Kern County Parcels CDFA join on APN

The purpose of this Rmarkdown document is to join CDFA tabular data to the Kern County Parcel shapefile. Two previos Rmarkdown documents prepared APNs for the join

Notes:

- This Rmarkdown document uses a function in the "3_KernCountyParcel_CDFA_join.R" file to join CDFA and Kern County Parcel data on their respective APN columns. See notes in that R script for more details about that function

1. Load packages, function, and data

```
library(tidyverse)
```

```
## -- Attaching packages ---------------------------------------------------------------------------
```

```
## v ggplot2 3.2.1     v purrr   0.3.2
## v tibble  2.1.3     v dplyr   0.8.3
## v tidyr   1.0.0     v stringr 1.4.0
## v readr   1.3.1     v forcats 0.4.0
```

```
## -- Conflicts ------------------------------------------------------------------------------------
## x dplyr::filter() masks stats::filter()
## x dplyr::lag()    masks stats::lag()
```

```
library(rgdal)
```

```
## Loading required package: sp
```

```
## rgdal: version: 1.4-4, (SVN revision 833)
##  Geospatial Data Abstraction Library extensions to R successfully loaded
##  Loaded GDAL runtime: GDAL 2.4.2, released 2019/06/28
##  Path to GDAL shared files: /Library/Frameworks/R.framework/Versions/3.6/Resources/library/rgdal/gdal
##  GDAL binary built with GEOS: FALSE
##  Loaded PROJ.4 runtime: Rel. 5.2.0, September 15th, 2018, [PJ_VERSION: 520]
##  Path to PROJ.4 shared files: /Library/Frameworks/R.framework/Versions/3.6/Resources/library/rgdal/pr
##  Linking to sp version: 1.3-1
```

```
library(sf)
```

```
## Linking to GEOS 3.7.2, GDAL 2.4.2, PROJ 5.2.0
```

```
source("../R/3_KernCountyParcel_CDFA_join.R")

# Read in Kern County Parcel data
KernCoParcels <- readOGR("../R_input/spatial/Kern_ALL_shp/Kern_Parcels_2017_Final.shp")
```

```
## OGR data source with driver: ESRI Shapefile
## Source: "/Users/clairepowers/Desktop/Organics_Final/Working/R_files/R_input/spatial/Kern_ALL_shp/Kern
## with 405613 features
## It has 8 fields
## Integer64 fields read as strings:  FID SHAPE_SQFT
```

```
# Transform into the correct CRS
kern_parcel_shp <- spTransform(KernCoParcels, CRS("+proj=aea +lat_1=34 +lat_2=40.5 +lat_0=0 +lon_0=-120
```

2. Apply function to years of interest: 2013 - 2017

```r
# Specify years to be evaluated
yrs = 2013:2017

for(i in yrs){

  KernCoParcel_CDFA_join(year = i, # Year index
                         kern_parcel_shp = kern_parcel_shp) # Shapefile to be used

  }
```

```
## Parsed with column specification:
## cols(
##   company = col_character(),
##   APN_index = col_character(),
##   original_apn = col_character(),
##   edited_APN = col_character(),
##   CDFA = col_double()
## )

## Warning in writeOGR(final, dsn = paste0("../R_output/spatial/
## CDFA_parcels/", : Field names abbreviated for ESRI Shapefile driver

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