WQX Web V.2.0 Tutorial 4

Working with Import Configurations

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WQX Web Tutorial 4: Working with Import Configurations

Import Configurations provide a roadmap detailing the structure and order of data files. In WQX Web, example Import Configurations for Monitoring Locations, Projects and Results files are provided for users (*to avoid overwriting the master copy, save the provided Import Configurations as your own before making changes*).

WQX Web users have three different options for composing an Import Configuration. Users are able to copy an existing Import Configuration in WQX Web, or upload a shared Import Configuration saved on your hard drive. Shared or copied Import Configurations can be modified in WQX Web to match your dataset. Provide your Import Configuration with a unique name so it does not get confused with other users Import Configurations. Alternatively users can create an Import Configuration from scratch to map their data files into WQX Web. This tutorial provides guidance in creating and modifying an Import Configuration through copying an existing Import Configuration, importing a saved file or creating an Import Configuration from scratch. For a more extensive discussion on working with Import Configurations, please refer to the following URL http://www.epa.gov/storet/wqx/products/WQX_Web_User_Guide_v2.0.pdf.

Accessing WQX Web

New users to WQX Web contact the STORET Helpdesk (Storet@epa.gov) to obtain a username and password for the WQX Web Demo environment. Users also contact the STORET Helpdesk to obtain a real username and password for submitting data all the way to the STORET Warehouse.

To access the CDX Website, open your web browser and enter in the URL https://cdx.epa.gov/SSL/cdx/login.asp. Enter your training user name (i.e. wqxwebtraining1) and password into the "User Name" and "Password" fields (for information on registering for CDX/ WQX Web enter the following URL into your web browser http://www.epa.gov/storet/wqx/wqxweb.html).

Open up your web browser and enter in the URL
http://www.epa.gov/storet/wqx/wqxweb_downloads.html. Download the WQX Web Excel (.xls) data template, and provided data files by selecting the link labeled **WQX Web Tutorials and Example Data Files**. *When using Microsoft Excel 2007, or a later version of Microsoft Excel, files will need to be saved in a macro enabled workbook format (.xlsm). The downloaded materials are for users to start with in importing actual monitoring data into WQX Web.*

