

APPENDIX H

DMS User Manual, Santa Ynez Subbasin
Eastern Management Area

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DMS USER MANUAL

Santa Ynez Subbasin Eastern Management Area
Data Management System (DMS)

Version 2.0

Updated June 2021

Developed by GEI Consultants, Inc.

Developed for Santa Ynez Subbasin Eastern Management Area

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ABBREVIATIONS AND ACRONYMS

CGS	California Geological Survey
DMS	Data management system
DWR	California Department of Water Resources
EMA	Eastern Management Area
GAMA	Groundwater Ambient Monitoring and Assessment
GEI	GEI Consultants, Inc.
GIS	Geographic Information System
GL	Groundwater levels
GSP	Groundwater Sustainability Plan
InSAR	Interferometric Synthetic Aperture Radar
ISW	Interconnected surface water
LS	Land subsidence
KML	Keyhole markup language
NASA	National Aeronautics and Space Administration
OSWCR	Online System for Well Completion Reports
PDF	Portable document format
SGMA	Sustainable Groundwater Management Act
SAGBI	Soil Agricultural Groundwater Banking Index
SMC	Sustainable Management Criteria
TDS	Total dissolved solids
USGS	U.S. Geological Survey
WQ	Water quality

1. Getting Started

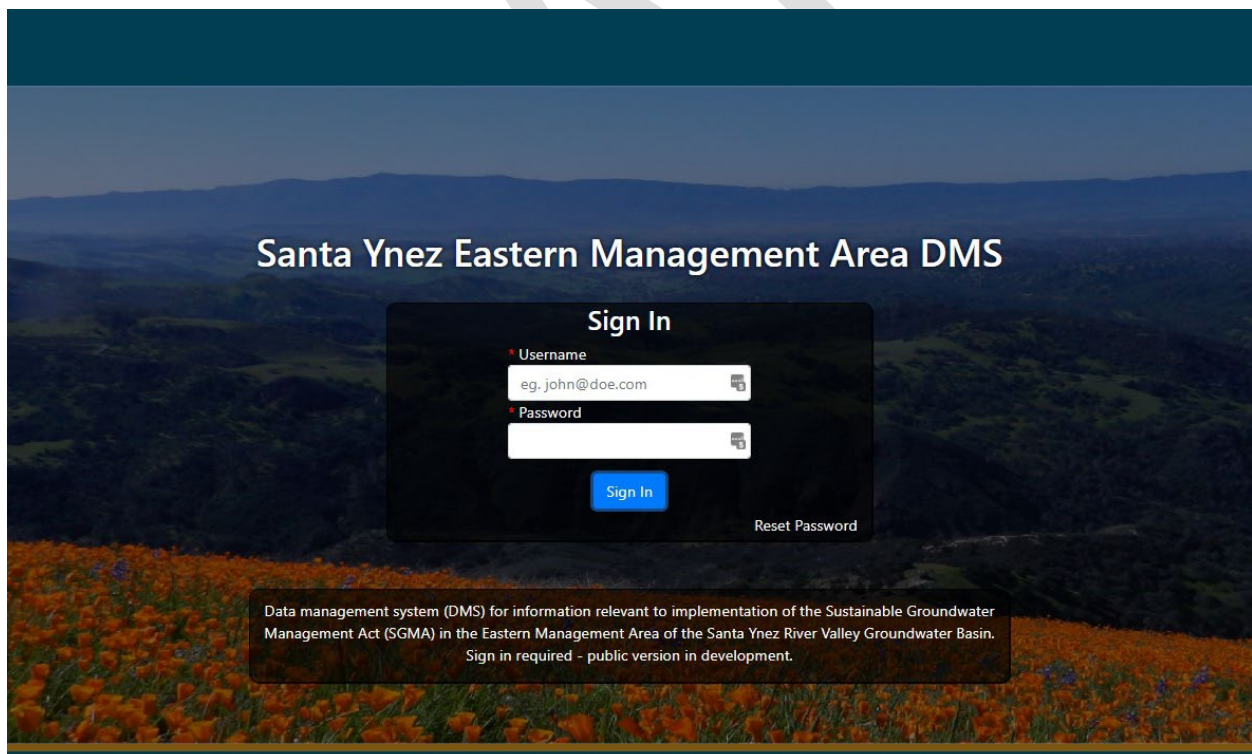
The Santa Ynez Subbasin Eastern Management Area (EMA) Data Management System (DMS) is designed to meet the requirements of the Sustainable Groundwater Management Act (SGMA). This User Manual provides instructions to use the features available to data managers.

1.1. Logging In

To log in, follow the steps below.

1. In a web browser, visit [\(URL\)](#). *The login page appears (Figure 1).*
2. In the Email field, enter your email address.
3. In the Password field, enter the password assigned by GEI and emailed to you.
NOTE: If you need help resetting your password, email a request to dmshelp@geiconsultants.com.
4. Click the Sign In button. *The welcome screen appears.*

FIGURE 1. LOGIN PAGE



1.2. Viewing Data

The blue navigation bar along the top of the application is the primary method to view data in the DMS. Once logged in, you will see up to four icons in the navigation bar (**Figure 2**).

FIGURE 2. NAVIGATION BAR



This User Guide describes how to interact with the tools under each icon, with the exception of Sign Out, which is a one-step process. Below is a list of what each icon represents:

- **Map Viewer:** Displays data stored in the DMS on an interactive map (see **Section 2**)
- **Data Management:** Displays the data stored in the DMS on interactive tables (see **Section 3**)
- **Accounts:** Displays a table of users with access to the DMS (see **Section 4**)
- **Sign Out:** Logs user out of the current DMS session

NOTE: Most users do not have the Accounts tool available in their navigation bar. This feature is reserved for Administrative Users.

1.3. Exploring Further

This User Guide provides detailed instructions on how to use each of the tools in the DMS interface. The DMS is a very powerful application with a range of functions from simple to complex. Because each user has a specific need for the DMS and will use it for their own purposes, you do not need to read this entire manual before using the system. The User Manual is primarily a reference for when you have questions. Use the Table of Contents to navigate to your specific topics of interest.

If you have questions, please email DMS Help at the email below.

NEED HELP?

Send an email to:
dmshelp@geiconsultants.com

2. Using the Map Viewer

This section describes how to use the map viewer to display data and how to use the map tools. The primary purpose of the map viewer is to VIEW data – not to import new data or create reports. Actions such as importing and reporting are done with the Data Management tables and tools (see **Section 3**).

2.1. Viewing Data on the Map

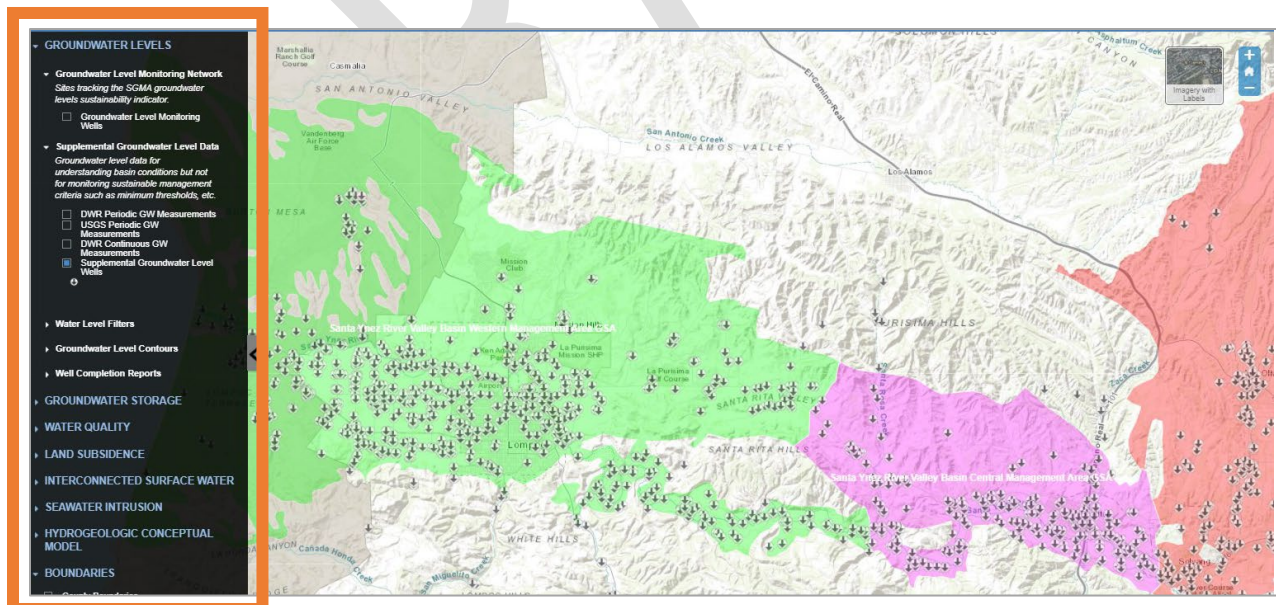
To view DMS data on a geographical map, follow the steps below.

