

## CASGEM Release Notes for Release 4

Below is a list of items that have been fixed or added as new functionality to the CASGEM system that were implemented on 05/25/2016.

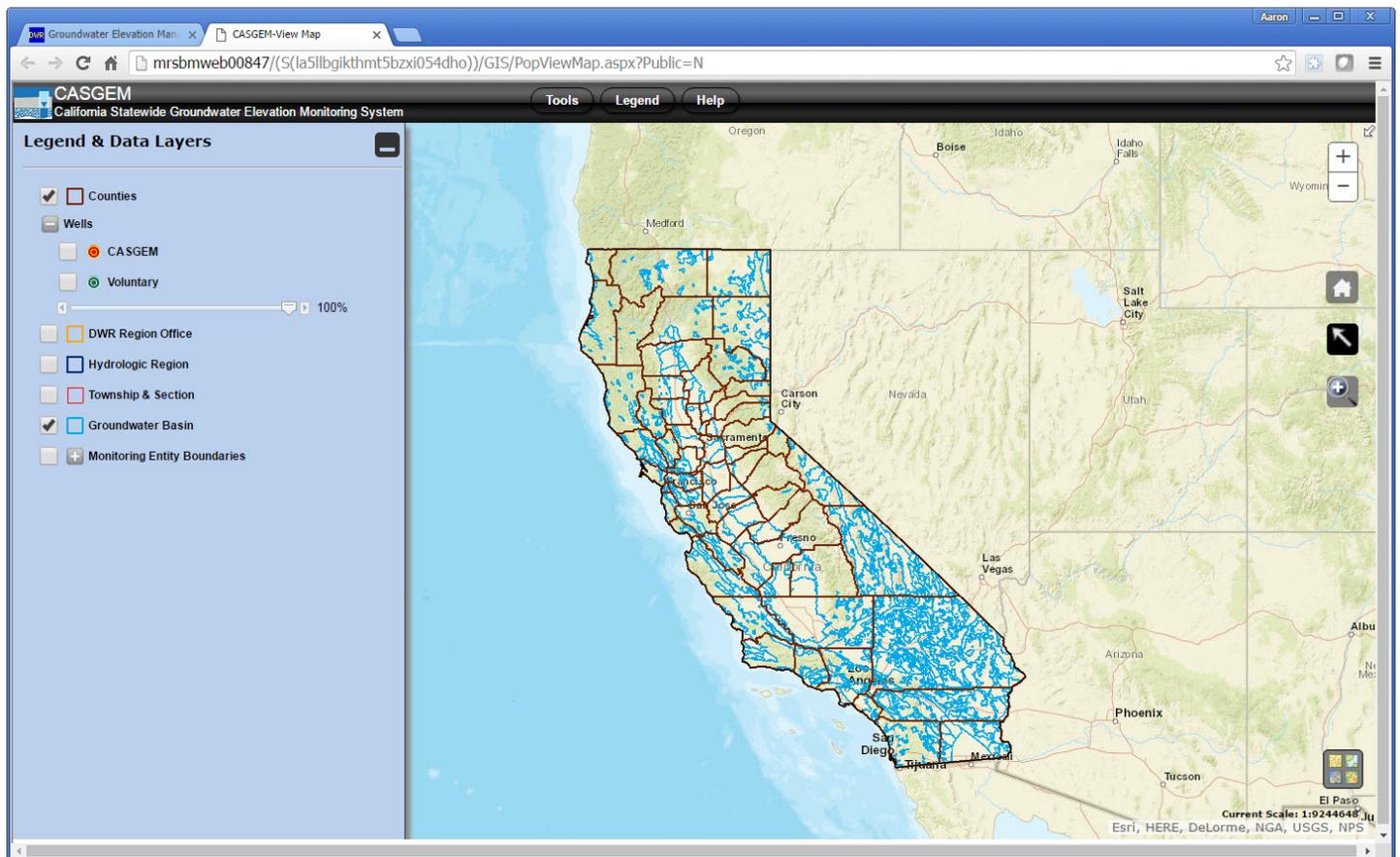
