

Using Quarto to Generate Custom Soil Reports

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Quarto Showcase

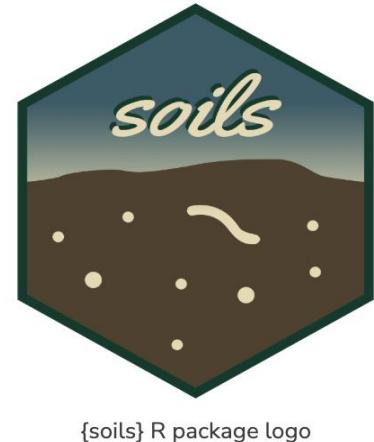


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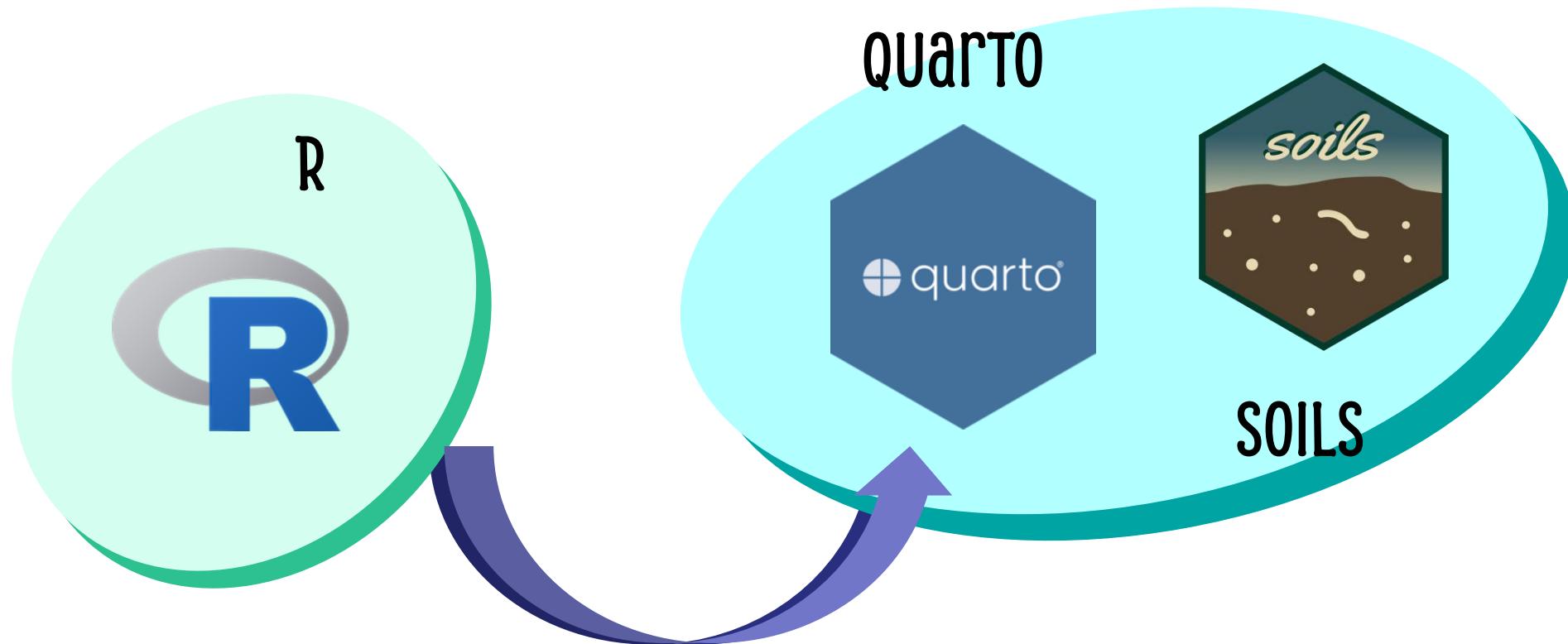
Introduction

- **{soils}**: An R Package for Soil Health Reporting
- Developed by **Washington State Department of Agriculture** (WSDA) and **Washington State University** (WSU)
- Help growers:
 - **Access** their soil health data
 - **Interpret** within their crop and region context
 - **Translate** into informed management decisions