Creating an Import Configuration by Copying an Existing One

1. From the WQX Web Homepage, select the "*Import Configurations"* link on the left side of the page
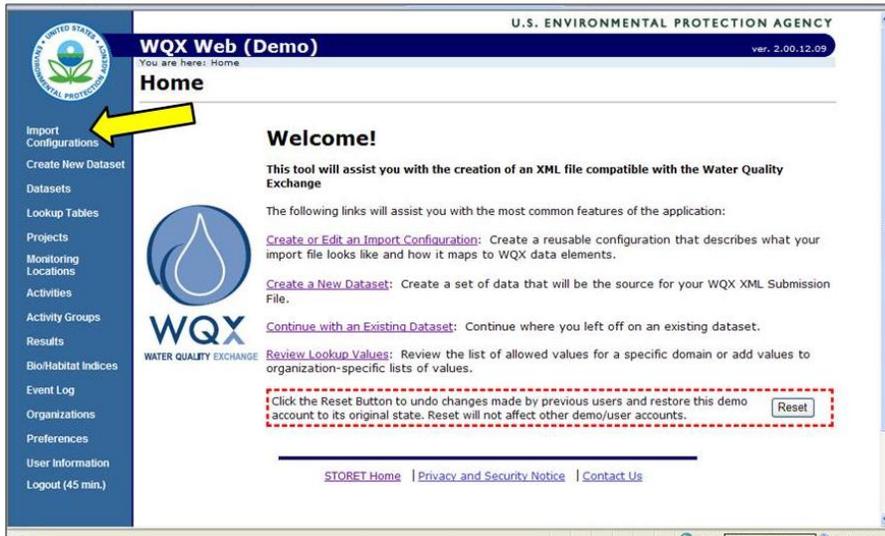
2. Click on the "*Add New"* button.
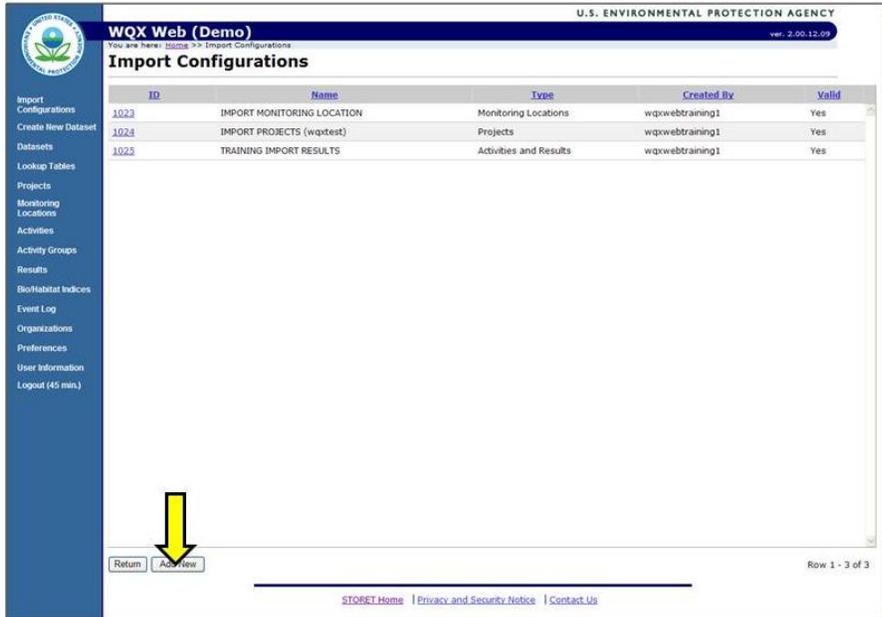
3. Click on the radio button, "*by copying an existing one*." Choose "*Activities and Results"* from the "*Import Configuration Type"* dropdown menu.
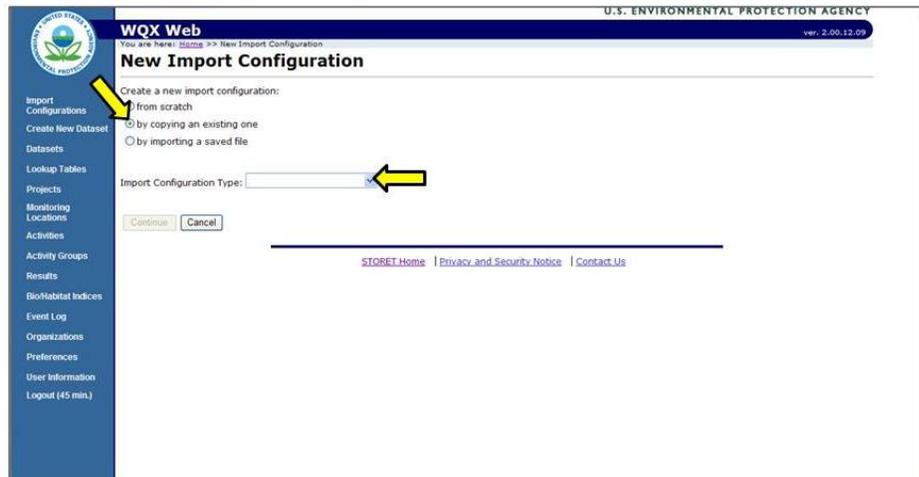
4. From the "*Import Configuration Type"* drop-down menu select "*TRAINING IMPORT RESULTS".* If the translations in the existing Import Configuration apply to your dataset, click in the check box next to "*Copy Translation"* (translations are addressed in the **WQX Web Tutorial 5, Importing a File of Results**). For copying this dataset, it is not necessary to select the "*Copy Translation"* checkbox, since there are no translations in the configuration that you are copying. Click on the "*Continue"* button.
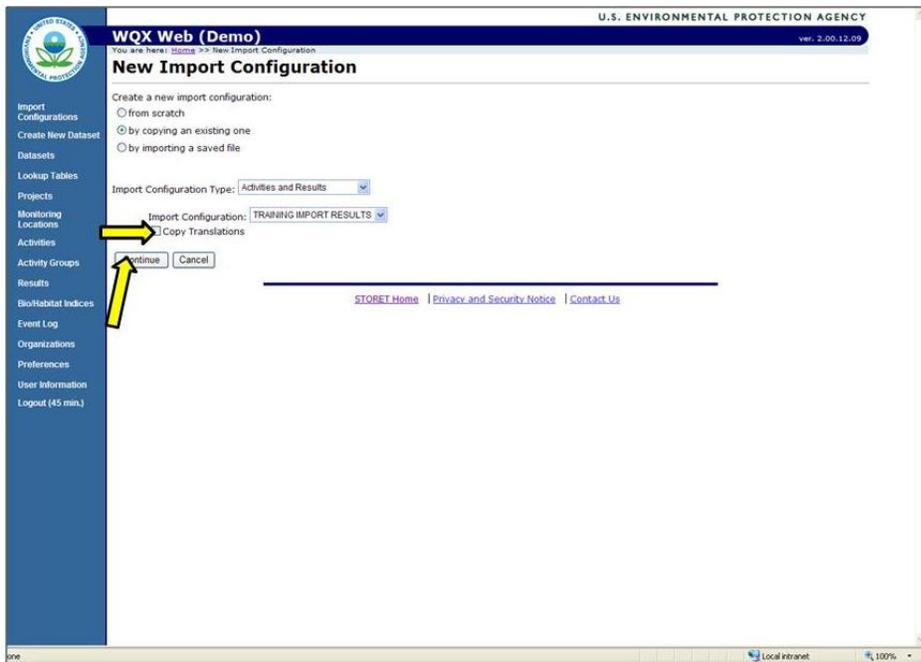
5. Change the name of the Import Configuration to a title of your choosing; the name must be different than the original, "*TRAINING IMPORT RESULTS*". WQX Web will automatically change the title to "Copy of ..." as the default name. This tutorial will use the default name, "*Copy of TRAINING IMPORT RESULTS*". Click on the link next to organization ID, to indicate the organization associated with your data.
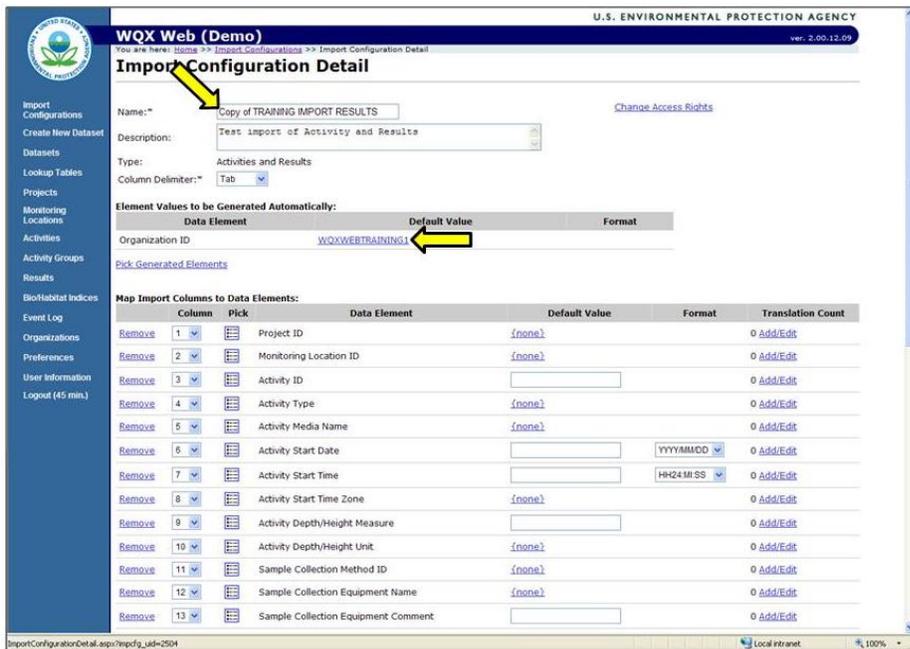
6. Take a few moments to scroll down through the Import Configuration, and review the *Map Import Columns to Data Elements Table*. This table allows a user to specify the structure of a data file, i.e. the type of Data Element located in each column. Data Elements can be added, subtracted, and modified; reordered to reflect the sequence that they appear in a data file. Scroll to the bottom of the Import Configuration, click on the "Save" button, and then click on the "*Return*" button twice, to return to the home page.

