



NEW HAMPSHIRE
DEPARTMENT OF

Environmental Services

**USER INSTRUCTIONS
NHDES REAL-TIME DATA & INFORMATION
FOR WATERSHEDS IN NEW HAMPSHIRE WEBPAGE**

To view available Real-Time data from watersheds throughout New Hampshire, please click on the Observations tab on the left side-bar.

nhdes.rtiamanzi.org/stations

New Hampshire Department of Environmental Services

Home
Observations
Snow Data
Useful Links

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MAP LIST

Select a station to see data

STATION LEGEND

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In the MAP view, the user can pan around map and zoom in to locate and select a station by clicking it once.



Once a station is selected it will open the right side-bar with Timeseries Data in the default Plot view

The screenshot displays the New Hampshire Department of Environmental Services web application. On the left is a navigation sidebar with options: Home, Observations, Snow Data, and Useful Links. The main content area is split into two panels. The left panel shows a map view with a 'MAP' tab selected (circled in red). A red arrow points to a station marker labeled 'WEIN3' on the map, with the text 'Click station location once to open timeseries data side-bar'. The right panel shows the 'Lake Winnepesaukee (WEIN3)' data view. It has three tabs: 'TIMESERIES DATA' (circled in red), 'OPERATIONS UPDATES', and 'STATION INFORMATION'. Below the tabs, the data series is set to 'Observed Reservoir Pool Elevation'. The 'PLOT' tab is also selected (circled in red). The plot shows 'Observed Reservoir Pool Elevation (FT)' as blue dots and 'Mean Reservoir Pool Elevation (FT)' as an orange line. The x-axis is 'Datetime (EST)' from Oct 30, 2022, to Nov 27, 2022. The y-axis is 'FT' ranging from 502.6 to 503.4.

In the MAP view, clicking the Station Legend in upper right corner of MAP will open the Station Legend dialog.

Weather Stations – Indicated by gray square. Station reports some combination of Precipitation, AirTemp, Wind and other weather data.

Streamflow Stations – Indicated by blue triangle. Station reports River Stage and Observed River Discharge at this location.

Snow Sampling Station – Indicated by yellow pentagon. Station reports Snowpack Depth and Snow Water Equivalent data from NHDES manually conducted snow surveys.

Reservoir Elevation Station – Indicated by green cross. Station reports automated or manual Lake Level data collected at this location.

New Hampshire Department of Environmental Services

MAP LIST

STATION LEGEND

Montpelier, Vermont, W. White Mountain National Forest, Lewiston, Portland, Biddeford, Sanford, Rochester, Dover, Portsmouth, Keegan, Amherst, Amherstbury

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Station Legend

The following legend describes the symbology used for the stations shown in the map which indicated what type of data is available. Note, a station can have multiple types of data, in which case it will be represented by multiple "stacked" symbols.

- Weather Station
- Streamflow Station
- Snow Sampling Station
- Reservoir Elevation Station

CLOSE

Stations may also be browsed by name and selected in the LIST view. Clicking a station name in the LIST view will also open the right side-bar with Timeseries Data in the default Plot view

 **New Hampshire Department of Environmental Services**

MAP **LIST**

- ALLN3
Suncook River at Allentown
- ANPNH
Angle Pond
- ASHNH
Squam River**
- AYLNH
Ayers Lake (Snow)
- BAK01
Baker 1 Flood Control (Oliverian)
- BAK02
Baker 2 Flood Control (Hildreth)
- BAK05
Baker 5 Flood Control
- BAK06
Baker 6 Flood Control
- BAK06A
Baker 6A Flood Control
- BAK08
Baker 8 Flood Control

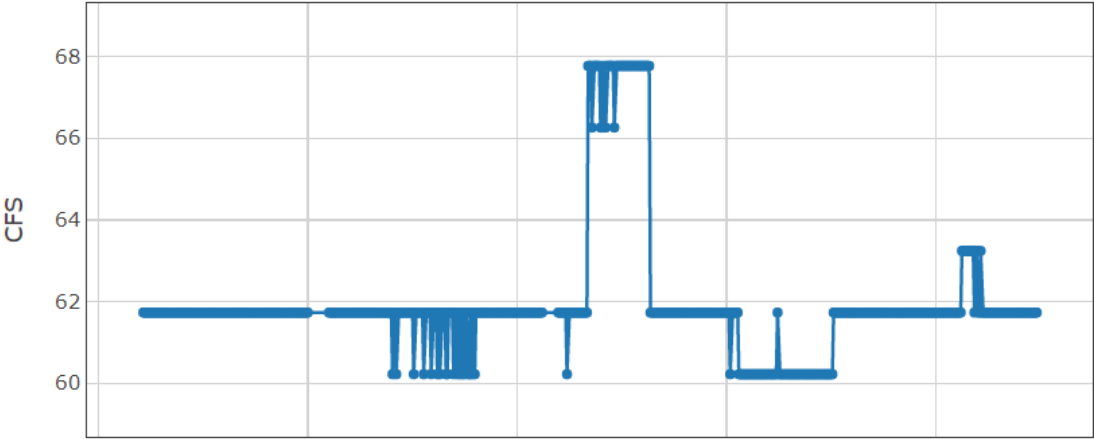
Squam River (ASHNH)

TIMESERIES DATA OPERATIONS UPDATES STATION INFORMATION

Observed Reservoir Release

PLOT TABLE

Squam River (ASHNH)

