Package ‘bcmaps’

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BugReports  https://github.com/bcgov/bcmaps/issues

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**Description**

British Columbia Air Zones

**Usage**

```r
airzones(ask = interactive(), force = FALSE)
```

**Arguments**

- `ask` Should the function ask the user before downloading the data to a cache? Defaults to the value of `interactive()`.
- `force` Should you force download the data?

**Value**

The spatial layer of `airzones` as an `sf` object.

**Source**

`bcdata::bcdc_get_data(record = 'e8eeefc4-2826-47bc-8430-85703d328516', resource = 'c495d082-b586-4df0-9e06-bd6b66a8acd9')`

**See Also**

Other BC layers: `bc_bound_hres()`, `bc_bound()`, `bc_cities()`, `bec()`, `census_dissemination_area()`, `census_division()`, `census_economic()`, `census_metropolitan_area()`, `census_subdivision()`, `census_tract()`, `ecoprovinces()`, `ecoregions()`, `ecosections()`, `fssa()`, `gw_aquifers()`, `health_chsa()`, `health_ha()`, `health_hlsa()`, `health_lha()`, `hydrozones()`, `mapsheets_250K()`, `mapsheets_50K()`, `municipalities()`, `nr_areas()`, `nr_districts()`, `nr_regions()`, `regional_districts()`, `tsa()`, `water_districts()`, `water_precincts()`, `watercourses_15M()`, `watercourses_5M()`, `wsc_drainages()`
available_layers  List available data layers

Description

A data.frame of all available layers in the bcmaps package. This drawn directly from the B.C. Data Catalogue and will therefore be the most current list layers available.

Usage

available_layers()

Value

A data.frame of layers, with titles, and a shortcut_function column denoting whether or not a shortcut function exists that can be used to return the layer. If TRUE, the name of the shortcut function is the same as the layer_name. A value of FALSE in this column means the layer is available via get_data() but there is no shortcut function for it.

A value of FALSE in the local column means that the layer is not stored in the bcmaps package but will be downloaded from the internet and cached on your hard drive.

Examples

## Not run:
available_layers()
## End(Not run)

bc_area  The size of British Columbia

Description

Total area, Land area only, or Freshwater area only, in the units of your choosing.

Usage

bc_area(what = "total", units = "km2")
Arguments

what          Which part of BC? One of 'total' (default), 'land', or 'freshwater'.
units         One of 'km2' (square kilometres; default), 'm2' (square metres), 'ha' (hectares), 'acres', or 'sq_mi' (square miles)

Details

The sizes are from Statistics Canada

Value

The area of B.C. in the desired units (numeric vector).

Examples

```r
## With no arguments, gives the total area in km^2:
bc_area()

## Get the area of the land only, in hectares:
bc_area("land", "ha")
```

---

**bc_bbox**

*Get an extent/bounding box for British Columbia*

Description

Get an extent/bounding box for British Columbia

Usage

```r
bc_bbox(class = c("sf", "raster"), crs = 3005)
```

Arguments

```r
class          "sf","raster".

```r
crs            coordinate reference system: integer with the EPSG code, or character with proj4string. Default 3005 (BC Albers).
```

Value

an object denoting a bounding box of British Columbia, of the corresponding class specified in class.
Examples

```r
## Not run:
bc_bbox("sf")
bc_bbox("raster")
## End(Not run)
```

---

**bc_bound**

**BC Boundary**

**Description**

BC Boundary

**Usage**

```r
bc_bound(ask = interactive(), force = FALSE)
```

**Arguments**

- `ask` Should the function ask the user before downloading the data to a cache? Defaults to the value of `interactive()`.
- `force` Should you force download the data?

**Value**

The spatial layer of `bc_bound` as an `sf` object

**Source**

`bcdata::bcdc_get_data('b9bd93e1-0226-4351-b943-05c6f80bd5da')`

**See Also**

Other BC layers: `airzones()`, `bc_bound_hres()`, `bc_cities()`, `bec()`, `census_dissemination_area()`, `census_division()`, `census_economic()`, `census_metropolitan_area()`, `census_subdivision()`, `census_tract()`, `ecoprovinces()`, `ecoregions()`, `ecosections()`, `fssa()`, `gw_aquifers()`, `health_chsas()`, `health_has()`, `health_hsdas()`, `health_lhas()`, `hydrozones()`, `mapsheets_250K()`, `mapsheets_50K()`, `municipalities()`, `nr_areas()`, `nr_districts()`, `nr_regions()`, `regional_districts()`, `tsas()`, `water_districts()`, `water_precincts()`, `watercourses_15M()`, `watercourses_5M()`, `wsc_drainages()`

**Examples**

```r
## Not run:
my_layer <- bc_bound()
## End(Not run)
```
bc_bound_hres

---

**bc_bound_hres**  
**BC Boundary - High Resolution**

**Description**

BC Boundary - High Resolution

**Usage**

bc_bound_hres(ask = interactive(), force = FALSE)

**Arguments**

- **ask**  
  Should the function ask the user before downloading the data to a cache? Defaults to the value of interactive().

- **force**  
  Should you force download the data?

**Value**

The spatial layer of bc_bound_hres as an sf object

**Source**

bcddc_get_data(record = '30aeb5c1-4285-46c8-b60b-15b1a6f4258b', resource = '3d72cf36-ab53-4a2a-9988-a883d7488384', layer = 'BC_Boundary_Terrestrial_Multipart')

**See Also**

Other BC layers:  
airzones(), bc_bound(), bc_cities(), bec(), census_dissemination_area(), census_division(), census_economic(), census_metropolitan_area(), census_subdivision(), census_tract(), ecoprovinces(), ecoregions(), eosections(), fsa(), gw_aquifers(), health_chsa(), health_ha(), health_hsda(), health_lha(), hydrozones(), mapsheets_250K(), mapsheets_50K(), municipalities(), nr_areas(), nr_districts(), nr_regions(), regional_districts(), tsa(), water_districts(), water_precincts(), watercourses_15M(), watercourses_5M(), wsc_drainages()

**Examples**

```r
## Not run:
my_layer <- bc_bound_hres()
```

## End(Not run)
bc_cities

BC Major Cities Points

Description

BC Major Cities Points

Usage

bc_cities(ask = interactive(), force = FALSE)

Arguments

ask  Should the function ask the user before downloading the data to a cache? De-
    faults to the value of interactive().
force Should you force download the data?

Value

The spatial layer of bc_cities as an sf object.

Source

bcdata::bcdc_get_data(record = 'b678c432-c5c1-4341-88db-0d6befa0c7f8', resource = '443dd858-2e37-4a8f-937a-f53359f16e64')

See Also

Other BC layers: airzones(), bc_bound_hres(), bc_bound(),bec(), census_dissemination_area(),
census_division(),census_economic(),census_metropolitan_area(),census_subdivision(),
censustract(),ecoprovinces(),ecoregions(),eosections(),fsa(),gw_aquifers(),health_chsa(),
health_ha(),health_hsd(),health_lha(),hydrozones(),mapsheets_250K(),mapsheets_50K(),
municipalities(),nr_areas(),nr_districts(),nr_regions(),regional_districts(),tsa(),
water_districts(),water_precincts(),watercourses_15M(),watercourses_5M(),wsc_drainages()

Examples

## Not run:
my_layer <- bc_cities()

## End(Not run)
**bc_neighbours**

Boundary of British Columbia, provinces/states and the portion of the Pacific Ocean that borders British Columbia

**Description**

Boundary of British Columbia, provinces/states and the portion of the Pacific Ocean that borders British Columbia

**Usage**

\[
\text{bc\_neighbours}(\text{ask} = \text{interactive}(), \text{force} = \text{FALSE})
\]

**Arguments**

- **ask**: Should the function ask the user before downloading the data to a cache? Defaults to the value of interactive().
- **force**: Should you force download the data?

**Value**

The spatial layer of bc\_neighbours as an sf object

**Source**

\[
\text{bcdata::bcdc\_get\_data('b9bd93e1-0226-4351-b943-05c6f80bd5da')}\]

**Examples**

