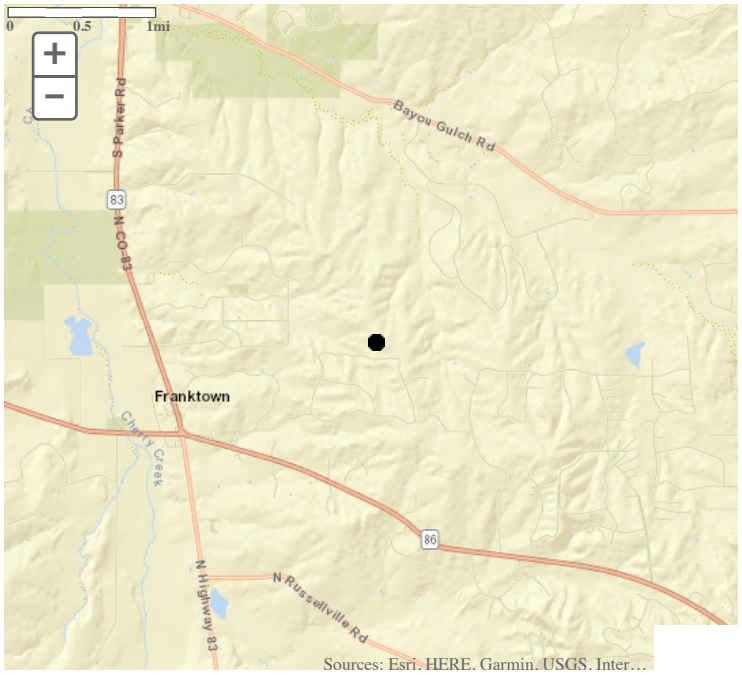
USGS science for a changing world

Groundwater Watch

Site Number: 392412104434201 - SC00706636AC UDAW 3



DESCRIPTION:
Latitude 39°24'00.07", Longitude 104°43'41.47" NAD83
Douglas County, Colorado, Hydrologic Unit 10190003
Well depth: 283 feet
Hole depth: 283 feet
Land surface altitude: 6,414.87feet above NAVD88.
Well completed in "Denver Basin aquifer system" (S300DNVRBS) national aquifer.
Well completed in "Dawson Arkose" (124DWSN) local aquifer

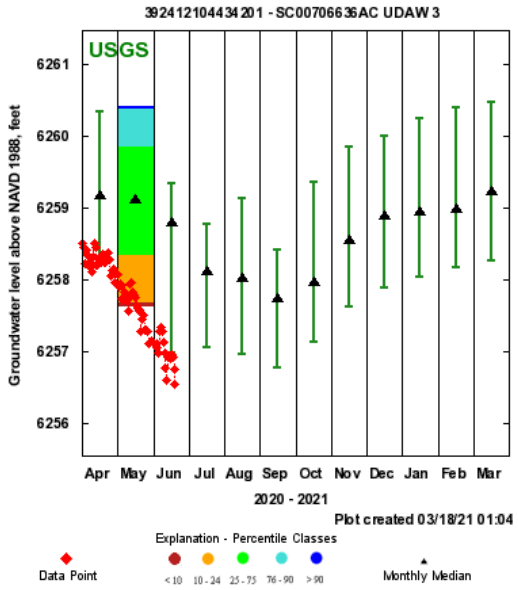
AVAILABLE DATA:

Data Type	Begin Date	End Date	Count
Current / Historical Observations	2011-10-14	2021-02-23	
Daily Data			
Groundwater level above NAVD 1988, feet	2011-10-15	2021-02-22	10254
Field groundwater-level measurements	2011-05-26	2021-02-23	44
Water-Year Summary	2014	2020	7

OPERATION:
Record for this site is maintained by the USGS Colorado Water Science Center
Email questions about this site to Colorado Water Science Center Water-Data Inquiries

Groundwater Watch Help Page

Site Statistics



Most recent data value: 157.16 on 2/23/2021
Period of Record Monthly Statistics for 392412104434201
Groundwater level above NAVD 1988, feet
All Approved Continuous & Periodic Data Used In Analysis
Note: Highlighted values in the table indicate closest statistic to the most recent data value.

Month	Lowest Median	10th %ile	25th %ile	50th %ile	75th %ile	90th %ile	Highest Median	Number of Years
Jan	6257.55	6257.6	6258.2	6258.76	6259.38	6260.18	6260.24	10
Feb	6257.72	6257.77	6258.46	6258.87	6259.59	6260.33	6260.39	10
Mar	6258.26	-	-	-	-	-	6260.47	9
Apr	6258.26	-	-	-	-	-	6260.34	9
May	6257.63	6257.7	6258.36	6259.11	6259.87	6260.39	6260.43	10
Jun	6256.89	-	-	-	-	-	6259.34	9
Jul	6256.36	-	-	-	-	-	6258.76	9
Aug	6256.12	6256.2	6257.1	6257.82	6258.34	6259.07	6259.13	10
Sep	6256.12	-	-	-	-	-	6258.42	9
Oct	6256.41	6256.48	6257.27	6257.84	6258.83	6259.32	6259.36	10
Nov	6257.04	6257.1	6257.81	6258.35	6259.19	6259.79	6259.85	10
Dec	6257.37	6257.42	6258.04	6258.66	6259.36	6259.96	6260	10

.As of 7/11/2021 10:18-M

Statistics Options

View month/year statistics

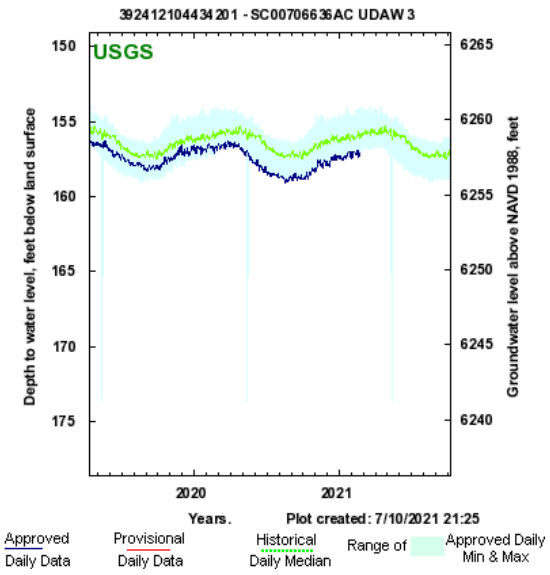
Daily Groundwater Data

Most recent Approved daily data value: 6,257.56 on 02/22/21

Summary for Period of Continuous Record
Groundwater level above NAVD 1988, feet
Approved Daily Maximum Values Data Used in Analysis

Begin Date	End Date	Days	% Complete
10/15/11	02/22/21	3,418	99
Min Level	**Mean**	**Max Level**	
6,241.20	6,258.44	6,260.88	

Daily Data Options



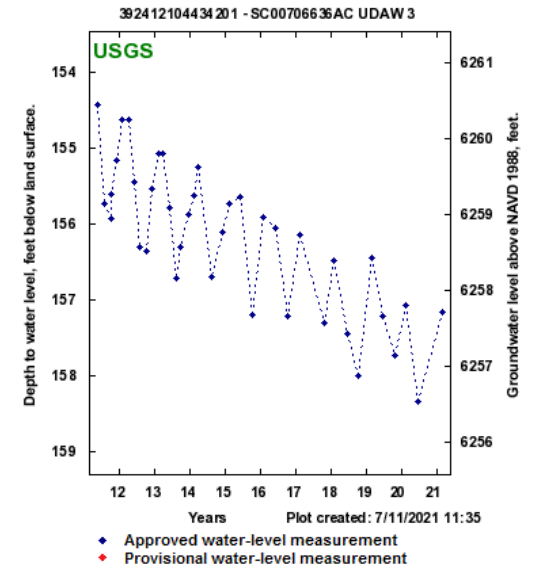
View latest data on NWISWeb

View data in calendar format

Download data in text format

View daily medians

Periodic Groundwater Data



Summary for Period of Record Periodic Water Levels

Depth to water level, feet below land surface

Approved Periodic Water Level Values

Begin Date	End Date	Number of Values
05/26/11	02/23/21	38

Highest WL	Date of Highest WL	Lowest WL	Date of Lowest WL
154.44	05/26/11	158.33	06/19/20

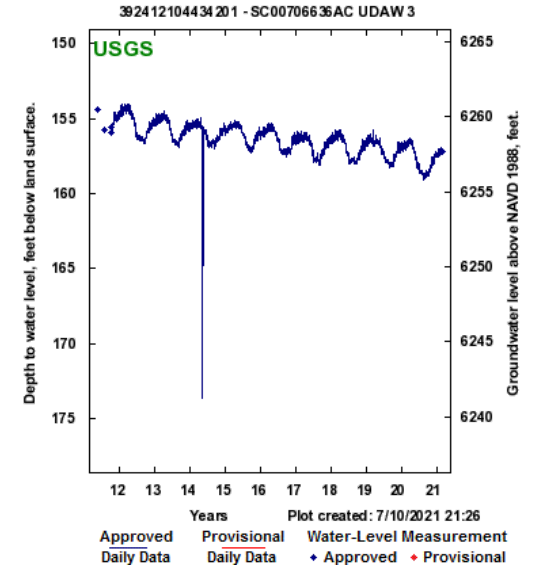
Groundwater Levels Options

View latest data on NWISWeb

Download groundwater levels in text format

Note: The most recent measurement on 02/23/2021 has the following status:
''

Period of Record - All Data Types



Summary for Period of Record - All Data Types

Groundwater level above NAVD 1988, feet

Begin Date	End Date	Number of Values
05/26/11	02/23/21	3,457

Lowest WL	Date of Lowest WL	Highest WL	Date of Highest WL
6241.2	05/14/14	6260.88	03/18/12

Period of Record Options

View latest data on NWISWeb for all data types

View month/year statistics

Download groundwater levels in text format of all data types

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URL: https://groundwaterwatch.usgs.gov/AWLSites.asp
Last update: Monday, March 8, 2021 at 15:43
Page Contact Information: Contact the GroundWater Watch Support Team

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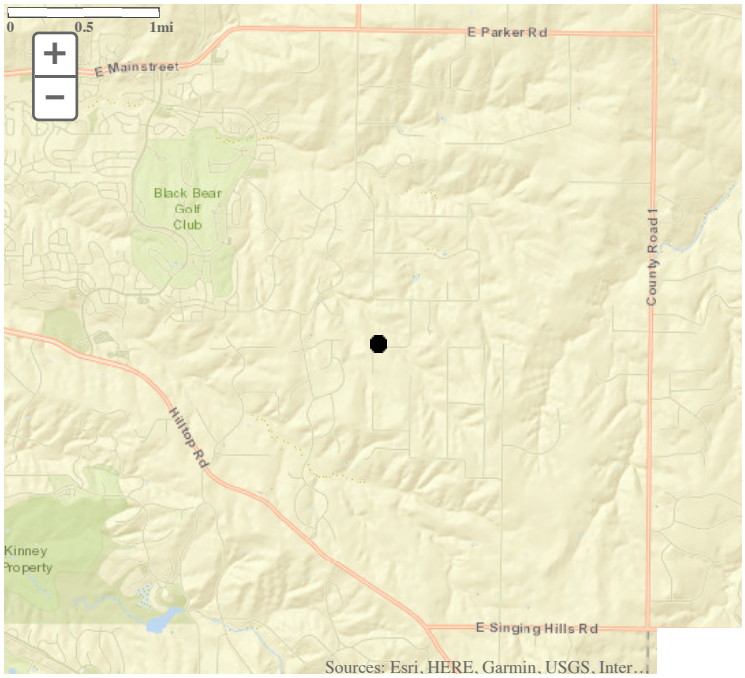
Groundwater Watch

Site Number: 392934104414901 - SC00606532BB UDAW 4



DESCRIPTION:
Latitude 39°29'28.68", Longitude 104°41'45.98" NAD83
Douglas County, Colorado, Hydrologic Unit 10190003
Well depth: 300 feet
Hole depth: 300 feet
Land surface altitude: 6,267.98feet above NAVD88.
Well completed in "Denver Basin aquifer system" (S300DNVRBS) national aquifer.
Well completed in "Dawson Arkose" (124DWSN) local aquifer

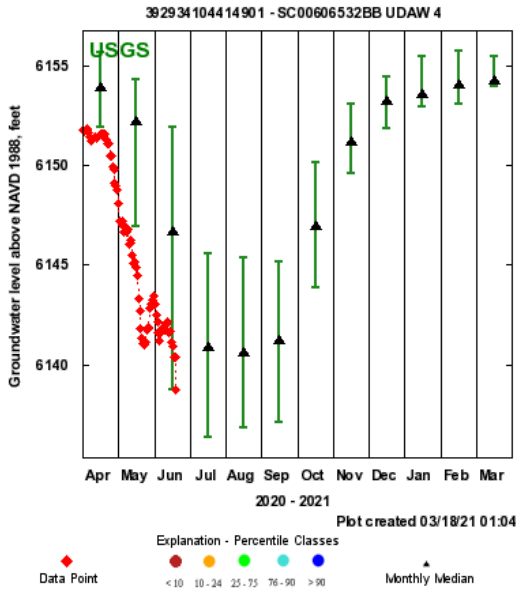
AVAILABLE DATA:

Data Type	Begin Date	End Date	Count
Current / Historical Observations	2011-10-14	2021-02-23	
Daily Data			
Groundwater level above NAVD 1988, feet	2011-10-15	2021-02-23	10259
Field groundwater-level measurements	2011-05-27	2021-02-23	45
Water-Year Summary	2014	2019	6

OPERATION:
Record for this site is maintained by the USGS Colorado Water Science Center
Email questions about this site to Colorado Water Science Center Water-Data Inquiries

Groundwater Watch Help Page

Site Statistics



Most recent data value: 6,150.18 on 2/23/2021
Period of Record Monthly Statistics for 392934104414901
Groundwater level above NAVD 1988, feet
All Approved Continuous & Periodic Data Used In Analysis
Note: Highlighted values in the table indicate closest statistic to the most recent data value.

