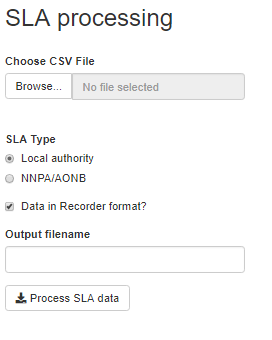
# SLA Processing Shiny app

An app written in R and Shiny to process data files output from Recorder or QGIS to filter and format data for an SLA for a local authority or national park. The app replicates the functionality in the Commercial Restrictions Macro when the SLA search option is selected.

There are options:

* To specify the CSV file containing the data
* Whether the SLA is for a local authority or national park
* Whether the data has originated from Recorder



## Output

* An Excel spreadsheet. Some fields may be highlighted if there is data that needs to be checked before the next stage of processing.

## Running the app

The source files for SLAs are typically too big to host the Shiny app online. Therefore it needs to be run within RStudio. See the document “R Shiny and Github” for notes on how to do this

## Code overview

The code makes extensive use of the ERIC\_Data\_Proc data processing library developed in R.

* Get input parameters
* Read the data from the input file
* Rename some columns if the data is from Recorder
* Format the date field
* Remove data that we don’t want from specific surveys:
  + All CDBC records
  + Northumbrian Water Violet Crystalwort records
  + Tom Tam’s Bedstraw Hawk-moth records at Holy Island
* Remove records from the “Great Crested Newt License Returns “ survey with zero abundance
* Merge location columns
* For national park surveys add a broad group column based on the taxon group
* Update labels, survey names, etc.
  + For EA surveys "River Jelly Lichen 2005", "White-Clawed Crayfish 2005", "Pale Bristle-Moss & Spruce's Bristle-Moss 2006" and "Orange-Fruited Elm-Lichen 2005" & the species is one of the ones surveyed for ("Collema dichotomum", "Austropotamobius pallipes", "Thotrichum pallens","Thotrichum sprucei" "Caloplaca luteoalba"):
    - Blank out location
    - Obscure grid ref
    - Add note about contacting EA
  + For planning/misc surveys blank out the survey run by field
  + For Terry Coult surveys blank out the survey name field
  + Remove any references to “Terry Coult” in the recorder or survey run by field
  + For the RSNE survey set the recorder field to RSNE
  + For the North Pennines AONB remove references to “farm” in the location or “(farmer)” in the recorder field
  + For the Butterfly Conservation survey:
    - Set the recorder field to “Butterfly Conservation”
    - If the species is one of Grayling, Large Heath, Small Pearl-bordered Fritillary or Northern Brown Argus blank out the location and add a note about contacting Butterfly conservation
  + For the National Bat Monitoring survey add a note linking to the metadata document on the ERIC website
  + For the “Batsites Inventory for England 1949 - 2011” and “Natural England Bat Worker Records” surveys add the NE copyright notice
* Set the protected flag (AllUkLeg field to “Yes”):
  + For all amphibians except “Mesotriton alpestris”
  + For specific species ("Arvicola","Lutra","Meles" and "Sciurus")
  + For specific groups ("fish, jawless (Agnatha)" , "marine mammal" and "reptile")
* Fix designations for local BAP species (Northumberland, Durham and Tees Valley):
  + For species in the specified lists add the appropriate BAP text to the All designations and NE Local BAP fields
* Calculate eastings and northings
* Format the data and check for:
  + - House numbers in location
    - Zero abundances
    - Swear words in comments
    - E-mail addresses in comments or recorder name
* Write it to an Excel spreadsheet highlighting any fields as necessary
* Save the Excel spreadsheet, asking the user for the name and location

Anne Donnelly – 20/07/22