**ORM2 BULK PROJECT/AQUATIC RESORUCE (AR) UPLOADS**

**Template Guidance**

**BACKGROUND**

Each ORM bulk data upload request must be accompanied by an associated workbook containing the data to be uploaded (Consolidated Upload Template with Validation). These workbooks have different columns based on the current Water of the US definition/rule in effect. Therefore, users should choose the appropriate workbook needed for the current rules and state being loaded.

For Example:

Consolidated Upload Template with Validation – AMENDED\_2023RULE.zip

Consolidated Upload Template with Validation – PRE2015\_POSTSACKETT.zip

The Request Details worksheet should be clearly filled out so the ORM team accurately understands the requirements for the project upload. Additionally, the validation must be performed on the workbook prior to submission. (Click on the green shield on the upper-left corner of the workbook to execute the data validation macros; see detailed instructions provided in the *Data Validation Instructions* section for more information on validating worksheets.) Workbooks with no Request Details or presenting validation errors will be returned to the requestor for more information.

In the workbook file name, include a DA Number followed by additional text to identify the type of upload requested (PRE2015\_POSTSACKETT, AMENDED\_2023RULE, etc). Additional qualifying information may be included if needed. (The version date (as shown when downloaded from ORM Home) does not need to be included in the filename as this is displayed on the first tab).

 Examples:

 SWG-2015-00001\_ PRE2015\_POSTSACKETT.xlsm

 SPA-2019-00593 ARs and Impacts ORM Upload- AMENDED\_2023RULE.xlsm

Only the most recent version of the upload forms will be accepted. Refer to the ORM2 homepage to determine the latest version of the form. These forms can and do change over time, so you will need to check the ORM2 homepage for the most current.

The upload request may also include Shapefile submissions for AR and Project location. The .shp, .shx, .dbf, and .prj files at a minimum must be received to be a complete submission. For additional information on content of the Shapefiles, see the *Shapefile Instructions* section below.

**WORKBOOK TIPS**

**General**

* Be sure to only save files as .xlsm. Saving as .xlsx will result in the Validation Macros failing to function.
* When cutting and pasting information into the workbook, ensure to paste VALUES only. (Right click cell, choose Paste Special, select Values.) Otherwise, the format of the cells may be changed, causing potential data errors. (This is often evidenced by cells appearing as DATE when normally number or text.)
* Workbooks are protected to ensure column headings and validations are not inadvertently changed.
* Ensure the Request Details tab has been filled out to provide itemized guidance on the requested upload.
* Fields / Column Information
	+ Green columns are required and will give a validation error if not provided.
	+ Yellow columns are conditionally required, based on other values in the workbook.
	+ Grey columns are optional.
* Clicking in a column cell will provide a “hover” message with more information on that field.

**Relating Worksheets using Waters Name**

The upload templates use the Waters Name field to tie information together across worksheets.

As a simple example, if you have a Mitigation that is to be related to a new Permit Action (NWP or RGP\_PGP), use the same Waters Name in each worksheet and that Mitigation will be associated with the new related Permit Action within ORM.

Duplicate Waters Names are not permitted on the AqResources, NWP, RGP\_PGP nor the specific \_JD worksheets. The Mit-PermitteeResp and MitBank\_ILF tabs do allow duplicate Waters Names. See the *Impacts* section below for details on the use of Waters Name duplicates for Impacts.

**Request Details**

On the Request Details worksheet, provide complete information so the ORM team accurately understands the requirements for the project upload. Specify Load and Finalize values for any tab that contains data.

* For ARs, indicate in “Required Additional Information” whether the data has been already loaded by the District Administrators.
* Permit Action ID? When Impact and/or Mitigation are provided, but not loading a Permit, you must provide the ACTION ID of one unfinalized Permit to which the data is to be tied. This is not the DA Number. You can get this information from the Action\_ID column on the Folder/Regulatory Actions Page.
* For NWP or RGP/PGP: if the permit is to be tied to a JD, but the JD information is not included for upload, provide the ID of the JD to which the uploaded permits should be associated. (The id can be viewed in ORM by hovering over the specific JD in the JD lists.)
* Reasons For Delay? For NWP or RGP/PGP, if the Permit End Date is more than 60 days past the Date Received, then specify the Delay Reason information on the Request Details page. There is no column on the NWP, RGP/PGP worksheet. Multiple Delay Reasons may be provided.

**Aquatic Resources**

Important: Ensure you have the correct workbook for the State and current Waters of the US Rule (eg. PRE2015\_POSTSACKETT, AMENDED\_2023RULE). This will affect the available values in the Waters Type field.

**Impacts**

To specify which Impact goes with a specific Permit Action (NWP or RGP\_PGP), the Waters Name must match. Since Impacts are required for all Permits, for each Waters Name in the Permit worksheet (NWP or RGP\_PGP) there must be a corresponding Waters Name in the Impact worksheet.

To upload all Impacts to one already existing, unfinalized permit, specify the Action ID on the Request Details Tab and do not include Permit data on the NWP or RGP\_PGP worksheets. This will associate that existing Permit with ALL the Impacts in the upload template.

For the Impacts tab, you may have duplicate Water Names listed **only if** the impacts have different Impact Duration (permanent vs temporary) for the same water. Note that this Waters Name should only be listed on the Permit tab once. Both Impacts will be associated with the resulting Permit.

Note if there are duplicates in the “Name” column (this is the Impact name) the fields will highlight in Yellow to call attention to duplicate names but will not result in a validation error.

**Permits (NWP or RGP\_PGP)**

Include only one type of permit per workbook (NWP, PGP, or RGP). Multiple workbooks may be submitted for a Project if additional permit types are necessary. The upload processes cannot support loading more than one permit type at one time. For example, a workbook may include rows to create five PGPs, but should not include both NWP and PGP.