### Item 1

Item ID: GIS System Upgrade

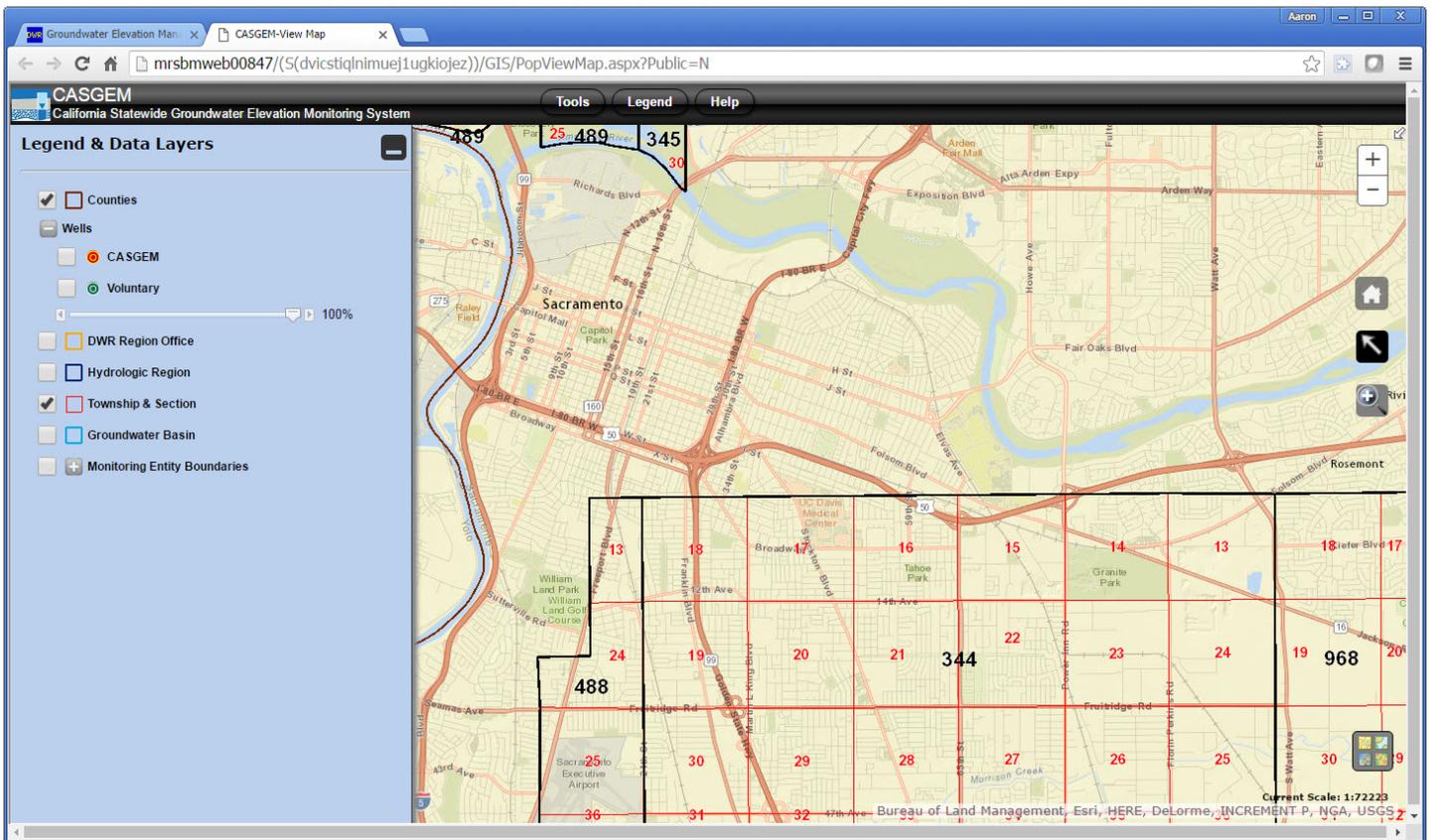
Category: New CASGEM system functionality.

Users affected: **Monitoring Entity, DWR, and Public users** of CASGEM.