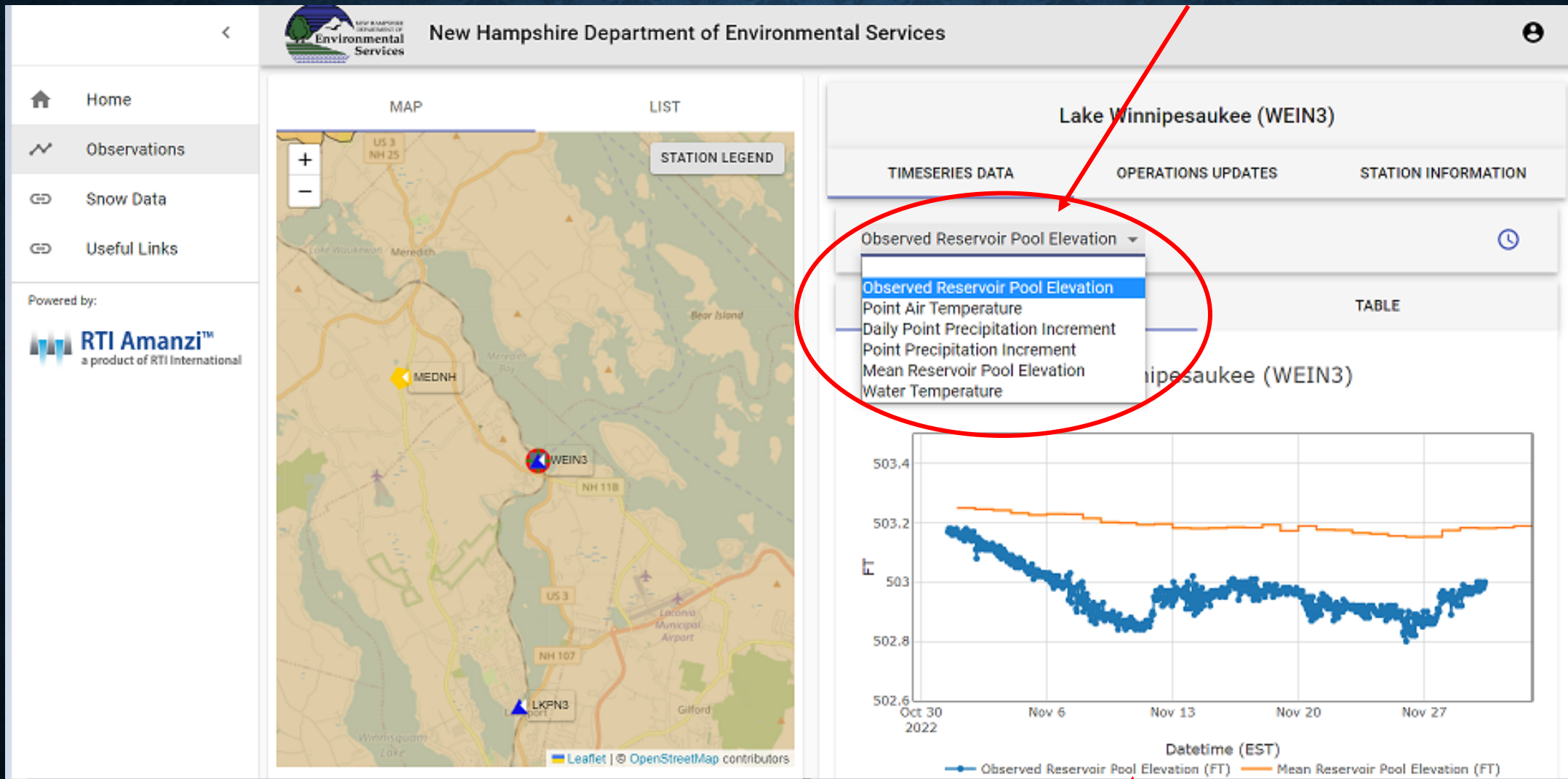


Datetime (EST)

Observed Reservoir Release (CFS)

Datetime (EST)	Observed Reservoir Release (CFS)
Oct 30, 2022	61.5
Nov 6, 2022	61.5
Nov 7, 2022	60.2
Nov 8, 2022	60.2
Nov 9, 2022	60.2
Nov 10, 2022	60.2
Nov 11, 2022	60.2
Nov 12, 2022	60.2
Nov 13, 2022	60.2
Nov 14, 2022	60.2
Nov 15, 2022	67.5
Nov 16, 2022	61.5
Nov 17, 2022	61.5
Nov 18, 2022	61.5
Nov 19, 2022	61.5
Nov 20, 2022	60.2
Nov 21, 2022	60.2
Nov 22, 2022	60.2
Nov 23, 2022	60.2
Nov 24, 2022	60.2
Nov 25, 2022	60.2
Nov 26, 2022	60.2
Nov 27, 2022	63.5
Nov 28, 2022	61.5

Select from different available timeseries data via the pull-down menu at top left of Plot view



Display of timeseries on a given plot may be turned on or off by clicking the timeseries title in the legend

Clicking the clock symbol at the top right will open the 'Change Selected Start and End Times' dialog and allow user to expand or contract the graph date & time span

The screenshot displays a web application interface for Lake Winnepesaukee (WEIN3). On the left is a map view with zoom controls. The main area is divided into a 'LIST' section at the top and a 'PLOT' section below. The 'LIST' section shows 'Observed Reservoir Pool Elevation' as the selected data series. The 'PLOT' section shows a line graph with blue dots for 'Observed Reservoir Pool Elevation' and an orange line for 'Mean Reservoir Pool Elevation'. The x-axis is labeled 'Datetime (EDT)' and ranges from Sep 4 2022 to Oct 2. A dialog box titled 'Change Selected Start and End Times' is open, allowing users to select start and end dates. A clock icon in the top right corner of the plot area is circled in red, with an arrow pointing to the dialog box.

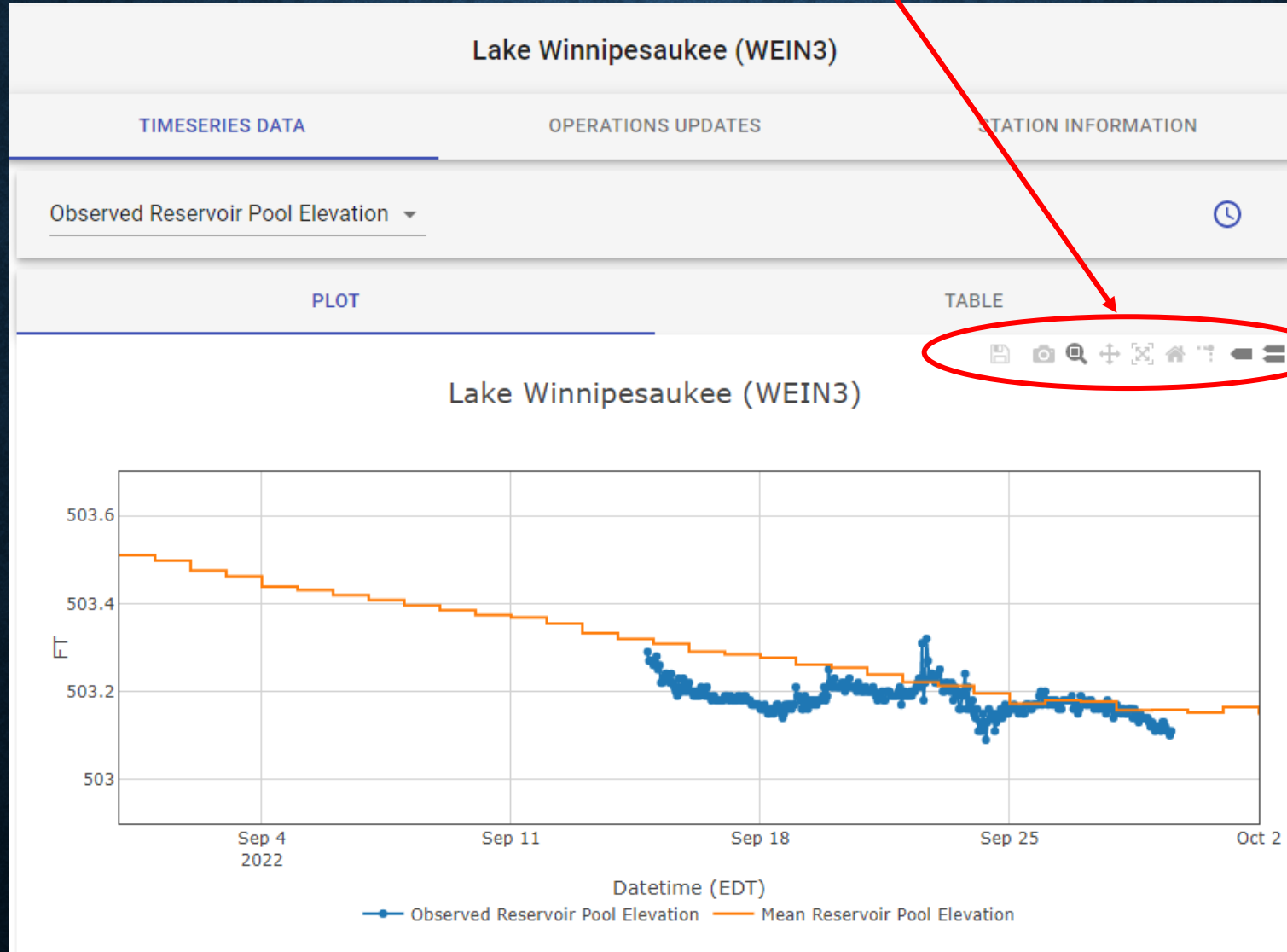
Change Selected Start and End Times

Select start and end dates to change the time period shown. Observed timeseries default to the last 30 days. Forecast timeseries default to showing the entire period

