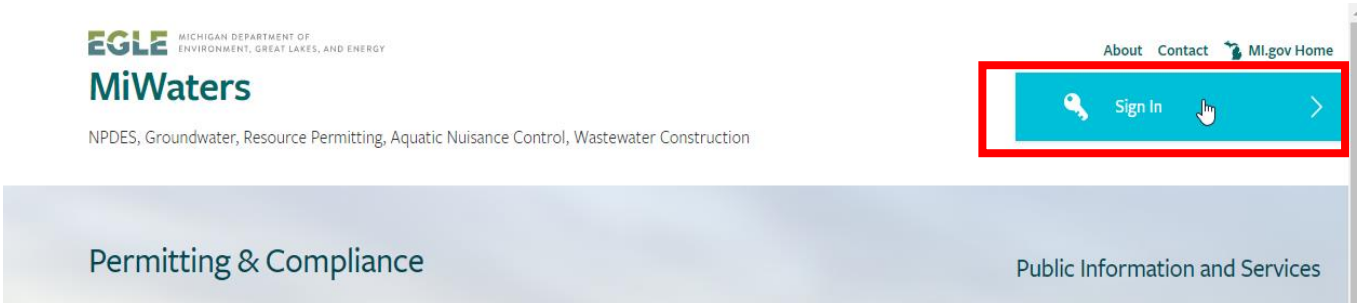
MICHIGAN DEPARTMENT OF ENVIRONMENT, GREAT LAKES, AND ENERGY

SUBMITTING A GROUNDWATER ANNUAL DISCHARGE MONITORING REPORT (DMR)

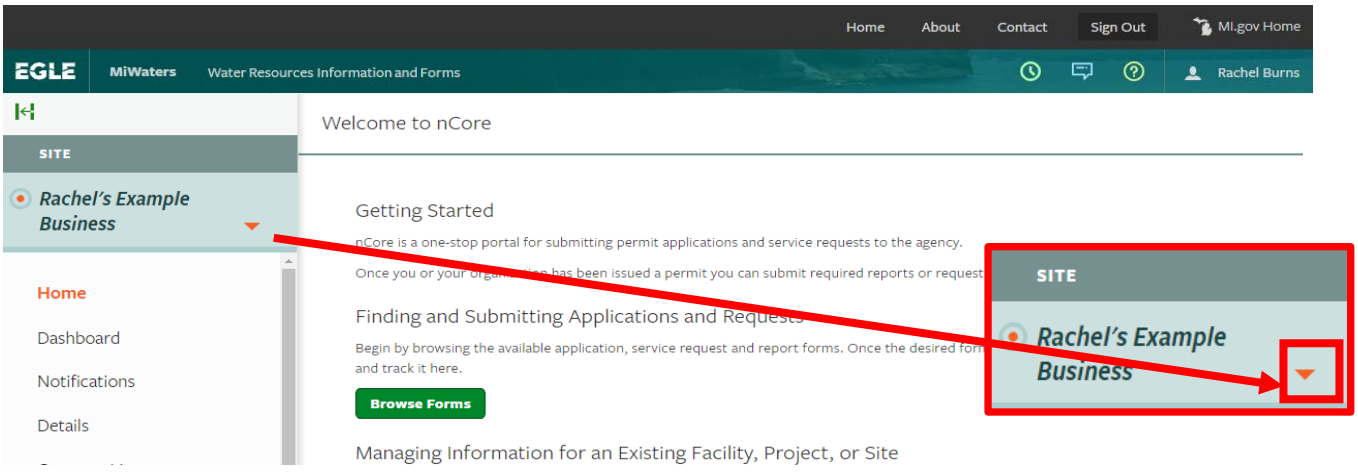
MiWaters Guide

FOR 2211(A) AND 2215-1 PERMITS IN MIWATERS.

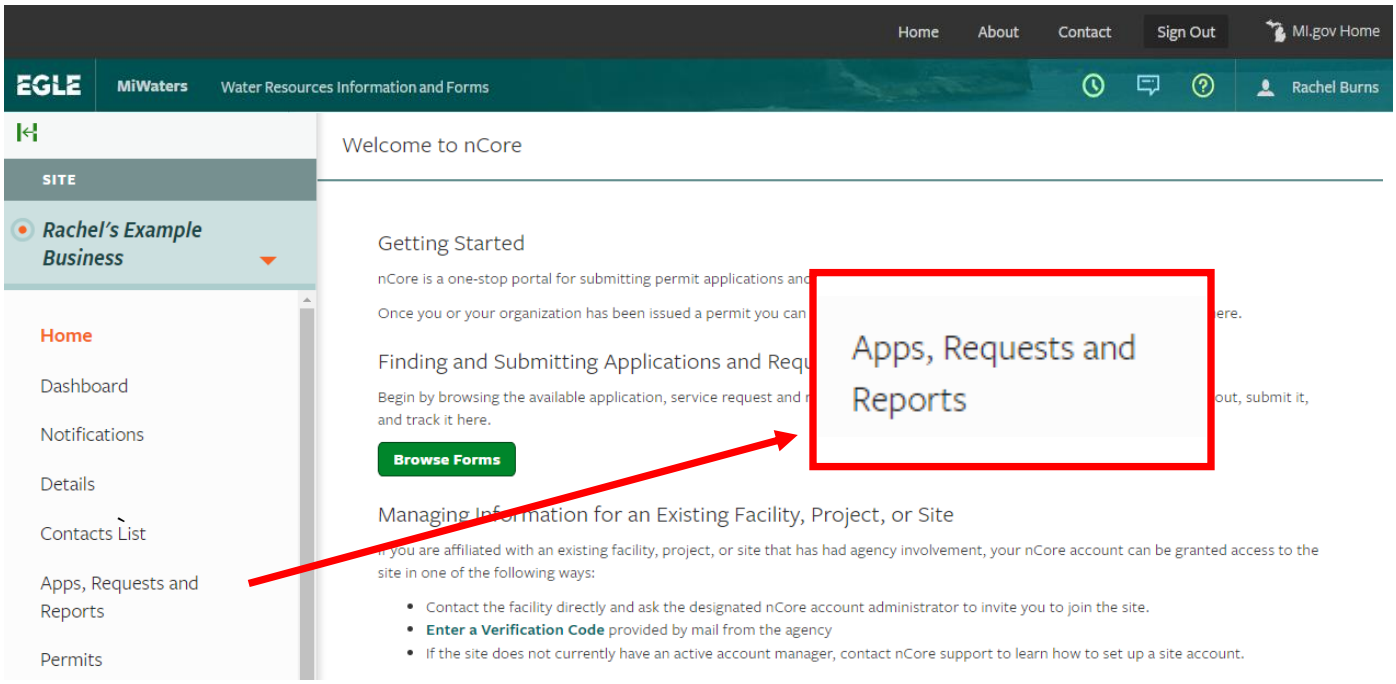
STEP 1 Sign in at https://mienviro.michigan.gov/ncore/external/home



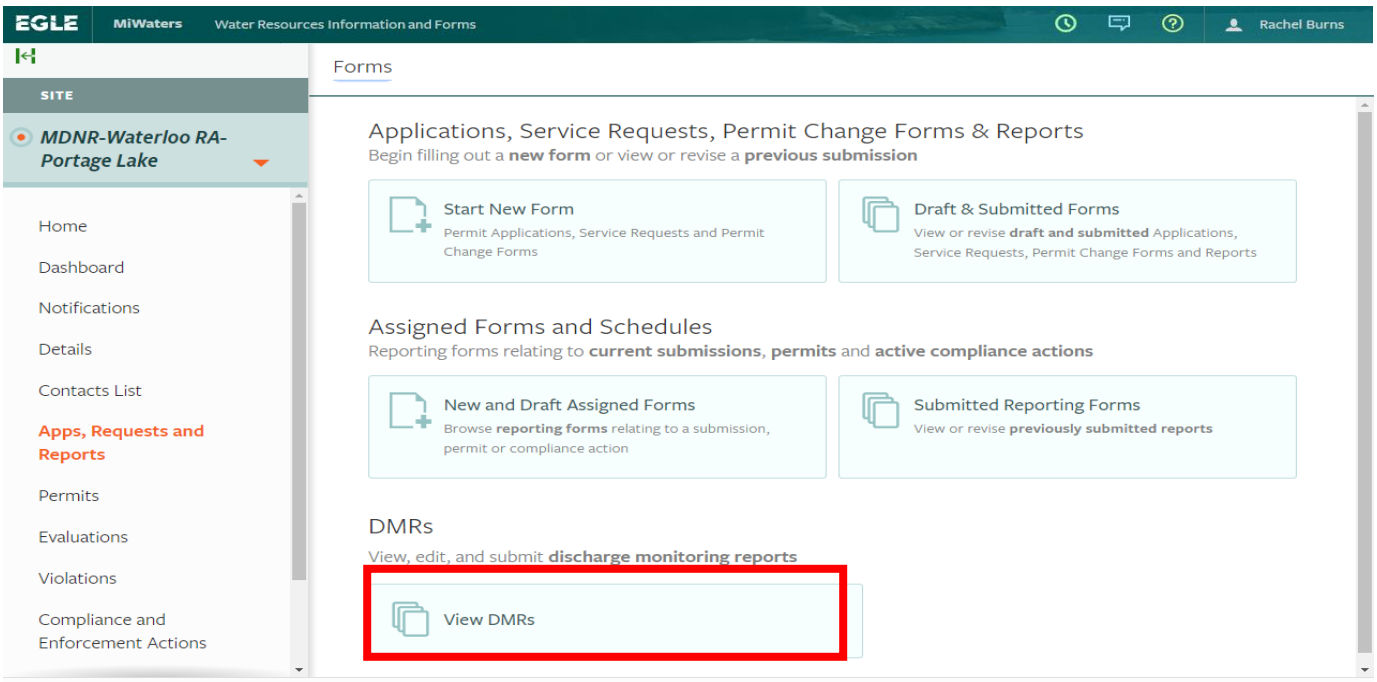
STEP 2 Using the downward pointing orange arrow near the upper left-hand corner of the page, select your site (if not automatically selected).



STEP 3 On the left-hand side of the screen, click on the Apps, Requests and Reports section.

