

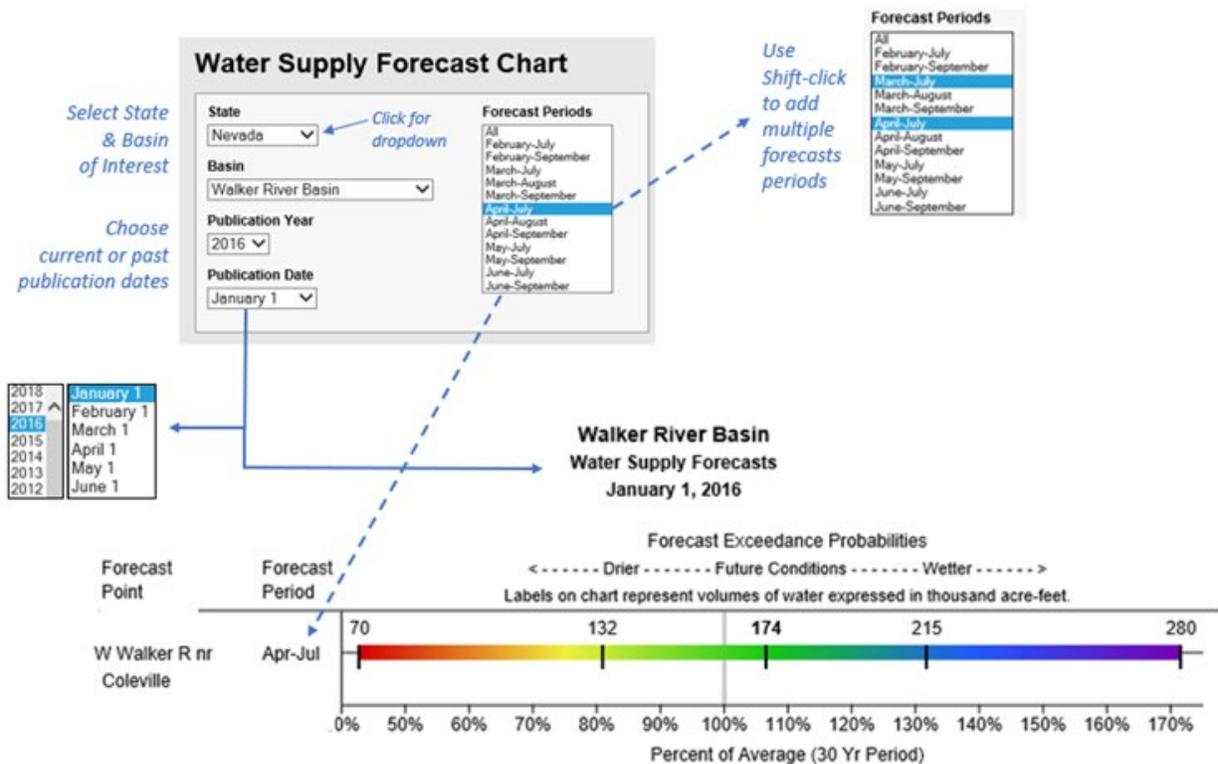
# Water Supply Forecast Charts User Guide

