

Retrieving USGS Hydrologic Data Using Water Data for the Nation Web Interface (NWISWeb)

USGS Nevada Water Science Center

Steve Berris

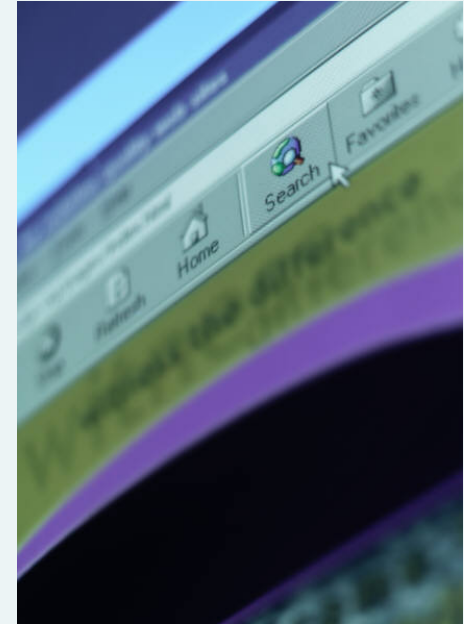
Nevada Networks Chief

Sonya Vasquez

Database Administrator

Objective

Describe how to search, find, and retrieve USGS hydrologic information from USGS Water Data for the Nation web interface (NWISWeb), WaterWatch, and other information sources.

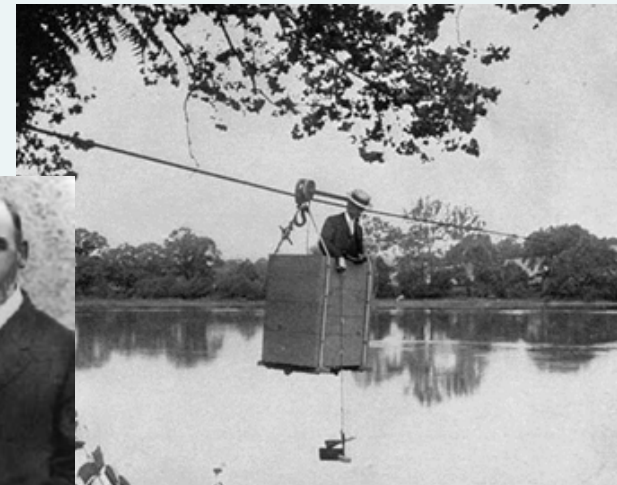
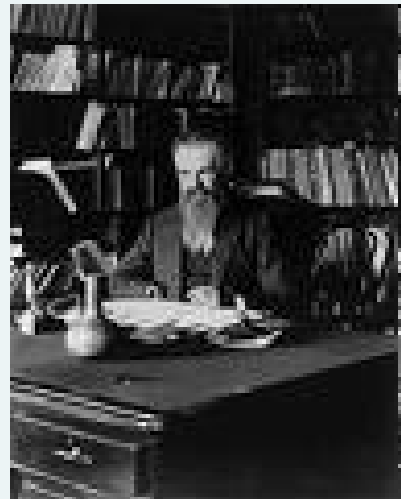


Agenda

- Short history of USGS data collection – Large database
- Water data reports
- WaterWatch – Easy way to display maps, graphs, tables
- WaterNow and WaterAlert – Data sent to you
- NWISWeb – Access and retrievals from USGS water database
 - Navigation
 - Basic process
 - Output formats
 - Site Selection
 - Data type selection
 - Data categories
- References – Handy links and fact sheets
- Questions – If time, we can go through an example or two

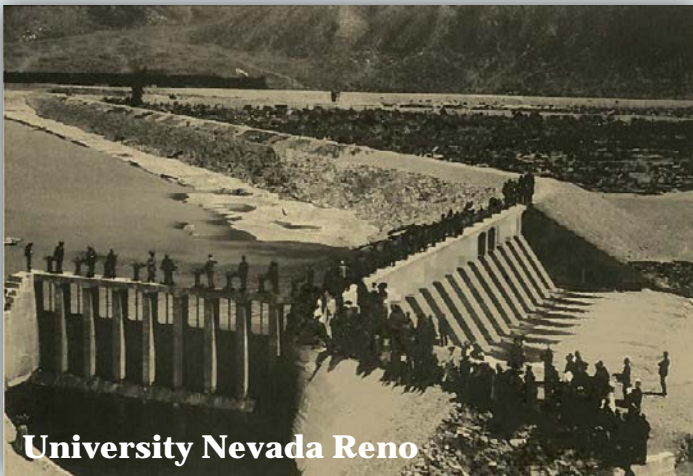
We've come a long way

- Streamgaging: 1889 at Embudo, NM
- Frederick H Newell led development with direction from John Wesley Powell
- 1895: began sharing cost with the States (Kansas State Engineer)



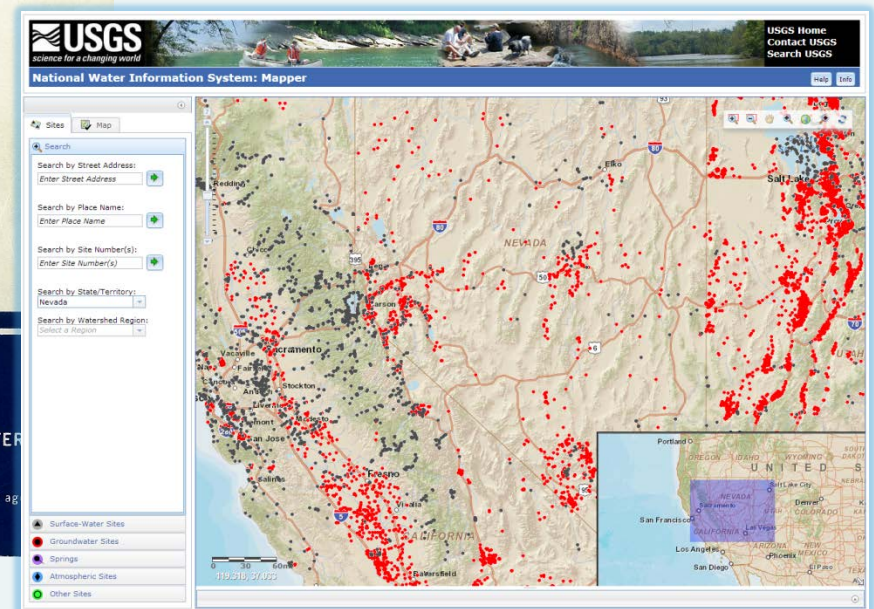
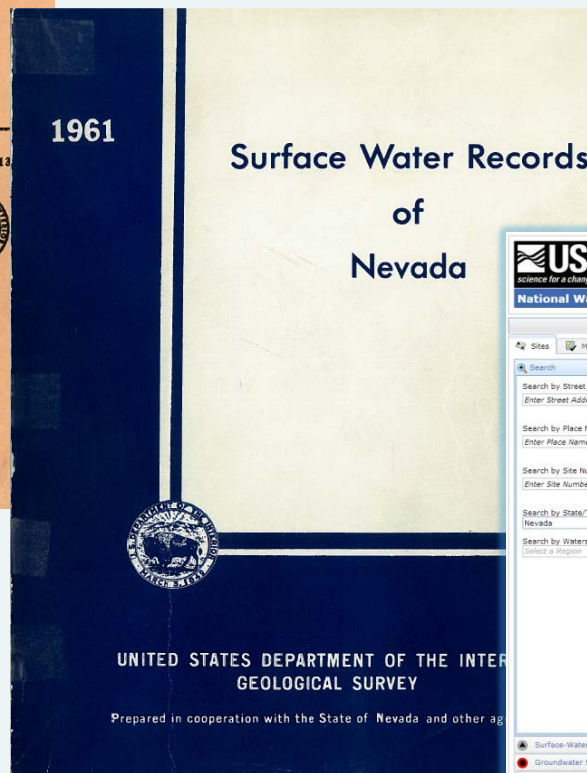
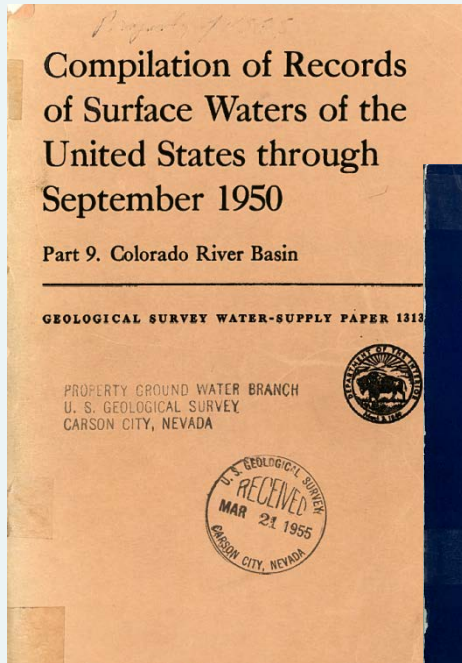
Long History of measuring water in Nevada

- East Fork Carson River near Gardnerville (1890)
- Truckee River at Tahoe City (1895)
- Humboldt River at Palisade (1902)
- Truckee River below Derby Dam (1909)
- Virgin River at Littlefield (1929)



We've come a long way in reporting our data

Water-Data Reports - <http://wdr.water.usgs.gov/>



Water-Data Reports - A History

- **Data Prior to September 1960**
 - Paper reports called, “Compilation of Records of Surface Waters of the United States”
- **1961 to 2002**
 - Paper reports only
- **2002 to 2004**
 - Paper reports and available online
- **2005 to present**
 - Online individual electronic Site Data Sheets with mapping interface

Water-Data Reports - Site Data Sheet

642, Muddy River near Overton, Nev., 1/

Location--Lat 36°38', long. 114°30', in NW1/4 sec. 21, T. 15 S., R. 67 E., at Wells Siding diversion dam, 2 miles northwest of Logandale, 5 miles downstream from Meadow Valley Wash, 8 1/2 miles northwest of Overton, and 7 1/2 miles southeast of Moapa. **Drainage area**--About 8,180 sq mi, of which about 4,250 sq mi contribute directly to surface runoff, for site near Overton, 1948-50. About 200 sq mi greater for sites near St. Thomas, 1913-16 (now submerged by Lake Mead). **Gage**--Water-stage recorder at present site since Dec. 13, 1947; crest of Wells Siding dam is control. Datum of gage is 1,452.16 ft above mean sea level, datum of 1959 (Bureau of Reclamation bench mark). **Prior to Feb. 21, 1914**, staff gage 1 1/2 miles downstream at different datum. **Mar. 15, 1914, to Sept. 30, 1916**, staff gage 1 1/2 miles downstream and a quarter of a mile upstream from mouth at different datum. Altitude of gage is 1,100 ft (from river-profile map). **Extremes**--1913-16, 1947-50: Maximum discharge, 6,500 cfs Feb. 22, 1914 (gage height, between 8 and 9 ft, datum then in use). From rating curve extended above 500 cfs on basis of slope-area determination of peak flow; no flow at times in most years. Greatest flood peaks known, 10,000 cfs (estimated) Mar. 3, 1938, and 12,000 cfs (estimated), corrected Aug. 11, 1941. **Remarks**--Many diversions above station for irrigation in 1913-16 above station and in 1948-50 above and below station. Records for both 1913-16 and 1948-50 were obtained below point of diversion for irrigation in vicinity of Logandale. Diversions at Wells Siding dam are not included in records for 1948-50. Records for 1913-16 show flow into Virgin River; those for 1948-50 show flow below Wells Siding dam and inflow to Lake Mead except for waste and drainage return from irrigated lands in vicinity of Logandale and diversion to a wild-life refuge.

Monthly and yearly mean discharge, in second-feet

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1913	-	-	-	-	-	-	-	-	-	-	-	-	-
1914	3.87	14.0	19.2	26.1	31.6	33.5	6.71	10.2	2.82	.92	.42	4.58	19.3
1915	3.86	12.0	21.3	34.8	63.7	23.4	5.56	51.2	-	-	-	-	-
1916	-	-	-	77.2	61.6	20.5	2.44	2.74	.93	9.58	12.7	2.48	-
1948	-	-	25.5	26.5	34.9	12.5	6.3	1.2	1.0	0	.1	0	-
1949	.03	12.1	28.8	30.5	29.2	11.8	1.7	0	0	0	0	0	9.3
1950	0	1.89	22.4	3.77	1.06	.25	.28	.01	.06	0	0	0	3.88

Monthly and yearly runoff, in acre-feet

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1913	-	-	-	-	-	-	-	-	-	-	-	-	-
1914	238	833	1,180	1,640	7,560	831	518	629	168	25	88	118	-
1915	360	714	1,110	2,110	3,540	1,440	331	3,150	-	-	-	-	13,950
1916	-	-	-	4,750	3,540	1,260	145	169	56	781	118	-	-
1948	-	-	1,570	1,630	2,010	772	373	73	58	0	4.0	0	-
1949	2.0	720	1,560	1,080	1,120	778	103	0	0	0	0	0	6,610
1950	0	112	1,160	1,360	209	4.5	15	17	.4	4.0	0	0	2,880

Yearly discharge, in second-feet

Year	W.S.P. no.	Water year ending Sept. 30			Calendar year	
		Discharge	Maximum Date	Minimum day	Mean	Runoff in acre-feet
1913	159	-	-	0	-	-
1914	189	6,500	Feb. 22, 1914	-1	19.3	13,950
1915	409	-	Feb. 11, 1915	-	-	19.5
1916	439	61,700	Jan. 20, 1916	-	-	14,080
1948	1119	-	-	0	-	-
1949	1149	-	-	0	9.3	6,610
1950	1179	-	-	0	3.98	2,880

1/ Published as "near St. Thomas", 1913-16.



Water-Data Report 2012
09419507 Muddy River At Lewis Avenue At Overton, NV

Lower Colorado-Lake Mead Basin
Muddy Subbasin

LOCATION--Lat 36°32'07", long 114°25'42" referenced to North American Datum of 1983, in NE 1/4 NW 1/4 sec. 19, T. 16 S., R. 69 E., Clark County, NV. Hydrologic Unit 15010012, east of State Route 169, on Lewis Avenue in Overton, NV, upstream of Overton Wash, and 5.75 mi upstream from Lake Mead.

DRAINAGE AREA--6,940 mi² of which 3,700 mi² probably is noncontributing.

SURFACE-WATER RECORDS

PERIOD OF RECORD--Aug 1997 to current year. Data prior to Aug 2006 available from the Southern Nevada Water Authority.

REVISED RECORDS--WDR NV-99-1: 1998.

GAGE--Water-stage recorder. Elevation of gage is 1,251 ft above North American Vertical Datum of 1988 (Southern Nevada Water Authority).

COOPERATION--Southern Nevada Water Authority

REMARKS--Records good except estimated daily discharges, which are poor.

EXTREMES FOR PERIOD OF RECORD--Maximum discharge, 4,000 ft³/s, Jan. 12, 2005, gage height, 10.86 ft; minimum daily, 1.9 ft³/s, July 12, 2004.

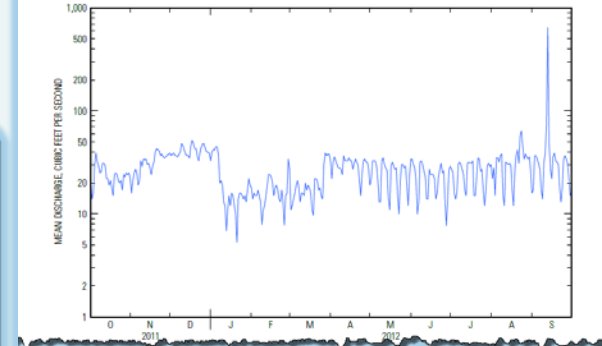
EXTREMES FOR CURRENT YEAR--Maximum discharge, 2,000 ft³/s, Sept. 12, gage height, 10.01 ft; minimum daily discharge, 5.3 ft³/s, Jan. 20.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2011 TO SEPTEMBER 2012
DAILY MEAN VALUES
[e, estimator]

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	22	16	37	40	14	11	22	22	34	27	22	17
2	14	21	38	42	16	12	32	33	30	25	28	37
3	16	25	39	42	15	14	36	33	28	16	15	37
4	30	27	37	45	15	16	33	33	21	14	35	34
5	39	25	37	45	17	19	30	29	10	16	35	31
6	32	19	36	37	15	21	28	21	13	30	32	27
7	29	21	38	20	13	18	28	13	32	32	37	17
8	25	33	40	21	7.9	13	27	13	33	30	38	14
9	26	29	48	19	11	16	24	33	30	27	15	31
10	31	34	46	13	12	16	37	35	26	24	12	39
11	31	34	42	12	15	15	33	30	23	17	32	72
12	29	34	38	6.9	19	20	33	28	14	15	31	637
13	22	30	37	11	24	17	33	26	14	31	30	49
14	22	31	37	15	24	19	35	14	27	32	31	27
15	19	28	35	12	23	18	33	11	24	31	29	22
16	21	24	46	16	20	16	33	29	24	31	17	36

SUMMARY STATISTICS

	Calendar Year 2011	Water Year 2012	Water Years 1998 - 2012	
Annual total	10,780.6	10,266.3		
Annual mean	29.5	28.1	16.9	
Highest annual mean			29.6	2011
Lowest annual mean			8.76	2004
Highest daily mean	63	637	2,410	Jan 12, 2005
Lowest daily mean	8.4	5.3	1.9	Jul 12, 2004
Annual seven-day minimum	11	12	4.0	Jan 28, 2001
Maximum peak flow		2,000	4,000	Jan 12, 2005
Maximum peak stage		10.01	10.86	Jan 12, 2005
Annual runoff (ac-ft)	21,380	20,360	12,270	
10 percent exceeds	42	39	30	
50 percent exceeds	31	27	13	
90 percent exceeds	14	14	6.4	



Water-Data Reports

Why do we need them?