1. Along the top of the application in the navigation bar, click Map Viewer (highlighted, **Figure 3**). The DMS map viewer appears (**Figure 4**).
2. Use the left-side navigation panel (highlighted, **Figure 4**) to choose a data type you want to see on the map.

FIGURE 3. MAP VIEWER ICON ON THE NAVIGATION BAR



FIGURE 4. DMS MAP VIEWER



The navigation panel contains a long list of data. For ease-of-use, data is grouped and shown or hidden by category. **Table 1** lists the data categories. A full description of the data within each category is provided in **Appendix A**.

TABLE 1. LEFT NAVIGATION PANEL LABELS

Label	Description	Stored in DMS?
GROUNDWATER LEVELS		
Groundwater Level Monitoring Network	Wells with sustainable management criteria (SMC) for groundwater levels	✓
Supplemental Groundwater Level Data	Wells with water level data but no SMC	○
Water Level Filters	Filter data to fit within a given time span	
Groundwater Level Contours	Display historical water depth, water level elevation, or water level change contours	
Well Completion Reports	Index of records from DWR OSCWR	
GROUNDWATER STORAGE		
Groundwater Storage Monitoring Network	Wells with SMC for groundwater storage	✓
Groundwater Storage Resources	Link to C2VSim	
WATER QUALITY		
Groundwater Quality Monitoring Network	Wells/stations with SMC for water quality	✓
Supplemental Groundwater Quality Data	Wells/stations with water quality data but no SMC	✓
Water Quality Filters	Filter by date or constituent	
Water Quality Resources	Link to GAMA Program Online Tools	
LAND SUBSIDENCE		
LS Representative Monitoring Network	Wells/stations with SMC for subsidence	✓
Supplemental Land Subsidence Data	Wells/stations with subsidence data but no SMC	○
TRE Altamira InSAR Dataset	InSAR data processed by TRE Altamira, Inc.	
NASA JPL InSAR Dataset	InSAR data processed by NASA	
INTERCONNECTED SURFACE WATER		
ISW Representative Monitoring Network	Wells/stations with SMC for interconnected surface water	✓
Supplemental Interconnected Surface Water Data	Wells/stations with interconnected surface water data but no SMC	○
SEAWATER INTRUSION		
Seawater Intrusion Monitoring Network	Wells/stations with SMC for seawater intrusion	✓
Supplemental Seawater Intrusion Data	Wells/stations with seawater intrusion data but no SMC	✓
HYDROGEOLOGIC CONCEPTUAL MODEL		
Soil and Recharge Map	UC Davis SAGBI	
Geologic Map	CGS Geologic Map – 750k Generalized	
Geologic Map – Quaternary	CGS Geologic Map – Quaternary age and older	
Faults	CGS Fault Activity Map of California	
BOUNDARIES		
Boundaries	GIS layers such as counties, water agencies, etc.	○

✓ Data stored in DMS database ○ Some data stored in DMS, other from outside sources.

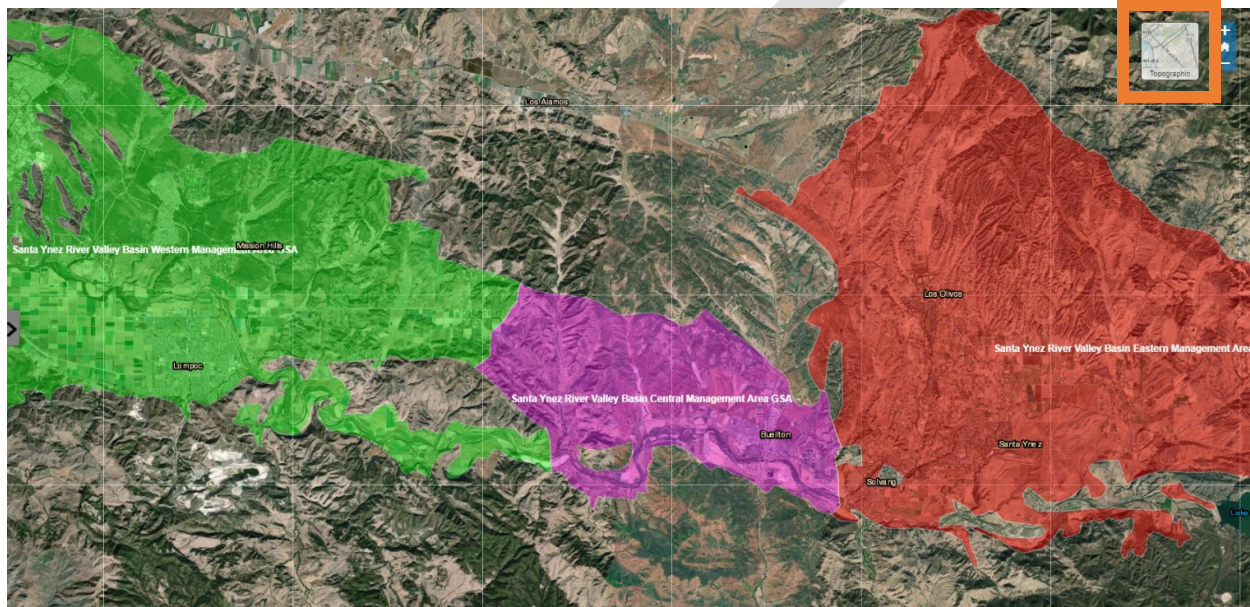
2.1.1. Changing the Map Background

By default, the DMS Map Viewer displays a topographic map in the background.

To change the map background to a satellite image:

1. Click the image in the upper right corner of the screen labelled Imagery with Labels.
A satellite image appears in the background (Figure 5).
2. To toggle back to topographic view, click the image in the upper right corner again.

FIGURE 5. SATELLITE IMAGE BACKGROUND MAP



2.1.2. Viewing Groundwater Level Data

To view groundwater level data on the map, follow the steps below.

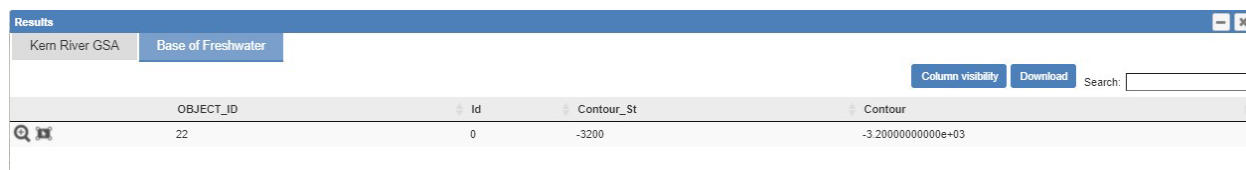
1. On the left navigation panel under the Groundwater Levels heading, click the ► (arrow) to expand the heading of the groundwater level data type you want to see. Descriptions of the available groundwater level data types are provided on **Table 2**.