Remove	19		Result Unit	{none}		0 Add/Edit
Remove	20		Result Sample Fraction	{none}		0 Add/Edit
Remove	21		Result Status ID	{none}		0 Add/Edit
Remove	22		Statistical Base Code	{none}		0 Add/Edit
Remove	23		Result Value Type	{none}		0 Add/Edit
Remove	24		Result Analytical Method ID	{none}		0 Add/Edit
Remove	25		Result Analytical Method Context	{none}		0 Add/Edit
Remove	26		Analysis Start Date		YYYY/MM/DD	0 Add/Edit
Remove	27		Result Detection/Quantitation Limit Type	{none}		0 Add/Edit
Remove	28		Result Detection/Quantitation Limit Measure			0 Add/Edit
Remove	29		Result Detection/Quantitation Limit Unit	{none}		0 Add/Edit
Remove	30		Result Comment			0 Add/Edit

Column Header (tab delimited to copy into Excel)

[Return] [Save] [Cancel] [Delete] [Save To File]

Import Configuration Terms

Remove - **Click this link to remove a row from the table.**

Column – **Refers to the location in a datafile where a specific data element is located. i.e. column 1, column 2, column 3.**

Pick – **the table of available data elements that can be added to the Import Configuration.**

*Data Element* – **A specific category, or type of data in WQX.**

Default Values – **The value that will be automatically be used in a column in instances where the field is blank.**

Format – **Specific way that data is formatted in your file i.e. for date DD/MM/YYYY.**

Translation Count – **The number of translations, indicated for a specific row. Translations convert specific data entries into values that are accepted in the WQX schema.**

# Creating an Import Configuration from Scratch

1. Click on the "*Import Configurations"* link on the left side of the page.
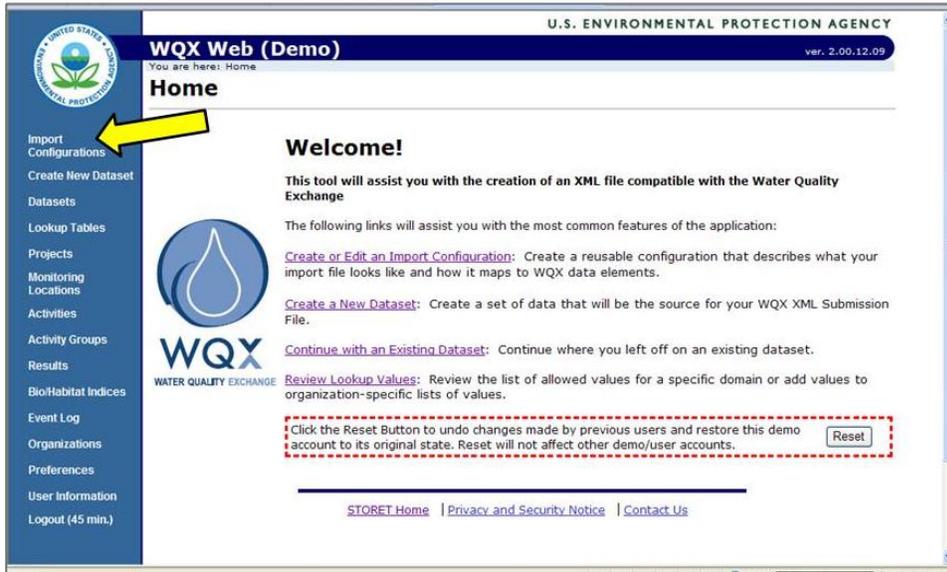
2. Click on the "*Add New"* button.
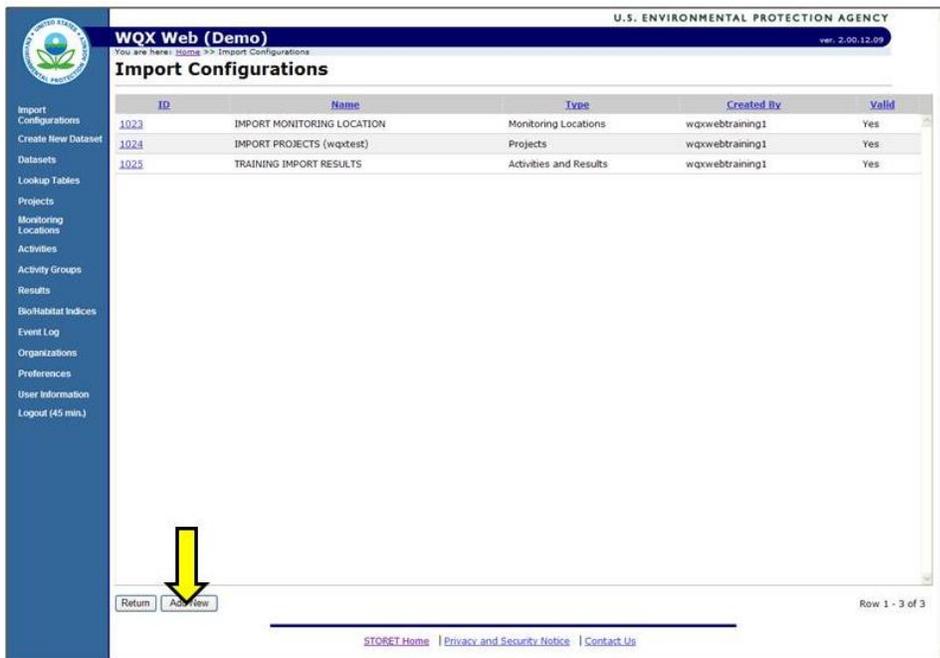
3. Click on the radio button; "*Create new Import Configuration From Scratch"*. Then from the "*Import Configuration Type"* dropdown menu select "*Activities and Results*."
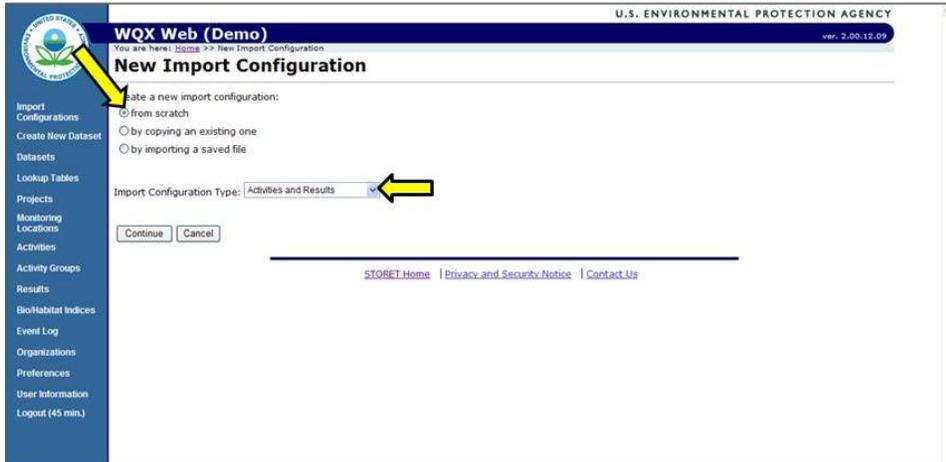
4. Click "*Continue*".

