

Nibley Weather and River Data

Updated 31 May 2022

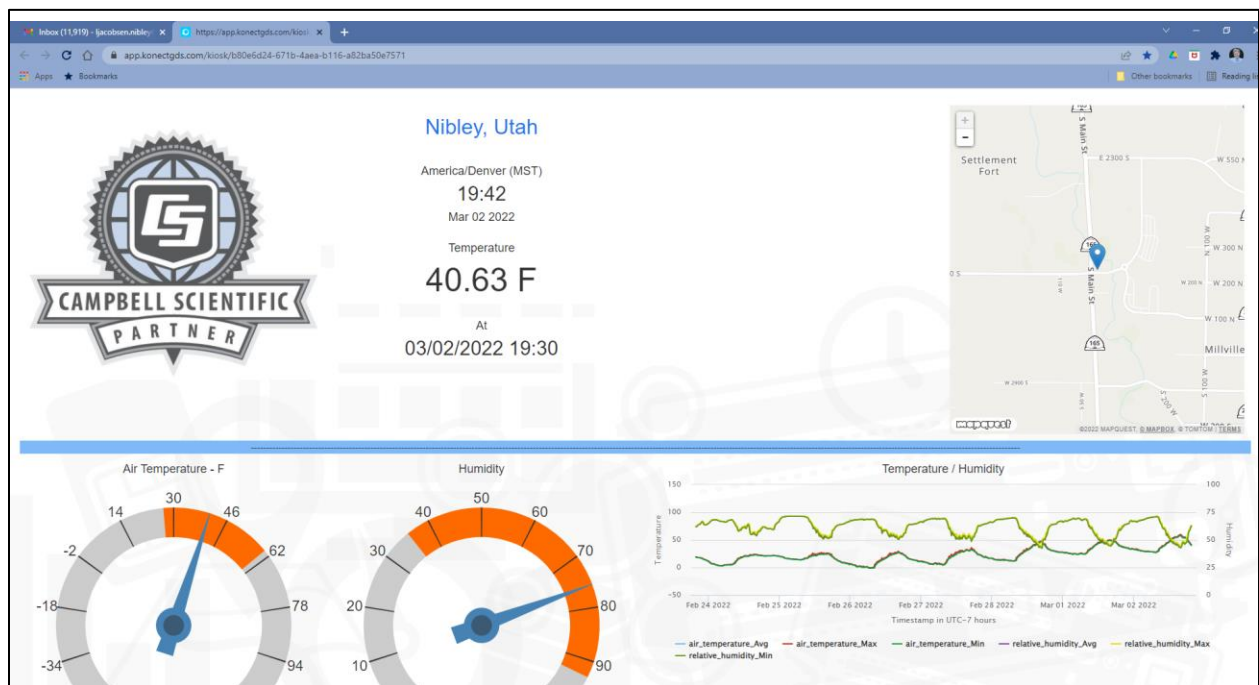
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Current Weather.

How cold is it? How much rain did we get yesterday? Here is a link to current weather data in Nibley. The weather station is at the Corner of Hwy 165 and 2600 S (Riverhawk Drive). You can see current conditions, along with a week of history for air temperature, relative humidity, wind speed and direction, in addition to solar radiation (sunshine) and rain. Gary Roberts, a Nibley citizen, and a fellow Campbell Scientific employee, helps make this data available for us. Thanks Gary!

<https://app.konectgds.com/kiosk/b80e6d24-671b-4aea-b116-a82ba50e7571>

Here is a screen shot of top portion of the website.



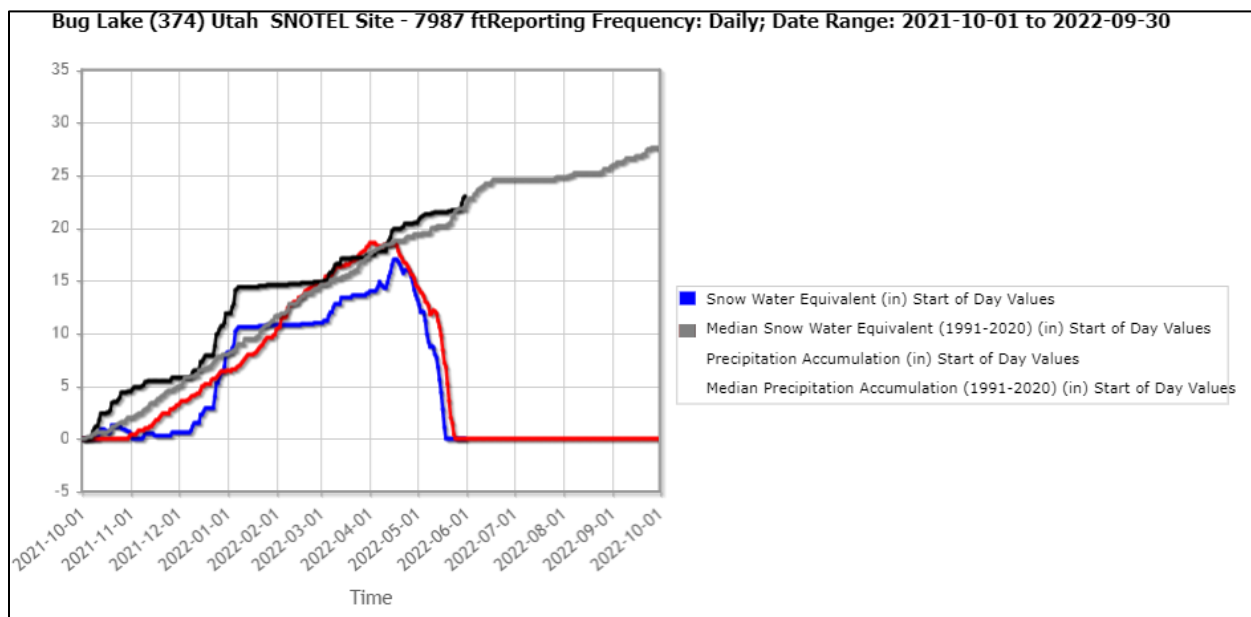
Snow in the Mountains.