TABLE 2. GROUNDWATER LEVEL DATA TYPES

Groundwater Level (GL) Data Type	Description
GL Wells	Well locations that are stored in the DMS and have groundwater level data
GL Well Filters	Filters the GL Wells currently displayed on the map by year
DWR Contours	Contours from the DWR Enterprise Water Management database
GSP Contours	Contours as presented in a local GSP
DWR Well Completion Reports	Points with well completion reports
GL Resources	Wells associated with outside agencies that have groundwater level measurements (ties directly to outside source, such as DWR)
GS Resources	C2VSim layers and resources

2. Click the ☐ (check box) next to the data type you want to see.
Data of the type you checked appear.
3. If you want to view data associated with **a single well**:
 - a. On the map, hover over the well symbol for the well you want to view.
A preview window with the well name and a thumbnail-sized hydrograph appear.
 - b. Click the well name.
The well information window, including hydrograph and time-series data, appears.
4. If you want to view data for **multiple wells on a single hydrograph**:
 - a. Follow the instructions through [Step 3](#) above.
 - b. In the upper-right corner of the well information window on the satellite image, click a second well (current well is marked with a red flag). *The information for the second well is added to the hydrograph and the second well location is marked with a ◆ (diamond).*
 - c. Repeat [Step 4b](#) to add additional wells to the hydrograph or click any ◆ (diamond) to remove the associated well from the hydrograph.
5. If you want to view data associated with a non-well **object**:
 - a. On the map, click the object you wish to view.
A results table appears at the bottom of the map window.
 - b. Click on the tab labelled with the data you wish to view. For example, if you clicked on a groundwater level contour – base of freshwater, click on the tab labelled Base of Freshwater. See **Figure 6** below.

FIGURE 6. BASE OF FRESHWATER TAB



Results			
Kern River GSA		Base of Freshwater	
		Column visibility	Download
		Search:	
OBJECT_ID	Id	Contour_St	Contour
22	0	-3200	-3.200000000000e+03

2.1.3. Viewing Groundwater Quality Data

To view groundwater quality data on the map, follow the steps below.

1. On the left navigation panel under the Water Quality heading, click the ► (arrow) to expand the heading of the groundwater quality data type you want to see. Descriptions of the available groundwater quality data types are provided on **Table 3** below.

TABLE 3. GROUNDWATER QUALITY DATA TYPES

Groundwater Quality (WQ) Data Type	Description
WQ Wells	Well locations that are stored in the DMS and have groundwater quality data
WQ Stations	Non-well station locations that are stored in the DMS and have groundwater quality data
WQ Filters	Filter the WQ wells and/or stations currently displayed on the map by constituent and/or year.
WQ Resources	Link to the national Water Quality Portal

2. Click the ☐ (check box) next to the data type you want to see. *Wells and/or stations with data of the type you checked appear.*
3. If you want to view water quality data associated with **a single well or station**:
 - a. On the map, hover over the symbol for the well or station you want to view. *A preview window with the well or station name and a thumbnail-sized TDS graph appear.*
 - b. Click the well or station name. *The well or site information window, including TDS graph and time-series data, appears (Figure 7).*
 - c. To view a water quality constituent other than TDS, click the drop-down menu next to the Constituent label (highlighted, **Figure 7**).

FIGURE 7. WATER QUALITY MONITORING WELL INFORMATION WINDOW

GeoTracker ID:
GeoTracker Name:
Public Supply Code: 1500544-001
Well Type: Production
Well Use: Municipal
Well Status: Unknown
Is Contour Well?: No
Well Completion Type: Unknown
Well Completion Report No:
Date Drilled:
Date Destroyed:
Depth:
Is Open Bottom?: No
Casing Material:
Is Confidential?: No
Basin: 5-022.14: SAN JOAQUIN VALLEY - KERN

Constituent: AS (28)

Monitored Constituents

- AL (6)
- ALK (6)
- AS (28)
- CA (6)
- CL (6)
- CR (6)
- CR6 (1)
- CU (6)

Minimum Threshold 1500544-001 (UPPER)

Graphic Levels for Well 1500544-001

2.1.4. Viewing Land Subsidence Data

To view land subsidence data on the map, follow the steps below.

1. On the left navigation panel under the Land Subsidence heading, click the ► (arrow) to expand the heading of the data type you want to see. Descriptions of the available data types are provided on **Table 4** below.

TABLE 4. LAND SUBSIDENCE DATA TYPES

Land Subsidence Data Type	Description
LS Stations	Stations, such as extensometers, that are stored in the DMS and have land subsidence data
LS Resources	Land subsidence data associated with outside agencies (ties directly to outside source) including DWR and USGS extensometers and InSAR data processed by TRE Altamira, Inc. and NASA

2. Click the ☐ (check box) next to the data type you want to see. *Wells and/or stations with data of the type you checked appear.*
3. If you want to view data associated with a station, click the station location marker.

2.1.5. Viewing Interconnected Surface Water Data

To view interconnected surface water data on the map, follow the steps below.

1. On the left navigation panel under the Interconnected Surface Water heading, click the ► (arrow) to expand the heading of the data type you want to see. Descriptions of the available data types are provided on **Table 5** below.

TABLE 5. INTERCONNECTED SURFACE WATER DATA TYPES

Interconnected Surface Water (ISW) Data Type	Description
ISW Wells	Wells/stations with interconnected surface water data
ISW Resources	ISW data associated with outside agencies (ties directly to outside source) including CDEC stations and Natural Communities Commonly Associated with Groundwater (NCCAG) layers

2. Click the ☐ (check box) next to the data type you want to see. *Wells and/or stations with data of the type you checked appear.*
3. If you want to view data associated with a station, click the station location marker.

2.1.6. Viewing Hydrogeologic Conceptual Model Data

Data displayed under the Hydrogeologic Conceptual Model heading is for reference only. These data are not stored in the DMS and cannot be modified. Instead, they are tied directly to outside sources, such as USGS, and are available for display only. Descriptions of the available data are provided on **Table 6**.

TABLE 6. HYDROGEOLOGIC CONCEPTUAL MODEL DATA TYPES

Hydrogeologic Conceptual Model Data Type	Description
Soil and Recharge Map	Soil Agricultural Groundwater Banking Index (SAGBI) and

	Soil Survey Geographic Database (SSURGO) datasets
Geologic Map	Geologic Map of California published by Department of Conservation, California Geological Survey
Geologic Map – Quaternary	Geologic Compilation of Quaternary Surficial Deposits published by the Department of Conservation, California Geological Survey (DOC/CGS)
USGS – Corcoran	USGS Corcoran Clay data including depth, thickness, extent
Recharge Basins	Local recharge basins as of July 8, 2019
Faults	Fault Activity Map of California published by Department of Conservation, California Geological Survey

2.1.7. Viewing Boundaries

The Map Viewer displays area boundaries and other GIS layers relevant to water management. To view boundaries/layers on the map, follow the steps below.

