Flag 17: Classify records into groups by “Beneficial Use Types” - identify dominant BU (by sorting or other logic) when multiple BU’s are listed

**Function name**: group\_by\_use\_type

eWRIMS Analyzer Logic:

Looked at all the BU combinations and used trends in the data to categorize into dominant “Groups”

* All non‐cannabis or non-municipal applications that list irrigation as a BU are categorized into the Irrigation BU Group
* App TYPE Registration Cannabis, then Cannabis is dominant BU
* If Municipal listed as BU, municipal is dominant BU
* As seen in Figures 13/15, when apps list a BU of irrigation in addition to other BUs, the diverted volumes are typically dominated by irrigation – thus, they are binned as irrigation dominant BU
* Apps with BUs of both Recreation and Irrigation have water use similar to Irrigation-only, thus they are recognized as Irrigation Dominant BUs
* Apps with both Recreation and Domestic BUs have similar water use to those with domestic-only but remain categorized as Recreation dominant BU because they contain monthly distributions distinct from Domestic BU Group
* Apps with both Stockwatering and Irrigation more similar to Irrigation than Stockwatering, thus Irrigation is dominant BU
* Apps with Stockwatering as sole BU are categorized as Stockwatering dominant (no combos)

**Data Source:**

* ewrims\_flat\_file.csv

<https://intapps.waterboards.ca.gov/downloadFile/faces/flatFilesEwrims.xhtml?fileName=ewrims_flat_file.csv>

* ewrims\_flat\_file\_use\_season.csv

<https://intapps.waterboards.ca.gov/downloadFile/faces/flatFilesEwrims.xhtml?fileName=ewrims_flat_file_use_season.csv>

**13 columns of BUs – Y/N – using eWRIMS data, not reported RMS data**

**Use EA Logic to populate additional field w/ what we think is dominant BU?**

**Existing Fields:**

* APPLICATION\_NUMBER (ewrims\_flat\_file.csv)
* USE\_CODE (ewrims\_flat\_file\_use\_season.csv)

**New Fields:**

* New field for EACH “USE\_CODE” type (Irrigation, Stockwatering, Aesthetic, Domestic, Aquaculture, Dust Control, Fire Protection, Fish and Wildlife Preservation, Frost Protection, Heat Control, Incidental Power, Mining, Milling, Industrial, Municipal, Snowmaking, Recreational, Power, Other) – 19 **(Note for Daron: these are the actual drop down values)**

Create 19 new fields: for each “USE\_CODE” type –

populate Y/N for each APPLICATION\_NUMBER