



www.baydeltalive.com
Tutorials

EXPLORE REAL TIME DATA

In this tutorial, you will be introduced to:

1. The data providers
2. The real time datasets you can access on Baydeltalive.com
3. How to explore and use real time data
4. How to save a real time data preset for future viewing and use with project and research

GETTING STARTED:

First, always be sure you are logged in by using the login/signup buttons at the top of the screen. If you don't log in, you won't be able to save your work.

The screenshot shows the Bay Delta Live website interface. At the top, there is a navigation bar with the Bay Delta Live logo on the left and three buttons on the right: 'LOGIN', 'JOIN BDL COMMUNITY', and 'HELP'. A search bar is also present. An orange arrow points from the logo area to the 'LOGIN' and 'JOIN BDL COMMUNITY' buttons, which are enclosed in an orange rectangular box. Below the navigation bar, there is a main content area featuring a large banner for 'Managing Salinity in a Drought' with a 'LEARN MORE...' button. At the bottom of the page, there is a row of icons representing various data categories: Explore Data, Daily Operations, Reservoir Storage, Snowpack / Runoff, Water Quality, Fish, Data Visualizations, and Data Catalog.

Once you are logged in, from the homepage, **click on EXPLORE DATA.**

Delta Acoustic Telemetry Studies

The intent of the web application is to support USFWS, USBR, Army Corp, USGS, MWD, DWR and participating agencies with the management of the receiver network ops and visualization of raw and processed data from the receivers in order to support the goal of rigorous statistical management-decision...

[LEARN MORE...](#)

- Explore Data
- Daily Operations
- Reservoir Storage
- Snowpack / Runoff
- Water Quality
- Fish
- Data Visualizations
- Data Catalog
- Ecosystem Projects
- Scientific Studies
- GIS/Map Layers
- Delta Atlas
- Photos / Videos / Docs
- Salinity Conditions
- 1641 Interactive
- News

THE DATA PROVIDERS:

You are now looking at the interface for accessing real time data.

Real time data category gives you access to the extensive sensor network throughout the state of California.

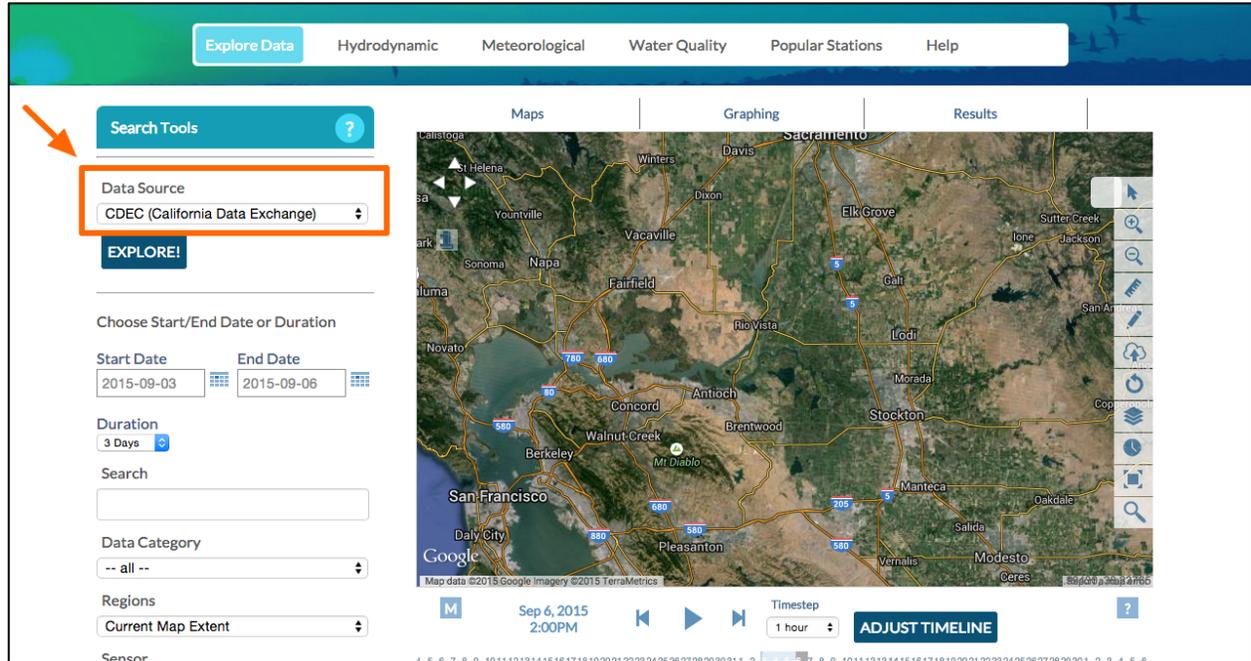
Sources such as, the California Data Exchange Network (CDEC), USGS National Information Water System (NWIS), and more provide these data.



Please note: These data sources are accessed by remote web services and are not hosted by Baydeltalive.com. The data provider maintains data quality.

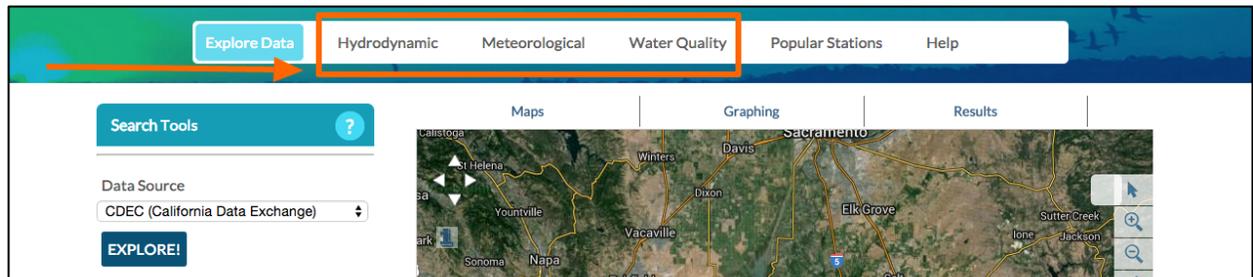
EXPLORE REAL-TIME DATA:

We will start with CDEC. Choose that option in the Data Source drop-down menu.