```r
## Not run:
my\_layer <- bc\_neighbours()
## End(Not run)
```

**bec**

*British Columbia BEC Map*

**Description**

British Columbia BEC Map

**Usage**

\[
\text{bec}(\text{ask} = \text{interactive}(), \text{force} = \text{FALSE})
\]
Arguments

ask  Should the function ask the user before downloading the data to a cache? Defaults to the value of interactive().

force  Should you force download the data?

Value

The spatial layer of bec as an sf object.

Source

`bcdata::bcdc_get_data(record = 'f358a53b-ffde-4830-a325-a5a03ff672c3', resource = '3ec24cb4-f78d-48a9-87e7-516763f00cc8')`

See Also

Other BC layers: `airzones()`, `bc_bound_hres()`, `bc_bound()`, `bc_cities()`, `census_dissemination_area()`, `census_division()`, `census_economic()`, `census_metropolitan_area()`, `census_subdivision()`, `census_tract()`, `ecoprovinces()`, `ecoregions()`, `ecosections()`, `fsa()`, `gw_aquifers()`, `health_chsa()`, `health_ha()`, `health_hsda()`, `health_lha()`, `hydrozones()`, `mapsheets_250K()`, `mapsheets_50K()`, `municipalities()`, `nr_areas()`, `nr_districts()`, `nr_regions()`, `regional_districts()`, `tsa()`, `water_districts()`, `water_precincts()`, `watercourses_15M()`, `watercourses_5M()`, `wsc_drainages()`

Examples

```r
## Not run:
my_layer <- bec()

## End(Not run)
```

---

bec_colours  **Biogeoclimatic Zone Colours**

Description

Standard colours used to represent Biogeoclimatic Zone colours to be used in plotting.

Usage

```r
bec_colours()
```

Value

named vector of hexadecimal colour codes. Names are standard abbreviations of Zone names.
## Not run:

```r
if (require(sf) && require(ggplot2)) {
  bec <- bec()
  ggplot() +
  geom_sf(data = bec[bec$ZONE %in% c("BG", "PP"),],
    aes(fill = ZONE, col = ZONE)) +
  scale_fill_manual(values = bec_colors()) +
  scale_colour_manual(values = bec_colours())
}

## End(Not run)
```

### Description

Digital Elevation Model (DEM) for British Columbia produced by GeoBC. This data is the TRIM DEM converted to the Canadian Digital Elevation Data (CDED) format. The data consists of an ordered array of ground or reflective surface elevations, recorded in metres, at regularly spaced intervals. The spacing of the grid points is .75 arc seconds north/south. The data was converted into 1:50,000 grids for distribution. The scale of this modified data is 1:250,000 which was captured from the original source data which was at a scale of 1:20,000.

### Usage

```r
cded(aoi = NULL,
     tiles_50K = NULL,
     .predicate = sf::st_intersects,
     dest_vrt = tempfile(fileext = ".vrt"),
     ask = interactive(),
     check_tiles = TRUE)
```

### Arguments

- **aoi**: Area of Interest. Currently supports sf and sp polygons, stars and raster objects.
- **tiles_50K**: a character vector of 1:50,000 NTS mapsheets.
- **.predicate**: geometry predicate function used to find the mapsheets from your aoi. Default `sf::st_intersects`.
- **dest_vrt**: The location of the vrt file. Defaults to a temporary file, but can be overridden if you’d like to save it for a project.
- **ask**: Should the function ask the user before downloading the data to a cache? Defaults to the value of `interactive()`.
check_tiles  Should the tiles that you already have in your cache be checked to see if they need updating? Default TRUE. If you are running the same code frequently and are confident the tiles haven’t changed, setting this to FALSE will speed things up.

Value

path to a .vrt file of the cded tiles for the specified area of interest

Examples

```r
## Not run:
vic <- census_subdivision()[census_subdivision()$CENSUS_SUBDIVISION_NAME == "Victoria", ]
vic_cded <- cded(aoi = vic)
## End(Not run)
```

## cded_raster

*Get Canadian Digital Elevation Model (CDED) as a raster object*

Description

Get Canadian Digital Elevation Model (CDED) as a raster object

Usage

```r
cded_raster(
  aoi = NULL,
  tiles_50K = NULL,
  .predicate = sf::st_intersects,
  dest_vrt = tempfile(fileext = ".vrt"),
  check_tiles = TRUE,
  ...
)
```

Arguments

- **aoi**  Area of Interest. Currently supports sf and sp polygons, stars and raster objects.
- **tiles_50K**  a character vector of 1:50,000 NTS mapsheet tiles
- **.predicate**  geometry predicate function used to find the mapsheets from your aoi. Default `sf::st_intersects`.
- **dest_vrt**  The location of the vrt file. Defaults to a temporary file, but can be overridden if you’d like to save it for a project
- **check_tiles**  Should the tiles that you already have in your cache be checked to see if they need updating? Default TRUE. If you are running the same code frequently and are confident the tiles haven’t changed, setting this to FALSE will speed things up.
- **...**  Further arguments passed on to `raster::raster`
Value

a raster object of the cded tiles for the specified area of interest

Examples

```r
## Not run:
vic <- census_subdivision()$CENSUS_SUBDIVISION_NAME == "Victoria", ]
vic_cded <- cded_raster(aoi = vic)
## End(Not run)
```

## Get Canadian Digital Elevation Model (CDED) as a stars object

### Description

Get Canadian Digital Elevation Model (CDED) as a stars object

### Usage