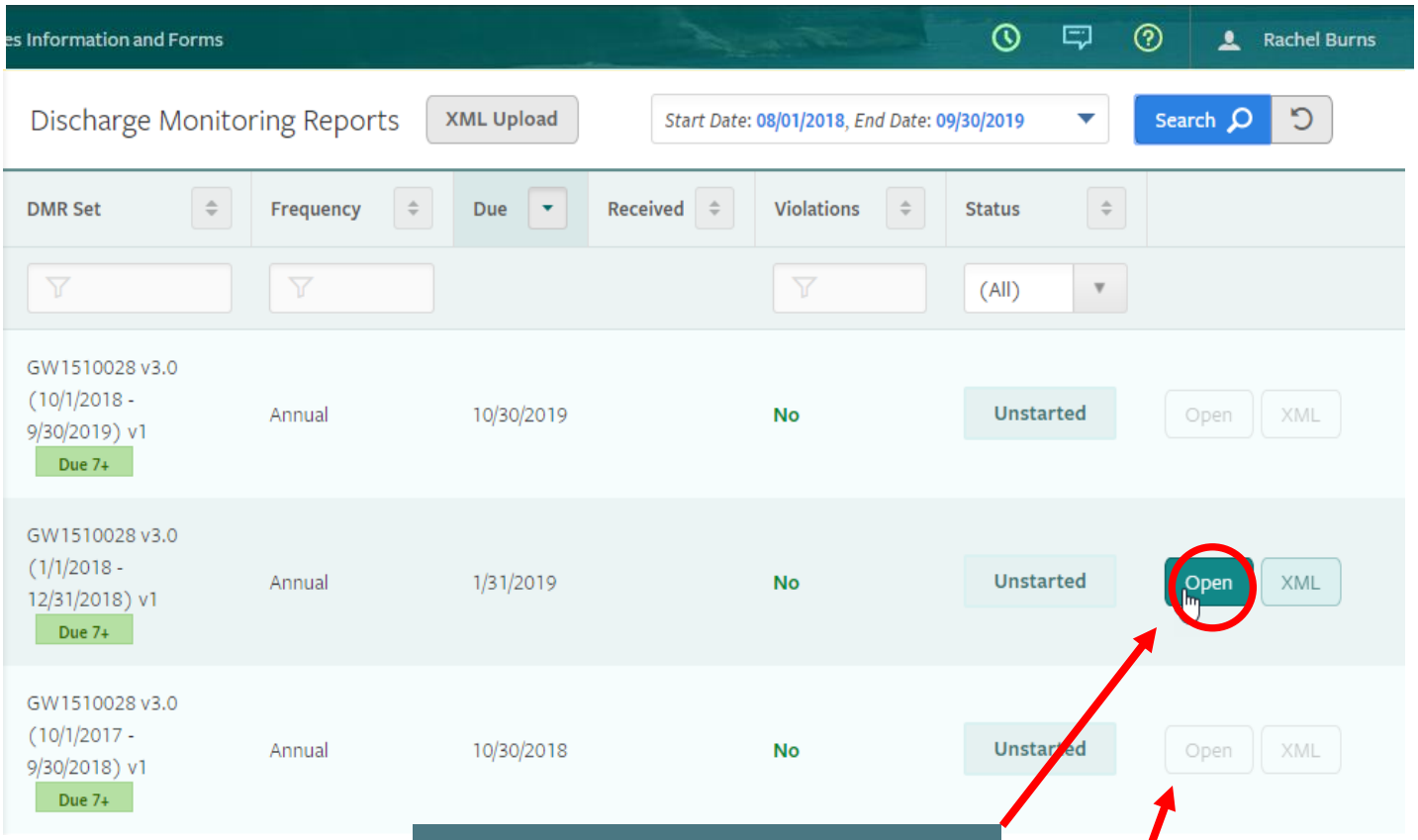


STEP 4 Click on the shaded button titled "View DMRS" located near the bottom of the page to see all available DMRs.



STEP 5

On the Discharge Monitoring Reports screen, find the correct DMR and click the "Open" button. To find the correct DMR, first look at the information contained in the DMR Set column and make sure that the DMR covers the calendar year that you are reporting for. Confirm that the "Due" column shows January 31 as the due date. Please note that some permits also require that an annual biosolids DMR be submitted; that is a separate annual DMR and covers a different reporting period (October through September of the following year) and is due on October 30.

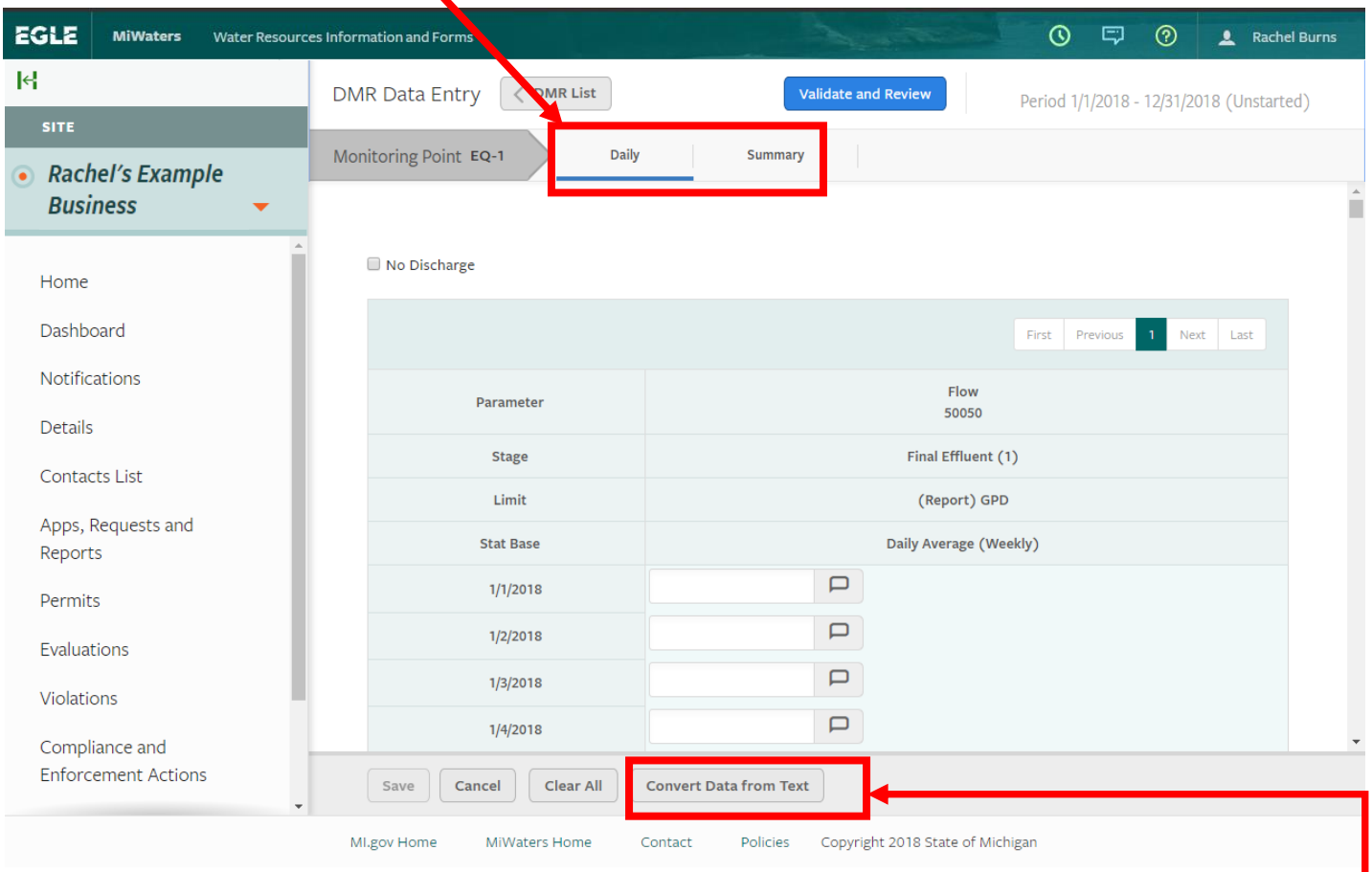


This is the groundwater annual DMR. Note that it covers January 1 through December 31 and is due January 31.

This is the biosolids annual DMR. Note that it covers October 1 through September 30 and is due October 30.

STEP 6

The DMR has both a **Daily** and **Summary** section. Both sections need to be filled out completely in order to submit the DMR. The DMR will open to the Daily section. To switch between sections, click the tabs near the top of the page.



STEP 7

The Daily section is where daily and/or weekly data will be reported. This section has one row for each day of the year, however, not all rows need to have a number added. The permit requires that a daily average be reported on a weekly basis, meaning that a daily average *must* be reported at least once a week. You may report daily flow data or choose any day of the week to report the daily average for the week. Data can be entered into the form manually or copied and pasted from an Excel spreadsheet using the Convert Data from Text button at the bottom of the page.

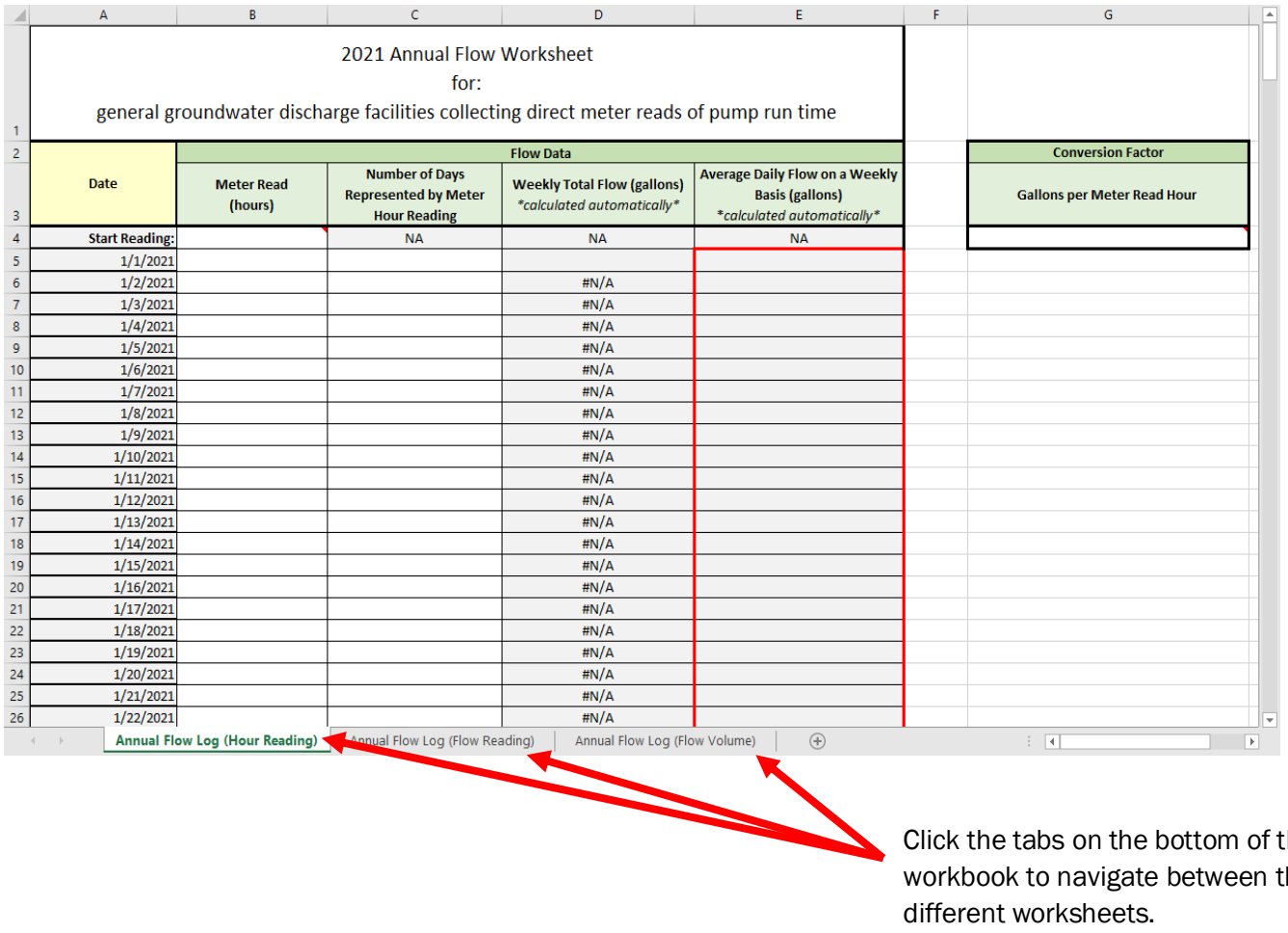
For more detailed instructions on using Excel spreadsheets to enter this data, please refer to steps 7a through 7i below; those choosing to enter data manually can skip to step 8.