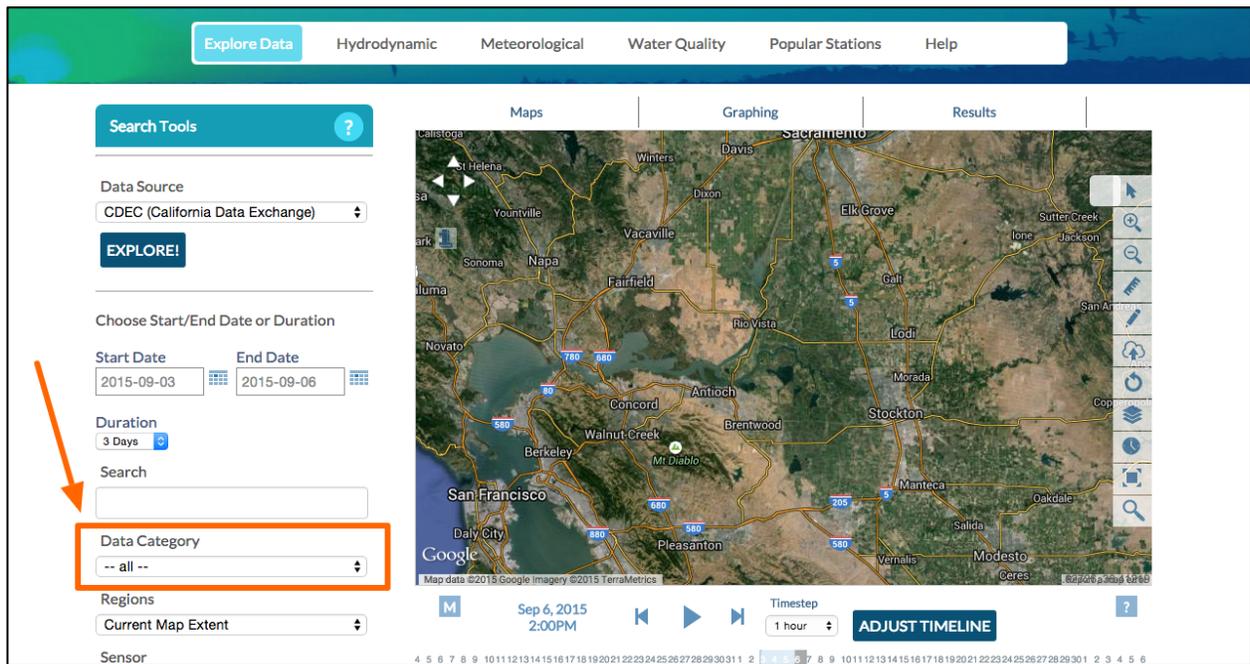


This dataset contains hydrodynamic, meteorological and water quality sensor information from the Delta and its watershed. For example you can explore things like snow pack, electrical conductivity, wind and more than 200 + other data parameters.

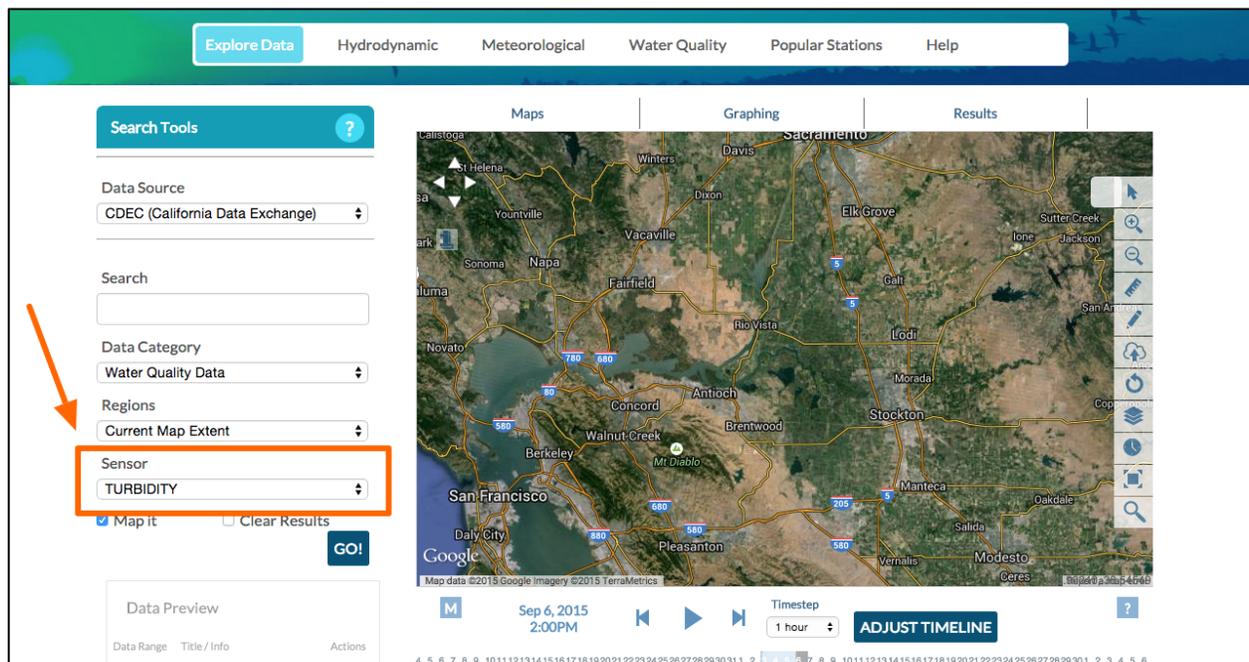
First you can choose to filter the data by sensor type using the quick links in the sub-navigation: Hydrodynamic, Meteorological or Water Quality.