```r
cded_stars(
  aoi = NULL,
  tiles_50K = NULL,
  .predicate = sf::st_intersects,
  dest_vrt = tempfile(fileext = ".vrt"),
  check_tiles = TRUE,
  ...
)
```

### Arguments

- `aoi`: Area of Interest. Currently supports sf and sp polygons, stars and raster objects.
- `tiles_50K`: a character vector of 1:50,000 NTS mapsheet tiles
- `.predicate`: geometry predicate function used to find the mapsheets from your aoi. Default `sf::st_intersects`.
- `dest_vrt`: The location of the vrt file. Defaults to a temporary file, but can be overridden if you’d like to save it for a project
- `check_tiles`: Should the tiles that you already have in your cache be checked to see if they need updating? Default TRUE. If you are running the same code frequently and are confident the tiles haven’t changed, setting this to FALSE will speed things up.
- `...`: Further arguments passed on to stars::read_stars

### Value

a stars object of the cded tiles for the specified area of interest
census_dissemination_area

Examples

## Not run:
vic <- census_subdivision()[census_subdivision()$CENSUS_SUBDIVISION_NAME == "Victoria", ]
vic_cded <- cded_stars(aoi = vic)

## End(Not run)

census_dissemination_area

Current Census Dissemination Areas

Description

Current Census Dissemination Areas

Usage

census_dissemination_area(ask = interactive(), force = FALSE)

Arguments

ask Should the function ask the user before downloading the data to a cache? De-

faults to the value of interactive().

force Should you force download the data?

Value

The spatial layer of census_dissemination_area as an sf object.

Source

bcdata::bcdc_get_data(record = 'a091fd65-d682-4a24-8c0e-68de7c87e3a3', resource = 'a7fa66d4-0f95-4c58-861d-42d875e5b79f')

See Also

Other BC layers: airzones(), bc_bound_hres(), bc_bound(), bc_cities(), bec(), census_division(),

  census_economic(), census_metropolitan_area(), census_subdivision(), census_tract(),

  ecoprovinces(), ecoregions(), eosections(), fsa(), gw_aquifers(), health_chsa(), health_ha(),

  health_hsdn(), health_lha(), hydrozones(), mapsheets_250K(), mapsheets_50K(), municipalities(),

  nr_areas(), nr_districts(), nr_regions(), regional_districts(), tsa(), water_districts(),

  water_precincts(), watercourses_15M(), watercourses_5M(), wsc_drainages()

Examples

## Not run:
my_layer <- census_dissemination_area()

## End(Not run)
Description

Current Census Division Boundaries

Usage

census_division(ask = interactive(), force = FALSE)

Arguments

ask Should the function ask the user before downloading the data to a cache? Defaults to the value of interactive().

force Should you force download the data?

Value

The spatial layer of census_division as an sf object.

Source

.bcdata::bcdc_get_data(record = '/ef17918a-597a-4012-8534-f8e71d8735b3', resource = '/36b530c2-1de6-44a2-a6f6-c1fce36c53ed')

See Also

Other BC layers: airzones(), bc_bound_hres(), bc_bound(), bc_cities(), bec(), census_dissemination_area(), census_economic(), census_metropolitan_area(), census_subdivision(), census_tract(), ecoprovinces(), ecoregions(), ecosections(), fsa(), gw_aquifers(), health_chsa(), health_ha(), health_hsda(), health_lha(), hydrozones(), mapsheets_250K(), mapsheets_50K(), municipalities(), nr_areas(), nr_districts(), nr_regions(), regional_districts(), tsa(), water_districts(), water_precincts(), watercourses_15M(), watercourses_5M(), wsc_drainages()

Examples

## Not run:
my_layer <- census_division()

## End(Not run)
**census_economic**

*Current Census Economic Region Boundaries*

**Description**

Current Census Economic Region Boundaries

**Usage**

```r
census_economic(ask = interactive(), force = FALSE)
```

**Arguments**

- **ask**: Should the function ask the user before downloading the data to a cache? Defaults to the value of `interactive()`.
- **force**: Should you force download the data?

**Value**

The spatial layer of `census_economic` as an `sf` object.

**Source**

`bcdata::bcdc_get_data(record = '1aebc451-a41c-496f-8b18-6f414cde93b7', resource = '3f0236cf-b1a1-4f1a-8e9e-86c2c3daff96')`

**See Also**

Other BC layers: `airzones()`, `bc_bound_hres()`, `bc_bound()`, `bc_cities()`, `bec()`, `census_dissemination_area()`, `census_division()`, `census_metropolitan_area()`, `census_subdivision()`, `census_tract()`, `ecoprovinces()`, `ecoregions()`, `ecosections()`, `fsa()`, `gw_aquifers()`, `health_chsa()`, `health_ha()`, `health_hdsa()`, `health_hla()`, `hydrozones()`, `mapsheets_250K()`, `mapsheets_50K()`, `municipalities()`, `nr_areas()`, `nr_districts()`, `nr_regions()`, `regional_districts()`, `tsa()`, `water_districts()`, `water_precincts()`, `watercourses_15M()`, `watercourses_5M()`, `wsc_drainages()`

**Examples**

```r
## Not run:
my_layer <- census_economic()

## End(Not run)
```
census_metropolitan_area

Current Census Metropolitan Areas

Description

Current Census Metropolitan Areas

Usage

census_metropolitan_area(ask = interactive(), force = FALSE)

Arguments

ask Should the function ask the user before downloading the data to a cache? Defaults to the value of interactive().
force Should you force download the data?

Value

The spatial layer of census_metropolitan_area as an sf object.

Source

bcdata::bcdc_get_data(record = 'a6fb34b7-0937-4718-8f1f-43dba2c0f407', resource = 'f129a965-363e-4d7e-8319-a4010e002fdb')

See Also

Other BC layers: airzones(), bc_bound_hres(), bc_bound(), bc_cities(), bec(), census_dissemination_area(), census_division(), census_economic(), census_subdivision(), census_tract(), ecoprovinces(), ecoregions(), ecosections(), fsa(), gw_aquifers(), health_chsa(), health_ha(), health_hsha(), health_lha(), hydrozones(), mapsheets_250K(), mapsheets_50K(), municipalities(), nr_areas(), nr_districts(), nr_regions(), regional_districts(), tsa(), water_districts(), water_precincts(), watercourses_15M(), watercourses_5M(), wsc_drainages()

Examples

## Not run:
my_layer <- census_metropolitan_area()

## End(Not run)
census_subdivision  
Current Census Subdivision Boundaries

Description

Current Census Subdivision Boundaries

Usage

census_subdivision(ask = interactive(), force = FALSE)

Arguments

ask  Should the function ask the user before downloading the data to a cache? Defaults to the value of interactive().
force Should you force download the data?

Value

The spatial layer of census_subdivision as an sf object.

Source

bcdata::bcdc_get_data(record = '4c5618c6-38dd-4a62-a3de-9408b4974bb6', resource = '98bd1222-57bb-4504-92c2-4a5857ae7671')

See Also

Other BC layers: airzones(), bc_bound_hres(), bc_bound(), bc_cities(), bec(), census_dissemination_area(), census_division(), census_economic(), census_metropolitan_area(), census_tract(), ecoprovinces(), ecoregions(), ecosections(), fsa(), gw_aquifers(), health_chsa(), health_ha(), health_hsda(), health_lha(), hydrozones(), mapsheets_250K(), mapsheets_50K(), municipalities(), nr_areas(), nr_districts(), nr_regions(), regional_districts(), tsa(), water_districts(), water_precincts(), watercourses_15M(), watercourses_5M(), wsc_drainages()

Examples

## Not run:
my_layer <- census_subdivision()

## End(Not run)
Description

Current Census Tract Boundaries

Usage

census_tract(ask = interactive(), force = FALSE)

Arguments

ask Should the function ask the user before downloading the data to a cache? Defaults to the value of interactive().
force Should you force download the data?

Value

The spatial layer of census_tract as an sf object.

Source

bcdata::bcdc_get_data(record = '539aae5b-12f6-4934-9592-9b27acc827f8', resource = 'be767db6-0d4e-4906-a89b-564637f14db9')

See Also

Other BC layers: airzones(), bc_bound_hres(), bc_bound(), bc_cities(), bec(), census_dissemination_area(), census_division(), census_economic(), census_metropolitan_area(), census_subdivision(), ecoprovinces(), ecoregions(), ecosections(), fsa(), gw_aquifers(), health_chsa(), health_ha(), health_hsda(), health_lha(), hydrozones(), mapsheets_250K(), mapsheets_50K(), municipalities(), nr_areas(), nr_districts(), nr_regions(), regional_districts(), tsa(), water_districts(), water_precincts(), watercourses_15M(), watercourses_5M(), wsc_drainages()

Examples