One or many Fund sources may be chosen. If no fund source, select No for each fund source column.

**Impact/Mitigation relationship to Permits**

When Impact and/or Mitigation data are provided, but the upload does not include Permits, you MUST specify the ID of the permit to which to load the data. Enter this information on the Request Details tab. This should be an un-finalized Permit that already exists in ORM. (Data cannot be loaded to finalized permits, as the bulk upload process simply follows existing ORM processes.) The Permit ID can be viewed by hovering over the Permit in the Folder Tree view.

When relating impacts to permits, the Bulk Upload process currently has the ability to

* load all impacts to one existing permit (as noted previously, specify the related permit action id) OR
* tie each impact to a corresponding permit being uploaded, related by Waters\_Name. (This presumes there is only one Aquatic Resource impact per permit (1:1)). One exception: temporary and permanent impacts can be uploaded to the same aquatic resource and corresponding permit. See the *Impacts* section for more details.

The upload process cannot handle multiple permit actions which have multiple Aquatic Resource impacts and mitigations per permit action. For this scenario, the impacts and mitigation data can be uploaded (unfinalized) under one permit action to get the data into ORM. Subsequently, the Project Manager would then move the impact/mitigation to the correct permit actions and finalize as appropriate.

**Permit to JD relationship**

When JDs and Permits are both specified in an upload, then the JD will be associated with the newly created permits. This can be seen in the Available JDs check box on the permit action screen after upload.

For permits (NWP or RGP/PGP), if the JD information is not included for upload, you may associate an existing JD to the newly loaded permits. To do this, obtain the ID of the JD desired by hovering over the specific JD on the JD tree in ORM. Then enter this ID on the Request Details tab of the workbook. (Note: Associating a JD to the new permits is not mandatory.)

**DATA VALIDATION INSTRUCTIONS**

The spreadsheets to upload data into ORM2 contain validation tools to ensure accuracy of the data before submitting to the ORM2 team. Performing the validation upfront will alleviate the need for back-and-forth correspondence between the requestor and the team to correct any possible errors in the data.

The upload process uses one workbook for uploading ORM ARs, Mitigations, Impacts, Permits and JDs. This helps in validating relationships between waters and other data types.

To run the validation tool, first enter all data in the appropriate columns and worksheets. Once you have completed entering the data and have saved the document, click the green shield at the top left of the workbook.



(If a Security Warning appears indicating Macros have been disabled, you must first select “Enable Content” before the validation will process.) The tool has a tooltip showing "Validate Worksheets." Clicking this button executes the data validation macros. Any resulting errors are added to the “Validation” worksheet. This tab is opened after the process is complete to allow the user to see the output. The validation output includes the worksheet (data type), column, and cell for where the possible error was found and a brief explanation of the issue.

The majority of the validation checks are captured in the Rules tab of the workbook. For a complete list of validation rules, refer to the UploadValidationRules.xlsx document found in the zip file with the workbook.

Please note any subactions required per EVALCKLST must be created and finalized manually in ORM2; they are not supported via the spreadsheets or upload process.

**SHAPEFILE INSTRUCTIONS**

Shapefile data can be uploaded into ORM2 through a bulk upload process to populate either Aquatic Resources, Project Location, or both.

For Shapefiles, the .shp, .shx, .dbf, and .prj files at a minimum must be received in order to be a complete submission. ORM2 also has the ability to accept KML/KMZ files; however, the preference is to receive shapefile data.

The submission should clearly identify the attached files and where each should be loaded. In the file name, include a DA Number followed by additional text as needed to identify multiple files (such as Streams, Wetlands, etc).

 Examples include:

 SWF-2004-00559\_Shapefile\_Streams.shp, .shx, .dbf, and .prj

 SWF-2004-00559\_shapefile\_Wetlands. .shp, .shx, .dbf, and .prj

NOTE: Please only include the files that are directly related to the upload. (Eg. Waters, Boundary). Shapefiles included which have no bearing on the upload often result in delay of the upload due to extra work to load and evaluate the data.

**Aquatic Resources Shapefile Upload**

For Aquatic Resources Shapefile Uploads the submission must include both the Aquatic Resources worksheet (in the upload template) and the accompanying Shapefile data files. Within the files, the following conditions must be met in order to tie the Shapefile data to the Aquatic Resources for the project:

* Each geometry in the shapefile must include an attribute for WatersName.
* Each WatersName within the shapefile MUST be unique.
	+ NOTE: While the submission can include several shapefiles for Aquatic Resources (such as Wetlands, Streams, etc.) the WatersName across ALL files must be unique.
* There must exist a one-to-one relationship between the waters names in the AR worksheet and the waters names in the Shapefile submission. Note that this means that individual shapefile features making up a single entity (i.e., multiple lines or polygons for one water or project) must be merged into one single feature which may contain discontiguous parts.

**Project Location Shapefile Upload**

When loading the Project Location to ORM, the submitted file must contain only one Geometry. This means that individual shapefile features making up a single entity (i.e., multiple lines or polygons for one water or project) must be merged into one single feature which may contain discontiguous parts.

**Shapefile Geometry Load Errors**

Quite often we encounter errors in the submitted shapefiles. We often are able to fix specific issues during the upload; however, if too many occur or other errors exist, we will need to return the submission for correction.

Following are the issues which can be corrected if there are not too many occurrences:

* the boundary of a polygon intersects itself (ORA-13349)
* adjacent points in a geometry are redundant. (i.e., There are repeated points in the sequence of coordinates.) (ORA-13356)
* wrong orientation for interior/exterior rings (Be sure the exterior rings are oriented counterclockwise and the interior rings are oriented clockwise.) (ORA-13367)