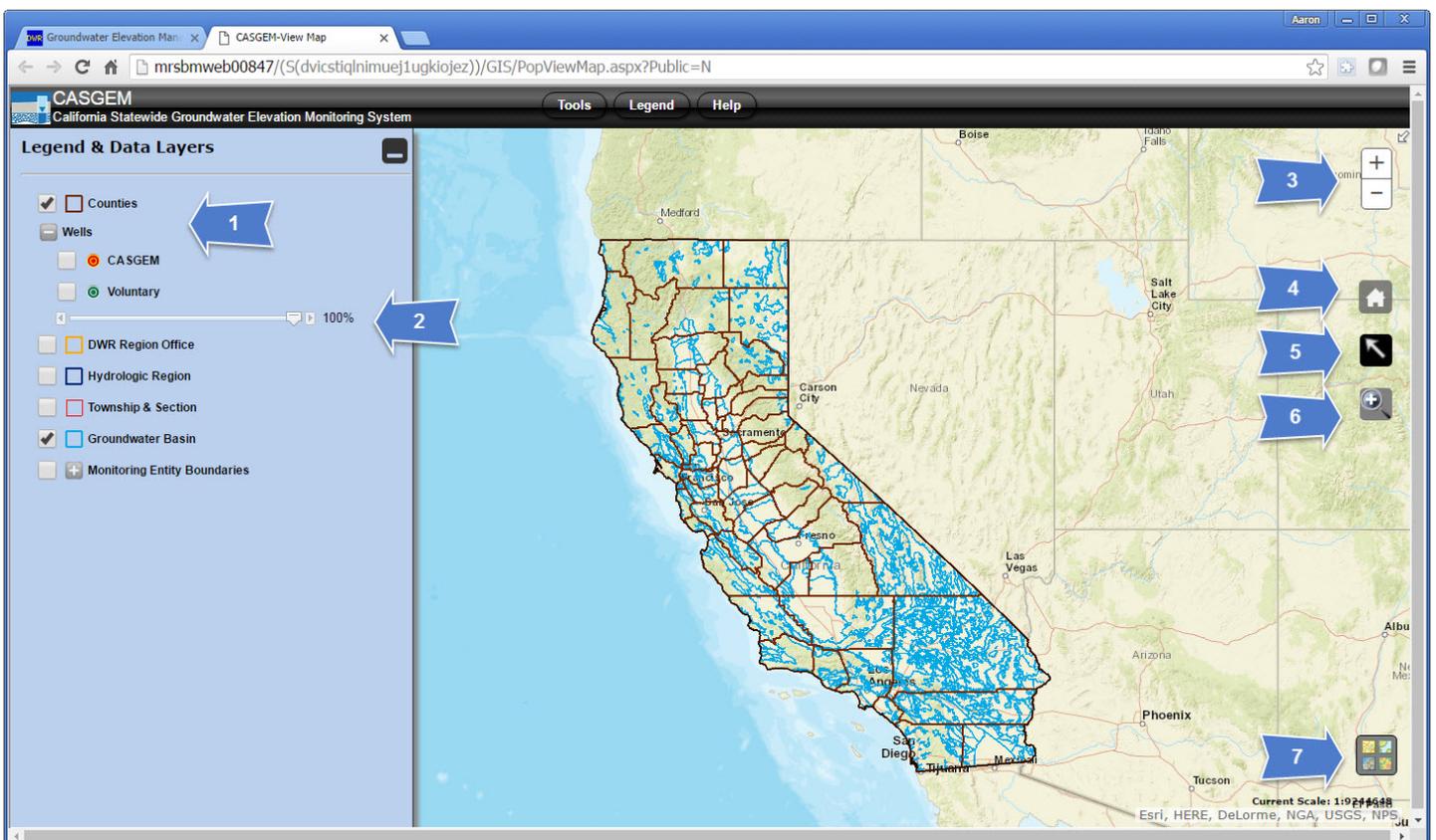
Description of new functionality: The Geographical Information System (GIS) in CASGEM, also known as the “Map Viewer”, has been upgraded to a more recent and robust technology. This brings the GIS solution up to a modern standard that offers better performance for the users. When users log in to CASGEM and click on the “View Map” tab at the top, they will be presented with a completely new interface. This is the default view the users will see:



The Map Legend and Data Layers control pane is displayed by default, and layers available are very similar to the layers available in the previous GIS solution. Please note that the Township and Section layers have now been combined into a single layer and the user must zoom in far enough before they are displayed on the map as shown:



Basic controls for the map are similar to the previous system, but some of the icons are new. Basic controls are as follows:



The three buttons on the black bar across the top of the map contains the following controls:

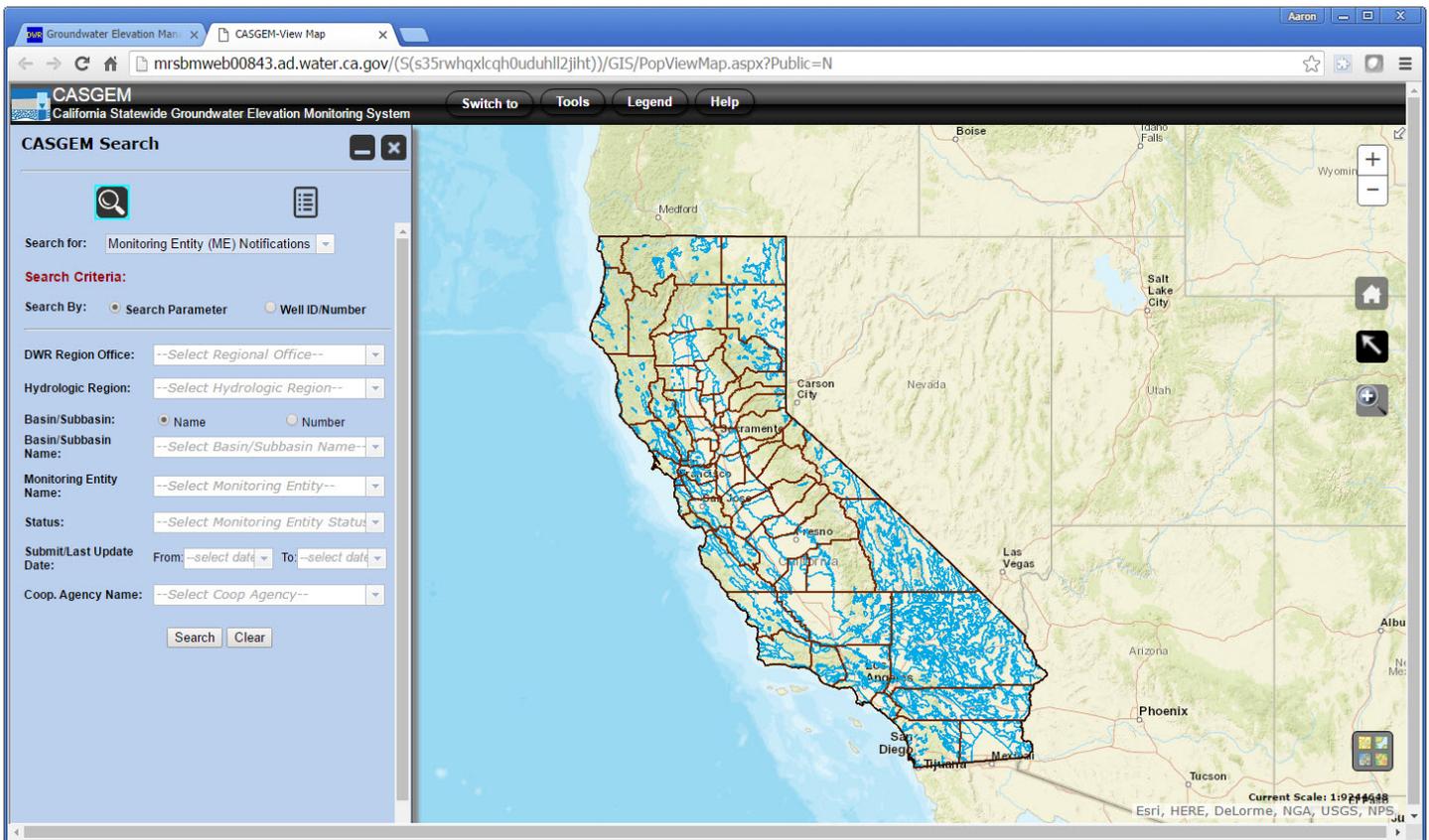
- Tools button: This button/drop-down menu contains the primary tools for the GIS system. Tools under this drop-down are: “CASGEM Search”, “Find an Address”, “Measure Distance”, “Bookmarks”, “Print”, and “User Guide”.
- Legend button: This button will display the Legend & Data Layer Control pane on the left of the map.
- Help button: This button will display the Help pane on the left of the map. The Help pane will be very helpful for new users to quickly learn how to navigate this new GIS system. *Note: Placing the mouse cursor over any icon in the GIS system will generate a label describing the function of the icon.*