- **Provides a snapshot in time of site conditions**
- **Manuscripts provide descriptive information**
 - **Location**
 - **Period of Record**
 - **Historical extremes outside period of record**
 - **Record accuracy**
 - **Other remarks pertinent to station operation**

Water-Data Report Retiring- an end but a new beginning

- Water Year 2013 will be the last year of the Water-Data Report series
- To be released in 2014
 - Print Friendly 12 month Summary of Daily Values
 - Users choose 12 month period of available data
 - Manuscript Information
 - Daily values table
 - Statistics
 - Graph



Use WaterWatch to quickly evaluate current and past conditions

- <http://waterwatch.usgs.gov>
- View surface water conditions in National and State Perspectives

USGS 10244950 STEPTOE CK
NR ELY, NV

Drainage area: 11 mi²
Discharge: 1.7 cfs
Stage: 2.16 ft
Date: 2014-01-13 08:15:00
Percentile: 2%
Class symbol: ●
% normal (median): 52%
% normal (mean): 47%

Choose a data retrieval option and select a location on the map
 List of all stations Single station Nearest stations Peak flow

Explanation - Percentile classes						
●	●	●	●	●	●	○
Low	<10	10-24	25-75	76-90	>90	High
	Much below normal	Below normal	Normal	Above normal	Much above normal	Not-ranked

- Access data in historical context
- Plot hydrograph
- Compare flow with historical flood peaks
- Retrieve stage-discharge rating

WaterWatch - tools to evaluate conditions at regional levels and at specific gages

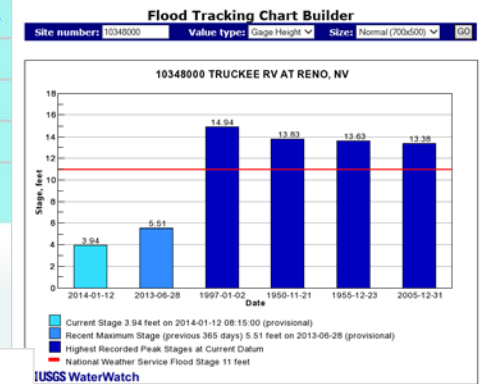
- Menu on left provides many options for evaluations



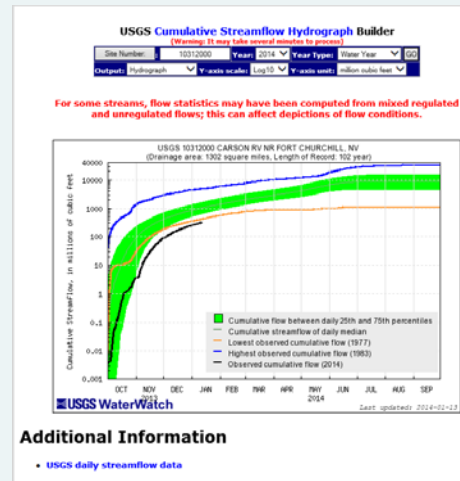
WaterWatch

- Home
- Map
- Current Streamflow
- Location above Flood Stage
- Web Map
- Flood
- Flood Table Builder
- Drought
- Flood-Tracking Chart
- Past Flow/Runoff
- Cumulative Streamflow Hydrograph
- Animation
- Toolkit

- Flood Tracking Chart puts current flow into historical context

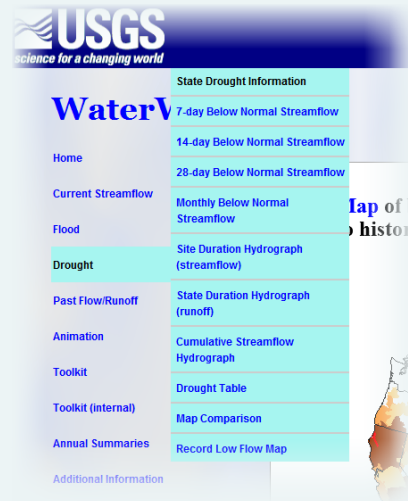


- Cumulative Streamflow hydrograph puts cumulative stream volumes into historical perspective

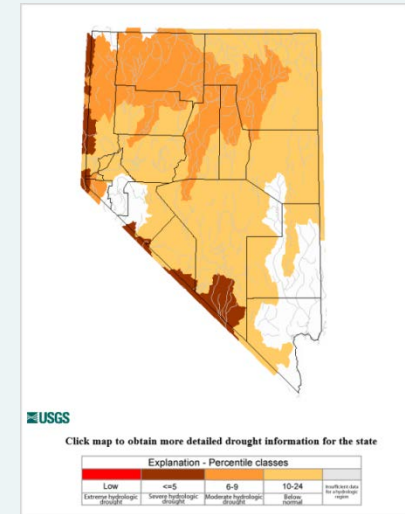


WaterWatch - tools to evaluate conditions at regional levels and at specific gages - continued

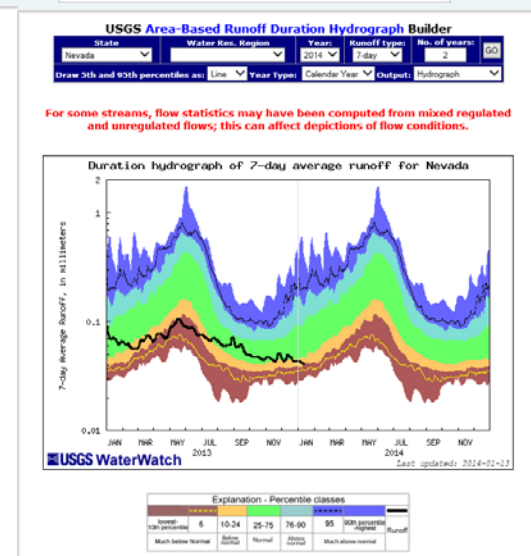
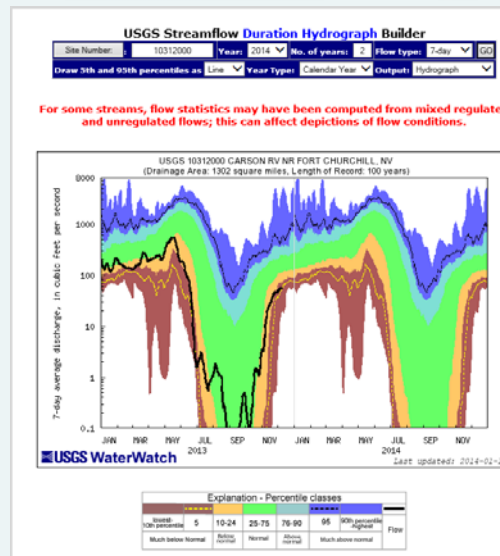
- Menu on left provides many options for evaluations



- Drought Tracking Chart puts current flow into historical context



- Site and State Duration Hydrographs put drought flows into perspective



WaterWatch provides tools to evaluate water data at gaging stations

- Use the Toolkit to retrieve streamflow statistics, stage-discharge rating curves, and streamflow measurements

WaterWatch

- Home
- Current Streamflow
- Flood
- Drought
- Past Flow/Runoff
- Animation
- Toolkit
- Toolkit (internal)
- Annual Summaries
- Additional Information
- About WaterWatch

- Site Duration Hydrograph (streamflow)
- State Duration Hydrograph (runoff)
- Cumulative Streamflow Hydrograph
- Cumulative Runoff Hydrograph
- Streamgauge Statistics
- Rating Curve
- Streamflow Map Builder
- Streamflow Map
- Flood Table
- Drought Table
- Map Comparison
- Site Visit
- Flood-Tracking Chart
- AHPS River Forecast
- Raster Hydrograph

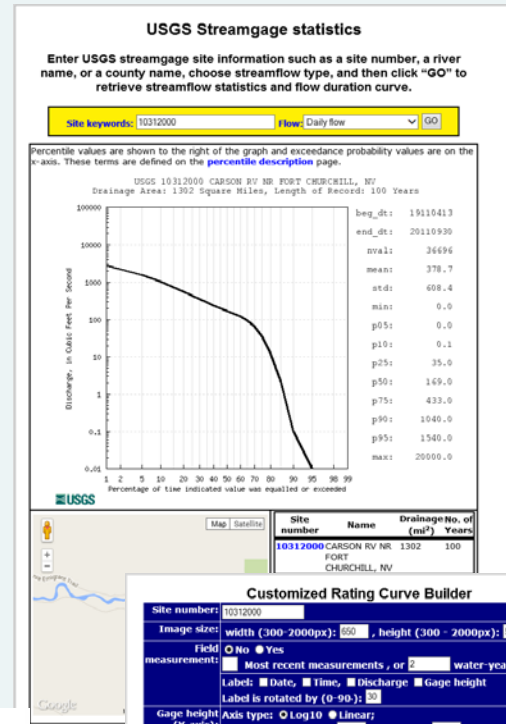
Streamflow Measurements for the Nation

USGS 10312000 CARSON RV NR FORT CHURCHILL, NV

Lyons County, Nevada
Hydrologic Unit Code 16050202
Latitude 39°17'00", Longitude 119°18'40" NAD83
Drainage area 1,302 square miles
Gage datum 4,180.00 feet above NAVD83

Output formats:
 HTML table with channel data
 HTML table without channel data
 Flat-separated data with channel data
 Flat-separated data without channel data
 CSV of data
 Reversed output format

Meas. Number	Date	Time	Time Duration	Measurement Unit	Wtd	Measuring Agency	Stream Name (RTN)	Gage Height (ft)	Rating %	Wtd Adj. (ft)	No. of Obs	Obs Change (ft)	Meas. Duration (hr)	Meas. Method	Control	Flow Addit. Code
753	2013-12-05 10:28:30			PIST	Yes	USGS	51.1	3.37	22.1	0.02	-7.8	0.00	0.75	FABR	CLER	MEAS
752	2013-10-24 11:02			PIST	Yes	USGS	1.35	2.81	22.3	0.02	-4.9	0.00	0.25	POOR	CLER	MEAS
755	2013-09-20 23:00:00			PIST	Yes	USGS	1.09	2.75	22.1	0.02	0.2	0.00	0.25	FABR	CLER	MEAS
750	2013-08-02 15:27:30			PIST	Yes	USGS	1.87	2.83	22.1	0.02	-4.1	0.00	0.50	POOR	CLER	MEAS
743	2013-06-26 12:18			PIST	Yes	USGS	4.70	2.93	22.3	0.01	4.2	0.00	0.50	POOR	CLER	MEAS
746	2013-06-03 11:49			PIST	Yes	USGS	4.71	2.80	22.1	0.01	5.2	0.00	0.50	FABR	CLER	MEAS
745	2013-05-20 17:00:43			PIST	Yes	USGS	328	4.37	22.1	-0.12	1.5	0.00	0.50	FABR	CLER	MEAS
744	2013-05-20 18:19:58			PIST	Yes	USGS	320	4.36	22.1	-0.12	2.1	0.00	0.50	FABR	CLER	MEAS
749	2013-05-05 05:07:20			PIST	Yes	USGS	360	4.71	22.0	0.00	-0.2	0.00	0.75	USGP	MEAS	
748	2013-05-03 06:32:30			PIST	Yes	USGS	465	4.51	22.1	0.00	0.4	0.00	0.75	USGP	MEAS	
743	2013-04-12 10:51			PIST	Yes	USGS	195	3.93	22.1	0.00	-0.5	0.00	1.00	FABR	PAHND	MEAS
742	2013-02-20 18:20			PIST	Yes	USGS	151	3.74	22.1	0.00	0.0	0.00	1.00	POOR	LOCB	MEAS
740	2013-01-20 11:18			PIST	Yes	USGS	198	3.82	22.1	0.12	-0.5	0.00	0.25	POOR	LOCB	MEAS
740	2013-01-16 11:28			PIST	Yes	USGS	110	3.63	22.1	0.00	2.8	0.00	1.00	POOR	ARCE	MEAS
738	2013-12-04 10:30			PIST	Yes	USGS	852	5.25	22.0	0.00	-10.5	0.00		POOR		MEAS
738	2013-12-03 08:15			PIST	Yes	USGS	328	4.24	22.1	0.00	-0.6	-0.01	0.83	FABR	WMPD	USGP
737	2013-11-27 12:13			PIST	Yes	USGS	51.2	3.34	22.1	0.01	3.3	0.00	0.00	CLER		MEAS
736	2013-11-27 12:05			PIST	Yes	USGS	46.8	3.34	22.1	0.01	-4.1	0.00	0.00	CLER		MEAS
735	2013-10-28 11:10			PIST	Yes	USGS	31.6	2.77	22.1	0.00	0.0	0.00	0.00	FABR	WMPD	USGP
734	2013-10-18 11:37:30			PIST	No	USGS	46.8	3.77	22.1	0.00	-17.5	0.00		POOR	WMPD	USGP



Customized Rating Curve Builder

Site number: 10312000

Image size: width (300-2000px): 600, height (300-2000px): 600

Field measurement: No Yes

Most recent measurements, or 2 water-years

Label: Date, Time, Discharge, Gage height

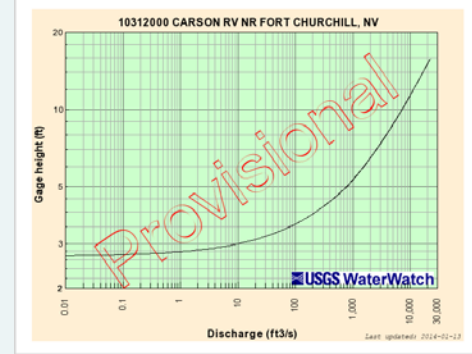
Label is rotated by (0-90): 30

Gage height (Y-axis): Log10 Linear

Axis range: Minimum: , Maximum:

Discharge (X-axis): Log10 Linear

Axis range: Minimum: , Maximum:



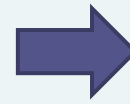
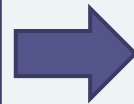
GroundwaterWatch and WaterQualityWatch - quickly evaluate current and past conditions

- <http://groundwaterwatch.usgs.gov>
- <http://waterwatch.usgs.gov/wqwatch>
- View conditions in National, State, and gaging station perspectives

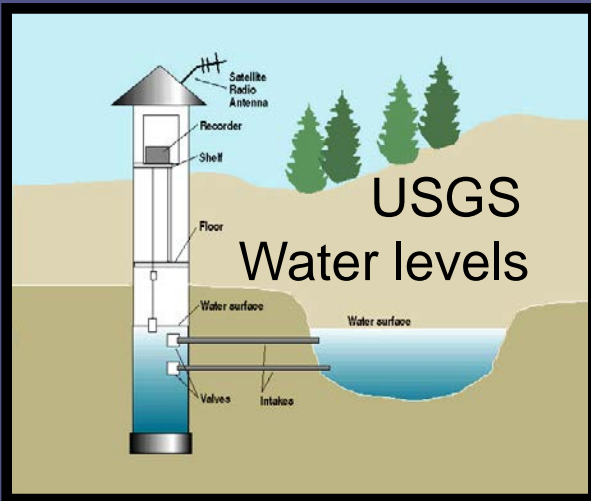
Get the data sent to you - Extremes, river and reservoir operations, recreation...



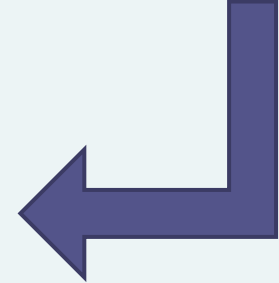
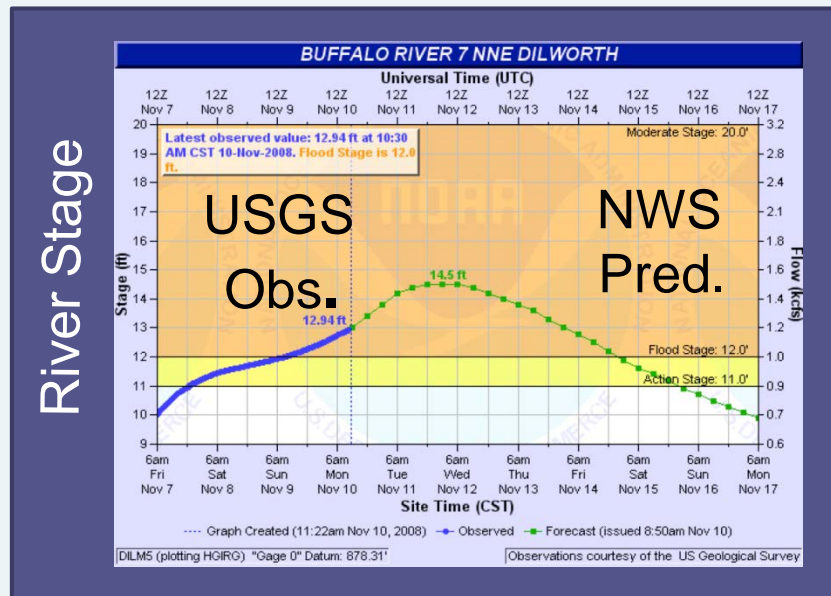
NWS
Rainfall
Forecast



USGS
Rating

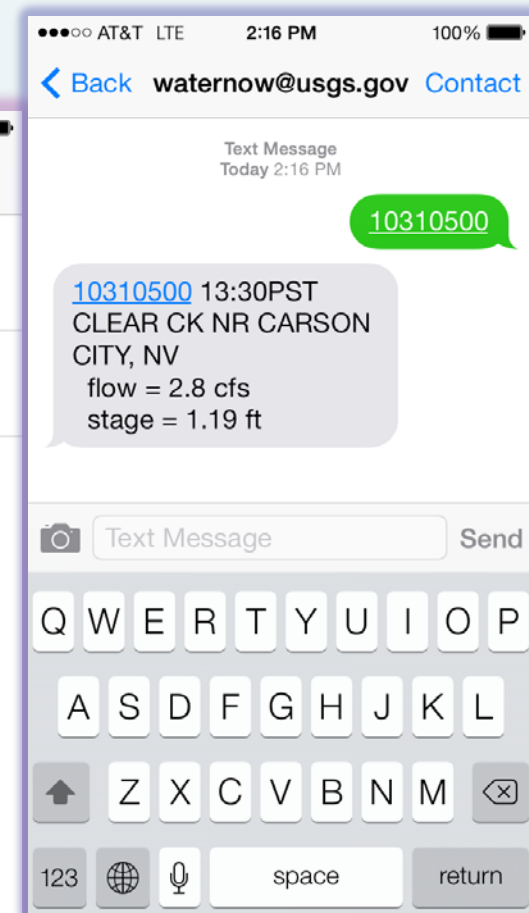
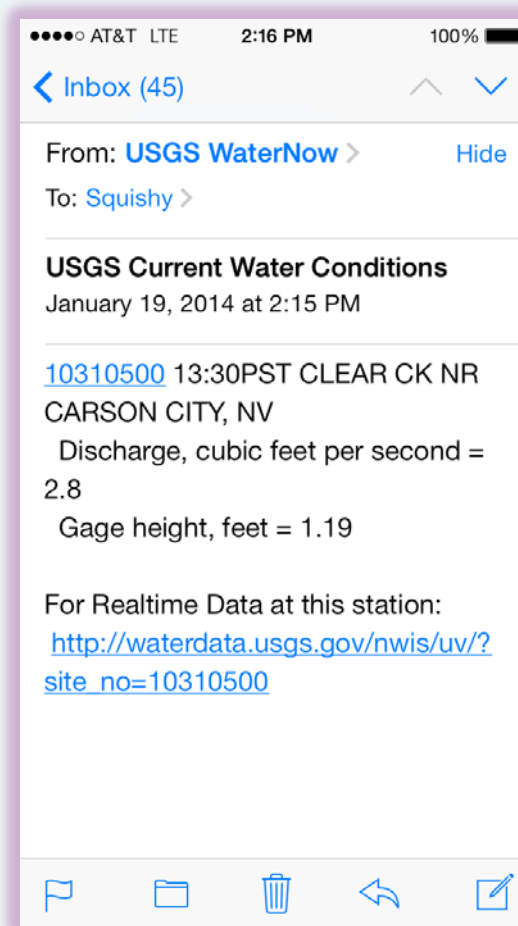


USGS
Water levels



WaterNow - <http://water.usgs.gov/waternow/> Current data direct to mobile or email

- Send an email or text to
 - WaterNow@usgs.gov
- Include Site Number in Text or in Email subject
 - Other options:
 - SiteNumber Parameter
 - SiteNumber Parm1, Parm2
 - SiteNumber ?