5. Assign the name "*Practice Import Configuration*" to the newly created Import Configuration and provide an accompanying description. Review the "*Element Values to be Generated Automatically*" table, and indicate your organization ID. Generated elements are elements that are not in your data file i.e. Organization ID. Organization ID is not in the results data file WQXWeb_results.txt, however it can be automatically generated by WQX Web. Click on the "*Pick Generated Elements*" link to review additional Data Elements that can be automatically generated.
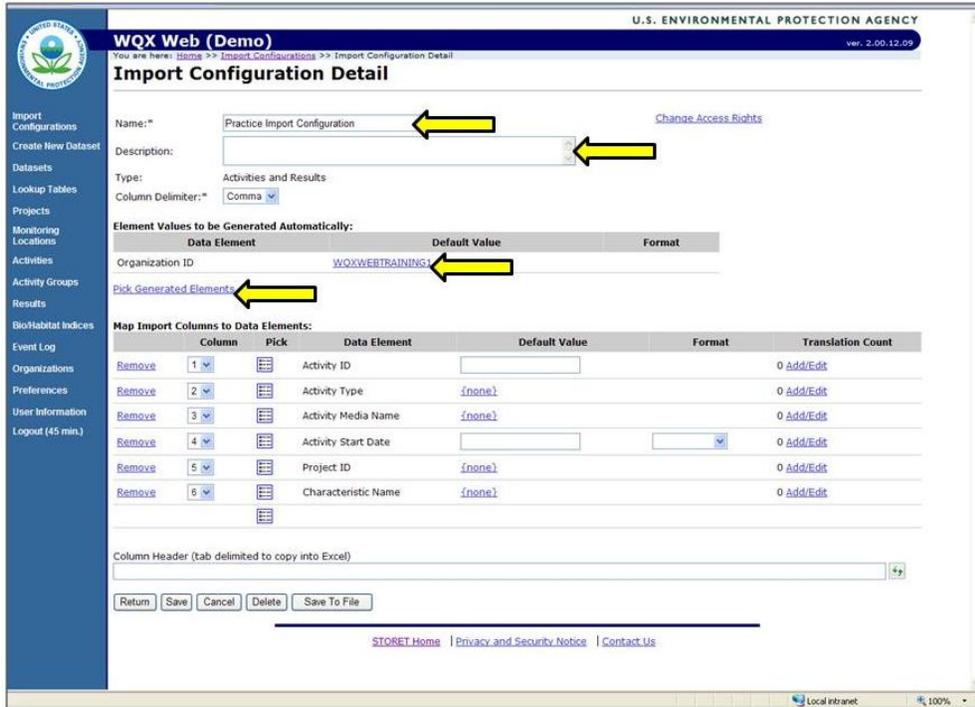
6. Scroll through the table to become familiar with the list of Data Elements that may be automatically generated in an Import Configuration. Select "*OK*" to return to the Import Configuration.
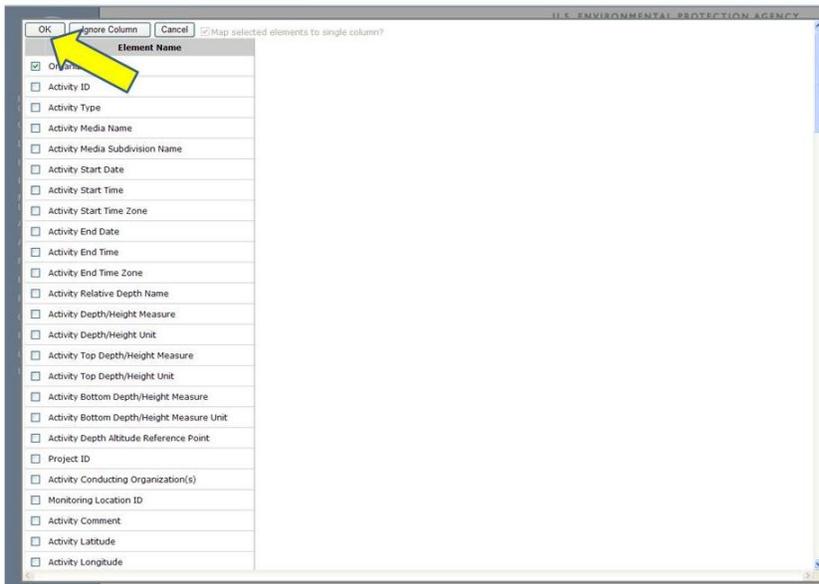
7. When the Create an Import Configuration from scratch option is selected, the new Import Configuration automatically generates several Data Elements, Activity ID, Activity Type, Activity Media Name… To map an Import Configuration to your data file, the order of Data

