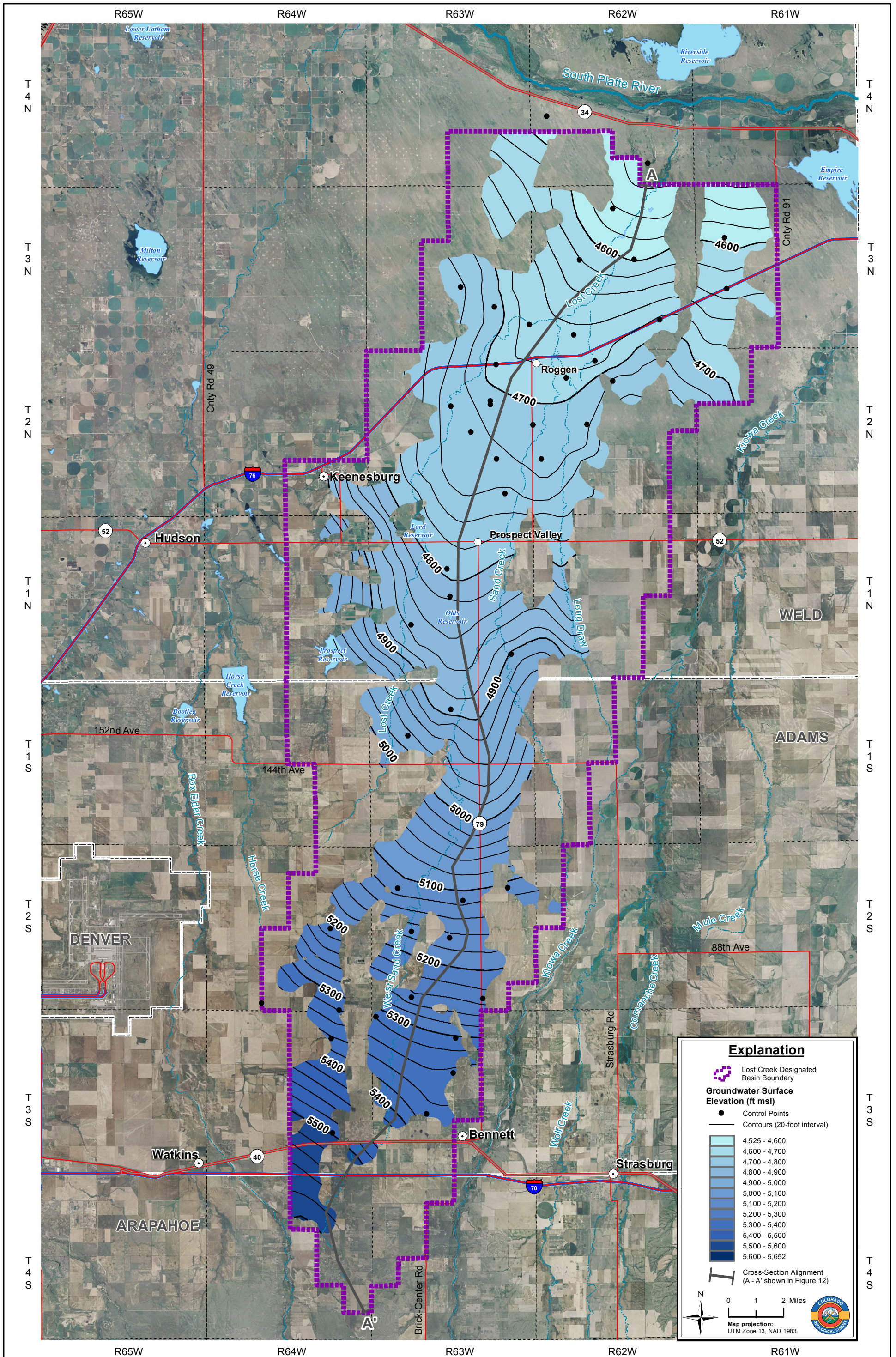


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State of Colorado -- Division of Water Resources
**Lost Creek Designated Basin
 Monitoring Well Locations**

5/28/2015

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**Alluvial Groundwater Elevation - Spring 2010
Lost Creek Basin Aquifer Recharge and Storage Study**

Figure 11

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LOST CREEK

Well Name: S-18 **Owner:** COLORADO DEPARTMENT OF TRANSPOR
Permit #: - - **Location #:** SB00206302DBA **USGS Site ID:**