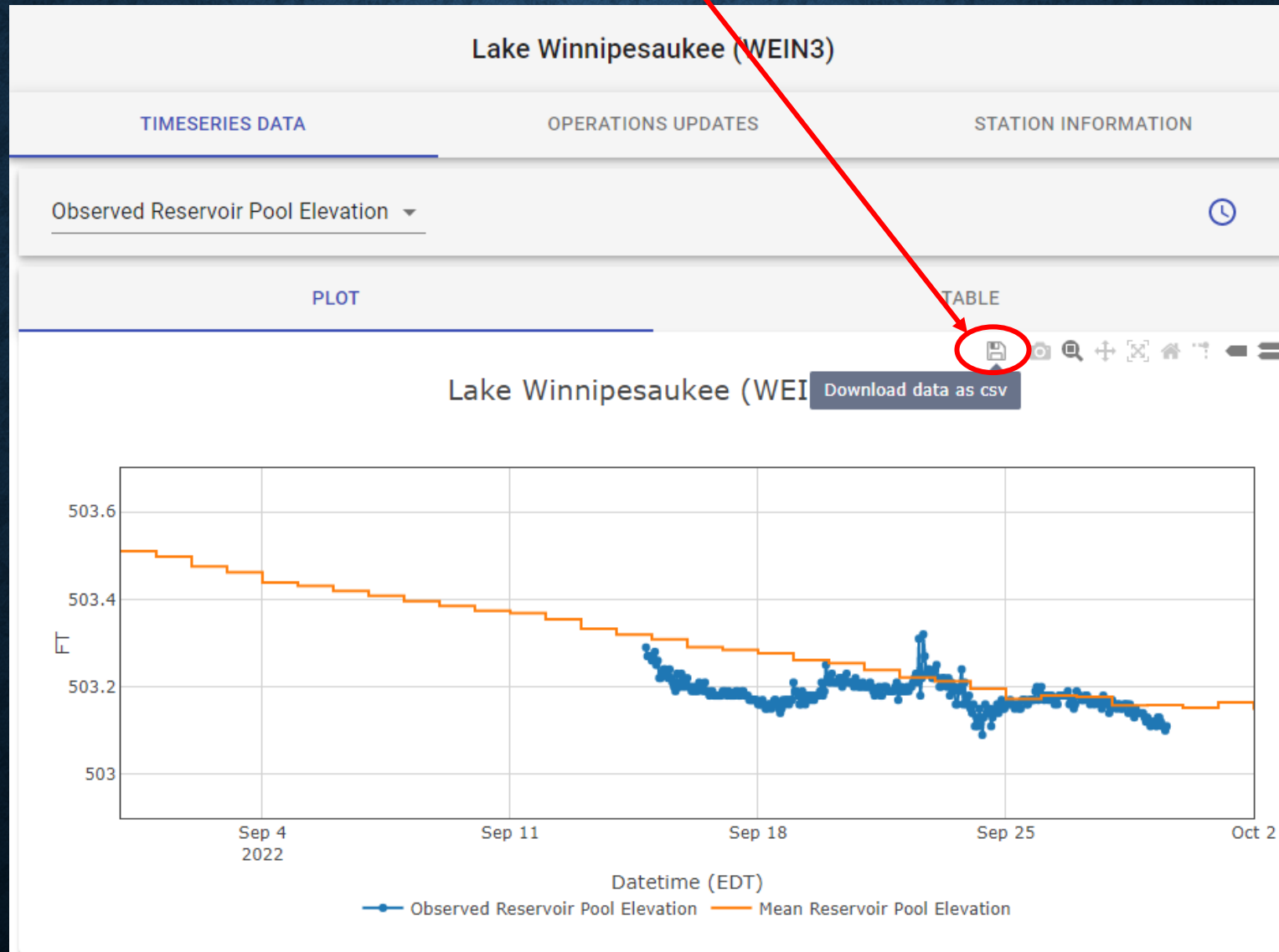
Start Datetime	End Datetime
Aug 30, 2022, 11:42 AM	Oct 2, 2022, 11:42 AM

[CANCEL](#) [CHANGE](#)

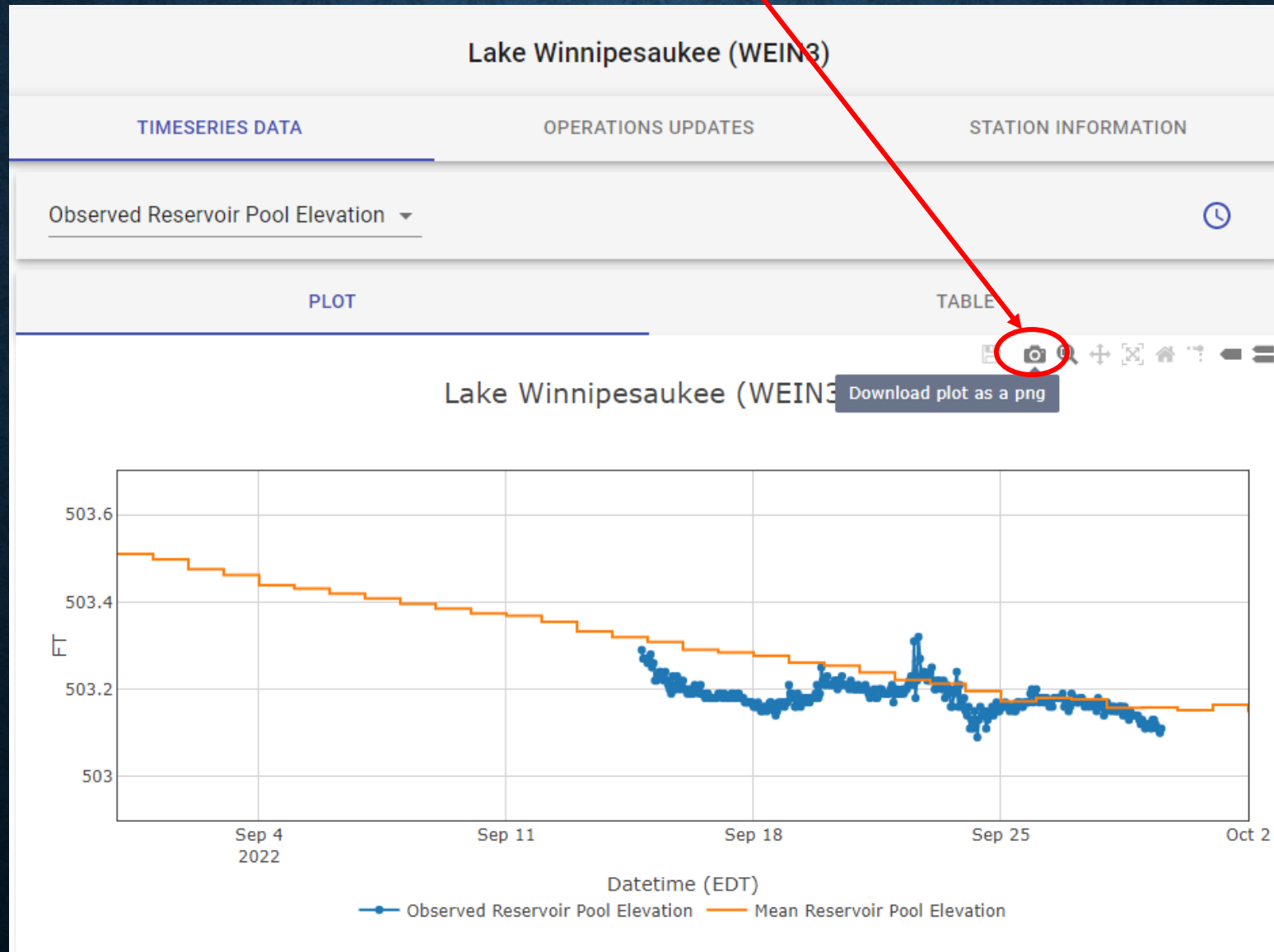
A number of plot functions are available at the top right of the plot space.