7a. Go to the Groundwater program webpage to find a current Flow Worksheet.

7b. After opening the excel spreadsheet for the year that you need to report for, find the correct worksheet for how your facility records flow volumes. Below are descriptions of each worksheet. To navigate between the different worksheets, just click the tabs at the bottom of the excel workbook.

i. Annual Flow Log (Hour Reading) and Annual Flow Log (Flow Reading): One of these worksheets should be used by groundwater discharge facilities that collect direct meter readings (either measured in run time or flow volume). **Please continue to step 7c if you are using one of these worksheets.**

ii. Annual Flow Log: This worksheet should be used by groundwater discharge facilities calculating flow volumes. **Please skip to step 7d if this is the worksheet you are using.**



2021 Annual Flow Worksheet
for:
general groundwater discharge facilities collecting direct meter reads of pump run time

Date	Flow Data				Conversion Factor
	Meter Read (hours)	Number of Days Represented by Meter Hour Reading	Weekly Total Flow (gallons) *calculated automatically*	Average Daily Flow on a Weekly Basis (gallons) *calculated automatically*	Gallons per Meter Read Hour
Start Reading:		NA	NA	NA	
1/1/2021					
1/2/2021			#N/A		
1/3/2021			#N/A		
1/4/2021			#N/A		
1/5/2021			#N/A		
1/6/2021			#N/A		
1/7/2021			#N/A		
1/8/2021			#N/A		
1/9/2021			#N/A		
1/10/2021			#N/A		
1/11/2021			#N/A		
1/12/2021			#N/A		
1/13/2021			#N/A		
1/14/2021			#N/A		
1/15/2021			#N/A		
1/16/2021			#N/A		
1/17/2021			#N/A		
1/18/2021			#N/A		
1/19/2021			#N/A		
1/20/2021			#N/A		
1/21/2021			#N/A		
1/22/2021			#N/A		

Annual Flow Log (Hour Reading) | Annual Flow Log (Flow Reading) | Annual Flow Log (Flow Volume)

Click the tabs on the bottom of the workbook to navigate between the different worksheets.

7c. When using the Annual Flow Log (Flow Reading) or Annual Flow Log (Hour Reading) worksheets, a start reading (from the beginning of the year) must first be entered. If using the Annual Flow Log (Hour Reading) worksheet, a conversion factor for pump run time to gallons of water pumped per hour must be provided in the Conversion Factor box located toward the upper right-hand corner of the worksheet. After that, readings may be entered daily or weekly; meter readings must be in gallons and need to be entered in the Meter Read column. The number of days between flow readings needs to be entered into the Number of Days Represented by Reading column. Numbers in the Weekly Total Flow and Average Daily Flow on a Weekly Basis columns will be calculated automatically once meter readings and number of days between flows are added. All grey boxes in the form are calculated automatically and numbers cannot be added or changed. **Continue to Step 7e.**

Enter start reading.

Enter meter readings and the number of days represented by each reading.

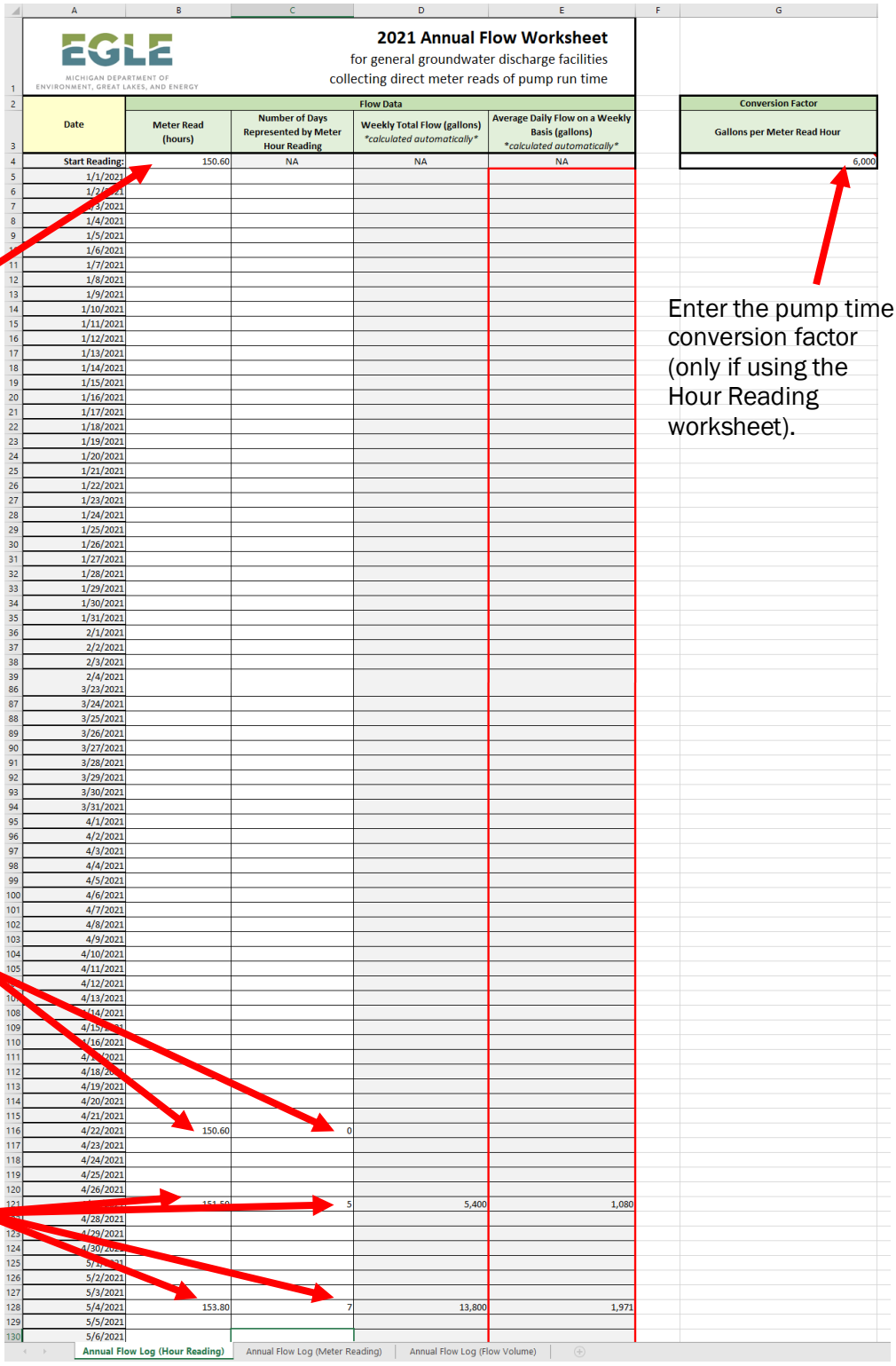
Enter the pump time conversion factor (only if using the Hour Reading worksheet).

2021 Annual Flow Worksheet
for:
general groundwater discharge facilities collecting direct meter reads of pump run time

Date	Flow Data				Conversion Factor
	Meter Read (hours)	Number of Days Represented by Meter Hour Reading	Weekly Total Flow (gallons) *calculated automatically*	Average Daily Flow on a Weekly Basis (gallons) *calculated automatically*	Gallons per Meter Read Hour
Start Reading:	859.00	NA	NA	NA	10,000
1/1/2021					
1/2/2021					
1/3/2021					
1/4/2021					
1/5/2021	862.30	5	33,000	6,600	
1/6/2021					
1/7/2021					
1/8/2021					
1/9/2021					
1/10/2021					
1/11/2021					
1/12/2021	867.00	7	47,000	6,714	
1/13/2021					
1/14/2021					
1/15/2021					
1/16/2021					
1/17/2021					
1/18/2021					
1/19/2021	872.60	7	56,000	8,000	
1/20/2021					
1/21/2021					
1/22/2021					
1/23/2021					

Annual Flow Log (Hour Reading) | Annual Flow Log (Meter Reading) | Annual Flow Log (Flow Volume)

Special Note: If you are entering data starting later in the year and have no wastewater flows to report for an extended period of time (i.e. seasonal campground that opens in May), you still need to enter the Start Reading and Conversion Factor (if applicable) at the top of the spreadsheet. You then need to scroll down to the day when you took the first meter reading in the year and enter the meter reading and put a "0" in the Number of Days Represented by Meter Reading column. Then continue to enter the data as described above. You may stop adding data to the worksheet when the discharge ends; there is no need to enter meter reads or days represented by meter reads once disscahrges are ended for the year. Please see example images on next page.



