match enrolled projects to CIRN properties

Albert Garcia

1 matching enrolled Native Forest Law properties to CIRN rural properties

1.1 data

```
projects_df <- proyecto_df %>%
  left_join(predio_df, by = c("rptpro_id", "rptpro_numero_ingreso")) %>%
  left_join(propietario_df, by = "rptpre_id") %>%
  inner_join(coordinadas_predio_df, by = "rptpre_id")
# turn into spatial object
projects_df.sf <- st_as_sf(projects_df, coords = c( "rptub_este", "rptub_norte"), na.fail = FA</pre>
#table(projects_df.sf$rptub_datum)
# trying to clean entries into intended datum
projects_df.sf$rptub_datum <- gsub(".*(84|wgs|WGS).*", "WGS84", projects_df.sf$rptub_datum)</pre>
projects_df.sf$rptub_datum <- gsub(".*(56|PSAD).*", "PSAD56", projects_df.sf$rptub_datum)</pre>
projects_df.sf$rptub_datum <- gsub(".*69*.", "SAD69", projects_df.sf$rptub_datum)
#table(projects_df.sf$rptub_datum)
projects_WGS19 <- projects_df.sf %>%
  filter(rptub_huso == 19 & rptub_datum == "WGS84")%>%
  st_set_crs("+proj=utm +zone=19 +south +datum=WGS84") %>%
  st_transform(st_crs(prop_clean.sf))
projects_WGS84 <- projects_df.sf %>%
  filter(rptub_huso != 19 & rptub_datum == "WGS84")%>%
  st_set_crs("+proj=utm +zone=18 +south +datum=WGS84") %>%
  st_transform(st_crs(prop_clean.sf)) %>%
  rbind(projects_WGS19)
proj_enrolled <- prop_clean.sf %>%
  st_join(projects_WGS84, join = st_intersects) %>%
    drop_na(rptpro_ano)
#here, I just see how many rols match between the CIRN data and native forest law data
#projects_df is the native forest law projects
#prop_rural.sf is the CIRN data with the rols as simple features object
rol_df <- projects_df %>%
  rename(ROL = rptpre_rol) %>% #renaming rols to be the same in both datasets
  inner_join(prop_rural.sf, by = "ROL") #merge by rol
```

Table 1: spatially joined dataframe

| | ROL | ${\tt rptpre_rol}$ | NOM_PREDIO | rptpre_nombre |
|----------|---------|---------------------|--|--|
| 164427 | 1391-9 | 1391-42 | AGUA FRIA | AGUA FRIA LOTE B |
| 251916 | 1324-1 | 1324-1 | AGUA LUNA-PEDREGOSO | AGUA LUNA |
| 259617 | 331-10 | 333-12; 333-12 | EL AROMO | AGUA SANTA |
| 217043 | 309-18 | 309-18 | HONDURAS | AGUAS CLARAS |
| 217043.1 | 309-18 | 309-18 | HONDURAS | AGUAS CLARAS |
| 165018 | 1386-23 | 1386-24 | EL LLEUQUE | Aguas Coloradas |
| 165018.1 | 1386-23 | 1386-24 | EL LLEUQUE | Aguas Coloradas |
| 165018.2 | 1386-23 | 1386-24 | EL LLEUQUE | Aguas Coloradas |
| 128799 | 111-14 | 111-20 | HJ EL MANIGUAL | AGUAS DEL PASO MALO |
| 157397.1 | 164-33 | 164-268 | SECTOR BULARCO SECTOR A COMUNA DE RANQUI | Aguas negras parcela B2 lote 3 Bularco |
| 157397 | 164-33 | 164-268 | SECTOR BULARCO SECTOR A COMUNA DE RANQUI | AGUAS NEGRAS PC B2 LOTE 3 BULARCO |
| 308209.1 | 526 | 1220-59 | NA | Ahuenco Parcela 19 |
| 176162 | 539-34 | 539-33 | STA AGUSTINA PTE | Alamo y Coihue |
| 176162.1 | 539-34 | 539-33 | STA AGUSTINA PTE | Alamo y Coihue |
| 268027.2 | 112-16 | 112-32; 112-33 | EL HUAPE | Alaska |

```
rol_display <- rol_df %>%
    select(ROL, NOM_PREDIO, rptpre_nombre)
rol_display$geometry <- NULL

kable(rol_display[1:20,],
    "latex",
    booktabs =T,
    caption = "merged on rol dataframe"
    ) %>%
    kable_styling(latex_options = "hold_position", font_size = 6)
```

Table 2: merged on rol dataframe

| ROL | NOM_PREDIO | rptpre_nombre |
|---------|--|---------------|
| 160-15 | EL CARMEN | LOS MANZANOS |
| 160-15 | NA | LOS MANZANOS |
| 160-15 | BARANDICA HIJUELA 4 | LOS MANZANOS |
| 160-15 | EL LITRE | LOS MANZANOS |
| 160-15 | LA HUACHA | LOS MANZANOS |
| 160-15 | PREDIO SAN AGUSTIN SECTOR RELBUN | LOS MANZANOS |
| 160-15 | PEUMO PICHILO S/N CARAMPANGUE | LOS MANZANOS |
| 160-15 | UITENTO | LOS MANZANOS |
| 160-15 | EL DAO AGUANTAO HJ 48 | LOS MANZANOS |
| 304-121 | EL ESCUDO PARCELA N 18 | PARCELA N°18 |
| 304-121 | HIJUELA 7 HEULIO COM CATREFOL | PARCELA N°18 |
| 304-121 | EL ESCUDO PARCELA N 18 | PARCELA N°18 |
| 304-121 | HIJUELA 7 HEULIO COM CATREFOL | PARCELA N°18 |
| 3290-9 | EL MIRADOR PC 21 VILCUN TEMUCO | PARCELA N°21 |
| 3290-9 | EL MIRADOR PC 21 VILCUN TEMUCO | PARCELA N°21 |
| 3290-9 | EL MIRADOR PC 21 VILCUN TEMUCO | PARCELA N°21 |
| 3290-9 | EL MIRADOR PC 21 VILCUN TEMUCO | PARCELA N°21 |
| 135-10 | CAM A CHINCOLC | QUETROLELFU |
| 135-10 | LA MONTANA COM | QUETROLELFU |
| 135-10 | PARCELA N 1 PATRIA NUEVA EX FUNDO MOSTAZ | QUETROLELFU |

 $\#length(unique(rol_df\$ROL)) \#find number of unique rol numbers found$