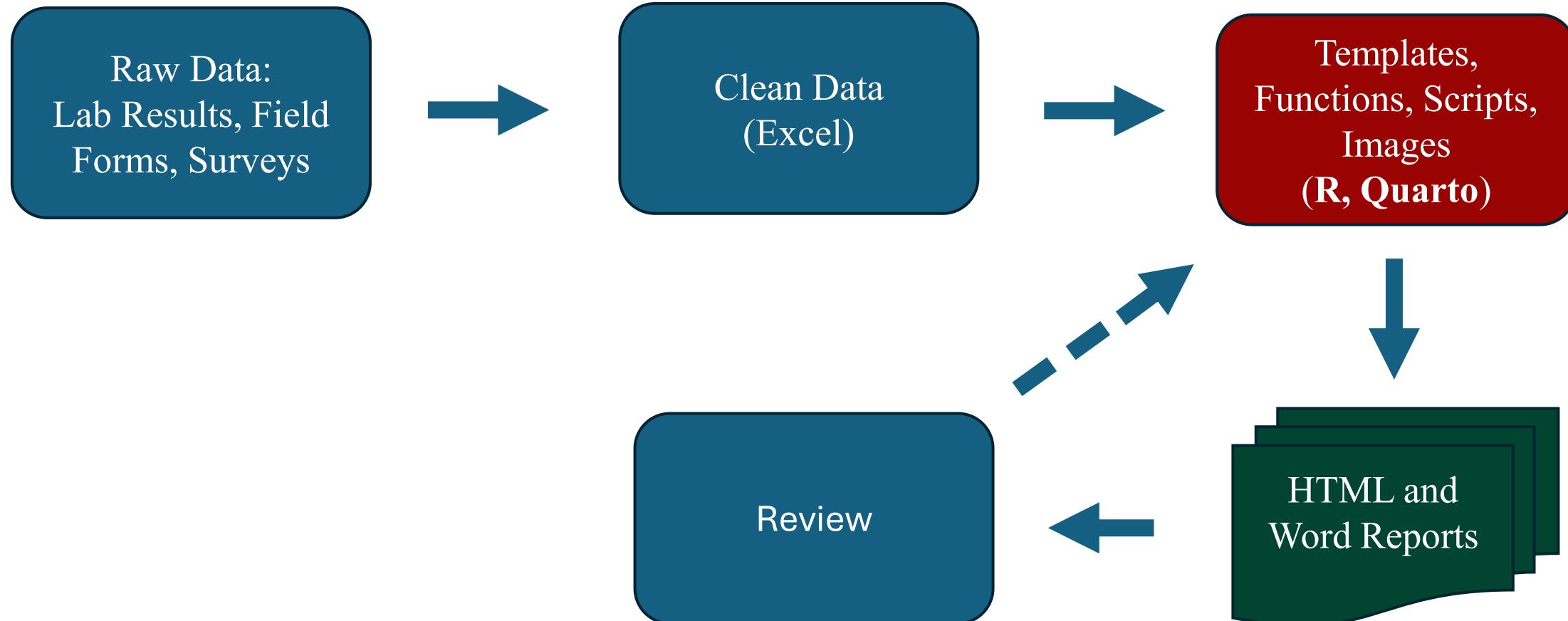


{soils} R package logo

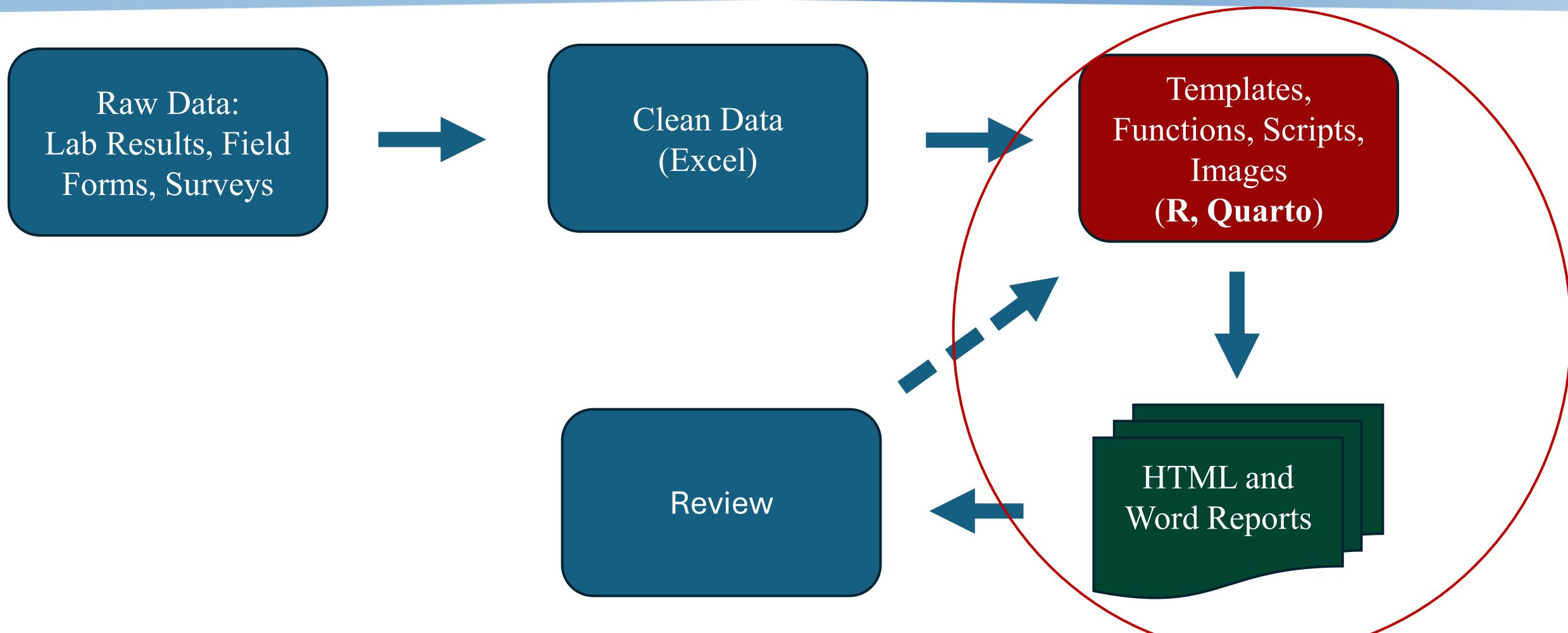
Painstakingly by Hand in Excel and Word



From Raw Data to Final Reports



From Raw Data to Final Reports



How do you get started?

{soils} package website



<https://wa-department-of-agriculture.github.io/soils/>

soils 1.0.1 Primers ▾ Tutorials ▾ Examples Functions

soils



Announcing Dirt Data Reports: a no-code soil health reporting tool built on {soils} using Shiny

👉 Try it [here](#) if you don't need full customization or prefer not to code.

📖 Read more about it in this [blog post](#).

Overview

{soils} is an R package for all your soil health data visualization and reporting needs. {soils} provides an RStudio extension for generating soil health reports. These reports compare to similar sites, county, and across the state.

Any scientist leading a soil health demonstration can engage all participants. Democratic managers who contribute to the reports to empower each other.

The [Washington State Department of Agriculture](#) developed {soils} as part of the Washington Soil Health Project. Learn more about {soils} in this [blog post](#).

Installation

Install the development version of {soils} from our [r-universe](#) with:

```
install.packages(  
  "soils",  
  repos = c("https://wa-department-of-agriculture.r-universe.dev")  