EGLE
MICHIGAN DEPARTMENT OF ENVIRONMENT, GREAT LAKES, AND ENERGY

2021 Annual Flow Worksheet
for general groundwater discharge facilities
collecting direct meter reads of pump run time

Date	Flow Data: Meter Read (hours)	Number of Days Represented by Meter Hour Reading	Weekly Total Flow (gallons) *calculated automatically*	Average Daily Flow on a Weekly Basis (gallons) *calculated automatically*
Start Reading:	150.60	NA	NA	NA
1/1/2021				
1/2/2021				
1/3/2021				
1/4/2021				
1/5/2021				
1/6/2021				
1/7/2021				
1/8/2021				
1/9/2021				
1/10/2021				
1/11/2021				
1/12/2021				
1/13/2021				
1/14/2021				
1/15/2021				
1/16/2021				
1/17/2021				
1/18/2021				
1/19/2021				
1/20/2021				
1/21/2021				
1/22/2021				
1/23/2021				
1/24/2021				
1/25/2021				
1/26/2021				
1/27/2021				
1/28/2021				
1/29/2021				
1/30/2021				
1/31/2021				
2/1/2021				
2/2/2021				
2/3/2021				
2/4/2021				
3/23/2021				
3/24/2021				
3/25/2021				
3/26/2021				
3/27/2021				
3/28/2021				
3/29/2021				
3/30/2021				
3/31/2021				
4/1/2021				
4/2/2021				
4/3/2021				
4/4/2021				
4/5/2021				
4/6/2021				
4/7/2021				
4/8/2021				
4/9/2021				
4/10/2021				
4/11/2021				
4/12/2021				
4/13/2021				
4/14/2021				
4/15/2021				
4/16/2021				
4/17/2021				
4/18/2021				
4/19/2021				
4/20/2021				
4/21/2021				
4/22/2021	150.60	0		
4/23/2021				
4/24/2021				
4/25/2021				
4/26/2021				
4/27/2021	151.50	5	5,400	1,080
4/28/2021				
4/29/2021				
4/30/2021				
5/1/2021				
5/2/2021				
5/3/2021				
5/4/2021	153.80	7	13,800	1,971
5/5/2021				
5/6/2021				

Conversion Factor
Gallons per Meter Read Hour
6,000

Annual Flow Log (Hour Reading) | Annual Flow Log (Meter Reading) | Annual Flow Log (Flow Volume)

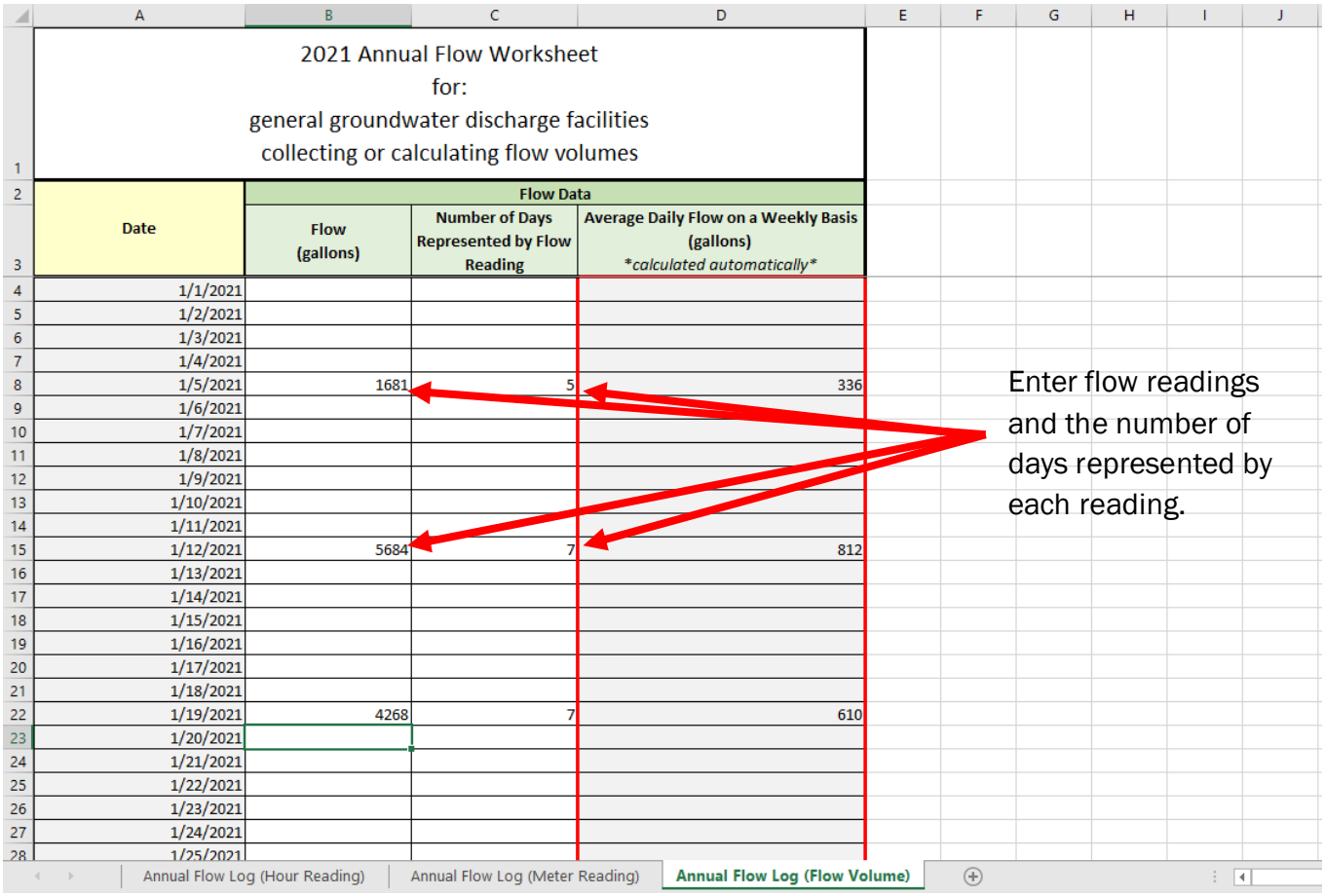
Enter start reading.

Enter the pump time conversion factor (only if using the Hour Reading worksheet).

Enter the initial meter read on the date it was collected and place a "0" in the second column.

Enter meter readings and the number of days represented by each reading.

7d. When using the Annual Flow Log (Flow Volume) worksheet, readings may be entered daily or weekly. Readings need to be entered in the Flow column in gallons. The number of days between flow readings needs to be entered into the Number of Days Represented by Flow Reading column. Numbers in the Daily Flow on a Weekly Basis column will be calculated automatically once the flow volumes and number of days between flows are added. All grey boxes in the form are calculated automatically and numbers cannot be added or changed. **Continue to Step 7e.**



2021 Annual Flow Worksheet
for:
general groundwater discharge facilities
collecting or calculating flow volumes

Date	Flow Data		
	Flow (gallons)	Number of Days Represented by Flow Reading	Average Daily Flow on a Weekly Basis (gallons) *calculated automatically*
1/1/2021			
1/2/2021			
1/3/2021			
1/4/2021			
1/5/2021	1681	5	336
1/6/2021			
1/7/2021			
1/8/2021			
1/9/2021			
1/10/2021			
1/11/2021			
1/12/2021	5684	7	812
1/13/2021			
1/14/2021			
1/15/2021			
1/16/2021			
1/17/2021			
1/18/2021			
1/19/2021	4268	7	610
1/20/2021			
1/21/2021			
1/22/2021			
1/23/2021			
1/24/2021			
1/25/2021			

Annual Flow Log (Hour Reading) | Annual Flow Log (Meter Reading) | Annual Flow Log (Flow Volume)

Enter flow readings and the number of days represented by each reading.

7e. Ensure that readings have been added for the entire year. At the bottom of the page there will be a section for Summary DMR Data. Within this box will be a result for Total Annual Flow, Total Number of Discharge Days, Highest Annual Daily Flow and Annual Average Daily Flow. These numbers are calculated automatically from the data added in the table above. Review the Total Annual Flow and Total Number of Discharge Days numbers and ensure that they look reasonable; if these numbers do not look correct, review the readings and number of discharge days entered in the worksheet to ensure they are accurate. Facilities that discharge every day year-round should have 365 for the Total Number of Discharge Days; facilities that do not discharge daily or only discharge seasonally will have a Total Number of Discharge Days that is less than 365.

Example of facility that discharges daily year-round.

Summary DMR Data *calculated automatically*		
	Total Annual Flow:	1,930,000
	Total Number of Discharge Days:	365
	Highest Annual Daily Flow:	8,000
	Annual Averge Daily Flow:	5,288

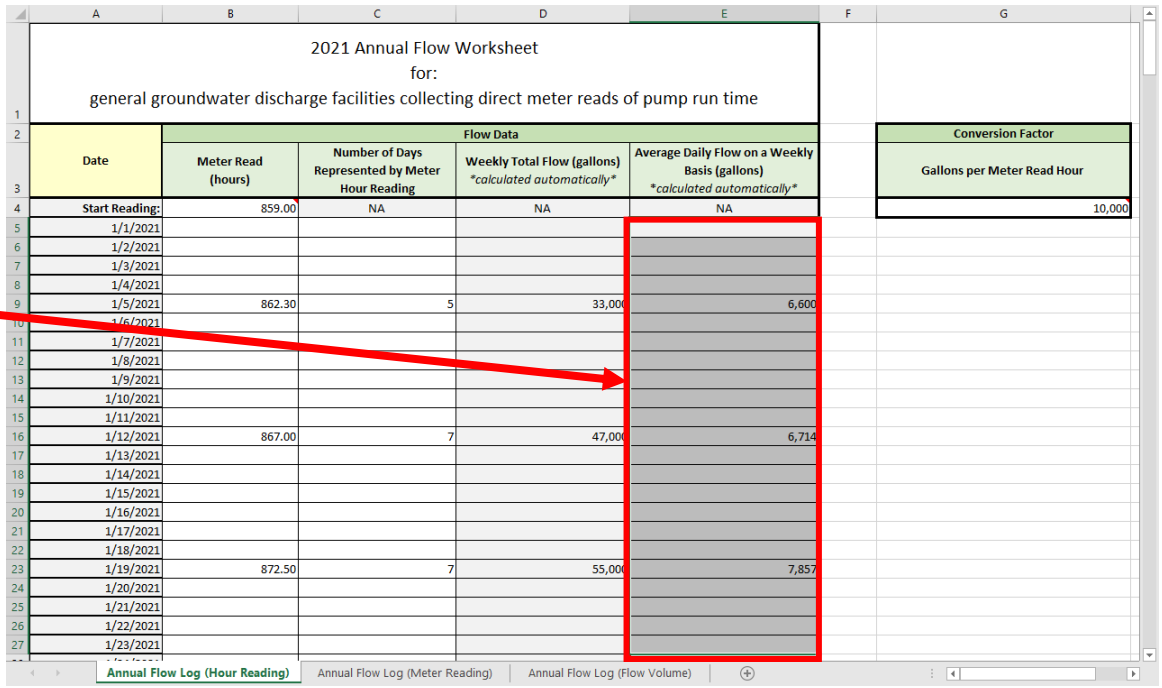
Example of facility that discharges daily March through November

Summary DMR Data *calculated automatically*		
	Total Annual Flow:	1,530,000
	Total Number of Discharge Days:	275
	Highest Annual Daily Flow:	7,857
	Annual Averge Daily Flow:	5,564

7f. To copy data from the spreadsheet to the discharge monitoring report in MiWaters, the appropriate data must be copied from the spreadsheet. On the spreadsheet there is a section outlined in red within the Average Daily Flow on a Weekly Basis column. Once the red outlined section has been identified in the spreadsheet, it needs to be copied. Cells can be copied in Excel several different ways, the two easiest are explained below:

- Left-click on the first cell in the series to be copied, hold down the shift button on the keyboard and then click on the final cell in the series to be copied. Selected cells will highlight dark grey. On the keyboard hold down the control (Ctrl) button and then hit C. The copied cells will be outlined in a dotted line.
- Left-click on the first cell in the series to be copied and hold the left button down on the mouse. Still holding the left button down, scroll to the final cell in the series to be copied and release the button. Selected cells will highlight dark grey. On the keyboard hold down the control (Ctrl) button and then hit C. The copied cells will be outlined in a dotted line.

