

Package: WaCSE (via r-universe)

September 27, 2026

Title Washington Climate Smart Estimator

Version 0.9.2

Description The Washington Climate Smart Estimator (WaCSE) is a shiny application to explore greenhouse gas mitigation potential from different agricultural conservation practices across Washington's diverse counties.

License MIT + file LICENSE

URL <https://github.com/WA-Department-of-Agriculture/WaCSE>

BugReports <https://github.com/WA-Department-of-Agriculture/WaCSE/issues>

Depends R (>= 3.5)

Imports config (>= 0.3.1), dplyr, DT, ggiraph, ggplot2, golem (>= 0.3.2), markdown, pkgload, rmarkdown, shiny (>= 1.7.1), shinydashboard, systemfonts

Suggests bslib, bsplus, gfonts, glue, htmltools, janitor, kableExtra, knitr, scales, shadowtext, shinycssloaders, shinydisconnect, shinyFeedback, shinyjs, shinyWidgets, stringr, tidyr, waiter, testthat (>= 3.0.0)

Config/testthat/edition 3

Encoding UTF-8

LazyData true

RoxygenNote 7.3.2

Config/pak/sysreqs

libcairo2-dev cmake libfontconfig1-dev libfreetype6-dev make libpng-dev libuv1-dev zlib1g-dev

Repository <https://wa-department-of-agriculture.r-universe.dev>

Date/Publication 2025-10-27 20:43:55 UTC

RemoteUrl <https://github.com/WA-Department-of-Agriculture/WaCSE>

RemoteRef HEAD

RemoteSha c88bd19181505a9b3b5e59fa48861e0e04692227

Contents

comet_tags	2
comet_wa	2
run_app	4
Index	5

comet_tags	<i>comet_wa tags</i>
------------	----------------------

Description

Tags for filtering conservation practice implementations from the comet_wa dataset

Usage

comet_tags

Format

- A data frame with 122 rows and 7 variables:
- class** Broad class of conservation practice
 - practice** USDA-NRCS Conservation Practice Standard name
 - implementation** The implementation scenario modeled for each conservation practice standard; implementation scenarios are described in more detail in the one-page summaries associated with each practice
 - abbr** Abbreviated implementation for plots.
 - current_land_use** Value extracted from planner_implementation to use as filtering tag.
 - irrigation** Value extracted from planner_implementation to use as filtering tag.
 - nutrient_practice** Value extracted from planner_implementation to use as filtering tag.

comet_wa	<i>Greenhouse gas emission reduction coefficients</i>
----------	---

Description

A subset of the NRCS COMET-Planner dataset (Version 3.1, Build 2, Released Dec 10 2024) containing the coefficients of greenhouse gas emissions and soil carbon for Washington State.

Usage

comet_wa

Format

A data frame with 17584 rows and 14 variables:

county County name

mlra USDA Major Land Resource Area rectified to county boundaries

class Broad class of conservation practice

practice USDA-NRCS Conservation Practice Standard name

implementation The implementation scenario modeled for each conservation practice standard; implementation scenarios are described in more detail in the one-page summaries associated with each practice

abbr Abbreviated implementation for plots.

current_land_use Value extracted from planner_implementation to use as filtering tag.

irrigation Value extracted from planner_implementation to use as filtering tag.

nutrient_practice Value extracted from planner_implementation to use as filtering tag.

ghg_type The Emission Reduction Coefficient (ERC) type: co2, n2o, ch4, or total_ghg_co2

mean Mean emission reductions in metric tonnes CO2 equivalent per acre per year (MT CO2e/ac/yr)

sterr Standard error of the mean of emission reductions in metric tonnes CO2 equivalent per acre per year (MT CO2e/ac/yr)

lower Mean ERC - sterr

upper Mean ERC + sterr

The below descriptions are directly from the source metadata.

co2_meanMean total carbon dioxide (CO2) emission reductions (sum of all CO2 sources) in metric tonnes CO2 equivalent per acre per year (MT CO2e/ac/yr) co2_sterrStandard error of the mean of total carbon dioxide (CO2) emission reductions (sum of all CO2 sources) in metric tonnes CO2 equivalent per acre per year (MT CO2e/ac/yr) n2o_meanMean total nitrous oxide (N2O) emission reductions (sum of all N2O emission sources) in metric tonnes CO2 equivalent per acre per year (MT CO2e/ac/yr) n2o_sterrStandard error of the mean for total nitrous oxide (N2O) emission reductions (sum of all N2O emission sources) in metric tonnes CO2 equivalent per acre per year (MT CO2e/ac/yr) ch4_meanMean total methane (CH4) emission reductions (sum of all CH4 emission sources) in metric tonnes CO2 equivalent per acre per year (MT CO2e/ac/yr) ch4_sterrStandard error of the mean for total methane (CH4) emission reductions (sum of all CH4 emission sources) in metric tonnes CO2 equivalent per acre per year (MT CO2e/ac/yr) total_ghg_co2Mean of total greenhouse gas emission reductions in metric tonnes CO2 equivalent per acre per year (MT CO2e/ac/yr) total_ghg_co2_sterrStandard error of the mean for total greenhouse gas emission reductions in metric tonnes CO2 equivalent per acre per year (MT CO2e/ac/yr) ...

Details

COMET-Farm metamodeling utilized COMET-Farm Version 4.0

Source

<http://www.comet-planner.com/>

`run_app`*Run the Shiny Application*

Description

Run the Shiny Application

Usage

```
run_app(  
  onStart = NULL,  
  options = list(),  
  enableBookmarking = NULL,  
  uiPattern = "/",  
  ...  
)
```

Arguments

<code>onStart</code>	A function that will be called before the app is actually run. This is only needed for <code>shinyAppObj</code> , since in the <code>shinyAppDir</code> case, a <code>global.R</code> file can be used for this purpose.
<code>options</code>	Named options that should be passed to the <code>runApp</code> call (these can be any of the following: "port", "launch.browser", "host", "quiet", "display.mode" and "test.mode"). You can also specify width and height parameters which provide a hint to the embedding environment about the ideal height/width for the app.
<code>enableBookmarking</code>	Can be one of "url", "server", or "disable". The default value, <code>NULL</code> , will respect the setting from any previous calls to enableBookmarking() . See enableBookmarking() for more information on bookmarking your app.
<code>uiPattern</code>	A regular expression that will be applied to each GET request to determine whether the <code>ui</code> should be used to handle the request. Note that the entire request path must match the regular expression in order for the match to be considered successful.
<code>...</code>	arguments to pass to <code>golem_opts</code> . See <code>'?golem::get_golem_options'</code> for more details.

Index

* **datasets**

comet_tags, [2](#)

comet_wa, [2](#)

comet_tags, [2](#)

comet_wa, [2](#)

enableBookmarking(), [4](#)

run_app, [4](#)