```r
## Not run:
my_layer <- census_tract()
## End(Not run)
```
combine_nr_rd  

Combine Northern Rockies Regional Municipality with Regional Districts

Description
Combine Northern Rockies Regional Municipality with Regional Districts

Usage

combine_nr_rd()

Value
A layer where the Northern Rockies Regional Municipality has been combined with the Regional Districts to form a full provincial coverage.

delete_cache  

View and delete cached files

Description
View and delete cached files
Show the files you have in your cache

Usage

delete_cache(files_to_delete = NULL)

show_cached_files()

Arguments
files_to_delete
An optional argument to specify which files or layers should be deleted from the cache. Defaults to deleting all files pausing for permission from user. If a subset of files are specified, the files are immediately deleted.

Value

delete_cache(): A logical of whether the file(s) were successful deleted
show_cached_files(): a data.frame with the columns:

• file, the name of the file,
• size_MB, file size in MB,
• is_dir, is it a directory? If you have cached tiles from the cded() functions, there will be a row in the data frame showing the total size of the cded tiles cache directory.
• modified, date and time last modified
ecoprovinces

## Not run:
## See which files you have
show_cached_files()

## Delete your whole cache
delete_cache()

## Specify which files are deleted
delete_cache(c('regional_districts.rds', 'bc_cities.rds'))

## End(Not run)

---

### ecoprovinces

**British Columbia Ecoprovinces**

#### Description

British Columbia Ecoprovinces

#### Usage

```
ecoprovinces(ask = interactive(), force = FALSE)
```

#### Arguments

- **ask**
  - Should the function ask the user before downloading the data to a cache? Defaults to the value of `interactive()`.
- **force**
  - Should you force download the data?

#### Value

The spatial layer of ecoprovinces as an `sf` object.

#### Source

`bcdata::bcdc_get_data(record = '51832f47-efdf-4956-837a-45fc2c9032dd', resource = '811fcedb-1a53-4574-8149-454f4a740682')`

#### See Also

Other BC layers: `airzones()`, `bc_bound_hres()`, `bc_bound()`, `bc_cities()`, `bec()`, `census_dissemination_area()`, `census_division()`, `census_economic()`, `census_metropolitan_area()`, `census_subdivision()`, `census_tract()`, `ecoregions()`, `ecosections()`, `fssa()`, `gw_aquifers()`, `health_chsa()`, `health_ha()`, `health_hlsa()`, `hydrozones()`, `mapsheets_250K()`, `mapsheets_50K()`, `municipalities()`, `nr_areas()`, `nr_districts()`, `nr_regions()`, `regional_districts()`, `tsa()`, `water_districts()`, `water_precincts()`, `watercourses_15M()`, `watercourses_5M()`, `wsc_drainages()`
Examples

## Not run:
my_layer <- ecoprovinces()

## End(Not run)

desc

## Not run:
my_layer <- ecoprovinces()

## End(Not run)

Description

British Columbia Ecoregions

Usage

ecoregions(ask = interactive(), force = FALSE)

Arguments

ask Should the function ask the user before downloading the data to a cache? De-
defaults to the value of interactive().
force Should you force download the data?

Value

The spatial layer of ecoregions as an sf object.

Source

bcdata::bcdc_get_data(record = 'd00389e0-66da-4895-bd56-39a0dd64aa78', resource = 'bd816a86-4f5e-4989-b1df-0b2f3f4a5f86')

See Also

Other BC layers: airzones(), bc_bound_hres(), bc_bound(), bc_cities(), bec(), census_dissemination_area(), census_division(), census_economic(), census_metropolitan_area(), census_subdivision(), census_tract(), ecoprovinces(), eosections(), fsa(), gw_aquifers(), health_chsa(), health_ha(), health_hsda(), health_lha(), hydrozones(), mapsheets_250K(), mapsheets_50K(), municipalities(), nr_areas(), nr_districts(), nr_regions(), regional_districts(), tsa(), water_districts(), water_precincts(), watercourses_15M(), watercourses_5M(), wsc_drainages()

Examples

## Not run:
my_layer <- ecoregions()

## End(Not run)
**ecosections**  

---

**ecosections**  

*British Columbia Ecosections*

---

**Description**

British Columbia Ecosections

**Usage**

```r
ecossections(ask = interactive(), force = FALSE)
```

**Arguments**

- `ask`  
  Should the function ask the user before downloading the data to a cache? Defaults to the value of `interactive()`.

- `force`  
  Should you force download the data?

**Value**

The spatial layer of `ecosections` as an `sf` object.

**Source**

`bcdata::bcdc_get_data(record = 'ccc01f43-860d-4583-8ba4-e72d8379441e', resource = '6b6a3122-7a0b-4c0f-a72b-1e5c0e13d7e6')`

**See Also**

Other BC layers: `airzones()`, `bc_bound_hres()`, `bc_bound()`, `bc_cities()`, `bec()`, `census_dissemination_area()`, `census_division()`, `census_economic()`, `census_metropolitan_area()`, `census_subdivision()`, `census_tract()`, `ecoprovinces()`, `ecoregions()`, `fsa()`, `gw_aquifers()`, `health_chsa()`, `health_ha()`, `health_hsda()`, `health_lha()`, `hydrozones()`, `mapsheets_250K()`, `mapsheets_50K()`, `municipalities()`, `nr_areas()`, `nr_districts()`, `nr_regions()`, `regional_districts()`, `tsa()`, `water_districts()`, `water_precincts()`, `watercourses_15M()`, `watercourses_5M()`, `wsc_drainages()`

**Examples**

```r
## Not run:
my_layer <- ecossections()