1. On the left navigation panel click the ► (arrow) to expand the Boundaries heading. Descriptions of the available boundaries are provided on **Table 7** below.
2. Click the ☐ (check box) next to the boundary or layer you want to see. *The selected layer appears on the map. Note: layers with a lot of data may take longer to load.*

TABLE 7. MAP BOUNDARIES

Boundary	Description
County Boundaries	Full detailed California county dataset with all coding (islands, inlets, etc.)
Canals and Aqueducts	Minor canal features from DWR, USBR, and various public water agencies
Tribal Trust Boundary	Administrative boundaries of all realty tracts (parcels) within California Indian Trust lands, as administered by the Bureau of Indian Affairs.
Disadvantaged Communities Block Groups	Blocks are the smallest geographic areas for which the U.S. Census Bureau publishes data from the decennial census.
Disadvantaged Communities Places	Boundaries as delineated as part of the Census Bureau's Participant Statistical Areas Program (PSAP) for the 2010 Census.
Disadvantaged Communities Tracts	Geographic and cartographic information from the U.S. Census Bureau's Master Address File.
Water Agencies	Boundaries of all public water agencies in California including public water systems, agricultural water districts, urban water districts, Federal and State water contractors, wholesalers, retailers, and other public or private utilities.
CASGEM Groundwater Basins Prioritization – 2019	Boundaries of 515 groundwater basins and subbasins with 2019 prioritization as defined by the California Department of Water Resources.
Bulletin 118 Groundwater Basins – 2016	Boundaries of 515 groundwater basins and subbasins as defined by the California Department of Water Resources in Bulletin 118, 2016.
State Parks	California State Parks Enterprise Geographic Information Systems.
State Refuges	State refuge boundaries as of 2020.
CDFW Owned and Operated Lands and Conservation Easements	Lands and conservation easements owned and operated by the California Department of Fish and Wildlife as of January 11, 2021.
California Protected Areas Database (CPAD) Holdings	Lands that are owned in fee and protected for open space purposes by over 1,000 public agencies or non-profit organizations.
California Conservation Easement Database (CCED)	Lands protected under conservation easements.
Regional Water Quality Control Board Boundaries	Jurisdictional boundaries of the nine Regional Water Quality Control Boards.
Federal Lands	U.S. Federal land classified by its active Federal surface managing agency.
Township and Range Section Lines	Compiled by the Bureau of Land Management (BLM), National Operations Center (NOC), OC-530.
GSA Boundaries	Boundaries submitted to the California Department of Water Resources SGMA Portal as part of the Groundwater Sustainability Agency (GSA) formation process.

2.2. Selecting and Exporting Data from the Map

There are several methods to select and export data from the DMS. One method is by using the Map Viewer. This method is best-suited for when you use the map's tools to display a specific combination of wells and stations and want to export the well or station data. This method is not well-suited for advanced filtering or exports of entire tables or time-series data. For information about other methods of export, see **Section 3: Using Interactive Data Tables**.

IMPORTANT! You may only export well and site information from the map viewer and NOT the associated time-series data (such as water levels or water quality). To export time-series data, use the Interactive Data Tables (see **Section 3**).

2.2.1. *Selecting Data on the Map*

The map viewer provides a set of tools to select data points displayed on the map. These tools are located in the map toolbar (**Figure 8**). **Table 8** describes the tools and their functions. The tools are labelled 1 through 13, from left to right.

FIGURE 8. MAP TOOLBAR



TABLE 8. MAP TOOL DESCRIPTIONS

#	Tool	Description
1	Legends	
2	Measure	
3	Print	
4	Full screen	
5	Bookmark	
6	Drawing	
7	Select	
8	Edit	
9	In-Feature Select	
10	Point Elevation	
11	Elevation Profile	
12	Application Tour	
13	Address Search	

2.2.2. Exporting Data from the Map

To export a full dataset from the map viewer, do the following:

1. Click a well or station. *The Results table appears.*
2. In the upper right portion of the Results table, click the Download button.
A drop-down menu appears.
3. In the drop-down menu under **Full Dataset**, select how you would like to receive the data. You may choose from the following:
 - a. Spreadsheet
 - b. KML
 - c. Shapefile*A Save As window appears.*
4. Choose the location where you would like to save the exported data, then click Save.
The file is saved to your chosen location.

To export selected well or station data from the map viewer, do the following:

1. Use the Map Tools to select the wells and/or stations you would like to export.
The Results table appears.
2. In the upper right portion of the Results table, click the Download button.
A drop-down menu appears.
3. In the drop-down menu under **Filtered Dataset**, select how you would like to receive the data. You may choose from the following:
 - Spreadsheet
 - KML
 - Shapefile*A Save As window appears.*
4. Choose the location where you would like to save the exported data, then click Save.
The file is saved to your chosen location.

2.3. Creating Map Figures

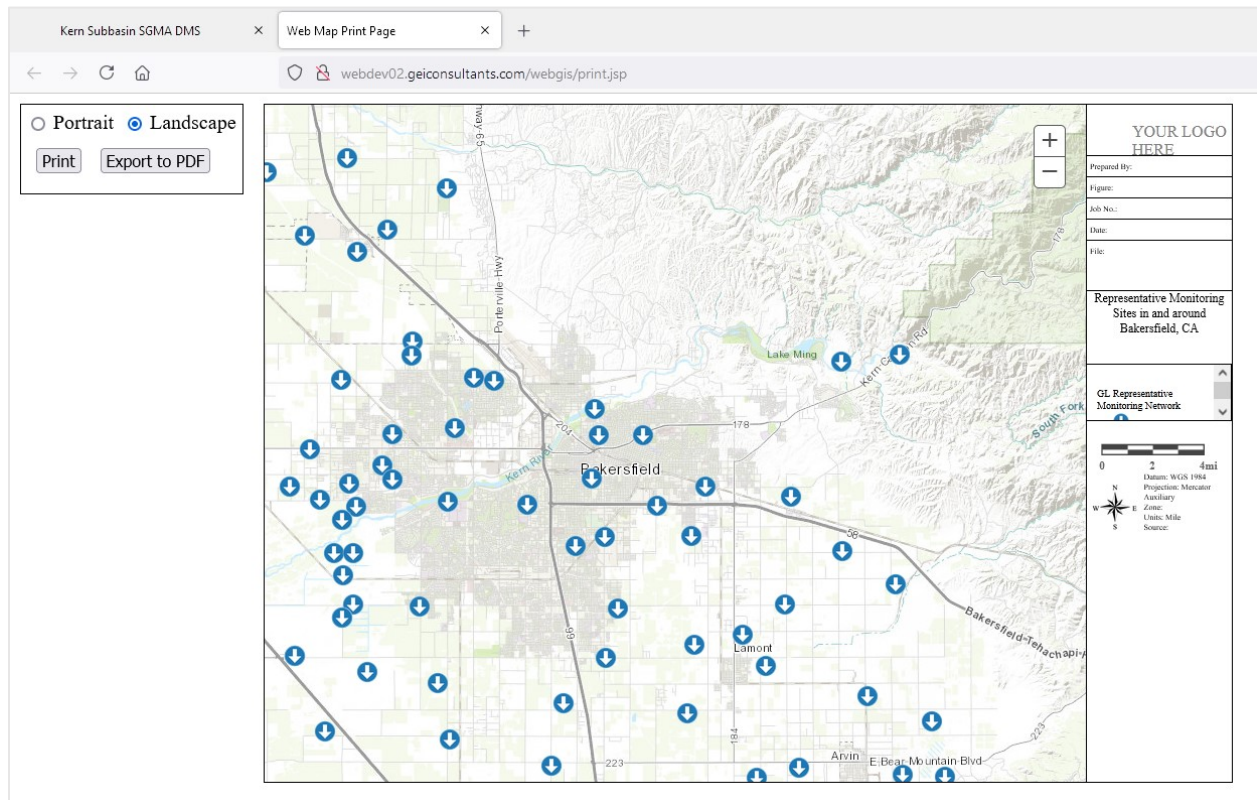
To create a figure from the map viewer to use in a report or other document, follow the steps below:

1. Use the left navigation panel to turn on the data you want to show on the figure (be sure to also turn off data you do not wish to show).
2. On the Map Toolbar (**Figure 9**), click the Print icon. The Web Map Print page (**Figure 10**) appears.
3. Populate the fields along the bottom (portrait orientation) or right side (landscape orientation) as desired (enter a date, name the figure, upload a logo, etc.).
4. If you want to print directly from your web browser to a printer on your network, click Print.
5. If you want to save the figure as a PDF, click Export to PDF.