WaterAlert -

<http://maps.waterdata.usgs.gov/mapper/wateralert/>

- Sends e-mail or text messages when parameters exceed user-defined thresholds at real-time sites
- Select the site and data type
- Submit your subscription form
- Change parameter thresholds at any time

USGS
science for a changing world

WaterAlert

USGS Home
Contact USGS
Search USGS

Help Info

Select Location

News updated October 1, 2012

Search by Street Address:
Enter Street Address

Search by Place Name:
Enter Place Name

Search by Site Number(s):
Enter Site Number(s)

Search by State/Territory:
Select an Area

Search by Watershed Region:
Select a Region

Select Data Type
About WaterAlert
How To Use WaterAlert
Related Information

Site Information

Site Number: 10348200
Site Name: TRUCKEE RV NR SPARKS, NV
Site Type: Stream
Agency: USGS
Access Data

Streamflow: 213 ft³/sec
on 2014-01-12 at 10:30 PST (DD 2)

Stage: 5.13 ft
on 2014-01-12 at 10:30 PST (DD 6)

Subscribe to WaterAlert

USGS WaterAlert [version 1.3]

Subscription Form

The U.S. Geological Survey WaterAlert service sends e-mail or text (SMS) messages when [certain parameters](#), as measured by a USGS real-time data-collection station, exceed user-definable thresholds. The development and maintenance of the WaterAlert system is supported by the USGS and its partners, including numerous federal, state, and local agencies.

Real-time data from USGS gages are transmitted via satellite or other telemetry to USGS offices at various intervals; in most cases, 1 to 4 times per hour. Emergency transmissions, such as during floods, may be more frequent. *Notifications will be based on the data received at these site-dependent intervals.*

Site Info:

Site Number:	10348200
Site Name:	TRUCKEE RV NR SPARKS NV
Agency:	USGS
Transaction ID:	NMBrg

Send Notification To: [about this...](#)

My mobile phone
 My email address

Notification Frequency: [about this...](#)

Hourly
Daily

Streamflow Parameter(s): [about this...](#) Recent value:

Discharge, DD2 (cfs)	<input checked="" type="radio"/>	213 [peak chart]
Gage height, DD6 (ft)	<input type="radio"/>	5.13 [peak chart]

Threshold Condition: [about this...](#)

Greater than (>)
 Less than (<)
 Outside a range (< or >)
 Inside a range (> and <)

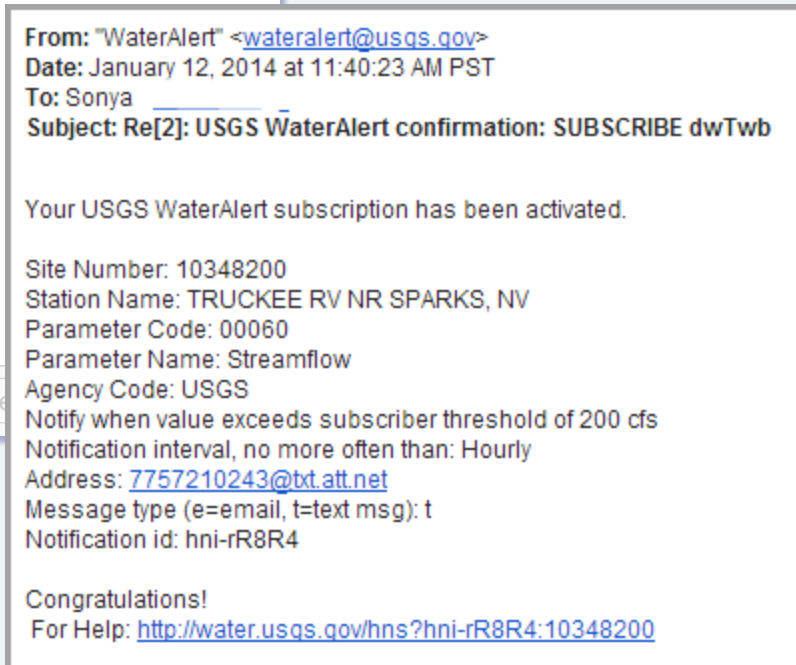
Real-time value is greater than: cfs

I have read and acknowledge the [Provisional Data Statement](#) and [Disclaimer](#).

Submit Reset Cancel

WaterAlert

Email or Text Alerts



Various Parameters:

Surface Water:

Streamflow
Gage height (stage)
Lake/reservoir level
Stream level
Stream velocity

Groundwater:

Water level (depth)
Water Level (elevation)

Water Quality:

Water temperature
Specific conductance
pH
Dissolved oxygen
Salinity
Turbidity

Precipitation:

Total precipitation

NWISWeb - <http://waterdata.usgs.gov/>

- What we provide
 - Access to 1.5 million sites
 - Site and location
 - Surface Water
 - Groundwater
 - Water Quality
 - Water Use
- Navigation
- Basic Process
- Output
- Site Selection
- Data type selection
- Data Category Specifics



USGS
science for a changing world

National Water Information System: Web Interface

Data Category: Home Geographic Area: United States GO

+ Click for News Bulletins

USGS Water Data for the Nation

Search for Sites With Data

Current Conditions Sites with real-time or recent surface-water, groundwater, or water-quality data.

Site information Descriptive site information for all sites with links to all available water data for individual sites.

 Map of all sites with links to all available water data for individual sites.

Frequent Searches By Data Category

Surface Water Water flow and levels in streams and lakes.

Groundwater Water levels in wells.

Water Quality Chemical and physical data for streams, lakes, springs, wells and other sites.

Water Use Water use information.

NWISWeb - Navigation

USGS
science for a changing world

National Water Information System: Web Interface

USGS Water Resources (District Access)

Data Category:
Home
Current Conditions
Site Information
Mapper
Surface Water
Groundwater
Water Quality
Water Use

Geographic Area:
United States
Alabama
Alaska
American Samoa
Arizona
Arkansas
California
Colorado
Connecticut
Delaware
Dist. of Columbia
Florida
Georgia
Guam
Hawaii
Idaho
Illinois
Indiana

GO

Click to hide News Bulletins

- December 12, 2013
- Read the [Mobile Site Tutorial](#) Try it (<http://m.waterdata.usgs.gov>) from your mobile device!
- New improved user interface.
- [Full News](#)

USGS Water Data for the Nation

Search for Sites With Data

Current Conditions Sites with real-time or recent surface-water, groundwater, or water-quality data.

Site information Descriptive site information for all sites with links to all available water data for individual sites.

Map of all sites with links to all available water data for individual sites.

Frequent Searches By Data Category

Surface Water Water flow and levels in streams and lakes.

Groundwater Water levels in wells.

Water Quality Chemical and physical data for streams, lakes, springs, wells and other sites.

Water Use Water use information.

Introduction

These pages provide access to water-resources data collected at approximately 1.5 million sites in all 50 States, the District of Columbia, Puerto Rico, the Virgin Islands, Guam, American Samoa and the Commonwealth of the Northern Mariana Islands. Online access to this data is organized around the categories listed to the left.

The USGS investigates the occurrence, quantity, quality, distribution, and movement of surface and underground waters and disseminates the data to the public, State and local governments, public and private utilities, and other Federal agencies involved with managing our water resources.

[About Us](#) [Help](#) [Tutorial](#)

Basic Process



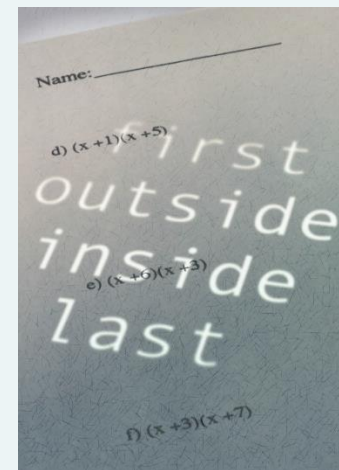
Begin your search

- Data Categories
- Geographic Areas
- Mapper

Refine your Search

- Site Selection Criteria
 - Site Location
 - County
 - Hydrographic Area
 - Site Identifier
 - Site Name
 - Site Numbers
 - Site Attribute
 - Site Type
 - Data Attribute
 - Parameters
 - Number of Observations
 - Last Updated

Output the data



NWISWeb - Output Formats

- **Graphs**
 - Real-time stream flow, water levels, and water quality
- **Tables**
 - HTML and ASCII tab-delimited files
 - Tipsheet for loading our RDB format into Excel
 - http://nwis.usgs.gov/nwisweb/NWISWebUG/tutorials_staging/down_loading_data.html#Excel
- **Files for Google Earth and GIS**
 - KML and shapefiles
- **Automated retrievals (Web Services)**
 - <http://waterservices.usgs.gov/>
 - http://waterdata.usgs.gov/nwis/?automated_retrieval_info
 - Site Information, Unit Values, Daily Values, Water Quality, Groundwater Levels



Google Earth

USGS Water Services

[Home](#) [REST Web Services](#) [SOAP Web Services](#) [Documentation](#) [Examples](#) [Links](#)

Site Information

USGS
science for a changing world

USGS Home
Contact USGS
Search USGS

National Water Information System: Web Interface

[USGS Water Resources](#)

Data Category: Site Information
Geographic Area: Nevada
GO

✦ [Click for News Bulletins](#)

USGS Water-Data Site Information for Nevada

☐ [Click to hide state-specific text](#)

[Annual Water Data Reports](#)

Site Information (23,055 sites)

Information for each site in the USGS data base can be retrieved for viewing and for download and import into other software, including GIS software. Includes links to all water data available for individual sites.

Introduction

The Site Inventory System contains and provides access to inventory information about sites at stream reaches, wells, test holes, springs, tunnels, drains, lakes, reservoirs, ponds, excavations, and water-use facilities.

About 300 components make up the descriptive elements of the site inventory. The retrieval program can be used for retrieving information about sites in summary lists, in detailed tables, or a file suitable for input to other programs.

Site Selection

Site Inventory for Nevada

Click for state-specific text

Choose Site Selection Criteria

Choose at least one of the following criteria to constrain the number of sites selected.

Site -- Location --	Site -- Identifier --	Site -- Attribute --	Data -- Attribute --
<input checked="" type="checkbox"/> County <input type="checkbox"/> Hydrologic Unit (by Code) <input type="checkbox"/> Hydrologic Unit (by Name) <input type="checkbox"/> Lat-Long box	<input type="checkbox"/> Site Name <input type="checkbox"/> Site Number <input type="checkbox"/> Multiple Site Numbers <input type="checkbox"/> Agency Code <input type="checkbox"/> File of Site Numbers	<input type="checkbox"/> Site type <input type="checkbox"/> Altitude <input type="checkbox"/> Drainage area <input type="checkbox"/> Data type <input type="checkbox"/> Well depth <input type="checkbox"/> Hole depth <input type="checkbox"/> National aquifer (by code) <input type="checkbox"/> National aquifer (by name) <input type="checkbox"/> Local aquifer (by code) <input type="checkbox"/> Local aquifer (by name)	<input type="checkbox"/> Update time

Site Numbers

- Those based on latitude and longitude
- Wells (GW), springs (SP), atmospheric (AT), water-quality grab samples (QW), places where there is difficulty assigning a meaningful downstream order number
- Those based on downstream order number
- Continuous SW stations, partial record (SW and QW) stations, QW sites, Spring stations where discharge measurements are routine

Station Names

- Based on a combination of NV hydrographic areas, township, range, section, and quarter section and other common name
 - Mostly wells and some springs
 - Example: 219 S13 E65 28BDBA1 USGS CSV-2
- Based on name of water body
 - Mostly surface water and some springs
 - Example: Muddy River near Moapa, NV



Site Selection - Broad searches

Select sites which meet all of the following criteria:

Define one or more values for each of the following site-selection criteria: --- or select [new criteria](#)

1 **Site Name** -- enter full or partial site name (double quotes denotes an exact match ie. "willow creek")

match from the start match any part

2 **Site type** -- select one or more (selection of a left-justified option will retrieve any subsequent indented entries)

Atmosphere
Glacier
Ocean
 Coastal
Estuary
Lake
Stream
 Canal
 Ditch
 Tidal stream
Spring
Well
 Collector or Ranney type well
 Extensometer well
 Hyporheic-zone well

It is easier to make a broad search when looking for data. We are looking for springs and wells in township S13, range E65 and are showing the available data for the sites found.

Choose Output Format

Display Summary of Selected Sites

Choose one of the following options for displaying descriptions of the sites meeting the criteria above:

- Show sites on a map NEW
- Table of sites grouped by
- Scroll list of sites -- allows selection of data for multiple sites
- Brief descriptions -- allows selection of data for multiple sites
- Site-description information displayed in

(Select fields to include in site-description output)

Agency
Site identification number
Site name
Site type

- Save file of selected sites to local disk for future upload

Retrieve Site inventory data for Selected Sites

Choose one of the following options for displaying data for the sites meeting the criteria above

- Detailed descriptions with links to available data for each site

Site Selection - Site Inventory

Available data for this site

SUMMARY OF ALL AVAILABLE DATA
 Location map
 Time-series: Current/Historical Observations
 Time-series: Daily data
 Time-series: Daily statistics
 Time-series: Monthly statistics
 Time-series: Annual statistics
 Water-Quality: Field/Lab samples
 Groundwater: Field measurements
 USGS Annual water-data report(s): (Offsite)
 Offsite: USGS Groundwater watch
 EPA Surf your watershed: Offsite

GO

Well Site

DESCRIPTION:
 Latitude 36°46'50.64", Longitude 114°43'21.86" NAD83
 Clark County, Nevada, Hydrologic Unit 15010012
 Well depth: 478 feet
 Hole depth: 478 feet
 Land surface altitude: 2,185.9 feet above NGVD29.
 Well completed in "Basin and Range carbonate-rock aquifers" (N400BSNRGC) national aquifer.
 Well completed in "Carbonate Rocks" (300CRBN) local aquifer

AVAILABLE DATA:

Data Type	Begin Date	End Date	Count
Current / Historical Observations (availability statement)	2007-10-04	2014-01-21	
Daily Data			
Depth to water level, feet below land surface	1991-02-06	2014-01-20	5668
Daily Statistics			
Depth to water level, feet below land surface	1991-02-06	2012-09-30	5191
Monthly Statistics			
Depth to water level, feet below land surface	1991-02	2012-09	
Annual Statistics			
Depth to water level, feet below land surface	1991	2012	
Field groundwater-level measurements	1985-02-06	2013-12-06	161
Field/Lab water-quality samples	1986-01-26	2003-07-08	2
Additional Data Sources			
Annual Water-Data Report (pdf) **offsite**	2005	2012	8
Groundwater Watch **offsite**	1985	2014	5826

OPERATION:
 Record for this site is maintained by the USGS Nevada Water Science Center
 Email questions about this site to [Nevada Water Science Center Water-Data Inquiries](#)

USGS 364650114432001 219 S13 E65 28DBA1 USGS CSV-2
Available data for this site
Location map
GO

Clark County, Nevada
 Hydrologic Unit Code 15010012
 Latitude 36°46'50.64", Longitude 114°43'21.86" NAD83
 Land-surface elevation 2,185.9 feet above NGVD29
 The depth of the well is 478 feet below land surface.
 The depth of the hole is 478 feet below land surface.
 This well is completed in the Basin and Range carbonate-rock aquifers (N400BSNRGC) national aquifer.
 This well is completed in the Carbonate Rocks (300CRBN) local aquifer.

Location of the site in Nevada

USGS 364650114432001 219 S13 E65 28DBA1 USGS CSV-2
Available data for this site
Groundwater: Field measurements
GO

Clark County, Nevada
 Hydrologic Unit Code 15010012
 Latitude 36°46'50.64", Longitude 114°43'21.86" NAD83
 Land-surface elevation 2,185.9 feet above NGVD29
 The depth of the well is 478 feet below land surface.
 The depth of the hole is 478 feet below land surface.
 This well is completed in the Basin and Range carbonate-rock aquifers (N400BSNRGC) national aquifer.
 This well is completed in the Carbonate Rocks (300CRBN) local aquifer.