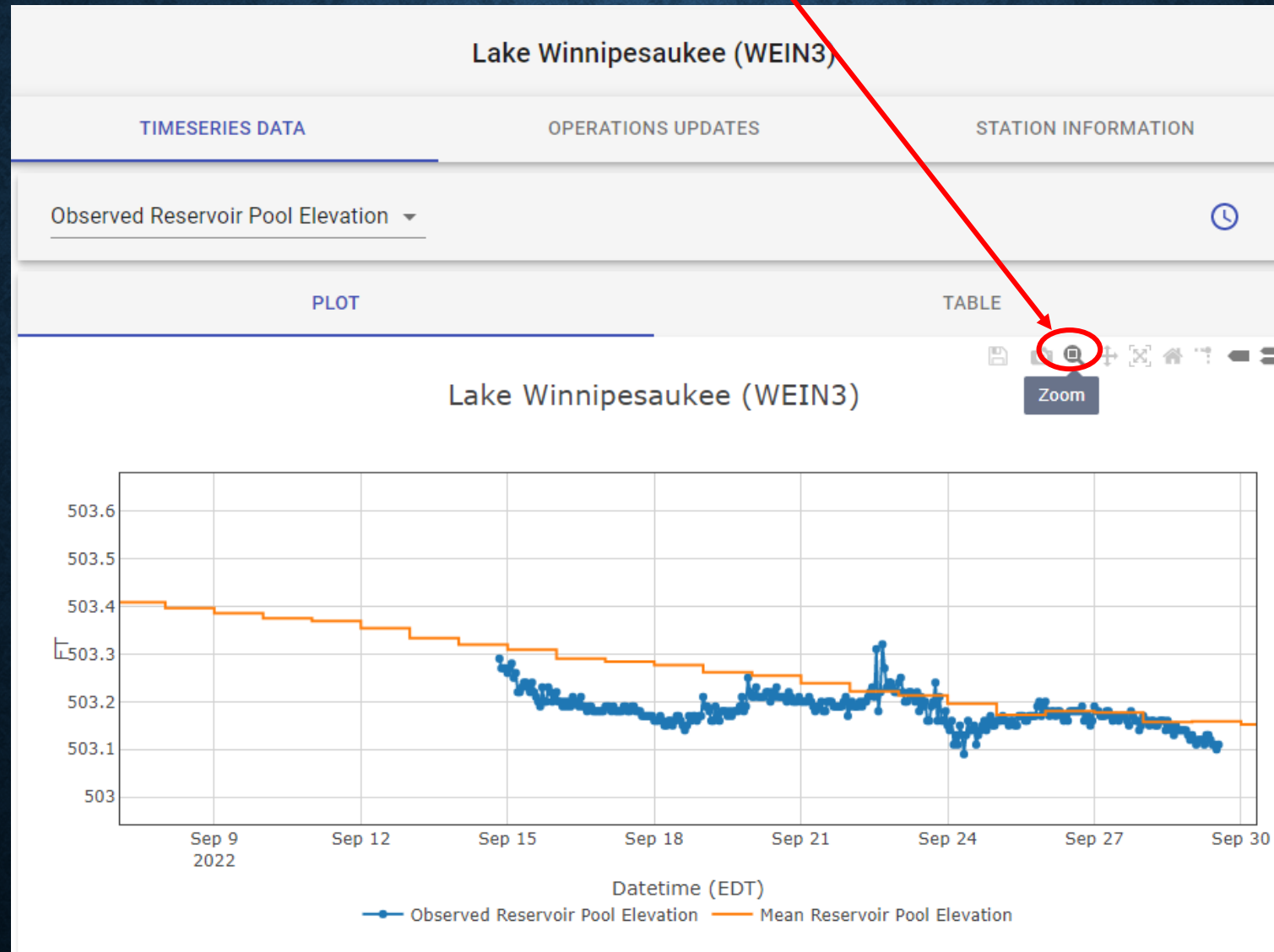
The disk icon allows user to download data to CSV file for the timespan selected.



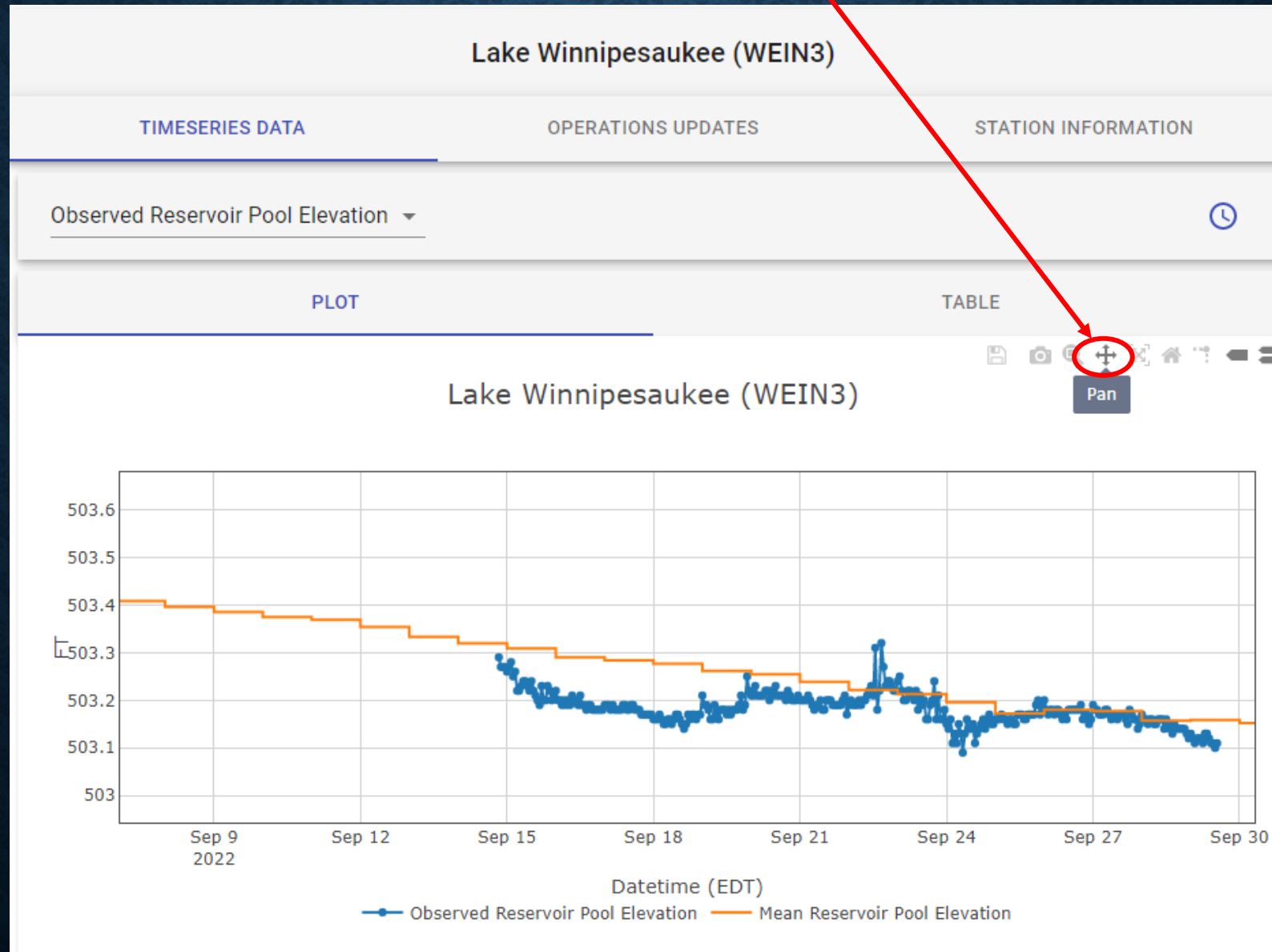
The camera icon allows user to download a plot in PNG format for the timespan selected.