FIGURE 9. PRINT ICON ON THE MAP TOOLBAR



FIGURE 10. WEB MAP PRINT PAGE



3. Using the Data Management Tables

Hovering over the Data Management icon displays a menu of data management pages. Below is a list of the data management pages with a brief description of each page:

- **View/Edit:** View or edit the well, station, agency, or water-year data stored in the DMS
- **Import:** Enter new data to the DMS
- **Export:** Export data from the DMS
- **Templates:** Download templates with the required data format for the DMS
- **Reports:** Generate data and figures for annual reports
- **Documents:** Save and retrieve documents





3.1. Viewing and Editing Existing Data

3.1.1. Viewing Data

To view DMS data in table format, follow the steps below.

1. Along the top of the application in the navigation bar, hover over Data Management (highlighted, **Figure 11**). A menu of options appears.

FIGURE 11. DATA MANAGEMENT MENU

Management System			
 Map Viewer		 Data Management	 Accounts
 Sign Out			
View/Edit View and edit your data. Wells Stations Agencies Water Years		Import Import data to the DMS. New Import Import Status	
Export Export data from the DMS. Export Status Table Exports			
Templates Download templates to import data into the DMS.		Reports Run useful reports on data housed within the DMS. Run Reports View Processed Reports	
Documents View and download documents.			

2. Under the View/Edit heading, click the data type you would like to view.
Data types include the following:
 - Wells
 - Stations (e.g., extensometers)
 - Agencies
 - Water Years

The data table loads.

IMPORTANT: If you choose Wells or Stations, one table will load followed by a series of empty tables below. This is not an error. The tables below store data for a single well or station, not for all wells and stations. Therefore, these tables do not populate until a well or station is selected in the top table.

3. If you want to view information associated with a specific well or station, click the desired well or station row. *The row is highlighted and the lower tables populate with data from the selected well or station.*

3.1.2. Searching for Data

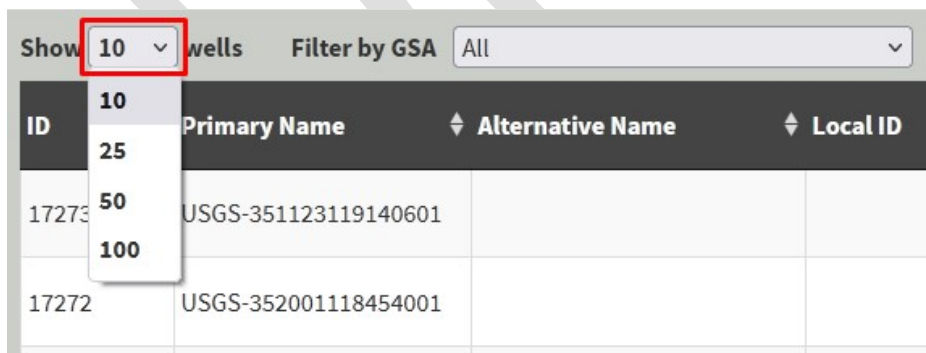
To search for data in any data table, follow the steps below:

1. In the upper right corner of the data table, click inside the search box (**Figure 12**).
2. Type a word, number, or letters relevant to your search. *The data filters as you type.*
3. Look for your desired search term in the table rows. You may need to show more rows or look on the next page.
 - To show more rows, find the number of rows drop-down menu in the upper left corner of the table. (**Figure 13**) Click the number and change to a higher value.
 - To look at data on the next page, find the page numbers along the bottom right side of the table and click Next. (**Figure 14**)

FIGURE 12. TABLE SEARCH BAR



FIGURE 13. TABLE NUMBER OF ROWS



Show	10	Filter by GSA	All
ID	Primary Name	Alternative Name	Local ID
17273	USGS-351123119140601		
17272	USGS-352001118454001		

FIGURE 14. TABLE PAGE NUMBERS

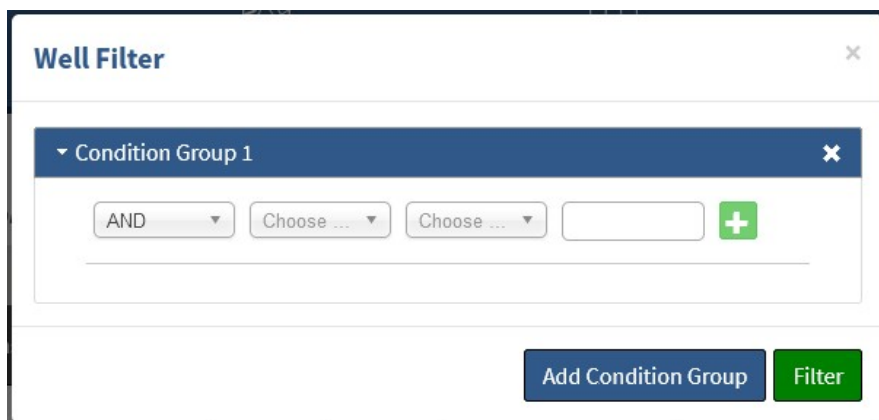


3.1.3. Filtering Data

The data management tables include powerful filtering tools. You can use these tools to constrain the data shown on the table based on rules you create.

1. From a data table (e.g., Well Data), click  Filter. *The filter window (Figure 15) opens.*



FIGURE 15. WELL FILTER WINDOW

The screenshot shows a 'Well Filter' dialog box. At the top is a title bar with 'Well Filter' and a close button. Below is a section titled 'Condition Group 1' with a close button. Inside this group, there is a dropdown menu set to 'AND', followed by two 'Choose ...' dropdown menus, an empty text input field, and a green '+' button. At the bottom of the dialog are two buttons: 'Add Condition Group' and 'Filter'.

2. In Condition Group 1, use the drop down menu(s) to select the property/properties you would like to filter by and the condition AND or OR.
 - Select AND if you want all criteria true
 - Select OR if you want any criteria true
3. If you want to add additional conditions, click Add Condition Group and repeat Step 2 above for Condition Group 2.
4. Click Filter. *The table refreshes with results that meet your filtering criteria.*

3.1.4. Editing Data

To edit data in any of the data tables, follow the steps below:

1. Find the row containing the data you would like to edit.
2. In the action(s) column, click the View  (eye) icon. *The data form opens.*
3. In the upper right corner of the form, click the edit  (pencil) icon. *The form allows edits.*
4. Edit the data you would like to change and click Save. *The data is saved and the table reloads.*

3.2. Entering New Data

There are two methods of entering new data to the DMS.

- Direct data entry via embedded web form in DMS application (most effective method to import single data entries)
- Excel templates (most effective method to import large volumes of historical data)

3.2.1. Entering New Data Using the Web Application

1. In the navigation bar along the top of the screen, hover over Data Management. *A menu of options appears.*
2. Under the View/Edit heading, click Wells. *The Well Data table appears.*

IMPORTANT: One data table will load followed by a series of empty tables below. This is not an error. The tables below store data for a single well, not for all wells. Therefore, these tables do not populate until a well row is selected in the top table.