## Open Water Supply Forecast Charts

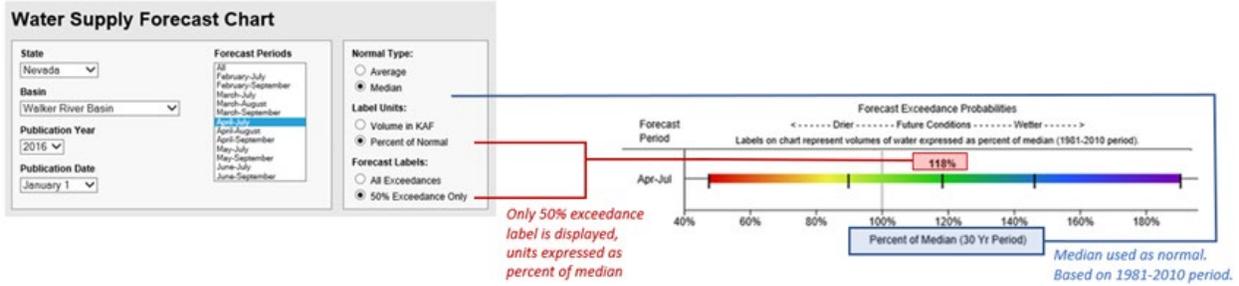
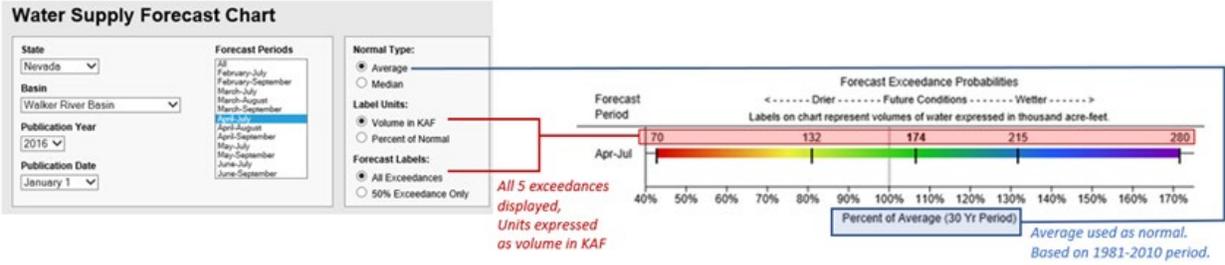
[Open the Water Supply Forecast Charting tool.](#)

## Creating Water Supply Forecast Charts

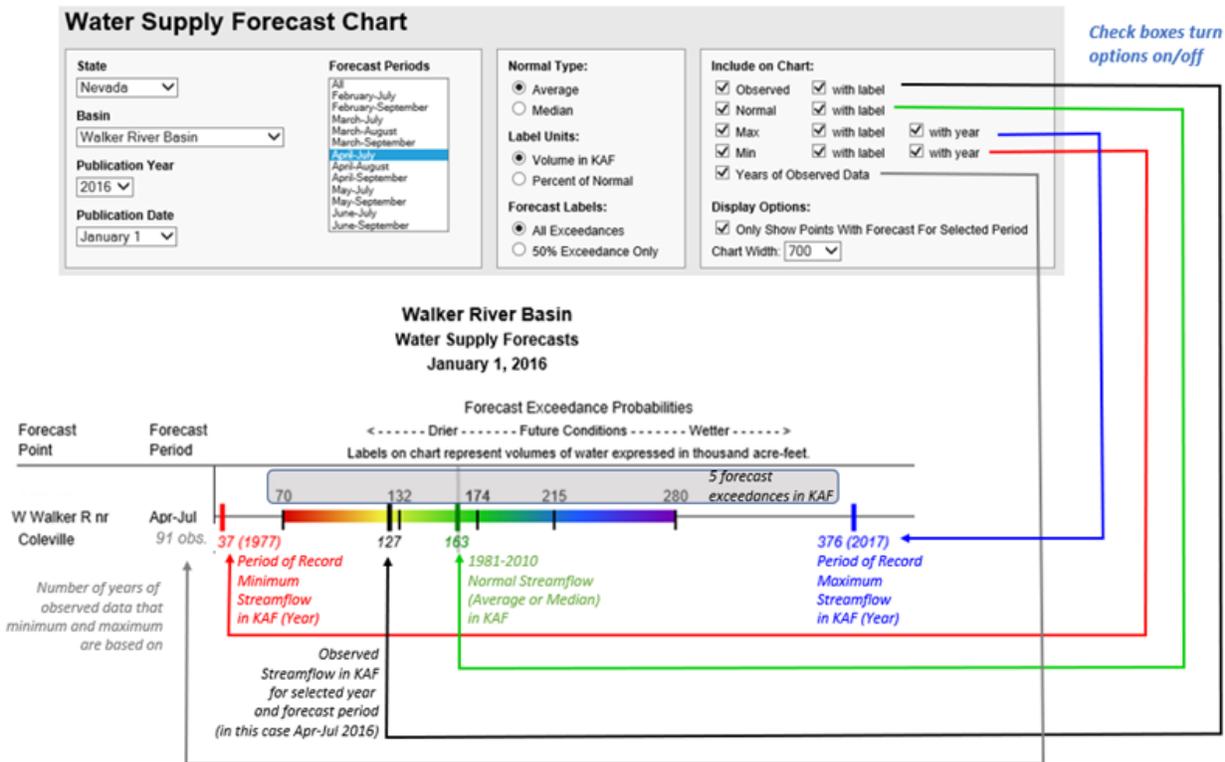
The **left control panel** at the top of the Water Supply Forecast Chart tool controls what forecasts are displayed on the chart.



