Command Reference: ReadNrcsAwdb()

Read 1+ time series from the NRCS AWDB web service

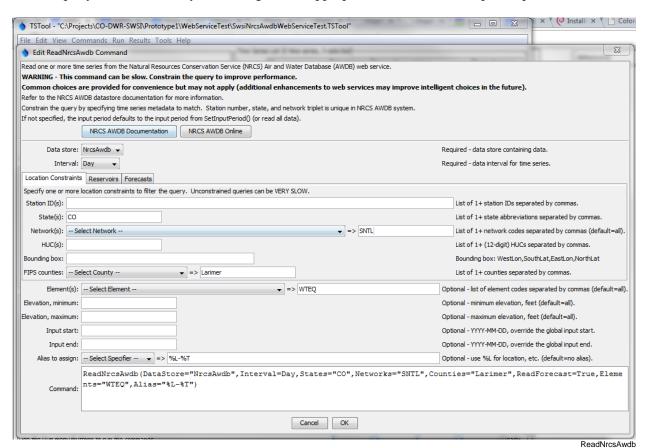
Version 10.26.00, 2012-11-10

The ReadNrcsAwdb () command reads one or more time series from the Natural Resources Conservation Service (NRCS) Air and Water Database (AWDB) web service (see the NRCS AWDB Datastore Appendix), including SNOTEL and Snow Course data and other data. Data from other sources is available within the NRCS naming convention.

The NRCS AWDB web service allows station lists to be filtered, both as a convenience and to ensure reasonable web service performance. Many of the choices that are available for limiting queries allow 0+ values to be provided. For example, specifying no requested element (data type) will return all available elements for a location. Specifying a list of elements (separated by commas) will return only stations and time series that have data for the requested elements.

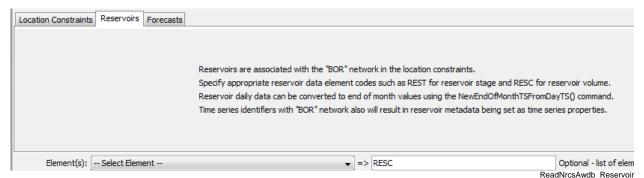
The following dialog is used to edit the command and illustrates the syntax for general parameters:

- Some choices are provided as a convenience. However, full listing of choices (such as all the thousands of HUCs) are not provided due to performance issues. Additional query features such as cascading choices may be enabled as web service integration is enhanced.
- Querying many time series can be slow. It is recommended that filters be used to constrain the query, and then modify to converge on an appropriate set of filters for optimal performance.



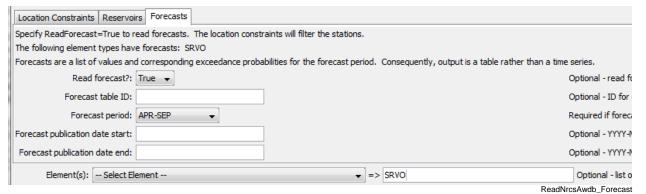
ReadNrcsAwdb() Command Editor for General Command Parameters

The following figure illustrates the *Reservoirs* tab of the dialog. No additional parameters are provided; however, the notes explain that reservoir data are available only from the BOR network and appropriate network element codes must be selected.



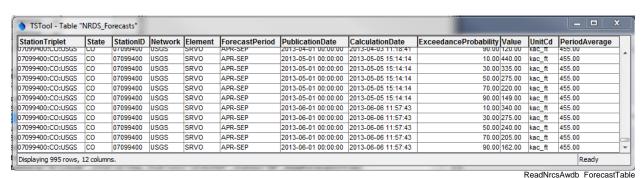
ReadNrcsAwdb() Command Editor for Reservoir Query Parameters

The following figure illustrates the *Forecasts* tab of the dialog. Forecasts are available for several element codes but mainly SRVO (stream volume, adjusted). Because it is possible to read normal time series and forecasts, the ReadForecast parameter is provided to specifically indicate that a forecast is being requested. The forecast is uniquely identified by the forecast period and publication date (typically the first day of a month).



ReadNrcsAwdb() Command Editor for Forecast Query Parameters

The resulting forecast table, as shown in the following figure, includes all the relevant information about the forecast. Use table processing commands to filter the table for a specific station and publication date.



ReadNrcsAwdb() Command Output Forecast Table

The command syntax is as follows:

ReadNrcsAwdb(Parameter=Value,...)

Command Parameters

Parameter	Description	Default
DataStore	The NRCS AWDB datastore to use for queries.	None – must be specified.
Interval	The data interval ("duration" in NRCS AWDB	None – must be specified.
	terms) to query. The Irregular interval is	
	used for instantaneous data.	
Stations	A list of station identifiers to read, separated by	Do not limit the query to a
	commas.	station list.
States	A list of state codes (e.g., AL), separated by	Do not limit the query to a
	commas.	state list.
Networks	A list of data network codes (e.g., SNTL),	Do not limit the query to a
	separated by commas.	network list.
HUCs	A list of 8-digit hydrologic unit codes, separated	Do not limit the query to a
	by commas.	HUC list.
BoundingBox	A bounding box consisting of west longitude,	Do not limit the query to a
	south latitude, east longitude, and north latitude,	bounding box.
	separated by spaces. Longitudes in the western	
	hemisphere are negative. This feature is not	
	finalized, pending resolution of a web service	
	issue.	
Counties	A list of county names, separated by commas.	Do not limit the query to a
	The state must be specified because county	county list.
	names are not unique.	
ReadForecast	Indicate whether forecast table should be read.	False (read observed time series)
ForecastTableID	The identifier for the output table.	NRCS_Forecasts
ForecastPeriod	The forecast period for a forecast, which is a	Must be specified when
	string like JAN-MAR. A list of choices is	ReadForecast=True.
	provided; however, only certain forecast periods	
	will be valid for specific element codes.	
Forecast	The earliest publication date for a forecast,	All publication dates are
PublicationDate	needed to uniquely identify the time series.	queried.
Start		
Forecast	The latest publication date for a forecast.	All publication dates are
PublicationDate		queried.
End		A 11 11-11-1 - 1
Elements	Data element codes for the stations (e.g., WTEQ	All available elements are
	for snow water equivalent), separated by	returned.
D1	commas.	De net limit the 1
ElevationMin	Minimum station elevation, feet.	Do not limit the query based
D1	Manipus station along the Control	on elevation minimum.
ElevationMax	Maximum station elevation, feet.	Do not limit the query based
Innut Chart	The start of the new od to seed date asset? 'C'	on elevation maximum.
InputStart	The start of the period to read data – specify if	Use the global query period.
	the period should be different from the global	

Parameter	Description	Default
	query period. Specify to the precision of the data using the format YYYY-MM-DD hh:mm.	
InputEnd	The end of the period to read data – specify if the period should be different from the global query period. Specify to the precision of the data using the format YYYY-MM-DD hh:mm.	Use the global query period.
TimeZone	 Envisioned for future enhancement: FromData – use the time zone from the data None – do not assign the time zone to date/times ABC – specify the time zone to use (useful because internal timezone is hour offset from GMT) 	Currently no time zone is assigned to hour or finer timesteps. See the time series properties or stationDataTimeZone.
Alias	The alias to assign to the time series, as a literal string or using the special formatting characters listed by the command editor. The alias is a short identifier used by other commands to locate time series for processing, as an alternative to the time series identifier (TSID).	None – must be specified.