Example of copied cells



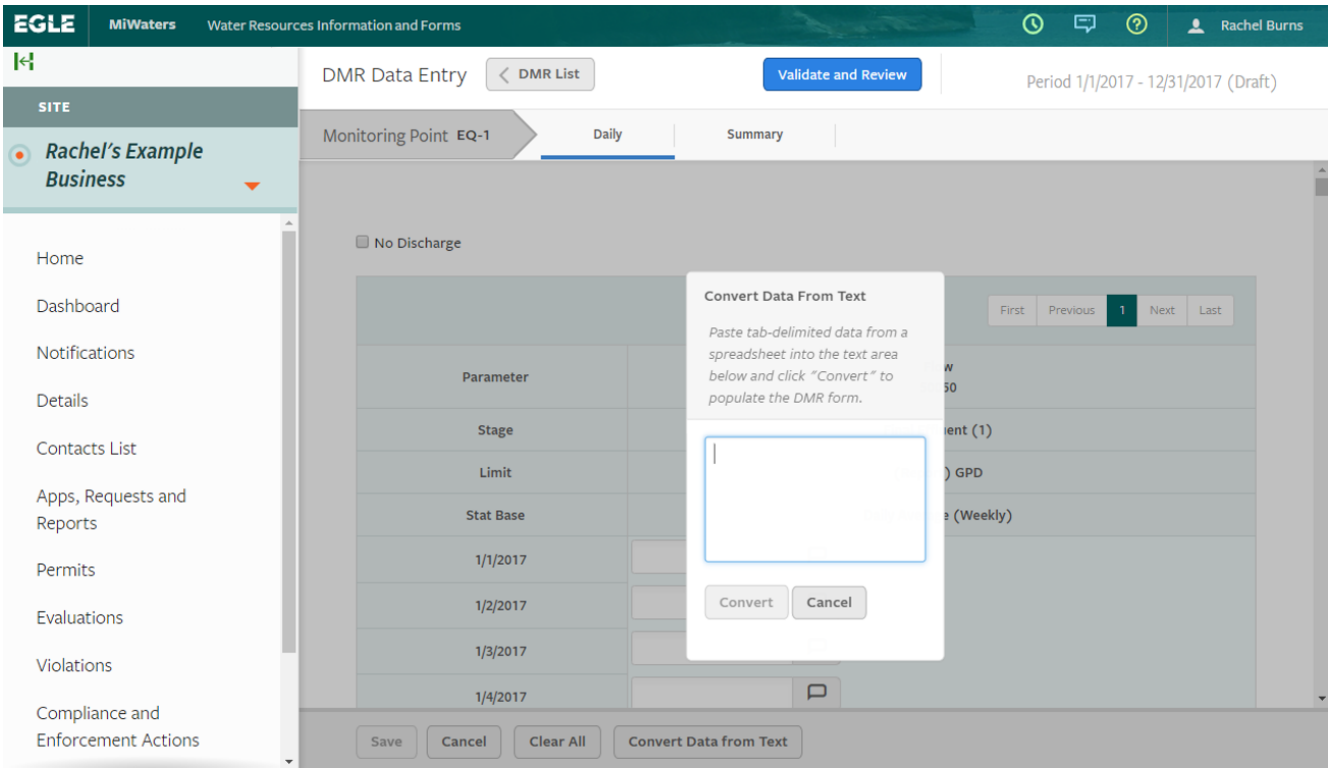
2021 Annual Flow Worksheet
for:
general groundwater discharge facilities collecting direct meter reads of pump run time

Date	Flow Data: Meter Read (hours)	Number of Days Represented by Meter Hour Reading	Weekly Total Flow (gallons) *calculated automatically*	Average Daily Flow on a Weekly Basis (gallons) *calculated automatically*
Start Reading:	859.00	NA	NA	NA
1/1/2021				
1/2/2021				
1/3/2021				
1/4/2021				
1/5/2021	862.30	5	33,000	6,600
1/6/2021				
1/7/2021				
1/8/2021				
1/9/2021				
1/10/2021				
1/11/2021				
1/12/2021	867.00	7	47,000	6,714
1/13/2021				
1/14/2021				
1/15/2021				
1/16/2021				
1/17/2021				
1/18/2021				
1/19/2021	872.50	7	55,000	7,857
1/20/2021				
1/21/2021				
1/22/2021				
1/23/2021				

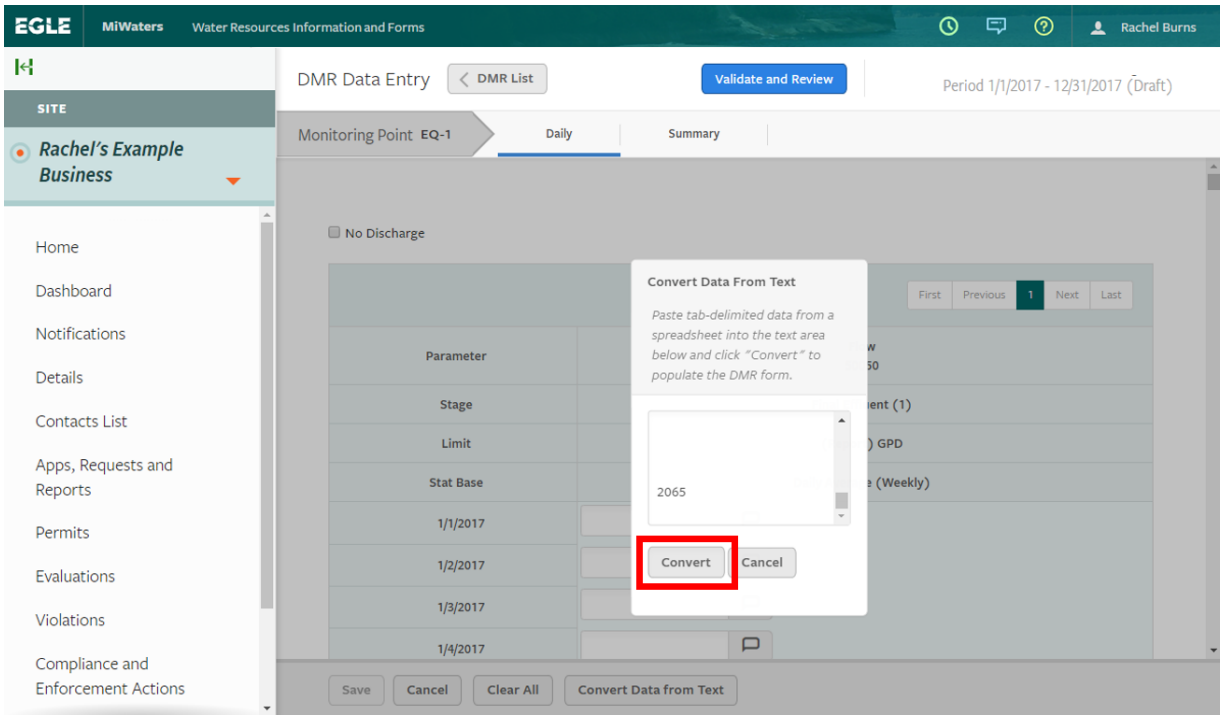
Conversion Factor
Gallons per Meter Read Hour
10,000

Annual Flow Log (Hour Reading) | Annual Flow Log (Meter Reading) | Annual Flow Log (Flow Volume)

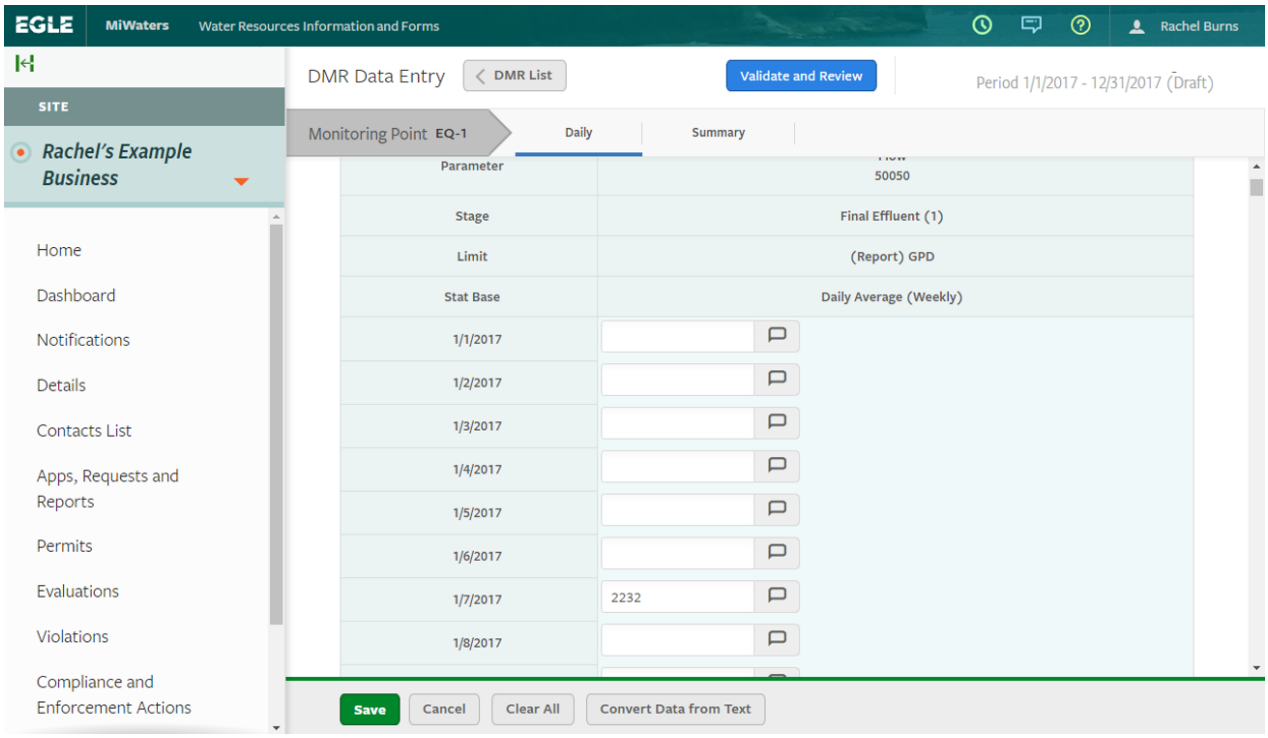
7g. Return to the MiWaters DMR page (step 7). On the DMR Daily page, click the Covert Data from Text button (see step 7). Click within the Convert Data from Text box, and on the keyboard hold down the control (Ctrl) button and hit the V button (to paste the copied cells from the Excel spreadsheet).