Month	Lowest Median	10th %ile	25th %ile	50th %ile	75th %ile	90th %ile	Highest Median	Number of Years
Jan	6152.91	-	-	-	-	-	6155.45	9
Feb	6150.22	6150.51	6153.42	6153.97	6155.4	6155.74	6155.74	10
Mar	6153.94	-	-	-	-	-	6155.47	8
Apr	6151.91	-	-	-	-	-	6155.62	8
May	6146.92	-	-	-	-	-	6154.28	9
Jun	6138.74	-	-	-	-	-	6151.93	9
Jul	6136.33	-	-	-	-	-	6145.59	8
Aug	6136.84	-	-	-	-	-	6145.38	9
Sep	6137.12	-	-	-	-	-	6145.16	8
Oct	6143.86	-	-	-	-	-	6150.16	9
Nov	6149.55	-	-	-	-	-	6153.08	9
Dec	6151.84	-	-	-	-	-	6154.41	9

.As of 7/11/2021 10:18-M

Statistics Options

View month/year statistics

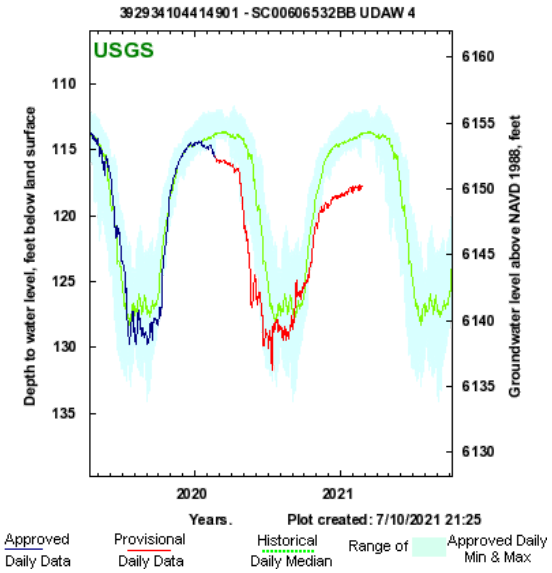
Daily Groundwater Data

Most recent Provisional daily data value: 6,150.18 on 02/23/21

Summary for Period of Continuous Record
Groundwater level above NAVD 1988, feet
Approved Daily Maximum Values Data Used in Analysis

Begin Date	End Date	Days	% Complete
10/15/11	02/20/20	3,051	100
Min Level	**Mean**	**Max Level**	
6,133.81	6,149.21	6,156.36	

Daily Data Options



View latest data on NWISWeb

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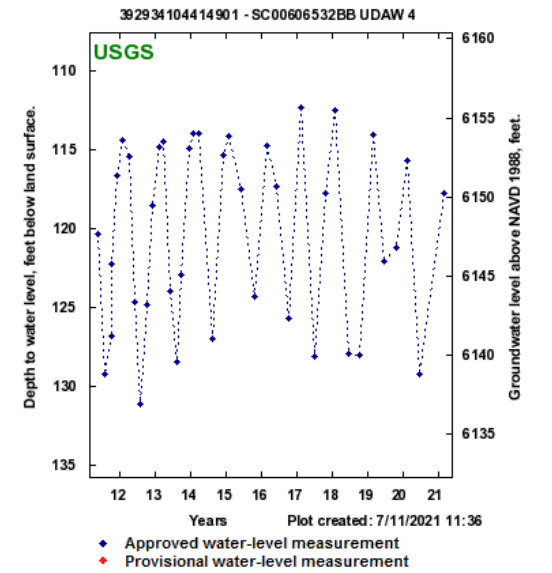
Download data in text format

View daily medians

Periodic Groundwater Data



Summary for Period of Record Periodic Water Levels
Depth to water level, feet below land surface
Approved Periodic Water Level Values

Begin Date	End Date	Number of Values
05/27/11	02/23/21	39

Highest WL	Date of Highest WL	Lowest WL	Date of Lowest WL
112.29	02/16/17	131.05	08/03/12

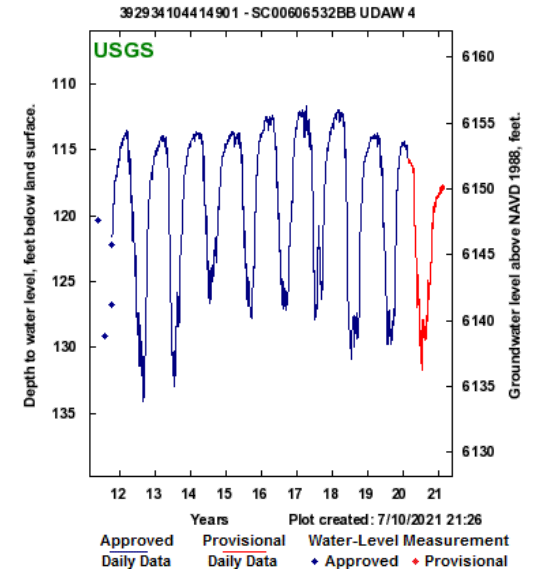
Groundwater Levels Options

View latest data on NWISWeb

Download groundwater levels in text format

Note: The most recent measurement on 02/23/2021 has the following status:
''

Period of Record - All Data Types



Summary for Period of Record - All Data Types
Groundwater level above NAVD 1988, feet

Begin Date	End Date	Number of Values
05/27/11	02/23/21	3,460

Lowest WL	Date of Lowest WL	Highest WL	Date of Highest WL
6133.81	09/03/12	6156.36	04/08/17

Period of Record Options

View latest data on NWISWeb for all data types

View month/year statistics

Download groundwater levels in text format of all data types

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*References to non-Department of the Interior (DOI) products do not constitute an endorsement by the DOI.

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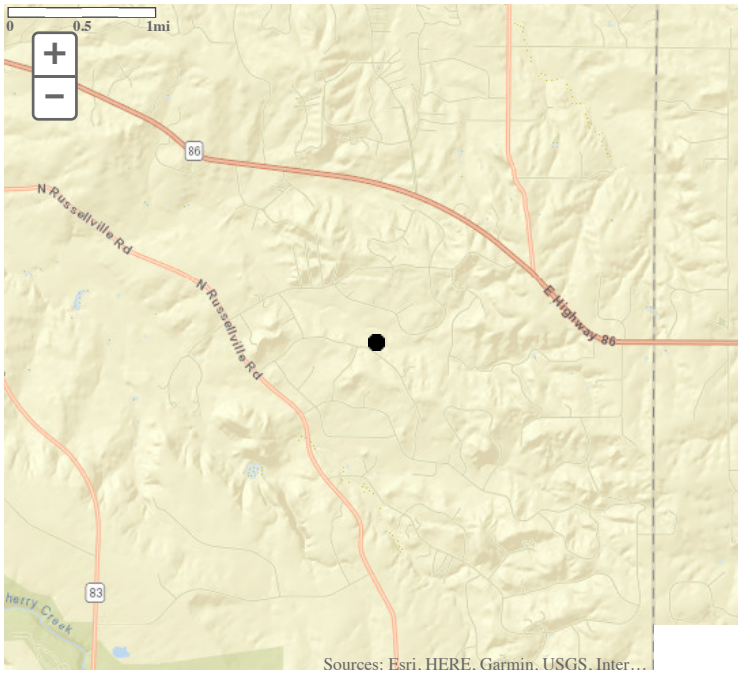
Groundwater Watch

Site Number: 392149104415501 - SC00806517BB UDAW 5



DESCRIPTION:
Latitude 39°21'42.84", Longitude 104°41'53.47" NAD83
Douglas County, Colorado, Hydrologic Unit 10190003
Well depth: 350 feet
Hole depth: 350 feet
Land surface altitude: 6,501.66feet above NAVD88.
Well completed in "Denver Basin aquifer system" (S300DNVRBS) national aquifer.
Well completed in "Dawson Arkose" (124DWSN) local aquifer

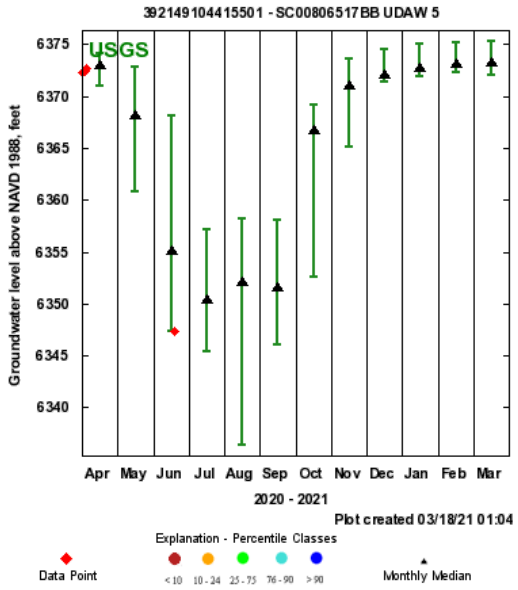
AVAILABLE DATA:

Data Type	Begin Date	End Date	Count
Current / Historical Observations	2011-10-14	2021-02-23	
Daily Data			
Groundwater level above NAVD 1988, feet	2011-10-15	2021-02-23	9595
Field groundwater-level measurements	2011-08-13	2021-02-23	44
Water-Year Summary	2014	2020	7

OPERATION:
Record for this site is maintained by the USGS Colorado Water Science Center
Email questions about this site to Colorado Water Science Center Water-Data Inquiries

Groundwater Watch Help Page

Site Statistics



Most recent data value: 6,370.83 on 2/23/2021
Period of Record Monthly Statistics for 392149104415501
Groundwater level above NAVD 1988, feet
All Approved Continuous & Periodic Data Used In Analysis
Note: Highlighted values in the table indicate closest statistic to the most recent data value.

Month	Lowest Median	10th %ile	25th %ile	50th %ile	75th %ile	90th %ile	Highest Median	Number of Years
Jan	6370.81	6370.92	6372.12	6372.67	6373.01	6374.9	6375.08	10
Feb	6370.86	6371.01	6372.43	6373.12	6373.53	6375.1	6375.23	10
Mar	6372.1	-	-	-	-	-	6375.37	9
Apr	6371.02	-	-	-	-	-	6374.13	9
May	6360.77	-	-	-	-	-	6372.81	8
Jun	6348.47	-	-	-	-	-	6368.2	9
Jul	6344.73	-	-	-	-	-	6357.2	9
Aug	6336.36	6336.92	6346.32	6351.46	6353.99	6357.83	6358.2	10
Sep	6346.11	-	-	-	-	-	6358.15	9
Oct	6352.62	6352.69	6356.74	6365.63	6368.07	6369.07	6369.17	10
Nov	6365.12	6365.41	6369.84	6370.88	6371.44	6373.4	6373.62	10
Dec	6369.97	6370.12	6371.56	6372.02	6372.16	6374.33	6374.56	10

As of 7/11/2021 10:18-M

Statistics Options

View month/year statistics

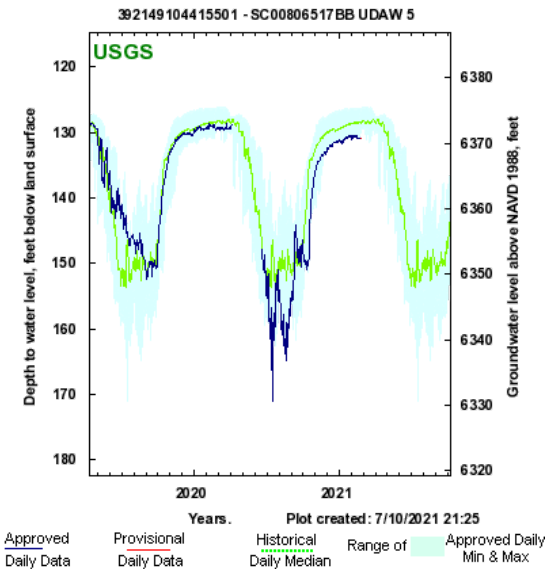
Daily Groundwater Data

Most recent Provisional daily data value: 6,370.83 on 02/23/21

Summary for Period of Continuous Record
Groundwater level above NAVD 1988, feet
Approved Daily Maximum Values Data Used in Analysis

Begin Date	End Date	Days	% Complete
10/15/11	02/22/21	3,320	97
Min Level	**Mean**	**Max Level**	
6,330.53	6,364.73	6,375.62	

Daily Data Options



View latest data on NWISWeb

View data in calendar format

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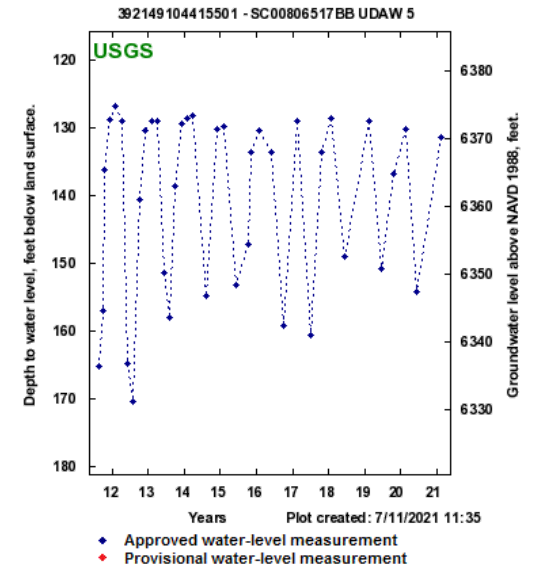
View daily medians

Periodic Groundwater Data



Summary for Period of Record Periodic Water Levels

Depth to water level, feet below land surface

Approved Periodic Water Level Values

Begin Date	End Date	Number of Values
08/13/11	02/23/21	38

Highest WL	Date of Highest WL	Lowest WL	Date of Lowest WL
126.72	02/01/12	170.35	07/27/12

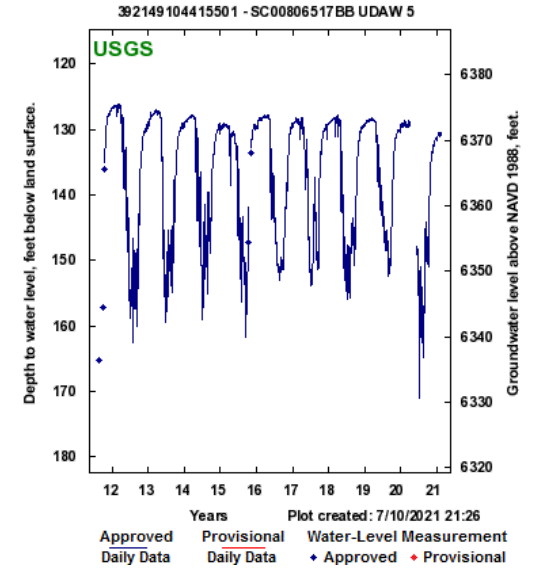
Groundwater Levels Options

View latest data on NWISWeb

Download groundwater levels in text format

Note: The most recent measurement on 02/23/2021 has the following status:
''