3. On the Well Table, click the row with the well associated with the water level values you want to enter. *The row is highlighted and the lower tables refresh with data associated with your selected well.*
4. Scroll down to the Water Elevation Data table and click Add New. *The Water Level Reading Form appears.*
5. Enter your data in the form and click Save. *The data is updated.*
 - If an error is displayed, modify the form and click Save. *The data is updated.*

3.2.2. Entering New Data Using the Excel Templates

Downloading the Templates

1. In the navigation bar along the top of the screen, hover over Data Management. *A menu of options appears.*
2. Click Templates. *The Templates page appears.*
3. Click to download the desired template. *The Save As window appears.*

TIP: You may also click a link to download all templates.
4. Navigate to your desired location and click Save. *The file is saved to your chosen location.*

Populating the Templates

Each Excel template has three sheets:

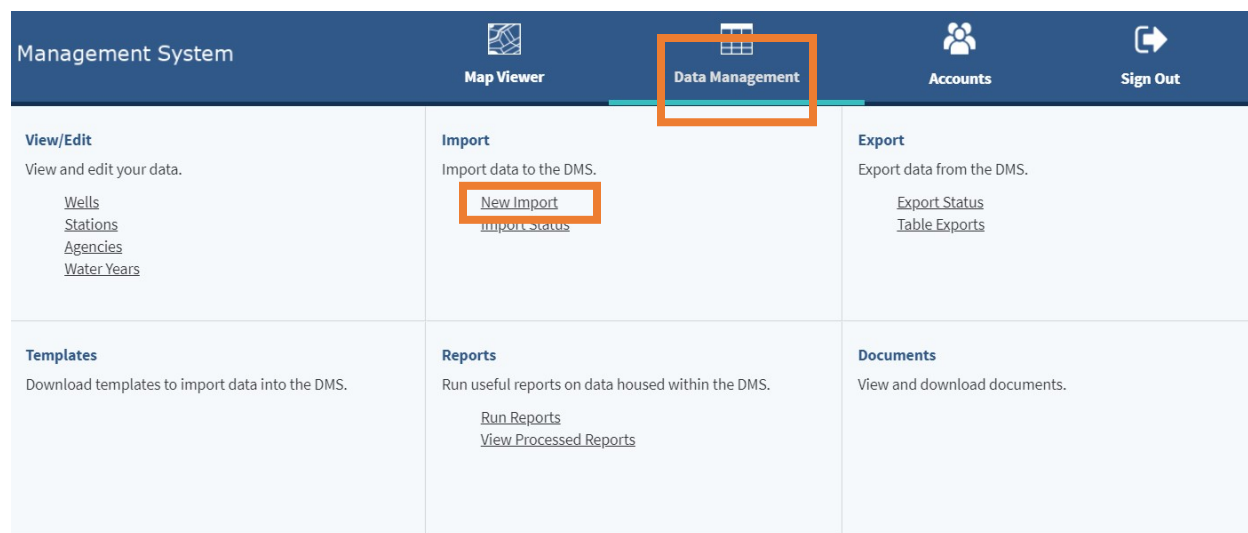
- **Data Entry** – Data to be imported to the DMS. Enter your data on this tab.
- **Lookup Table** – Selections for cells with drop-down choices. **CAUTION:** Do not edit the lookup tables. The DMS will not accept new lookup entries.
- **Description** – Descriptions of the data columns on the Data Entry tab. Refer to this tab if you are unsure what information should go in a column.

Enter your data in the appropriate columns. If you have a question about what data belongs in a column, refer to the Description tab. Some fields must be populated by a drop-down menu. Other fields may require numerical or alphabetical entries only. These constraints are designed to normalize data entry.

Uploading the Templates

1. In the navigation bar along the top of the screen, hover over Data Management. *A menu of options appears.*
2. Under the Import heading, click New Import (**Figure 16**). *The New Import page appears.*

FIGURE 16. NEW IMPORT ON THE DATA MANAGEMENT MENU



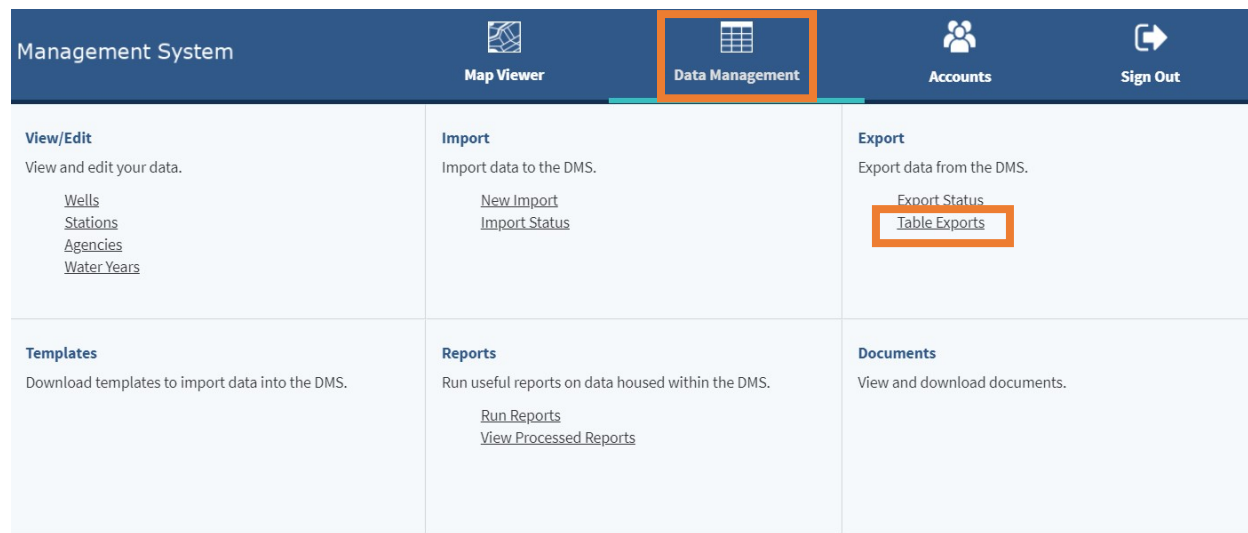
3. Under Step 1, click the drop-down menu and select a category. *Step 2 appears.*
NOTE: You may select from the following categories:
 - Well Data: Data associated with a well
 - Station Data: Data associated with a non-well site, such as a extensometer
 - Other Data: Data that is not well or site specific
4. Under Step 2, click the drop-down menu and select a data type. *Step 3 appears.*
NOTE: Data types are dependent upon what category you chose in Step 1.
5. Under Step 3, click the box or drag files into the box to upload. Step 4 appears.
6. Click Submit. *The batch number appears.*
7. To see the results of your upload, check the Status column on the Import Status table.
 - If your batch number status is **Success**, your data was successfully loaded to the DMS.
 - If your batch number status is **Processing**, your data is still being validated by the system before import. Check again later.
 - If your batch number status is **Error(s)**, click the row to populate the Error Table. In the Error Table, click the arrow ➤ to reveal each error. Correct your errors using the Error table actions.

3.3. Exporting Table Data

3.3.1. Exporting Entire Tables

1. In the navigation bar along the top of the screen, hover over (do not click) Data Management. A *menu of options appears.*
2. Under the Export heading, click Table Exports (**Figure 17**). *The Export page appears.*
3. In the row corresponding to the table you would like to export, click Download. *The Save As window opens.*
4. Navigate to the location you would like to save your document and click Save. *The table is exported and saved to your desired location.*

FIGURE 17. NEW IMPORT ON THE DATA MANAGEMENT MENU

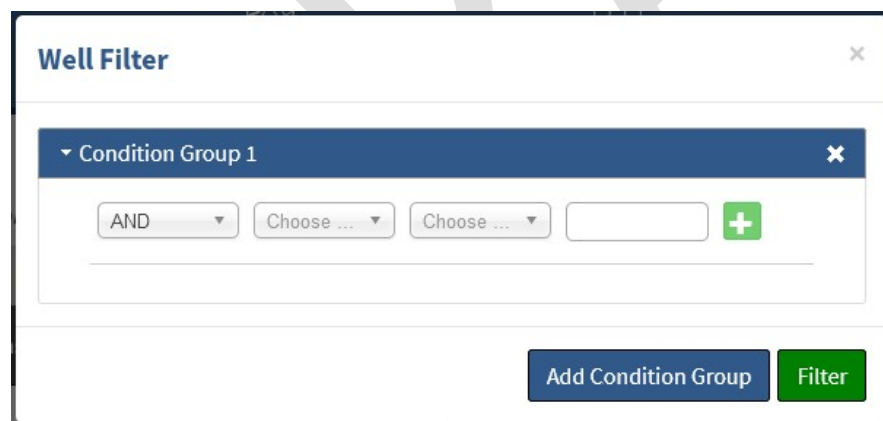



3.3.2. Exporting Filtered Data

The data management tables include powerful filtering tools. You can use these tools to constrain the data shown on the table based on rules you create. You may then export your filtered data.