Output formats

Table of data
Tab-separated data
Graph of data
Reselect period

Breaks in the plot represent a gap of at least one year between field measurements.
[Download a presentation-quality graph](#)

Site Selection - Output

- Search “Truckee”

Site Number	Site Name
10336578	UPPER TRUCKEE RV ABV TRIB ABV HAWLEY GRADE RD, CA
10336579	UPPER TRUCKEE RV TRIB ABV HAWLEY GRADE RD, CA
10336580	UPPER TRUCKEE RV AT S UPPER TRUCKEE RD NR MEYERS
10336582	BENWOOD MEADOWS TRIB S A S UPPER TRUCKEE RD, CA
10336583	BENWOOD MEADOWS TRIB MID A UPPER TRUCKEE RD, CA
10336584	BENWOOD MEADOWS TRIB N A S UPPER TRUCKEE RD, CA
1033659354	UPPER TRUCKEE RV S TRIB A GRASS LAKE RD, CA
1033659356	UPPER TRUCKEE RV N TRIB A GRASS LAKE RD, CA
10336596	UPPER TRUCKEE RV TRIB A HWY 89 S OF SANTA CLAUS DR
10336597	UPPER TRUCKEE RV TRIB A HWY 89 N OF SANTA CLAUS DR
10336598	UPPER TRUCKEE RV TRIB CELIO RNCH A S U TRUCKEE RD
10336599	UPPER TRUCKEE RV TRIB NR KEKIN S A S U TRUCKEE RD
1033660907	UPPER TRUCKEE RV TRIB US HWY 50 GAGE ABV MEYERS CA


Initial Site Selection Results -- 164 sites match criteria

Site name contains string = Truckee

Select one or more sites from this initial selection list --- or click here to select all sites

NV001 10347705 TRUCKEE RV AT IDLEWILD PARK AT RENO, NV
 USGS 10347710 TRUCKEE RV ABV SPCCO IDLEWILD INTAKE AT RENO, NV
 USGS 10347861 TRUCKEE RV IN WINGFIELD PARK AT RENO, NV
USGS 10348000 TRUCKEE RV AT RENO, NV
 USGS 10348036 TRUCKEE RV AT GLENDALE AVE NR SPARKS, NV
 USGS 10348200 TRUCKEE RV NR SPARKS, NV
 USGS 10348201 TRUCKEE RV INTRAGRAVEL NR SPARKS, NV
 USGS 10348245 N TRUCKEE DRAIN AT SPANISH SPRINGS RD NR SPARK, NV
 USGS 10348250 FWM28: N TRUCKEE DR BLW SPANISH SPGS V NR SPARKS,
 USGS 10348270 FWM21: N TRUCKEE DITCH AT RENO, NV

NWIS Mapper - Navigating



science for a changing world

USGS Home
Contact USGS
Search USGS

National Water Information System: Mapper Help Info

Sites
Map

Search

Surface-Water Sites

Groundwater Sites

Active Sites

- Any data
- Instantaneous data
- Daily data
- Water-quality data
- Measurements
- Annual Report

Inactive Sites

- Any data
- Instantaneous data
- Daily data
- Water-quality data
- Measurements
- Annual Report

Export Sites

Export Format:


- Table of Sites (.html)
- List of Site Numbers (.txt)
- Microsoft Excel (.xls)
- Comma Separated (.csv)
- Tab Separated (.rdb)
- Keyhole Markup Language (.kml)
- ESRI Shapefile (.shp)

Export

Springs

Atmospheric Sites

Other Sites



Status
Surface-Water
Groundwater
Springs
Atmospheric
Other

Active

Site Number	Site Name	Site Type	Status	Agency	Access Data
09419680	COTTONWOOD VALLEY NR BLUE DIAMOND, NV	Stream	Active	USGS	Access Data
09419682	OAK CK NR BLUE DIAMOND, NV	Stream	Active	USGS	Access Data
09419659	SLOAN CHANNEL TRIB AT LAS VEGAS BLVD NR N LV	Stream	Active	USGS	Access Data
094196781	FLAMINGO WASH AT NELLIS BLVD NR LAS VEGAS, NV	Stream	Active	USGS	Access Data
09419658	LAS VEGAS WASH NR SAHARA AVE NR LAS VEGAS, NV	Stream	Active	USGS	Access Data
094196783	LV WASH BLW FLAMINGO WASH CONFL NR LAS VEGAS, NV	Stream	Active	USGS	Access Data
09419665	SLOAN CHANNEL AT CHARLESTON BLVD NR LAS VEGAS, NV	Stream	Active	USGS	Access Data
094196784	LAS VEGAS WASH AT VEGAS VALLEY DR NR LAS VEGAS, NV	Stream	Active	USGS	Access Data

USGS 09419680 COTTONWOOD VALLEY NR BLUE DIAMOND, NV


Available data for this site [SUMMARY OF ALL AVAILABLE DATA](#) [GO](#)

Stream Site

DESCRIPTION:
 Latitude 36°00'35", Longitude 115°23'50" NAD27
 Clark County, Nevada, hydrologic Unit 15010013
 Drainage area: 18.3 square miles
 Datum of gage: 3,980.00 feet above NGVD20.

AVAILABLE DATA:	Data Type	Begin Date	End Date	Count
Peak streamflow		1961	2013-08-31	53
Field measurements		1965-11-23	2013-12-13	46
Additional Data Sources		Begin Date	End Date	Count
Annual Water-Data Report (pdf)	**offsite**	2005	2012	8

OPERATION:
 Record for this site is maintained by the USGS Nevada Water Science Center
 Email questions about this site to [Nevada Water Science Center Water-Data Inquiries](#)



science for a changing world

NWIS Mapper - Base Maps

The default will show the Map Layer, pop up Base map to change the base map.

Map Layers

- Watershed Boundary Dataset
- USGS National Hydrography Dataset (NHD)
- Principal Aquifers
- USGS National Atlas
- USGS Offices
- Water Science Center

Base Map

- Imagery
- Imagery with Labels
- Streets
- Topographic

USGS science for a changing world

National Water Information System: Mapper

USGS Home Contact USGS Search USGS

Help Info

Map

Map Layers

Base Map

Imagery

Imagery with Labels

Streets

Topographic

Status Surface-Water Groundwater Springs Atmospheric Other

Active	Site Number	Site Name	Site Type	Status	Agency	Access Data
Inactive	09419680	COTTONWOOD VALLEY NR BLUE DIAMOND, NV	Stream	Active	USGS	Access Data

Export...

Searches by Data Category

Frequent Searches By Data Category

Surface Water

Water flow and levels in streams and lakes.

Groundwater

Water levels in wells.

Water Quality

Chemical and physical data for streams, lakes, springs, wells and other sites.

Water Use

Water use information.

Common Themes

Current Conditions

Current Unit Values

Historical Observations

Historical Unit values back to 10/2007

Daily Data

Daily Values


Statistics

Monthly, Annual and Daily

Field Measurements

Field Measurements and Samples

Current Conditions - Real-time data



[USGS Home](#)
[Contact USGS](#)
[Search USGS](#)

National Water Information System: Web Interface

USGS Water Resources (District Access) Data Category: Current Conditions | Geographic Area: Nevada | GO

Click for News Bulletins

USGS Current Water Data for Nevada

Click for state-specific text

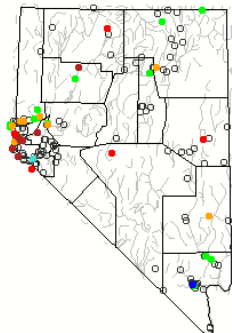
--- Predefined displays ---

Introduction

Daily Streamflow Conditions

Select a site to retrieve data and station information.

Monday, January 20, 2014 16:30ET



Build Your Own

Explanation

- High
- > 90th percentile
- 76th - 90th percentile
- 25th - 75th percentile
- 10th - 24th percentile
- < 10th percentile
- Low
- Not ranked

The colored dots on this map depict streamflow conditions as a [percentile](#), which is computed from the period of record for the current day of the year. Only stations with at least 30 years of record are used. The **gray circles** indicate other stations that were not ranked in percentiles either because they have fewer than 30 years of record or because they report parameters other than streamflow. Some stations, for example, measure stage only.

The data on these pages is made possible with the cooperation from Federal, Tribal, State, and local agencies. A list of our current cooperators is available [online](#).

[Streamflow Real-Time Table](#)

[Hoover Release/Colorado River below Hoover Dam \(09421500\)](#)

[Lake and Reservoir Real-Time Table](#)

[Reservoir elevation for Lake Mead](#)


[Groundwater Real-Time Table](#)

[Precipitation Real-Time Table](#)

[Water Quality Real-Time Table](#)

Real-time data typically are recorded at 15-60 minute intervals, stored onsite, and then transmitted to the Nevada Water Science Center every 4 hours. Recording and transmission times may be more frequent during critical events. Data from real-time sites are relayed to the Nevada District Office via satellite; telephone and radio are also available at some sites for viewing data within minutes of arrival. All real-time data are [provisional and subject to revision](#).

Build Real-Time Table	Show a custom real-time summary table for one or more stations.
Build Time Series	Show custom graphs or tables for a series of recent data for one or more stations.



USGS
science for a changing world

Current Conditions - Build Your Own

Build Real-Time Table	Show a custom real-time summary table for one or more stations.
Build Time Series	Show custom graphs or tables for a series of recent data for one or more stations.

USGS
science for a changing world

National Water Information System: Web Interface
USGS Water Resources

Click for News Bulletins

USGS Current Conditions for Nevada: Build Current Table

Click for state-specific text

Choose Site Selection Criteria

Choose from the following criteria to constrain the number of sites selected. If no additional site-selection criteria are chosen and no additional specifications are defined on the following page then output will be for all 187 sites in Nevada that have current-conditions.

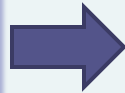
Site -- Location --
 County
 Hydrologic Unit (by Code)
 Hydrologic Unit (by Name)
 Lat-long box

Site -- Identifier --
 Site Name
 Site Number
 Multiple Site Numbers
 Agency Code
 File of Site Numbers

Site -- Attribute --
 Site type

Data -- Attribute --
 Update time

Submit Reset



Select sites which meet all of the following criteria:
Define one or more values for each of the following site-selection criteria: --- or select [new criteria](#)

Site Name -- enter full or partial site name (double quotes denotes an exact match ie. "willow creek")
 Truckee match from the start match any part

Available parameters -- select sites that have data for the following parameters:
Enter numbers to choose parameters and order columns in the output --or-- Select all.

1 Station name
2 Date and time

Water Level/Flow Parameters

Depth to water level, ft below land surface (23 sites)
 Elevation of reservoir water surface above datum, ft (11 sites)
3 Gage height, ft (175 sites)
 Long-term mean daily streamflow, ft³/s
 Long-term median daily streamflow, ft³/s
 Reservoir storage, acre-ft (12 sites)
4 Streamflow, ft³/s (171 sites)

Water Quality Parameters

pH, water, unfiltered, field, standard units (1 sites)
5 Specific conductance, water, unfiltered, µS/cm at 25 °C (9 sites)
6 Temperature, water, °C (14 sites)
 Turbidity, water, unfiltered, monochrome near infra-red
Wavelength: 780-880 nm, detection angle 90°, 2.0-5.0

Physical Properties Parameters

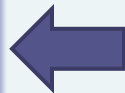
Atmospheric water vapor density, g/m³ (1 sites)
 Evapotranspiration, inches (1 sites)

Miscellaneous Parameters

Latent heat flux, W/m² (1 sites)
 Sensible heat flux, W/m² (1 sites)

DCP/Gage Performance Parameters

DCP battery voltage, V (122 sites)
 Estimate of DCP transmitted power, dB (23 sites)



Current Conditions for Nevada -- 15 site(s) found
PROVISIONAL DATA SUBJECT TO REVISION

Predefined displays: Current Custom Display
Group table by: no grouping
Select sites by number or name: go show sites on a map

[Customize table to display other current-condition parameters](#)

Station Number	Station name	Date/Time	Gage height, feet	Dis-charge, ft ³ /s	Specific conductance, µS/cm @ 25 deg C	Temperature, water, deg C
103327500	TRUCKEE R A TAHOE CITY CA	01/20 13:00 PST	2.53	52	97	6.8
103380000	TRUCKEE R NR TRUCKEE CA	01/20 13:30 PST	1.43	60	--	--
103445050	TRUCKEE R A BOCA BRIDGE NR TRUCKEE CA	01/20 13:15 PST	5.84	216	--	--
103460000	TRUCKEE R A FARAD CA	01/20 13:30 PST	3.16	236	--	--
103474600	TRUCKEE RV NR MOGUL, NV	01/20 13:15 PST	5.24	150	--	--
103480000	TRUCKEE RV AT RENO, NV	01/20 13:15 PST	3.76	227	--	--
103482000	TRUCKEE RV NR SPARKS, NV	01/20 13:30 PST	5.01	180	137	2.4
103500000	TRUCKEE RV AT VISTA, NV	01/20 13:15 PST	3.82	292	--	--
103503400	TRUCKEE RV NR TRACY, NV	01/20 13:00 PST	6.60	286	--	--
103505000	TRUCKEE RV AT CLARK, NV	01/20 13:30 PST	9.54	--	305	3.9
103513000	TRUCKEE CANAL NR WADSWORTH, NV	01/20 13:00 PST	--	172	--	--
	[from admn]	01/20 13:00 PST	5.70	--	--	--
103514000	TRUCKEE CANAL NR HAZEN, NV	01/20 13:15 PST	9.42	171	--	--
103516000	TRUCKEE RV BLW DERBY DAM NR WADSWORTH, NV	01/20 13:00 PST	1.80	81	322	3.8
103516500	TRUCKEE RV AT WADSWORTH, NV	01/20 13:15 PST	4.15	72	--	--
103517000	TRUCKEE RV NR NIXON, NV	01/20 13:15 PST	2.97	99	450	3.5

Choose Output Format
Display Summary of Selected Sites

Choose one of the following options for displaying descriptions of the sites meeting the criteria above:

Show sites on a map ***

Table of sites grouped by []

Scroll list of sites -- allows selection of data for multiple sites

Brief descriptions -- allows selection of data for multiple sites

Site-description information displayed in [table format]

(Select fields to include in site-description output)

Agency
Site identification number
Site name
Site type

Save file of selected sites to local disk for future upload

Raw NWISWeb sitefile review (internal)

Retrieve Current data for Selected Sites
Choose one of the following options for displaying data for the sites meeting the criteria above

Table of data sorted by [Site number] grouped by []

Separated data [Save to file] *

* Save compressed files with a .gz file extension.

Submit Reset Help

Nevada Current Conditions

<http://waterdata.usgs.gov/nv/nwis/current/?type=flow>

USGS
science for a changing world

National Water Information System: Web Interface

USGS Water Resources (District Access) Data Category: Current Conditions Geographic Area: Nevada GO

Click for News Bulletins

Click to hide state-specific text

[Annual Water Data Reports](#)

Current Conditions for Nevada: Streamflow -- 183 site(s) found

PROVISIONAL DATA SUBJECT TO REVISION

Predefined displays: Nevada Streamflow Table Group table by: Major River Basin Select sites by number or name: [] go show sites on a map

[Customize table to display other current-condition parameters](#)

Station Number	Station name	Long-term mean flow 1/12	Gage height, feet	Dis-charge, ft ³ /s	Date/Time
MAIN STEM COLORADO RIVER					
09402500	COLORADO RIVER NEAR GRAND CANYON, AZ	10,400	9.63	14,900	01/12 13:15 MST
09404200	COLORADO RVR ABV DIAMOND CREEK NR PEACH SPRINGS AZ	15,600	49.77	15,700	01/12 13:30 MST
09421500	COLORADO RV BLW HOOVER DAM, AZ-NV	---	42.77	--	01/12 11:30 PST
09422500	LAKE MOHAVE AT DAVIS DAM, AZ-NV	---	41.03	--	01/12 12:45 MST
09423000	COLORADO RIVER BELOW DAVIS DAM, AZ-NV	9,570	11.59	9,830	01/07 16:30 MST
VIRGIN RIVER BASIN					
09413500	VIRGIN RIVER NEAR ST. GEORGE, UT	345	5.76	Rat	01/12 12:30 MST
09413700	VIRGIN RV ABV THE NARROWS NR LITTLEFIELD, AZ	453	6.44	91	01/12 12:15 PST
09413900	BEAVER DAM WASH NEAR ENTERPRISE, UT	18.0	5.07	3.8	01/12 13:00 MST
09414900	BEAVER DAM WASH AT BEAVER DAM, AZ	2.80	4.40	1.4	01/12 11:30 PST
09415000	VIRGIN RV AT LITTLEFIELD, AZ	297	5.20	145	01/12 11:30 PST
09415060	MESQUITE CANAL NR MESQUITE, NV	.000	13.52	0.00	01/12 11:30 PST
09415250	VIRGIN RV ABV LAKE MEAD NR OVERTON, NV	156	12.44	219	01/12 12:00 PST
09415460	WHITE RV NR RED MTN NR PRESTON, NV	2.20	4.56	Ice	01/12 11:30 PST

- List of Sites with most recent data
- Options for various predefined displays, table groupings
- Show listed sites on a map
- Special flags for current issues at site
- Access to other available data
- Customize your own table to show other parameters

Overview of Single Site Current Conditions

- General site information
- List of recent cooperators that contribute funds to operate site
- Access to available data and various output
 - Location Map
 - Daily Data
 - Statistics
 - Field measurements
 - Water Quality
 - Links to offsite data
- Graphs
- Comparison graphs

USGS 09415000 VIRGIN RV AT LITTLEFIELD, AZ PROVISIONAL DATA SUBJECT TO REVISION

Available data for this site Time-series Current/Historical Observations

Recent funding for this site is provided by:



- ▶ **NWS Flood Stage:** 16.9 ft.
- ▶ **WaterNow** - get the latest data from your mobile device or email
- ▶ **Rating Information** - analysis of stage-discharge relations
- ▶ **Peak Chart** - current, recent, and highest peaks

Due to recent storm events, provisional discharges greater than 10,000 cubic feet per second are considered poor until further detailed analyses are done.

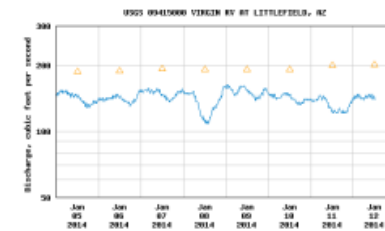
This station managed by the Las Vegas Field Unit.