Period of Record - All Data Types



Summary for Period of Record - All Data Types

Groundwater level above NAVD 1988, feet

Begin Date	End Date	Number of Values
08/13/11	02/23/21	3,360

Lowest WL	Date of Lowest WL	Highest WL	Date of Highest WL
6330.53	07/17/20	6375.62	03/12/12

Period of Record Options

View latest data on NWISWeb for all data types

View month/year statistics

Download groundwater levels in text format of all data types

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URL: https://groundwaterwatch.usgs.gov/AWLSites.asp
Last update: Monday, March 8, 2021 at 15:43
Page Contact Information: Contact the GroundWater Watch Support Team

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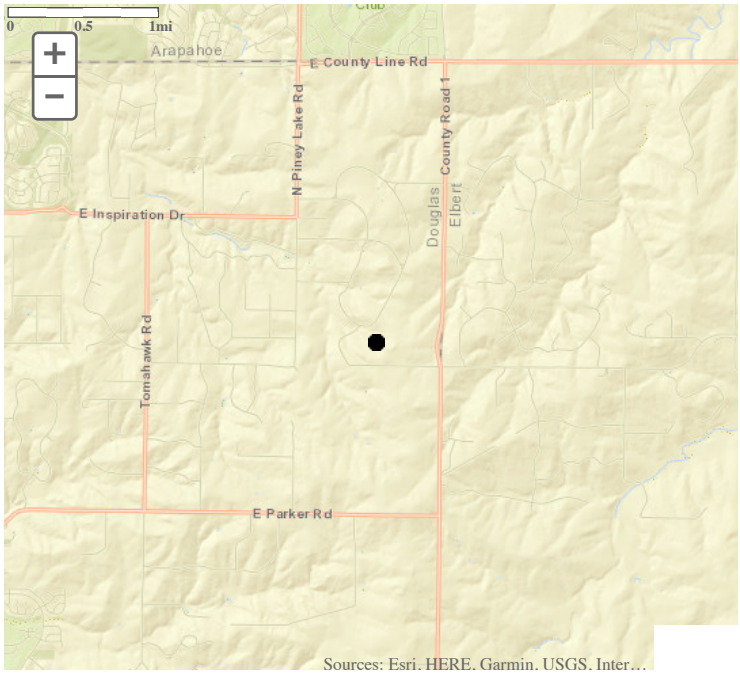
Groundwater Watch

Site Number: 393226104394401 - SC00606509DD UDAW 9



DESCRIPTION:
Latitude 39°32'18.18", Longitude 104°40'09.34" NAD83
Douglas County, Colorado, Hydrologic Unit 10190003
Well depth: 314 feet
Hole depth: 314 feet
Land surface altitude: 6,285.29feet above NAVD88.
Well completed in "Denver Basin aquifer system" (S300DNVRBS) national aquifer.
Well completed in "Dawson Arkose" (124DWSN) local aquifer

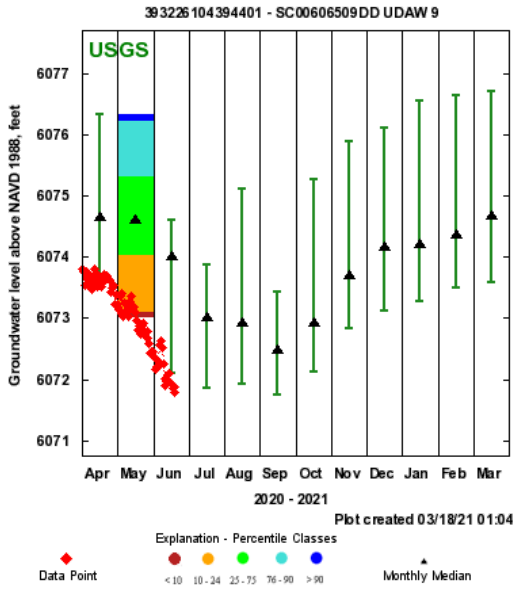
AVAILABLE DATA:

Data Type	Begin Date	End Date	Count
Current / Historical Observations	2011-10-14	2021-02-23	
Daily Data			
Groundwater level above NAVD 1988, feet	2011-10-15	2021-02-23	10208
Field groundwater-level measurements	2011-05-27	2021-02-23	47
Water-Year Summary	2014	2020	7

OPERATION:
Record for this site is maintained by the USGS Colorado Water Science Center
Email questions about this site to Colorado Water Science Center Water-Data Inquiries

Groundwater Watch Help Page

Site Statistics



Most recent data value: 6,072.77 on 2/23/2021
Period of Record Monthly Statistics for 393226104394401
Groundwater level above NAVD 1988, feet
All Approved Continuous & Periodic Data Used In Analysis
Note: Highlighted values in the table indicate closest statistic to the most recent data value.

Month	Lowest Median	10th %ile	25th %ile	50th %ile	75th %ile	90th %ile	Highest Median	Number of Years
Jan	6072.48	6072.56	6073.5	6074.1	6074.87	6076.41	6076.54	10
Feb	6072.69	6072.77	6073.84	6074.27	6075.12	6076.52	6076.63	10
Mar	6073.59	-	-	-	-	-	6076.7	9
Apr	6073.63	-	-	-	-	-	6076.33	9
May	6073.02	6073	6074	6074.61	6075.33	6076.25	6076.35	10
Jun	6071.93	-	-	-	-	-	6074.61	9
Jul	6071.19	-	-	-	-	-	6073.86	9
Aug	6070.81	6070.92	6071.95	6072.73	6073.16	6074.95	6075.12	10
Sep	6070.93	-	-	-	-	-	6073.4	9
Oct	6071.26	6071.35	6072.24	6072.9	6074.01	6075.18	6075.27	10
Nov	6071.98	6072.07	6073	6073.6	6074.37	6075.78	6075.89	10
Dec	6072.3	6072.4	6073.29	6073.91	6074.76	6076.01	6076.1	10

As of 7/16/2021 14:53-M

Statistics Options

View month/year statistics

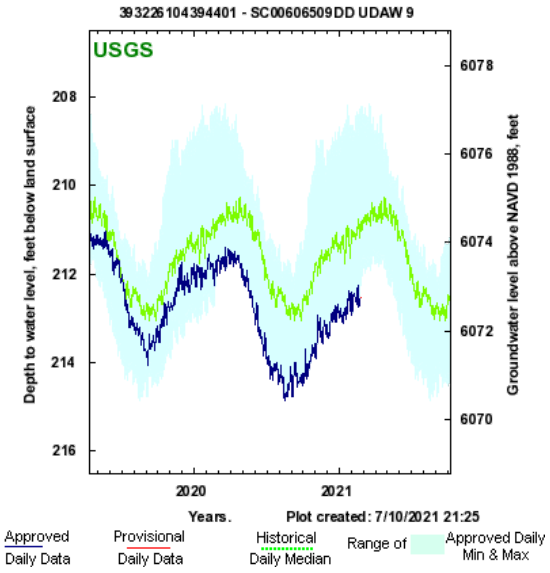
Daily Groundwater Data

Most recent Provisional daily data value: 6,072.77 on 02/23/21

Summary for Period of Continuous Record
Groundwater level above NAVD 1988, feet
Approved Daily Maximum Values Data Used in Analysis

Begin Date	End Date	Days	% Complete
10/15/11	02/22/21	3,402	99
Min Level	**Mean**	**Max Level**	
6,070.45	6,073.72	6,077.12	

Daily Data Options



View latest data on NWISWeb

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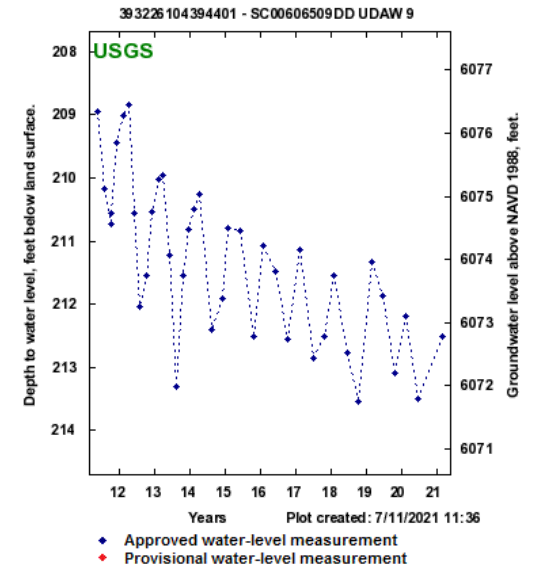
View daily medians

Periodic Groundwater Data



Summary for Period of Record Periodic Water Levels

Depth to water level, feet below land surface

Approved Periodic Water Level Values

Begin Date	End Date	Number of Values
05/27/11	02/23/21	39

Highest WL	Date of Highest WL	Lowest WL	Date of Lowest WL
208.85	04/04/12	213.53	10/04/18

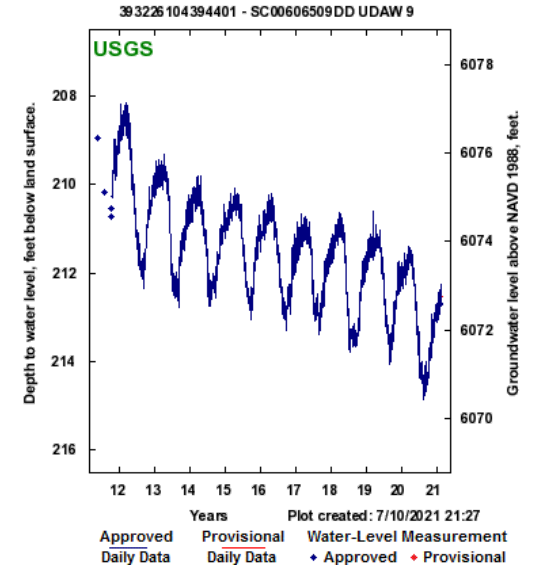
Groundwater Levels Options

View latest data on NWISWeb

Download groundwater levels in text format

Note: The most recent measurement on 02/23/2021 has the following status:
''

Period of Record - All Data Types



Summary for Period of Record - All Data Types

Groundwater level above NAVD 1988, feet

Begin Date	End Date	Number of Values
05/27/11	02/23/21	3,443

Lowest WL	Date of Lowest WL	Highest WL	Date of Highest WL
6070.45	08/18/20	6077.12	03/18/12

Period of Record Options

View latest data on NWISWeb for all data types

View month/year statistics

Download groundwater levels in text format of all data types

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*References to non-Department of the Interior (DOI) products do not constitute an endorsement by the DOI.

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URL: https://groundwaterwatch.usgs.gov/AWLSites.asp
Last update: Monday, March 8, 2021 at 15:43
Page Contact Information: Contact the GroundWater Watch Support Team

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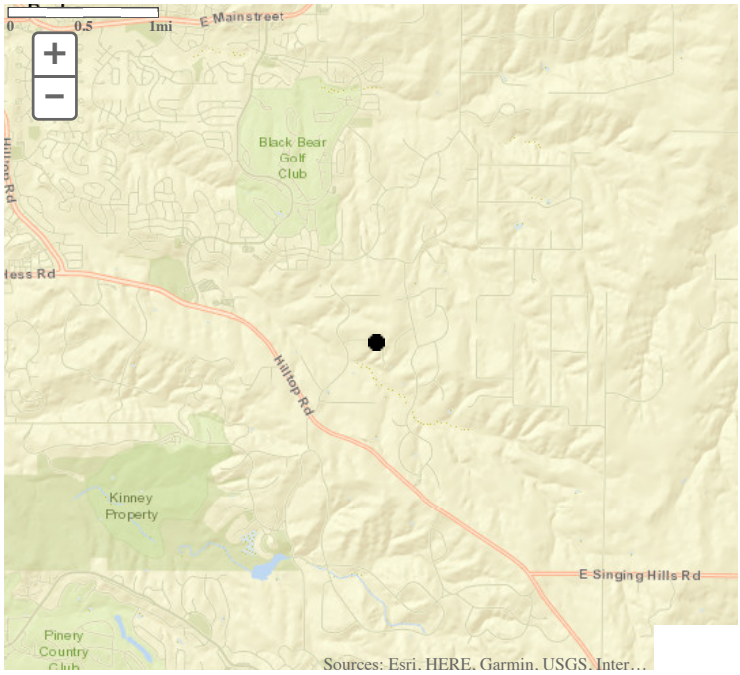
Groundwater Watch

Site Number: 392916104423601 - SC00606531BD UDAW 10



DESCRIPTION:
Latitude 39°29'10.65", Longitude 104°42'34.58" NAD83
Douglas County, Colorado, Hydrologic Unit 10190003
Well depth: 320 feet
Hole depth: 320 feet
Land surface altitude: 6,288.97feet above NAVD88.
Well completed in "Denver Basin aquifer system" (S300DNVRBS) national aquifer.
Well completed in "Dawson Arkose" (124DWSN) local aquifer

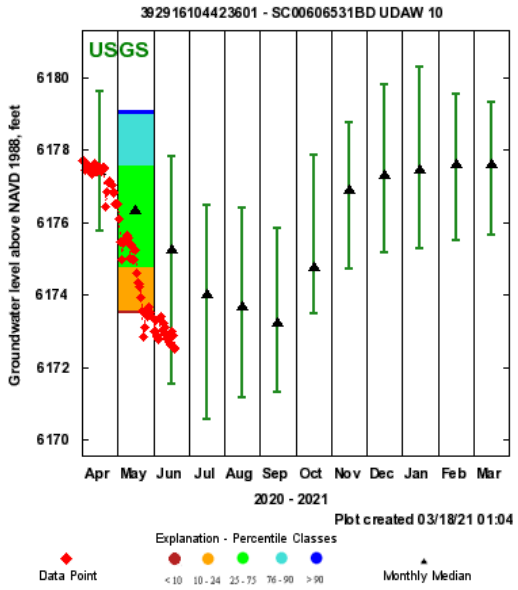
AVAILABLE DATA:

Data Type	Begin Date	End Date	Count
Current / Historical Observations	2011-08-27	2021-02-23	
Daily Data			
Groundwater level above NAVD 1988, feet	2011-08-28	2021-02-23	10391
Field groundwater-level measurements	2011-05-27	2021-02-23	46
Water-Year Summary	2014	2020	7

OPERATION:
Record for this site is maintained by the USGS Colorado Water Science Center
Email questions about this site to Colorado Water Science Center Water-Data Inquiries

Groundwater Watch Help Page

Site Statistics



Most recent data value: 6,176.19 on 2/23/2021
Period of Record Monthly Statistics for 392916104423601
Groundwater level above NAVD 1988, feet
All Approved Continuous & Periodic Data Used In Analysis
Note: Highlighted values in the table indicate closest statistic to the most recent data value.