Elements in your Import Configuration will have to be consistent with the order of elements in your data file. To practice building an Import Configuration, create an Import Configuration that maps to the Results tab of the WQX Web Excel template (Template_WQXWeb.xls).
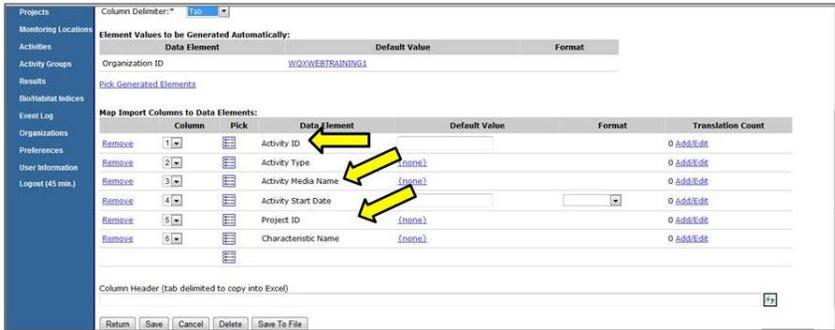
8. To practice modifying the "*Map Import Columns to Data Elements"* table, add Data Element Activity Start Time to the last (7th) row. Entering the Data Element Activity Start Time into the 7th column of this Import Configuration is consistent with the structure of the Results tab of the WQX Web excel template (***Template_WQX_Web.xls),*** where Activity Start Time is located in the 7th column. Scroll to the last row of the Import configuration, and select the table icon in the column labeled "Pick."
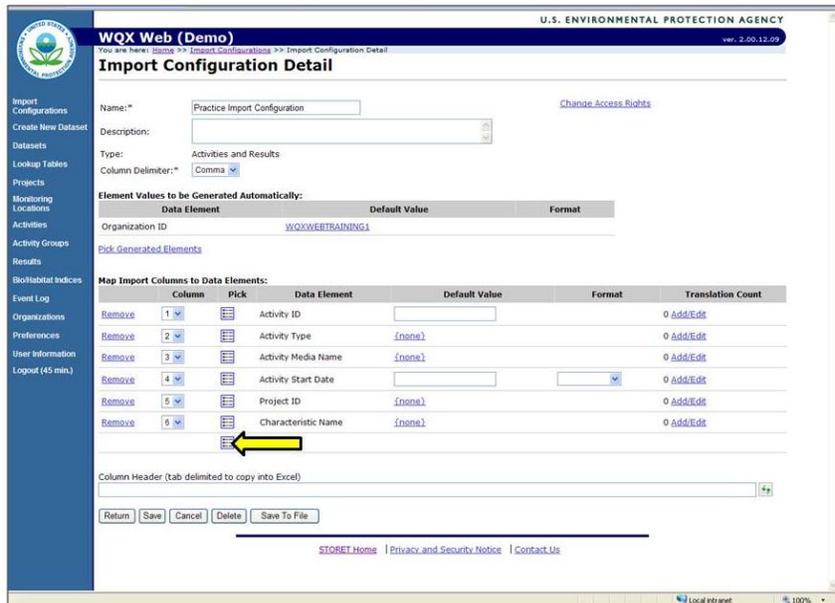
9. Click in the box next to "*Activity Start Time*" to select the Data Element.
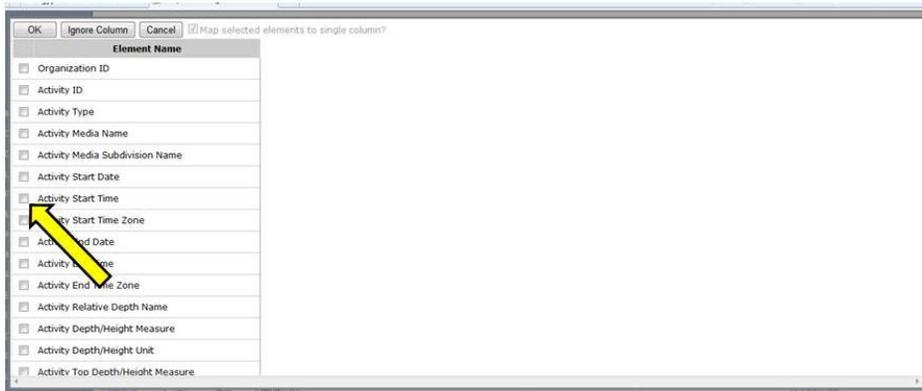
10. Select "*OK*" to confirm the selection and return to the Import Configuration. Blank columns, that contain no data, can be indicated by selecting "*Ignore column*".
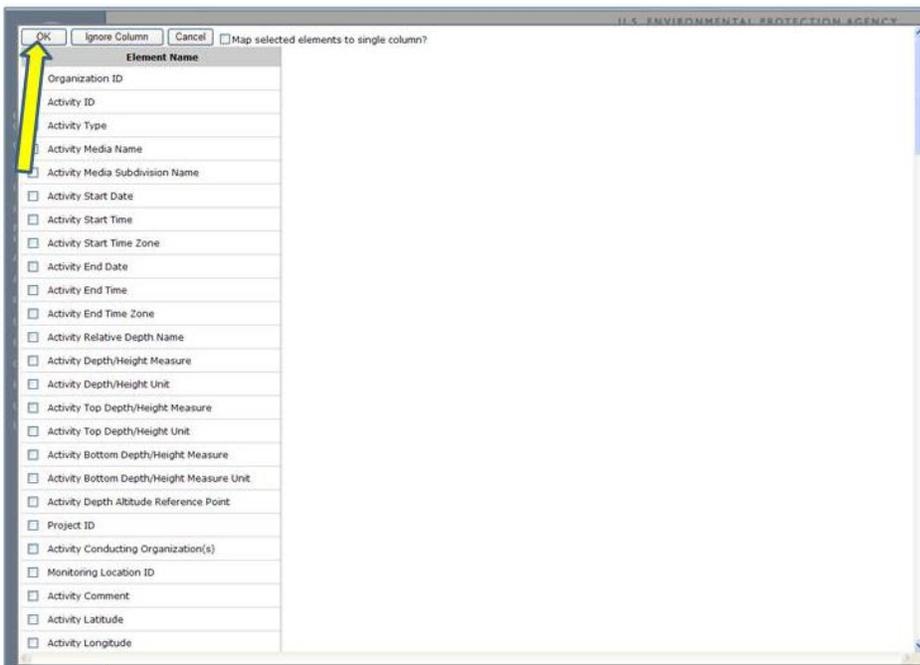
11. Click on the column drop down list and select "7".
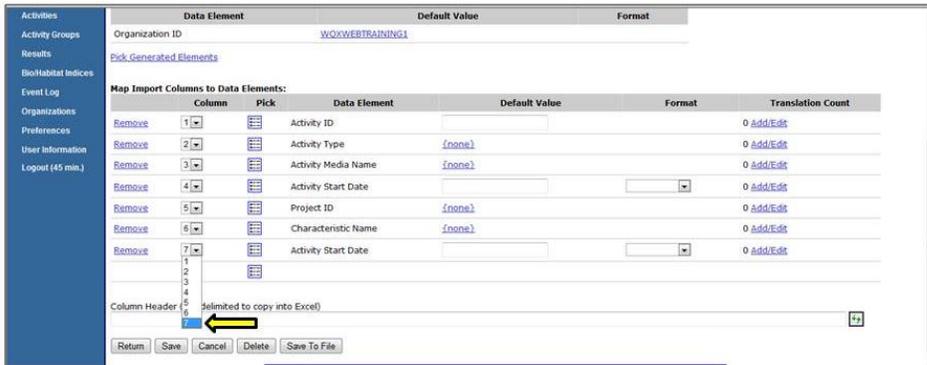