7h. The formatting may look a little strange within the Convert Data from Text box after you paste into it – this is normal, do not make any changes to the formatting. Click the Convert button.



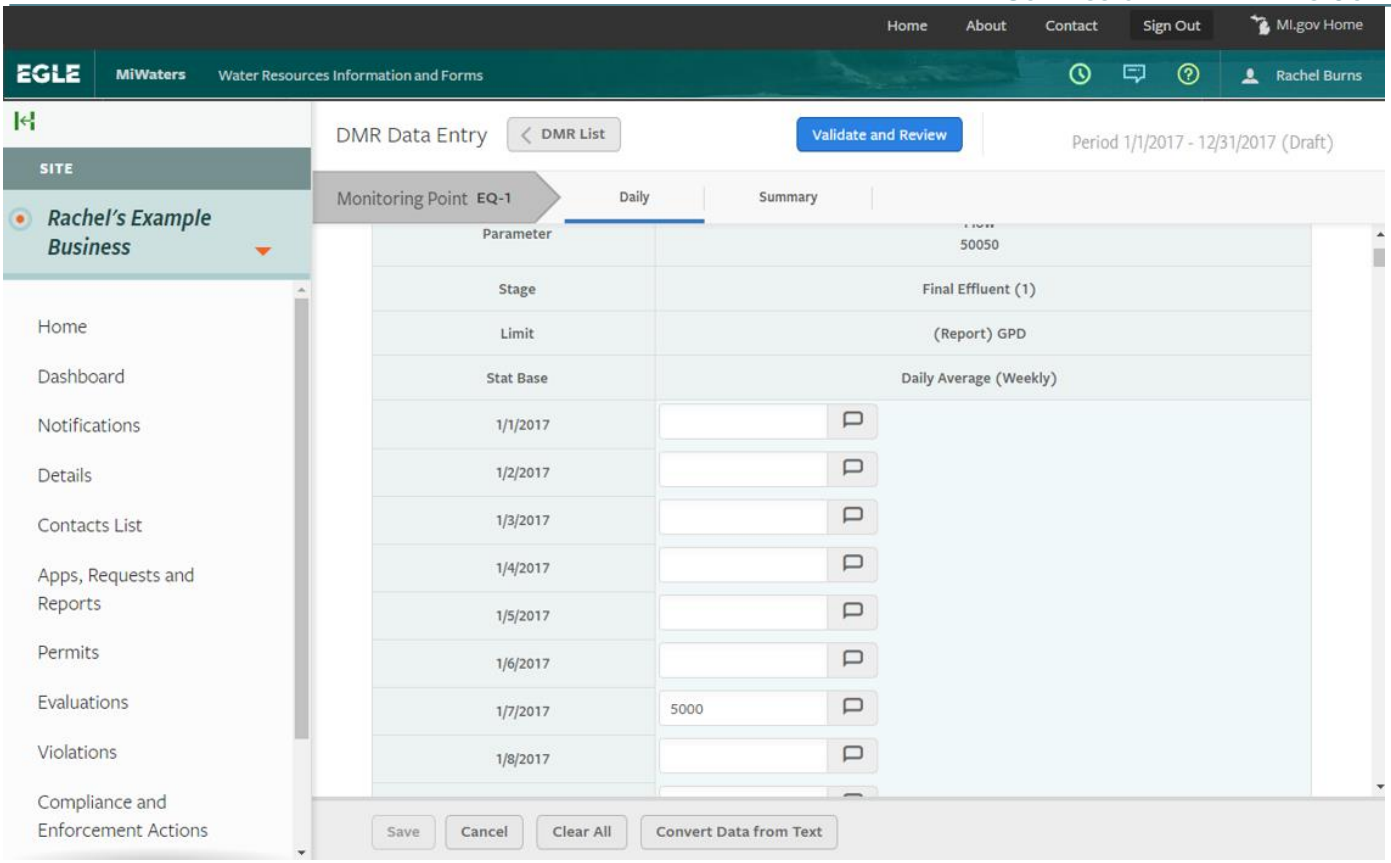
7i. The data will be converted and should appear within the DMR in the same order that it was entered on the Excel spreadsheet. Scroll down the DMR page to confirm that all data converted over correctly and is properly formatted. Any needed changes can be made manually within the DMR. **Skip to step 9.**



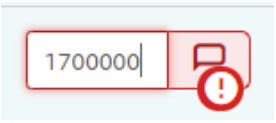
STEP 8

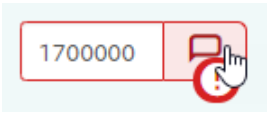
You may enter the information on the page manually by moving your mouse pointer over any of the open boxes and doing a single right click (the box will outline in blue when it is selected). You may report daily flow data or choose any day of the week to report the daily average for the week; either way, a daily average *must* be reported at least once a week. If reporting the daily average for the week, it should be calculated by taking the total flow for the week and dividing by the number of days that discharge was occurring. For example, if a total flow of 35,000 gallons was recorded between January 1 and January 7, and the facility discharged every day that week, the daily average for the week would be calculated as follows:

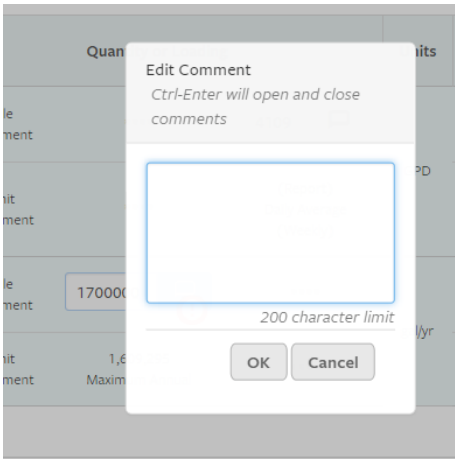
35,000 (gallons) / 7 (days) = 5,000 (gallons/day)

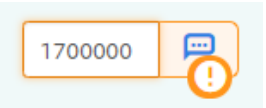


STEP 9 If any boxes turn red indicating that the flow is higher than allowed under the permit, ensure that the number entered in the box is correct then click the comment box and add a comment about why the flow is higher than allowed under the permit. The box will turn orange once a comment is entered.