Month	Lowest Median	10th %ile	25th %ile	50th %ile	75th %ile	90th %ile	Highest Median	Number of Years
Jan	6175.27	6175.3	6175.85	6176.95	6178.72	6180.19	6180.3	10
Feb	6175.5	6175.53	6176.07	6177.05	6178.39	6179.47	6179.54	10
Mar	6175.66	-	-	-	-	-	6179.33	9
Apr	6175.77	-	-	-	-	-	6179.61	9
May	6173.52	6173.6	6174.79	6176.34	6177.59	6179.03	6179.13	10
Jun	6171.54	-	-	-	-	-	6177.83	9
Jul	6170.55	-	-	-	-	-	6176.47	9
Aug	6170.19	6170.29	6171.33	6173.32	6174.22	6176.32	6176.39	10
Sep	6171.31	6171.32	6172.06	6173.18	6174.27	6175.83	6175.84	10
Oct	6171.97	6172.12	6173.7	6174.59	6176.4	6177.83	6177.85	10
Nov	6174.73	6174.76	6174.99	6176.36	6177.73	6178.76	6178.77	10
Dec	6175.18	6175.2	6175.61	6176.75	6178.4	6179.72	6179.79	10

.As of 7/11/2021 10:18-M

Statistics Options

View month/year statistics

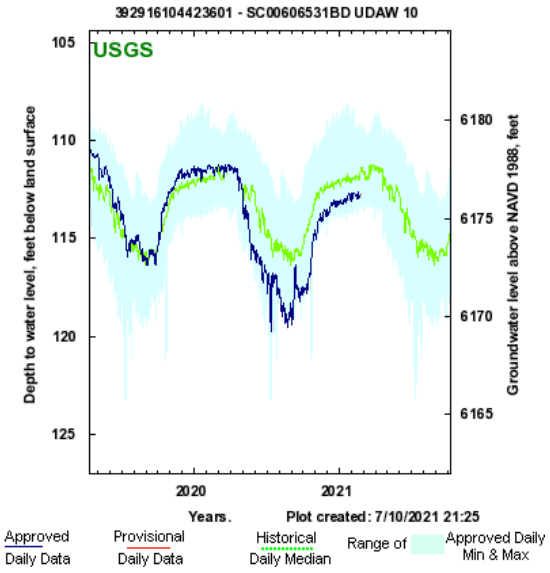
Daily Groundwater Data

Most recent Provisional daily data value: 6,176.19 on 02/23/21

Summary for Period of Continuous Record
Groundwater level above NAVD 1988, feet
Approved Daily Maximum Values Data Used in Analysis

Begin Date	End Date	Days	% Complete
08/28/11	02/22/21	3,463	99
Min Level	**Mean**	**Max Level**	
6,165.72	6,175.69	6,180.83	

Daily Data Options



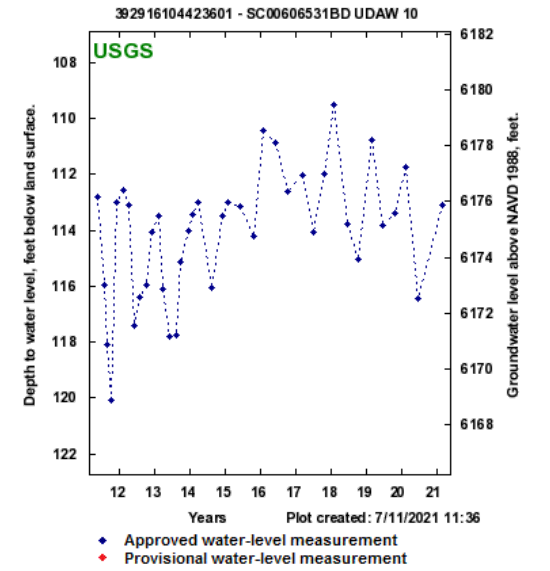
View latest data on NWISWeb

View data in calendar format

Download data in text format

View daily medians

Periodic Groundwater Data



Summary for Period of Record Periodic Water Levels

Depth to water level, feet below land surface

Approved Periodic Water Level Values

Begin Date	End Date	Number of Values
05/27/11	02/23/21	39

Highest WL	Date of Highest WL	Lowest WL	Date of Lowest WL
109.53	02/01/18	120.10	10/04/11

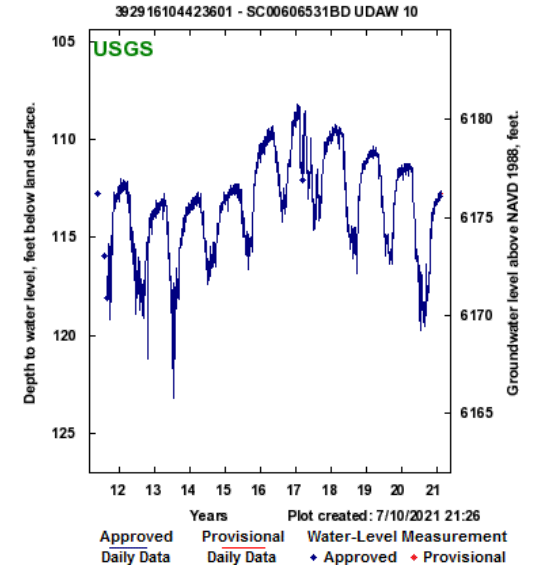
Groundwater Levels Options

View latest data on NWISWeb

Download groundwater levels in text format

Note: The most recent measurement on 02/23/2021 has the following status:
''

Period of Record - All Data Types



Summary for Period of Record - All Data Types

Groundwater level above NAVD 1988, feet

Begin Date	End Date	Number of Values
05/27/11	02/23/21	3,504

Lowest WL	Date of Lowest WL	Highest WL	Date of Highest WL
6165.72	07/11/13	6180.83	01/21/17

Period of Record Options

View latest data on NWISWeb for all data types

View month/year statistics

Download groundwater levels in text format of all data types

Return to Groundwater Watch | Return to County Page | Return to State Page

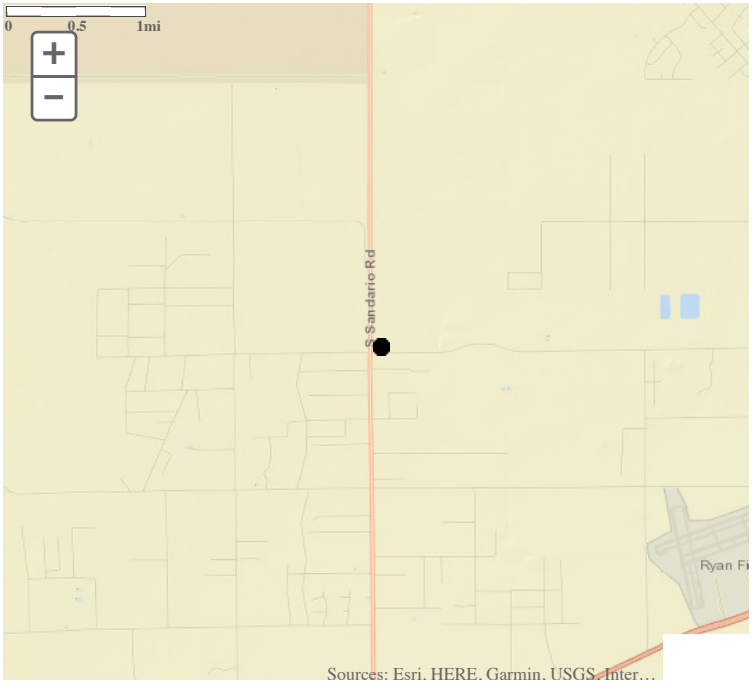
U.S. Department of the Interior | U.S. Geological Survey
URL: https://groundwaterwatch.usgs.gov/AWLSites.asp
Last update: Monday, March 8, 2021 at 15:43
Page Contact Information: Contact the GroundWater Watch Support Team

USGS science for a changing world

Groundwater Watch

Tuscon, AZ water well example

Site Number: 320944111125701 - D-14-11 34CCC [AV-025 A]



DESCRIPTION:
Latitude 32°09'44", Longitude 111°12'57" NAD27
Pima County, Arizona, Hydrologic Unit 15050304
Land surface altitude: 2,322feet above NGVD29.
Well completed in "Basin and Range basin-fill aquifers" (N100BSNRGB) national aquifer.

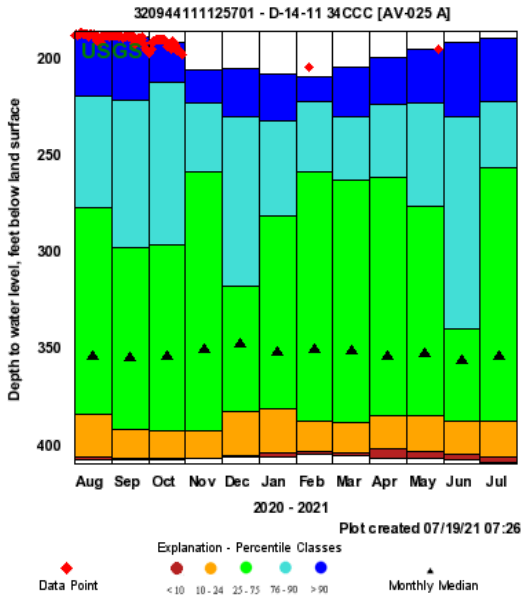
AVAILABLE DATA:

Data Type	Begin Date	End Date	Count
Current / Historical Observations	2007-10-01	2020-10-28	
Daily Data			
Depth to water level, feet below land surface	2002-09-30	2020-10-27	4333
Daily Statistics			
Depth to water level, feet below land surface	2002-09-30	2020-10-27	4239
Monthly Statistics			
Depth to water level, feet below land surface	2002-09	2020-10	
Annual Statistics			
Depth to water level, feet below land surface	2002	2021	
Field groundwater-level measurements	1954-01-03	2020-10-28	295
Water-Year Summary	2006	2018	13

OPERATION:
Record for this site is maintained by the USGS Arizona Water Science Center
Email questions about this site to Arizona Water Science Center Water-Data Inquiries

Groundwater Watch Help Page

Site Statistics



Most recent data value: 195.19 on 5/27/2021
Period of Record Monthly Statistics for 320944111125701
Depth to water level, feet below land surface
All Approved Continuous & Periodic Data Used In Analysis
Note: Highlighted values in the table indicate closest statistic to the most recent data value.

Month	Lowest Median	10th %ile	25th %ile	50th %ile	75th %ile	90th %ile	Highest Median	Number of Years
Jan	405.79	403.84	381.25	351.66	281.22	231.62	207.93	32
Feb	404.44	403.30	387.63	350.20	258.48	222.26	208.89	28
Mar	405.20	403.61	388.14	351.20	262.92	229.67	204.22	31
Apr	406.57	401.51	384.46	353.80	261.37	223.63	198.82	29
May	406.84	403.05	384.66	352.81	276.45	222.88	195.22	32
Jun	407.60	404.55	387.70	356.10	339.57	230.13	191.33	29
Jul	408.55	405.91	387.53	353.61	256.03	222.24	189.41	30
Aug	407.50	405.94	384.06	354.18	276.58	219.39	187.81	30
Sep	407.63	406.40	391.47	354.41	297.43	221.27	188.50	30
Oct	407.20	406.65	392.45	353.93	296.04	212.12	191.41	32
Nov	406.50	406.40	392.34	350.35	258.36	222.71	205.65	30
Dec	406.24	405.10	382.53	347.55	317.53	230.06	205.00	34

.As of 7/16/2021 14:09-2

Statistics Options

View month/year statistics

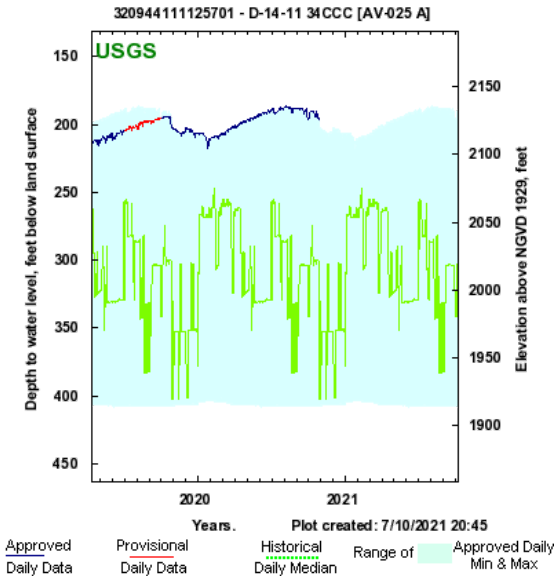
Daily Groundwater Data

Most recent Approved daily data value: 196.64 on 10/27/20

Summary for Period of Continuous Record
Depth to water level, feet below land surface
Approved Daily Mean Values Data Used in Analysis

Begin Date	End Date	Days	% Complete
09/30/02	10/27/20	4,239	64

Lowest Level	5th %ile	10th %ile	25th %ile	50th %ile	75th %ile	90th %ile	95th %ile	Highest Level
407.91	406.76	406.21	403.04	302.19	231.67	209.20	198.42	186.62