Much of the water available to us in Nibley collects in the surrounding mountains during the winter and percolates through the soil. This process makes water that falls as winter snow available for our use throughout the year. How much snow is there in the mountains? Snow depth would be a logical thing to measure, but the amount of water in the snow – if we melted it – is even better. We call this snow water equivalent, and we report the snow's equivalent water depth just like we measure rainfall, in inches. The USDA measures snow water equivalent and total precipitation (snow plus rain) in certain locations in the mountains, and the USDA provides us those measurements, along with historical comparisons to past years.

Here is a link to the USDA's data at Bug Lake, which is on the Cache-Rich county line east of Nibley.

https://wcc.sc.egov.usda.gov/reportGenerator/view/customChartReport/daily/374:UT:SNTL%7Cid=%22%22%7Cname/CurrentWY,CurrentWYEnd/WTEQ::value,WTEQ::median_1991,PREC::value,PREC::median_1991?fitToScreen=false

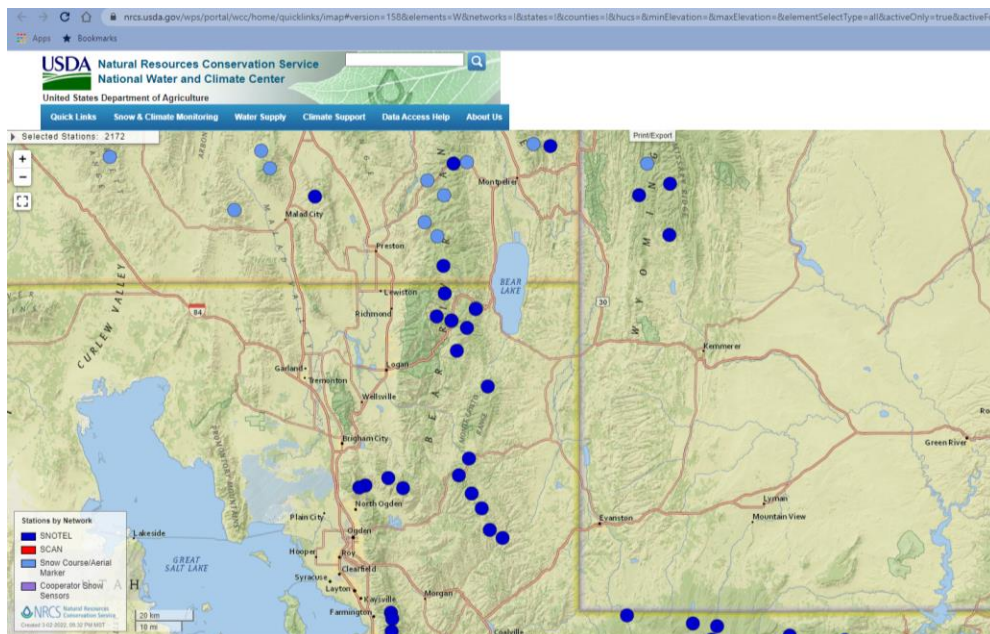
I pasted below an image through the first of June for Bug Lake. The red line is the most common (the median) snow water equivalent for the past thirty years, and the blue line is this year. After a good start last December, then two months of nothing, and decent snow accumulation in April and May, we finished within an inch or two the historic median. The grey line is the most common amount of total precipitation, and the black line is this year. Although the long-term drought continues, the total precipitation at Bug Lake is close to normal through 1 June.



Here is another link to a map with the same kind of data for other locations.

