

Thank you for your interest in the Remote Sensing of Water Quality Workshop!
We are so excited at the enthusiasm for the workshop!

The workshop will have a fair amount of live coding for attendees, so please be sure to bring a machine with you, if you intend on coding along. All scripts and slides will be available after the workshop for participants.

The workshop is divided into three main components and will follow this general schedule. Please feel free to come and go as you wish.

- 08:00 - 08:15 am MST: Welcome, Introduction, Ground Rules, Sticky Notes
- 08:15 - 08:45 am MST: An Introduction to Google Earth Engine
- 08:45 - 09:00 am MST: Break
- 09:00 - 10:00 am MST: Working with Spectral Indices for Water Quality in Google Earth Engine
- 10:00 - 10:15 am MST: Break
- 10:15 - 11:00 am MST: Working with AquaSat - A Harmonized Spectral Reflectance and Water Quality Dataset
- 11:00 - 11:30 am MST: Applying AquaSat in Google Earth Engine
- 11:30 - 12:00 pm MST: Open Lab

In preparation for the workshop, we wanted to be sure that everyone had the proper software and licenses.

1. **Google Earth Engine:** The majority of time in the workshop will be spent using Google Earth Engine. Please be sure that you have an authorized account. You can register for a free account [here](#). It can sometimes take a few days to get an approved account, so please be sure to sign up sooner than later. Please note that depending on your affiliation, you may need an enterprise account through your institution. Please consult your local departments and branches if this pertains to you.

2. **R and RStudio:** The last portion of the workshop will be in R, and we will be using the RStudio Integrated Development Environment. You can download R [here](#), and RStudio [here](#).

We recommend having the latest version of R, but older versions will likely work well. If you wish to install necessarily packages in advance of the workshop, those can be installed using the code below:

```
packages <- c("lubridate",
             "tidyverse",
             "sf",
             "viridis",
             "tigris",
             "hexbin",
             "ggpubr",
             "broom")
install.packages(setdiff(packages,
                        rownames(installed.packages())))
```

3. **AquaSat:** The R portion of the workshop will use AquaSat V1. You can download AquaSat [here](#).

Please be sure to reach out to Michael F Meyer (mfmeyer@usgs.gov) with any questions, comments, or concerns you may have.