Daily Data Options

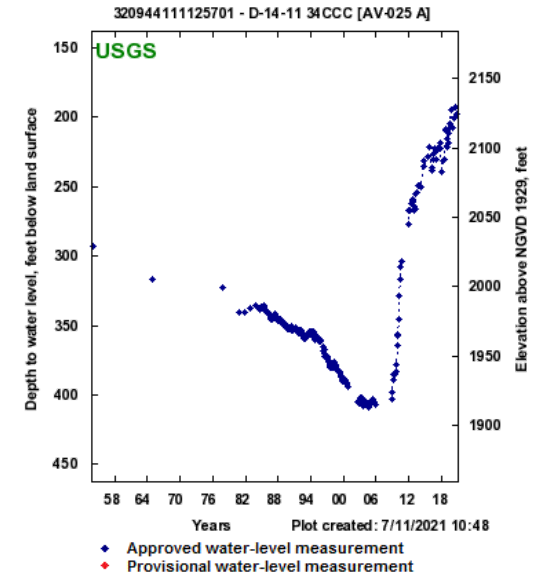
View latest data on NWISWeb

View data in calendar format

Download data in text format

View daily medians

Periodic Groundwater Data



Summary for Period of Record Periodic Water Levels
Depth to water level, feet below land surface
Approved Periodic Water Level Values

Begin Date	End Date	Number of Values
01/03/54	05/27/21	296

Highest WL	Date of Highest WL	Lowest WL	Date of Lowest WL
192.18	07/08/20	408.55	07/20/04

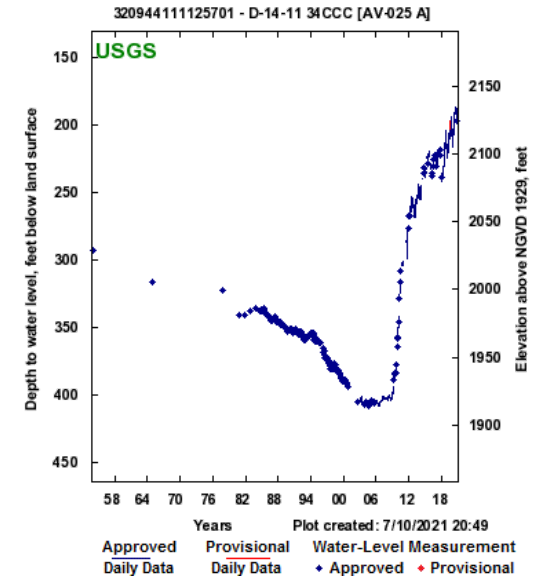
Groundwater Levels Options

View latest data on NWISWeb

Download groundwater levels in text format

Note: The most recent measurement on 05/27/2021 has the following status:
"

Period of Record - All Data Types



Summary for Period of Record - All Data Types
Depth to water level, feet below land surface

Begin Date	End Date	Number of Values
01/03/54	05/27/21	5,096

Highest WL	Date of Highest WL	Lowest WL	Date of Lowest WL
186.62	08/05/20	408.55	07/20/04

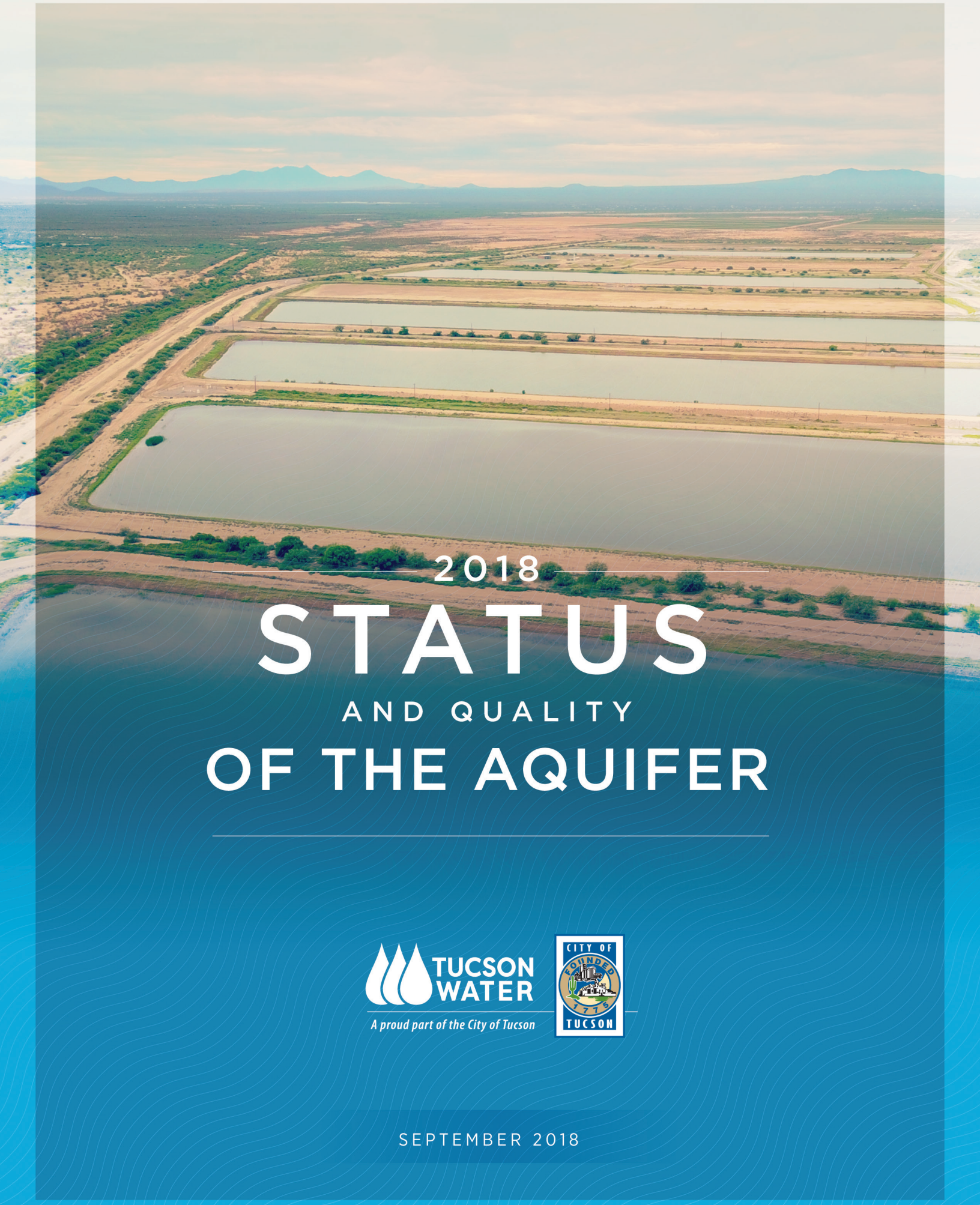
Period of Record Options

View latest data on NWISWeb for all data types

View month/year statistics

Download groundwater levels in text format of all data types

Return to Groundwater Watch | Return to County Page | Return to State Page



2018

STATUS AND QUALITY OF THE AQUIFER

TUCSON WATER

A proud part of the City of Tucson

CITY OF TUCSON FOUNDED 1775

SEPTEMBER 2018

Foreword

Tucson was once the largest American city solely reliant on groundwater to meet its water needs. The community benefited from large, clean, and highly productive aquifers that supported our evolution from a small town to a modern city. However, the water needs of Tucson began to outpace natural recharge by the 1940s, resulting in accelerating water level declines and measurable land subsidence. Tucson was not sustainable as a groundwater-only community and things needed to change.

In the 1980s, Tucson developed its reclaimed water system to begin the transition toward renewable water resources. In the early 1990s, our water future appeared to be secure with the introduction of Colorado River water delivered via the Central Arizona Project (CAP). This supply was abundant and could readily meet the community's demand, placing groundwater into a back-up status. Within two years, however, the direct delivery of CAP water was terminated due to pervasive water quality issues. As of 1998, Tucson was predominately reliant on groundwater again, water table elevations were at historic lows, and long-term sustainability was not yet a reality. These were the prevailing conditions when the original Status of the Aquifer report was prepared. In many ways, it was a call to action – and the Tucson community responded.

Since 1998, Tucson Water has retooled how we treat and deliver our Colorado River water supply, expanded our uses of reclaimed water, brought rain/stormwater into the water supply mix, and reduced our potable water use down to mid-1980s levels through conservation. These collective actions have reduced our reliance on groundwater, which now serves as only one part of a robust and diverse water supply portfolio. As a result, the Status of the Aquifer in 2018 is vastly improved, water reliability has been achieved, and Tucson's water future is sound. This report documents these transformations and reinforces the actions we need to continue into the future to keep Tucson thriving.

Timothy M. Thomure, PE, ENV SP
Director of Tucson Water
September 2018

RECHARGE BASINS, CENTRAL AND SOUTHERN AVRA VALLEY STORAGE AND RECOVERY PROJECTS (CAVSARP/SAVSARP)

Table of Contents

Introduction

PURPOSE: UPDATE 1998 STATUS OF THE AQUIFER

Tucson Water is the largest provider of drinking and reclaimed water for Tucson's urban population. Tucson Water's water supply is stored in the Tucson/Avra Valley Aquifer, so the status of the aquifer is important.

What is an aquifer?

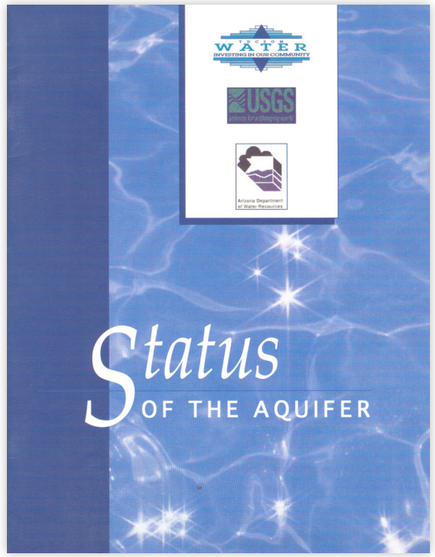
- A naturally-occurring rock or sediment basin that stores water
- Water stored in an aquifer can be pumped out, for delivery to customers

What is meant by the "Status of the Aquifer"?

- Quantity of water in the aquifer
- Depth to water
- Quality of water in the aquifer

Why is Tucson Water doing an update now?

- Conditions have significantly changed and improved since the 1998 report



1998 REPORT

Status of the Aquifer
1998

Groundwater Overdraft

Reliance on Groundwater
Falling Water Levels
Ground Subsidence

Status and Quality of the Aquifer
2018

Groundwater Recovery

Colorado River Water
Rising Water Levels
Ground Subsidence Slowed

INTRODUCTION AND OVERVIEW

Tucson Water Customer Service Area

ABOUT TUCSON WATER

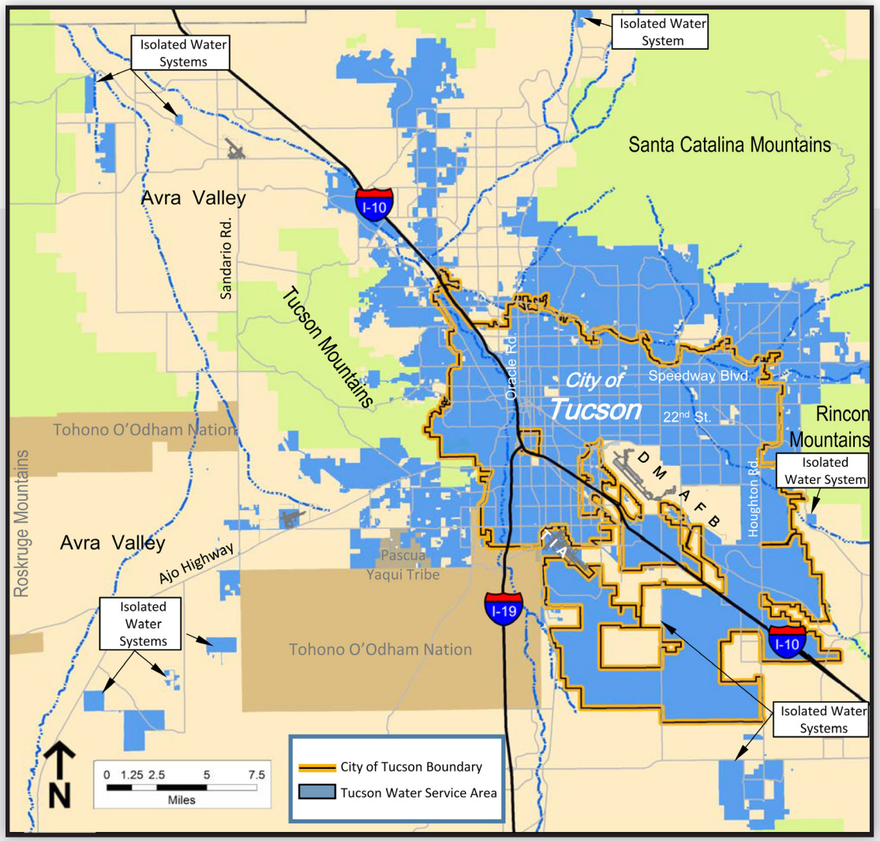
- Tucson Water is a department of the City of Tucson (COT)

What is the Tucson Water service area?

- Area in which Tucson Water provides water service to customers

Who are Tucson Water's customers?

- ~ 725,000 people (2017)
  - One main potable system
  - Nine smaller isolated potable systems
  - One main reclaimed water system
- 35% of customers are outside the COT boundaries



Overview 2018 Compared to 1998

IMPROVED AQUIFER STATUS, 2018

- Groundwater overdraft reversed and aquifer water levels rising in many areas of the aquifer
- Ground subsidence rates slowed or nearly halted in areas where groundwater overdraft is slowed or reversed

What is overdraft?
When water pumped out of the aquifer exceeds water put into (recharged to) the aquifer

What is ground subsidence?
The downward movement of the ground surface, caused by groundwater overdraft

What is renewable water?
Water that is replenished in a human time-scale, like a river that is fed by snowmelt. Groundwater is mostly non-renewable; it takes much longer to be replenished naturally than renewable water.