<https://www.nrcs.usda.gov/wps/portal/wcc/home/quicklinks/imap#version=158&elements=W&networks=!&states=!&counties=!&hucs=&minElevation=&maxElevation=&elementSelectType=all&activeOnly=true&activeForecastPointsOnly=false&hucLabels=false&hucIdLabels=false&hucParameterLabels=false&stationLabels=&overlays=&hucOverlays=&basinOpacity=100&basinNoDataOpacity=100&basemapOpacity=100&maskOpacity=0&mode=stations&openSections=dataElement,parameter,date,basin,elements,location,networks&controlsOpen=false&popup=&popupMulti=&popupBasin=&base=esriNgwm&displayType=inventory&basinType=6&dataElement=SRVO&depth=-8¶meter=PCTAVG&frequency=MONTHLY&duration=custom&customDuration=1&dayPart=E&monthPart=E&forecastPubDay=1&forecastExceedance=50&seqColor=1&divColor=3&scaleType=D&scaleMin=&scaleMax=&referencePeriodType=POR&referenceBegin=1981&referenceEnd=2010&minimumYears=20&hucAssociations=true&relativeDate=-1&lat=41.6914&lon=-110.7477&zoom=9.0>

This is the map if you follow the link above. If you click on one of the dots and select Data Reports, and finally Water Year Chart, you can see the snow water equivalent for other locations.

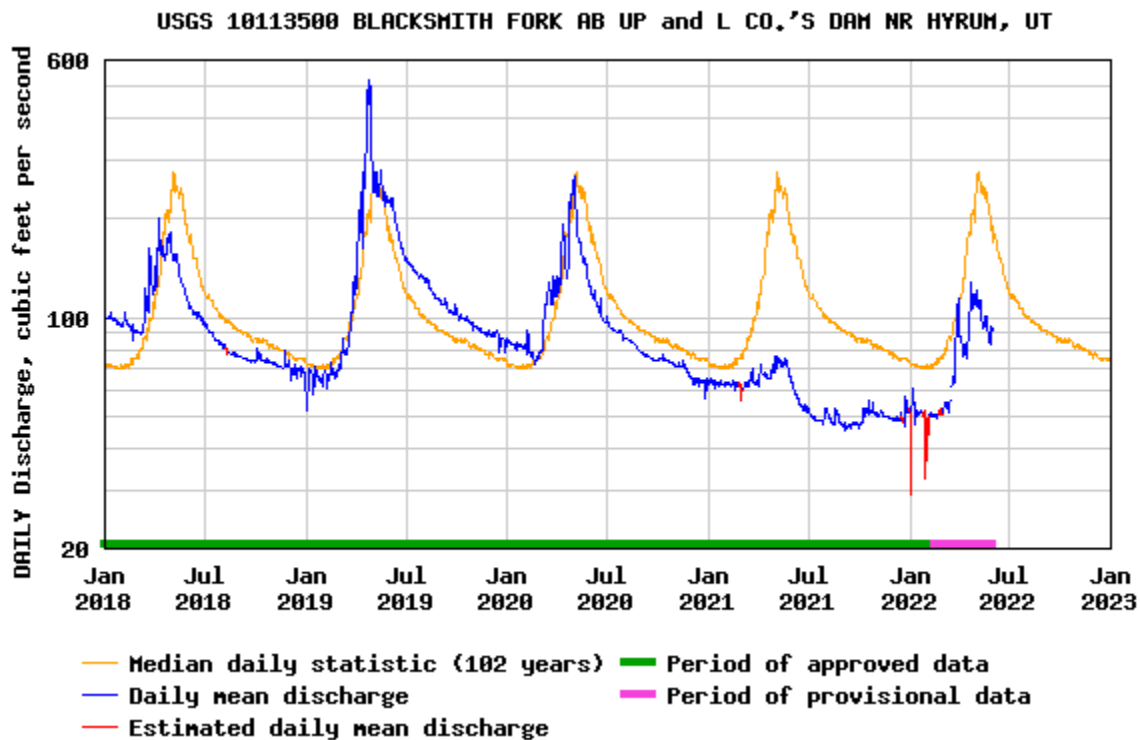


Water in the Blacksmith Fork River.

After the snow melts, much of it comes to Nibley in the Blacksmith Fork River. Sometimes it comes too fast, and we worry about flooding. More often, we wish we had more. The USGS measures the flow in the Blacksmith Fork a few miles above the mouth of the canyon. Here is a link to the last five years of average daily discharge on the river.

https://waterdata.usgs.gov/ut/nwis/dv/?ts_id=143457&format=img_stats&site_no=10113500&begin_date=20180101&end_date=20220601

This is an image of that data. You can see the spring-time peaks when the snow melts. The yellow line is the usual historic flow, and the blue line shows the last five years. Last year was rather dismal, not only because of a light snowpack, but because soil moisture levels were so low that much of the snowmelt was simply absorbed rather than percolating through and collecting in the river. This year's runoff was an improvement, but still below normal.



In addition to daily average discharge, here is a website showing real-time stream flow data on the Blacksmith Fork River provided by the US Geological Survey. Below is a snapshot from 31 May 2022. The top curve is the historic median (or most common) flow rate, the middle curve is this year, and the bottom curve is last year. This real-time curve is very useful when we are worried about flooding (remember those days?).

<https://waterdata.usgs.gov/monitoring-location/10113500/#parameterCode=00060&period=P30D&compare=true>

Streamflow, ft³/s ⓘ

113 ft³/s - May 02, 2022 09:15:00 PM MDT

74.9 ft³/s - May 02, 2021 09:15:00 PM MDT