The numbered markers in the screen shot above highlight the following map control functions:

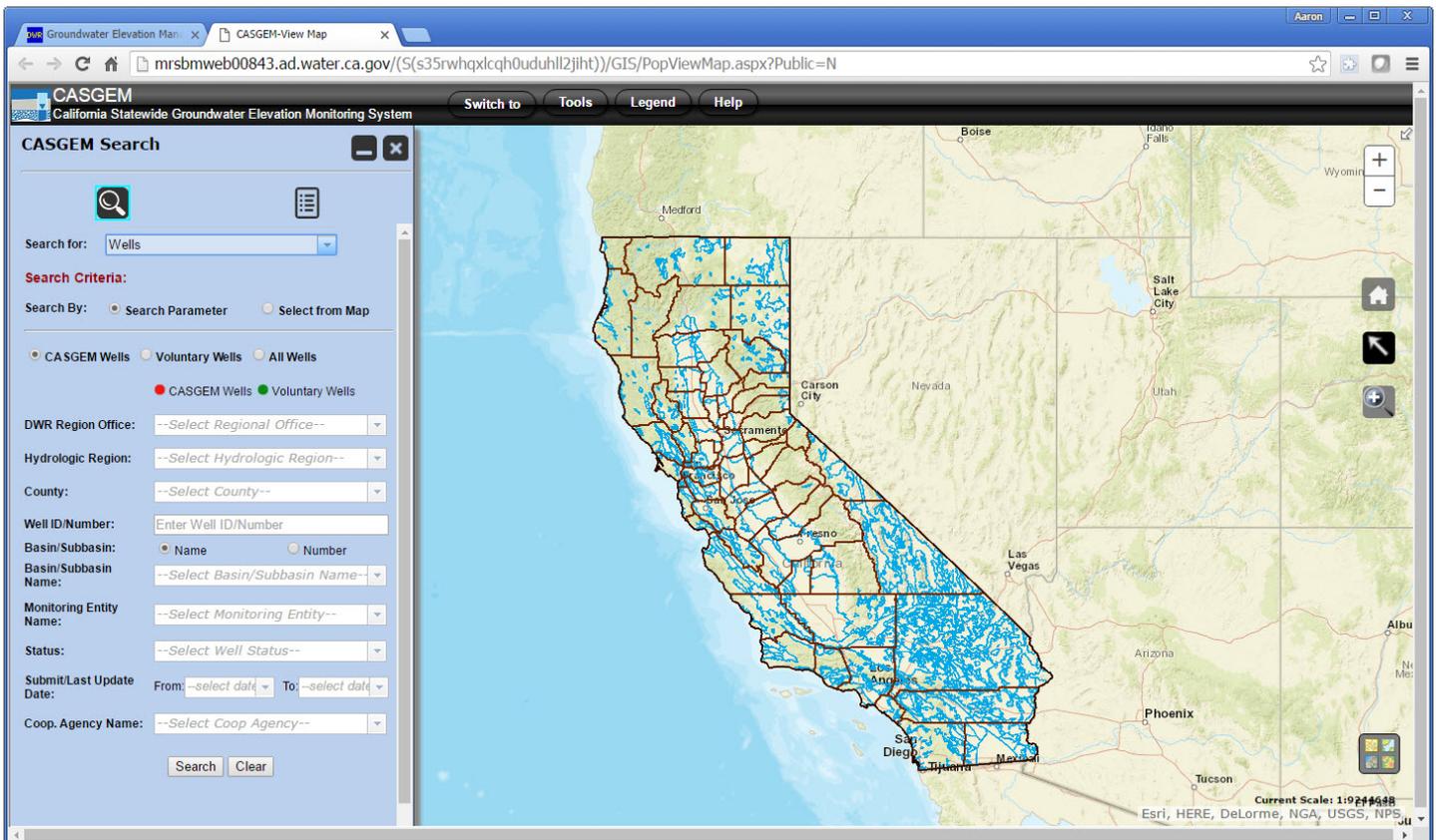
1. Layer Control: Allows the user to turn on/off the various layers listed that can be displayed on the map.
2. Layer Transparency Control: Allows the user to control the transparency of the layers where transparency control is provided.
3. Zoom In/Zoom Out: Click the + button to zoom in and the – button to zoom out.
4. Home Button: This will reset your zoom level and re-center the map when clicked.
5. Pan/Identify Tool: This is the default control for the mouse cursor in the GIS system. This allows the user to click, hold and drag the map. The user can also click on the map and identify objects selected. The identify tool will generate a pop-up window with the information for the object selected and the enabled data layers for the object/point selected on the map.
6. Lasso Zoom Tool: This allows the user to “draw” a box around the area on the map they would like to zoom in to.
7. Base Map Selection: This will display the various base maps available to display as the background map in the GIS system.