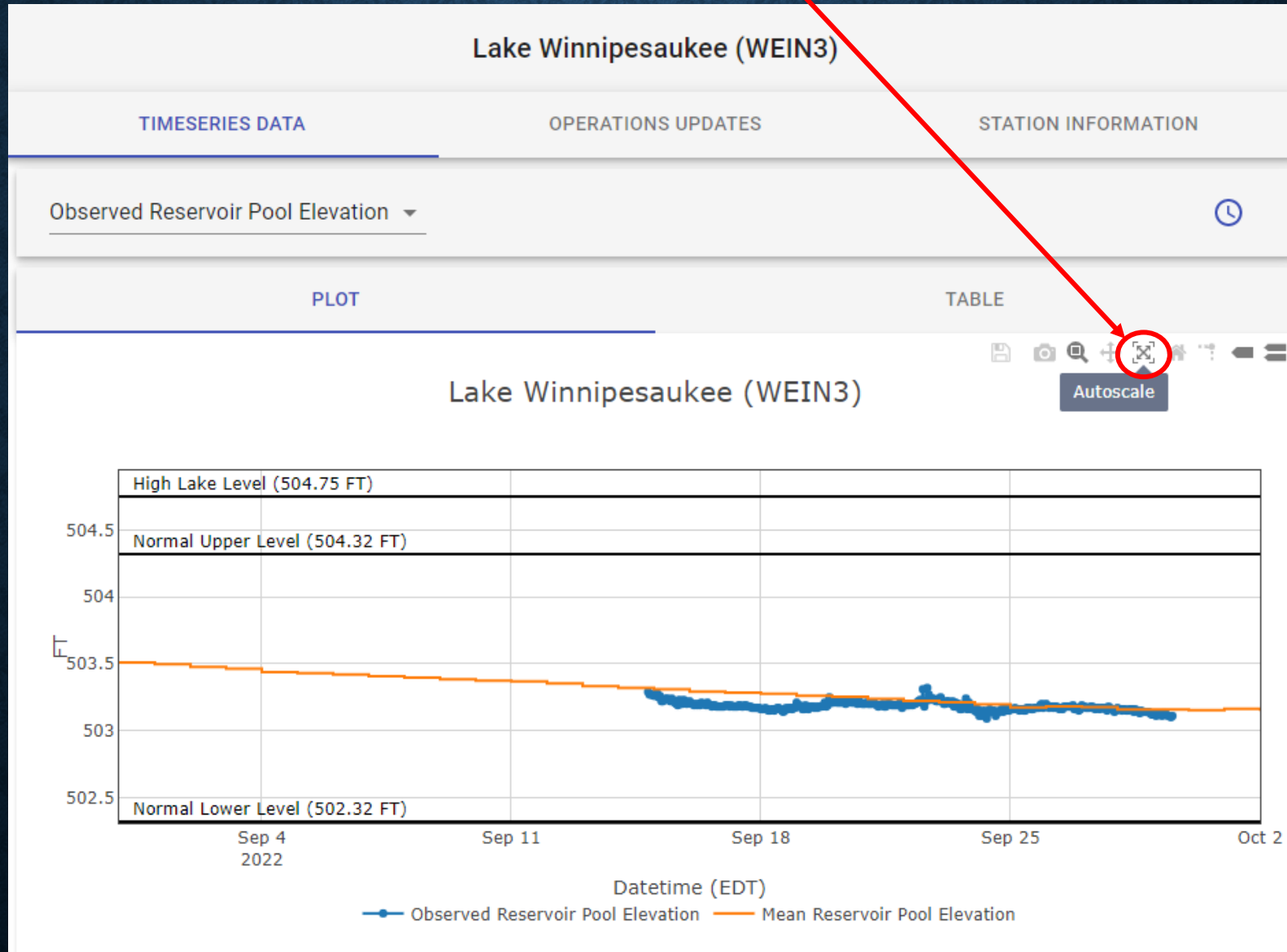
With the magnifying glass 'Zoom' icon selected (default) the user can click and drag to zoom in on the plot. Zooming back out on a plot requires the use of either the 'Autoscale' or 'Reset Axes' icons featured in next slides



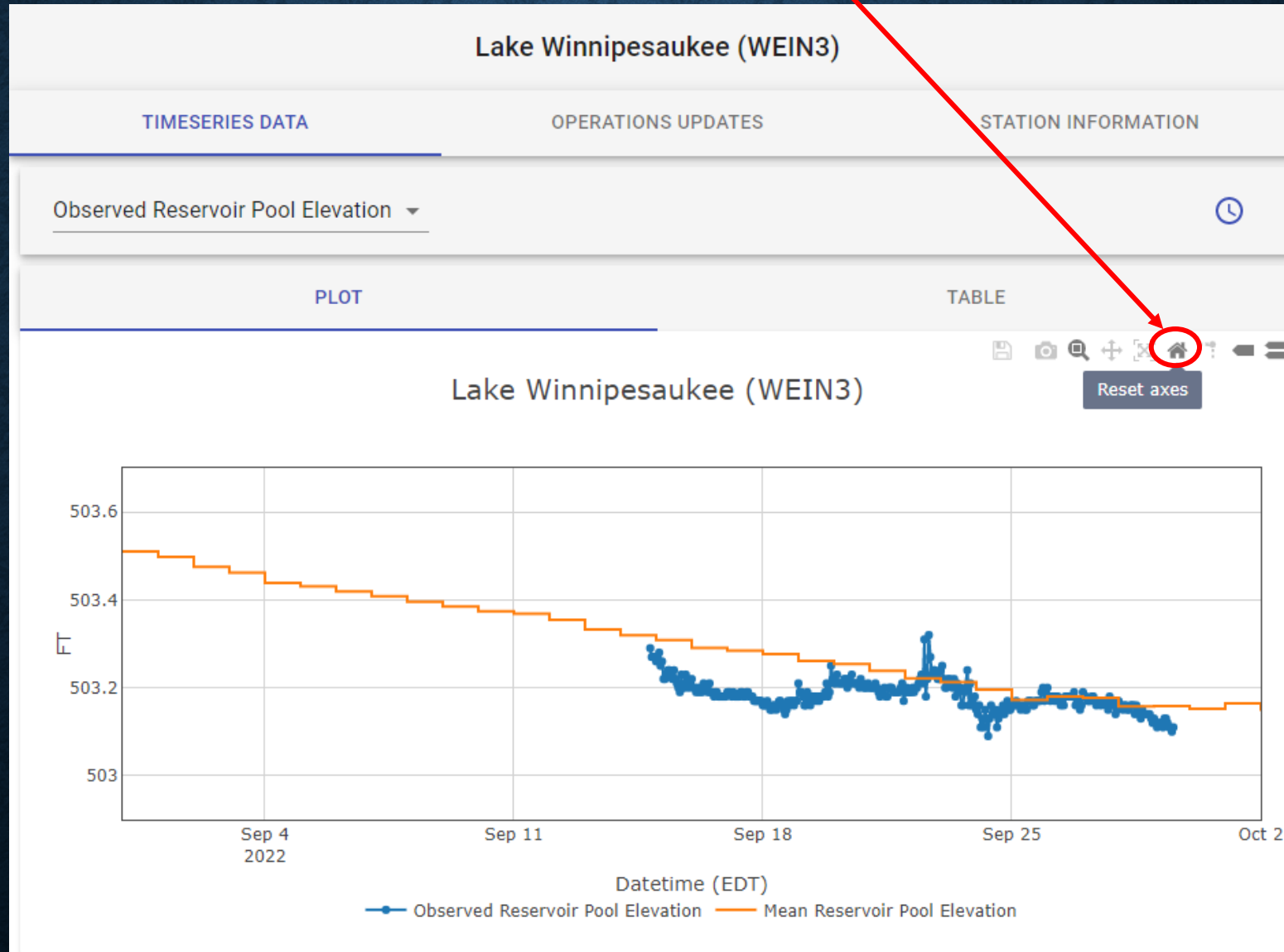
With the cross 'Pan' icon selected the user can click and drag to pan around the plot