## End(Not run)
```
fSA  British Columbia Forward Sortation Areas

Description

British Columbia Forward Sortation Areas

Usage

fSA(ask = interactive(), force = FALSE)

Arguments

ask  Should the function ask the user before downloading the data to a cache? De-

force  Should you force download the data?

Source

http://www12.statcan.gc.ca/census-recensement/2011/geo/bound-limit/files-fichiers/2016/lfsa000b16a_e.zip

See Also

Other BC layers: airzones(), bc_bound_hres(), bc_bound(), bc_cities(), bec(), census_dissemination_area(),
census_division(), census_economic(), census_metropolitan_area(), census_subdivision(),
census_tract(), ecoprovinces(), ecoregions(), ecosections(), gw_aquifers(), health_chsa(),
health_ha(), health_hda(), health_lha(), hydrozones(), mapsheets_250K(), mapsheets_50K(),
municipalities(), nr_areas(), nr_districts(), nr_regions(), regional_districts(), tsa(),
water_districts(), water_precincts(), watercourses_15M(), watercourses_5M(), wsc_drainages()

Examples

## Not run:
my_layer <- fSA()

## End(Not run)
**get_layer**  
*Get a B.C. spatial layer*

**Description**

Get a B.C. spatial layer

**Usage**

```r
get_layer(layer, ask = interactive(), force = FALSE)
```

**Arguments**

- `layer`: the name of the layer. The list of available layers can be obtained by running `available_layers()`
- `ask`: Should the function ask the user before downloading the data to a cache? Defaults to the value of `interactive()`.
- `force`: Should you force download the data?

**Value**

the layer requested

**Examples**

```r
## Not run:
get_layer("bc_bound_hres")
## End(Not run)
```

---

**gw_aquifers**

*British Columbia’s developed ground water aquifers*

**Description**

British Columbia’s developed ground water aquifers

**Usage**

```r
gw_aquifers(ask = interactive(), force = FALSE)
```

**Arguments**

- `ask`: Should the function ask the user before downloading the data to a cache? Defaults to the value of `interactive()`.
- `force`: Should you force download the data?
Value

The spatial layer of gw_aquifers as an sf object.

Source

bcdata::bcdc_get_data(record = '099d69c5-1401-484d-9e19-c121ccb7977c', resource = '8f421e3a-cd3-4fab-8198-53ad6e9e2af2')

See Also

Other BC layers: airzones(), bc_bound_hres(), bc_bound(), bc_cities(), bec(), census_dissemination_area(), census_division(), census_economic(), census_metropolitan_area(), census_subdivision(), census_tract(), ecoprovinces(), ecoregions(), esections(), fsa(), health_chsa(), health_ha(), health_hsda(), health_lha(), hydrozones(), mapsheets_250K(), mapsheets_50K(), municipalities(), nr_areas(), nr_districts(), nr_regions(), regional_districts(), tsa(), water_districts(), water_precincts(), watercourses_15M(), watercourses_5M(), wsc_drainages()

Examples

```r
## Not run:
my_layer <- gw_aquifers()
## End(Not run)
```

---

### Community Health Service Areas - CHSA

**Description**

Community Health Service Areas - CHSA

**Usage**

`health_chsa(ask = interactive(), force = FALSE)`

**Arguments**

- **ask**
  
  Should the function ask the user before downloading the data to a cache? Defaults to the value of `interactive()`.

- **force**

  Should you force download the data?

**Value**

The spatial layer of `health_chsa` as an sf object.

**Source**

bcdata::bcdc_get_data(record = '68f2f577-28a7-46b4-bca9-7e9770f2f357', resource = '59065b51-511a-4976-979a-c183a0f8f57b')
See Also

Other BC layers: `airzones()`, `bc_bound_hres()`, `bc_bound()`, `bc_cities()`, `bec()`, `census_dissemination_area()`, `census_division()`, `census_economic()`, `census_metropolitan_area()`, `census_subdivision()`, `census_tract()`, `ecoprovinces()`, `ecoregions()`, `ecosections()`, `fsa()`, `gw_aquifers()`, `health_chsa()`, `health_hsda()`, `health_lha()`, `hydrozones()`, `mapsheets_250K()`, `mapsheets_50K()`, `municipalities()`, `nr_areas()`, `nr_districts()`, `nr_regions()`, `regional_districts()`, `tsa()`, `water_districts()`, `water_precincts()`, `watercourses_15M()`, `watercourses_5M()`, `wsc_drainages()`. 

Examples

```r
## Not run:
my_layer <- health_chsa()

## End(Not run)
```

health_ha

- **Health Authority Boundaries**

Description

Health Authority Boundaries

Usage

```r
health_ha(ask = interactive(), force = FALSE)
```

Arguments

- `ask` Should the function ask the user before downloading the data to a cache? Defaults to the value of `interactive()`.
- `force` Should you force download the data?

Value

The spatial layer of `health_ha` as an `sf` object.

Source

```r
bcdata::bcdc_get_data(record = '7bc6018f-bb4f-4e5d-845e-c529e3d1ac3b', resource = '93b79a3c-2da4-4fd4-b953-2f5c690db430')
```

See Also

Other BC layers: `airzones()`, `bc_bound_hres()`, `bc_bound()`, `bc_cities()`, `bec()`, `census_dissemination_area()`, `census_division()`, `census_economic()`, `census_metropolitan_area()`, `census_subdivision()`, `census_tract()`, `ecoprovinces()`, `ecoregions()`, `ecosections()`, `fsa()`, `gw_aquifers()`, `health_chsa()`, `health_hsda()`, `health_lha()`, `hydrozones()`, `mapsheets_250K()`, `mapsheets_50K()`, `municipalities()`, `nr_areas()`, `nr_districts()`, `nr_regions()`, `regional_districts()`, `tsa()`, `water_districts()`, `water_precincts()`, `watercourses_15M()`, `watercourses_5M()`, `wsc_drainages()`
Examples

```r
## Not run:
my_layer <- health_hsda()
## End(Not run)
```

---

### health_hsda

**Health Service Delivery Area Boundaries**

#### Description

Health Service Delivery Area Boundaries

#### Usage

```r
health_hsda(ask = interactive(), force = FALSE)
```

#### Arguments

- `ask` Should the function ask the user before downloading the data to a cache? Defaults to the value of `interactive()`.
- `force` Should you force download the data?

#### Value

The spatial layer of `health_hsda` as an `sf` object.

#### Source

`bcdata::bcdc_get_data(record = '71c930b9-563a-46da-a10f-ead49ccbc390', resource = 'c5dad467-229b-4378-852b-ff92479a65b6')`

#### See Also

Other BC layers: `airzones()`, `bc_bound_hres()`, `bc_bound()`, `bc_cities()`, `bec()`, `census_dissemination_area()`, `census_division()`, `census_economic()`, `census_metropolitan_area()`, `census_subdivision()`, `census_tract()`, `ecoprovinces()`, `ecoregions()`, `ecosections()`, `fsa()`, `gw_aquifers()`, `health_chsa()`, `health_hsda()`, `health_lha()`, `hydrozones()`, `mapsheets_250K()`, `mapsheets_50K()`, `municipalities()`, `nr_areas()`, `nr_districts()`, `nr_regions()`, `regional_districts()`, `tsa()`, `water_districts()`, `water_precincts()`, `watercourses_15M()`, `watercourses_5M()`, `wsc_drainages()`

#### Examples