12. The Import Configuration is now modified to include Activity Start Time in column 7. To correctly map this Import Configuration to the WQX Web template, the rest of the rows in the Import Configuration would have to correspond with the columns of the template. Continue to map this Practice Import Configuration to the remaining sample data in the WQX Web template, i.e. row 1 of the Import Configuration would need to be changed to Project ID, since Project ID is entered into Column 1 of the WQX Web Excel Template.
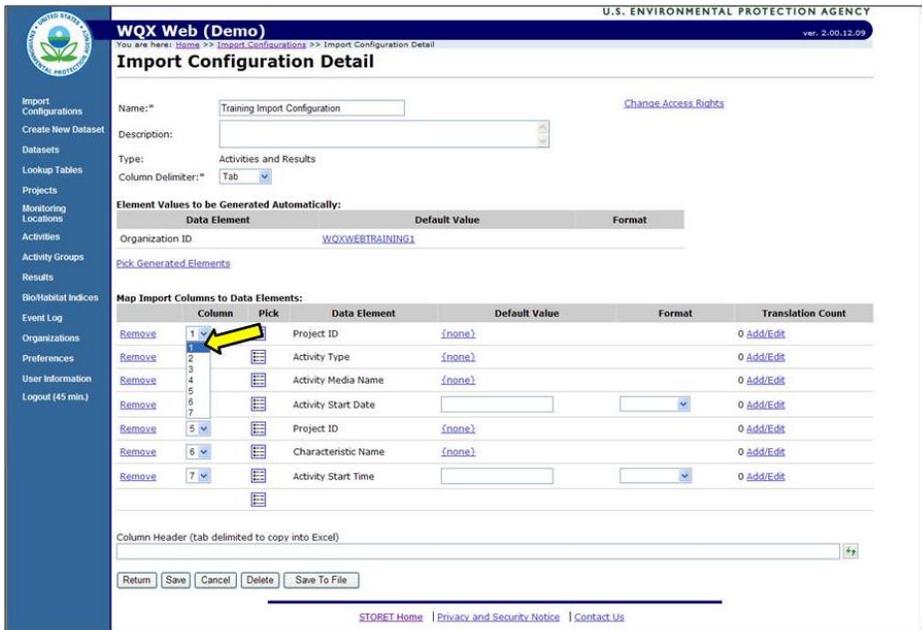
13. WQX Web performs a check of an Import Configuration before allowing a user to save the document. The business rules of WQX require certain Data Elements to be tied together, i.e. if Data Element Activity Depth/ Height Measure is entered, Data Element Activity Depth/ Height Unit must also be entered. When WQX business rules such as this one are violated, a message box pops up, informing the user that the required fields will be added to the Import Configuration. Users are unable to save Import Configurations if a business rule is violated. Select "OK" to accept the change.
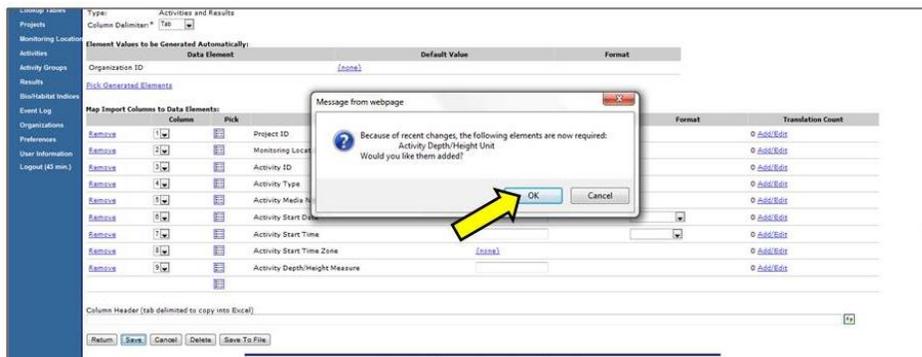
14. After selecting "*OK*," WQX Web automatically inserted Activity Depth/ Height Unit into the next available row on the page. The column dropdown menu can be used to specify the correct column the Result Depth/Height unit is located in. Select "*Save'* Again.