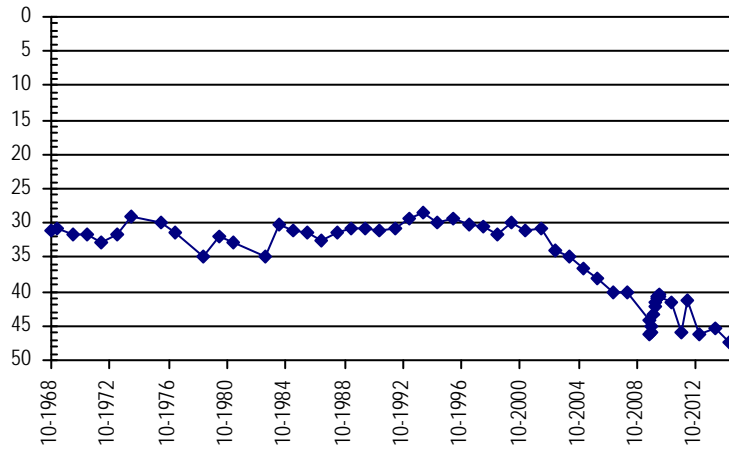
Division: 1 **Water District:** 1 **County:** WELD
Location: Q160 Q40 Q10 Section Twtnshp Range PM Distance from section lines:
 SE NW NE 2 2 N 63 W S **From N/S line:** **From E/W line:**
UTM Coordinates (NAD83): **Northing (UTM y):** 4446449.3 **Easting (UTM x):** 551027.6
Latitude/Longitude (decimal degrees): 40.166859 -104.400746

Surface Elevation (ft): 4737.42 **Top Perforated Interval (ft):** **Base of grout (ft):** **Water Level Change**
Well depth (ft): **Bottom Perforated Interval (ft):** **1 year:** -2.08
Aquifer(s): QUATERNARY ALLUVIUM **5 year:** -5.86
10 year: -10.72

Measurements from last 10 years

Date	Depth to WL (ft)	Elev of WL (ft)	Change (ft)
2/15/2005	36.61	4700.81	-1.69
2/7/2006	38.08	4699.34	-1.47
3/21/2007	40.19	4697.23	-2.11
2/26/2008	40.22	4697.20	-0.03
7/20/2009	44.24	4693.18	-4.02
8/24/2009	46.33	4691.09	-2.09
9/24/2009	45.82	4691.60	0.51
10/23/2009	44.95	4692.47	0.87
11/24/2009	43.40	4694.02	1.55
12/22/2009	42.28	4695.14	1.12
1/27/2010	41.47	4695.95	0.81
2/10/2010	41.05	4696.37	0.42
2/26/2010	40.79	4696.63	0.26
3/31/2010	40.52	4696.90	0.27
4/28/2010	40.57	4696.85	-0.05
2/22/2011	41.49	4695.93	-0.92
11/1/2011	45.90	4691.52	-4.41
4/5/2012	41.29	4696.13	4.61
1/28/2013	46.30	4691.12	-5.01
3/4/2014	45.25	4692.17	1.05
1/27/2015	47.33	4690.09	-2.08

All Historic Measurements



LOST CREEK

Well Name: N-5

Owner: ROSS SEYFRIED

Permit #: - -

Location #: SB00306203CCC

USGS Site ID:

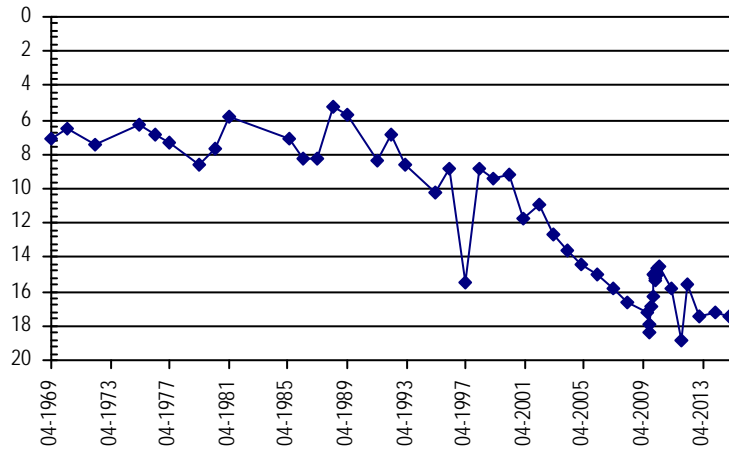
Division: 1 *Water District:* 1 *County:* WELD
Location: Q160 Q40 Q10 Section *Twtnshp* *Range* *PM* *Distance from section lines:*
 SW SW SW 3 3 N 62 W S *From N/S line:* *From E/W line:*
UTM Coordinates (NAD83): *Northing (UTM y)* 4455609.0 *Easting (UTM x):* 557885.3
Latitude/Longitude (decimal degrees): 40.248932 -104.319391