```r
## Not run:
my_layer <- health_hsda()
## End(Not run)
```
Local Health Area Boundaries

Description

Local Health Area Boundaries

Usage

health_lha(ask = interactive(), force = FALSE)

Arguments

- `ask`: Should the function ask the user before downloading the data to a cache? Defaults to the value of `interactive()`.
- `force`: Should you force download the data?

Value

The spatial layer of `health_lha` as an `sf` object.

Source

`bcdata::bcdc_get_data(record = 'afd021d9-7722-4410-b506-d394c66e74fc', resource = 'd6e951d3-5103-475a-8bb6-b4d275e6343f')`

See Also

Other BC layers: `airzones()`, `bc_bound_hres()`, `bc_bound()`, `bc_cities()`, `bec()`, `census_dissemination_area()`, `census_division()`, `census_economic()`, `census_metropolitan_area()`, `census_subdivision()`, `census_tract()`, `ecoprovinces()`, `ecoregions()`, `ecosections()`, `fsa()`, `gw_aquifers()`, `health_chsa()`, `health_ha()`, `health_hsda()`, `hydrozones()`, `mapsheets_250K()`, `mapsheets_50K()`, `municipalities()`, `nr_areas()`, `nr_districts()`, `nr_regions()`, `regional_districts()`, `tsa()`, `water_districts()`, `water_precincts()`, `watercourses_15M()`, `watercourses_5M()`, `wsc_drainages()`

Examples

```r
## Not run:
my_layer <- health_lha()

## End(Not run)
```
Hydrologic Zone Boundaries of British Columbia

Description

Hydrologic Zone Boundaries of British Columbia

Usage

hydrozones(ask = interactive(), force = FALSE)

Arguments

ask Should the function ask the user before downloading the data to a cache? Defaults to the value of interactive().
force Should you force download the data?

Value

The spatial layer of hydrozones as an sf object.

Source

bcdata::bcdc_get_data(record = '329fd234-8835-4d44-9aaa-97c37bfc8d92', resource = 'baeb665e-85c7-4a7b-8e67-8b956785490a')

See Also

Other BC layers: airzones(), bc_bound_hres(), bc_bound(), bc_cities(), bec(), census_dissemination_area(), census_division(), census_economic(), census_metropolitan_area(), census_subdivision(), census tract(), ecoprovinces(), ecoregions(), esections(), fsa(), gw_aquifers(), health_chsa(), health ha(), health_hsda(), health_lha(), mapsheets_250K(), mapsheets_50K(), municipalities(), nr_areas(), nr_districts(), nr_regions(), regional districts(), tsa(), water districts(), water precincts(), watercourses_15M(), watercourses_5M(), wsc drainages()
mapsheets_250K

---

**Description**

NTS 250K Grid - Digital Baseline Mapping at 1:250,000 (NTS)

**Usage**

```r
mapsheets_250K()
```

**Value**

The spatial layer of `mapsheets_250K` as an `sf` object.

**Source**

https://open.canada.ca/data/en/dataset/055919c2-101e-4329-bfd7-1d0c333c0e62

**See Also**

Other BC layers: `airzones()`, `bc_bound_hres()`, `bc_bound()`, `bc_cities()`, `bec()`, `census_dissemination_area()`, `census_division()`, `census_economic()`, `census_metropolitan_area()`, `census_subdivision()`, `census_tract()`, `ecoprovinces()`, `ecoregions()`, `ecosections()`, `fsa()`, `gw_aquifers()`, `health_chsa()`, `health_ha()`, `health_hesda()`, `health_lha()`, `hydrozones()`, `mapsheets_50K()`, `municipalities()`, `nr_areas()`, `nr_districts()`, `nr_regions()`, `regional_districts()`, `tsa()`, `water_districts()`, `water_precincts()`, `watercourses_15M()`, `watercourses_5M()`, `wsc_drainages()`

**Examples**

```r
## Not run:
my_layer <- mapsheets_250K()

## End(Not run)
```

mapsheets_50K

---

**Description**

NTS 50K Grid - Digital Baseline Mapping at 1:50,000 (NTS)

**Usage**

```r
mapsheets_50K()
```
Value

The spatial layer of mapsheets_50K as an sf object.

Source

https://open.canada.ca/data/en/dataset/055919c2-101e-4329-bfd7-1d0c333c0e62

See Also

Other BC layers: airzones(), bc_bound_hres(), bc_bound(), bc_cities(), bec(), census_dissemination_area(), census_division(), census_economic(), census_metropolitan_area(), census_subdivision(), census_tract(), ecoprovinces(), ecoregions(), esections(), fsa(), gw_aquifers(), health_chsa(), health_ha(), health_hsda(), health_lha(), hydrozones(), mapsheets_250K(), municipalities(), nr_areas(), nr_districts(), nr_regions(), regional_districts(), tsa(), water_districts(), water_precincts(), watercourses_15M(), watercourses_5M(), wsc_drainages()

Examples

## Not run:
my_layer <- mapsheets_50K()

## End(Not run)
nr_areas

See Also
  combine_nr_rd() to combine Regional Districts and the Northern Rockies Regional Municipality into one layer

Other BC layers: airzones(), bc_bound_hres(), bc_bound(), bc_cities(), bec(), census_dissemination_area(), census_division(), census_economic(), census_metropolitan_area(), census_subdivision(), census_tract(), ecoprovinces(), ecoregions(), ecoresections(), fsa(), gw_aquifers(), health_chsa(), health_ha(), health_hsda(), health_lha(), hydrozones(), mapsheets_250K(), mapsheets_50K(), nr_areas(), nr_districts(), nr_regions(), regional_districts(), tsa(), water_districts(), water_precincts(), watercourses_15M(), watercourses_5M(), wsc_drainages()

Examples
  ```r
  ## Not run:
  my_layer <- municipalities()
  ## End(Not run)
  ```

nr_areas (British Columbia Natural Resource (NR) Areas)

Description
  British Columbia Natural Resource (NR) Areas

Usage
  nr_areas(ask = interactive(), force = FALSE)

Arguments
  ask Should the function ask the user before downloading the data to a cache? Defaults to the value of interactive().
  force Should you force download the data?

Value
  The spatial layer of nr_areas as an sf object.

Source
  bcdata::bcdc_get_data(record = 'c1861ba4-abb8-4947-b3e5-7f7c4d7257d5', resource = '4b317896-1a42-4c03-
nr_districts

British Columbia Natural Resource (NR) Districts

Description

British Columbia Natural Resource (NR) Districts

Usage

nr_districts(ask = interactive(), force = FALSE)

Arguments

ask Should the function ask the user before downloading the data to a cache? Defaults to the value of interactive().
force Should you force download the data?

Value

The spatial layer of nr_districts as an sf object.

Source

bcdata::bcdc_get_data(record = '0bc73892-e41f-41d0-8d8e-828c16139337', resource = 'e6676e55-2a6f-4b2b-91ad-3caf291ac5d4')

See Also

Other BC layers: airzones(), bc_bound_hres(), bc_bound(), bc_cities(), bec(), census_dissemination_area(), census_division(), census_economic(), census_metropolitan_area(), census_subdivision(), census_tract(), ecoprovinces(), ecoregions(), ecosections(), fsa(), gw_aquifers(), health_chsa(), health_ha(), health_hsda(), health_lha(), hydrozones(), mapsheets_250K(), mapsheets_50K(), municipalities(), nr_areas(), nr_regions(), regional_districts(), tsa(), water_districts(), water_precincts(), watercourses_15M(), watercourses_5M(), wsc_drainages()
Examples