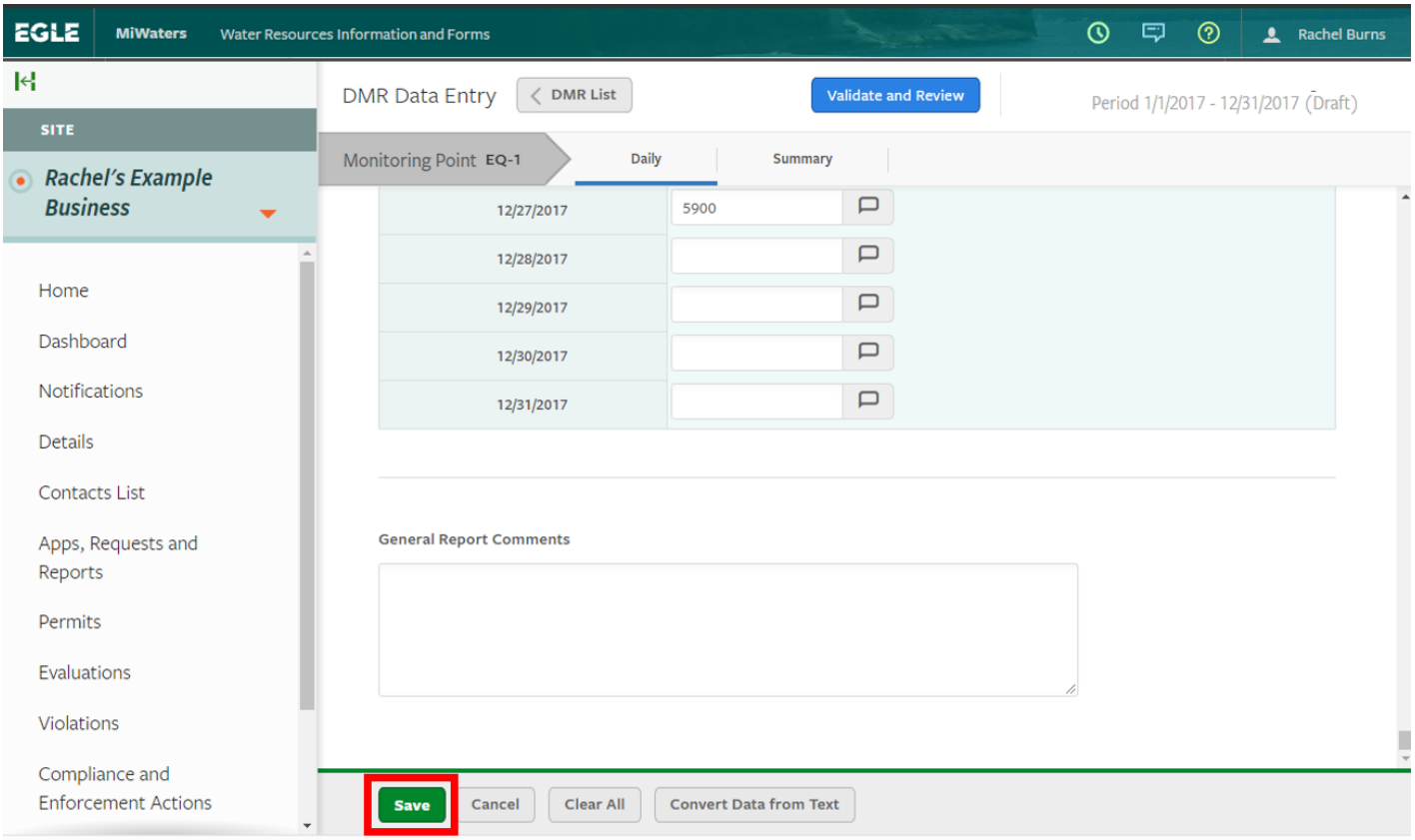






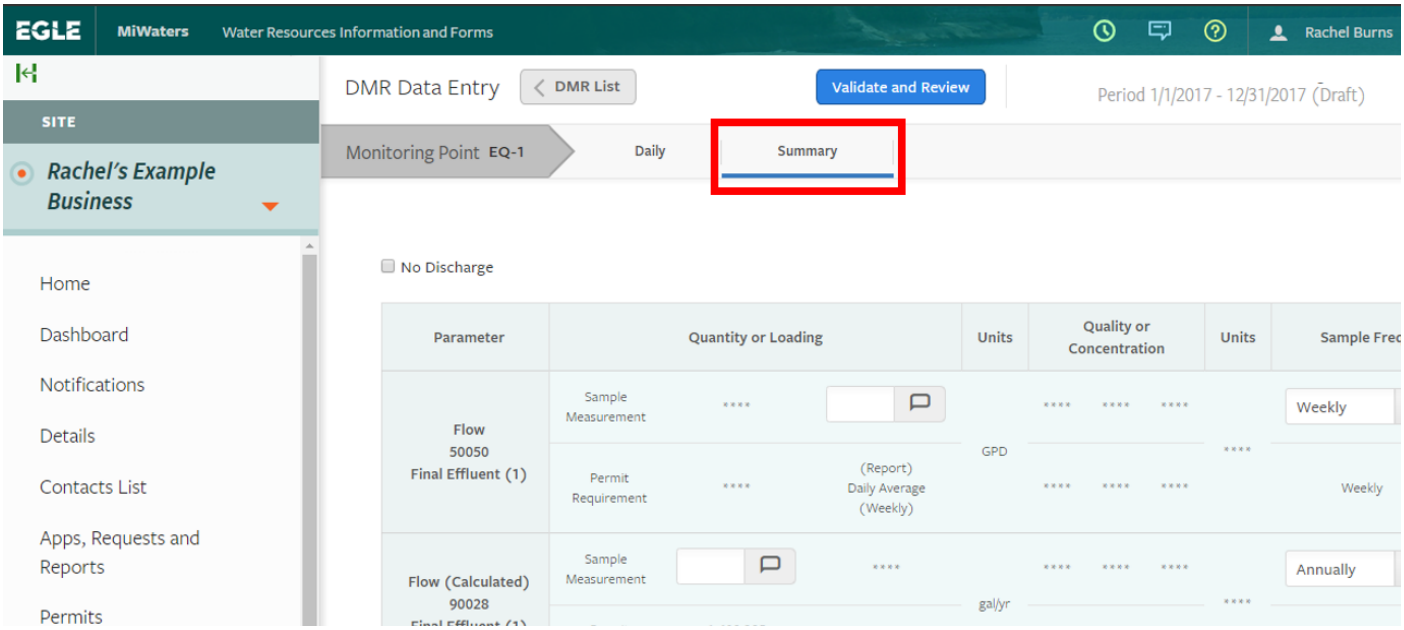
STEP 10

Once you have entered all your data for the year, click the green Save button at the bottom of the page. There is also a General Report Comments box at the bottom of the page where you may add comments if needed.



STEP 11

Next, click on the Summary section near the top of the page.



STEP 12

The data required to be entered in the Summary section of the DMR will differ slightly between permit types. 2211(a) permits will need to report the highest daily average flow for the year and the total annual flow for the year, while 2215-1 permits will also need to report the annual daily average flow. **If you are using the Excel spreadsheet, please see step 12a for where to find these numbers**; descriptions for calculating these numbers are included below.

① Flow (Calculated) Final Effluent/Maximum Annual: the total flow volume for the year (in gallons).

② Flow Final Effluent/Daily Average (Weekly): the highest daily average reported for the year (from the Daily page).

③ Flow Final Effluent/Daily Average (Annual): the annual daily average flow; calculated by taking the total annual flow volume and dividing by the number of days that discharge occurred (365 for year-round daily dischargers, less than 365 for seasonal or non-daily dischargers).

Example of DMR Summary page for 2211(a) permit

Parameter		Quantity or Loading		Units	Quality or Concentration			Units	Sample Freq	Sample Type
Flow 50050 Final Effluent (1)	Sample Measurement	****	②	GPD	****	****	****	****	Weekly	Calculation
	Permit Requirement	****	9100 Daily Average (Weekly)		****	****	****		Weekly	Calculation
Flow (Calculated) 90028 Final Effluent (1)	Sample Measurement	①	****	gal/yr	****	****	****	****	Annually	Calculation
	Permit Requirement	698,000 Maximum Annual	****		****	****	****		Annually	Calculation

Example of DMR Summary page for 2215-1 permit

Parameter		Quantity or Loading		Units	Quality or Concentration			Units	Sample Freq	Sample Type
Flow 50050 Final Effluent (1)	Sample Measurement	③	②	GPD	****	****	****	****	See Permit Requirements	Calculation
	Permit Requirement	10000 Daily Average (Annual)	20000 Daily Average (Weekly)		****	****	****		See Permit Requirements	Calculation
Flow (Calculated) 90028 Final Effluent (1)	Sample Measurement	①	****	gal/yr	****	****	****	****	Annually	Calculation
	Permit Requirement	1,892,935 Maximum Annual	****		****	****	****		Annually	Calculation

12a. From the Summary DMR Data section near the bottom of the spreadsheet, copy (either manually or using the copy/paste function) the numbers into the corresponding boxes on the DMR Summary page (please see image below).

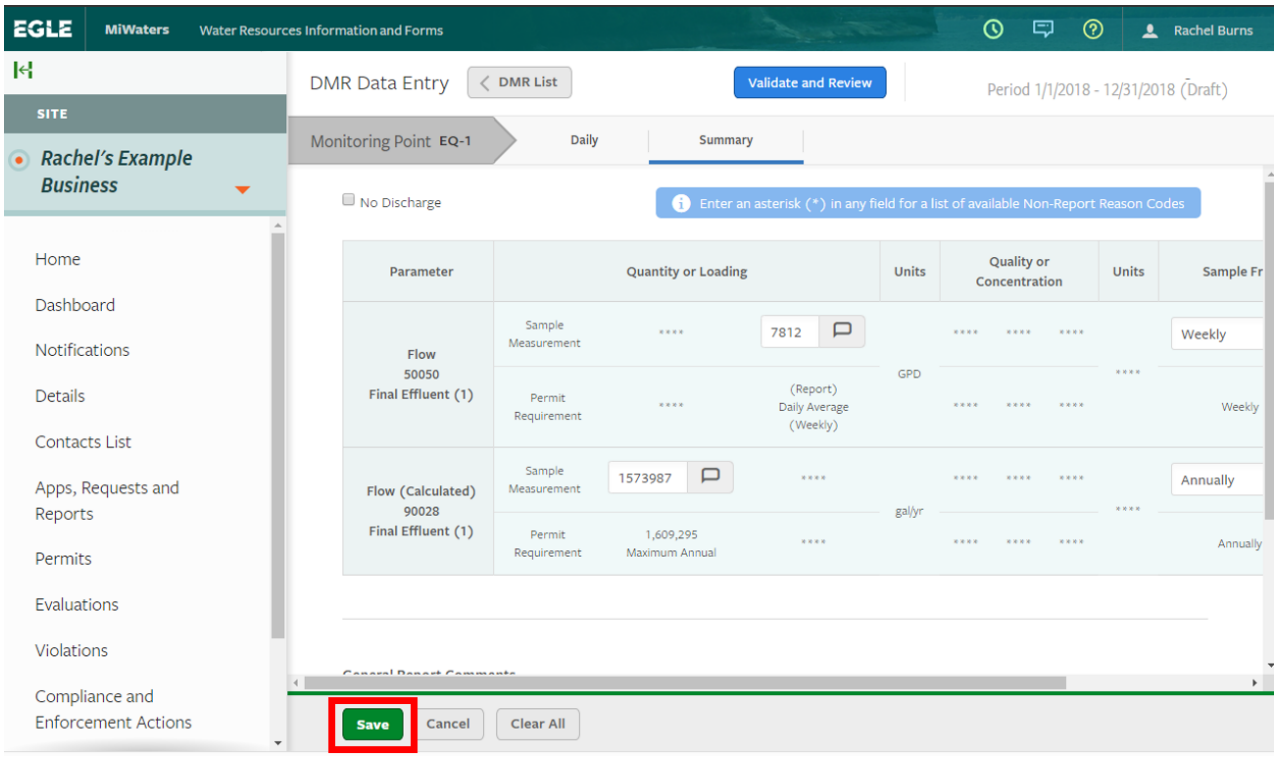
Summary DMR Data *calculated automatically*		
	Total Annual Flow:	1,930,000
	Total Number of Discharge Days:	365
	Highest Annual Daily Flow:	8,000
	Annual Averge Daily Flow:	5,288

2215-1 permits only, for other permits this box will not exist on the DMR.