Available Parameters	Available Period	Output format	Days (?)
<input type="checkbox"/> All 3 Available Parameters for this site		<input checked="" type="radio"/> Graph	-- Of --
<input checked="" type="checkbox"/> 00060 Discharge	2007-10-01 2014-01-12	<input type="radio"/> Graph w/ stats	Begin date
<input checked="" type="checkbox"/> 00065 Gage height	2013-09-14 2014-01-12	<input type="radio"/> Graph w/ (up to 3) parms	2014-01-05
<input checked="" type="checkbox"/> 70969 DCP battery voltage	2013-12-11 2014-01-12	<input type="radio"/> Table	End date
		<input type="radio"/> Tab-separated	2014-01-12

[Summary of all available data for this site](#)
[Instantaneous-data availability statement](#)

Discharge, cubic feet per second

Most recent instantaneous value: 140 01-12-2014 12:30 PST



Add up to 2 more sites and replot for "Discharge, cubic feet per second"

Enter up to 2 site numbers separated by a comma. A site number consists of 8 to 15 digits

Legend: ▲ Median daily statistic (603 years) — Discharge

Create [presentation-quality / stand-alone](#) graph. Subscribe to [@WaterAlert](#) P00045 0001 A3

[Share this graph](#) | [f](#) [t](#) [g+](#) [v](#)

Daily discharge, cubic feet per second -- statistics for Jan 12

Based on 83 years of record [learn](#)

Min (1964)	Most Recent Instantaneous Value Jan 12	25th percentile	Median	75th percentile	Mean	Max (2005)
91	140	160	201	237	297	7000

Gage height, feet

Most recent instantaneous value: 5.18 01-12-2014 12:30 PST



Add up to 2 more sites and replot for "Gage height, feet"

Enter up to 2 site numbers separated by a comma. A site number consists of 8 to 15 digits

Create [presentation-quality / stand-alone](#) graph. Subscribe to [@WaterAlert](#) P00045 0002 A3

[Share this graph](#) | [f](#) [t](#) [g+](#) [v](#)

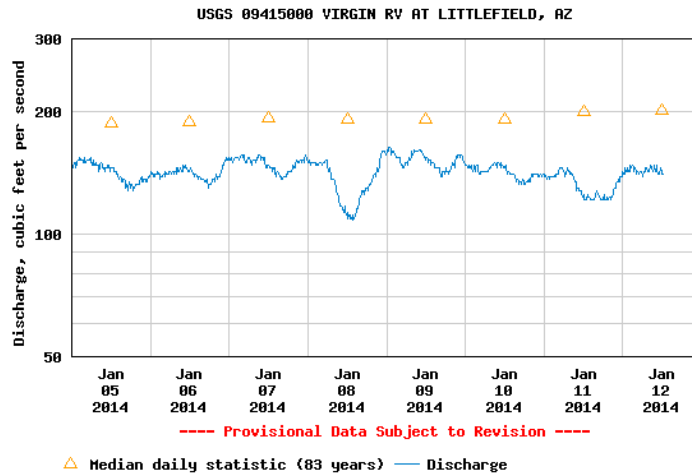
Single Site Current Conditions - Various Outputs

Available Parameters <input type="checkbox"/> All 3 Available Parameters for this site <input checked="" type="checkbox"/> 00060 Discharge <input checked="" type="checkbox"/> 00065 Gage height <input type="checkbox"/> 70969 DCP battery voltage	Available Period 2007-10-01 2014-01-12 2013-09-14 2014-01-12 2013-12-11 2014-01-12	Output format <input checked="" type="radio"/> Graph <input type="radio"/> Graph w/ stats <input type="radio"/> Graph w/o stats <input type="radio"/> Graph w/ (up to 3) parms NEW <input type="radio"/> Table <input type="radio"/> Tab-separated	Days (7) <input type="text"/> -- or -- Begin date <input type="text" value="2014-01-05"/> End date <input type="text" value="2014-01-12"/> <input type="button" value="GO"/>
--	--	--	--

[Summary of all available data for this site](#)
[Instantaneous-data availability statement](#)

Discharge, cubic feet per second

Most recent instantaneous value: 140 01-12-2014 12:30 PST



Create [presentation-quality](#) / [stand-alone](#) graph. Subscribe to [WaterAlert](#) P0006

[Share this graph](#) | [f](#) [t](#) [v](#) [p](#)

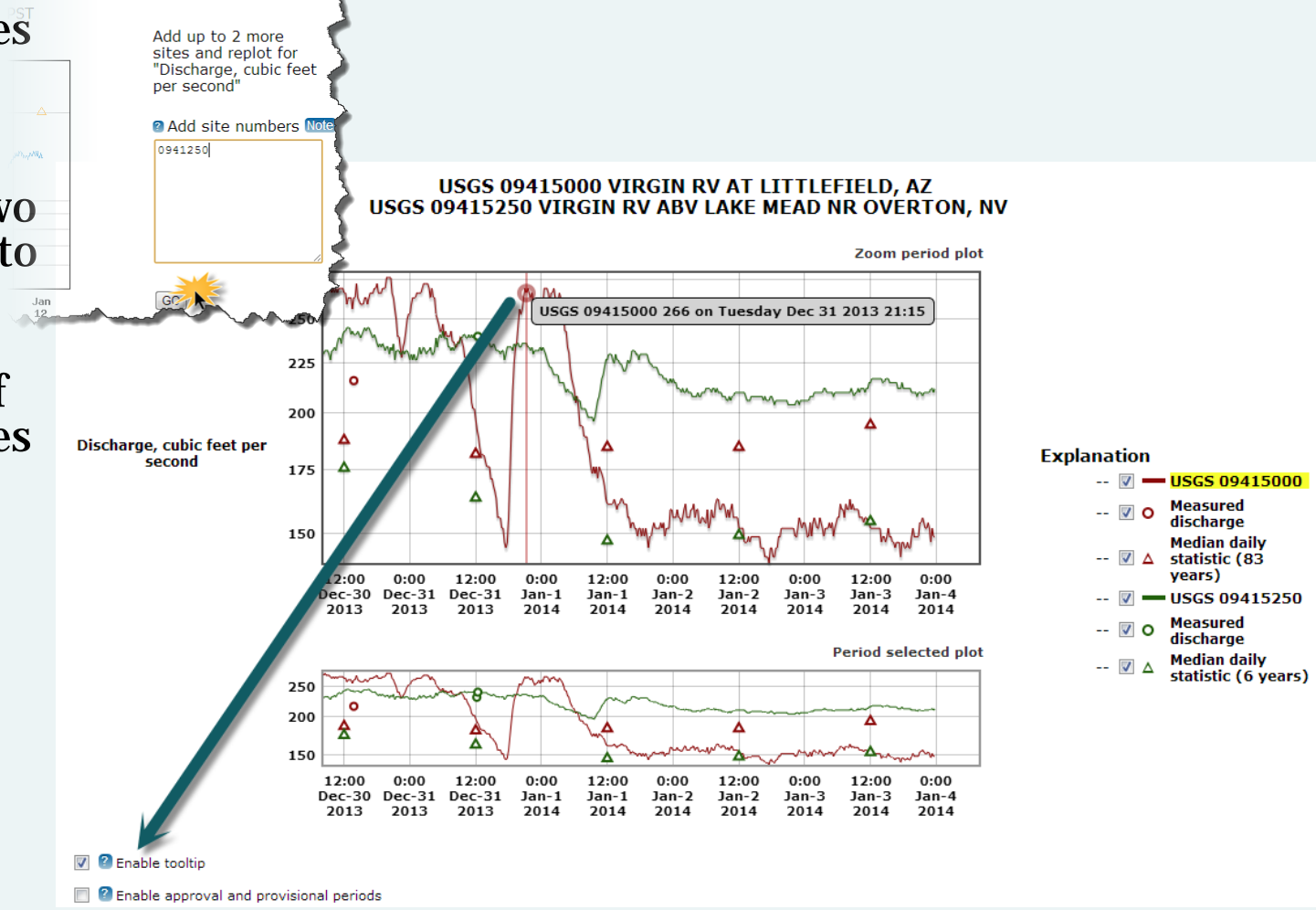
```

----- WARNING -----
# The data you have obtained from this automated U.S. Geological Survey database
# have not received Director's approval and as such are provisional and subject to
# revision. The data are released on the condition that neither the USGS nor the
# United States Government may be held liable for any damages resulting from its use.
# Additional info: http://waterdata.usgs.gov/nwis/?provisional
#
# File-format description: http://waterdata.usgs.gov/nwis/?tab_delimited_format_info
# Automated-retrieval info: http://waterdata.usgs.gov/nwis/?automated_retrieval_info
#
# Contact: gs-w_support_nwisweb@usgs.gov
# retrieved: 2014-01-12 16:16:05 EST (sdw02)
#
# Data for the following 1 site(s) are contained in this file
# USGS 09415250 VIRGIN RV ABV LAKE MEAD NR OVERTON, NV
#
-----
# Data provided for site 09415250
# DD parameter Description
# 01 00065 Gage height, feet
# 02 00060 Discharge, cubic feet per second
#
# Data-value qualification codes included in this output:
# P Provisional data subject to revision.
#
agency_cd site_no datetime tz_cd 01_00065 01_00065_cd 02_00060 02_00060_cd
Ss 15s 20d 6s 14n 10s 14n 10s
USGS 09415250 2014-01-05 00:00 PST 12.40 P 210 P
USGS 09415250 2014-01-05 00:15 PST 12.39 P 208 P
USGS 09415250 2014-01-05 00:30 PST 12.39 P 208 P
USGS 09415250 2014-01-05 00:45 PST 12.38 P 206 P
USGS 09415250 2014-01-05 01:00 PST 12.38 P 206 P
USGS 09415250 2014-01-05 01:15 PST 12.38 P 206 P
USGS 09415250 2014-01-05 01:30 PST 12.37 P 204 P
USGS 09415250 2014-01-05 01:45 PST 12.38 P 206 P
USGS 09415250 2014-01-05 02:00 PST 12.37 P 204 P
USGS 09415250 2014-01-05 02:15 PST 12.37 P 204 P
USGS 09415250 2014-01-05 02:30 PST 12.37 P 204 P
USGS 09415250 2014-01-05 02:45 PST 12.37 P 204 P
USGS 09415250 2014-01-05 03:00 PST 12.36 P 202 P
USGS 09415250 2014-01-05 03:15 PST 12.37 P 204 P
USGS 09415250 2014-01-05 03:30 PST 12.37 P 204 P
USGS 09415250 2014-01-05 03:45 PST 12.37 P 204 P
USGS 09415250 2014-01-05 04:00 PST 12.37 P 204 P
USGS 09415250 2014-01-05 04:15 PST 12.37 P 204 P
USGS 09415250 2014-01-05 04:30 PST 12.37 P 204 P
USGS 09415250 2014-01-05 04:45 PST 12.37 P 204 P
USGS 09415250 2014-01-05 05:00 PST 12.37 P 204 P
  
```



Current Conditions - Comparison

- Comparison of flow at two sites can help evaluate what may happen between the two sites (seepage to groundwater, gains, etc.)
- Comparison of flow at two sites can help evaluate the quality of the provisional record.
- Tooltips allow for data point information



Daily Data and Statistics

Surface-water [daily data example](#).

Select sites which meet all of the following criteria:

Define one or more values for each of the following site-selection criteria: --- or select [new criteria](#)

Site Name -- enter full or partial site name (double quotes denotes an exact match i.e. "willow creek")

match from the start match any part

Available parameters -- select sites that have data for the following parameters:
Select one or more parameters --or-- leave blank to select all:

Water Level/Flow Parameters

- Depth to water level, ft below land surface (44 sites)
- Elevation above NGVD 1929, m (1 sites)
- Elevation of reservoir water surface above datum, ft (14 sites)

Choose Output Format

Display Summary of Selected Sites

Choose one of the following options for displaying descriptions of the sites meeting the criteria above:

Show sites on a map [NEW](#)

Retrieve USGS Surface-Water Daily Data for Selected Sites

Choose one of the following options for displaying data for the sites meeting the criteria above:

Retrieve data for:

- the previous days (1 - 365) ****OR****
- for the date range: First date: Last date: (1838-01-01 through 2014-01-25)

Output Options:

- Graphs of data -- use arithmetic Y-axis for streamflow
- Graphs of data with long-term statistics -- use arithmetic Y-axis for streamflow

SUMMARY OF ALL AVAILABLE DATA

Location map

Time-series: Current/Historical Observations

Time-series: Daily data

Time-series: Daily statistics

Time-series: Monthly statistics

Time-series: Annual statistics

Surface-water: Peak streamflow

Surface-water: Field measurements

Water-Quality: Field/Lab samples

USGS Instantaneous-data archive: (Offsite)

USGS Annual water-data report(s): (Offsite)

EPA Surf your watershed: Offsite

USGS 412910117321001 069 N42 E39 25CAC 1 USBLM

PROVISIONAL DATA SUBJECT TO REVISION

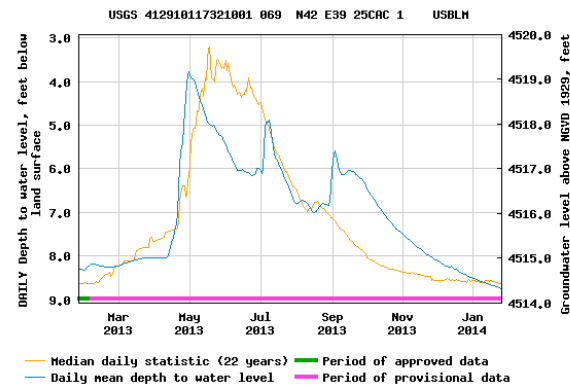
Available data for this site Time-series: Daily data

This station managed by the Elko Field Unit.

Available Parameters	Period of Record	Output format	Days (365)
<input type="checkbox"/> All 1 Available Parameters for this site		<input type="radio"/> Graph	<input type="text" value="365"/>
<input checked="" type="checkbox"/> 72019 WaterLevel, BelowLSD(Mean)	1987-06-25 2014-01-25	<input checked="" type="radio"/> Graph w/ stats	<input type="text" value="-- or --"/>
		<input type="radio"/> Graph w/ meas	<input type="text" value="Begin date"/>
		<input type="radio"/> Graph w/ (up to 3) parms **	<input type="text" value="2013-01-25"/>
		<input type="radio"/> Table	<input type="text" value="End date"/>
		<input type="radio"/> Tab-separated	<input type="text" value="2014-01-25"/>
		<input type="radio"/> Tab-separated w/ meas	<input type="button" value="GO"/>

[Summary of all available data for this site](#)
[Instantaneous-data availability statement](#)

Depth to water level, feet below land surface



Add up to 2 more sites and replot for "Depth to water level, feet below land surface"

Add site numbers [Note](#)

Enter up to 2 site numbers separated by a comma. A site number consists of 8 to 15 digits

Field Measurements

- Similar site selection criteria
- Similar output

USGS 394340115252501 175 N21 E58 03ABB81 USGS-MX

White Pine County, Nevada
 Latitude 39°43'36.8", Longitude 115°25'33.7" NAD83
 Land-surface elevation 6,113 feet above NAVD88
 The depth of the well is 150 feet below land surface.
 This well is completed in the Basin and Range basin-fill aquifers (N100BSNRGB) national aquifer.
 This well is completed in the Valley Fill (110VFL) local aquifer.

Output formats

- Table of data
- Tab-separated data
- Graph of data
- Reselect period

Date	Time	Water level, feet below land surface	Water level, feet above specific vertical datum	Referenced vertical datum	Status	Measuring Agency
2009-09-16	08:35 PDT		48.50			USGS
2009-11-03			48.53			NV073

Explanation

Section	Code	Description
Status		The reported water-level measurement represents a static level
MeasuringAgency	NV073	SOUTHERN NEVADA WATER AUTHORITY (SNWA), NV
MeasuringAgency	USGS	US GEOLOGICAL SURVEY

Under certain circumstances we will store and present other measuring agency data. Data are reviewed for accuracy.

USGS 10310500 CLEAR CK NR CARSON CITY, NV

Douglas County, Nevada
 Hydrologic Unit Code 16050201
 Latitude 39°06'48", Longitude 119°47'50" NAD27
 Drainage area 15.5 square miles
 Gage datum 5,000 feet above NGVD29



Channel data are available for use.

Output formats

- HTML table with channel data
- HTML table without channel data
- Tab-separated data with channel data
- Tab-separated data without channel data
- Graph of data
- Reselect output format

Meas. Number	Date	Time	Time Datum	Measurement Used?	Who	Measuring Agency	Stream flow (ft ³ /s)	Channel flow (ft ³ /s)	Channel width (ft)	Channel area (ft ²)	Channel vel. (ft/s)	Channel stability	Channel material
483	2013-12-30	12:52	PST	Yes	djr	USGS	2.97	2.97	5.90	2.75	1.08	SOFT	SAND
482	2013-12-11	14:09	PST	Yes	JDJ	USGS	3.04	3.04	6.80	3.60	0.84	SOFT	SAND
481	2013-11-12	10:31	PST	Yes	djr kms	USGS	2.15	2.15	6.40	2.32	0.93	SOFT	SAND
480	2013-10-30	11:11:30	PDT	Yes	djr/dj	USGS	2.05	2.05	6.20	2.25	0.91	FIRM	SAND
479	2013-10-23	10:49	PDT	Yes	JDJ	USGS	1.90	1.90	6.60	2.10	0.91	SOFT	SAND
478	2013-09-16	15:40:30	PDT	Yes	JDJ	USGS	1.33	1.33	6.20	1.75	0.76	SOFT	SAND
477	2013-09-04	13:19:30	PDT	Yes	djr/dj	USGS	1.23	1.23	6.30	1.73	0.71	FIRM	SAND
476	2013-08-15	13:53:30	PDT	Yes	djr/dj	USGS	1.21	1.21	6.20	1.71	0.71	SOFT	SAND

Field/Lab Samples

- Similar Site Selection criteria
- Similar output
- Way too many ways to narrow down the data.
 - Use the tool tips [?]
 - Parameter groupings
 - Single parameters

Parameter Code Definition

Retrieve definitions of parameter codes and parameter groupings.

Search Criteria

Parameter groupings -- List all parameters in a group

All -- include all parameter groups

Information

Physical

Inorganics, Major, Metals

Inorganics, Major, Non-metals

Nutrient

Microbiological

Biological

Inorganics, Minor, Metals

Inorganics, Minor, Non-metals

Parameter code/name -- Enter a code or name (matches any part)

Conductance

CASRN -- For best result, enter full CASRN with dashes. For example, "7439-97-6" (CAS Registry Number® is a Registered Trademark of the American Chemical Society. CAS recommends the verification of the CASRNs through CAS Client ServicesSM.)