```r
## Not run:
my_layer <- nr_districts()
## End(Not run)
```

### Description

British Columbia Natural Resource (NR) Regions

### Usage

```r
nr_regions(ask = interactive(), force = FALSE)
```

### Arguments

- `ask`: Should the function ask the user before downloading the data to a cache? Defaults to the value of `interactive()`.
- `force`: Should you force download the data?

### Value

The spatial layer of `nr_regions` as an `sf` object.

### Source

`bcdata::bcdc_get_data(record = 'dfe492c0-69c5-4c20-a6de-2c9bc989930f', resource = 'ec636f64-9c5f-4704-8e66-2dd43032c9b5')`

### See Also

Other BC layers: `airzones()`, `bc_bound_hres()`, `bc_bound()`, `bc_cities()`, `bec()`, `census_dissemination_area()`, `census_division()`, `census_economic()`, `census_metropolitan_area()`, `census_subdivision()`, `census_tract()`, `ecoprovinces()`, `ecoregions()`, `ecosections()`, `fda()`, `gw_aquifers()`, `health_chsa()`, `health_ha()`, `health_hsda()`, `health_lha()`, `hydrozones()`, `mapsheets_250k()`, `mapsheets_50k()`, `municipalities()`, `nr_areas()`, `nr_districts()`, `regional_districts()`, `tsa()`, `water_districts()`, `water_precincts()`, `watercourses_15M()`, `watercourses_5M()`, `wsc_drainages()`

### Examples

```r
## Not run:
my_layer <- nr_regions()
## End(Not run)
```
raster_by_poly

Overlay a SpatialPolygonsDataFrame or sf polygons layer on a raster layer and clip the raster to each polygon. Optionally done in parallel.

Description

Overlay a SpatialPolygonsDataFrame or sf polygons layer on a raster layer and clip the raster to each polygon. Optionally done in parallel.

Usage

raster_by_poly(
  raster_layer,
  poly,
  poly_field,
  summarize = FALSE,
  parallel = FALSE
)

Arguments

- **raster_layer**: the raster layer
- **poly**: a SpatialPolygonsDataFrame layer or sf layer
- **poly_field**: the field on which to split the SpatialPolygonsDataFrame
- **summarize**: Should the function summarise the raster values in each polygon to a vector? Default FALSE
- **parallel**: process in parallel? Default FALSE. If TRUE, it is up to the user to call `future::plan()` (or set options) to specify what parallel strategy to use.

Value

- a list of RasterLayers if `summarize = FALSE` otherwise a list of vectors.

regional_districts

British Columbia Regional Districts

Description

British Columbia Regional Districts

Usage

regional_districts(ask = interactive(), force = FALSE)
summarize_raster_list

Arguments

ask Should the function ask the user before downloading the data to a cache? Defaults to the value of interactive().

force Should you force download the data?

Value

The spatial layer of \texttt{regional_districts} as an \texttt{sf} object.

Source

\citep{bcdata::bcdc_get_data} record = 'd1aff64e-dbfe-45a6-af97-582b7f6418b9', resource = '57c7f719-dc87-415c-8be7-ef2f95289397'

See Also

\citep{combine_nr_rd()} to combine \texttt{Regional Districts} and the \texttt{Northern Rockies Regional Municipality} into one layer

Other BC layers: \texttt{airzones()}, \texttt{bc_bound_hres()}, \texttt{bc_bound()}, \texttt{bc_cities()}, \texttt{bec()}, \texttt{census_dissemination_area()}, \texttt{census_division()}, \texttt{census_economic()}, \texttt{census_metropolitan_area()}, \texttt{census_subdivision()}, \texttt{census_tract()}, \texttt{ecoprovinces()}, \texttt{ecoregions()}, \texttt{ecosections()}, \texttt{fisa()}, \texttt{gw_aquifers()}, \texttt{health_chsa()}, \texttt{health_ha()}, \texttt{health_hdsa()}, \texttt{health_lha()}, \texttt{hydrozones()}, \texttt{mapsheets\_250K()}, \texttt{mapsheets\_50K()}, \texttt{municipalities()}, \texttt{nr_areas()}, \texttt{nr_districts()}, \texttt{nr_regions()}, \texttt{tsa()}, \texttt{water_districts()}, \texttt{water_precincts()}, \texttt{watercourses\_15M()}, \texttt{watercourses\_5M()}, \texttt{wsc\_drainages()}

Examples

```r
## Not run:
my_layer <- regional_districts()

## End(Not run)
```

summarize_raster_list  Summarize a list of rasters into a list of numeric vectors

Description

Summarize a list of rasters into a list of numeric vectors

Usage

```r
summarize_raster_list(raster_list, parallel = FALSE)
```

Arguments

- \texttt{raster_list} list of rasters
- \texttt{parallel} process in parallel? Default FALSE. If TRUE, it is up to the user to call \texttt{future::plan()} (or set \texttt{options}) to specify what parallel strategy to use.
Value

a list of numeric vectors

transform_bc_albers  Transform a Spatial* object to BC Albers projection

Description

The Spatial method has been removed as of bcmaps 2.0.0. The sf method is here to stay.

Usage

transform_bc_albers(obj)

Arguments

obj The sf object to transform.

Value

the sf object in BC Albers projection

tsas

British Columbia Timber Supply Areas and TSA Blocks

Description

British Columbia Timber Supply Areas and TSA Blocks

Usage

tsas(ask = interactive(), force = FALSE)

Arguments

ask Should the function ask the user before downloading the data to a cache? De-
defaults to the value of interactive().

force Should you force download the data?

Value

The spatial layer of tsa as an sf object.

Source

bcdata::bcdc_get_data(record = '8daa29da-d7f4-401c-83ae-d962e3a28980', resource = '6851f8a6-77b9-4555-
See Also
Other BC layers: `airzones()`, `bc_bound_hres()`, `bc_bound()`, `bc_cities()`, `bec()`, `census_dissemination_area()`, `census_division()`, `census_economic()`, `census_metropolitan_area()`, `census_subdivision()`, `census_tract()`, `ecoprovines()`, `ecoregions()`, `ecosections()`, `fsa()`, `gw_aquifers()`, `health_chsa()`, `health_ha()`, `health_hsea()`, `health_hse()`, `hydrozones()`, `mmapsheets_250K()`, `mmapsheets_50K()`, `municipalities()`, `nr_areas()`, `nr_districts()`, `nr_regions()`, `regional_districts()`, `water_districts()`, `water_precincts()`, `watercourses_15M()`, `watercourses_5M()`, `wsc_drainages()`

Examples
```r
## Not run:
my_layer <- tsa()

## End(Not run)
```

---

### vrt_files

List the files that a vrt is built on

**Description**
List the files that a vrt is built on

**Usage**

```r
vrt_files(vrt, omit_vrt = FALSE)
```

**Arguments**

- `vrt` path to a .vrt file
- `omit_vrt` omit the listing of the original vrt. Default FALSE

**Value**
character vector of tiles
vrt_info  

*Get metadata about a .vrt file*

**Description**

Get metadata about a .vrt file

**Usage**