Surface Elevation (ft): 4592 *Top Perforated Interval (ft):* *Base of grout (ft):* **Water Level Change**
Well depth (ft): *Bottom Perforated Interval (ft):* **1 year:** -0.27
Aquifer(s): QUATERNARY ALLUVIUM **5 year:** -2.03
 10 year: -2.97

Measurements from last 10 years

Date	Depth to WL (ft)	Elev of WL (ft)	Change (ft)
2/15/2005	14.46	4577.54	-0.84
2/7/2006	14.97	4577.03	-0.51
3/21/2007	15.79	4576.21	-0.82
2/26/2008	16.61	4575.39	-0.82
7/20/2009	17.18	4574.82	-0.57
8/24/2009	18.36	4573.64	-1.18
9/24/2009	17.85	4574.15	0.51
10/23/2009	16.91	4575.09	0.94
11/24/2009	16.27	4575.73	0.64
12/22/2009	15.01	4576.99	1.26
1/27/2010	15.40	4576.60	-0.39
2/10/2010	15.22	4576.78	0.18
2/26/2010	15.05	4576.95	0.17
3/31/2010	14.70	4577.30	0.35
4/28/2010	14.57	4577.43	0.13
2/22/2011	15.78	4576.22	-1.21
11/1/2011	18.78	4573.22	-3.00
4/5/2012	15.56	4576.44	3.22
1/28/2013	17.45	4574.55	-1.89
3/4/2014	17.16	4574.84	0.29
1/27/2015	17.43	4574.57	-0.27

All Historic Measurements



LOST CREEK

Well Name: LC-9 **Owner:** SOUTH ADAMS COUNTY WATER & SANITA
Permit #: 14861 - RFP - **Location #:** SC00106302CC **USGS Site ID:**

Division: 1 **Water District:** 1 **County:** ADAMS
Location: Q160 Q40 Q10 Section Twnshp Range PM Distance from section lines:
 SW SW 2 1 S 63 W S **From N/S line:** **From E/W line:**
UTM Coordinates (NAD83): Northing (UTM y) 4426237.0 Easting (UTM x): 550006.3
Latitude/Longitude (decimal degrees): 39.984823 -104.414301

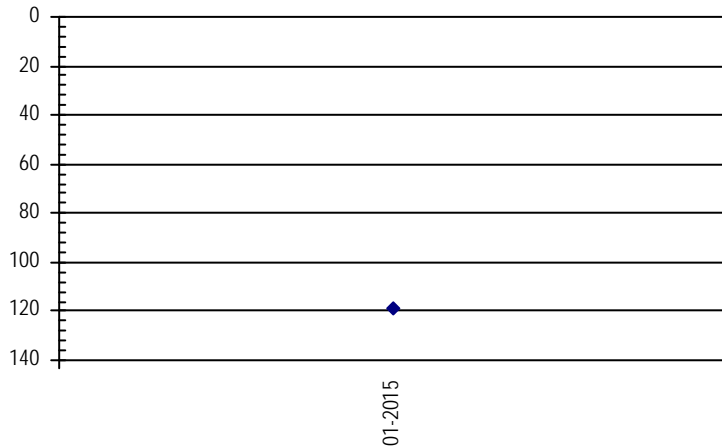
Surface Elevation (ft): **Top Perforated Interval (ft):** **Base of grout (ft):** **Water Level Change**
Well depth (ft): 182 **Bottom Perforated Interval (ft):**
Aquifer(s):

1 year:
5 year:
10 year:

Measurements from last 10 years

Date	Depth to WL (ft)	Elev of WL (ft)	Change (ft)
1/28/2015	118.73		

All Historic Measurements



Well Name: LC-7 **Owner:** JOHN SAUTER
Permit #: - - **Location #:** SC00106308CD **USGS Site ID:**