USEPA SRS -- Matches any part. For example, "phosphorus" retrieves SRS names "Phosphorus", "Organic phosphorus" and "Phosphate-phosphorus". ([Definition](#))

Choose output format

Parameter code information displayed in

Select additional fields to include with the parameter code output:

Group Name

Parameter Name/Description

CASRN

USEPA SRS

Parameter List

Retrieve Water-Quality Samples for Selected Sites

Choose one of the following options for displaying data for the sites meeting the criteria above

Parameter Group Period of Record table

Inventory of water-quality data

Tab-separated inventory of water-quality data *

Retrieve data from: to: (YYYY-MM-DD -- **Blank = all data**)

Retrieve sample time and time zone as stored in UTC

Retrieve samples for specified parameter values: (Parameter Code) (Numeric Value)

Samples and parameters to include:

Samples that include only above parameter selection criteria (Count: 0)

Samples that include above selection criteria and all associated parameters

Samples that include above selection criteria plus one or more of these parameter codes separated by a comma (Limit: 200 codes).

<--Find [parameter codes](#)

Samples that include above selection criteria plus one or more of these parameters in a file

Enter the full pathname of a file containing parameter codes. (Limit: 200 codes)

Table of data

Tab-separated data *

* Save compressed files with a .gz file extension.

Field/Lab Sample Results

USGS 10310500 CLEAR CK NR CARSON CITY, NV

Available data for this site Water-Quality: Field/Lab samples GO

Douglas County, Nevada
 Hydrologic Unit Code 16050201
 Latitude 39°06'48", Longitude 119°47'50" NAD27
 Drainage area 15.5 square miles
 Gage datum 5,000 feet above NGVD29

Output formats

- [Parameter Group Period of Record table](#)
- [Inventory of available water-quality data for printing](#)
- [Inventory of water-quality data with retrieval](#)
- [Tab-separated data, one result per row](#)
- [Tab-separated data one sample per row with remark codes combined with values](#)
- [Tab-separated data one sample per row with tab-delimiter for remark codes](#)
- [Reselect output format](#)

Sample Datetime	Time datum	Time datum reliability code	Sample Medium Code	Agency Collecting Sample, Code	Stream width, feet (00004)	Temperature, water, deg C (00010)	Temperature, air, deg C (00020)	Barometric pressure, mm Hg (00025)	Agency analyzing sample, code (00028)	Instantaneous discharge, ft ³ /s (00061)	Number of sampling points, count (00063)	Gage height, feet (00065)	Turbidity, NTU (0007)
2010-10-05 11:07	PDT	K	WS	USGS-WRD		9.3	7.0			7.1		1.58	
2011-03-06 16:45	PST	K	WS	USGS-WRD	6.00	5.5	8.0			5.8	10	1.37	

Specific conductance, water unfiltered @ 25 degC (00095)	Hydrogen ion, water, unfiltered calculated, mg/L (00191)	Dissolved oxygen, mg/L (00200)	pH, water, unfiltered field, standard units (00400)	Flow velocity, m/s (00400)	Suspended sediment concentration, mg/L (80154)	Suspended sediment discharge, ton/d (80155)	Sediment discharge, ton/d (80155)
74	0.00003		7.5		104	2.0	
88	0.00001		7.9		38	0.60	

Peak Streamflow

Peak Streamflow for Nevada

Click for state-specific text

Select sites which meet all of the following criteria:

Define one or more values for each of the following site-selection criteria: --- or select [new criteria](#)

Hydrologic Unit (by Name) -- select one or more

Hydrologic Unit: Not all sites have been associated with a Hydrologic Unit. Such sites will not be retrieved using this search criteria.

17120009 Alvord Lake
17050102 Bruneau
16060013 Cactus-Sarcobatus Flats
16050203 Carson Desert
18090102 Crowley Lake
18090203 Death Valley-Lower Amargosa

Period of record -- select sites where the time period between the first and last observations at the site overlaps with the period entered below. (Note: Sites can meet this criterion without actually having observations *during* the date range entered.)

Select sites with a period of record that overlaps the period from: 0004-01-23 x to: 01/23/2014

Jan		2004				
Su	Mo	Tu	We	Th	Fr	Sa
				1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	31

Choose Output Format

Display Summary of Selected Sites

Choose one of the following options for displaying descriptions of the

- Show sites on a map xxx
- Table of sites grouped by
- Scroll list of sites -- allows selection of data for multiple sites
- Brief descriptions -- allows selection of data for multiple sites
- Site-description information displayed in

(Select fields to include in site-description output)

Agency
Site identification number
Site name
Site type

- Save file of selected sites to local disk for future upload

Retrieve Published peak streamflow data for Selected Sites

Choose one of the following options for displaying data for the sites meeting the criteria above

Retrieve data from: to: (YYYY-MM-DD -- Blank = all data)

- Graphs of data
- Table of data
- Tab-separated data *

* Save compressed files with a .gz file extension.

peakfq (watstore) format *

* Save compressed files with a .gz file extension.

Specialized format for use with USGS Software PeakFQ used for flood Frequency analyses.

Water Use

- Data are current best estimates
- May be revised from previous publications

Water Use Data for Nevada

Click to hide state-specific text

Annual Water Data Reports

Choose the Year and other Retrieval Criteria.

-- Year --

-- Area Type --

-- Category --

--ALL Years--
1985
1990
1995
2000
2005

State Total
County

--ALL Categories--
Total Population
Public Supply
Commercial
Domestic
Industrial
Total Thermoelectric Power
Fossil-fuel Thermoelectric Power
Geothermal Thermoelectric Power
Nuclear Thermoelectric Power

Submit Reset

Water Use Data for Nevada

Click for state-specific text

Refresh Date: Jan 2012

Year(s): ALL

Area: State Total

County(s):

Category(s): TP,PS,CO,DO,IN

* Click table headers to sort, use shift for sorting multiple columns. Click a row to highlight for greater visibility. - [Glossary of Terms](#)

State Code	State Name	Year	Total Population total population of area, in thousands	Public Supply population served by groundwater, in thousands	Public Supply population served by surface water, in thousands	Public Supply total population served, in thousands	Public Supply self-supplied groundwater withdrawals, fresh, in Mgal/d	Public Supply self-supplied groundwater withdrawals, saline, in Mgal/d	Public Supply total self-supplied withdrawals, groundwater, in Mgal/d	Public Supply self-supplied surface-water withdrawals, fresh, in Mgal/d
32	Nevada	1985	967.750	302.500	579.250	881.750	94.20	-	-	193.3
32	Nevada	1990	1201.850	317.970	802.000	1119.970	104.08	-	-	280.9
32	Nevada	1995	1530.110	379.870	1059.710	1439.580	116.76	0.00	116.76	350.7
32	Nevada	2000	1998.260	452.790	1421.040	1873.830	150.95	-	-	477.8
32	Nevada	2005	2414.807	-	-	2232.960	134.85	0.00	134.85	541.4

* References to sources of water-use data can be found here. - <http://water.usgs.gov/watuse>

Legend Key	Legend Description
-	Data not collected or missing, or totals not calculated due to missing data

Tutorials and Help

<http://help.waterdata.usgs.gov/tutorials>

<http://help.waterdata.usgs.gov/>



National Water Information System: Help System

Search Site Search

[Home](#) [News](#) [FAQ](#) [Tutorials](#) [Search criteria and codes](#)

You are here: [Home](#) > [Tutorials](#)

Tutorials

Do you need help finding USGS data about your watershed? These tutorials includes step-by-step guides for the first-time users of the USGS Water Data for the Nation site, as well as refreshers for returning users. These guides represent only one way to access some of the data.

- [Overview](#)
- [Current Conditions Data](#)
- [Groundwater data](#)
- [Mobile](#)
- [Site information](#)
- [Surface-Water data](#)
- [User Interface](#)
- [Water-Quality Data](#)



National Water Information System: Help System

Search Site Search

[Home](#) [News](#) [FAQ](#) [Tutorials](#) [Search criteria and codes](#) [Output formats](#) [Policies](#) [Known problems](#)

You are here: [Home](#)

USGS Water Data for the Nation Help

An overview of this help system.

This help system is designed to assist you in rapidly finding relevant information about the [USGS Water Data for the Nation web site](http://waterdata.usgs.gov) (waterdata.usgs.gov).

If in a hurry, simply enter the search term in the search box and a list of related topics will be shown. You can also view [frequently asked questions](#) or if you want to learn how to do common tasks follow one of our [tutorials](#). A list of defined USGS [search criteria and codes](#) and [parameters](#) is also available. You can also learn to [navigate the web site](#) and learn about [output formats](#). A [news page](#) is also provided that highlights various system changes that you can subscribe to with the newsreader of your choice.

If you cannot find the information that you are looking for here, please [contact us](#). Except for weekends or holidays, we can usually respond to questions within one business day.

Filed under: [USGS Water Data for the Nation](#) [Help system](#)

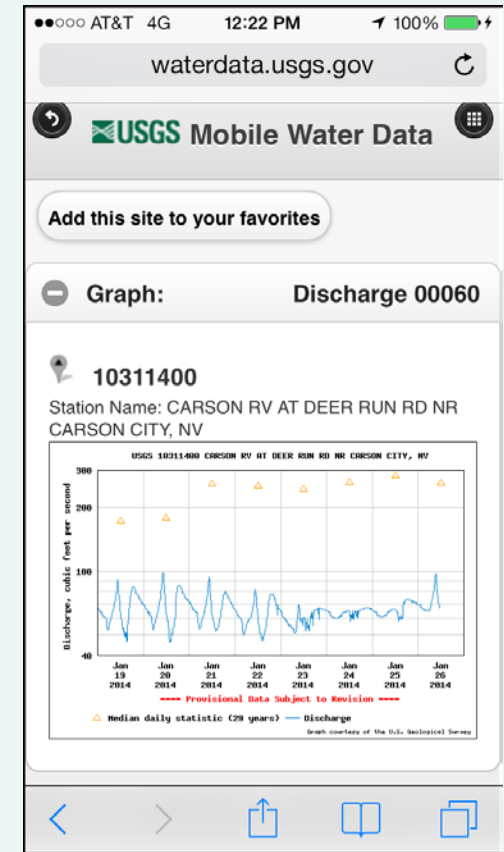
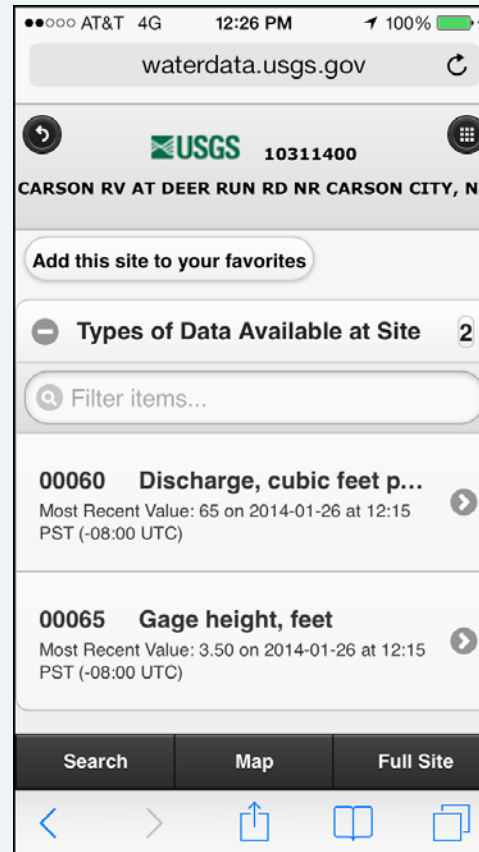
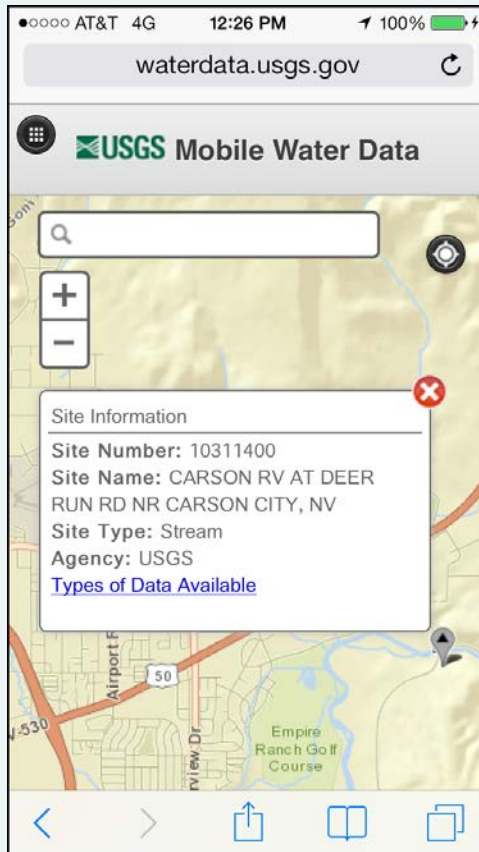
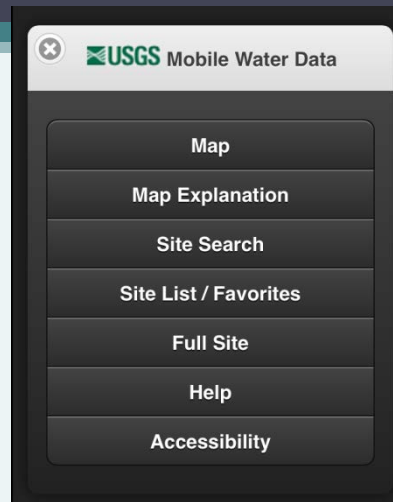
Tag Cloud

[Apache web server](#)
[Excel](#) [FTP](#) [GNUPlot](#)
[Help system](#) [Linux](#) [MySQL](#)
[NWIS Perl](#)
[Provisional data RDB Sites](#) [Stations](#) [USGS](#)
[Visual Identity](#) [USGS](#)
[Water Data for the Nation](#)
[WaterAlert](#)
[WaterWatch XML](#)
[aggregated water use analyses apps](#)
[atmospheric sites](#)
[automated](#)

NWISWeb Mobile

<http://m.waterdata.usgs.gov>

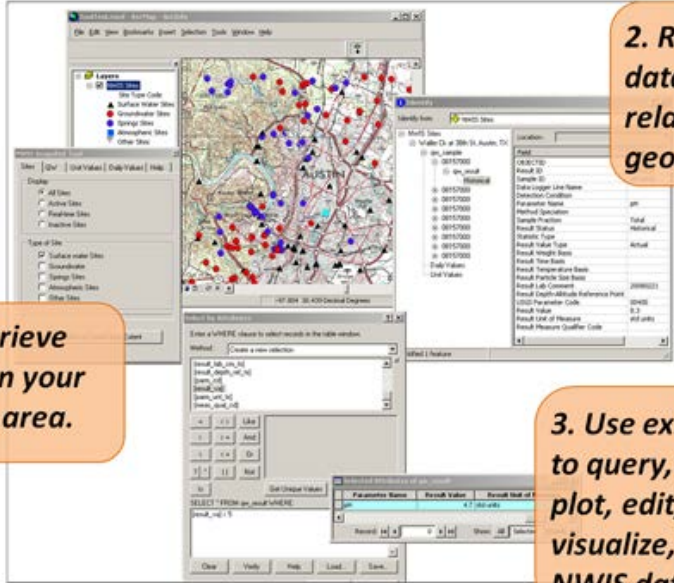
- Can use phone location
- Search by Site Number
- Add to Favorites
- Toggle to main site



USGS NWIS Snapshot

<http://txpub.usgs.gov/snapshot/>

- Uses NWIS Web Services
- Creates geodatabase
- Has built in relationships between tables
- Can build new relationships with other data
- Standard ArcGIS functions can be used to analyze and export data to analyze in other software



NWIS Snapshot

1. Retrieve sites in your study area.

2. Retrieve data to a relational geodatabase.

3. Use existing tools to query, analyze, plot, edit, expand, visualize, and export NWIS data.

Parameter Name	Result Value	Result Unit
PH	47.100	mg/L

BioData

Aquatic Bioassessment Data for the Nation

<https://aquatic.biodata.usgs.gov/landing.action>

Access to aquatic bioassessment data (biological community and physical habitat data) collected by USGS scientists.

1991 samples by National Water-Quality Assessment ([NAWQA](#)).

USGS
science for a changing world

USGS Home
Contact USGS
Search USGS

BioData - Aquatic Bioassessment Data for the Nation

BioData Retrieval

Retrieval Welcome to the U.S. Geological Survey (USGS) BioData Retrieval system which provides access to aquatic bioassessment data (biological community and physical habitat data) collected by USGS scientists from stream ecosystems across the nation. [more...](#)

BioData Retrieval System Features

- Select data using variety of criteria, including: sample type, geography, site characteristics and lists, sampling dates, and project or program
- See how many samples you will retrieve in real time as you modify selection criteria
- Save data selection criteria for re-use. Email to colleagues for them to use
- Preview data tables before downloading them
- Download data as comma-delimited, tab-delimited, XML, Excel 1997/2003 or Excel 2007/2010
- Download multiple related data tables in one operation - packaged together in one zip file
- All taxonomy reported using standardized and harmonized taxonomic system - synonymy is resolved for you
- Online data table and column definitions

BioData Support

Downloads, FAQ, Tip sheets, and more
Contact the BioData Team

BioData Public Data Retrieval

Retrieval
Retrieve Data
About Public Data Retrieval
Release Notes

BioData Input System

Input
Login to BioData Input
Training Information
Release Notes

BioData Labs

Lab Info
Lab Support
Summary of Lab Usage
Login to BioData Input

Other Resources

BioData Fact Sheet (FS 2011-3112)
USGS Water Data for the Nation
USGS National Water Quality Assessment Data Warehouse
National Water-Quality Assessment Program (NAWQA)
National Rivers and Streams Assessment (NRSA)
Diatoms of the United States
Biodiversity Information Serving Our Nation (BISON)
Integrated Taxonomic Information System (ITIS)

USGS - BioData Retrieval - Environment: production - Version 3.1.3 Release Notes

So many websites so little time....

Water Data Discovery

<http://water.usgs.gov/data>

Nevada Water Science Center

<http://nevada.usgs.gov/water/>

Water-Data Report

<http://wdr.water.usgs.gov>

National Water Information System (NWIS): Web Interface – Provides access to USGS water data

<http://waterdata.usgs.gov>

Nevada Current Conditions

<http://waterdata.usgs.gov/nv/nwis/rt>

Instantaneous-Data Archive (IDA) – Obtain instantaneous data

<http://ida.water.usgs.gov/ida/index.cfm>

NWIS automated retrievals – Obtain USGS water data via automated methods

http://waterdata.usgs.gov/nwis/?automated_retrieval_info

USGS Water Services

<http://waterservices.usgs.gov>

USGS NWIS Snapshot – Query, visualize, and analyze NWIS data from geodatabase

<http://txpub.usgs.gov/snapshot>

Water Watch - Quick evaluation of current and past conditions; surface water

<http://waterwatch.usgs.gov>

Groundwater Watch - Quick evaluation of current and past conditions

<http://groundwaterwatch.usgs.gov>

Water Quality Watch - Quick evaluation of current and past conditions

<http://waterwatch.usgs.gov/wqwatch>

Water Now – Current data direct to mobile or email

<http://water.usgs.gov/waternow>

Water Alert – Sends email or text messages when parameters exceed thresholds

<http://maps.waterdata.usgs.gov/mapper/wateralert>

BioData: A National Aquatic Bioassessment Database

<https://aquatic.biodata.usgs.gov/landing.action>

...and a bunch Fact Sheets as well....