```
vrt_info(vrt, options = character(0), quiet = FALSE)
```

**Arguments**

- `vrt`  
  path to a .vrt file
- `options`  
  options to pass to gdalinfo. See [here](#) for possible options.
- `quiet`  
  suppress output to the console (default FALSE)

**Value**

character of vrt metadata

---

watercourses_15M  

*British Columbia watercourses at 1:15M scale*

**Description**

British Columbia watercourses at 1:15M scale

**Usage**

```
watercourses_15M(ask = interactive(), force = FALSE)
```

**Arguments**

- `ask`  
  Should the function ask the user before downloading the data to a cache? Defaults to the value of interactive().
- `force`  
  Should you force download the data?

**Value**

The spatial layer of `watercourses_15M` as an `sf` object.

**Source**

https://ftp.maps.canada.ca/pub/nrcan_rncan/vector/canvec/fgdb/Hydro/canvec_15M_CA_Hydro_fgdb.zip
## watercourses_5M

### British Columbia watercourses at 1:5M scale

**Description**

British Columbia watercourses at 1:5M scale

**Usage**

```r
watercourses_5M(ask = interactive(), force = FALSE)
```

**Arguments**

- `ask`: Should the function ask the user before downloading the data to a cache? Defaults to the value of `interactive()`.
- `force`: Should you force download the data?

**Value**

The spatial layer of `watercourses_5M` as an `sf` object.

**Source**

https://ftp.maps.canada.ca/pub/nrcan_rncan/vector/canvec/fgdb/Hydro/canvec_5M_CA_Hydro_fgdb.zip

**See Also**

Other BC layers: `airzones()`, `bc_bound_hres()`, `bc_bound()`, `bc_cities()`, `bec()`, `census_dissemination_area()`, `census_division()`, `census_economic()`, `census_metropolitan_area()`, `census_subdivision()`, `census_tract()`, `ecoprovinces()`, `ecoregions()`, `ecosections()`, `fha()`, `gw_aquifers()`, `health_chsa()`, `health_ha()`, `health_hsda()`, `health_lha()`, `hydrozones()`, `mapsheets_250K()`, `mapsheets_50K()`, `municipalities()`, `nr_areas()`, `nr_districts()`, `nr_regions()`, `regional_districts()`, `tsa()`, `water_districts()`, `water_precincts()`, `watercourses_15M()`, `wsc_drainages()`
Examples

```r
## Not run:
my_layer <- watercourses_5M()

## End(Not run)
```

---

### water_districts

**British Columbia’s Water Management Districts**

#### Description

British Columbia’s Water Management Districts

#### Usage

```r
water_districts(ask = interactive(), force = FALSE)
```

#### Arguments

- `ask` Should the function ask the user before downloading the data to a cache? Defaults to the value of `interactive()`.
- `force` Should you force download the data?

#### Value

The spatial layer of `water_districts` as an `sf` object.

#### Source

`bcdata::bcdc_get_data(record = '92cb3ad8-9582-48a9-9e79-9a9d33601e50', resource = '07f9aa3f-0b66-4a49-919f-332d12bcd8f0')`

#### See Also

Other BC layers: `airzones()`, `bc_bound_hres()`, `bc_bound()`, `bc_cities()``, `bec()`, `census_dissemination_area()`, `census_division()`, `census_economic()`, `census_metropolitan_area()`, `census_subdivision()`, `census_tract()`, `ecoprovinces()`, `ecoregions()`, `ecosections()`, `fsa()`, `gw_aquifers()`, `health_chsa()`, `health_ha()`, `health_hdsa()`, `health_lha()`, `hydrozones()`, `mapsheets_250K()`, `mapsheets_50K()`, `municipalities()`, `nr_areas()`, `nr_districts()`, `nr_regions()`, `regional_districts()`, `tsa()`, `water_precincts()`, `watercourses_15M()`, `watercourses_5M()`, `wsc_drainages()`

#### Examples

```r
## Not run:
my_layer <- water_districts()

## End(Not run)
```
**water_precincts**  

**British Columbia’s Water Management Precincts**

**Description**

British Columbia’s Water Management Precincts

**Usage**

`water_precincts(ask = interactive(), force = FALSE)`

**Arguments**

- `ask`: Should the function ask the user before downloading the data to a cache? Defaults to the value of `interactive()`.
- `force`: Should you force download the data?

**Value**

The spatial layer of `water_precincts` as an `sf` object.

**Source**

`bcdata::bcdc_get_data(record = 'b5f436b4-532c-4ee2-ba27-90d55ec8c73f', resource = 'e482fd4a-be58-4541-8e0d-c39a764fd0a3')`

**See Also**

Other BC layers: `airzones()`, `bc_bound_hres()`, `bc_bound()`, `bc_cities()`, `bec()`, `census_dissemination_area()`, `census_division()`, `census_economic()`, `census_metropolitan_area()`, `census_subdivision()`, `census_tract()`, `ecoprovinces()`, `ecoregions()`, `ecosections()`, `fsa()`, `gw_aquifers()`, `health_chsa()`, `health_ha()`, `health_hsda()`, `health_lha()`, `hydrozones()`, `mapsheets_250K()`, `mapsheets_50K()`, `municipalities()`, `nr_areas()`, `nr_districts()`, `nr_regions()`, `regional_districts()`, `tsa()`, `water_districts()`, `watercourses_15M()`, `watercourses_5M()`, `wsc_drainages()`

**Examples**

```r
## Not run:
my_layer <- water_precincts()

## End(Not run)
```
**Description**

Water Survey of Canada Sub-Sub-Drainage Areas

**Usage**

```r
wsc_drainages(ask = interactive(), force = FALSE)
```

**Arguments**

- `ask` Should the function ask the user before downloading the data to a cache? Defaults to the value of `interactive()`.
- `force` Should you force download the data?

**Value**

The spatial layer of `wsc_drainages` as an `sf` object.

**Source**

`bcdata::bcdc_get_data(record = '7ae18a3c-917b-4cb1-9aa8-51a172475dbb', resource = '4455072e-d33b-4685-9edd-cffda763dd45')`

**See Also**

Other BC layers: `airzones()`, `bc_bound_hres()`, `bc_bound()`, `bc_cities()`, `bec()`, `census_dissemination_area()`, `census_division()`, `census_economic()`, `census_metropolitan_area()`, `census_subdivision()`, `census_tract()`, `ecoprovinces()`, `ecoregions()`, `ecosections()`, `fsa()`, `gw_aquifers()`, `health_chsa()`, `health_ha()`, `health_hsda()`, `health_lha()`, `hydrozones()`, `mapsheets_250K()`, `mapsheets_50K()`, `municipalities()`, `nr_areas()`, `nr_districts()`, `nr_regions()`, `regional_districts()`, `tsa()`, `water_districts()`, `water_precincts()`, `watercourses_15M()`, `watercourses_5M()`

**Examples**

```r
## Not run:
my_layer <- wsc_drainages()

## End(Not run)
```
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