1. From a data table (e.g., Well Data), click  Filter. The filter window (Figure 18) opens.

FIGURE 18. WELL FILTER WINDOW



2. In Condition Group 1, use the drop down menu(s) to select the property/properties you would like to filter by and the condition AND or OR.
 - Select AND if you want all criteria true
 - Select OR if you want any criteria true
3. If you want to add additional conditions, click Add Condition Group and repeat Step 2 above for Condition Group 2.
4. Click Filter. The table refreshes with results that meet your filtering criteria.
5. Click  Download. The download window opens.
6. If available, select related tables to download, if desired.

7. Click Download. *The Export Submitted message appears.*
8. Click Check Export Status. *The Table Exports page appears.*
9. In the row with your export, look at the Status column.
 - If the Status is Success, click the File Name to save your export.
 - If the Status is Processing, wait a few minutes and check again. Exports with a large volume of data take extra time to generate.
 - If the Status is Failed, go back to Step 1 and try again. If the problem persists, contact the DMS Help Desk (dmshelp@geiconsultants.com).

3.4. Generating Report Figures

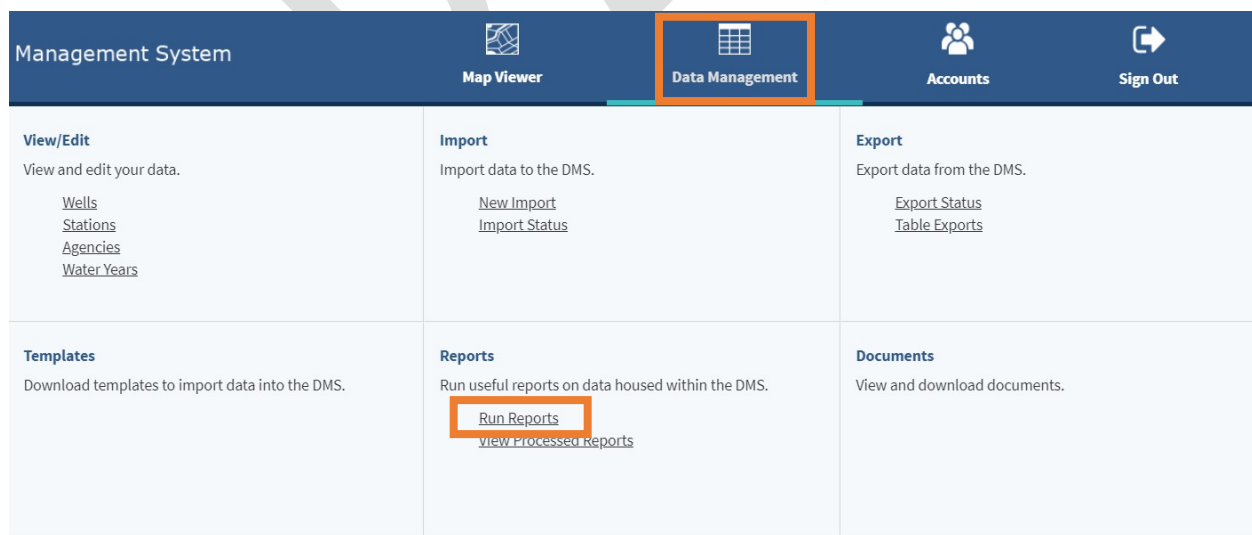
The DMS includes tools to assist with developing groundwater contours and hydrographs.

3.4.1. Groundwater Contours

The Groundwater Contours tool generates a file with the data required to create groundwater contours in a GIS-based application. The tool DOES NOT generate the contours.

1. In the navigation bar along the top of the screen, hover over (do not click) Data Management. *A menu of options appears.*
2. Under the Reports heading, click Run Reports (**Figure 19**). *The Reports page appears.*

FIGURE 19. RUN REPORTS ON THE DATA MANAGEMENT MENU



3. Under Groundwater Elevation Contouring Export, click in the Start Date field. *A calendar appears.*
4. Use the calendar to select the beginning of the date range for your contours. Alternatively, you may type in the date.
5. Repeat Steps 3 and 4 in the End Date field.

6. Use the drop-down menu indicate if you want to include all wells in your export, or only contour wells. **NOTE:** Contour wells are wells that may be flagged in the database because they were used to generate contours for a Groundwater Sustainability Plan, and it may be beneficial to generate subsequent contours based on the same set of wells.
7. Click Submit. *The Success message appears.*
8. On the success message, click Report Status. *The Processed Reports page appears.*
9. In the row with your report, look at the Status column.
 - a. If the Status is Success, click the File Name to save your export.
 - b. If the Status is Processing, wait a few minutes and check again. Exports with a large volume of data take extra time to generate.
 - c. If the Status is Failed, go back to Step 1 and try again. If the problem persists, contact the DMS Help Desk (dmshelp@geiconsultants.com).

3.4.2. Hydrographs

The Hydrographs tool generates a file with the data required to create hydrographs. The tool DOES NOT generate the hydrographs.

1. In the navigation bar along the top of the screen, hover over (do not click) Data Management. *A menu of options appears.*
2. Under the Reports heading, click Run Reports. *The Reports page appears.*
3. Under Hydrograph Export, click in the Start Date field. *A calendar appears.*
4. Use the calendar to select the beginning of the date range for your contours. Alternatively, you may type in the date.
5. Repeat Steps 3 and 4 in the End Date field.
6. Use the drop-down menu indicate if you want to include all wells in your export, or only contour wells. **NOTE:** Contour wells are wells that may be flagged in the database because they were used to generate contours for a Groundwater Sustainability Plan, and it may be beneficial to generate subsequent contours based on the same set of wells.
7. Click Submit. *The Success message appears.*
8. On the success message, click Report Status. *The Processed Reports page appears.*
9. In the row with your report, look at the Status column.
 - a. If the Status is Success, click the File Name to save your export.
 - b. If the Status is Processing, wait a few minutes and check again. Exports with a large volume of data take extra time to generate.
 - c. If the Status is Failed, go back to Step 1 and try again. If the problem persists, contact the DMS Help Desk (dmshelp@geiconsultants.com).

3.5. Viewing and Storing Documents

You may store DMS-related documents for other users to view or save, or for you to view or save at a later time. **NOTE:** The documents page displays three types of documents:

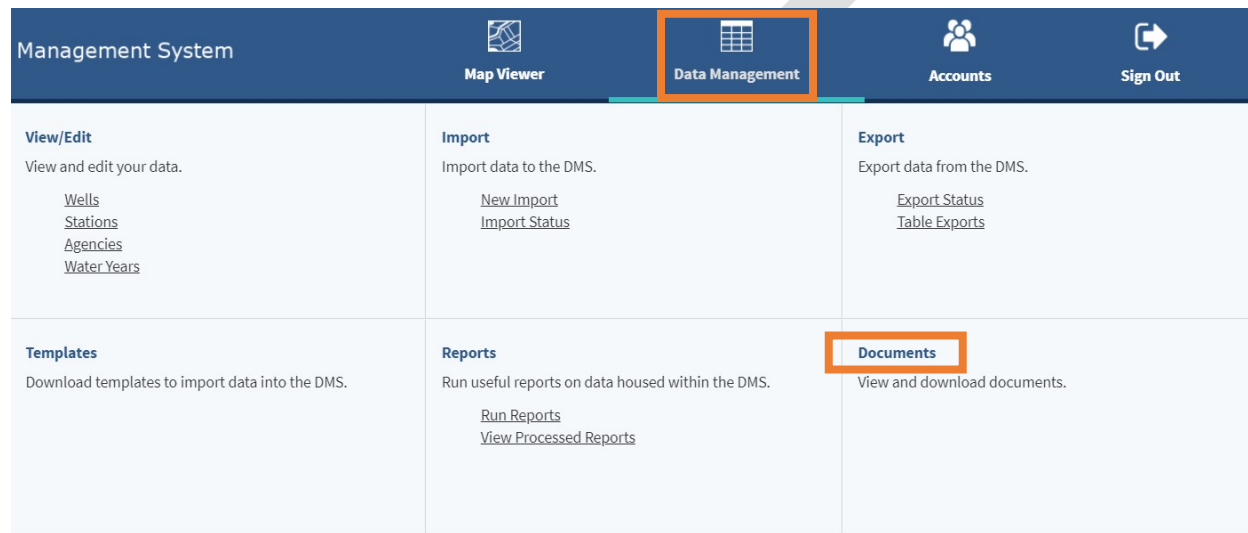
- General Documents – Documents saved to the documents page
- Well Documents – Documents associated with wells


- Station Documents – Documents associated with stations

You may upload General Documents only from the Documents page. The Well and Station Documents are only available for viewing and downloading because those documents are associated with individual wells or stations and must be uploaded from the associated well or station documents table.