The **center control panel** at the top of the Water Supply Forecast Chart controls the chart's horizontal axis and the labels used for the exceedance forecasts.



The **right control panel** is used to compare forecasts to historic observed streamflow, as well as period of record (POR) maximums and minimums.



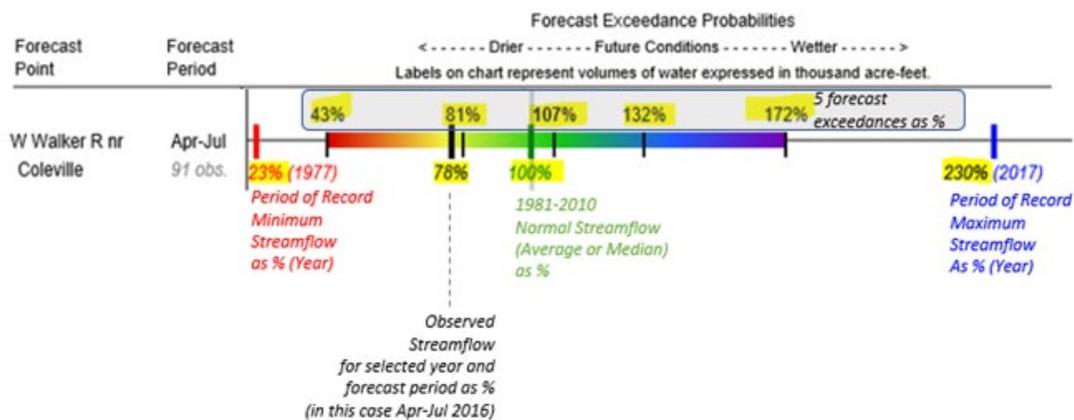
Changing the **normal type** and **label units** controls the historic label (observed, normal, maximum, and minimum), as well as the exceedance probability labels.

## Water Supply Forecast Chart

<b>State</b> Nevada	<b>Forecast Periods</b> All February-July February-September March-July March-August March-September <b>April-July</b> April-August April-September May-July May-September June-July June-September	<b>Normal Type:</b> <input checked="" type="radio"/> Average <input type="radio"/> Median	<b>Include on Chart:</b> <input checked="" type="checkbox"/> Observed <input checked="" type="checkbox"/> with label <input checked="" type="checkbox"/> Normal <input checked="" type="checkbox"/> with label <input checked="" type="checkbox"/> Max <input checked="" type="checkbox"/> with label <input checked="" type="checkbox"/> with year <input checked="" type="checkbox"/> Min <input checked="" type="checkbox"/> with label <input checked="" type="checkbox"/> with year <input checked="" type="checkbox"/> Years of Observed Data
<b>Basin</b> Walker River Basin		<b>Label Units:</b> <input type="radio"/> Volume in KAF <input checked="" type="radio"/> Percent of Normal	<b>Display Options:</b> <input checked="" type="checkbox"/> Only Show Points With Forecast For Selected Period Chart Width: 700
<b>Publication Year</b> 2016		<b>Forecast Labels:</b> <input checked="" type="radio"/> All Exceedances <input type="radio"/> 50% Exceedance Only	
<b>Publication Date</b> January 1			

All labels expressed as percent of average

### Walker River Basin Water Supply Forecasts January 1, 2016



The **chart width option** reduces overlap when chart become crowded. The **export options** provide presentation-quality graphics. The chart uses **dynamic URLs** which keep track of selections and can be bookmarked, shared, or linked.