COLORADO RIVER WATER FLOWING INTO AVRA VALLEY RECHARGE BASIN

WATER SUSTAINABILITY GAINS, 2018

- **Main water supply is renewable water:** In 2018, Tucson Water's main water supply is Colorado River water. In 1998, it was groundwater pumped from the Central Well Field.
- **Reliable alternate supply:** If there are interruptions in the Colorado River water delivery system, Tucson Water can pump groundwater from the Central Well Field. In 1998, there was no alternate supply to pumping groundwater for potable use.
- **Storing water for our future:** Tucson Water has been storing available Colorado River water in the aquifer. If there is a shortage on the Colorado River system, Tucson Water is prepared to supplement its resources by pumping and delivering stored water.
- **Conservation and efficiency gains:** Tucson Water has several programs to help reduce water demand. Over time, the average per-person water demand has been decreasing.

Overview

GROUNDWATER

- Water stored in aquifer sediments
- Pumped from well fields

COLORADO RIVER WATER

- Surface water from the Colorado River delivered via the Central Arizona Project (CAP) canal
- Recharges aquifer in Avra Valley and at Pima Mine Road/I-19; pumped out near recharge basins
- Used at Groundwater Savings Facilities instead of pumping groundwater

REMEDIATED WATER

- Formerly contaminated groundwater, cleaned up to drinking water or higher standards
- From the TARP/AOP treatment facility (Tucson Airport Remediation Project/Advanced Oxidation Process)

RECYCLED WATER

- Water that is reused; one type, reclaimed water, is wastewater that has been treated to tertiary standards (high quality but not up to drinking water standards)
- From the City's Reclaimed Water Treatment Plant
- Reclaimed water is recharged at various recharge facilities

RAIN/STORMWATER

- Active systems
- Passive systems

Groundwater

Colorado River Water

Remediated Water

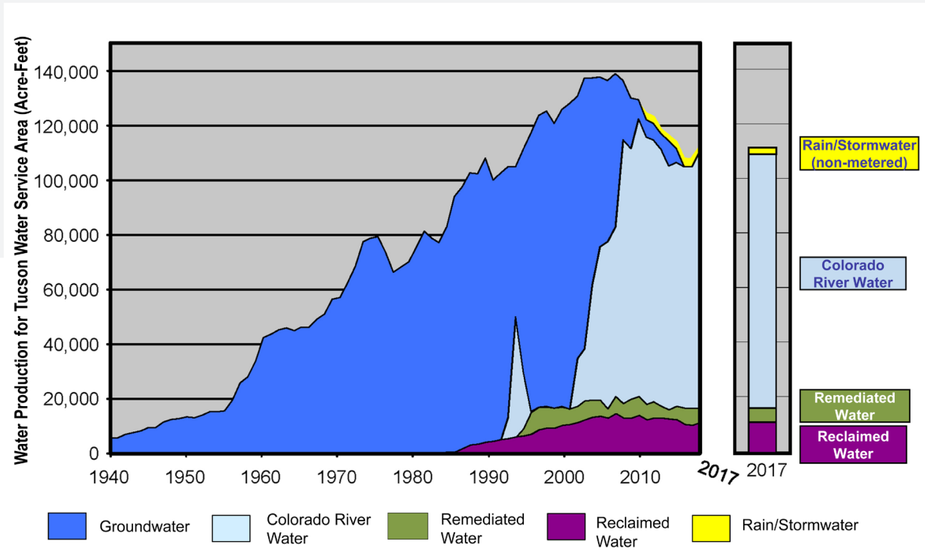
Recycled Water (Reclaimed Water)

Rain/Stormwater

Water Production in Acre-Feet, 1940-2017, Tucson Water

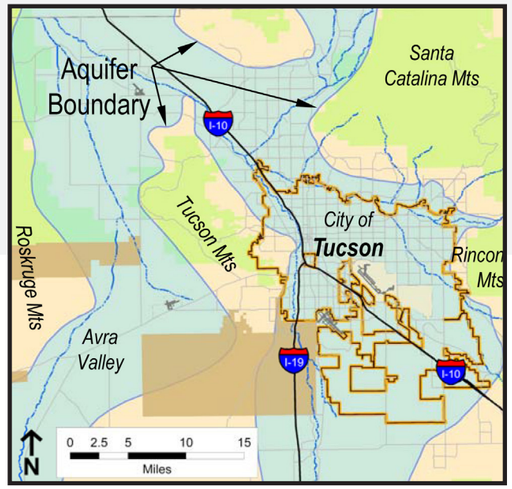
What is an acre-foot?

An acre-foot of water will cover an acre, or an area roughly the size of a football field, one foot deep. One acre-foot equals 325,851 gallons of water. This is enough water to supply approximately 4.5 Tucson households for one year, assuming an average water use of 800 cubic feet (8 Ccf) or about 6,000 gallons of water per month.

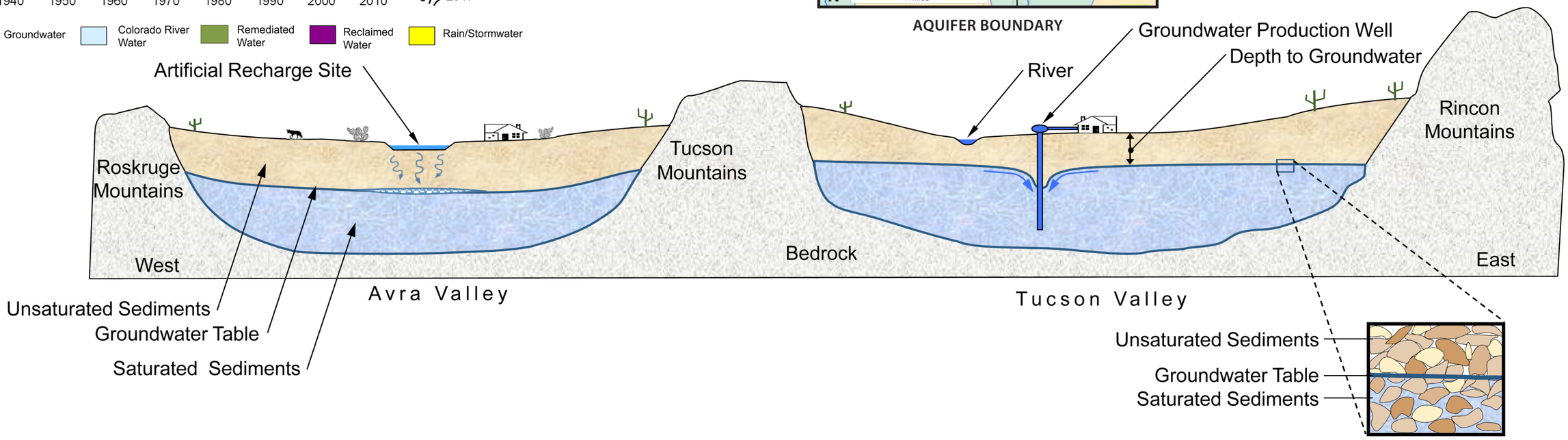


Tucson/Avra Valley Aquifer and Groundwater

The Tucson/Avra Valley Aquifer is a naturally-occurring sediment basin that stores water and releases it when pumped. Water in the aquifer – groundwater – has accumulated over thousands of years from snowmelt and rainfall percolating through the sediments. Tucson Water also now artificially recharges and stores additional water in the Tucson/Avra Valley Aquifer.



AQUIFER BOUNDARY



How We Get Colorado River Water

Colorado River water is shared among seven states and Mexico according to interstate agreements and international treaties, which also assign a priority to Colorado River water rights.

The four "upper basin" states are Colorado, Wyoming, Utah, and New Mexico. The three "lower basin" states are California, Arizona, and Nevada.

In Arizona, Colorado River water is delivered to the Phoenix, Pinal County, and Tucson areas via the Central Arizona Project (CAP) canal. Tucson's share of Colorado River water is piped from the CAP canal in Avra Valley to three large recharge basin projects *(see map, page 9)*:

- Central Avra Valley Storage and Recovery Project (CAVSARP)
- Southern Avra Valley Storage and Recovery Project (SAVSARP)
- Pima Mine Road Recharge Project (PMRRP)

CAP CANAL

COLORADO RIVER BASIN STATES

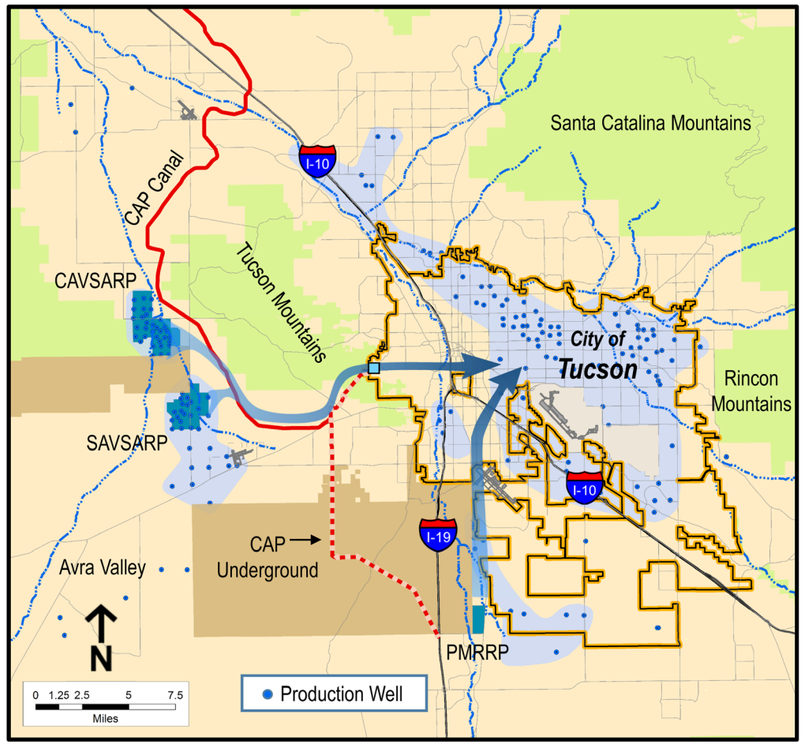
CAVSARP RECHARGE BASINS

BASIN INLET STRUCTURE

Using Colorado River Water: Recharge, Recover, Deliver

How does it work?

- Colorado River water in the recharge basins (CAVSARP, SAVSARP and PMRRP) percolates down to and recharges the aquifer
- Colorado River water blends with native groundwater in the aquifer
- The blended water is pumped out of (recovered from) the aquifer by local wells
- The water is delivered to customers via Tucson Water's distribution system, and is used for drinking and other municipal uses



Tucson Water began full-scale, long-term Colorado River water operations, including recharging Colorado River water, and recovering and delivering it to customers in May 2001.

Remediated Water

Where does it come from?

- Remediated water is formerly contaminated groundwater that comes from the TARP/AOP Treatment Facility (Tucson Airport Remediation Project/Advanced Oxidation Process) at I-19 and Irvington Road.
- TARP/AOP is part of the larger federal Superfund site near the Tucson International Airport. The treatment facility was largely funded by the original polluters.
- **1994** – Tucson Water began operating the TARP plant, which removes an industrial solvent (trichloroethylene or TCE) from the groundwater.
- **Since 2014** – Tucson Water operates the TARP/AOP Treatment Facility, which removes TCE and 1,4–dioxane (an emerging contaminant, see page 22) from the groundwater.

BENEFITS

- Removes pollutants from the aquifer and prevents the further spread of pollutants in the aquifer.
- Enables the use of groundwater that would otherwise not be suitable for drinking purposes. In 2017, TARP/AOP provided about 5% of our drinking water.

ULTRAVIOLET REACTORS

How does the TARP/AOP Treatment facility work?

- Contaminated water is pumped out of the ground and moved through a treatment system.
- The water is cleaned up to drinking water standards by saturating it with hydrogen peroxide, and running it through ultraviolet reactors to oxidize and remove compounds from water.
- After water quality testing, the remediated water is discharged from the treatment facility into Tucson Water's distribution system.
- Remediated water blends with other water in the distribution system and is delivered to customers.