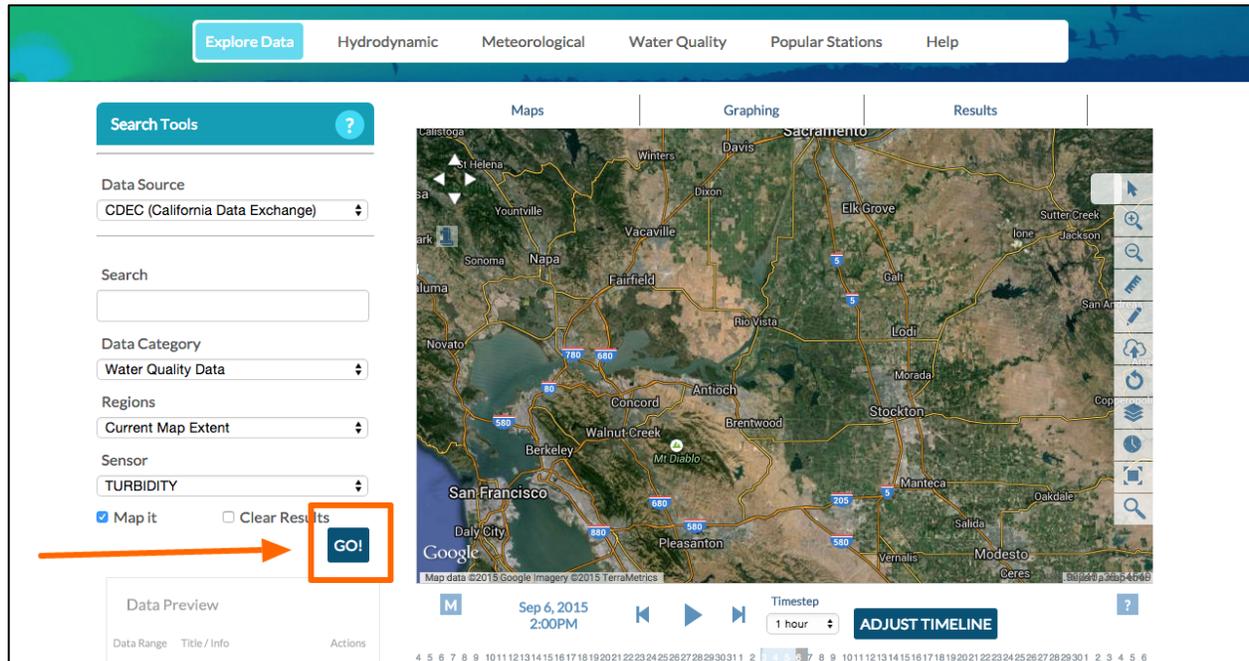
Or you can choose to dig deeper by using the Data Category menu option. Choose **“Water Quality”** from the Data Category drop-down menu.



A drop-down list of sensors will appear on the left. You can scroll through the list to find your water quality parameter. Choose **turbidity**.

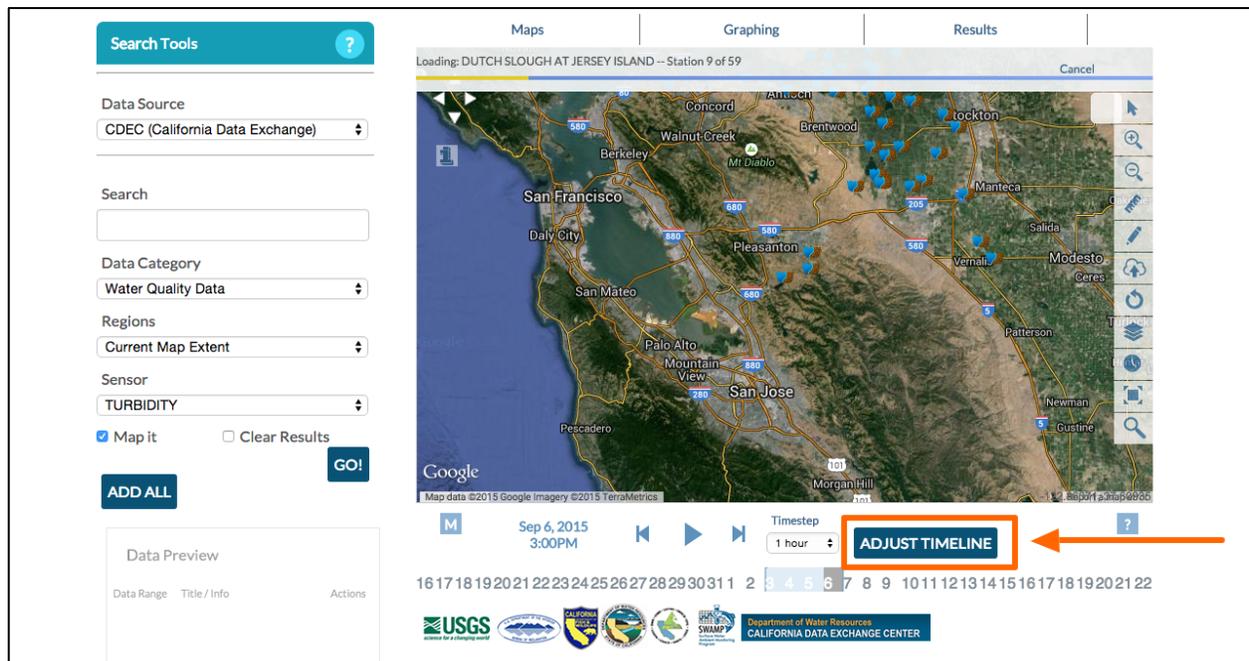


Click “GO!” to get the data.