)
```

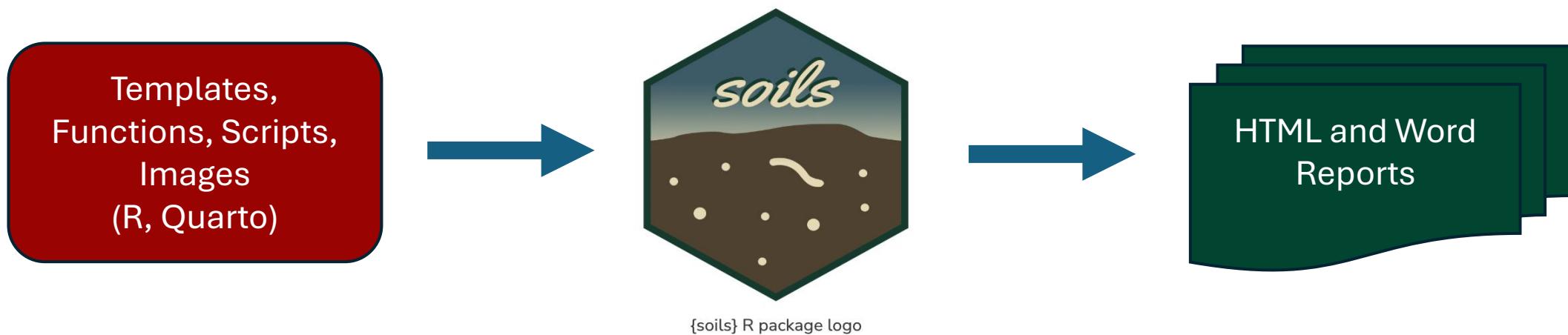
Or install from GitHub with [{pak}](#):

```
# Uncomment the below line if {pak} is not installed.  
# install.packages("pak")  
pak::pkg_install("WA-Department-of-Agriculture/soils")
```

Load the example datasets and functions with:

```
library(soils)
```

Using Soils Package in Quarto



Render about 100 Reports

The screenshot shows the RStudio interface with several panes:

- Code Editor:** Displays the R script `render-reports.R` containing code to bind HTML and docx reports together and render them to the project directory.
- Environment:** Shows the global environment with two objects: `data` (100 obs. of 42 variables) and `reports_ht...` (83 obs. of 3 variables). The `reports_ht...` object is circled in red.
- Console:** Shows the output of running the script, including Quarto configuration options and the creation of a report named `2023_WUY05_Report.html`. The progress bar at the bottom indicates the task is 1% complete with an ETA of 2 hours. This output is also circled in red.
- File Explorer:** Shows the file structure of the project directory `workshop testing`, including files like `08_looking-forward.qmd`, `09_acknowledgement.qmd`, and `2023_WUY05_Report.html`.

Questions?

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