CASGEM Search:

The CASGEM Search function is accessed by clicking on the “Tools” button and selecting “CASGEM Search” from the drop-down menu. The CASGEM Search pane will display to the left of the map. This is how users will search for data in CASGEM that can be graphically represented by the GIS system. This is the default display for the CASGEM Search pane:



“Monitoring Entity (ME) Notifications” is the default search item in the “Search for:” drop-down selection menu. This allows the user to search for monitoring notifications based on various search criteria. If the user selects “Wells” from the “Search for:” drop-down, the following well search criteria display on the search pane:



This adjusts the search criteria accordingly for searching for wells. *Please Note: Carefully review the various search criteria available for searching for wells and monitoring notifications. For instance, when searching for wells, the well type radio button selection is defaulted to "CASGEM Wells" and will only return wells with the status of CASGEM. The user would need to select "All Wells" if they wanted to see both CASGEM and Voluntary wells in the search results.*

## Item 2

Item ID: US1059

Description: Enhance data validation on GWL batch measurement upload.

Category: Modified CASGEM system functionality.

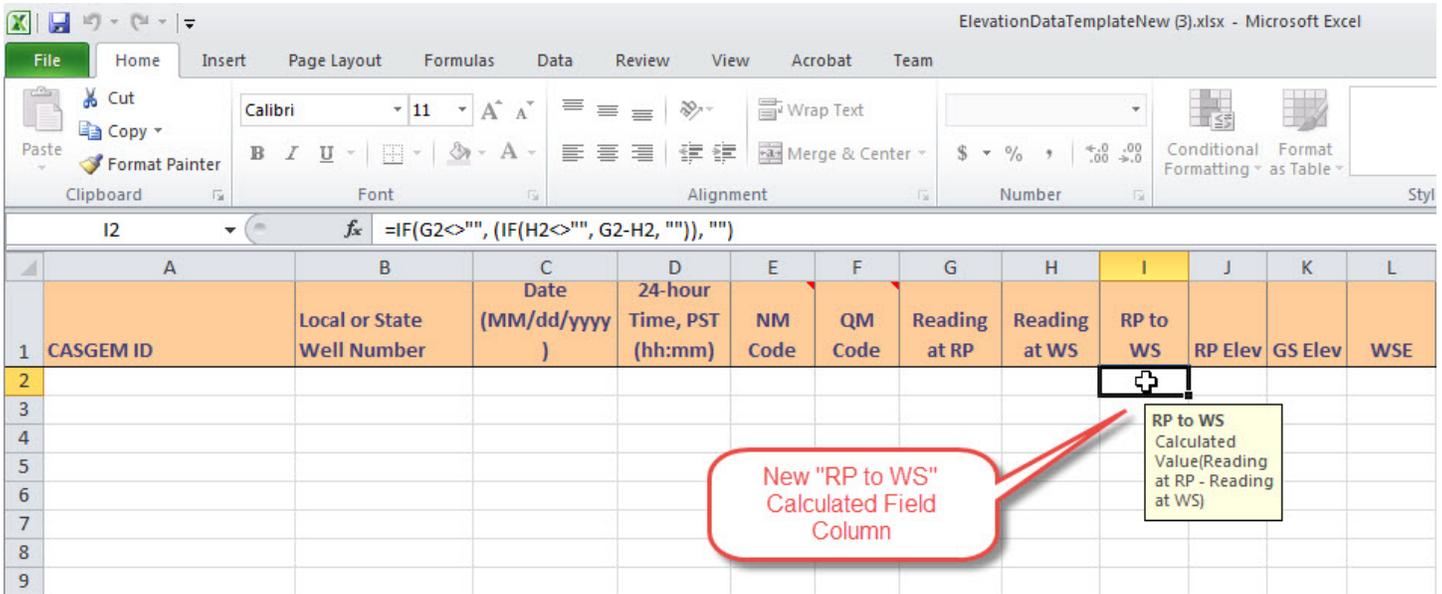
Users affected: **Monitoring Entity users and DWR users** of CASGEM.