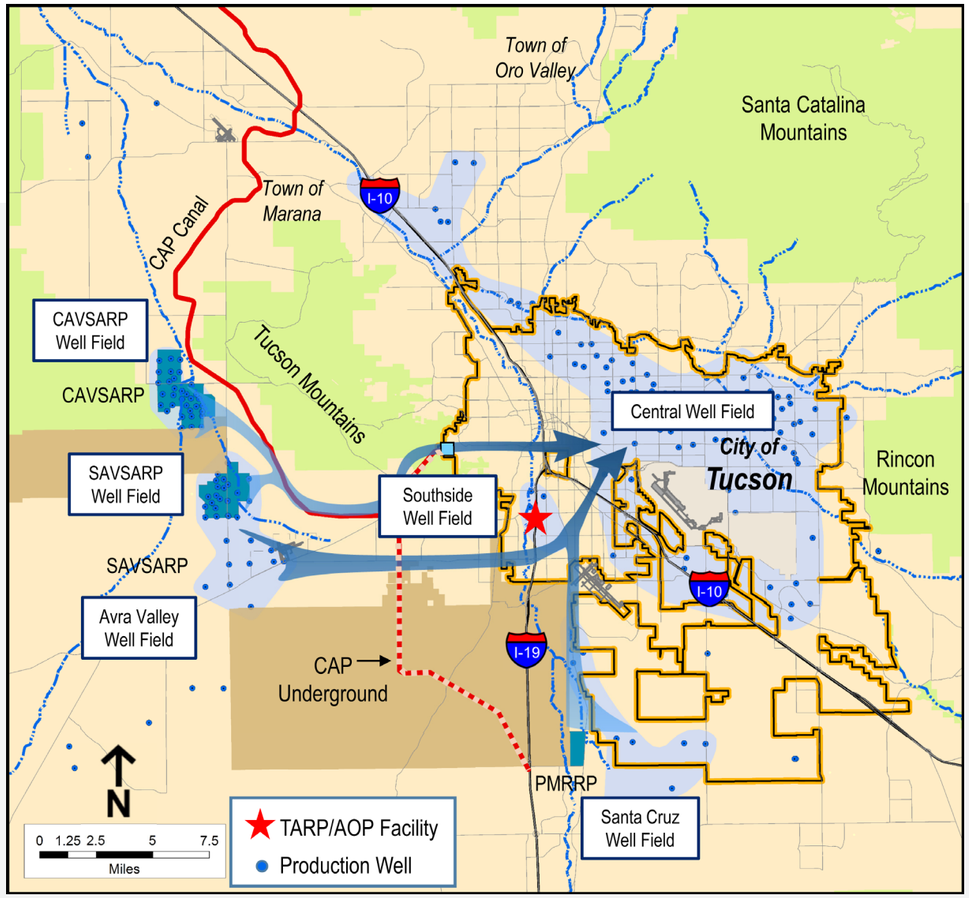
GRANULAR ACTIVATED CARBON TANKS

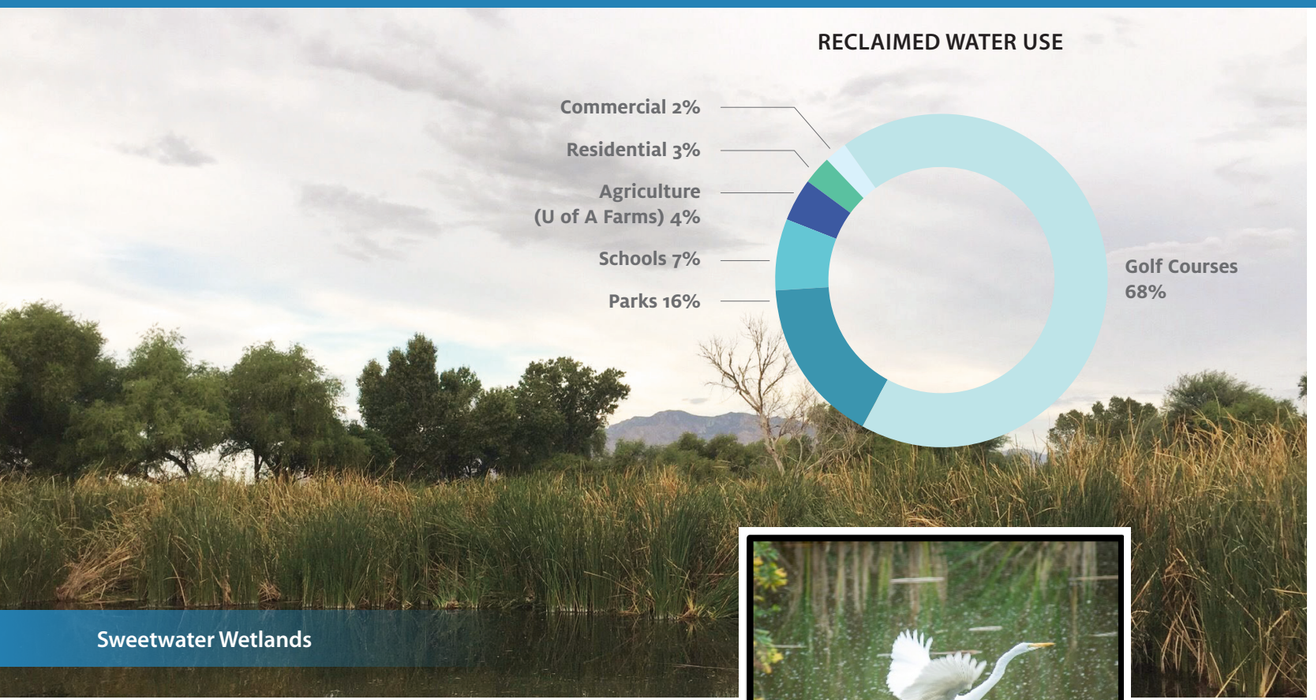
Drinking Water Well Fields – Groundwater, Colorado River Water, and Remediated Water

- **Prior to 2001** – The Central Well Field provided most of Tucson Water's water supply (groundwater).
- **Since 2008** – Tucson Water has delivered more blended Colorado River water than groundwater.
- **2018** – The Central and Southside Well Fields are continuously maintained to be able to provide water service on short notice.

MOST WATER DELIVERED TO CUSTOMERS:

- Comes from Tucson Water's CAVSARP, SAVSARP, and Santa Cruz Well Fields
- Is a Colorado River water blend





Sweetwater Wetlands

Recycled Water

A LOCAL, RENEWABLE RESOURCE

- Recycled water is water that is reused; reclaimed water is one use of recycled water
- Reclaimed water is wastewater that has been treated to tertiary (high quality) standards; it is used primarily for irrigation (watering golf courses and turf at parks and schools, etc.)
- It comes from Pima County's wastewater treatment plants (i.e., water reclamation facilities), and undergoes further disinfection and blending at the City's Reclaimed Water Treatment Plant
- The reclaimed water system is entirely separate from the drinking water system

Tucson Water first used reclaimed water in 1975 to irrigate the Randolph Park golf course. In 1984, Tucson Water began delivering reclaimed water to several locations via a newly-constructed reclaimed water system.

GREAT EGRET

You may have visited the **Sweetwater Wetlands**. This facility was initially part of the reclaimed water treatment process. Enhanced wastewater treatment was implemented and the wetlands are no longer needed for treatment. However, they continue to serve as a public amenity and have become a popular destination for birdwatchers.

Rain/Stormwater Harvesting

What is water harvesting?

Actions taken to capture rain and/or stormwater runoff and put it to beneficial use, for example, to irrigate landscaping.

LANDSCAPED AREAS MAY BE:

Public areas – streets, parks, public buildings

Private property – homes, businesses

WATER HARVESTING SYSTEM COMPONENTS:

Collection system – to collect the rain (roof gutters) or stormwater runoff (curb cuts along the edges of streets)

Conveyance system – to direct the captured water to the plants (earthen swales are typically used)

Storage – the collected water may be stored in large containers, like barrels or cisterns, for future use. This is an "active" water harvesting system. "Passive" water harvesting systems store the collected water in the ground.

CURB CUT AT ROADWAY EDGE

CISTERN OUTIDE OFFICE BUILDING

Water harvesting is a small but growing component of the water portfolio. It can play an important role in increasing the amount of tree canopy, which helps reduce the urban heat island effect.

Aquifer Water Level Changes: Improving

100% GROUNDWATER

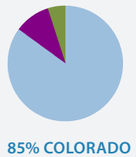
1940s (BASELINE)

- Tucson population ~ 36,800
- 100% groundwater
- Slight water table declines
- Loss of year-round flow, Santa Cruz River

85% GROUNDWATER

1998

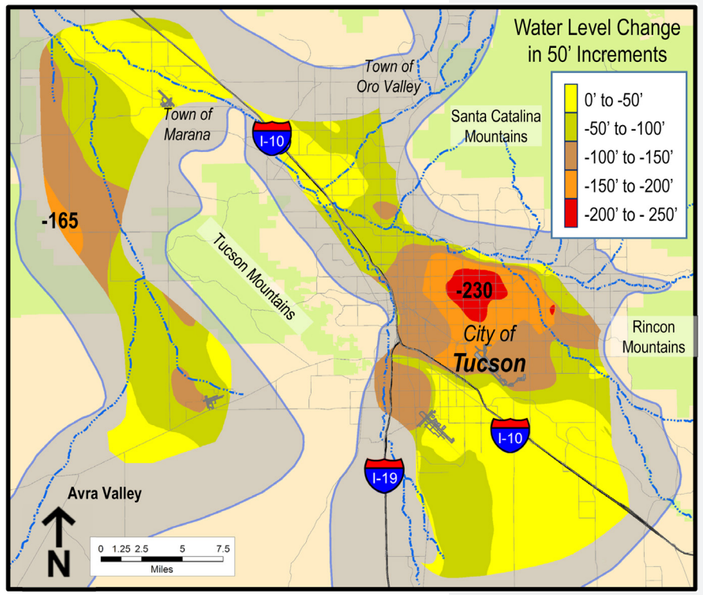
- Tucson Water's customers: 612,800
- 85% groundwater
- 15% reclaimed and remediated water
- Water table declines: 100 to 200 feet
- Groundwater overdraft a big problem



85% COLORADO RIVER WATER

2017

- Tucson Water's customers: ~ 725,000
- 85% Colorado River water
- 15% reclaimed and remediated water
- Water table rises: varied – *see page 15*
- Groundwater overdraft reversed in much of the aquifer



WATER LEVEL DECLINES, 1940-1998

REVERSING WATER LEVEL DECLINES

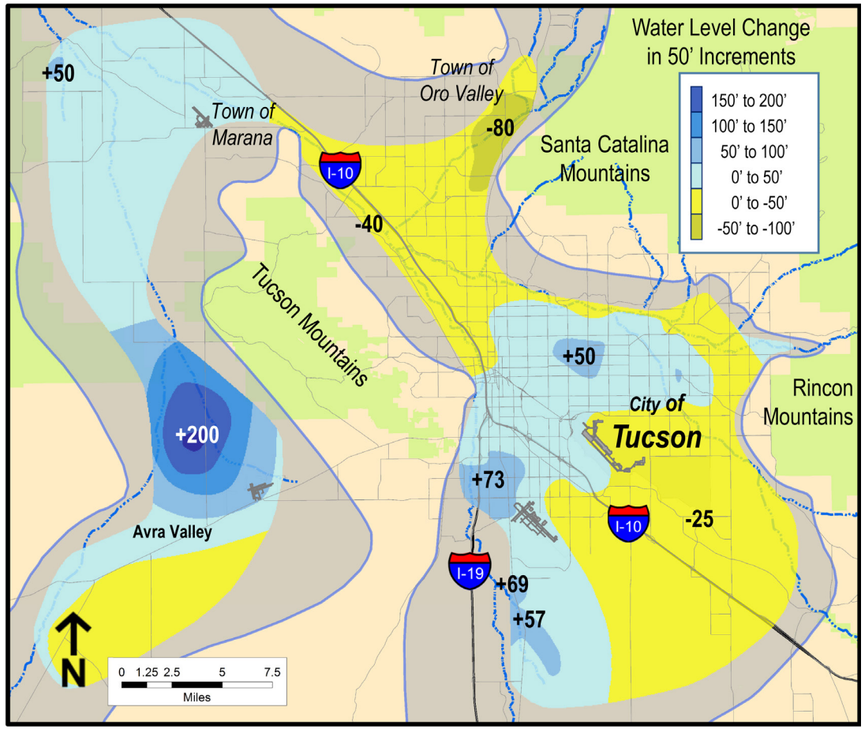
see page 15

Aquifer water levels started rising in 1999 near the Pima Mine Road Recharge Project and in the Santa Cruz Well Field area, reversing almost 60 years of water level declines (overdraft). Water levels near CAVSARP and in the Central Well Field area began rising in 2001/2002.

IMPROVING AQUIFER CONDITIONS AND SUSTAINABILITY GAINS

Aquifer Water Level Changes, 2000 – 2016

This map shows the change in depth to groundwater between 2000 – 2016. For example, if the depth to groundwater in 2000 was 350 feet, and the depth to groundwater in 2016 is 300 feet, the change is +50 feet, meaning the groundwater level has risen 50 feet.



SIGNIFICANT WATER LEVEL RISES:

- Over 200 feet, Avra Valley recharge areas
- Over 60 feet, Pima Mine Road recharge area

MODERATE WATER LEVEL RISES:

- North-central Tucson due to less pumping in Central Well Field area

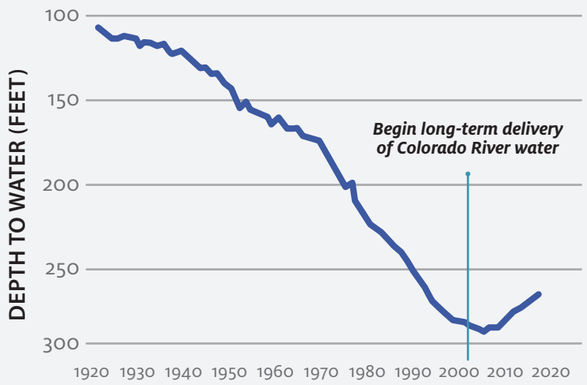
CONTINUED WATER LEVEL DECLINES:

- East of I-10 and generally north of the Prince Road alignment, extending to Oracle and Tangerine Roads, due to groundwater pumping by others
- Valencia and Kolb Roads and surroundings, due to groundwater pumping by Tucson Water and others

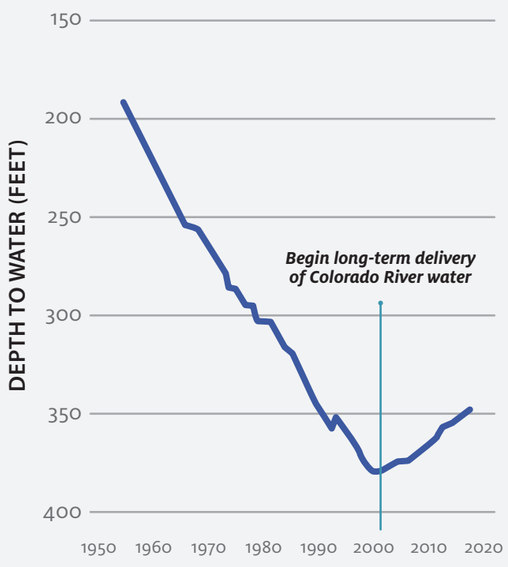
Well Hydrographs: Another Way to Look at Aquifer Water Levels

A well hydrograph is a chart of water levels measured over time in a single well. These hydrographs show how water levels declined from 1920 through every decade until the early 2000s.

Water levels in the Central Well Field area began rising in 2001, when Tucson Water began the long-term delivery of Colorado River water to customers and substantially reduced groundwater pumping in this area.



WELL HYDROGRAPH NEAR SPEEDWAY BLVD./ CAMPBELL AVE.



WELL HYDROGRAPH NEAR BROADWAY BLVD./ WILMOT RD.

IMPROVING AQUIFER CONDITIONS AND SUSTAINABILITY GAINS

Reduced Ground Subsidence

Subsidence is the downward movement of the earth's surface. It can be caused by aquifer overdraft. When water is removed from void spaces in the aquifer faster than it is replenished, the sediments can compact, causing the ground above it to sink. If the aquifer is allowed to recover (water levels rise), additional subsidence can be slowed or halted, but subsidence cannot be reversed.