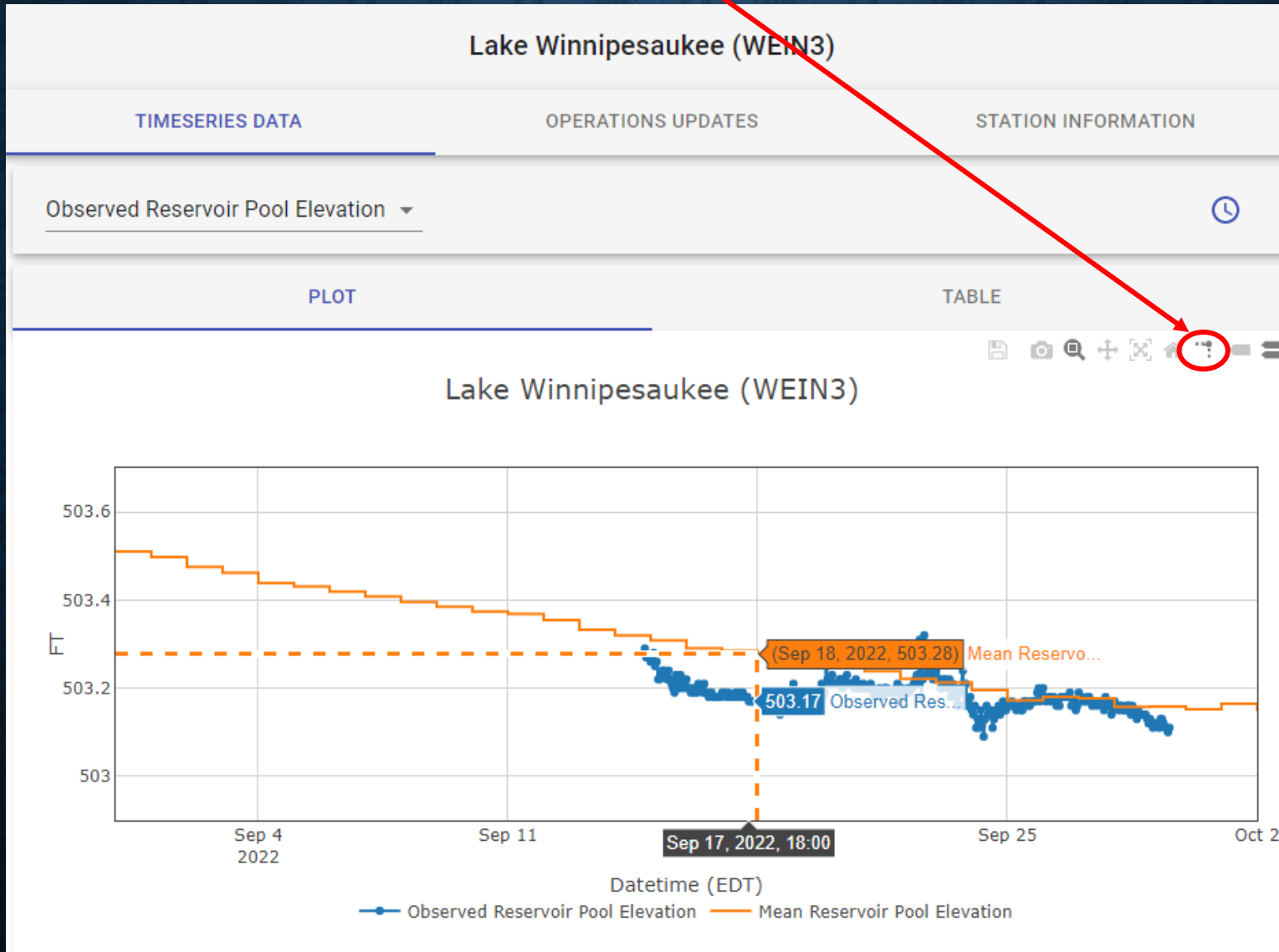
The "Autoscale" button will scale the plot to include all defined threshold lines for a given timeseries plot



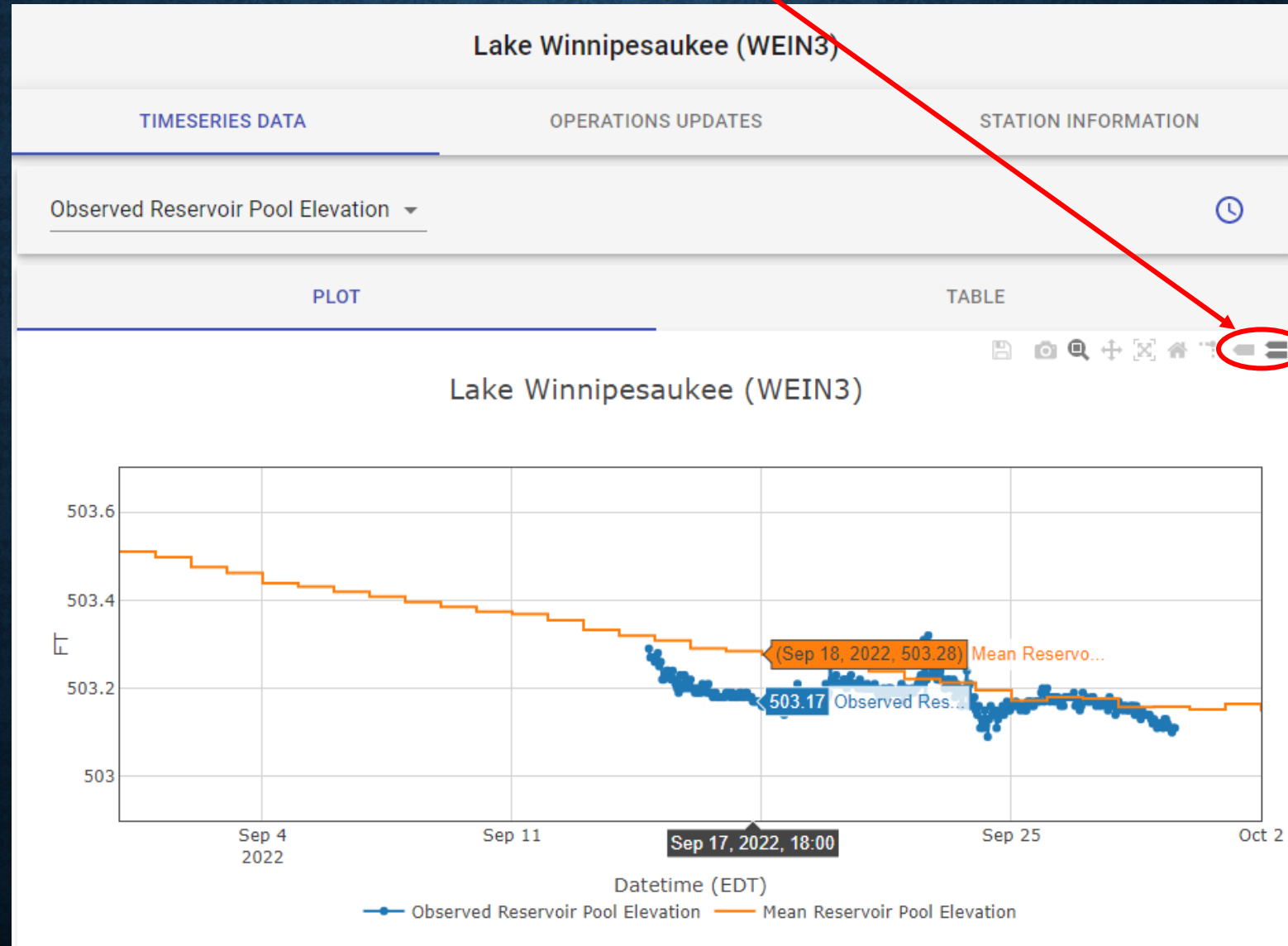
The "Reset Axes" button will re-scale the plot to the timeseries data only



The "Toggle Spike Lines" button will present dashed horizontal and vertical alignment lines when the mouse is hovered over plot time series



The default setting for mouse hovering is to “Compare data on hover” which will show values of all timeseries displayed for a given date-time point. User can select “Show closest data on hover” to only show a single timeseries datapoint, whichever is closest to mouse hover.



Click TABLE to view data in table format.