Description of modified functionality: This release enhances the validation rules applied to the upload of GWL measurement data through the batch upload process. Additionally, an updated batch upload Excel template is now required and is available for download in the CASGEM system. To download this new template, please log in to CASGEM and navigate to "Manage Wells", then to "Groundwater Elevation Data", then click on the "Elevation Data Import" button; the template will be available on the "Upload Elevation Data File" page. Please note that this new Excel template must be used to prevent unnecessary errors during the upload of elevation data. This release implemented the following rules to ensure better data accuracy within the CASGEM system:

Rules implemented:

- Reading at RP (Reference Point) cannot be lower than Reading at WS (Water Surface): A measurement that has a "Reading at WS" that is higher than the "Reading at RP" will generate an error message and upload failure unless the Measurement Method code used is "PG" (Airline Measurement, Pressure Gauge, or Manometer) or "OTH" (Other). This rule was implemented to ensure the correct measurement methods are captured when measurements are submitted that match the above criteria.
- Reading at WS should not have a value other than zero entered if the Measurement Method code used is ES (Electric Sounder), AS (Acoustic or Sonic Sounder), PG (Pressure Gauge), or TR (Electronic Pressure Transducer). An error message will be generated and the batch upload will fail if there is a value greater than zero in the "Reading at WS" column and one of these Measurement Methods has been used. Measurement Method codes that will allow a value other than zero in the Reading at WS field are ST (Steel Tape), OTH (Other), or UKN (Unknown).
- RP (Reference Point) Elevation must match the RP Elevation listed on the well details page in CASGEM. Measurement records in batch upload files with RP Elevations that do not match the RP Elevation for that well in CASGEM will generate an error and the batch upload will fail. *Note: If you need to use a temporary RP, please enter the RP elevation that matches the well details in CASGEM, but add a note in the "Comments" column of the spreadsheet to specify the use of a temporary RP due to well casing modification, damage, etc.*
- GS (Ground Surface) Elevation must match the GS Elevation listed on the well details page in CASGEM. Measurement records in batch upload files with GS Elevations that do not match the GS Elevation for that well in CASGEM will generate an error and the batch upload will fail.
- RP to WS column was added to the batch upload template. This new RP (Reference Point) to WS (Water Surface) column in the upload template is a calculated field that requires no input. It simply displays the difference in values between the "Reading at RP" and "Reading at WS" columns. This is a calculated field for reference only

and will not be processed by CASGEM at the time of upload. Please download the new Excel template from the CASGEM system as stated above.



- Date format for the “Date” column must be MM/dd/yyyy. If a date in the “Date” column in the GWL Measurement batch upload file contains a date that is not in the MM/dd/yyyy format, an error will be generated and the upload will fail.
- An NM (No Measurement) Code of “0” or “7” requires that the “Comments” column be populated. Any measurements using an NM Code of “0” (Measurement Discontinued) or “7” (Special/Other), need to be accompanied with comments in the “Comments” column of the batch upload spreadsheet that explain why these NM codes are being used. If an NM Code of “0” or “7” are used for a measurement and there are no comments in the “Comments” column, an error will be generated and the upload will fail. The comment field must be populated with at least 2 characters to not generate an error.
- A QM (Questionable Measurement) Code of “6” requires that the “Comments” column be populated. Any measurements using a QM Code of “6” (Other), need to be accompanied with comments in the “Comments” column of the batch upload spreadsheet that explain why this QM code is being used. If a QM Code of “6” is used for a measurement and there are no comments in the “Comments” column, an error will be generated and the upload will fail. The comment field must be populated with at least 2 characters to not generate an error.