U.S. Geological Survey Water Resources Internet Tools

<http://pubs.usgs.gov/fs/2013/3072/>

NWISWeb: New Site for the Nation's Water Data

<http://permanent.access.gpo.gov/waterusgs.gov/water.usgs.gov/pubs/fs/fs-128-02/index-1.htm>

Streamflow, Groundwater, and Water-Quality Monitoring by USGS Nevada Water Science Center

<http://pubs.usgs.gov/fs/2013/3004/>

WaterWatch-Maps, Graphs, and Tables of Current, Recent, and Past Streamflow Conditions

<http://pubs.usgs.gov/fs/2008/3031/>

From the River to You: USGS Real-Time Streamflow Information

<http://pubs.usgs.gov/fs/2007/3043/>

Recent Improvements to the U.S. Geological Survey Streamgaging Program ...from the National Streamflow Information Program

<http://pubs.usgs.gov/fs/2007/3080/>

U.S. Geological Survey Community for Data Integration: NWIS Web Services Snapshot Tool for ArcGIS

<http://pubs.usgs.gov/fs/2011/3141/>

StreamStats: A Water Resources Web Application

<http://pubs.usgs.gov/fs/2008/3067/>

The National Streamflow Statistics Program: Estimating High and Low Streamflow Statistics for Ungaged Sites

<http://pubs.er.usgs.gov/publication/fs20073010>

Estimating magnitude and frequency of floods using the PeakFQ program

<http://pubs.er.usgs.gov/publication/fs20063143>

Real-time ground-water data for the nation

<http://pubs.usgs.gov/fs/fs-090-01/>

U.S. Geological Survey Real-Time River Data Applications

<http://pubs.usgs.gov/fs/1998/fs029-98/>

BioData: A National Aquatic Bioassessment Database

<http://pubs.usgs.gov/fs/2011/3112/>

If you can only remember one link, make it

Water Data Discovery

<http://water.usgs.gov/data/>

What are you looking for?

What is happening today...

[Water Now](#)

What happened in the past...

[Water Then](#)

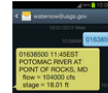
What might happen in the future...

[Water Tomorrow](#)

Water Now

WaterNow@usgs.gov

How can I quickly get current water conditions that are important to me, such as water levels, streamflow, or temperatures? How do I find locations where these data are available?



WaterAlert

How can I be alerted to water conditions that exceed thresholds that are important to me, such as high water levels or temperatures? How do I find locations where these alerts may be available?



Real-time streamflow

Where is the USGS collecting and transmitting real-time streamflow data right now? How does flow today compare with historical streamflow? How can I see these sites on a map and get to the data? ([Fact Sheet](#))



Real-time flood data

Where in the Nation are floods or very high flows occurring now? How can I see these sites on a map and get to the data?



Real-time drought data

Where in the Nation are droughts or very low flows occurring now? How can I see these sites on a map and get to the data?



Real-time groundwater levels

Where is the USGS collecting and transmitting real-time groundwater levels right now? How do levels today compare with historical levels? How can I see these sites on a map and get to the data?



Recent groundwater levels

Where in the Nation is the USGS currently collecting groundwater level data? How can I see these sites on a map and get to the



Water Then

Annual water data reports

Can I see all of the locations where the USGS has published water resources data for a particular year? How can I see these sites on a map and get to the data?



You can retrieve data using a [map](#) or a [search form](#).

Instantaneous streamflow data (prior to 2007)

I want to find long-term streamflow data reported in short time intervals (such as 15 minutes or 1 hour) rather than as daily averages. Where can I see a list of those sites and get to the data?



National Water Quality Assessment

The NAWQA program provides a search to physical, chemical, sediment, and biological data that have been collected as part of the national program, including some aquatic ecological data that can not be stored in NWIS. ([Fact Sheet](#))



Water use in the United States

Use of water in the United States is tracked by USGS in cooperation with state, tribal, and local governments.



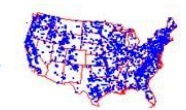
Some notable collections of USGS water data

[Sediment data](#) collected by USGS is stored in NWIS and is also described in a dedicated web page and [report](#).



A [Reservoir Sedimentation Database](#) from federal agencies is also maintained by USGS.

The [Hydro-Climatic Data Network](#) provides streamflow data between 1874 and 1988 and is useful in studying climate change.



Questions??

Steve Berris

snberris@usgs.gov

775-887-7693

Sonya Vasquez

slvasque@usgs.gov

775-887-7718

We have two main offices in Nevada:

Carson City Office

2730 N. Deer Run Rd.
Carson City, NV 89701
phone: 775-887-7600

Henderson Office

160 N. Stephanie St.,
Henderson, NV 89074
phone: 702-564-4600

We also have two smaller field offices:

Elko Field Office

phone: 775-778-6616

Mercury Field Office

phone: 702-564-4600

Support Slides not discussed during the session

Detailed information about WaterWatch

Instantaneous Data Archive (IDA) – unit values prior to 10/1/07

WaterWatch - What is it?

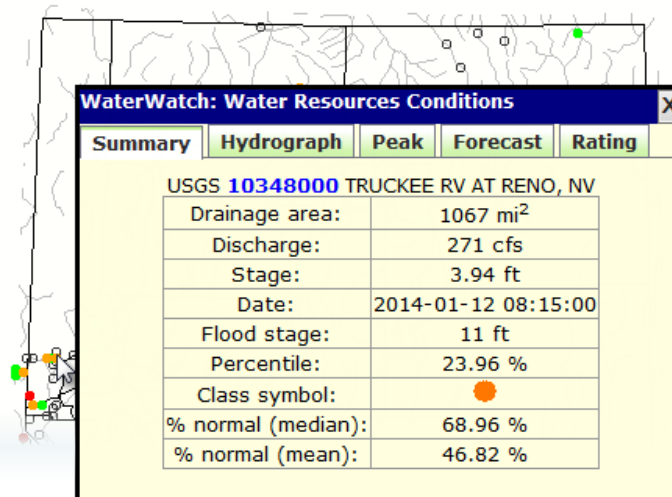
- Current, recent, and historical maps
 - Real-time, flood, 1-, 7-, 14-, 28-day, and monthly average flow
 - Site-by-site and hydrologic unit region maps
- Graphs and Tables
 - Summary of flow conditions in a region
 - List of streamflow condition information
- Tools to customize WaterWatch products
 - Interactive maps, Google Earth kml output
- Links to just about every data delivery site you need

WaterWatch

Map | [HUC Map](#) | [Map \(HCDN\)](#) | [Summary Table](#) | [Web Map](#)

Map of 28-day average streamflow compared to historical streamflow for the day of the year (Nevada)

Nevada ▼ or Water-Resources Regions ▼



Choose a data retrieval option and select a location on the map

List of all stations Single station Nearest stations

Explanation - Percentile classes

●	●	●	●	●	●	●	○
Low	<10	10-24	25-75	76-90	>90	High	Not-ranked
	Much below normal	Below normal	Normal	Above normal	Much above normal		

WaterWatch



USGS Home
Contact USGS
Search USGS

National Water Information System: Web Interface

USGS Water Resources (District Access) Data Category: Site Information Geographic Area: Nevada GO

- Click for News Bulletins
- Click for state-specific text

USGS 10348000 TRUCKEE RV AT RENO, NV

Available data for this site: SUMMARY OF ALL AVAILABLE DATA GO

Stream Site

DESCRIPTION:
 Latitude 39°31'49", Longitude 119°47'40" NAD27
 Washoe County, Nevada, Hydrologic Unit 16050102
 Drainage area: 1,067 square miles
 Datum of gage: 4,444.53 feet above NGVD29.

AVAILABLE DATA:


Data Type	Begin Date	End Date	Count
Current / Historical Observations (availability statement)	2007-10-01	2014-01-12	
Daily Data			
Temperature, water, degrees Celsius	1989-08-26	1998-09-30	8235
Discharge, cubic feet per second	1906-10-01	2014-01-11	33023
Daily Statistics			
Temperature, water, degrees Celsius	1989-08-26	1998-09-30	2745
Discharge, cubic feet per second	1906-10-01	2013-10-30	32950
Monthly Statistics			
Temperature, water, degrees Celsius	1989-08	1998-09	
Discharge, cubic feet per second	1906-10	2013-10	
Annual Statistics			
Temperature, water, degrees Celsius	1989	1998	
Discharge, cubic feet per second	1907	2014	
Peak streamflow	1907-03-18	2012-04-26	87
Field measurements	1908-10-09	2013-12-20	861
Field/Lab water-quality samples	1977-04-11	2001-03-14	154
Additional Data Sources			
Instantaneous-Data Archive **offsite**	1989-01-11	2007-09-30	587862
Annual Water-Data Report (pdf) **offsite**	2005	2012	8

OPERATION:
 Record for this site is maintained by the USGS Nevada Water Science Center
 Email questions about this site to [Nevada Water Science Center Water-Data Inquiries](#)

WaterWatch: Water Resources Conditions X

Summary Hydrograph Peak Forecast Rating

USGS **10348000** TRUCKEE RV AT RENO, NV

Drainage area:	1067 mi ²
Discharge:	271 cfs
Stage:	3.94 ft
Date:	2014-01-12 08:15:00
Flood stage:	11 ft
Percentile:	23.96 %
Class symbol:	
% normal (median):	68.96 %
% normal (mean):	46.82 %

WaterWatch

USGS Home
Contact USGS
Search USGS

National Water Information System: Web Interface

USGS Water Resources (District Access) Data Category: Current Conditions Geographic Area: Nevada GO

Click for News Bulletins

Click for state-specific text

USGS 10348000 TRUCKEE RV AT RENO, NV

PROVISIONAL DATA SUBJECT TO REVISION

Available data for this site Time-series: Current/Historical Observations GO

Recent funding for this site is provided by:

This station managed by the Carson City Field Unit.

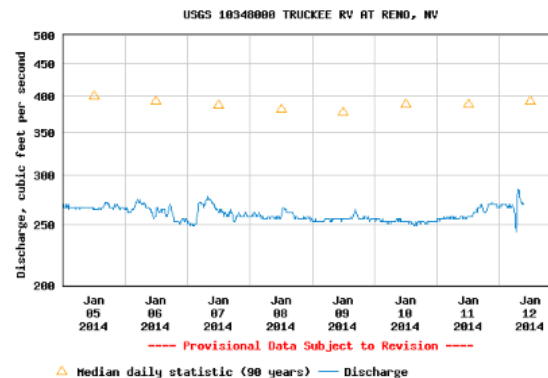
Available Parameters	Available Period	Output format	Days (7)
<input type="checkbox"/> All 2 Available Parameters for this site		<input checked="" type="radio"/> Graph	<input type="text" value="-- Or --"/>
<input checked="" type="checkbox"/> 00060 Discharge	2007-10-01 2014-01-12	<input type="radio"/> Graph w/ stats	<input type="text" value="Begin date"/>
<input checked="" type="checkbox"/> 00065 Gage height	2013-09-14 2014-01-12	<input type="radio"/> Graph w/o stats	<input type="text" value="2014-01-05"/>
		<input type="radio"/> Graph w/ (up to 3) parms new	<input type="text" value="End date"/>
		<input type="radio"/> Table	<input type="text" value="2014-01-12"/>
		<input type="radio"/> Tab-separated	<input type="text" value="GO"/>

[Summary of all available data for this site](#)

[Instantaneous-data availability statement](#)

Discharge, cubic feet per second

Most recent instantaneous value: 269 01-12-2014 09:15 PST



Add up to 2 more sites and replot for "Discharge, cubic feet per second"

Add site numbers [Note](#)

Enter up to 2 site numbers separated by a comma. A site number consists of 8 to 15 digits

GO

WaterWatch: Water Resources Conditions X

Summary Hydrograph Peak Forecast Rating

USGS 10348000 TRUCKEE RV AT RENO, NV

Discharge, cubic feet per second

Jan 05 2014 Jan 06 2014 Jan 07 2014 Jan 08 2014 Jan 09 2014 Jan 10 2014 Jan 11 2014 Jan 12 2014

--- Provisional Data Subject to Revision ---

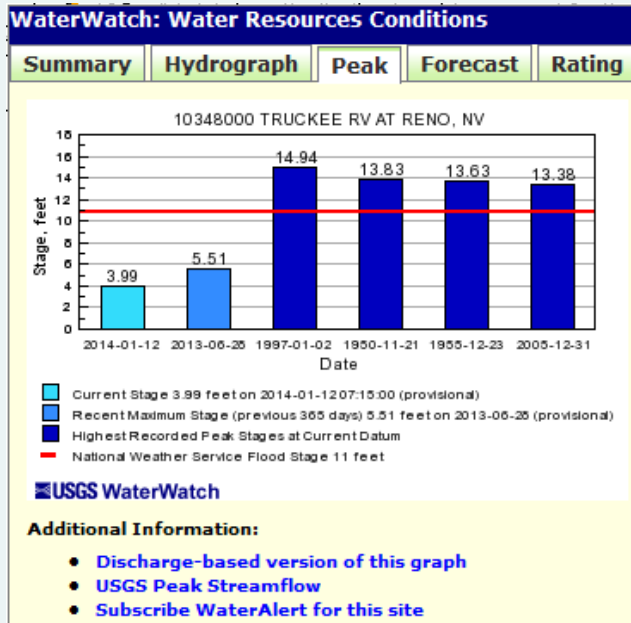
△ Median daily statistic (90 years) — Discharge

Graph courtesy of the U.S. Geological Survey

Additional Information:

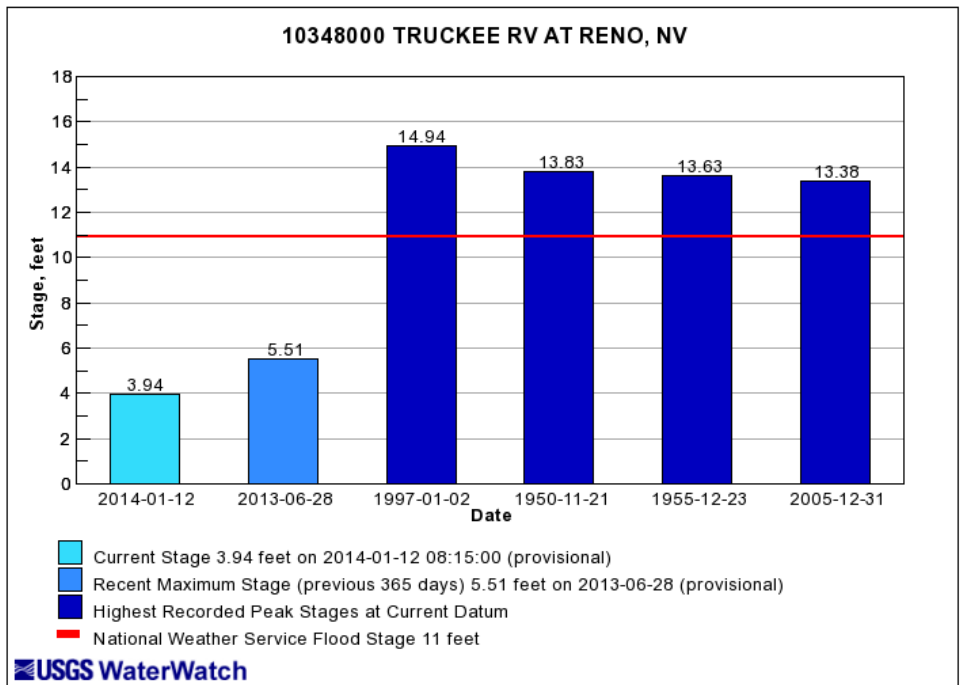
- WaterAlert email and text message alerts
- Subscribe WaterAlert for this site

WaterWatch



Flood Tracking Chart Builder


Site number: Value type: Size:



Additional Information


- [USGS real-time streamflow data](#)
- [USGS peak streamflow](#)

WaterWatch



National Weather Service

Advanced Hydrologic Prediction Service



Home News Organization Search for:
NWS All NOAA Go
BOOKMARK

Local weather forecast by "City, ST"

City, ST Go

National Conditions
Rivers
Satellite
Climate
Observed Precip


Local Conditions
Warnings
Weather Forecast
Radar

AHPS Documentation
User Guide
User Brochure

What is AHPS?
Facts
Our Partners

Feedback/Questions
Provide Feedback
Ask Questions

Observations courtesy of



Over 200 USGS real-time streamgages used to support NWS river forecasts and warnings are at risk of being discontinued. [Click here for more information from the USGS...](#)

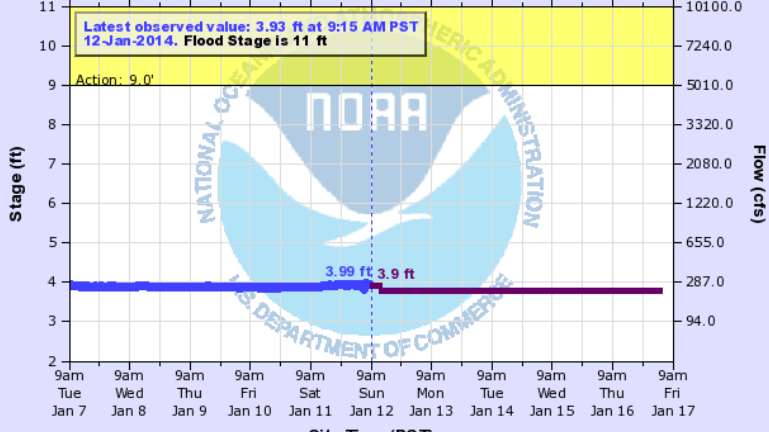
Weather Forecast Office Reno, NV California Nevada River Forecast Center