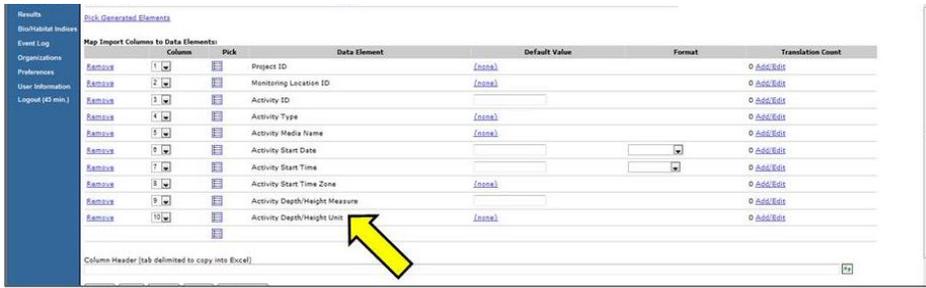
15. WQX business rules also require the format of certain data elements to be specified, i.e. Activity Start Time and Activity Start Date. WQX Web will not save this Import Configuration, unless a format is specified. Specify the format Activity Start Date and Activity Start Time to satisfy the business rule.
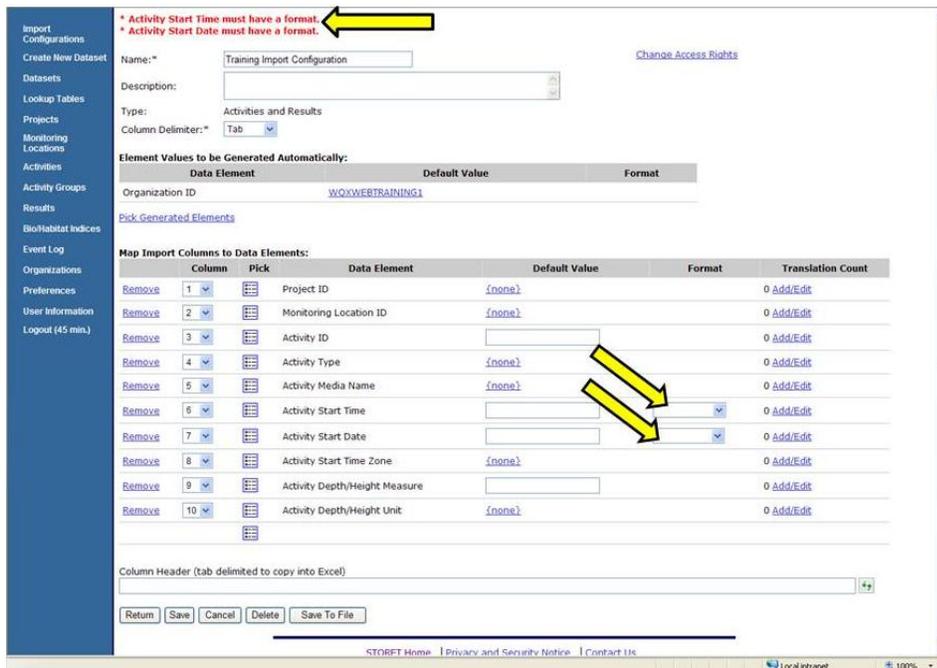
16. Click on the drop down menu next to activity start date and select the format "MM/DD/YYYY". Then click on the drop down arrow next to "Activity Start Time" and select "HH24:MI:SS". Select "Save".
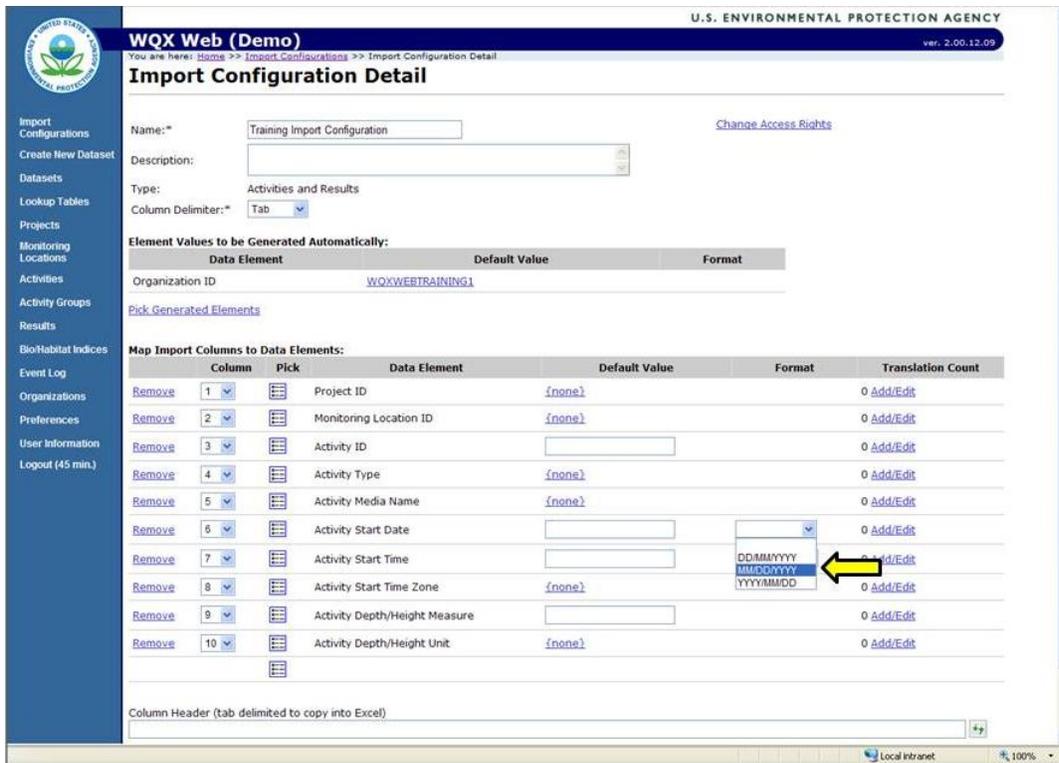
17. Since no business rules are violated, the Import Configuration has been saved successfully. As the owner of an Import Configuration, Users are able to change access, specifying who can view, update or delete data in the Import Configuration
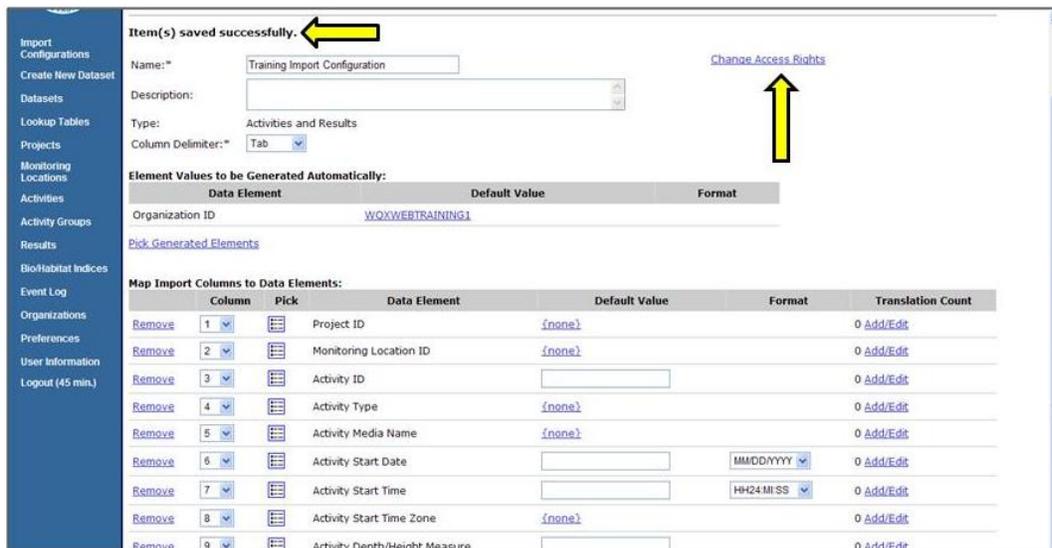
18. To automatically generate the column headers that would accompany this Import Configuration, click on the refresh button at the bottom of the page. Import Configurations can be saved to a user's hard drive by selecting the "Save To File" button at the bottom of the page.