Division: 1 **Water District:** 1 **County:** ADAMS
Location: Q160 Q40 Q10 Section Twnshp Range PM Distance from section lines:
 SW SE 8 1 S 63 W S **From N/S line:** **From E/W line:**
UTM Coordinates (NAD83): Northing (UTM y) 4424655.0 Easting (UTM x): 545855.0
Latitude/Longitude (decimal degrees): 39.970806 -104.463033

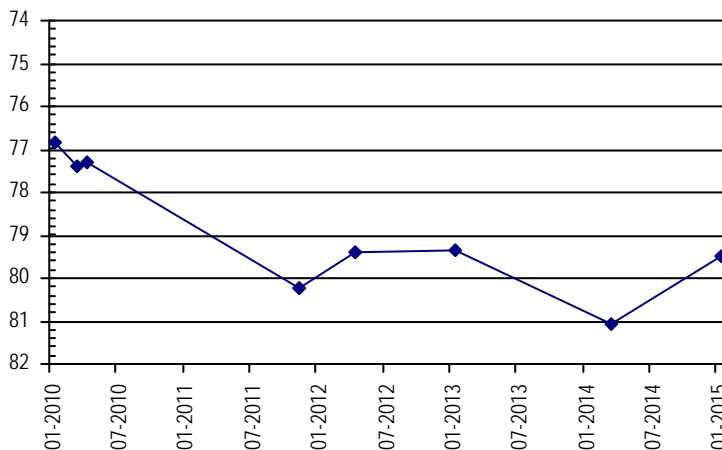
Surface Elevation (ft): 5042 **Top Perforated Interval (ft):** **Base of grout (ft):** **Water Level Change**
Well depth (ft): 103 **Bottom Perforated Interval (ft):**
Aquifer(s): QUATERNARY ALLUVIUM

1 year: 1.60
5 year: -2.64
10 year:

Measurements from last 10 years

Date	Depth to WL (ft)	Elev of WL (ft)	Change (ft)
1/14/2010	76.84	4965.16	
3/31/2010	77.41	4964.59	-0.57
4/28/2010	77.29	4964.71	0.12
11/17/2011	80.23	4961.77	-2.94
4/5/2012	79.40	4962.60	0.83
1/28/2013	79.35	4962.65	0.05
3/5/2014	81.08	4960.92	-1.73
1/28/2015	79.48	4962.52	1.60

All Historic Measurements



LOST CREEK

Well Name: **GS-6** **Owner:** JOHN KILPATRICK
Permit #: 14856 - R - **Location #:** SC00106310BBB **USGS Site ID:** 395904104252901

Division: 1 **Water District:** 1 **County:** ADAMS
Location: Q160 Q40 Q10 Section Twnshp Range PM Distance from section lines:
NW NW NW 10 1 S 63 W S **From N/S line:** **From E/W line:**
UTM Coordinates (NAD83): **Northing (UTM y)** 4426200.9 **Easting (UTM x):** 548372.0
Latitude/Longitude (decimal degrees): 39.984593 -104.433445

Surface Elevation (ft): 5008.8 **Top Perforated Interval (ft):** **Base of grout (ft):** **Water Level Change**
Well depth (ft): 180 **Bottom Perforated Interval (ft):**
Aquifer(s): QUATERNARY ALLUVIUM **1 year:**
5 year:
10 year:

Measurements from last 10 years

Date	Depth to WL (ft)	Elev of WL (ft)	Change (ft)
2/15/2005	118.22	4890.58	-0.81
2/7/2006	118.22	4890.58	0.00
3/21/2007	118.93	4889.87	-0.71
2/26/2008	119.59	4889.21	-0.66
7/20/2009	134.21	4874.59	-14.62
8/26/2009	137.58	4871.22	-3.37
9/25/2009	137.10	4871.70	0.48
10/23/2009	137.72	4871.08	-0.62
11/24/2009	132.59	4876.21	5.13
12/22/2009	139.43	4869.37	-6.84
1/27/2010	138.95	4869.85	0.48
2/10/2010	118.96	4889.84	19.99
2/26/2010	132.47	4876.33	-13.51
3/31/2010	125.96	4882.84	6.51
4/28/2010	118.64	4890.16	7.32
2/22/2011	118.53	4890.27	0.11
11/17/2011	118.90	4889.90	-0.37
4/5/2012	118.35	4890.45	0.55
1/28/2013	119.60	4889.20	-1.25
1/28/2015			

All Historic Measurements