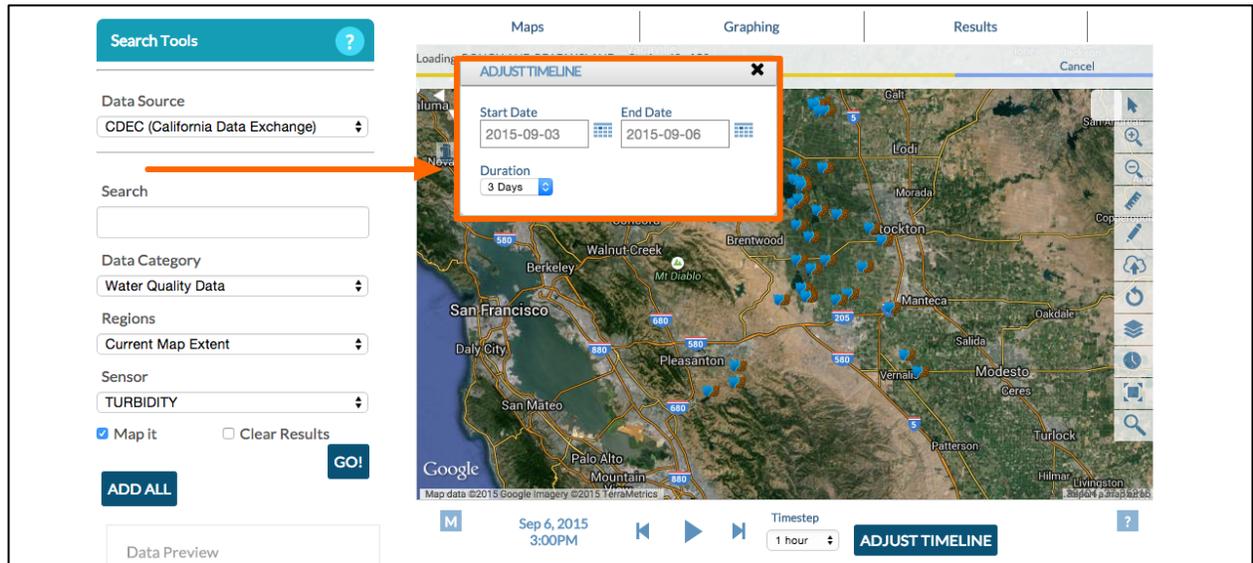


The CDEC default time extent for CDEC is 3 days and now 3 days worth of data for each station is loading in my map extent.

You can change the time extent by clicking the “Adjust Timeline” button.

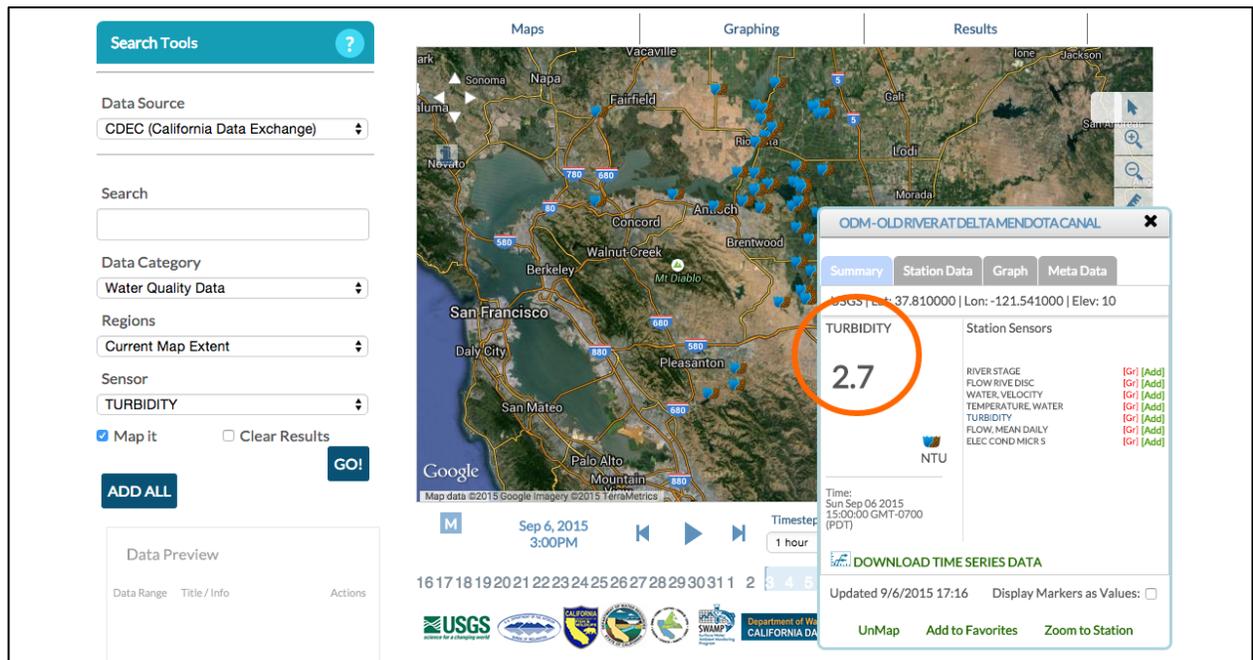


Note: If you choose new dates and adjust the timeline, let the new information load in the map before closing out of the adjust timeline pop-up (pictured below).



Now you can explore the data at each station using your mouse cursor.

Hover over a station and a rollover will appear with detailed information including the current turbidity value at that station, a 3-day trend graph (unless you adjusted the time extent to include more days), station metadata and a link to the original data source.



Pictured: rollover badge appears when mouse cursor scrolls over stations, showing turbidity value

The screenshot displays a web application interface for water quality data. On the left, a 'Search Tools' panel includes filters for 'Data Source' (CDEC), 'Data Category' (Water Quality Data), 'Regions' (Current Map Extent), and 'Sensor' (TURBIDITY). The central map shows the San Francisco Bay Area with various locations marked. On the right, a data panel for 'ODM-OLD RIVER AT DELTA MENDOTA CANAL' is open, showing a 'Graph' tab with a line chart of turbidity (NTU) over time. The graph shows a peak in turbidity around September 4th and 5th, followed by a decline. The interface also includes a 'Data Preview' table at the bottom left and various utility buttons like 'UnMap', 'Add to Favorites', and 'Zoom to Station' at the bottom right.

Pictured: rollover badge 3-day trend graph tab

This screenshot shows the same web application interface, but with the 'Meta Data' tab selected in the data panel. The 'Meta Data' tab is highlighted with an orange box and an arrow. The meta data displayed includes: 'table stations', 'ID 6748', 'station_id ODM', 'station_name OLD RIVER AT DELTA MENDOTA CANAL', 'start_date 2009-12-14 00:00:00-08', 'end_date 2010-12-31 00:00:00-08', 'elev 10', 'latitude 37.810000', 'longitude -121.541000', 'vector 316', 'river_basin DELTA', 'county SAN JOAQUIN', 'operating_agency USGS', 'type cdec', 'subtype cdec', 'sensor_number 27', 'icon /images/icons/32x32/sensor/turbidity.png', and 'pe_code WTIZZZZ'. The rest of the interface, including the search tools and map, remains the same as in the previous screenshot.

