

Beneficial_Use_Return_Flow.xlsx – Changed first “DOMESTIC” field to “DOMESTIC_GOV”. Altered formula for second “DOMESTIC” field to Flag as “domestic” if either 1) Small Domestic Registration or 2) Domestic listed as use AND smaller than 10 AF face value to be consistent with common staff QAQC corrections, it’s also consistent with Domestic Registration values of up to 10 AF. Deleted manual override of BU type and Removed Manual override of return flow values and intermediate calculation for manual override (the manual override would take place in the QAQC Working File via directly over-writing the module outputs). Also, the BU manual override was in the wrong location, as you would need to update every record of BU type for each water right, rather than just updating the final ASSIGNED_BENEFICIAL_USE field (which should be updated in the QAQC Working file as needed). Updated corresponding tab in the QAQC Working File (BeneficialUse_ReturnFlow) to match the module fields, and added QAQC columns to the end. This tab can be Data Only. QAQC Changes will be made by manually over-writing the ASSIGNED_BENEFICIAL_USE (column W), FULLY NON-CONSUMPTIVE (column X), POWER_DEMAND_ZEROED (column Y) fields, and/or the monthly PERCENT_RETURN_FLOW fields (if return flows are incorporated into WAA), and importantly to preserve a transparent record of changes made, the QAQC_ACTION_TAKEN_Y_N field, and the QAQC_NOTES (optional) field.

Diversion out of Season_Part_A.xlsx – no changes made to module. Updated corresponding tab in QAQC Working file to remove QAQC ACTION TAKEN fields and add back missing header rows. Part A could be removed, but remains in the final Working File as a reference for the months that are “In Season” for each water right.

Diversion out of Season_Part_B.xlsx – no changes made to module. Updated corresponding tab in QAQC Working file to remove QAQC ACTION TAKEN fields and add back missing header rows. This update carries the results of Diversion out of Season_Part_B to the master table for reference on how many out of diversion records are associated with the Expected Monthly Diversion Amounts for each water right. Calculated percent of records that are out of diversion.

DuplicateMonths_Years – Module now uses the PivotTable from the ExpectedDemand_Input_Table.xlsx module in lieu of the RMS flat file table. Reworked formulas to improve efficiency for “TotalMonthlyDiverted”, “AnnualTotalDiversion”, and added concatenated intermediate calculated fields. Changed name of “NumberOfOccurrencesWithinSingleReport” and “OccurrencesAcrossReports” fields to “Repeated_Monthly_Reported_Values” and “Repeated_Yearly_Reports”, respectively and revised formulas for efficiency and accuracy. Added new table structured by 1 row per water right, added “Total_Duplicate_Years” and “Total_Duplicate_Months” fields, along with annual duplicate monthly reported value fields. Added percent values for each attribute. Updated the QAQC Working File to match fields accordingly.

DuplicateReport_SameOwner - Module now uses the PivotTable from the ExpectedDemand_Input_Table.xlsx module in lieu of the RMS flat file table. Reworked formulas to improve efficiency, used concatenated pre-calculated fields to reduce array iterations of the SUMIFS formula. Added new table structured by 1 row per water right OWNER. Fixed error where duplicate report accounting was tripled for each use type (DIRECT, STORAGE, USE) and x12 for each month, because the annual count was added to each monthly line item by use type.

Missing_RMS_Reports.xlsx – reworked formulas to use concatenated structure rather than named ranges and xlookups. Added new table structured by reporting year to simplify calculations and add

increased clarity on which reports have been submitted for each right. Added percent of reports submitted field to carry over to master table.

PriorityDate – Modified STATEMENT_PRIORITY_SOURCE formula to include Federal Claims.

ExpectedDemand_ExceedsFV_UnitConversion_StorVsUseVsDiv_StatisticsCLEAN.xlsx – updated formulas, split calcs between module and QAQC working file. Significant changes to the first half of the module, utilize Pivot Table in lieu of Xlookups, greatly reducing computational resource loads and speeding up the process. Improved process for QAQC of reported values using separate scratch worksheets for each reviewer, which can be combined prior to pasting into Working File. Created new spreadsheet that combines the scratch files and identifies which records were modified from the As-Reported RMS data.

QAQC_Working_File – Revised tabs to match structure of modules. Revised multiple lookup formulas in Master Table. Converted several flagged fields to Percentages rather than total record counts so it's more meaningful to an observer without needing to dig into the underlying data.