1. In the navigation bar along the top of the screen, hover over (do not click) Data Management. A *menu of options appears (Figure 20)*.
2. Click Documents. *The Documents page appears.*

FIGURE 20. DOCUMENTS ON THE DATA MANAGEMENT MENU

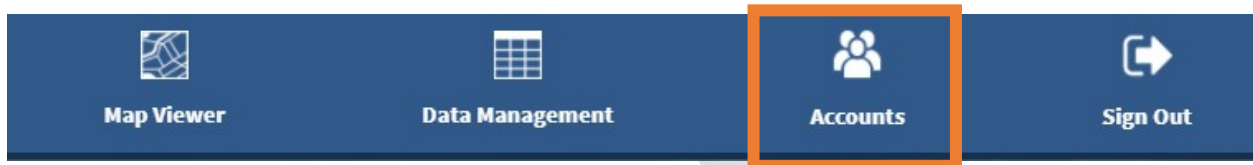


3. If you want to store a new document, click  Upload New. *The Upload Document Form appears.*
 4. Complete the form and click Save. *The document is saved to the General Documents table.*
- CAUTION:** Do not upload confidential documents to the Documents page. All users with a login may view the General Documents.

4. Managing User Accounts

Most users do not have the permission to manage user accounts and the Accounts icon (**Figure 21**) does not appear on their Navigation Bar. **This section of the User Manual will be developed when the database permissions are finalized.**

FIGURE 21. ACCOUNTS ICON



For DMS Version 2.0, please contact GEI Project Manager, Mike Cornelius, at mcornelius@geiconsultants.com to request new user accounts.

APPENDIX A

Map Viewer Data Categories and Contents

Santa Ynez Subbasin Eastern Management Area Data Management System (EMA DMS)

Label	Description	Stored in DMS?
GROUNDWATER LEVELS (GL)		
Groundwater Level Monitoring Network		
Groundwater Level Monitoring Wells	Wells with sustainable management criteria (SMC) for groundwater levels	✓
Supplemental Groundwater Level Data		
DWR Periodic GW Measurements	Groundwater elevation monitoring stations maintained in the DWR Enterprise Water Management database	
USGS Periodic GW Measurements	Groundwater elevation monitoring stations maintained by USGS	
DWR Continuous GW Measurements	Continuously monitored groundwater elevation stations belonging to DWR	
Supplemental Groundwater Level Wells	Wells with water level data but no SMC	✓
Water Level Filters	Filter currently displayed water level data to fit within a given time span	
Groundwater Level Contours	Display historical water depth, water level elevation, or water level change contours.	
Well Completion Reports	Index of records from DWR's Online System for Well Completion Reports (OSWCR)	
GROUNDWATER STORAGE		
Groundwater Storage Monitoring Network		
Monitored Groundwater Storage Wells	Wells with SMC for groundwater storage	✓
Groundwater Storage Resources	Link to C2VSim	
WATER QUALITY		
Groundwater Quality Monitoring Network		
Monitored Water Quality Wells	Wells with SMC for water quality	✓
Monitored Water Quality Stations	Stations with SMC for water quality	✓
Supplemental Groundwater Quality Data		
Supplemental Water Quality Wells	Wells with water quality data but no SMC	✓
Supplemental Water Quality Stations	Stations with water quality data but no SMC	✓
Water Quality Filters	Filter by date or constituent	
Water Quality Resources	Link to GAMA Program Online Tools	
LAND SUBSIDENCE		
LS Representative Monitoring Network		
Monitored Subsidence Stations	Wells and stations with SMC for subsidence	✓
Supplemental Land Subsidence Data		
DWR Extensometers	DWR monitored borehole extensometers	
Supplemental Subsidence Stations	Stations with subsidence data but no SMC	✓
UNAVCO CGPS Site	UNAVCO Continuous Global Positioning System (CGPS) Stations	
TRE Altamira InSAR Dataset	Measurements of vertical ground surface displacement	
NASA JPL InSAR Dataset		
INTERCONNECTED SURFACE WATER		
ISW Representative Monitoring Network		

Label	Description	Stored in DMS?
Monitored Interconnected Surface Water Wells	Wells with SMC for interconnected surface water	✓
Supplemental Interconnected Surface Water Data		
Precipitation & Stream Gage Stations		✓
<i>Precipitation Stations</i>		✓
<i>Stream Gage Stations</i>		✓
California Data Exchange Center (CDEC)		
Natural Communities Commonly Associated with Groundwater (NCCAG)		
SEAWATER INTRUSION		
Seawater Intrusion Monitoring Network		
Monitored Seawater Intrusion Stations	Stations with SMC for seawater intrusion	✓
Monitored Seawater Intrusion Wells	Wells with SMC for seawater intrusion	✓
Supplemental Seawater Intrusion Data		
Supplemental Seawater Intrusion Stations	Stations with seawater intrusion data but no SMC	✓
Supplemental Seawater Intrusion Wells	Wells with seawater intrusion data but no SMC	✓
HYDROGEOLOGIC CONCEPTUAL MODEL		
Soil and Recharge Map		
UC Davis SAGBI	Soil Agricultural Groundwater Banking Index (SAGBI) developed and maintained by the California Soil Resource Lab at UC Davis and UC-ANR.	
Soil Survey Geographic Database	The Soil Survey Geographic Database (SSURGO) dataset is a compilation of soils information collected over the last century by the Natural Resources Conservation Service (NRCS).	
Geologic Map		
CGS Geologic Map – 750k Generalized	Geologic Map of California published by Department of Conservation, California Geological Survey	
Geologic Map – Quaternary	Geologic Compilation of Quaternary Surficial Deposits published by the Department of Conservation, California Geological Survey (DOC/CGS), with funding from DWR	
Faults	Fault Activity Map of California published by Department of Conservation, California Geological Survey	
BOUNDARIES		
County Boundaries		
Canals and Aqueducts		
Tribal Trust Boundary		
Disadvantaged Communities Block Groups		
Disadvantaged Communities Places		
Disadvantaged Communities Tracts		

Label	Description	Stored in DMS?
	Water Agencies	
	CASGEM Groundwater Basins Prioritization – 2019	
	Bulletin 118 Groundwater Basins – 2016	
	State Parks	
	State Refuges	
	CDFW Owned and Operated Lands and Conservation Easements	
	California Protected Areas Database (CPAD) Holdings	
	California Conservation Easement Database (CCED)	
	Regional Water Quality Control Board Boundaries	
	Federal Lands	
	GSA Boundaries	

APPENDIX B

Troubleshooting

Santa Ynez Subbasin Eastern Management Area Data Management System (EMA DMS)

Login Issues

Why does the login screen appear when I logged in already?

For security purposes, the DMS automatically logs out of a session after XX minutes of inactivity. Enter your credentials to start a new session.

Heading

Question

Answer

(TO BE DEVELOPED)