Pictured: rollover badge meta data tab

You can download the data and graph for a project through the "download time series data" link.

The screenshot shows the application interface with search tools on the left and a map on the right. A data popup is open for 'ODM-OLD RIVER AT DELTA MENDOTA CANAL'. The popup includes a 'Summary' tab, station data, and a graph. A red box highlights the 'DOWNLOAD TIME SERIES DATA' link, with an orange arrow pointing to it. The popup also shows a turbidity value of 2.7 and a list of station sensors.

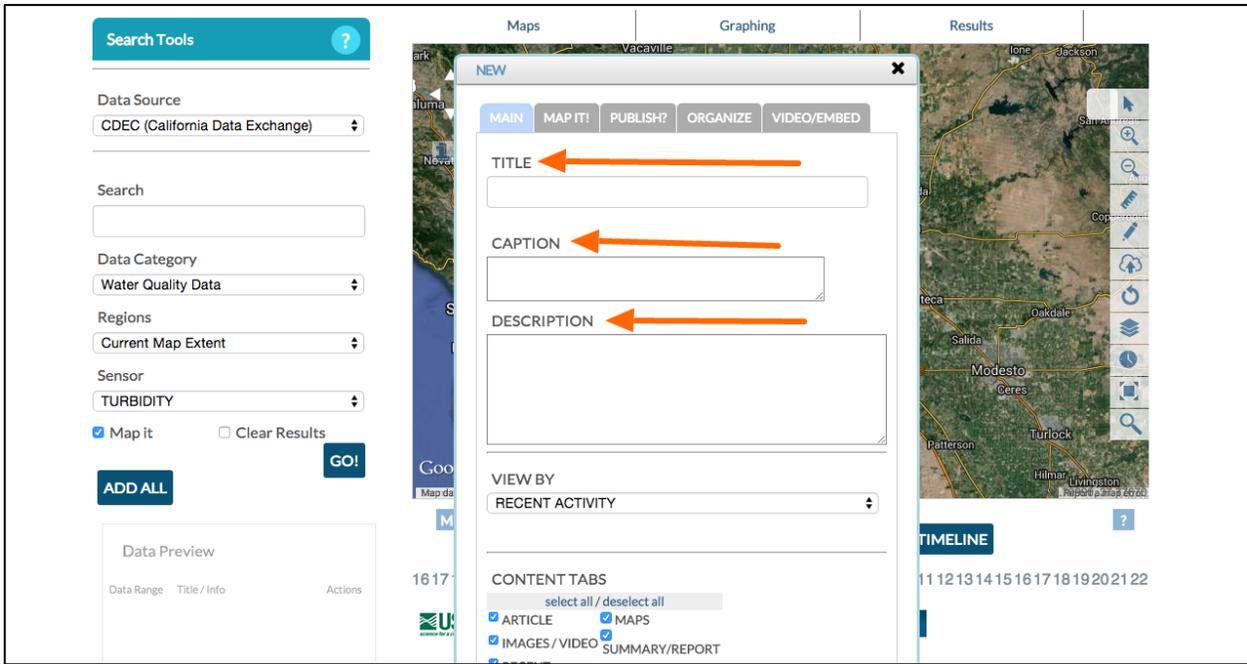
Pictured: rollover badge link to original data source / download time series data

SAVE THE DATA PRESET:

To save the data preset, go to the toolbar on the right-hand side and click the "save map" icon.

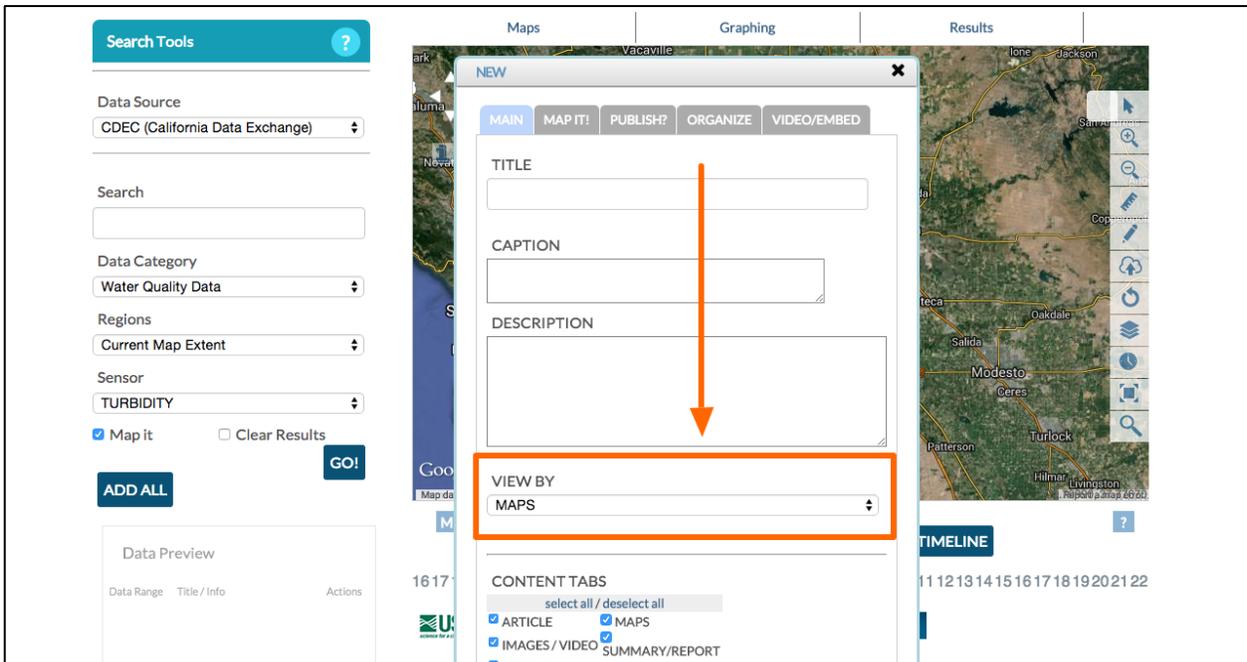
The screenshot shows the application interface with search tools on the left and a map on the right. The toolbar on the right-hand side is visible, and the 'Save Map' icon is highlighted with a red box and an orange arrow.