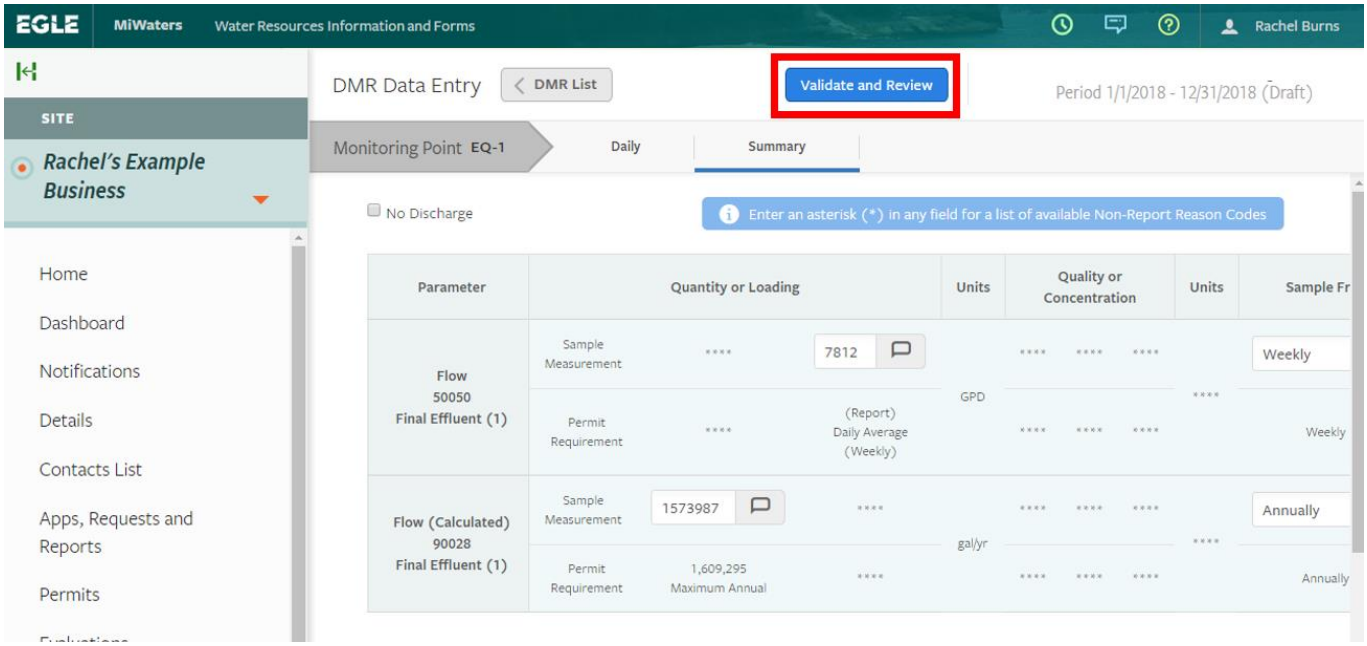
Parameter		Quantity or Loading		Units	Quality or Concentration			Units	Sample Freq	Sample Type
Flow 50050 Final Effluent (1)	Sample Measurement			GPD	****	****	****	****	See Permit Requirements	Calculation
	Permit Requirement	10000 Daily Average (Annual)	20000 Daily Average (Weekly)		****	****	****		See Permit Requirements	Calculation
Flow (Calculated) 90028 Final Effluent (1)	Sample Measurement		****	gal/yr	****	****	****	****	Annually	Calculation
	Permit Requirement	1,892,935 Maximum Annual	****		****	****	****		Annually	Calculation

STEP 13

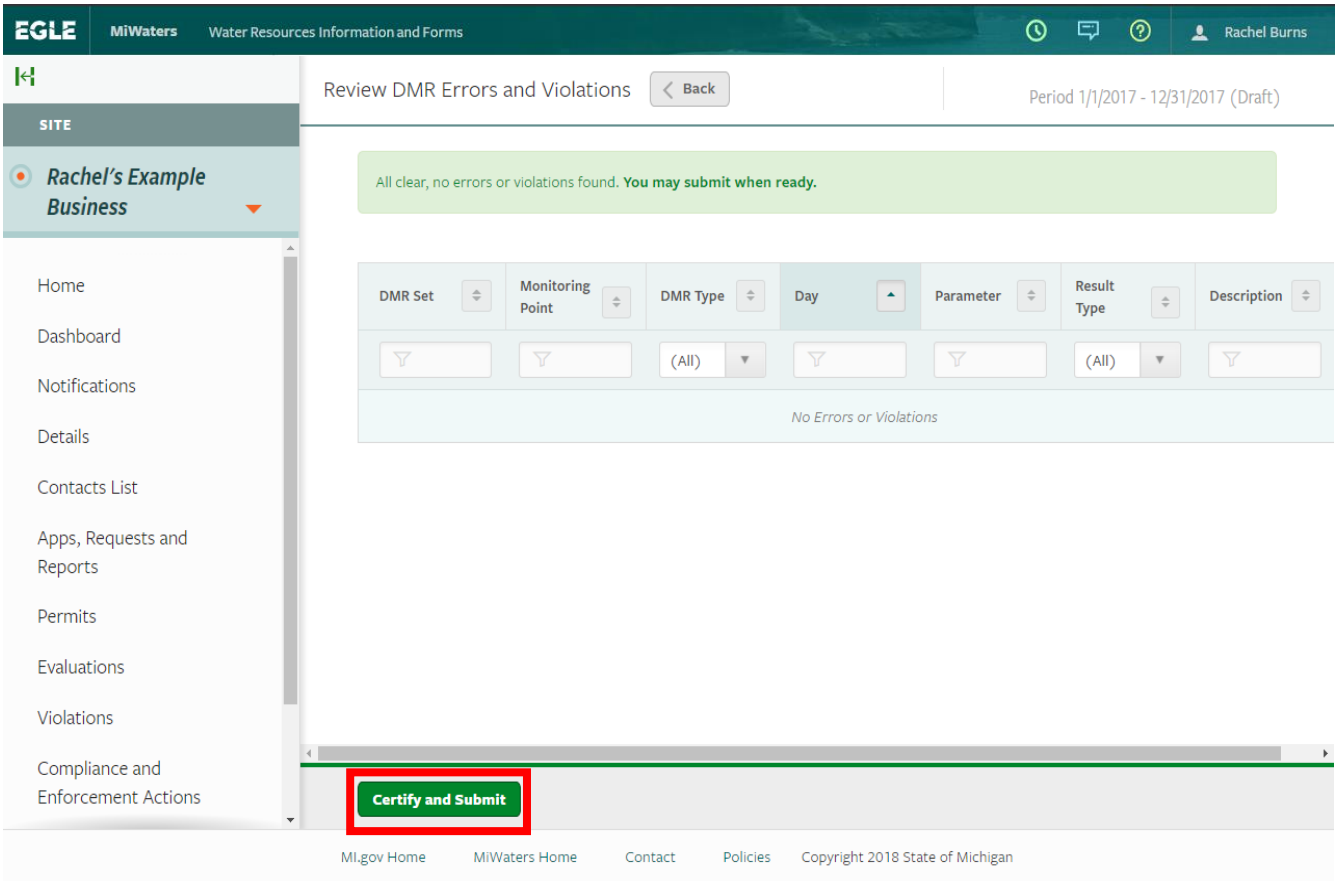
Once you have entered all required numbers, click "Save" at the bottom of the page.



STEP 14 Click the blue Validate and Review button near the top of the page.

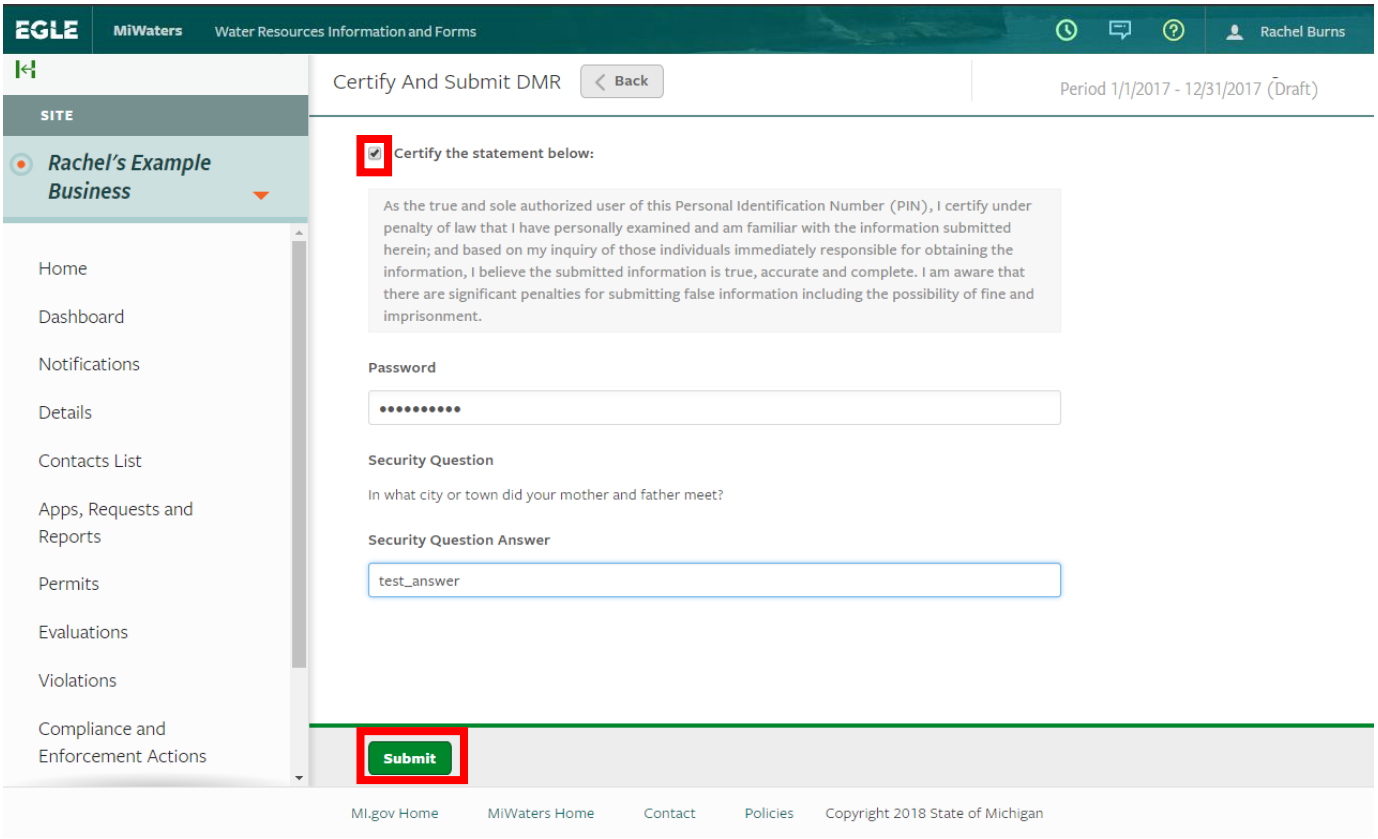


STEP 15 The review page will open. Ensure that there are no errors and click the Certify and Submit button at the bottom of the page.



STEP 16

On the Certify and Submit DMR page be sure to click the button next to the "I Certify the statement below:" line, enter your MiWaters password, provide your answer to the security question and then click the green Submit button at the bottom of the page.



STEP 17

Once the DMR is successfully submitted, a DMR Submission Confirmation window will appear. At the bottom of the page there is a Download Copy of Record button that you may use to download a copy of the submission confirmation and save to your computer or print off for your records. Once finished, click the green OK button to close the page.