The entire data table (for timespan specified) can be downloaded to CSV or PDF file via the Export button at top right

New Hampshire Department of Environmental Services

MAP LIST

STATION LEGEND

Observed Reservoir Pool Elevation

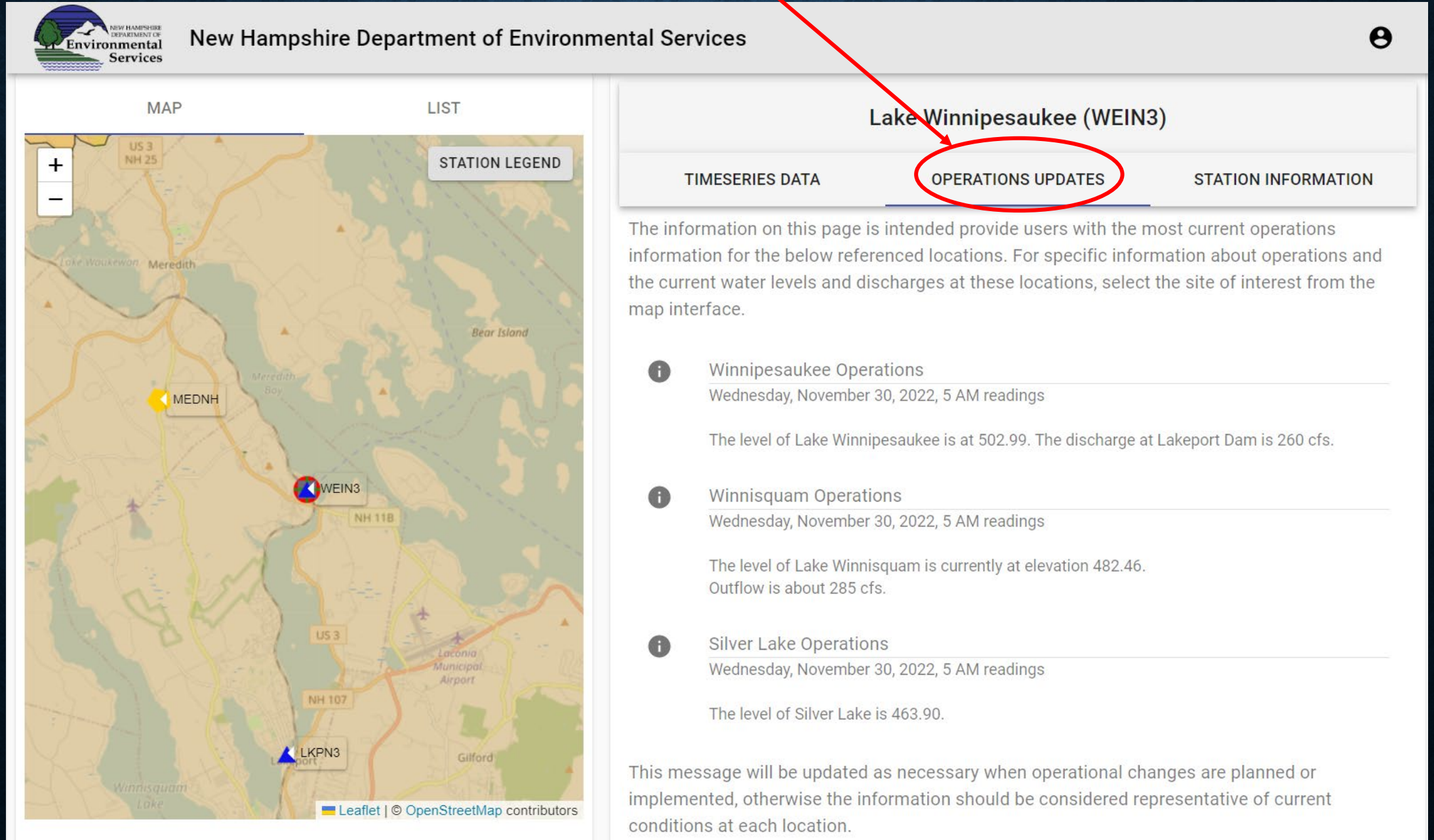
PLOT TABLE

Search

Datetime (EST)	Observed Reservoir Pool Elevation (FT)	Mean Reservoir Pool Elevation (FT)
10/31/2022, 12:00:00 PM	503.1700134277344	
10/31/2022, 1:00:00 PM	503.17999267578125	
10/31/2022, 2:00:00 PM	503.17999267578125	
10/31/2022, 3:00:00 PM	503.17999267578125	
10/31/2022, 4:00:00 PM	503.17999267578125	

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For select stations, the user may view updates concerning dam & watershed operations by clicking the Operations Updates tab



The screenshot displays the New Hampshire Department of Environmental Services website. The header includes the department's logo and name. Below the header, there are two tabs: 'MAP' and 'LIST'. The 'MAP' tab is active, showing a map of the Lake Winnepesaukee region with several monitoring stations marked: MEDNH, WEIN3, and LKPN3. A red arrow points from the text above to the 'OPERATIONS UPDATES' tab, which is circled in red. The 'LIST' tab is also visible, showing the title 'Lake Winnepesaukee (WEIN3)' and three sub-tabs: 'TIMESERIES DATA', 'OPERATIONS UPDATES', and 'STATION INFORMATION'. The 'OPERATIONS UPDATES' sub-tab is selected. Below the sub-tabs, there is a paragraph of text explaining the purpose of the page. Three information cards are listed, each with an 'i' icon and a title: 'Winnepesaukee Operations', 'Winnisquam Operations', and 'Silver Lake Operations'. Each card provides the date and time of the data (Wednesday, November 30, 2022, 5 AM readings) and a brief description of the current conditions. At the bottom of the page, there is a disclaimer message.

New Hampshire Department of Environmental Services

MAP LIST

STATION LEGEND

US 3 NH 25

Lake Waukegan Meredith

MEDNH

Meredith Bay

Bear Island

WEIN3

NH 11B

US 3

NH 107

Laconia Municipal Airport

LKPN3

Winnisquam Lake

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Lake Winnepesaukee (WEIN3)

TIMESERIES DATA OPERATIONS UPDATES STATION INFORMATION

The information on this page is intended provide users with the most current operations information for the below referenced locations. For specific information about operations and the current water levels and discharges at these locations, select the site of interest from the map interface.

- Winnepesaukee Operations**
Wednesday, November 30, 2022, 5 AM readings
The level of Lake Winnepesaukee is at 502.99. The discharge at Lakeport Dam is 260 cfs.
- Winnisquam Operations**
Wednesday, November 30, 2022, 5 AM readings
The level of Lake Winnisquam is currently at elevation 482.46.
Outflow is about 285 cfs.
- Silver Lake Operations**
Wednesday, November 30, 2022, 5 AM readings
The level of Silver Lake is 463.90.

This message will be updated as necessary when operational changes are planned or implemented, otherwise the information should be considered representative of current conditions at each location.

More detailed information for the selected station may be viewed on the 'Station Information' tab

New Hampshire Department of Environmental Services

MAP LIST

STATION LEGEND

US 3 NH 25

Lake Winnepesaukee

Meredith

Bear Island

Meredith Bay

MEDNH

WEIN3

NH 11B

US 3

NH 107

Laconia Municipal Airport

Gilford

LKPN3

Winnepesaukee Lake

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Lake Winnepesaukee (WEIN3)

TIMESERIES DATA OPERATIONS UPDATES **STATION INFORMATION**

i NHDES - AUTO
This hydrometeorological gauging station is operated and maintained by the New Hampshire Department of Environmental Services (NHDES). Most data relayed by satellite or other telemetry have received little or no review. Inaccuracies in the data may be present because of instrument malfunctions or physical changes at the measurement site, including backwater effects due to ice formation. Although the data presented herein is intended to be an accurate representation of actual conditions, it is presented for informational purposes only and the user is cautioned to use it at his/her own risk.

i WEIN3 Operations

LOCATION
Laconia, NH
Latitude 43°36'27", Longitude 71°27'34" NAD27
This station is located beneath the Weirs Beach boardwalk and adjacent to the City of Laconia's public docks.
Belknap County, New Hampshire, Hydrologic Unit 01070002

DRAINAGE AREA
363.00 square miles.

GAGE
Datum of gage is 500.00 feet above sea level NGVD29.

SITE TYPE
Lake Winnepesaukee Stage (Lake elevation)

Current and archived PDFs of annual NHDES Snow Sampling Surveys are provided under the 'Snow Data' tab. Click any link to open a Snow Survey PDF.