You have several options here such as the title, caption, description, and where to publish it.



For now, title this one “Turbidity Stations” and go down to the “view by” drop-down menu.

These options are correlated to how the map will show up when you go to look at it later. Choose “map.”



Then scroll down and click, “save changes.”

Presets Clear All

About Bay-Delta Live
Bay-Delta Live is a collaborative community of interests with the goal of expanding open and tra...
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CONTENT ADDONS

WEB LINK (Opens a new window)

META DATA URL

CONTACT

Save changes Cancel

Subscribe email
Name Name
Email Email address
Submit

Errors

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A box will appear and you can view the map now or go on to create other maps. Click “view” and go in to edit some of the information.

BAY-DELTA LIVE

Explore Data Hydrodynamic Meteorological Water Quality Popular Stations Help

Search Tools ?

Data Source -- CHOOSE --

EXPLORE!

Maps Graphing Results

NEW

Data length is 134178

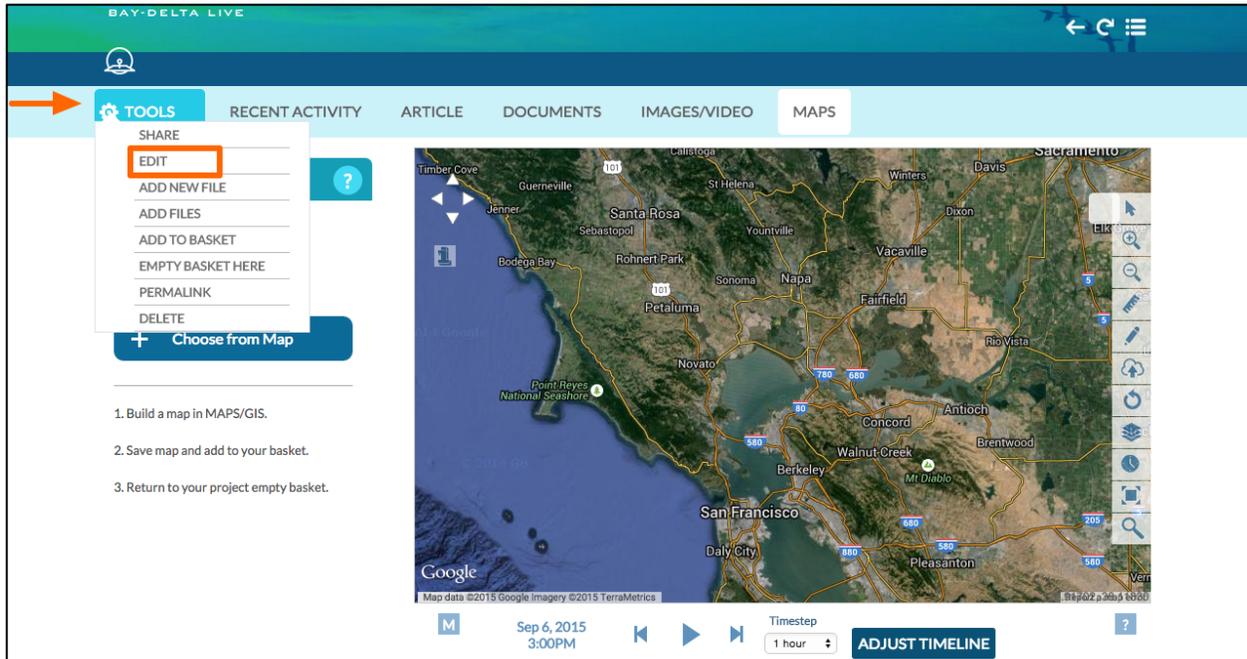
Updates were successful.
Changes Saved.

View

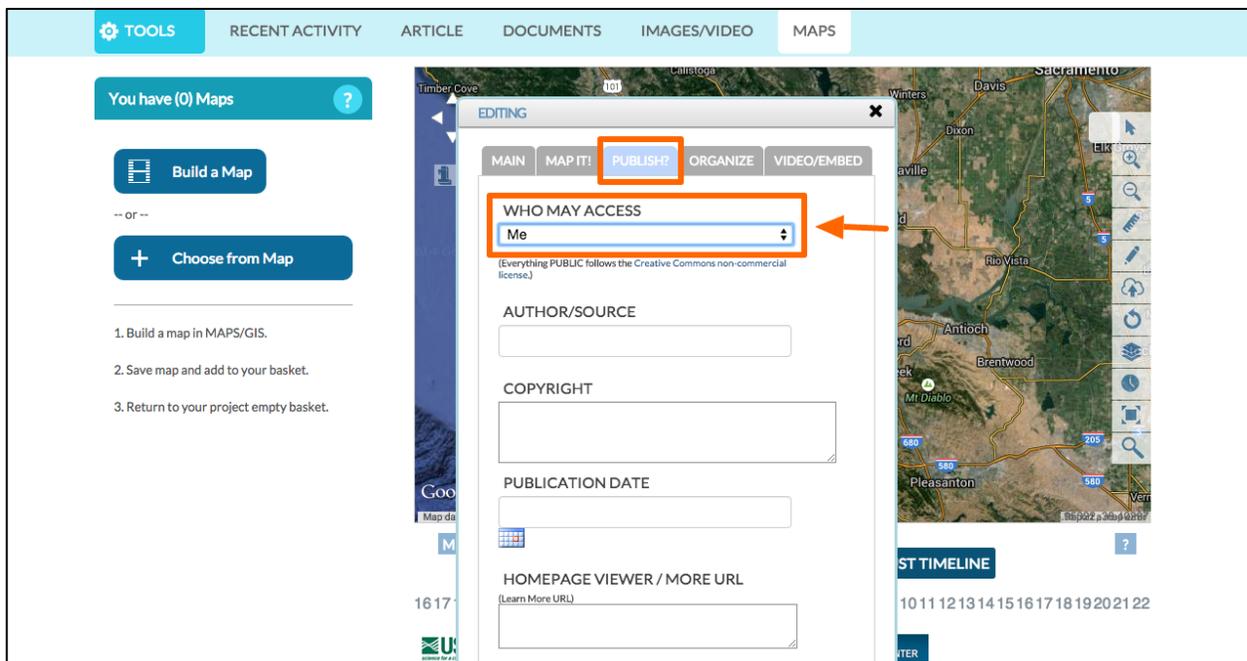
Map data ©2015 Google Imagery ©2015 TerraMetrics