1940 – EARLY 1990s

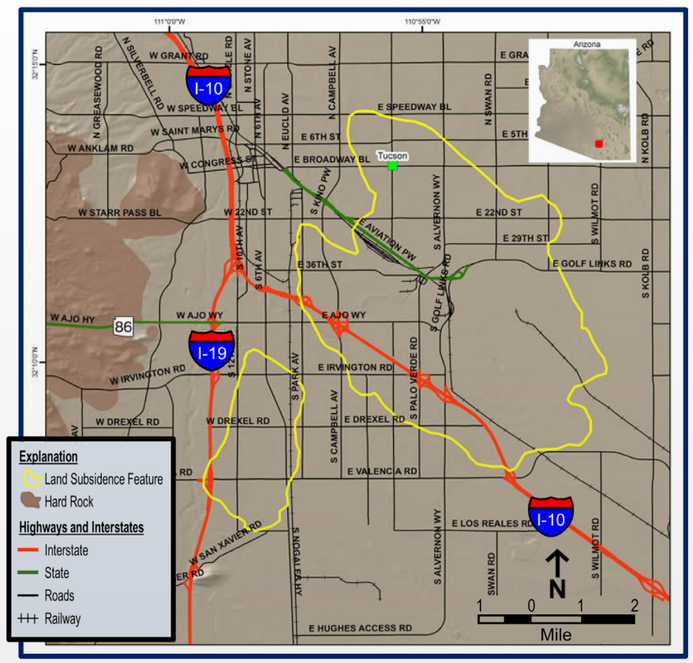
Although subsidence was observed, it was difficult to measure. It is believed that up to one foot of subsidence may have occurred in north-central Tucson ("The Lessening Stream", Michael F. Logan, 2002).

1998 – 2017

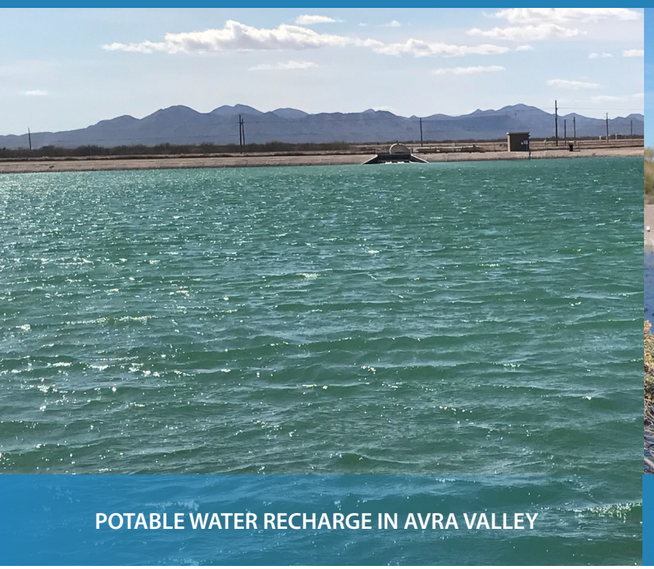
Beginning around 2005, substantial reductions in subsidence rates were observed in the central Tucson area, in conjunction with rising water levels ("Journal of Geophysical Research", Megan Marie Miller and others, 2017).

Why are we concerned about subsidence?

In severe cases, if no action is taken, ground surface elevation changes can damage infrastructure (roads, bridges, railways, dams, canals, etc.), as well as private property (homes, driveways, businesses, etc.), and change the direction of surface drainage.



Boundaries of Subsidence Features, Tucson
ADWR, Hydrology, Geophysics/Surveying Unit



POTABLE WATER RECHARGE IN AVRA VALLEY

RECLAIMED WATER RECHARGE IN TUCSON

Sustainability Gains: Increasing Our Use of Renewable Water Resources

TUCSON WATER'S RENEWABLE WATER RESOURCES

- Colorado River Water
- Recycled Water
- Rain/Stormwater

COLORADO RIVER WATER – BENEFITS

- Replenishes the aquifer near the recharge basins
- Tucson Water's main water supply is renewable
- Enables reduced groundwater pumping and rising water levels, especially in the Central Well Field area
- Improves service reliability by enabling groundwater from the Central Well Field to be a back-up supply
- Excess is stored underground for future use. Based on average annual water use, Tucson Water has stored over four years of Colorado River water in the aquifer (2017)

RECYCLED WATER – BENEFITS

- Makes use of a locally-available resource; reclaimed water is one use of recycled water
- Excess reclaimed water is stored underground for future use at Tucson Water's recharge facilities Based on average annual water use, Tucson Water has stored over one year of reclaimed water in the aquifer (2017)
- Reclaimed water supports multi-benefit projects that include riparian habitat, wildlife, and public amentities

RAIN/STORMWATER HARVESTING – BENEFITS

- Makes use of a locally-available resource
- Supports increased tree canopy, vegetation in traffic-calming facilities, enhanced quality of life, and reduced urban heat island effects
- Rainwater harvesting can reduce household water use: an average reduction of 10% can be achieved if cisterns are used for water storage

IMPROVING AQUIFER CONDITIONS AND SUSTAINABILITY GAINS

Sustainability Gains and Regulations

Photo from ADWR

ARIZONA'S HISTORIC GROUNDWATER MANAGEMENT ACT OF 1980

Adoption of the 1980 Groundwater Management Act (GMA) radically changed the way groundwater would be used and managed in parts of Arizona.

Almost 40 years after the GMA was adopted, Tucson Water has switched its main supply from a mostly non-renewable one (groundwater) to a renewable one (Colorado River water).

1980 GROUNDWATER MANAGEMENT ACT, ADOPTED BY THE ARIZONA STATE LEGISLATURE

PURPOSE:

- Mitigate impacts of groundwater overdraft in urban areas

KEY OBJECTIVE:

- Move away from groundwater over-pumping through greater use of "renewable" water supplies

HOW IT WORKS:

- Created groundwater accounting system
- Created active management areas in which groundwater use is regulated
- Required groundwater use monitoring and reporting

GOAL: *(for Tucson Active Management Area or TAMA)*

- "Balanced" aquifer conditions by 2025: annual groundwater withdrawals and recharge are balanced
- According to the Arizona Department of Water Resources (ADWR), the TAMA has been at or near this goal in recent years (Fourth Management Plan, TAMA)

ENFORCEMENT:

- ADWR administers the Groundwater Management Act

Sustainability Gains: Conservation and Efficiency Programs

Water conservation means purposefully saving water or reducing water use. It is generally based on changing customers' water use habits. Water efficiency means doing more with less water, e.g., washing dishes with the least amount of water needed to get the job done, or installing high-efficiency toilets. Conservation and efficiency programs make our water supplies last longer.

CONSERVATION PROGRAMS

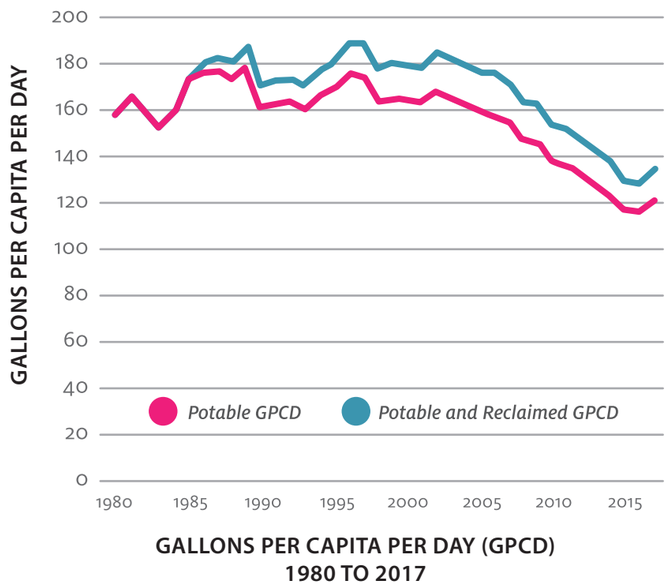
- Tucson Water offers rebates and incentives: rainwater harvesting, gray water irrigation, home and business water audits, guides for water-wise landscaping
- Increasing block rates: higher rates charged per unit of water above a certain amount of water use provide a financial incentive to conserve

EFFICIENCY PROGRAMS

- Rebates and incentives: high-efficiency (low water-use) toilets, urinals, washing machines

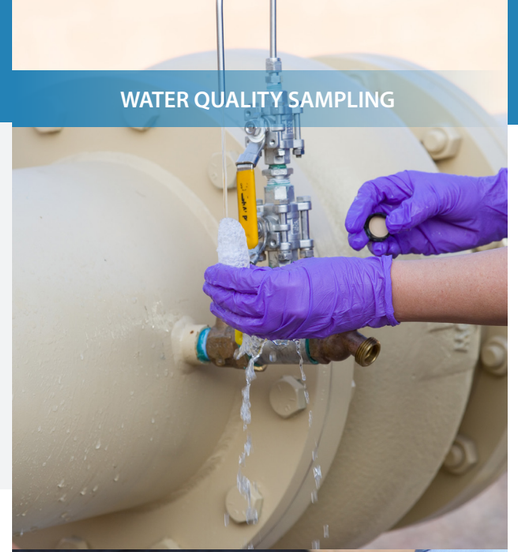
COMMUNITY EDUCATION AND OUTREACH PROGRAMS

- For more information on Tucson Water programs: *tucsonaz.gov/water/education-and-outreach*



GALLONS PER CAPITA PER DAY (GPCD)
1980 TO 2017

The total amount of potable (drinking) water used in 2017 was the same as in 1987 (see page 6), even with a significant increase in the number of Tucson Water customers (about 200,000 more).



WATER QUALITY SAMPLING

Aquifer Water Quality and the Safe Drinking Water Act

AQUIFER WATER QUALITY OVERVIEW

Conserving the amount of water in our aquifer is important. So is protecting the quality of that water.

- Groundwater pumped from the aquifer (native groundwater and Colorado River water recharged to the aquifer) largely meets federal Safe Drinking Water Act (SDWA) standards without treatment, except for TARP/AOP water *(see page 10)*
- After groundwater is pumped from the aquifer, chlorine is added to assure drinking water delivered to customers does not have microbial contamination
- As in all major urban areas, some contaminants are present in our aquifer *(see page 22)*
- Tucson Water is responsible for delivering safe drinking water to our customers

SAFE DRINKING WATER ACT (SDWA) REGULATIONS

- Apply to drinking water provided by public water systems like Tucson Water
- Set standards for contaminants allowed in drinking water to protect public health
    - **Primary standards** – related to health effects; establish maximum contaminant levels (MCLs) allowed in drinking water; are enforceable
    - **Secondary standards** – related to aesthetic effects, e.g., taste, color, and odor; do not pose a health risk; non-enforceable
    - **Health Advisories (HAs)** – provide information on contaminants that may have health effects; non-enforceable
- Tucson Water treats HAs like primary standards
- As required by the SDWA, Tucson Water monitors water pumped out of the aquifer at points where it enters the distribution system, and throughout the entire drinking water distribution system
- Federal SDWA administered in Arizona by the Arizona Department of Environmental Quality (ADEQ)

Water Quality Concerns in Our Aquifer

FEDERAL SUPERFUND SITE

- Tucson's largest contamination site is the Tucson International Airport Superfund site (TARP/AOP, *see page 10)*.

WATER QUALITY ASSURANCE REVOLVING FUND (WQARF) SITES

- Managed by ADEQ; includes historic unlined landfills and old disposal dry wells
- ADEQ map with Tucson WQARF Sites: *http://static.azdeq.gov/wqarf/tucson2016.pdf*

LEAKING UNDERGROUND STORAGE TANKS

- ADEQ administers an Underground Storage Tank Program to help minimize contamination

EMERGING CONTAMINANTS

- Naturally-occurring and human-made chemicals that have been detected globally in drinking water at trace levels
- 1,4-dioxane, and per- and poly-fluorinated alkyl substances (PFAS) are some of the emerging contaminants Tucson Water is monitoring
- No enforceable standards at this time

HARDNESS

- Colorado River water generally has higher hardness levels than groundwater pumped from the Tucson/Avra Valley Aquifer
- Hard water can cause mineral deposits on customer appliances, but is not a health concern

How do contaminants get in our aquifer?

- Naturally-occurring local rocks and sediments, and domestic, industrial, and agricultural practices may contribute contaminants
- Up until the early 1970s, it was common to bury or inject waste in the ground. No monitoring or precautionary measures were required
- Today, waste disposal is regulated. For example, many landfills must have leak detection and containment systems

What are we doing about them?

- Tucson Water assures that our water meets all enforceable standards and non-enforceable HAs
- Since 2007, Tucson Water has had a "Sentry Program" to actively look for new contaminants that could threaten our water supply

Questions about your water quality and what Tucson Water is doing to protect it?

- Tucson Water publishes a report online every year: *tucsonaz.gov/water/water-quality-reports-and-publications*

Looking Forward: Tucson Water Activities to Protect the Aquifer

USE RENEWABLES WITH PRIORITY OVER NON-RENEWABLES

- Use Colorado River water, reclaimed water, and rain/stormwater
- Use groundwater (non-renewable) as a back-up supply
- Work with our neighboring water providers to do the same
- Continue efforts to acquire and develop additional renewable water supplies

CONTINUE STORING WATER IN THE AQUIFER FOR THE FUTURE

Water stored in the aquifer is like money in the bank: we can withdraw it (pump it out) in the future when we need it.

- Expand our capacity to store Colorado River water
- Projects nearing completion (expected 2019):
  1. Santa Cruz River Heritage Project in downtown Tucson
  2. Southeast Houghton Area Recharge Project (SHARP) near Houghton and Drexel Roads

CONTINUE TUCSON WATER'S WATER QUALITY PROGRAM

- Perform water quality monitoring and testing
- Operate the TARP/AOP Treatment Facility *(see page 10)*
- Monitor and manage emerging contaminants

PROMOTE CONSERVATION AND EFFICIENCY PROGRAMS TO HELP MANAGE DEMAND

- Tucson Water's programs: *tucsonaz.gov/water/residential-and-commercial-conservation*

EMBRACE THE ONE WATER MOVEMENT

- All water resources have value
- All water resources should be managed holistically and cooperatively to achieve a sustainable water future

Tucson Water is committed to ensuring that our customers receive high quality water and excellent service in a safe, reliable, efficient, and environmentally responsible manner.

TUCSON WATER
A proud part of the City of Tucson

CITY OF TUCSON FOUNDED 1775

TUCSONAZ.GOV/WATER
520.791.4331