Hydrograph
River at a Glance
Download

TRUCKEE RIVER AT RENO NV

Universal Time (UTC)

17Z	17Z	17Z	17Z	17Z	17Z	17Z	17Z	17Z	17Z	17Z	17Z	17Z	17Z	17Z	17Z	17Z	17Z
Jan 7	Jan 8	Jan 9	Jan 10	Jan 11	Jan 12	Jan 13	Jan 14	Jan 15	Jan 16	Jan 17							



Site Time (PST)

--- Graph Created (9:44AM Jan 12, 2014) —●— Observed —■— Forecast (issued 7:27AM Jan 12)

TRRN2(plotting HGIRG) "Gage 0" Datum: 4444.53" Observations courtesy of US Geological Survey

Printable Image

About this graph


Tabular Data


XML

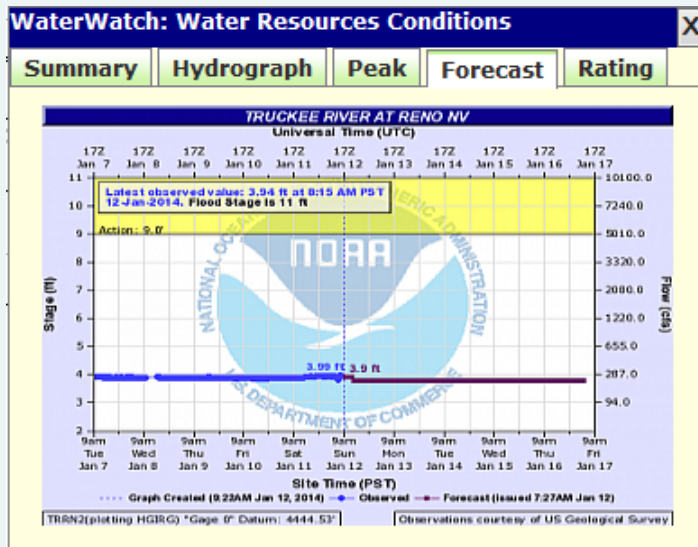
RSS

Default Hydrograph

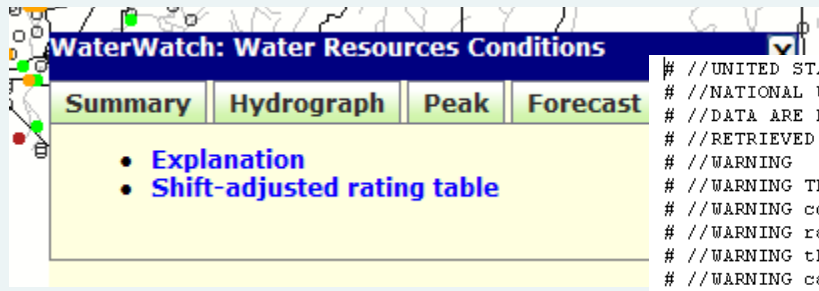
Return to Area Map







WaterWatch



WaterWatch: Water Resources Conditions

Summary | Hydrograph | Peak | Forecast

- Explanation
- Shift-adjusted rating table

Stage-discharge relations

Stage-discharge relations (ratings) are usually developed from current-meter discharge measurements (sometimes called calibratic stages and discharges. Measurements are made on various scheduled purposes. Each measurement is carefully made, and undergoes quality control. Frequently, measurements indicate a change in the rating, often due to streambed or riparian vegetation. Such changes are called shifts; they are long-term change in the rating for the gage. In normal usage, the ratings (and corrections) are applied mathematically to a defined rating. Ratings are invalidated and unavailable due to backwater conditions caused by variable physical obstructions.

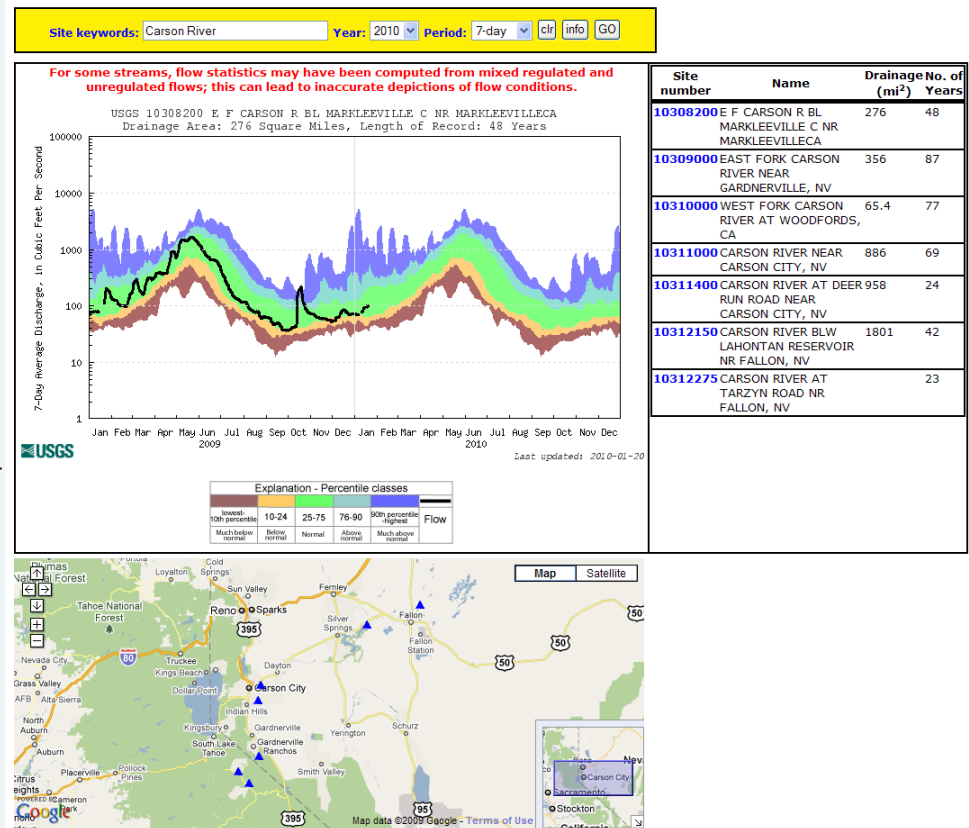
The tables being provided are shift corrected, incorporating the measurements as measured data becomes available, resulting in an adjusted rating as often as weekly, others may not change for months.

```
# //UNITED STATES GEOLOGICAL SURVEY      http://water.usgs.gov/
# //NATIONAL WATER INFORMATION SYSTEM    http://water.usgs.gov/data.html
# //DATA ARE PROVISIONAL AND SUBJECT TO CHANGE UNTIL PUBLISHED BY USGS
# //RETRIEVED: 2009-11-12 20:45:56
# //WARNING
# //WARNING The stage-discharge rating provided in this file should be
# //WARNING considered provisional and subject to change. Stage-discharge
# //WARNING ratings change over time as the channel features that control
# //WARNING the relation between stage and discharge vary. Users are
# //WARNING cautioned to consider carefully the applicability of this
# //WARNING rating before using it for decisions that concern personal or
# //WARNING public safety or operational consequences.
# //WARNING
# //FILE TYPE="NWIS RATING"
# //DATABASE NUMBER=1  DESCRIPTION=" Standard data base for this site."
# //STATION AGENCY="USGS " NUMBER="10348000 " TIME_ZONE="PST" DST_FLAG=Y
# //STATION NAME="TRUCKEE RV AT RENO, NV"
# //DD NUMBER=" 1" LABEL="Discharge (cfs)"
# //PARAMETER CODE="00060"
# //RATING SHIFTED="20091112200000 PST"
# //RATING ID="29.1" TYPE="STGQ" NAME="stage-discharge" AGING=A
# //RATING REMARKS="Extension of rating #29.0"
# //RATING EXPANSION="logarithmic"
# //RATING OFFSET1=0.00
# //RATING_INDEP ROUNDING="2223456782" PARAMETER="Gage height (ft)"
# //RATING_DEP ROUNDING="222233332" PARAMETER="Discharge (cfs)"
# //RATING_DATETIME BEGIN=20021120120100 BZONE=PST END=20090531235959 EZONE=PDT AGING=A
# //RATING_DATETIME BEGIN=20090601000000 BZONE=PDT END=20090930235959 EZONE=PDT AGING=R
# //RATING_DATETIME BEGIN=20091001000000 BZONE=PDT END=23821230160000 EZONE=PST AGING=U
# //SHIFT_PREV BEGIN="20091112200000" BZONE="PST" END="-----" EZONE="----"
# //SHIFT_PREV STAGE1="3.00" SHIFT1="0.03" STAGE2="4.80" SHIFT2="0.03" STAGE3="6.20" SHIFT3="0.00"
# //SHIFT_PREV COMMENT="V2 defined by QM#759 prorate on declining stage"
# //SHIFT_NEXT BEGIN="-----" BZONE="----" END="-----" EZONE="----"
# //SHIFT_NEXT STAGE1="----" SHIFT1="----" STAGE2="----" SHIFT2="----" STAGE3="----" SHIFT3="----"
# //SHIFT_NEXT COMMENT=" "
INDEP SHIFT DEP  STOR
16N  16N  16N  1S
1.87 0.03 16  *
1.88 0.03 16
1.89 0.03 17
```

WaterWatch

Streamflow Duration Hydrographs

- Create duration graph of 7-, 14-, and 28-day flows for all USGS sites for any year
- Search sites by location and site number
- Access via a map interface showing site locations and a table showing site information
- Can display and download statistics



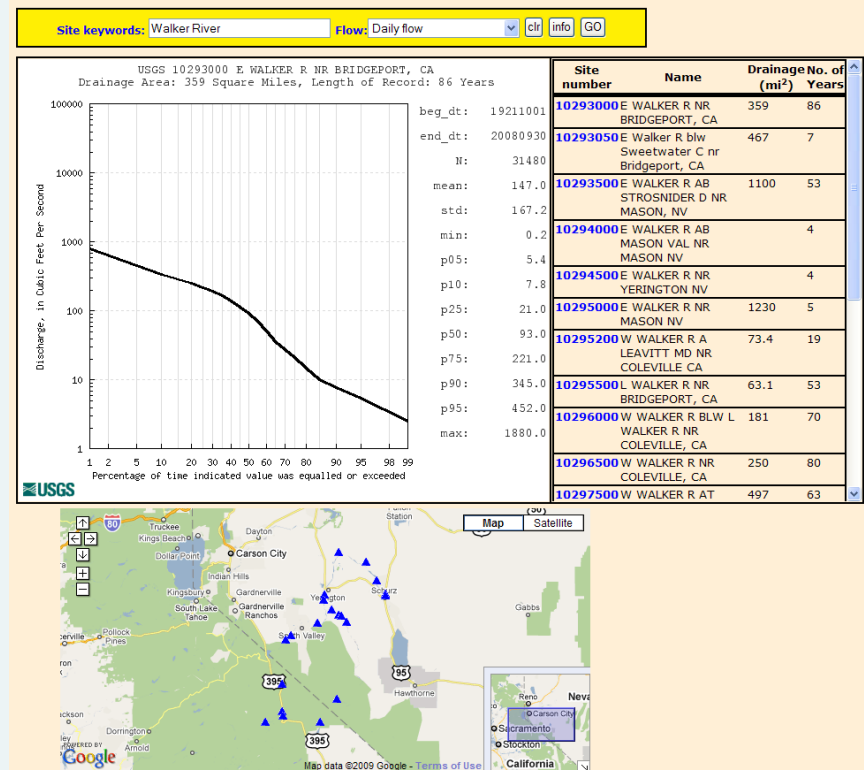
WaterWatch

Streamgauge Statistics

- Daily and 7-day lowest flow statistics and flow duration curve
- Search all USGS sites
- Access via Google Map showing location and a table showing site information
- Simple approximation for 7 yr, 10 day, low flow (7Q10)

WaterWatch -- USGS streamgauge statistics

Enter USGS streamgauge site information such as a site number, a river name, or a county name, choose streamflow type, and then click "GO" to retrieve streamflow statistics and flow duration curve.



Streamflow Map Animation (United States)

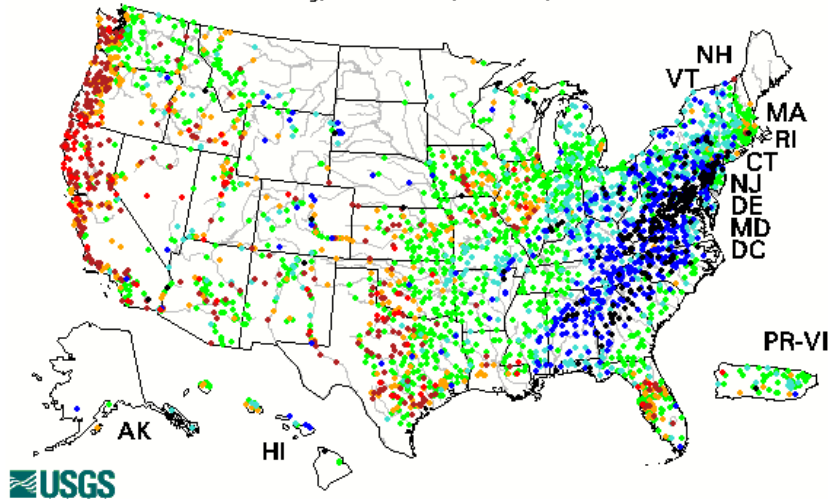
(Warning: Building an animation longer than 365 days is not advised as it may cause the system to timeout)

Choose options to build a map animation

Begin: 2013 ▾ December ▾ 1 ▾ End: 2014 ▾ January ▾ 10 ▾ Interval(days): 1

Map type: Real-time ▾ Delay(secs): 0.5 ▾ Loops: Continuous ▾ Width: px

Sunday, December 29, 2013 19:30ET



Explanation - Percentile classes						
Low	<10	10-24	25-75	76-90	>90	High
	Much below normal	Below normal	Normal	Above normal	Much above normal	

The data used to produce this map are [provisional](#) and have not been reviewed or edited. They may be subject to significant change.

WaterWatch-Streamflow Map Animation

- Build customized WaterWatch map animations
- Real-time and flood maps

WaterWatch - Flood Intensity and Extent

WaterWatch -- Current water resources conditions

Retrieve Summary of Recent Flood and High Flow Conditions
 (Warning: These Data are Provisional and May be Prone to Error.)

State: Begin Date: End Date:
 Output format: table text Sort by: ascend descend

Summary of Recent Flood and High Flow Conditions for Nevada

["--", no data; "<", less than all historical peaks]

USGS station number	USGS station name	Drainage area [mi ²]	NWS flood stage [ft]	No. of days above flood stage	Highest peak from 2005-05-01 to 2010-01-20					Historical peaks	
					Date	Time	Discharge [ft ³ /s]	Stage [ft]	Rank	years	No. of
10311250	VICEE CYN CK NR CARSON CITY, NV	1.30	--	--	2005-07-18	20:15:00	--	1.89	--	1	6.60 (1983)
09415920	WARM SPGS W NR MOAPA, NV	--	--	--	2008-10-30	07:00:00	4.7	1.09	1	1	4.4 (2008)
09415558	HOT CK NR SUNNYSIDE, NV	--	--	--	2009-11-02	16:30:00	15	7.73	1	1	15 (2007)
09415640	ASH SPGS CK BLW HWY 93 AT ASH SPGS, NV	--	--	--	2009-07-27	14:00:00	34	4.59	<	1	185 (2006)
09419745	C-1 CHANNEL ABV MOUTH NR HENDERSON, NV	--	--	--	2009-12-07	18:30:00	6.9	2.95	<	2	9.6 (2007)

- Analyze high flows in a region during a specific period and compare to historical floods
- Uses provisional data which may be prone to errors

Instantaneous-Data Archive - IDA



[USGS Home](#)
[Contact USGS](#)
[Search USGS](#)

Instantaneous Data Archive - IDA

[Home](#) / [About IDA](#) / [Frequently Asked Questions](#) / [Questions and Feedback](#) / [Help](#) / [Other Water Data-NWISWeb](#) /

Home

Since 1889 the United States Geological Survey has collected continuous stage, discharge, and other instantaneous time-series data on the nations rivers and streams. These time-series data have been and are typically recorded at intervals ranging from 5 to 60 minutes. These instantaneous data have been processed into and published as various daily values, such as the daily maximum, minimum, and/or mean. Because the published record are daily values, the original instantaneous data have not historically been officially approved, published, or made widely available. This web site has been established to make available as much historical instantaneous data from USGS data collection stations as possible. Although this site currently serves instantaneous discharge (streamflow) data only, work is planned to extend it to other time-series parameters in the future.

As described above, the USGS procedure for processing and publishing time-series data has focused on daily values as our final product and not the instantaneous values. As a result, the instantaneous values may not have been corrected and processed to the same extent as the daily values. Because of these USGS procedures, the instantaneous discharge data provided through this web site should be viewed as raw, unreviewed data. In order to provide a basic level of review and quality assurance of these data, the data have been recovered and compared against the published daily values through the use of automated filtering and computational software. Although significant effort has been made to ensure the instantaneous data available is reasonable and to remove obviously bad data, there may still be significant error in any individual value. Users are strongly encouraged to review all data carefully prior to use. These data are released on the condition that neither the USGS nor the United States Government may be held liable for any damages resulting from its use.

For further information, see [About IDA](#).

[IDA Status Map](#) / [IDA Station and UV Data Count](#)

What is IDA?

- Repository of available instantaneous (unit value) discharge data prior to 10/01/2007
- Corresponds to the period of published daily-mean data
- 15 minute interval
- Data typically start in the 1980's
- Values are to be considered raw
- Should be reviewed prior to use

USGS
science for a changing world

USGS Home
Contact USGS
Search USGS

Instantaneous Data Archive - IDA

[Home](#) / [About IDA](#) / [Frequently Asked Questions](#) / [Questions and Feedback](#) / [Help](#) / [Other Water Data-NWISWeb](#) /

Geographic Area: Nevada

Period of record for site: **10310500 / CLEAR CK NR CARSON CITY, NV**

[View](#) data summary report

From	To	Count
1989-01-19	2008-09-30	545,833

Retrieve data from: to: (YYYY-MM-DD)

Tab-delimited data:

Retrieval may take several minutes depending upon the amount of data requested.

Select a different Geographic Area or Site Number

Select a different Site Number for Geographic Area: Nevada

Data can be retrieved as a table in the html or as text files.

Site selection by site number or by geographic area