M Sep 6, 2015 3:00PM Timestep 1 hour ADJUST TIMELINE

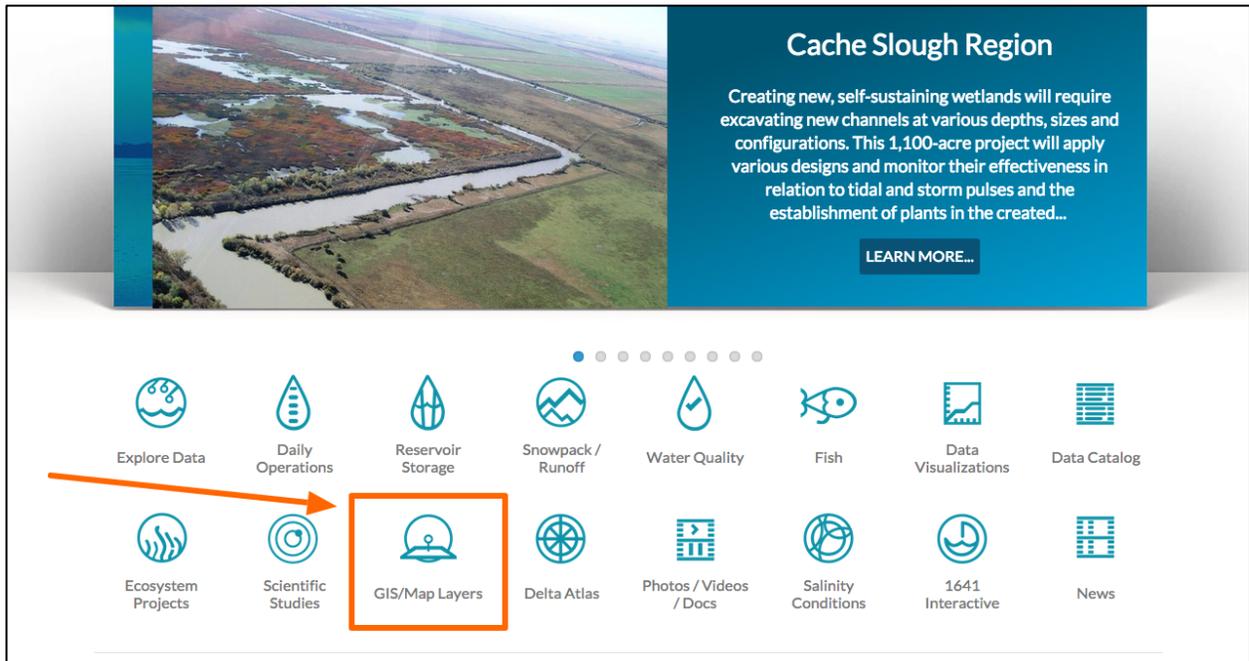
Hover over the TOOLS menu in the upper left corner, and choose "edit."



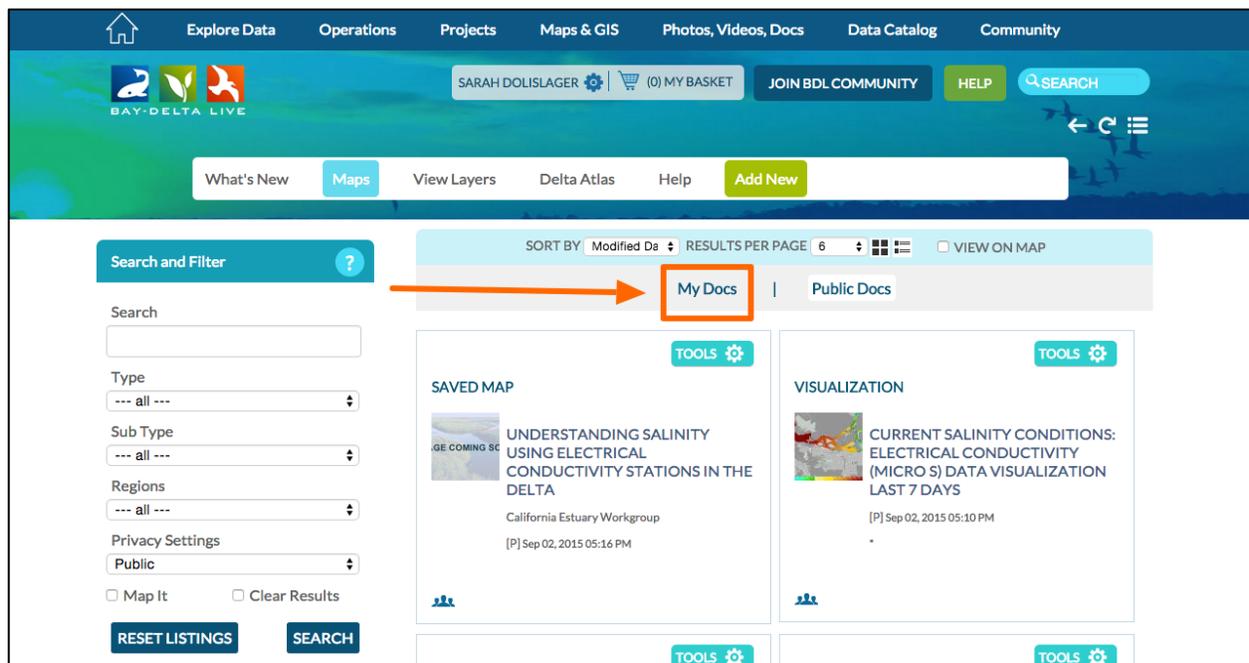
If you would like to make your map public, you can do so through the "publish?" tab.