Importing a Saved File

1. Import Configurations saved to your hard drive can also be uploaded into WQX Web and can be shared between users. On the WQX Web Homepage, select the *"Import Configurations"* link on the left side of the page

2. Click on the *"Add New"* button.

3. Click on the radio button; "*Create from File,*" then select "Browse" and locate the Import Configuration saved on your hard drive.

4. Import Configurations are saved in a .bin format. Load your Import Configuration and select "Continue".
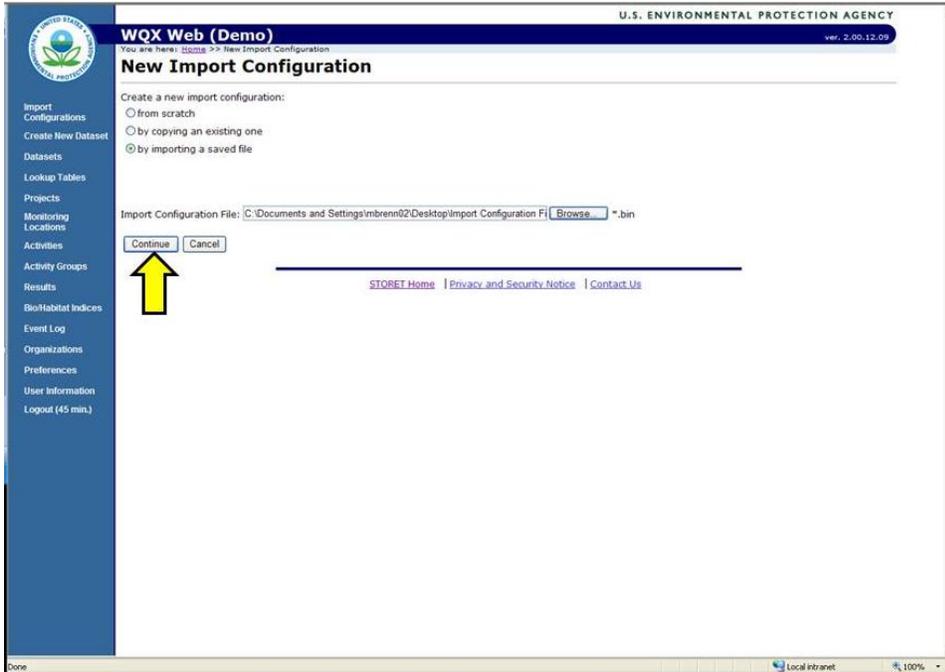
5. The Import Configuration is now available to view and modify in your web browser. Select "Return" twice to return to the WQX Web homepage.
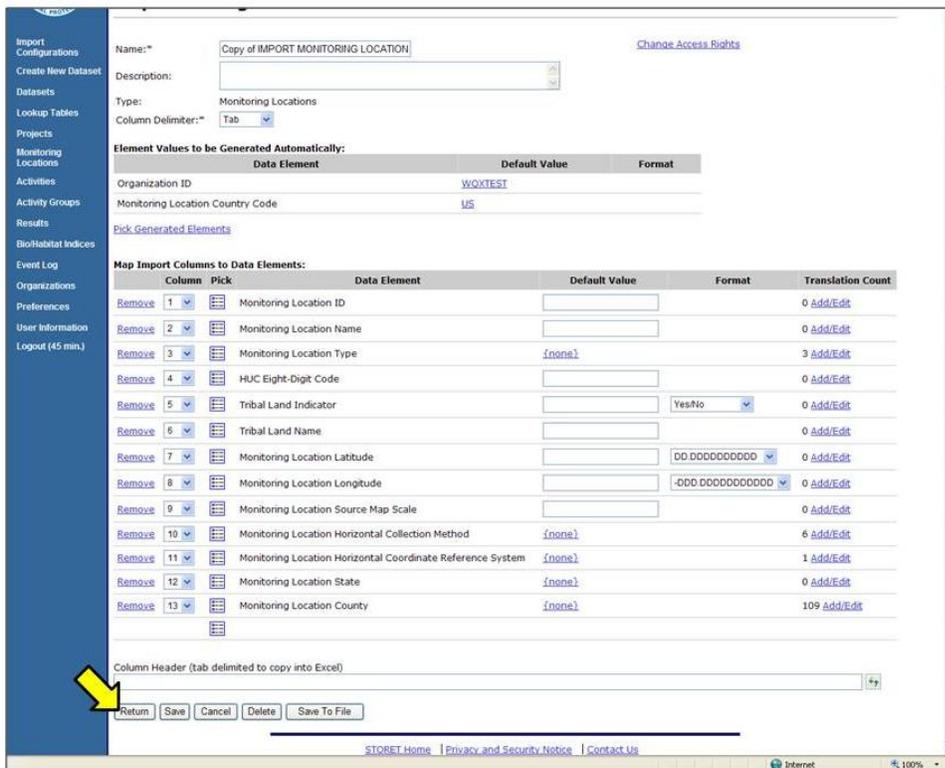
Summary

This tutorial has provided guidance on using preexisting Import Configurations in addition to creating Import Configurations from scratch. Please refer to the additional tutorials for guidance on importing Monitoring Locations, Project, and results data. For a more detailed description on using WQX Web, please refer to the WQX Web user guide accessible at the following URL http://www.epa.gov/storet/wqx/products/WQX_Web_User_Guide_v2.0.pdf.