## Water Supply Forecast Chart

<b>State</b> Nevada	<b>Forecast Periods</b> All February-July February-September March-July March-August March-September <b>April-July</b> April-August April-September May-July May-September June-July June-September	<b>Normal Type:</b> <input checked="" type="radio"/> Average <input type="radio"/> Median	<b>Include on Chart:</b> <input type="checkbox"/> Observed <input type="checkbox"/> with label <input type="checkbox"/> Normal <input type="checkbox"/> with label <input type="checkbox"/> Max <input type="checkbox"/> with label <input type="checkbox"/> with year <input type="checkbox"/> Min <input type="checkbox"/> with label <input type="checkbox"/> with year <input type="checkbox"/> Years of Observed Data
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<b>Publication Year</b> 2018		<b>Forecast Labels:</b> <input checked="" type="radio"/> All Exceedances <input type="radio"/> 50% Exceedance Only	
<b>Publication Date</b> January 1			

Some web browsers may not support image export. Tested in Chrome 55, Firefox 50, and Safari 11.

Export SVG Export PNG

These are image export options which work best with the internet browsers highlighted to the left.

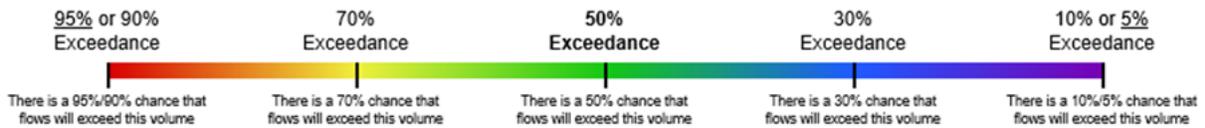
This dropdown controls the width of the chart to reduce overlap when exceedances are grouped tightly.

## Interpreting Water Supply Forecast Charts

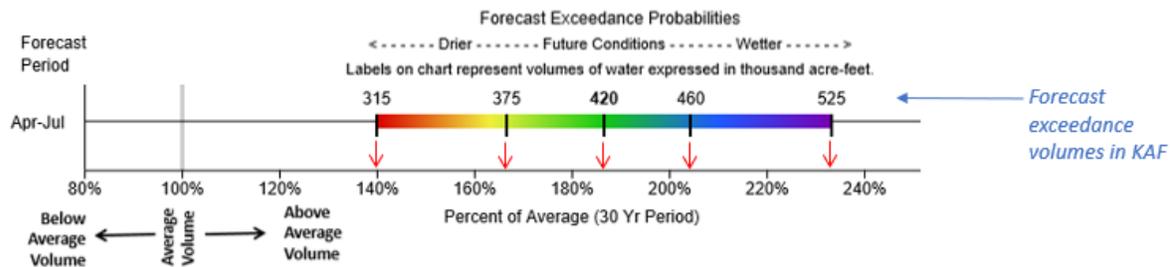
Typically, the Natural Resources Conservation Service (NRCS) has presented streamflow forecasts as a table format showing the five exceedance probabilities compared to the 30-year median (or average) as follows. The examples below show a comparison to the 30-year average, but the default central tendency is the median.

Forecast Exceedance Probabilities for Risk Assessment Chance that actual volume will exceed forecast							
Forecast Period	90% (KAF)	70% (KAF)	50% (KAF)	% Avg	30% (KAF)	10% (KAF)	30yr Avg (KAF)
APR-JUL	315	375	420	187%	460	525	225

The Forecast Chart provides a visual alternative to the table. The forecast range is represented by a colored bar. Vertical lines on the bar signify the five forecast exceedances.



Below is an example. The numbers above the forecast bar are the five exceedance probability volumes in thousand acre-feet (KAF). Each exceedance forecast's percent of average can be estimated by looking at the horizontal axis. The gray line centered above 100% on the horizontal axis represents the 1991-2020 historical average streamflow for the forecast period.



In the example, the entire forecast bar is shifted right of the gray line indicating a forecast for above average streamflow. The 50% exceedance is represented by the black line in the green portion of the colored bar. This represents a forecast volume of 420KAF which is ~185% of average. If drier than normal future conditions occur the 70% exceedance forecast may be more likely (375KAF or ~165% of average). If future conditions turn wetter than normal, the 30% exceedance forecast may be more likely (460KAF or ~205% of average). Water users are encouraged to consider the range of forecast exceedances instead of relying solely on the 50% forecast.