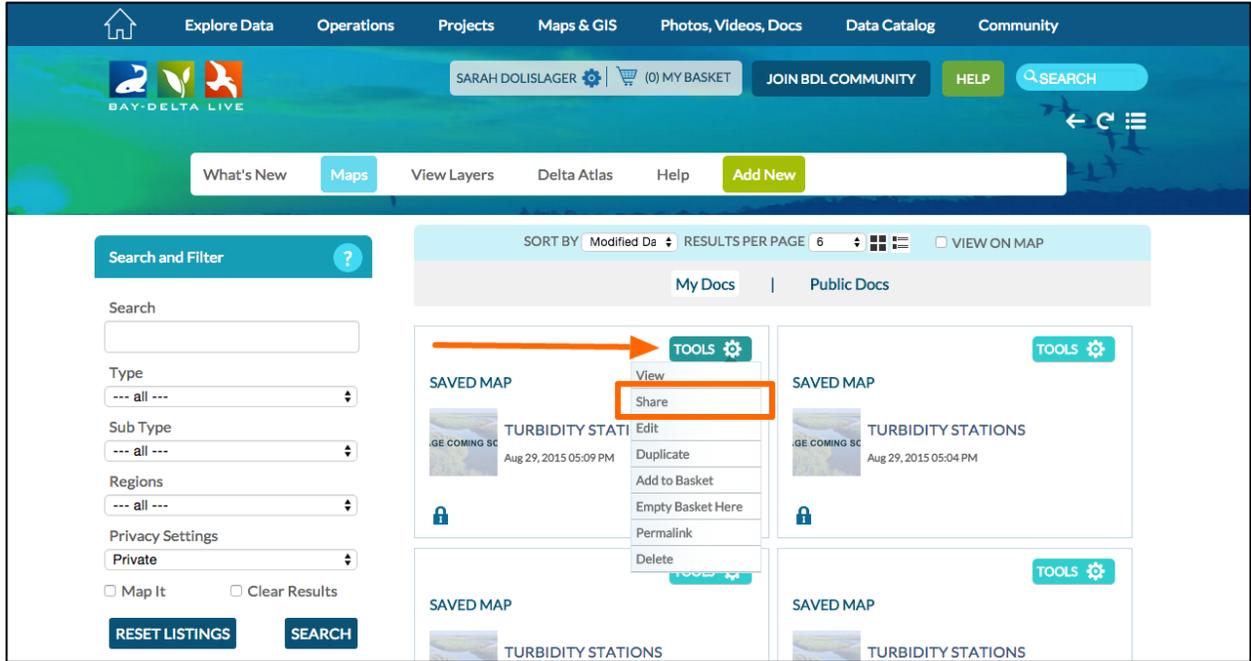
Now to access your map from the homepage, click on “GIS/Map Layers” icon.



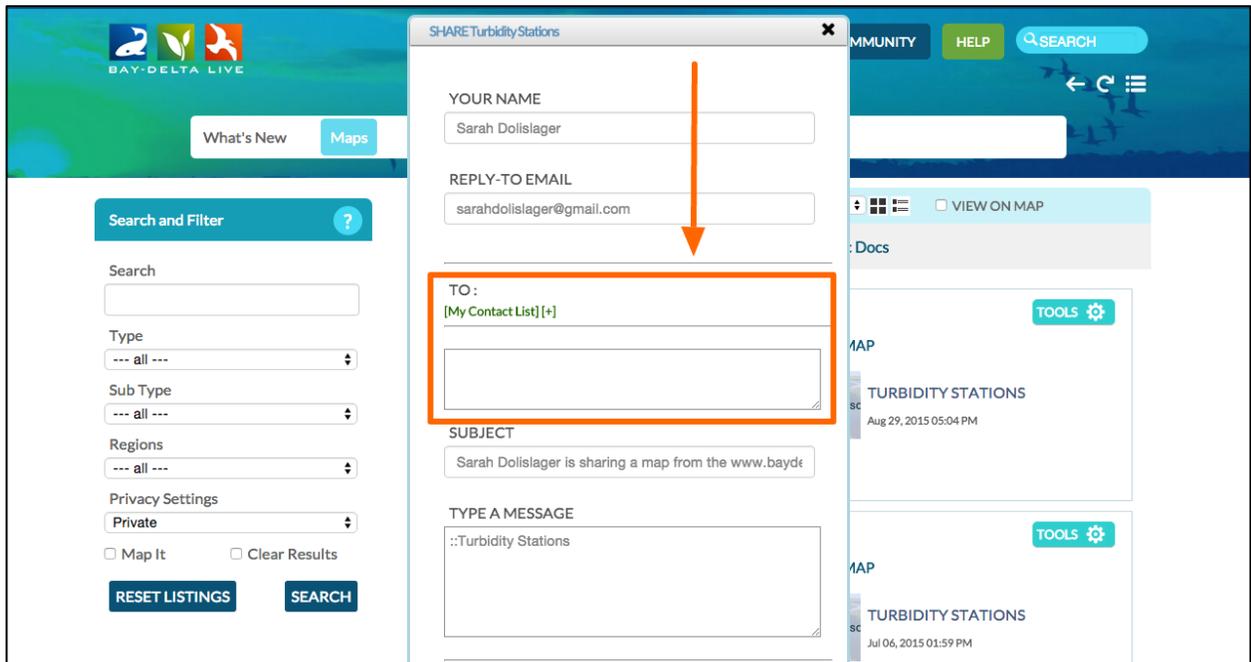
Then click on “My Docs” and there you’ll see the data preset you created.



Lastly, you can share this data preset from the tools menu. Choose "share" from the drop-down menu.



You can add an email address or use the built-in contact list to share with colleagues.



This concludes our first "Explore Real Time Data (1 Parameter)" tutorial. We hope this will help you to get started using data for your Delta science research.