The screenshot displays the New Hampshire Department of Environmental Services website. The header includes the department's logo and name. A left-hand navigation menu contains links for Home, Observations, Snow Data, and Useful Links. The 'Snow Data' link is circled in red, with a red arrow pointing to the 'Snow Data' section of the main content area. This section is titled 'Snow Data' and contains a list of PDF links for snow surveys. The link for '2022 - Snow Survey #7 - 03/29/2022' is circled in red, with a red arrow pointing to it from the text above. Below this are links for surveys #6 through #1, all dated in 2022. At the bottom left, there is a 'Powered by: RTI Amanzi' logo.

New Hampshire Department of Environmental Services

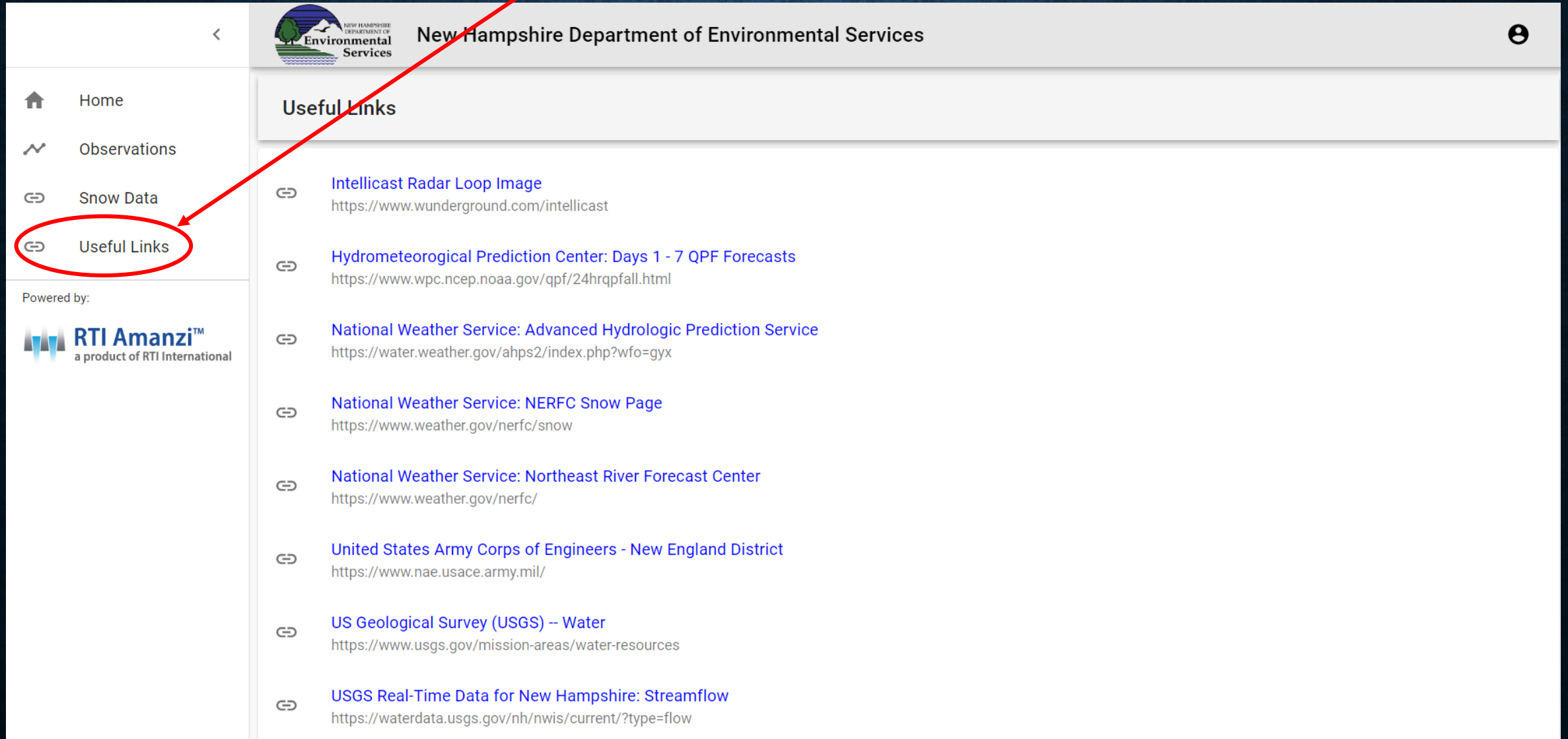
Home
Observations
Snow Data
Useful Links

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Snow Data


- [2023 - Snow Survey Schedule](http://nhdes.rtiamanzi.org/media/2023_Snow_Samp_Sched.pdf)
http://nhdes.rtiamanzi.org/media/2023_Snow_Samp_Sched.pdf
- [2022 - Snow Survey #7 - 03/29/2022](http://nhdes.rtiamanzi.org/media/20220329_7_snowrprt.pdf)**
http://nhdes.rtiamanzi.org/media/20220329_7_snowrprt.pdf
- [2022 - Snow Survey #6 - 03/15/2022](http://nhdes.rtiamanzi.org/media/20220315_6_snowrprt.pdf)
http://nhdes.rtiamanzi.org/media/20220315_6_snowrprt.pdf
- [2022 - Snow Survey #5 - 03/01/2022](http://nhdes.rtiamanzi.org/media/20220301_5_snowrprt.pdf)
http://nhdes.rtiamanzi.org/media/20220301_5_snowrprt.pdf
- [2022 - Snow Survey #4 - 02/15/2022](http://nhdes.rtiamanzi.org/media/20220215_4_snowrprt.pdf)
http://nhdes.rtiamanzi.org/media/20220215_4_snowrprt.pdf
- [2022 - Snow Survey #3 - 02/01/2022](http://nhdes.rtiamanzi.org/media/20220201_3_snowrprt.pdf)
http://nhdes.rtiamanzi.org/media/20220201_3_snowrprt.pdf
- [2022 - Snow Survey #2 - 01/18/2022](http://nhdes.rtiamanzi.org/media/20220118_2_snowrprt.pdf)
http://nhdes.rtiamanzi.org/media/20220118_2_snowrprt.pdf
- [2022 - Snow Survey #1 - 01/04/2022](http://nhdes.rtiamanzi.org/media/20220104_1_snowrprt.pdf)
http://nhdes.rtiamanzi.org/media/20220104_1_snowrprt.pdf

Links to other sources of hydrologic and meteorological information are provided under the 'Useful Links' tab



The screenshot displays the New Hampshire Department of Environmental Services website. The navigation menu on the left includes 'Home', 'Observations', 'Snow Data', and 'Useful Links', with 'Useful Links' circled in red and a red arrow pointing to it from the text above. The main content area is titled 'Useful Links' and contains a list of external links:

- [Intellicast Radar Loop Image](https://www.wunderground.com/intellicast)
<https://www.wunderground.com/intellicast>
- [Hydrometeorological Prediction Center: Days 1 - 7 QPF Forecasts](https://www.wpc.ncep.noaa.gov/qpf/24hrqpfall.html)
<https://www.wpc.ncep.noaa.gov/qpf/24hrqpfall.html>
- [National Weather Service: Advanced Hydrologic Prediction Service](https://water.weather.gov/ahps2/index.php?wfo=gyx)
<https://water.weather.gov/ahps2/index.php?wfo=gyx>
- [National Weather Service: NERFC Snow Page](https://www.weather.gov/nerfc/snow)
<https://www.weather.gov/nerfc/snow>
- [National Weather Service: Northeast River Forecast Center](https://www.weather.gov/nerfc/)
<https://www.weather.gov/nerfc/>
- [United States Army Corps of Engineers - New England District](https://www.nae.usace.army.mil/)
<https://www.nae.usace.army.mil/>
- [US Geological Survey \(USGS\) -- Water](https://www.usgs.gov/mission-areas/water-resources)
<https://www.usgs.gov/mission-areas/water-resources>
- [USGS Real-Time Data for New Hampshire: Streamflow](https://waterdata.usgs.gov/nh/nwis/current/?type=flow)
<https://waterdata.usgs.gov/nh/nwis/current/?type=flow>

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